

Durham E-Theses

The Ethics of Pre-Onset Early Detection and Interventions in Psychiatry

JULIA CAMILLE TINLAND

How to cite:

TINLAND, JULIA CAMILLE (2018) *The Ethics of Pre-Onset Early Detection and Interventions in Psychiatry*. Doctoral thesis, Durham University.

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a <https://etheses.durham.ac.uk/id/eprint/12782/> is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

The Ethics of Pre-Onset Early Detection and Interventions in Psychiatry

A Defence of Staging Models of Vulnerability

Julia Camille Tinland

A Thesis presented for the degree of
Doctor of Philosophy

Supervised by Professor Geoffrey Scarre and Professor
Holger Maehle



Department of Philosophy

University of Durham

England

December 2017

The Ethics of Pre-Onset Early Detection and Interventions in Psychiatry

A Defence of Staging Models of Vulnerability

Julia Camille Tinland

Submitted for the degree of Doctor of Philosophy

December 2017

Abstract

In this dissertation, I assess the ethical debate surrounding the development of pre-emptive psychiatry, and propose to reframe it around models of vulnerability. This leads me to advocate for nonspecific staging models over the creation of attenuated syndromes.

Chapter 1 delineates the ‘mid-level’ approaches I selected for the ethical appraisal of various models of vulnerability: mainly, Beauchamp and Childress’ principlism and Nussbaum’s capabilities approach. It is followed in Chapter 2 by an outline of the current state of research in pre-emptive psychiatry. I argue in Chapter 3 that the debate surrounding these new developments has missed an opportunity to discuss the ethical issues they raise in a constructive manner. Various conceptualisations of psychiatric vulnerability ought to be more clearly at the heart of this conversation. I explore in Chapter 4 the wide-ranging relevance of the concept of vulnerability in ethical theory, so as to explain in Chapter 5 how it can serve as the foundation of a normative approach that favours resilience and relational autonomy over outright protective responses to vulnerability. Consequently, I highlight in Chapter 6 the advantages of integrating more traditional nosologies into the larger framework of nonspecific staging models. I aim to show that, through fostering a greater focus on resilience rather than on diagnosis and treatment, hybrid diagnostic models promote a better management of the ethical issues associated with pre-emptive psychiatry.

The main outcome of this project is a new framework for discussions regarding the ethics of pre-onset early detection and interventions in psychiatry, re-centring them around conceptualisations of vulnerability. Altogether, this dissertation shows how ethical concerns arise concretely in pre-emptive psychiatry, and defends its prospects for addressing them.

Declaration

The work in this thesis is based on research carried out in the Department of Philosophy of Durham University, England. No part of this thesis has been submitted elsewhere for any other degree or qualification and it is all my own work unless referenced to the contrary in the text.

Copyright

“The copyright of this thesis rests with the author. No quotations from it should be published without the author’s prior written consent and information derived from it should be acknowledged”.

Acknowledgements

I would like to express sincerely my deep gratitude to Professor Geoffrey Scarre and to Professor Holger Maehle, my research supervisors, for their invaluable assistance and feedback. Their willingness to give their time and advice so generously has been very much appreciated. I would also like to offer my special thanks to Professor Jan Scott for our enlightening conversations and her helpful commentary on the transcripts of these exchanges. The Royal Institute of Philosophy, by awarding me a Jacobsen Studentship, has really encouraged me in the pursuit of my research. Furthermore, I am particularly grateful for the constructive comments given by Dr. Xi-Yang Guo and by Dr. Rebecca Oxley. Finally, I wish to thank my parents and family for their support and encouragement throughout my studies.

Dedicated To

Catherine Gros

TABLE OF CONTENTS

Introduction	9
I. CONTEXT	10
II. RE-FRAMING THE ETHICAL DEBATE	12
III. A DEFENCE OF STAGING MODELS	14
IV. TERMINOLOGY	16
V. OUTLINE OF THE CHAPTERS	19
Chapter 1 - Methodological Justifications	22
I. ACKNOWLEDGING EXISTING CONSTRAINTS	24
1. Varied and Multifaceted Ethical Issues	25
2. A Restrictive Lack of Data	28
3. Explanatory Power	30
II. HIGH MORAL THEORIES	33
1. The Advantages of a Utilitarian Approach to Biomedical Ethics	35
2. A Rigid Framework	39
III. APPLICABLE MID-LEVEL THEORIES	43
1. Principlism	44
2. The Capabilities Approach and Others	53
Chapter 2 - Current State of Research in Pre-Emptive Psychiatry	60
I. HOPES ATTACHED TO PRE-EMPTIVE PSYCHIATRY	61
1. Medical Interest in the Prodromal Phase of Mental Disorders	61
2. Cost-Saving Measures	64
II. VULNERABILITY TRAITS AND PRODRAMAL SYMPTOMS	67
1. Cognitive Risk Profiles and Psychosocial Functioning	68
2. Biomarkers of Vulnerability	71
III. MODELS OF VULNERABILITY AND ASSESSMENTS OF RISK	75
1. The Attenuated Psychosis Syndrome	76
2. Staging models	78
3. Instruments for the Assessment of Psychiatric Vulnerability	81
IV. PRE-ONSET EARLY INTERVENTIONS	86
1. Psychotherapies	87
2. Pharmacotherapies	88
3. Existing Structures	90
Chapter 3 - Re-Framing The Ethical Debate on Pre-Emptive Psychiatry	93
I. A RIGID FRAMEWORK	95
1. The Larger Debate	96
2. The Predominance of Particular Ethical Issues	101
3. Cost-Benefit and Cost-Effectiveness Analyses	106

II. RECOGNISING THE SHORTCOMINGS OF THE DEBATE ON THE ETHICS OF PRE-EMPTIVE PSYCHIATRY	110
1. The Overrepresentation of the APS	110
2. The Need to Focus on Conceptualisations of Vulnerability	114
Chapter 4 - The Centrality of Vulnerability	119
I. VULNERABILITY IN THE ETHICS OF CARE	122
1. Caring Relationships as a Societal and Moral Ideal	123
2. Caring for the Vulnerable	125
II. DEONTOLOGY	128
1. The Consideration of Vulnerability in Staunchly Libertarian Accounts	130
2. Special Duties and Welfare Rights: Positive Moral Responsibilities in Regard to Vulnerabilities	134
3. O’Neill’s Account of Deontic Virtues	137
III. CONSEQUENTIALISM	144
1. Consequentialism: Between Over-Demandingness and Impotence	145
2. Goodin and the Protection of the Vulnerable	153
3. The Limits of Goodin’s Vulnerability Theory	160
Chapter 5 - Defining Vulnerability and Responding to It	164
I. MULTIFACETED VULNERABILITIES	165
1. The Difficult Task of Defining Vulnerability	166
2. Inherent, Situational and Pathogenic Vulnerabilities	170
II. VULNERABLE INDIVIDUALS’ CAPABILITIES AT RISK	177
1. A Fitting Approach	178
2. Applicable Guidance	184
III. MORAL RESPONSIBILITIES ARISING FROM VULNERABILITY	190
1. Pathogenic Responses to Vulnerability	190
2. Against a Frontal Opposition Between Autonomy and Vulnerability	194
Chapter 6 - Defending Staging Models	204
I. THE THERAPEUTIC AND ETHICAL IMPLICATIONS OF DIVERSE MODELS OF VULNERABILITY	206
1. Primary Prevention and Secondary Prevention	207
2. Specific and Nonspecific Approaches	217
3. Prioritising Psychosocial Functioning Over Symptomatic Recovery	225
II. PRE-ONSET EARLY INTERVENTIONS IN RESPONSE TO PSYCHIATRIC VULNERABILITY	230
1. Holistic Models of Youth Mental Health	231
2. Relational Autonomy and Resilience in Pre-Emptive Psychiatry	238
III. REMAINING CONSIDERATIONS, BOTH PRAGMATIC AND ETHICAL	244
1. Grounding Pre-Emptive Psychiatry in Evidence-Based Practices	245

2. Pre-Onset Early Detection of Psychiatric Vulnerability and Pre-Onset Early Interventions Outside of Psychiatry	248
Conclusion	251
Bibliography	256

Introduction

Initially, this project was structured in the very same way that eventually came to be at the heart of what I now criticise. My former aim was to expose a series of issues in the development of pre-emptive psychiatry, in line with concerns expressed by its detractors. This dissertation now proposes to re-frame the ethical debate on pre-emptive psychiatry around conceptualisations of vulnerability, rather than focusing directly on its undesirable consequences. In place of answering the question ‘Is pre-emptive psychiatry a form of care worth developing?’ (which I think is still central in the debate surrounding pre-onset early detection and interventions in psychiatry), this dissertation attempts to provide a response to the following interrogation: ‘How should vulnerability be conceptualised, and how ought we respond to it?’.

The current ‘standard understanding’ of pre-onset early detection and interventions based on attenuated syndromes¹ raises seemingly insurmountable moral problems, from overmedication to stigmatisation. However, I firmly believe that alternative conceptualisations of vulnerability should be considered more attentively, as they can cast the role of pre-emptive psychiatry in a different light (one which would not be so medically-oriented). I thus argue that the relatively common assumption that attenuated syndromes are the main contenders for pre-onset early detection methods should be overturned. I also argue that this ‘re-framing’ of the debate is not a mere conceptual shift, but also highlights the extensive ramifications that models of vulnerability have for psychiatric practice.

¹ In a few words, attenuated syndromes can be thought of as attempting to ‘capture’ the prodrome (or set of earlier symptoms) of a disorder at a specific point in time, immediately preceding the onset of that full-threshold disorder. Staging models, on the other hand, postulate that distinct, progressive phases of a disorder can be distinguished from one another, from an asymptomatic stage to a chronic, full-threshold disorder. While attenuated syndromes are mostly static, staging models of vulnerability tend to be dynamic. I will take the time to explain both types of model in more detail in Chapter 2, and the idea of nonspecificity attached to some staging models will be addressed in Chapters 2 and 6.

This, in turn, leads me to favour nonspecific staging models over attenuated syndromes. Rather than thinking of vulnerability as an attenuated version of a full-threshold disorder - so, as a diagnosable and treatable condition - we ought to recognise it as a 'corrosive disadvantage'² threatening a person's central capabilities. Morally appropriate responses to vulnerability are therefore those which aim, first and foremost, to empower vulnerable, at-risk individuals and promote their resilience.

I. CONTEXT

I started out this research project with the profound conviction that delving into the ethics of pre-emptive psychiatry was a worthwhile endeavour as, whatever it was, there was sure to be something suspicious and unscrupulous underneath current efforts to develop pre-onset early detection and interventions in psychiatry. At-risk individuals were in danger (from those who ventured to widen existing diagnostic categories and their possible collusion with interested pharmaceutical parties), and I was to expose exactly in how many ways they were so. At-risk individuals - perfect representatives of the excesses of over-medicalisation, inflating statistics of overdiagnosis and overmedication, plagued by stigma and anxiety and, lastly, twice victims of injustice (to which they owe many of their vulnerabilities as well as their relative lack of access to healthcare) - did appear to be in a very unenviable predicament indeed.

The development of pre-onset early detection and interventions in psychiatry, especially in the past twenty years, has very quickly given rise to a divisive discussion on the ethics of pre-emptive psychiatry. The higher the predictive validity of the criteria established for the detection of at-risk individuals, the louder the voices expressing apprehension regarding these new developments got. The detractors of pre-emptive psychiatry saw in it the embodiment of wider problems related to current tendencies in psychiatric care, while its proponents presented it as the best hope for

² I am borrowing Wolff and de-Shalit's formulation (2007), which will be analysed in Chapters 1 and 5.

improved prognoses and the prevention of serious mental health issues. Like the former, I was concerned that identified at-risk individuals, suddenly perceived and labelled as patients, would see their lives 'pathologised' either too early, or even entirely unnecessarily in the case of those who would not have gone on to develop more severe symptoms. The spectre of mostly asymptomatic teenagers and young adults being prescribed antipsychotics and suffering from damaging side-effects was raised: a warning sign that pre-emptive psychiatry was deeply problematic for ethical reasons. The culmination of this debate occurred when, in 2013, the psychotic disorders Work Group for the fifth edition of the *Diagnostic and Statistical Manual of mental disorders* (DSM-5) elected to relegate the Attenuated Psychosis Syndrome (APS) to the Appendix, Section III of the *Manual*, under 'conditions for further study'³. The APS was, as a new diagnostic category, supposed to open more official doors for the implementation of pre-onset early detection and interventions in psychiatry, but the ultimate decision to lessen its inclusion in the main body of the text brought a first answer to the central enquiry of this debate. To the overarching question: 'Are pre-onset early detection and interventions worth implementing in psychiatry?', many answered that the dangers incurred by at-risk individuals still outweighed the benefits they could hope to gain from them. Even proponents of pre-emptive psychiatry graciously acknowledged that the diagnostic criteria proposed for the APS needed to be refined before the APS' full integration into the *Manual*⁴.

Wary of the dangers posed by the development of pre-emptive psychiatry, I thus agreed that potential stigma, discrimination, overmedication, overdiagnosis, over-medicalisation, anxiety and disadvantage needed to be shown as credible and powerful threats to at-risk individuals. The detrimental aspects of this rather piecemeal approach to the ethics of pre-emptive psychiatry - its redundancy and, more than

³ The APS is still present in the main body of the *Manual* under 'Other Specified Schizophrenia Spectrum and Other Psychotic Disorder', section 3: 298.8 (F28) (APA, 2013, p.122), but its presence remains mostly inconspicuous. Its relegation to the Appendix might have been more symbolic than 'real', but it only helps to show how disputed and controversial its full integration was at the time of publication.

⁴ I will focus exclusively on the DSM in this dissertation, despite the significance of other diagnostic manuals, such as the International Classification of Diseases (and ICD-10, in particular). Because the APS was proposed for the fifth edition of the DSM, its role in the debate surrounding the development of pre-emptive psychiatry overshadowed that of other nosologies.

anything, its overly pessimistic outlook on the possibility ever to develop ethically-informed pre-emptive measures in psychiatry - only became apparent to me with time.

II. RE-FRAMING THE ETHICAL DEBATE

What I hope to contribute to this debate is a way to re-frame it around conceptualisations of vulnerability, so as to encourage more constructive conversations about the ethics of pre-emptive psychiatry. Understanding how one ought to respond to vulnerability might provide a way to assess available pre-onset early detection methods and proposed pre-onset early interventions. For that contribution to be effective, I intend to address the mental health professionals as well as the ethicists and philosophers involved in this particular discussion.

I believe that my original mistake was one that is commonly made by participants in this debate: I assumed that the APS was to serve as the primary diagnostic model for the development of pre-onset early detection, and thus, of pre-onset early interventions. After all, similar 'attenuated' categories could be envisaged for other types of mental disorder, such as mood or anxiety disorders. One must say that the grounds for this assumption are not overly mysterious: not only does the case of the APS and the Ultra High Risk (UHR) criteria from which it derives occupy a large place in the more general discussion about pre-emptive psychiatry, but it is also presented by medical professionals themselves as the diagnostic model upon which most of their hopes (and fears) hinge. That assumption, however, should be dismissed. The development of pre-emptive psychiatry is a heterogeneous process, and to think that it points uniformly to a single model is to misunderstand what those who work on the elaboration of diagnostic criteria are trying to achieve. Constructing diagnostic models which can encompass the prodrome of a mental disorder and help identify what makes a person more vulnerable than others is central to the work of those who aim to develop pre-onset early detection and interventions. I believe that

any enquiry into the ethics of pre-emptive psychiatry should be more overtly focused on these goals themselves, rather than directly questioning their potential outcomes.

Asking whether pre-onset early detection and interventions are worth implementing in psychiatry challenges it as a whole, without allowing for a thorough evaluation of the various models of vulnerability that have been suggested. Each of these models, however, can have significantly different implications for the implementation of pre-emptive measures, both with regards to pre-onset early detection and to pre-onset early interventions. In other words, the question of whether these pre-emptive measures are a good thing can quickly lead to outright negative answers, especially if one simply assumes that the diagnostic models under scrutiny are limited to attenuated versions of existing disorders. One can adopt a more fruitful approach by looking into our conceptualisations of vulnerability and examining what our responses to identifiable vulnerabilities ought to be: an 'ethical litmus test' to assess various early detection methods and proposed pre-onset early interventions.

Re-centring conversations on the ethics of pre-emptive psychiatry around models of vulnerability facilitates the adoption of clear normative guidelines for what our responses ought to be once vulnerability is identified. The concept of vulnerability is value-laden, and has been argued to give rise to specific moral duties in myriad ways. Working on conceptualisations of vulnerability within the context of pre-emptive psychiatry, and determining which responses are morally appropriate, and which ones are harmful, might thus help change the way we think and talk about the ethics of pre-emptive psychiatry. I have no intention to dismiss any of the concerns I outlined earlier, but I do believe that considering them through the scope of vulnerability models can pave the way for a more constructive conversation on this topic.

III. A DEFENCE OF STAGING MODELS

Posing the problem in these terms has led me to offer a defence, on ethical grounds, of staging models over diagnostic models based on attenuated syndromes like the APS.

It is possible to demonstrate that vulnerability is widely recognised as giving rise to strong moral obligations; and I intend to explore what these obligations have been said to be following various philosophical traditions. However, determining how vulnerability should be conceptualised and the kinds of answers that ought to be brought to it in the specific context of pre-emptive psychiatry is another matter entirely.

I believe that the account of vulnerability developed by Rogers, Mackenzie and Dodds manages to capture remarkably well the ideas and concerns expressed by researchers who are attempting to elaborate early detection criteria. The distinction they make between *inherent vulnerabilities*, which refer to the sources of vulnerability that are ingrained in the human condition - those that arise from our corporeality, our neediness, our dependence on others - and *situational* ones, more context-specific and generally caused or exacerbated by personal, social, political, economic or environmental circumstances (Rogers, Mackenzie, Dodds, 2012, p.24), reflects mental health professionals' consideration of *markers of vulnerability* and their interactions with *environmental risk factors*. Therefore, while it does not deny the existence of universal and inescapable vulnerability, Rogers, Mackenzie and Dodds' conceptualisation does acknowledge, as proponents of pre-emptive psychiatry have tried to show, that some individuals or groups are more inherently and situationally vulnerable than others.

What their account of vulnerability also highlights, especially when it is applied to the case of pre-onset early detection and interventions in psychiatry, is that some of our responses to vulnerability are *pathogenic*, in the sense that they either exacerbate or create vulnerabilities. Many of the ethical issues that have been identified

in the development of pre-emptive psychiatry can be said to arise exactly in this way, born out of inadequate, overly medicalised and paternalistic responses to vulnerability.

Combined with Nussbaum's capabilities approach (2011), Wolff and de-Shalit's work on fertile functionings and corrosive disadvantages (2007) and Beauchamp and Childress' principlist account (2009), this conceptualisation of vulnerability gives rise to a normative framework that favours responses encouraging resilience, empowerment and relational autonomy over those which primarily aim to protect and treat vulnerable persons. Responding to these vulnerabilities through protective measures alone can give rise to new, pathogenic forms of vulnerability. In that sense, understanding vulnerabilities as threatened capabilities emphasises the duties we have to empower identified vulnerable persons, to encourage the preservation and promotion of their most fertile capabilities, and of their capacities for resilience. It also allows me to highlight the need to avoid adopting overly medical responses to the growing ability to identify psychiatric vulnerabilities: conceptualised in this way, they point to the necessity of relying on positive social relationships and supportive networks, of prioritising psychosocial functioning over symptomatic recovery, and of adopting more holistic approaches to youth mental health.

This explains why, in re-framing the ethical debate around conceptualisations of vulnerability, I develop a defence of nonspecific staging models. I argue that, despite their convergence and their compatibility in many respects, what distinguishes nonspecific staging models from attenuated syndromes in their conceptualisations of vulnerability has significant implications for the implementation of pre-onset early detection and interventions in psychiatry. Strangely enough, the choice to remove the notion of risk from the Attenuated Psychosis Syndrome so as to lessen the anxiety one might feel in receiving this label is, I believe, one of the most problematic features of this diagnostic model: it participates in shaping vulnerability into a fully-fledged mental disorder - a pathology that must be treated and eliminated. On the face of it, staging models themselves might appear dangerously problematic, integrating as they do pre-symptomatic phases of mental disorders into their framework, leaving the door open for a considerable widening of existing diagnostic categories and a continuing

backlash against pre-emptive measures in psychiatry. I argue nonetheless that the choices to allow for primary prevention in addition to secondary pre-emptive measures, to acknowledge nonspecificity rather than only seek syndromal specificity, and to prioritise overall psychosocial functioning over symptomatic recovery, afford staging models considerable advantages from an ethical standpoint. In shaping early detection methods accordingly, staging models facilitate the elaboration of pre-onset early interventions that respond to vulnerability in ways that aim, first and foremost, to provide at-risk individuals with the psychological, cognitive or neurological mechanisms - and with the social and even familial environments - which could allow them to become more resilient and to preserve their autonomy through supportive relationships.

IV. TERMINOLOGY

I have been led to make several choices regarding terminology throughout this dissertation that I feel the need to explain and justify. Many of these choices have been made for the sake of clarity, but some of them could have repercussions on the way several arguments are understood, which is why they need to be clarified.

The decision to speak of 'pre-emptive psychiatry' itself might seem rather perplexing. The implementation of pre-onset early detection and interventions in psychiatry could perhaps fit better under the umbrella of prevention, or of 'preventive psychiatry'. I point out myself how staging models' capacity to encompass measures for primary prevention offers them an advantage over attenuated syndromes.

The distinction between pre-emptive and preventive action can be understood in the same way that it is in political philosophy and just war theories, meaning that the first would designate action against a target when there is incontrovertible evidence that the target is about to commit a harmful attack, and the second would designate action against a target when it is believed that a harmful attack, while not imminent, is inevitable, and when delay in intervening would involve greater risk (Barnes, Stoll,

2007). In the case of pre-onset early detection and interventions, then, pre-emptive measures are those which take place when a first psychotic (or manic, or depressive, etc.) episode can be said to be imminent (within one or two years after detection, generally) with high predictive validity; while preventive measures anticipate harm to a greater extent.

In the end, the model I defend clearly advocates for dealing with threats as they slowly arise, rather than immediately ahead of their realisation. It might therefore seem bizarre to see the words 'pre-emptive psychiatry' used almost throughout this dissertation. I made the decision to follow a formulation commonly used by proponents of pre-onset early detection and interventions (see McGorry, 2014) for the precise reason that it allows me to underline how prevalent diagnostic models based on attenuated syndromes have been in their development, as well as in the ethical debate that arose with them. Even those who strongly support the use of staging models often prefer to speak in terms of pre-emptive measures, rather than advocating more generally for the advancement of preventive action. Additionally, I do believe that speaking of 'pre-emptive psychiatry' rather than of 'preventive psychiatry' is a useful reminder that what is at the heart of this dissertation is indeed the growing capacity to identify, with high predictive validity, those individuals who are much more vulnerable to psychiatric problems than others. Referring to prevention alone (and especially universal prevention) might obscure this too much.

Furthermore, as the topic of my research touches upon what might be referred to as a spectrum of symptoms, markers and syndromes, there have been difficulties in selecting terms which encompass all of these without being too general or misleading. The distinction I have just made between preventive and pre-emptive measures can actually be quite porous; and I face similar issues when faced with the necessity to qualify the kinds of detection methods and the therapeutic interventions that are at the heart of this dissertation.

First, one thing needs to be clarified: although they are somehow entangled, detection and intervention are two distinct moments in care - two distinct medical

practices - and each is supported by different sets of evidence. The detection of at-risk individuals in psychiatry relies on a growing ability to identify with higher predictive validity persons who will, at some point, transition to a full-threshold disorder. On its own, it does little to indicate effective counter-measures against that eventual transition. For example, a similar development can be said to have happened with regards to Alzheimer's disease: people who are more vulnerable to this neurodegenerative disorder can now be identified years before its onset. Nevertheless, without effective pre-emptive measures, the only thing that can be envisaged for at-risk individuals is the provision of information about their vulnerability and the risks they face. In the case of psychiatry, however, several types of intervention have been elaborated for identified vulnerable persons, and many of them have been shown to delay or prevent more or less efficiently the onset of a full-threshold disorder. Speaking of 'early detection' and of 'early interventions', however, can be misleading. Many care structures using these terms (Early Intervention services in the U.K., for example) aim to 'support young people with first episode psychosis' (Marwaha et al., 2016, p.186). As such, the people to whom they provide care are often already patients suffering from an identified disorder, rather than at-risk individuals. While 'early intervention', even understood in that sense, still falls under the scope of my own evaluations, its meaning becomes too restricted to encompass the kinds of vulnerabilities which are at the heart of my dissertation. I need to account for vulnerabilities and risks detected before the onset of a full-threshold disorder or of a first episode. Both the APS and staging models aim to do just that, meaning that simply mentioning 'early detection' and 'early interventions' becomes inadequate. For the sake of clarity, I will thus speak of 'pre-onset early detection and interventions' and, on rarer occasions, of 'very early detection and interventions'.

Thirdly, I will often speak of 'vulnerable people' in lieu of 'people with vulnerabilities'. I made that choice mostly for the sake of simplicity: specifying every time that vulnerabilities are shared by all, but affect some people more than others, appeared more confusing than helpful. I do want to use this occasion to insist on this idea, however. Large parts of the line of argumentation I develop point out how stigmatising, paternalistic and patronising it can be to label whole groups as vulnerable,

while taking for granted that these vulnerabilities are not universally shared in one way or another. The negative impact that these kinds of generalising designations can have has been highlighted in various fields, and psychiatry is not spared from these excesses. But the whole impetus behind the development of pre-onset early detection and interventions in psychiatry hinges upon a growing capacity to identify those who are indeed more vulnerable than the norm, which is what talking of ‘vulnerable persons’ helps me underline. I have to recognise, however, that the formulation ‘people with vulnerabilities’ might have expressed this idea more rigorously, if not more efficiently.

V. OUTLINE OF THE CHAPTERS

The inaugural chapter outlines the methodology I use throughout this dissertation. I delineate the reasons why I have dismissed what I call ‘high moral theories’ for the evaluation of the ethics of pre-emptive psychiatry⁵. In adopting a top-to-bottom approach, they tend not to be comprehensive and adaptable enough, and they lack in explanatory power. The ‘mid-level’ approaches I have selected for the ethical appraisal of various models of vulnerability are supposed to remedy this problem. I believe that referring to Beauchamp and Childress’ principlism, Nussbaum’s account of the central capabilities, Rogers, Mackenzie and Dodds’ vulnerability theory and Wolff and de-Shalit’s work on fertile functionings and corrosive disadvantages allows me to work within a coherent and comprehensive framework that is particularly well-suited to the case of pre-emptive psychiatry.

The methodology is followed in Chapter 2 by an outline of the current state of research in pre-emptive psychiatry. This outline remains mostly descriptive; I attempt to provide an up-to-date account of the pre-onset early detection and intervention methods that have already been made available to at-risk individuals. Moreover, this

⁵ ‘High moral theories’, in this dissertation, designate moral doctrines which derive their normative power from theoretical underpinnings and use a ‘top-to-bottom’ approach when it comes to the application of their principles to concrete situations. Consequentialism, deontology or the ethics of care would be categorised as such. ‘Mid-level theories’ often rely on a form of ‘back and forth’ between particular moral judgements and moral principles, aiming to reach a coherent and reflective equilibrium between the two. I believe that the capabilities approach, various vulnerability theories or biomedical principlism all fit better under that umbrella.

chapter provides the occasion for me to explain the reasoning behind the elaboration of various models of vulnerability - including staging models - thus justifying why these models are of medical and therapeutic interest before they undergo any kind of ethical evaluation.

I then argue in Chapter 3 that the debate surrounding these new developments has missed an opportunity to discuss the ethical issues they raise in a constructive manner: often rigidly encased in a wider conversation about general and pervasive problems in psychiatry, this debate has sometimes failed to address the more specific features of pre-onset early detection and interventions, consolidating newer concerns into pre-existing arguments and blocking out pertinent lines of investigation. Various conceptualisations of psychiatric vulnerability and of the responses we ought to bring to it should be more clearly at the heart of this conversation.

I explore in Chapter 4 the relevance of the concept of vulnerability in ethical theory: there exists a wide-ranging consensus that vulnerability is not ethically neutral, so to speak. Despite an undeniable variation in the responses that consequentialism, deontology or the ethics of care bring to the recognition of vulnerability, they all point to the existence of strong moral duties that are tied to it. Based on this, I argue that focusing on conceptualisations of vulnerability should lay the foundations for a more constructive conversation about the ethics of pre-emptive psychiatry, and help identify applicable normative principles.

I then explain in Chapter 5 just how a specific conceptualisation of vulnerability can serve as the basis for a normative approach that favours resilience and relational autonomy over outright protective responses to vulnerability. Tensions between Beauchamp and Childress' principles of respect for autonomy and beneficence should not impede the way in which we react to vulnerability: relying on Nussbaum's capabilities approach, I defend interventions which acknowledge that it is through our relations to others that we can hope to gain autonomy and resilience. Early interventions should aim to preserve and improve these capacities in at-risk individuals.

Consequently, I highlight in Chapter 6 the advantages of integrating more traditional nosologies into the larger framework of nonspecific staging models: the latter are more likely to account for pluripotential, nonspecific risks, leading pre-onset early detection and interventions to be adapted accordingly. I aim to show that, through fostering a greater focus on resilience rather than on diagnosis and treatment, hybrid diagnostic models promote a better management of the ethical issues associated with pre-emptive psychiatry.

Chapter 1 - Methodological Justifications

Before attempting to lay down the foundations for a more constructive debate on the ethics of pre-onset early detection and interventions in psychiatry, I want to explain and justify several of the philosophical standpoints and outlooks I adopt throughout this dissertation. As I have to account for a series of constraints attached to the nature of this project, I believe that mid-level approaches like principlism and the capabilities approach offer better prospects for the evaluation of pre-emptive psychiatry and of the debate to which it gave rise than do high moral theories (and, in particular, utilitarianism).

In order to carry out the kind of evaluation that I have in mind, I must delineate a normative framework that is grounded on solid philosophical bases, all the while being readily applicable to the particular biomedical problem at hand. By 'readily applicable', I mean a framework which allows me to address with clarity all relevant problematics and ethical issues related to the development of pre-emptive psychiatry. I have to be able to account for all the aspects of these problems that I deem critical, in a way that is plausible to medical professionals and philosophers alike.

For the purpose of justifying my choice to refer to one normative framework over other possibilities, and aiming for both philosophical authority and accessible applicability, I thus intend to outline the series of constraints which are to inform this decision.

The problems raised by the development of pre-emptive psychiatry are incredibly varied and multifaceted, which means that whatever framework I select must be suitably versatile and comprehensive. Additionally, I am bound by the limited amount of data that can be gathered in the context of this project. Finally, I also need to

explain relevant concepts and principles (vulnerability and autonomy, in particular) in a way that is equally convincing to medical professionals and to ethicists. This kind of ‘explanatory power’ is thus deemed indispensable for an adequate evaluation of pre-emptive psychiatry.

This, in turn, leads me to make a distinction between so-called traditional, top-to-bottom ‘high moral theories’ (with a particular focus on preference and ideal forms of utilitarianism), and ‘mid-level theories’, which generally rely on the practice of reflective equilibrium.

As I will explain more at length later on, I will not consider particularism to the same extent as other theories in this dissertation, and that for two reasons: firstly, because I need to move from individual to collective scales (from at-risk individuals to medical professionals and to public policy-makers) in order to develop a fully-fledged reflection on the ethics of pre-emptive psychiatry. A philosophy like particularism, while it would allow for the detailed evaluation of all the morally-relevant features of the development of pre-emptive psychiatry, might not provide the type of framework I need to resolve clearly potential conflicts between these different agents. Secondly, and more importantly, I do believe that particularism is actually profoundly compatible with the pluralist, mid-level approaches I have selected in the end. Indeed, these approaches integrate many crucial insights from particularism, which they attempt to balance out with more general principles without ascribing priority to one over the other: what matters most is that the whole should be cohesive. Additionally, the mid-level framework I delineate in this dissertation is specifically tailored to the particular case of pre-emptive psychiatry, and is not meant to be applied as such to different situations.

What I want to demonstrate is that, while high moral theories like utilitarianism do provide insightful perspectives on the ethics of pre-emptive psychiatry, there remain various difficulties preventing them from being entirely adequate in this particular case. In the end, I determine that mid-level theories are better-suited to an in-depth evaluation of the development of pre-emptive psychiatry

and of the debate that accompanied it: in particular, I focus on Nussbaum's capabilities approach (2011); Wolff and de-Shalit's account of corrosive disadvantages and fertile functionings (2007); Rogers, Mackenzie and Dodds' contributions to vulnerability theory (2014); all combined with Childress and Beauchamp's principlism (2009). These approaches allow me to delineate an adequate philosophical framework with which to evaluate the ethics of pre-emptive psychiatry.

The forthcoming chapters of this dissertation are going to address many of the themes and arguments introduced in this section. A considerable challenge will therefore be to develop a convincing defence of the methodology I adopt throughout this project, while not impinging on lines of reflection that are to be initiated more appropriately later on. For this reason, I might, on occasion, mention an idea, a philosophical approach or an argument without going into an in-depth analysis at this stage, so as to be better able to integrate it where and when necessary.

I. ACKNOWLEDGING EXISTING CONSTRAINTS

In view of the dual objective I set for myself in this project (re-framing the debate on the ethics of pre-emptive psychiatry in a way that might encourage more constructive conversations and, in doing so, defending staging models), I need to adopt a coherent, grounded and applicable normative framework. Several constraints must first be acknowledged, though.

The first of these constraints is related to the sheer variety of issues that I must be able to address, necessitating a versatile and comprehensive normative framework; the second is linked to my need to adapt to a certain lack of data; while the last one calls for wide-ranging explanatory power.

1. Varied and Multifaceted Ethical Issues

The first constraint I wish to address is the necessity to cover *all* relevant ethical issues related to the development of pre-emptive psychiatry.

I fully intend to question, expand or delimitate both these issues and the place that they have occupied in the debate that took place with the progressive implementation of pre-onset early detection and interventions in psychiatry. Nevertheless, at this stage, I do need to insist on how wide-ranging this array of ethical problems really is. Whatever normative framework I eventually adopt has to be remarkably versatile if I am to consider each of these issues in a pertinent and comprehensive manner. The research questions I outlined in the introduction should be enough to emphasise the sheer scope of the concerns under consideration, and the various levels of enquiry that frame them.

Before anything else, it is possible to gather that there are many who are questioning whether implementing pre-emptive measures is worth the risks that these involve for at-risk individuals and others. Boiled down to a simple question, their concerns can be formulated as such: are the gains that these measures could potentially bring about for society, for at-risk individuals and for psychiatric practice worth their (monetary, but also psychological, social or medical) costs? While I intend to point out the limitations that are built into this formulation later on, it does highlight that some of the avenues of research that I am about to explore aim for an evaluation of possible *outcomes*.

Cost-benefit, cost-effectiveness and cost-utility analyses are widely-used in biomedical research and public policy for an arguably straightforward reason: their primary aim is to compare the relative value of outcomes attached to various interventions or measures. In a field which is dedicated to the promotion of health and the elimination of disease and/or illness, but which is also tethered by limited resources, these kinds of analyses provide a clear triage method and refer to

widely-recognised - if not always easily definable - concepts: monetary benefits, therapeutic effectiveness or welfare-related/preference-based utility. It is therefore not surprising at all to see those who are preoccupied with the ethics of pre-emptive psychiatry apply such methods in order to gauge the potential impact of pre-onset early detection and interventions in psychiatry, and to provide an answer to the question outlined above.

Despite my own intentions to go beyond this line of enquiry, I have absolutely no wish to question the importance of assessing (or even calculating) outcomes when discussing the ethics of pre-emptive psychiatry. I am concerned with diagnostic models and conceptualisations of vulnerability only insofar as they have a tangible and potentially harmful impact on the lives of at-risk individuals and others. As such, the normative framework I select must be able to account for these more consequentialist concerns.

Parallel to this, however, I am indeed very attentive to diagnostic models and conceptualisations of vulnerability themselves. While it is so because I believe that they encourage and bolster different views of at-risk individuals and of the ways to respond to their vulnerabilities, this also means that I must be able to evaluate their accuracy, their pertinence and their coherence within a wider philosophical and medical context. I thus also aim to question the validity of these models and conceptualisations outside of their direct and supposed consequences, and not solely in relation to them. The idea that one diagnostic model relies on a more complete and sophisticated understanding of vulnerability gives it an advantage over others that is not entirely dependent on the ways in which it might be used and the impact it can have: it simply presents better epistemic qualities than its competitors. This, in turn, allows for a more precise and responsive moral reflection on the subject at hand. I must therefore also be allowed to pursue such lines of investigation unimpeded by a too rigid normative framework.

It is also possible to gather, from the research questions alone, that I need to be able to balance and swap between individual and more collective scales: at-risk individuals themselves are, of course, at the heart of the debate surrounding the ethics

of pre-emptive psychiatry. However, the wider impact of pre-onset early detection and interventions must not be neglected, just like the moral responsibilities to which vulnerability gives rise cannot be thought of simply at the level of the medical profession. Citing 'comprehensiveness' and 'versatility' as necessary features of the normative framework I am to apply to pre-emptive psychiatry is not insignificant; it indicates that I must be able to evaluate pre-onset early detection and interventions on various levels (individual, familial, professional and societal), and from different perspectives (medical and psychiatric, psychological and political, to name a few). As mentioned earlier on, this is also one of the reasons why I have not presented particularist approaches as competing on the same level as principle-based, high moral theories. Issues arising with the development of pre-emptive psychiatry must be considered while keeping in mind the interests and responsibilities of all these different individuals and institutions. Demonstrating that particularism can (or cannot) provide relevant insights into solving potential conflicts is, unfortunately, outside of the realm of what can reasonably be accomplished in this dissertation: I believe that it is more relevant and effective to focus primarily on theories which have already been applied to the assessment of the ethics of pre-emptive psychiatry.

Going further, I question the manner in which the debate engendered by these relatively new developments in psychiatry has been led. All the lines of investigation I just mentioned are therefore implicitly mirrored in an underlying query regarding the capacity of biomedical ethics to provide pertinent insights into such a practical issue.

The sheer scope of information to be covered by these overlapping research questions might prove to be a problematic obstacle in the search for a consistent methodological approach. An ethical evaluation of the development of pre-emptive psychiatry would have to integrate of a great variety of data, from psychological studies to economic predictions and healthcare policies, from individual risks to societal interests. This points to another restraint attached to this project: the need to adapt to available data.

2. A Restrictive Lack of Data

A difficulty arises from the fact that, although results regarding both the identification of at-risk individuals and very early intervention techniques have been highly publicised in the field of psychiatry, only a few have led to wide-ranging implementation in existing healthcare institutions.

Pre-emptive psychiatry mostly remains embedded in the realm of research and prospective ventures. While some medical centres advertising a strengthened focus on early detection and early intervention have indeed gradually emerged in the past twenty years⁶, the controversy surrounding them is still ongoing. Additionally, first psychotic-like episodes (or first manic or depressive episodes in the case of bipolar disorders) remain at the heart of many early intervention services, rather than the prodromal symptoms and other pre-symptomatic vulnerabilities that would be targeted by pre-onset early interventions. The lack of official recognition⁷ of a diagnostic model for the purposes of very early detection, added to continuing disagreements with regards to diagnostic criteria, hinder a wider expansion of pre-emptive psychiatry. As a result, some elements are noticeably absent from the data that can be gathered on this topic. More particularly, information about the impact of pre-emptive measures is still quite fragmentary, be it in relation to economics, psychology or even health outcomes.

One could argue, though, that while this might impede the process of analysing the precise medical and ethical repercussions of pre-emptive psychiatry, it doesn't necessarily represent an obstacle to the possibility of an ethical evaluation itself. Indeed, applied ethicists have often endeavoured to engage in the study of anticipated technological evolutions, and most ethical theories do attempt to offer methods that are to be applied regardless of a current lack of factual data.

⁶ A few examples are: Early Intervention in Psychosis (EIP) services in the UK in the 2000's; Outreach and Support in South London (OASIS); the Personal Assessment and Crisis Evaluation (PACE) clinic in Melbourne, or the Early Recognition and Intervention Centre for Mental Crises (FETZ), in the Department of Psychiatry and Psychotherapy of the University of Cologne.

⁷ By 'official recognition', I mean at least a wide-ranging professional consensus regarding a diagnostic model. The APS is often heralded as the most plausible option, but despite the large influence of the DSM in psychiatry, I want to undermine this assumption.

A considerable amount of what is available regarding the development of pre-emptive psychiatry consists in medical publications advertising the results of clinical trials aiming to refine diagnostic criteria for at-risk individuals, and their predictive validity. Slightly rarer are those more focused on the identification of risk factors or on the efficacy of various pre-emptive measures. Several meta-analyses have compiled these results and organised them according to specific axes of investigation, however, and they do offer a more general outlook on the progressive development of pre-emptive psychiatry.

Publications on economic and financial data are still quite sparse, by comparison. Some have attempted to evaluate the economic impact of very early intervention for psychosis, and to analyse its cost-effectiveness or cost-utility⁸, but the samples collected remain very limited. As for those which have taken an interest in the individual perceptions of receiving the at-risk label, in potential feelings of stigmatisation or experiences of discrimination, they are fewer still. Nevertheless, the publications which are available on each of these topics are, as will be seen later on, quite revelatory and informative, even if they remain insufficient for something like a fully-fledged and thorough cost-effectiveness or cost-utility analysis of pre-emptive psychiatry.

As I do not have the possibility to gather data other than through published materials, this considerably limits the array of normative frameworks that I can reasonably expect to yield clear, accurate and applicable guidance. The only exception is the interview I have conducted in 2015 with Professor Jan Scott, a psychiatrist and researcher whose work is focused on the development of very early detection and interventions regarding bipolar disorder. I present her insights on the prospects that

⁸ Ising, H. K. et al. (2015) 'Cost-effectiveness of preventing first-episode psychosis in ultra-high-risk subjects: multi-centre randomized controlled trial', *Psychol Med*, 45(7).

McCrone, P. et al. (2010) 'Cost-effectiveness of an early intervention service for people with psychosis', *Br J Psychiatry*, 196(5), 377-82.

McCrone, P. et al. (2013) 'The economic impact of early intervention in psychosis services for children and adolescents', *Early Interv Psychiatry*, 7(4), 368-73.

Phillips, L. J. et al. (2009) 'Cost implications of specific and non-specific treatment for young persons at ultra high risk of developing a first episode of psychosis', *Early Interv Psychiatry*, 3(1), 28-34.

are currently envisaged by experts in the field in Chapter 6. Her vision and observations are therefore integrated into the materials used in this dissertation, alongside published quantitative and qualitative data.

As for ethical considerations related to new developments in pre-emptive psychiatry, they are often mentioned in the medical literature as part of the limitations attached to the implementation of pre-onset early detection and interventions, but they are only occasionally the central focus of these publications. I intend to show that these ethical considerations have been problematically restricted by more general discussions and disagreements regarding wider psychiatric practices.

In the end, it can be said that such limitations in the range of available data are to play a large role in the way I intend to evaluate the development of pre-emptive psychiatry. I have to be able to adapt to these constraints, all the while retaining the capacity to yield the kind of normative guidance that a problem like this one requires. Comprehensiveness and versatility should thus be accompanied by a lack of demandingness in terms of data input. Lastly, in addressing both medical professionals and ethicists, I need to delineate a framework that explains relevant concepts and principles in a satisfactory and plausible manner.

3. Explanatory Power

Whatever framework I select to evaluate the ethics of pre-emptive psychiatry must play a very specific and dual role: it must simultaneously allow me to shed light on all relevant ethical issues related to the development of pre-onset early detection and interventions in psychiatry, as well as elucidate the kinds of responses we ought to bring to these issues. In other words, it must be both explanatory and normative; and I believe these two features to be closely interrelated.

Ideally, the normative framework I select would allow this dissertation to fit into a broader philosophical tradition, while exemplifying the potential application of

its principle(s) to a very practical situation. The constraints I have just outlined, however, tend to indicate that this framework will most likely be specifically tailored to the case of pre-emptive psychiatry. It is not my aim, in this dissertation, to defend the overall superiority of one moral theory over all others. What I must find is a workable and fitting ethical framework so that I may apply it to the question of pre-emptive psychiatry alone.

If the development of pre-emptive psychiatry has engendered so much controversy, if it is even now at the heart of this dissertation, it is in great part because it questions how we demarcate mental health from mental illness. It also 'dares' to place vulnerability somewhere on that spectrum, closer or farther away from mental illness depending on the diagnostic model used for very early detection. It leads us to wonder if we are profoundly and irremediably unequal when facing risks of deterioration, or if we are all somehow concerned by such risks. Additionally, the progressive implementation of pre-onset early detection and interventions in psychiatric care challenges the ways in which we think of appropriate moral responses to the identification of risk and vulnerability: to what extent can we risk harm to at-risk individuals? How might they be harmed? Do we have a duty to intervene, and do they have a duty to accept these interventions? At this stage, all these questions, which only partially cover the full scope of the ethical issues related to the development of pre-emptive psychiatry, appear incredibly disparate.

To try to answer each of these questions separately would be either repetitive, or potentially contradictory. My hope is that the elaboration of a framework to think about these interrogations methodically will provide a way for me to untangle them and put them into perspective. And, here, the main question I must answer thus becomes: what is really at stake in the development of pre-emptive psychiatry? (I believe the most convincing answer is: models of psychiatric vulnerability and the moral responses to which they each give rise). It is therefore a great priority for me to develop satisfactory and enlightening accounts of the various notions and principles that are at the heart of my reply to that particular line of enquiry, all fitting into a coherent normative framework. I must speak of vulnerability and of respect for

autonomy, for example, in a way that is meaningful and enriching to both mental health professionals and ethicists.

Various philosophical traditions and moral theories will bring diverging insights into such notions and principles, and the most pertinent ones will therefore be those which can best bridge the gap between the preoccupations of the mental health professionals who work on pre-onset early detection and interventions, and those of ethicists.

For example, one might wonder whether it would be enlightening and informative to formulate these problems in terms of a professional's deontological duties to provide care; or even in terms of at-risk individuals' rights (to be informed and treated or, on the contrary, not to be informed). However, neither of these formulations on their own appears to facilitate an in-depth consideration of what the development of pre-emptive psychiatry might cost in the end, be it in terms of economic or medical resources, or even with regards to its psychological toll.

A similar line of thought can be followed if one's focus is primarily on the development of medical professionals' virtues in their pre-emptive efforts. Proponents of pre-emptive psychiatry have the stated objective to become able to identify at-risk individuals with the highest predictive validity possible - to detect those persons who are considerably more vulnerable than others - and to offer evidence-based very early interventions. Their own preoccupations centre mostly around these aims; and the ethical framework elaborated might reflect this as a central concern. It might also lead one to neglect other lines of investigation, however, such as problems of stigma and discrimination linked to the 'at-risk' label.

I believe that formulating the problem around conceptualisations of vulnerability provides a satisfactory solution to these issues: by exploring the kinds of responses we ought to bring to vulnerability (defined in a particular manner), it becomes possible to delineate a normative framework that allows us to address a very wide array of ethical problems in a coherent and plausible manner.

Due to the particular nature of this project, the normative framework eventually chosen needs to be accessible as well as efficiently applicable to this concrete situation. If this dissertation is to provide any kind of insight to those who are concerned with the development of pre-emptive psychiatry, the way in which I identify, delineate and analyse ethical issues has to be intelligible as well as befitting these people's own experiences. It is of great importance that this framework be able to account for the complexity of a multi-faceted, practical situation while offering pertinent normative guidance.

II. HIGH MORAL THEORIES

Given that this project hinges entirely upon the possibility of applying some form of normative framework to the development of pre-emptive psychiatry, it is now time to differentiate between theories so as to determine which one fares best when it comes to its actual application to this practical problem.

I will not, in this chapter, focus strongly on particularist approaches, instead turning first to high moral theories. If, indeed, particularism is to be thought of as a family of doctrines which are at least united by adopting a critical view towards the nature and the role of principles (Smith, 2011, p.2), it is more difficult to view it as an obvious candidate for a structured normative framework when, as is the case here, one intends to evaluate both the development of pre-emptive psychiatry and the ethical debate to which it gave rise.

The first reason behind this choice not to envisage a particularist approach on the same level as other high level candidates is that the latter allow for the methodological and straightforward application of norms and principles to a situation like the one at hand. It is for that reason that high moral theories are often privileged in applied ethics: they offer a clear-cut, and general - if quite rigid - decision-making process which appeals to many. Particularism, on the other hand, focuses more intently

on a specific situation, and derives moral judgements from its most salient features. However, who might be best placed to recognise the most morally relevant properties of the development of pre-emptive psychiatry? At-risk individuals? Psychiatrists? Policy-makers? The interests and responsibilities of these various agents can be in conflict with one another, and determining which one ought to take precedence over others is rarely done without ascribing a 'reason-giving capability' (Smith, 2011, p.28) to specific principles. Because of this, I believe that principle-based high moral theories are more likely to offer a familiar and well-adapted framework here, which is why they will be the primary focus of the upcoming subsections. High moral theories already occupy a large place in the ethical debate that has surrounded the development of pre-emptive psychiatry, and the choice not to go to them first while seeking to elaborate a normative framework for my own evaluations would be unjustified.

Nevertheless, I do join particularists in concluding that the 'order of priority' (Smith, 2011, p.53) between principles and particular judgements is indeed quite problematic in high moral theories - a reason why I prefer mid-level approaches. I would even go further and argue that the mid-level approaches I favour, by adopting the method of the reflective equilibrium, are not incompatible at all with particularist stances. On the contrary, the approach I will delineate later in this chapter relies heavily on the necessity to establish coherence between particular judgements and more general principles, and to do so without ascribing priority to either one.

Therefore, despite the useful resources that high moral theories - and especially utilitarian forms of consequentialism - provide here, I will argue that they remain insufficient and too rigid for a direct, top-to-bottom application of their normative principles to this particular case.

1. The Advantages of a Utilitarian Approach to Biomedical Ethics

Debates surrounding the *applicability* of moral theories are still ongoing in moral philosophy, and they have rarely been as emphasised as with the development of applied ethics, and more specifically of biomedical ethics. Many have embarked upon this particular exercise, trying to apply philosophical reasoning and moral theories to problems arising in fields like biomedical research, clinical medicine, and public health in seeking normative guidance.

In the tradition of applied ethics, a wide array of so-called 'high moral theories' - which draw their normative strength from theoretical underpinnings and adopt a top-to-bottom approach for their application - can be considered plausible alternatives. For restrictions related to time and efficacy, I need to assume that traditional high moral theories such as consequentialism, deontology or virtue ethics could each be supported by rigorous philosophical arguments and be potentially applied to problems arising with the development of pre-emptive psychiatry.

Unfortunately, while it would be quite enlightening to study in depth how each of these high moral theories bears upon the case at hand, I have to follow a more direct procedure. As I mentioned earlier, the object of this project is to contribute to ethical reflections on the topic of pre-emptive psychiatry, and not to evaluate the more general advantages and limits of diverse ethical theories. Evidently, I do need to justify the choice I make regarding the normative framework to which I will refer throughout this dissertation. However, it is imperative, first, to narrow down considerably the number of pertinent possibilities, which is why utilitarian forms of consequentialism are presented as the most persuasive, and will be the main focus of the upcoming subsections.

The reason why I am focusing on utilitarianism as the primary high level contender for the moral evaluation of pre-emptive psychiatry is explained, for the most

part, by one of the research questions I delineated earlier. The problematic in question already points to utilitarian lines of reasoning in its very formulation, seeing as it questions the overall effectiveness and utility of pre-emptive psychiatry, and encourages a balancing of the advantages it potentially brings about with its (monetary, but also psychological or medical) costs. Since this line of interrogation brings one to consider whether or not allocating limited resources to the development of pre-emptive psychiatry is worth its costs, it seems that this project lends itself particularly well to cost-utility calculations and welfare considerations. Using a utilitarian approach might indeed provide a convincing method, allowing for the defence or condemnation of pre-emptive psychiatry on ethical grounds. I intend to outline in Chapter 3 why cost-effectiveness and cost-utility analyses fail to do justice to the complexity that is characteristic of pre-emptive psychiatry, but what follows is a brief and general evaluation this approach in applied matters.

Utilitarianism is already quite a predominant ethical model in health policy-making; and several forms of utilitarianism are very commonly used by those who are concerned with other biomedical issues. Preference utilitarianism, for example, is a widely-adopted and prevailing approach in biomedical ethics, especially with the development of Quality-Adjusted Life Years (QALYs), or even the Willingness To Pay (WTP) measure, which are both particularly useful when one's aim is to rank various outcomes according to costs and projected values. I do agree with Tim Mulgan when he affirms that some of the most exciting work in contemporary utilitarianism is at the intersection of economics and philosophy, thus offering new perspectives of measurement and institutional design (2007, p.72). In the medical field, cost-effectiveness and cost-utility analyses, which are both based on utilitarian definitions of welfare or preferences, are frequently used as valuable instruments in decision procedures and economic evaluations (Haddix, Teutsch, Corso, 2003).

With regards to the development of pre-emptive psychiatry, most of the ethical and economic analyses that have already been carried out do actually rely heavily on such methodologies. In the debate that opposed them in the *British Journal of Psychiatry* (around an interrogation very similar to the one I mentioned earlier: 'Is early

intervention for psychosis a waste of valuable resources?'), both Pelosi and Birchwood frame their arguments in utilitarian terms (Pelosi, Birchwood, 2003). While Pelosi regrets that Early Intervention Services misleadingly divert valuable resources to specialised teams, therefore hindering the capacity to provide decent care 'to people with severe and enduring mental disorders' (Ibid., p.196), Birchwood, who focuses more heavily on long-term outcomes, welcomes the UK Government's investment in new services for early psychosis. In parallel, Bentall and Morrison appeal to the necessity of balancing likely benefits and likely costs in their charge against the use of antipsychotic drugs to prevent severe mental illness (Bentall, Morrison, 2002, p.352). After recognising the difficulty of cases in which the recipient of benefits (meaning the person whose illness is prevented) is not necessarily the same person as the recipient of costs (identified at-risk individuals who may never have developed the illness but who are nonetheless exposed to the risk of suffering from side effects), they reach the conclusion that 'from a utilitarian perspective, the cost benefit analysis becomes more favourable towards treatment the more dreadful the consequences of the illness, once it develops' (Ibid., p.352).

From a more overtly economic perspective, a few small-scale cost-effectiveness studies have been implemented, the results of which have, for example, relied on medical and travel costs, types of intervention, as well as costs arising from loss of productivity (Ising et al., 2015); or on the rates of relapse, hospitalisations, vocational recovery and quality of life (McCrone et al., 2010, pp.377-378). With regards to that last criterion, the use of Quality-Adjusted Life Years (QALY) is a prime example of utilitarian conceptualisations of welfare applied directly to public health considerations and pre-emptive psychiatry.

Healthcare professionals, researchers, policy-makers - and even patients - are familiarised with utilitarian reasoning in ethics, which is a great advantage for this approach in the context of this dissertation.

However, despite the frequent use of preference utilitarianism in biomedical ethics, the utilitarian approach I consider most adaptable to the case of pre-emptive

psychiatry - the one I deem to be the most pertinent - is a form of ideal utilitarianism. Such an account would rely on a pluralistic and complex account of well-being (i.e. one that is not limited to hedonistic or preference considerations). I argue that ideal utilitarianism is superior to other forms of consequentialism in the case that preoccupies me because it recognises a diversity of ends to be promoted and ranked, the value of which is seen as intrinsic rather than simply instrumental. These ends are conceived as objective interests, and as constitutive of well-being (though they can be sought out for themselves). Lists of valuable ends, depending on the account selected, tend to incorporate elements such as political liberty, economic independence, basic standard of living, access to education and healthcare, etc., each participating in the collection of individual utilities. In view of the kinds of harms to which at-risk individuals might be more vulnerable, I believe that ideal utilitarianism is better able than other forms of utilitarianism to express how these persons could potentially see their liberty, their independence, their self-image and their educational and professional opportunities threatened (amongst others).

Conversely, the recurrent criticism levelled against preference utilitarianism, which points to adaptive preferences⁹, might be especially problematic in this case, as both prodromal symptoms and the at-risk label could be argued to have a significant impact on one's preferences. Ideal utilitarianism's focus on welfare as the ultimate good (Mulgan, 2007, p.61) is thus a characteristic that might also play in its favour here, in contrast with other high moral theories: by placing the 'objective' interests of at-risk individuals - and those of society in general - at the heart of its ethical line of justification, ideal utilitarianism allows for the consideration of a vast array of problems within a coherent and systematic methodology. Without going into the particulars of the concept of well-being, it is already possible to ascertain that a utilitarian approach might help ground reflections on most of the ethical issues identified with regards to the development of pre-emptive psychiatry, from overdiagnosis to stigma or

⁹ The problem of adaptive preferences is a criticism that capability theorists often raise against preference utilitarianism. It highlights how preferences are unreliably adaptive, as many victims of injustice appear quite content to perpetuate their own oppression and disadvantages. Adaptive preferences might be particularly problematic for theories of distributive justice, 'where preferences may play a role in determining the goods or opportunities an individual is entitled to' (Begon, 2015, p.241).

overmedication. Nevertheless, 'going into the particulars of the concept of well-being' is still necessary if ideal utilitarianism is to become an applicable normative framework.

Despite this approach's many qualities as well as its pertinence in the ethical evaluation of pre-emptive psychiatry, I believe that utilitarianism remains, in the end, inadequate and insufficient for this project, and so for a number of reasons. It is due, first and foremost, to limits that are directly associated with utilitarian theories and the definition of well-being; and, secondly, to remaining difficulties in trying to apply high moral theories to practical situations such as the development of pre-emptive psychiatry.

2. A Rigid Framework

Ideal utilitarianism's focus on well-being as the ultimate good may actually contribute to discredit it as an applicable and effective framework to assess the ethics of pre-emptive psychiatry, despite how well-suited it might seem at first glance. That it requires a rigid top-to-bottom application of its normative principles only adds to that.

The difficulties inherent to the elaboration of a satisfactory account of well-being are at the heart of the first criticism. Utilitarian approaches need to rely on such accounts and provide specific criteria for the understanding of that notion in order to apprehend, promote and calculate well-being. Ideal utilitarianism, in opposition to other forms of utilitarianism, often relies on an 'objective' or 'substantive' view of well-being, outlining a series of intrinsically valuable elements (Mulgan, 2007, p.61). While I believe this utilitarian approach to be most pertinent in the context of this dissertation - more so than theories centred on preference satisfaction or hedonism - numerous difficulties must be overcome in the identification and justification of the elements that are constitutive of well-being. Accusations of paternalism have been thrown against such attempts, for example: who can claim for oneself the right to determine what well-being objectively consists in, sometimes despite people's own preferences to the contrary? Any assertion about a feature believed to be a necessary

component of well-being would most probably not be able to escape controversy (Mulgan, 2007, p.85). Were the ideal utilitarian framework to be selected for this dissertation, a solid account of well-being would need to be elaborated. Such an endeavour seems severely overambitious in the context and limits of this research project, however. One hope would be to find an existing account of well-being that allows for a comprehensive analysis of all the ethical issues that arise with the development of pre-emptive psychiatry without being overly restricted by limited amounts of data, while also providing plausible and persuasive accounts of relevant notions and principles. I am unsure that ideal utilitarianism on its own can fulfill these demands satisfactorily.

Additionally, defining well-being as the ultimate good through which to judge all ethical features of the development of pre-emptive psychiatry would considerably restrict the scope of this ethical analysis. Although making the promotion of well-being the focal point of this project does bring out essential problematics and features of pre-emptive psychiatry, it also precludes the study of several key ideas. If one were to draw a very brief overview of the spectrum of potential ethical issues arising with the development of pre-emptive psychiatry, one striking characteristic would be the sheer diversity in kind of these various problems. Concerns surrounding over-medicalisation, overmedication and overdiagnosis can all be traced back more or less directly to the elaboration of diagnostic criteria themselves, but risks of stigmatisation and discrimination may be grounded in complex and multifactorial determinants, as may the possibility of unequal and disadvantaging access to healthcare resources. I must therefore be able to account for problems that are directly outcome-related, and problems akin to erroneous or inadequate diagnostic models and conceptualisations of vulnerability.

While adopting an ideal utilitarian approach might allow for an incisive and pertinent enquiry into how to deal with each of these concerns in the most ethical manner, then, it would also obviate several relevant lines of interrogation. One can use the example of stigmatisation to illustrate this point: utilitarians would be capable to explore and evaluate questions pertaining to increased risks of stigmatisation with ease,

determining whether or not the development of pre-emptive psychiatry might, in the end, fail to promote general welfare. These utilitarians might even, with a sufficiently rich account of well-being, rest their case on a subtle understanding of the implications of unjustified stigma, from its impact on at-risk individuals' quality of life to its repercussions on self-image, motivation or capacity for self-determination. However, any question regarding the existence of a discourse that is deliberately 'biologising' in order to lessen perceived stigma would be limited to the actual efficacy of such a stratagem, without much regard for its value, or its accuracy.

Similar remarks can be made in relation to the problem of fair access to healthcare: as a consequentialist theory, utilitarianism would point to any measure that maximises overall welfare as the most ethical one. In the case of pre-emptive psychiatry, however, this might lead to the neglect of disadvantaged populations who, although more seriously at risk than others, might possibly be less likely to have a good observance of treatments and be more difficult to reach. In practice, it might indeed be less effective to target disadvantaged populations due to a higher risk of disengagement and the requirement of more pronounced economic and medical efforts. If these assumptions were proven true, an evaluation of the fairness of that conclusion might indeed give reason to utilitarian lines of thinking, but it remains legitimate to ask the question, even if it falls outside of a purely utilitarian framework.

In order to rely exclusively on utilitarianism, one would need to provide extensive justifications for forsaking these avenues of inquiry. As mentioned above, though, it is neither within the bounds of this dissertation, nor is it its object, to defend a specific moral theory. If the goal here is to produce a comprehensive ethical analysis of the development of pre-emptive psychiatry, limiting the method to utilitarian considerations seems to be arbitrarily restrictive, given the complexity and the diversity of the issues under study.

Moreover, another factor renders the use of utilitarianism in this dissertation a precarious choice, although for more pragmatic - but more decisive - reasons this time. As explained previously, the decision to select one normative framework over another

will be partially informed by limitations in the amount of resources available. Whatever the preferred account of well-being, any utilitarian analysis of a practical situation like this one would have to rely on a large amount of accurate and quantifiable data, be it of patient preferences, QALYs estimations or medical costs. Most data of this type has yet to be collected, however, due to the prospective nature of pre-emptive psychiatry. Designing a comprehensive and pertinent cost-utility analysis, although a worthwhile initiative, is an endeavour too demanding in terms of resources in the context of this project.

The difficulties previously mentioned are related to utilitarian approaches specifically, but other obstacles appear due to utilitarianism's status as a high moral theory. High moral theories such as utilitarianism, but also deontology or virtue ethics, face difficulties in providing a solid basis for the application of ethical principles. Such is the case for two reasons; and the first of these is related to the nature of ethical beliefs. According to Griffin, while there is some degree of organisation to our actual ethical beliefs, it remains almost impossible for them to be organised in the same manner that beliefs in the sciences are - meaning that they cannot take a holistic form with systematic unity (1996, p.124). Yet, this is what traditional forms of applied ethics try to do when they attempt to find sanction or support for a whole set of beliefs (Ibid., p. 123). In the end, ethical beliefs are best defined as what Griffin calls 'beliefs of fairly high reliability', therefore rendering any attempt to organise them in a coherent and unified system, working top-to-bottom from theory to application, rather perilous. It is possible to draw a parallel between what Griffin says of environmental ethics and biomedical ethics: both might be developed using the resources of an already established ethical tradition, but it is also likely that the problems they present are so discontinuous with the concerns that shaped older ethics that new conceptualisations, tied in with older ones, must be refined (Griffin, 1996, p.127).

The second reason why high moral theories often fail to be readily applicable to specific situations is best explained by London, when he writes that 'the independence of practical ethics is rooted in an appreciation of the constraints that non-ideal circumstances place on the role that the philosophically refined premises of

moral theory can play' (London, 2001, p.87). Most high moral theories fail to account for the decidedly non-ideal circumstances in which moral judgements and moral considerations actually take place. The development of pre-emptive psychiatry provides a good illustration of this particular point: even assuming that a substantial and satisfying account of well-being were to be developed, and sufficient resources were available for a comprehensive cost-utility analysis, utilitarianism would remain bound to its ideally framed, theoretical lines of reasoning. It would fail to account for the disorganisation, the internal disagreements or the malleability inherent to such medical evolutions.

To conclude, accounts of well-being derived from ideal utilitarianism and cost-utility analyses can prove to be very useful instruments, providing crucial information and pertinent perspectives on the development of pre-emptive psychiatry. However, taken as the sole methodological approach through which to evaluate the ethics of pre-emptive psychiatry, rather than as a complementary tool, it suffers from many disadvantages. For this reason, mid-level ethical theories are considered to be a better potential fit for this dissertation.

III. APPLICABLE MID-LEVEL THEORIES

Now that high moral theories in general, and utilitarianism in particular, have been deemed pertinent but insufficient to provide a sound methodology for the evaluation of pre-emptive psychiatry, I wish to consider some pluralistic, mid-level theories as a plausible alternative. Several of these approaches might be of particular interest here: Beauchamp and Childress' account of principlism (2009), and Nussbaum's capabilities approach (2011), Wolff and de-Shalit's work on fertile functionings and corrosive disadvantages (2007), and Rogers, Mackenzie and Dodds' vulnerability theory (2014). All of these are compatible with one another, referring to common principles and notions, and relying on a similar procedure: the reflective equilibrium.

1. Principlism

As a mid-level theory centred on four core principles (respect for autonomy, nonmaleficence, beneficence, and justice), Beauchamp and Childress' account of principlism does not claim to have the theoretical foundation of a complete system for general normative ethics: its aim is to provide a comprehensive general framework for the specific domain of biomedical ethics (Beauchamp, Childress, 2009, p.334). Principlism accepts as legitimate various aspects of many theories advanced in the history of ethics, but it rejects the hypothesis that all leading principles of the major moral theories can be assimilated into a coherent and applicable whole (Ibid., p.334).

Principlism, as developed by Beauchamp and Childress, is founded upon what they call the 'common morality': a set of moral standards (encompassing norms, rules, virtues, etc.) that are applicable to all persons in all places, and through which all human conduct can be judged (Beauchamp, Childress, 2009, p.3). Their conception is not ahistorical: products of human experience and history, they are nonetheless universally shared (Ibid., p.3). The four principles of biomedical ethics that these two authors have identified can therefore be seen as providing a much needed analytical framework both articulating general norms of the common morality, and providing a solid starting point for the specification of rules, obligations, rights, etc. in biomedical ethics (Beauchamp, Childress, 2009, pp.12-13).

Beauchamp and Childress' approach is primarily concerned with the development and the justification of these four principles, so that they may be applied specifically to the areas of science, medicine and healthcare. The wish to provide pertinent and useful tools to researchers, medical practitioners and policymakers facing ethical considerations has led them to emphasise the significance of contextual factors in decision-making and in public policy: 'the implementation of moral principles and rules must take into account factors such as feasibility, efficiency, cultural pluralism, political procedures, pertinent legal requirements, uncertainty about risk, and non-compliance by patients' (Beauchamp, Childress, 2009, p.9).

As such, substantial flexibility is required in the articulation and application of the four principles of biomedical ethics, as well as the rules, obligations, virtues, rights, etc. that are specified from them. All of these must allow for compromise in situations that require it, and therefore cannot be absolutely rigid. However, the acknowledgement of necessary compromises should not be perceived as a weakness, but rather as a strength of Beauchamp and Childress' account: 'it is no objection to moral norms that, in some circumstances, they can be justifiably overridden by other moral norms with which they conflict. Principles, duties, and rights are not absolute merely because they are universal' (Beauchamp, Childress, 2009, p.14). Flexibility and adaptability, here, are an openly pragmatic choice, in that they allow for the consideration of contextual elements that are specific to particular problematics or situations. Be that as it may, Beauchamp and Childress both insist on method and coherence in order to preserve the integrity of their mid-level theory: progressive specification and balancing, both used within the bounds of a Rawlsian type of reflective equilibrium, are the two main ways in which precise ethical judgements are reached.

In rejection of top-to-bottom high moral theories (in which general principles are deemed too rigid for pertinent application) and simple casuistry (focused on paradigm cases but deprived of higher justifications), Beauchamp and Childress have instead opted for a method admitting the absence of a fixed order of inference or dependence from general to particular, or from particular to general (Beauchamp, Childress, 2009, p.381).

The type of reflective equilibrium that they defend aims to 'match, prune, and adjust considered judgements and their specification to render them coherent with the premises of [Beauchamp and Childress'] most general moral commitments' (Beauchamp, Childress, 2009, p.381). These 'general moral commitments' are in reference to the common morality mentioned earlier, which supplies Beauchamp and Childress' initial norms. As for the 'considered judgements', they encompass moral convictions at all levels of generality in which agents have the highest confidence and

which are believed to have the least bias (Ibid., p.382). The development of sound moral judgements therefore relies on the exercise of this constant two-fold adjustment aimed at preserving the coherence of the whole. Concerns for coherence are indeed at the heart of the reflective equilibrium, which is accordingly in perpetual development, always striving for stability without ever being able to attain it.

Progressive specification, as mentioned earlier, is one way in which one can handle the great diversity of ethical challenges that emerge in research, medical practice or public policy: this process, aiming at reducing the indeterminate character of abstract principles and at generating more specific, action-guiding content (Beauchamp, Childress, 2009, p.17), offers a way to reduce conflicts where more general principles fail to provide guidance. However, the process of progressive specification cannot avoid the apparition of competing specifications. In such cases, though Beauchamp and Childress reiterate the value of overall coherence, they concede, once again, that there are occurrences of genuine ethical dilemma in which no specific moral belief can be determined to be unquestioningly superior to another (Beauchamp, Childress, 2009, p.388). 'Balancing' is another useful process, more focused on justification than scope. In evaluating the strength and legitimacy of an array of beliefs, it allows for a due consideration of all norms bearing on a complex, very particular circumstance (Ibid., p.21).

Because principlism relies so heavily on the common morality and a process of reflective equilibrium, it incorporates pertinent elements from a series of higher theories - ethical theories (utilitarianism, Kantian ethics, virtue ethics, or the ethics of care), but also political theories, or theories of justice (liberalism, egalitarianism, contractualism...).

The four principles of biomedical ethics identified by Beauchamp and Childress offer a pragmatic and open starting point for a coherent evaluation of the ethics of pre-emptive psychiatry. Indeed, questions of autonomy, nonmaleficence, beneficence and justice seem to be at the heart of many issues that are to be central in this dissertation. It is now appropriate, though, to analyse briefly the scope of ethical

considerations that these four principles can actually cover with regards to the development of pre-emptive psychiatry.

The principle of respect for autonomy, widely employed in biomedical ethics (regardless of theoretical affiliation), is quite illustrative of the capacity of principlism to cover a wide array of moral considerations, and to apply them to particular problematics. However, as will be seen later on, it also highlights the existence of potential limits in the scope of action that principlism can justify or motivate.

Beauchamp and Childress define autonomous actions in terms of acting (1) intentionally, (2) with understanding, and (3) without controlling influences that determine one's action (Beauchamp, Childress, 2009, p.101). The criteria, identified in such a way, allow for various degrees of autonomous action, depending on how the last two conditions just enumerated are fulfilled. Both authors estimate that, for an action to qualify as autonomous according to their account, 'it needs only a substantial degree of understanding and freedom from constraint, not a full understanding or a complete absence of influence' (Ibid., p.101). This also leaves the door open for more or less complex conceptualisations of autonomy, including accounts insisting on the importance of social relationships and intersecting social determinants in the formation of one's identity (a crucial quality, I argue) - as long as these features of autonomous action are accepted and acknowledged (Beauchamp, Childress, 2009, p.103).

Beauchamp and Childress stress the idea that the principle of respect for autonomy can be stated both as a negative obligation and as a positive obligation (for example, the obligation to foster autonomous decision making) (Ibid, p.104). The process of progressive specification can, in this way, use both types of obligation to support a variety of moral norms. For example, in delineating the existence of a duty to respect a person's autonomy, in which autonomous action must fulfill (at least to some degree) several conditions, this account defends a correlative 'right to choose, not a mandatory duty to choose' (Ibid., p.105). The possibility to decline information is therefore recognised and validated. In the case of pre-emptive psychiatry, as will be

seen later on, this specification is of particular importance, especially considering the risks of false-positives and the particularity of the 'at-risk' label.

However, while acknowledging that 'fostering autonomous decision making' might be a positive obligation, and specifying precisely what shape that obligation may take, principlism fails to account for such an obligation outside of a purely medical setting, therefore disregarding its wider scope. Admittedly, anything falling outside a defined field (clinical medicine, medical research, or public health) should not be incorporated into reflections centred on biomedical ethics, at the risk of losing clarity and focus. However, I argue here that such a restriction in the scope of matters under consideration would considerably hinder the pertinence of an ethical analysis - especially with regards to matters of prevention.

In recent years, for example, a stronger emphasis has been placed in biomedical ethics on the quality of people's actual understanding of information and their consent, rather than on the duty simply to disclose that information (Beauchamp, Childress, 2009, pp.117-118): clinical experience and empirical data 'indicate that patients and research subjects exhibit wide variation in their understanding of information about diagnoses, procedures, risks, probable benefits, and prognoses' (Ibid, p.127). This shift in attention has led to the identification of problematic obstacles to understanding that have later been overcome, at least partially, through specific procedures. But the capacity for autonomous decision-making, even within the limited account defined by Beauchamp and Childress' criteria, and despite beneficial refinements like the ones surrounding the notion of understanding, must be fostered by a multitude of measures going far beyond what medical practitioners, researchers or even healthcare policymakers can do on their own.

This issue is especially salient in the case of preventive medicine. While the availability of readily understandable information for populations with vulnerabilities helps foster autonomy, one's capacity for autonomous action might hinge upon factors falling outside the realm of medical or scientific intervention. Preventive measures cover a multitude of possible actions, many of them not immediately medical. In order

to satisfy - even partially - the third condition for autonomous action identified by Beauchamp and Childress (the absence of controlling influences that determine one's action), at-risk patients must, for example, be preserved from undue pressure arising from the stigma associated with specific choices, or simply have access to necessary resources from which they are unjustly deprived and which cannot be made available in any medical or healthcare capacity. Similar remarks can be made with regards to the principles of nonmaleficence, beneficence and justice.

Because they accept both broad or narrow construals of harm, obligations of nonmaleficence as developed by Beauchamp and Childress are particularly helpful when one has to analyse the specific repercussions of the development of pre-emptive psychiatry. Certainly, at the heart of many ethical concerns surrounding this question are the potentially unjustified harms done to at-risk individuals: issues of overmedication and overdiagnosis are central in the rationale of those who oppose, on ethical grounds, the recognition of an 'at-risk' status in psychiatry.

Beauchamp and Childress dismiss as morally dangerous the traditional distinctions (such as intended versus merely foreseen effects, withholding and withdrawing treatment, killing and letting die, etc.) that have occupied a privileged position in professional codes, institutional policies, and writings in biomedical ethics (Beauchamp, Childress, 2009, p.155). They prefer to focus on the arguably more morally pertinent distinction between futile (or pointless) treatments, and obligatory treatments (in the absence of valid refusal of treatment). Although both of them work with this distinction in the context of a specific topic in biomedical ethics (mainly intending, causing, and permitting death or the risk of death), their work on obligations of nonmaleficence and futile/obligatory treatments can be applied to pre-emptive psychiatry and other medical domains.

The term futility, here, is used to cover many situations of predicted improbable outcomes, improbable success, and unacceptable benefit-burden ratios (Ibid., p.167): 'decision makers typically use futility to express a combined value judgement and scientific judgement' (Ibid., p.168) - therefore, it is a particularly useful

notion to use when considering the efficacy and the necessity of pre-emptive measures. A certain shift is indispensable, though: because their focus on palliative care brings them to consider only life-sustaining treatments, Beauchamp and Childress associate futile measures with the idea of optionality, and necessary/effective treatments with that of obligation. With a wider understanding of futility, therefore including treatments other than life-sustaining or life-saving, such associations are less applicable: futility would be more easily associated with the idea of duty (the duty not to treat). It then becomes possible to combine considerations centred on quality of life, or well-being, with medical and scientific input in order to determine whether a treatment is futile or effective.

Closely related, the principle of beneficence permits a precise evaluation of the other side of that coin. Beneficence is a principle used to determine the legitimacy of positive duties - that of providing benefits to others. A comprehensive and coherent account of well-being is an essential feature of reflections centred on beneficent duties: one cannot defend the idea of such duties without at least a rough account of what one should aim for. In healthcare, utilitarian conceptualisations of well-being are widely used, thanks to their propensity to balance benefits, effectiveness, utility, risks, and costs so as to produce the best overall results. Beauchamp and Childress expand this notion to account for virtues of benevolence, various forms of care, and non-obligatory ideals of beneficence (Beauchamp, Childress, 2009, p.197), and they reject stronger accounts of beneficence in which the possibility of beneficence as an ideal is dismissed.

As mentioned earlier, cost-effectiveness analyses (CEA), cost-benefit analyses (CBA) and cost-utility analyses (CUA) have become quite common in medicine - both in research and in public policy. However, such quantitative instruments, centred on probability and magnitude, have been at the centre of many controversies: 'critics claim that these methods of analysis are not sufficiently comprehensive, that they fail to include all relevant values and options, that they frequently conflict with principles of justice, and that they are often themselves subjective and biased' (Ibid., p.222). While Beauchamp and Childress recognise the usefulness and insights of techniques derived from utilitarian thought, especially in the formulation of public policy, they insist on

the idea that they can only provide one form of indicators for appropriate social beneficence (Ibid., p.230). They balance the use of cost-effectiveness analyses (and others) as ways to implement the principle of utility with principles such as respect for autonomy and justice, in order to set much needed limits (Beauchamp, Childress, 2009, p.233).

Indeed, conflicts with ideas of autonomy and justice are the most pervasive problem one faces in the implementation of duties of beneficence. In biomedical ethics, accusations of paternalism highlight this situation in a very illustrative way, and are also particularly relevant in the context of pre-emptive psychiatry. While Beauchamp and Childress defend the legitimacy of both soft and hard paternalism in very specific situations, they stress the importance of caution even with regards to some forms of soft paternalism: 'soft paternalistic policies, for example, sometimes work by stigmatising certain conduct. However, in practice, it is easy to slide from stigmatising conduct to stigmatising people who engage in that conduct' (Ibid., p.212). Preventive measures, in psychiatry just like in many other areas of medicine, often make use of such forms of soft paternalism, from a condemnation of smoking to the encouragement of balanced diets and regular exercise. Principlism, therefore, provides once again useful concepts to undertake the ethical evaluation of medical practices, and of pre-emptive psychiatry.

The principle of justice, as elaborated by Beauchamp and Childress, incorporates elements from various theories of justice in an effort to bring coherence and comprehensiveness to visions of how healthcare resources ought to be distributed in a way that adheres to ideals of social justice. From a Rawlsian acceptance of the fair-opportunity rule (stating that undeserved disadvantaging conditions need to be compensated), to a utilitarian focus on maximisation, or a rights-based and egalitarian attention to the idea of a decent minimum, Beauchamp and Childress try to delineate a conceptualisation of justice and fairness as comprehensive as can be for the field of biomedical ethics. In doing so, they manage to account for a multitude of justice-based concerns, as varied in scope as they are in substance. Applied to the specific problems appearing with the development of pre-emptive psychiatry, the principle of justice can

be used in reference to a wide range of concerns. For example, disparities in healthcare based on social and gender properties are social problems that fall under the fair-opportunity rule (Beauchamp, Childress, 2009, p.250), and such disparities can be evaluated both at a national or at a global level.

Issues of disparity and disadvantage are particularly prominent in psychiatry, in which environmental risks are pronounced (low income, migration, sleep-patterns, abuse, insecurity, etc. are all recognised factors in the existence of higher risks for specific disorders or symptoms). Furthermore, the right to a decent minimum of healthcare is seen by Beauchamp and Childress as an attractive, moderate, egalitarian point of view that offers a possible compromise among libertarians, utilitarians, communitarians, and egalitarians (Beauchamp, Childress, 2009, p.261), by allowing the recognition of a two-tier system consisting of a unitary system at the first tier of healthcare, and a pluralist system at the second tier (Ibid., p.272). Both authors defend the idea that the recognition of global, enforceable rights to a decent minimum of healthcare can be used to condemn the piecemeal approach taken by many countries to their healthcare system, despite the fact that principlism recognises the relevance of various theories of justice (Ibid., pp.280-281). This perspective recognises the legitimacy of trade-offs between efficiency and justice, a position that mirrors Beauchamp and Childress' insistence on the possibility of contingent conflicts between beneficence and justice (Ibid., p.181).

Although it has been determined that Beauchamp and Childress' approach allows for the possibility of a practical, multi-factorial and pluralistic ethical evaluation of pre-emptive psychiatry, it is necessary to acknowledge the limitations attached to this choice. The absence of higher-level justifications, even though it permits greater comprehensiveness and pertinence than most ethical theories, does leave upcoming arguments potentially open to criticism due to a lack of higher theoretical grounding. It also circumscribes ethical reflections to the realm of medicine and public health policy.

In conclusion, Beauchamp and Childress' principles of biomedical ethics provide the opportunity to cover a very large array of issues, at diverse levels of medical

practice and with regards to a variety of agents, despite some restrictions. It has the advantage of being flexible enough to provide practical guidance without removing the possibility to appeal to ethical principles, norms and theories in grounding diverse moral judgements. Principlist lines of reasoning will thus be very present in the rest of this evaluation of the ethics of pre-emptive psychiatry, although, more often than not, not overtly so: the avenues of reflection introduced in this subsection will often be very closely tied in with other mid-level theories that I believe to be profoundly compatible with Beauchamp and Childress' work.

2. The Capabilities Approach and Others

In order to account for problematics that exceed the limits of purely biomedical considerations, another mid-level theory has been selected. The choice to focus on the account of capabilities developed by Nussbaum reflects a resolution to formulate such problematics within a more politically-informed framework. Indeed, a considerable amount of deliberations surrounding the development of pre-emptive psychiatry falls directly under the scope of public policy - be it healthcare measures or more general programs - and therefore needs to be politically motivated in addition to being ethically justifiable.

Adopting a form of political liberalism, Nussbaum's account of the capabilities approach borrows what one might call a 'statement of intent' from Rawls, in the sense that one of its primary aims is to provide principles which can be recognised as legitimate and applied in a pluralistic society. Consequently, the idea of a potential overlapping consensus in which holders of a variety of views - philosophical, secular or religious - can convene, is at the heart of the capabilities approach (Nussbaum, 2013, p.79). As a mid-level political doctrine relying on a similar kind of reflective equilibrium as Beauchamp and Childress' principlism, then, I argue that the capabilities approach brings a distinct, though complementary, set of concepts to the table.

Nussbaum follows Sen in defining capabilities as ‘substantial freedoms’: a set of (usually interconnected) opportunities to choose and to act (Nussbaum, 2013, p.20). The notion is complex, as well as multi-faceted: the substantial freedoms mentioned above - or *combined capabilities* - encompass both the fluid and dynamic abilities residing inside a person, but also the freedoms or opportunities created by a combination of personal abilities and a certain political, social, and economic environment (Nussbaum, 2013, p.20). *Internal capabilities*, which are ‘trained or developed traits and abilities, developed, in most cases, in interaction with the social, economic, familial, and political environment’, must be distinguished from innate aptitudes that can potentially be nurtured (*basic capabilities*) (Ibid. p.21). Additionally, on the other side of capability is *functioning*: ‘a functioning is an active realization of one or more capabilities’ (Nussbaum, 2013, pp.24-25). A list of ten central capabilities has been identified by Nussbaum: *life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; control over one’s environment* (Nussbaum, 2013, pp.33-34).

To include the intricate notion of capabilities in the context of this dissertation opens up highly pertinent perspectives. First and foremost, it allows for the introduction of a clearer idea of governmental and societal responsibility, especially with regards to groups and individuals presenting specific vulnerabilities. As a grounded theory enriched by the experiences, the stories and the identified needs of the people concerned, the capabilities approach also provides fundamental tools for the identification and the management of such vulnerabilities.

Nussbaum’s approach is indeed deeply normative, adopting from the very start a clear evaluative and ethical stance (Nussbaum, 2013, p.28). At its heart is the notion of dignity, and the idea that society has a responsibility both to protect and to promote living conditions worthy of people’s dignity (Ibid., p.30). Indeed, the capabilities approach asserts that an affirmative task for governments stems from the existence of such entitlements (Nussbaum, 2013, p.65): ‘fundamental rights are only words unless and until they are made real by government action’ (Ibid., p.65). Closely related to Beauchamp and Childress’ account of the ‘fair-opportunity rule’, which states that

undeserved disadvantages induce a right in justice to some form of assistance (Beauchamp, Childress, 2009, p.250), and their idea of a decent minimum (Ibid., p.259), the capabilities approach therefore advocates for the existence of positive rights, and of the moral obligations that derive from them.

Two additional notions, which were introduced by Wolff and de-Shalit in *Disadvantage* (2007), are of particular importance in the context of this dissertation: *fertile functionings* and *corrosive disadvantages*. Because capabilities are not hermetically isolated from one another but, on the contrary, intricately interconnected and interdependent, some might prove to be particularly fertile, promoting the development and flourishing of others, while some circumstances might turn out to be quite deleterious to a series of capabilities. A useful consequence of the incorporation of fertile functionings and corrosive disadvantages is that it allows for a form of hierarchisation and prioritisation in the management of scarce resources for the policymaker: 'just as politicians have reason to spend scarce resources on the most fertile capabilities, expecting those to generate improvement in yet other areas, so they have reason to focus their energies on removing what Wolff and de-Shalit call *corrosive disadvantage*, types of capability failure that lead to failure in other areas' (Nussbaum, 2013, p.99).

The main reason why the notions of capabilities, fertile functionings and corrosive disadvantages provide particularly effective tools in order to address issues related to the development of pre-emptive psychiatry is that, as mentioned previously, they stimulate a more sophisticated understanding of specific vulnerabilities, beyond the restricted scope of a purely biomedical vulnerability. The identification of corrosive disadvantages, for example, leads to the incorporation of vulnerabilities related to societal and environmental conditions that are also shown to be correlated to higher risks in psychiatry. The capabilities approach is quite well suited to the analysis of such larger issues: 'often these will be failures connected to marginalization, stigma, and other forms of group-based powerlessness, giving societies reason to adopt group-based remedies, even though the end in view is always the full empowerment of each individual' (Nussbaum, 2013, p.100). I will expand on Rogers, Mackenzie and

Dodds' work on vulnerability theory in Chapter 5, but I can point out here that their contributions are consonant with the capabilities approach and Wolff and de-Shalit's work on fertile functionings and corrosive disadvantages.

The need for pre-onset early interventions, in medicine or other fields, is therefore well accounted for by the capabilities approach. Inspired by Heckman's work on the topic, Nussbaum admits that 'a great deal of human potential is being wasted by the failure to intervene early both through programs designed to enhance the future human being's health *in utero* and through programs after birth' (Nussbaum, 2013, p.194).

The capabilities approach, as a mid-level political, liberal and pluralistic theory, provides substantial advantages in the ethical evaluation of pre-emptive psychiatry, mainly through its capacity to conceptualise and deal with vulnerabilities exceeding the scope of biomedicine. Furthermore, at the heart of this approach is an intricate idea of well-being, or quality of life, in line with the pluralistic one developed throughout this dissertation. Indeed, the compatibility between principlism and the capabilities approach arises in great part from their rich and complex conceptualisation of the idea of well-being, both admitting the coexistence of multiple, legitimate ends.

First and foremost, it is because the notion of development is so central in Nussbaum's approach that the idea of well-being, closely related to it, becomes itself quite crucial: 'the purpose of development is to create an enabling environment for people to enjoy long, healthy, and creative lives' (Mahbub ul Haq, as cited by Nussbaum, 2013). As a result, there are two concomitant axes developed in parallel to each other in the capabilities approach: one aims to provide the means for a comparative assessment of well-being (or quality of life), while the other delineates an account of basic social justice (Nussbaum, 2013, p.18). One primordial characteristic of Nussbaum's account of well-being is its refusal to reduce the notion to one single value, despite emerging challenges appearing with the inability to compare and aggregate clearly across individuals or populations. The approach 'takes *each person as an end*, asking not just about the total or average well-being but about opportunities available to each person.

It is *focused on choice or freedom* [...] The approach is *resolutely pluralist about value*' (Nussbaum, 2013, p.18). A clear definition of quality of life is absent from Nussbaum's capability-based theory of justice, due to its decisive adherence to political liberalism. Despite their interconnectedness, the central capabilities remain distinctive, irreducible and heterogeneous areas of freedom. All need to be secured and protected, regardless of one another: 'when capabilities have intrinsic value and importance (as do the ten on my list), the situation produced when two of them collide is tragic: any course we select involves doing wrong to someone. This situation of *tragic choice* is not fully captured in standard cost-benefit analysis' (Nussbaum, 2013, p.36). And the flaws of such standard cost-benefit analyses and Gross Domestic Product calculations (GDP) are carefully outlined and stressed in Nussbaum's argumentation - a necessary feature of her analysis in order to legitimise the decision to opt for an adaptive, unspecific account of well-being.

At the centre of such recriminations is the allegation of oversimplification: 'the GDP approach aggregates across component parts of lives, suggesting that a single number will tell us all we need to know about quality of life, when in reality it doesn't give us good information' (Nussbaum, 2013, p.49). Utilitarian approaches are not spared; four different issues, more or less problematic depending on the account selected, are identified. It is argued that, as a measure of quality of life, utilitarianism aggregates across lives in the same way GDP calculations do; that it unjustifiably aggregates across components of lives; that it fails to account for the malleability of preferences and satisfactions; and, finally, that in defining satisfaction as a goal, it greatly undervalues freedom (Nussbaum, 2013, pp.51-55).

While some of the issues identified by Nussbaum are indeed quite problematic, as was recognised in a previous section, I would like to argue here that her decision to focus on a form of welfare utilitarianism centred on preference satisfaction is somewhat unwarranted. Preference satisfaction might actually be said to be the least sustainable form of utilitarian value theory (Scarre, 1996, p.133), in great part for the reasons highlighted above. A favoured approach would be the ideal, inclusive-end conception of well-being I mentioned earlier: 'an inclusive-end view of happiness singles out neither

pleasure nor any other individual element as the whole of happiness, but sees happy existence as a coherent construction out of a variety of complementary parts - a construction on which the subject can look with satisfaction' (Scarre, 1996, p.141). This inclusive-end account of well-being seems more in line with Nussbaum's own conceptualisation, especially if one admits that a very similar type of political action derives from it. The most efficient way to promote well-being would be to 'create the basic political, economic and educational conditions which permit [people's] chosen lifestyles to be realised. The most fruitful happiness-enhancing service which utilitarians can render is generally to facilitate individuals' own efforts to live the lifestyle of their choice' (Ibid., p.142). In recognising the partial incommensurability of these diverse ends and, therefore, the difficulty in implementing comparative value judgements, such an account might be said to be quite a weak version of utilitarianism - or another form of consequentialism altogether. However, by admitting outright the existence of such complications, this ideal, inclusive-ends account offers a convincing understanding of well-being, in addition to being compatible with both the principlist and the capabilities approaches. As conceded by Nussbaum herself, the capabilities approach, being outcome-oriented, can be seen as a cousin of consequentialism, or even as a form of political, non-welfarist consequentialism (Nussbaum, 2013, p.95): 'in this sense it is reasonable to classify the capabilities approach with approaches that focus on promoting social welfare - understanding welfare, of course, in terms of capabilities, not the satisfaction of preferences' (Ibid., p.96). I believe that an outcome-oriented approach like this one suits my purposes quite well.

As applied as a topic like the development of pre-emptive psychiatry might be, meta-ethical questions and other purely theoretical interrogations are unavoidable in the ethical evaluation of these medical practices. If one wishes to understand the source, the nature or limits of our moral justifications, one necessarily has to turn to highly theoretical lines of enquiry. The topic of this dissertation would indeed gain a lot from a deeper analysis of its implications as well as the assumptions it relies on. The idea of prevention itself, in medicine, in politics, or economics, etc., is particularly complex and necessarily engages with deeply abstract notions, such as risk, or vulnerability. For reasons of efficiency, though, the choice has been made, here, to strictly limit the scope

of these interrogations to their practical consequences and implications. It is only insofar as there are actual repercussions - in the treatment of at-risk individuals, in the attitudes of the general population, on the duties of psychiatrists, etc. - that such theoretical enquiries will be pursued.

To conclude this more methodological section of my dissertation, I want to stress once again the necessity to adopt a comprehensive, adaptable and explanatory framework for the evaluation of pre-emptive psychiatry. With these constraints in mind, mid-level approaches appear to offer the most coherent and pragmatic option, offering clear normative (moral and political) guidance, while seeking to reach a form of equilibrium between our beliefs and our principles.

Chapter 2 - Current State of Research in Pre-Emptive Psychiatry

Before delving into the ethical inquiries that are the main object of this dissertation, it is first indispensable to determine and explain what medical concepts, research and practices are hereby under consideration. This chapter aims to establish a clear account of what pre-emptive psychiatry currently consists in; what underlies and justifies its development; and how it is evolving.

The topic is surrounded by ongoing debates and disagreements, in both the clinical field and the research community. Moreover, the data produced, the models elaborated, and the treatments selected in research and practice are highly heterogeneous. On account of this, the delineation of this account adopts a wide-ranging approach. Several definitions and characteristics of the prodrome¹⁰ of mental disorders and of vulnerability traits will therefore be discussed, mainly with regards to psychosis (for reasons of data availability). In a similar manner, a series of instruments and criteria aiming to assess vulnerability traits and prodromal symptoms will be considered. Regarding treatment, the efficacy of both pharmacotherapies and psychotherapies will be considered, as well as the array of structures that have been developed in answer to rising awareness of the potential of pre-onset early interventions in psychiatry. The account of pre-emptive psychiatry thus elaborated should be clear and comprehensive enough to support pertinent ethical reflections.

For the sake of clarity and precision, this chapter is thematically organised, following the process of pre-emptive psychiatry's development. Therefore, the first part examines how the existence of a prodromal phase was determined in the case of several

¹⁰ In psychiatry, as in medicine more generally, the prodrome of a disorder designates a phase characterised by the presence of benign early symptoms, which are also precursors of a more serious phase.

mental disorders, as well as the medical and economic relevance of this determination; the second focuses on the characterisation of vulnerability traits and prodromal phases; the third, on the various methods with which these can be clinically assessed; and lastly, the fourth focuses on treatments envisaged in response to the need for pre-emptive psychiatry. Given that most of these developments are fairly recent and that research is accumulating rapidly, an effort has been made to rely primarily on sources published in the last decade, so as to give as up-to-date an account as possible.

I. HOPES ATTACHED TO PRE-EMPTIVE PSYCHIATRY

While the increasing interest taken by researchers and clinicians alike in the early phases of mental disorders really gained momentum in the past 15-20 years (Fusar-Poli et al., 2012, p.220), the awareness that a series of early symptoms might constitute the prodrome of psychosis¹¹ is not particularly recent. Many hopes hinge upon the growing capacity to identify with relatively high predictive validity those individuals who are at high risk of developing serious mental health issues, opening the door for preventive or pre-emptive measures in the psychiatric field.

1. Medical Interest in the Prodromal Phase of Mental Disorders

Sullivan, a psychiatrist, published as early as July 1927 his article on the onset of schizophrenia in *The American Journal of Psychiatry* (Sullivan, 1994). He explained there that two factors preliminary to schizophrenic psychoses had been identified in male patients: the experience of 'subjectively difficult efforts' and a 'sex factor' (the inability to 'achieve if only for a short time a definitely satisfying adjustment to a sex object') (Sullivan, 1994, p.135). In addition to this, 'cultural distortions provided by the

¹¹ I will focus almost exclusively on psychotic disorders in this chapter (and throughout this dissertation), as they have been at the forefront of research efforts in pre-emptive psychiatry.

home' were determined to be of prime importance in the onset of schizophrenia (Ibid., p.135). While the detection of vulnerability traits, risk factors and prodromal symptoms has transformed considerably since then, Sullivan's insistence on the importance of a dynamic view rather than a static one when envisaging psychotic disorders, so as to dedicate more efforts into the study of their prodrome, is in a quite similar vein to what is published on the topic nowadays.

The most recent increase in focus on the prodromal phase of mental disorders was, in part, motivated by the aggregation of retrospective accounts from schizophrenic patients relating their growing difficulties in thinking, in feeling and in behaving (Addington; Heinssen, 2012). A series of studies, a number of which were not primarily aiming to inform the definition of a prodrome, provided researchers with data about patients' experiences and memories before the onset of a full-threshold mental disorder. Their narratives were recorded, analysed, combined and compared in order to try and reach a clearer consensus in the demonstration and the definition of psychosis' prodrome, as is shown by Loebel et al. (1992, p.1184):

First we asked patients and their family members when the patient (or the family member) first experienced (or noticed) behavioral changes which, in retrospect, appear to have been related to the patient's becoming ill. Second, after explaining psychosis in clear language, we asked when the patient (or the family member) first experienced (or noticed) psychotic symptoms.

Although the precision of such recollections is liable to questioning and might cast doubt on the accuracy of the data thus collected, the frequency with which patients' accounts mentioned specific symptoms across various populations allowed researchers to reach conclusions concerning the existence of a prodromal phase for several mental disorders. The retrospective study of the prodromal symptoms of schizophrenia headed by Rofes, Bueno, Labad and Valero led to the discovery that several prodromal symptoms were repeatedly reported in their sample of 689 schizophrenic patients:

delusional ones, disorganized ones and neurotic ones (2003, p.35). Up to 90% of patients with schizophrenia have been shown to describe changes in drive, perception, beliefs, attention, concentration, mood, affect and behaviour (Yung, McGorry, 1996, p.353).

As I will explain later, however, definitions of the prodrome have become much more detailed and comprehensive with time, and they cannot be reduced to the retrospective reports of patients who already suffer from a full-threshold mental disorder. A large number of retrospective and prospective clinical studies focusing on subthreshold symptoms, biomarkers and genetic markers has given rise to remarkably thorough assessments of the prodrome. What is most noteworthy about these efforts, though, are the reasons why the earlier phases of mental disorders have gathered increasing attention since the 1990's, and how pre-emptive psychiatry has recently become an overarching issue.

Underlying the development of pre-emptive psychiatry is the hope that it might provide significantly better clinical and functional outcomes for patients, as opposed to simply palliative approaches (McGorry et al., 2014, p.211). A significant link between the Duration of Untreated Psychosis (DUP) and poorer prognoses has been established on several occasions; and there is convincing evidence of a 'modest association between DUP and outcome, which supports the case for clinical trials that examine the effect of reducing DUP' (Marshall, 2005, p.975). Therefore, there is considerable medical interest in being able to intervene as early as possible. According to Singh, three emerging strands of evidence support the case for specialised Early Intervention services: first, evidence that early trajectory and disability are strongly predictive of long-term course and outcome, as it offers an early window of opportunity during this period of neuronal and psychosocial plasticity; secondly, the association between longer periods of untreated psychosis and poorer outcomes being firmly established; and thirdly, evidence that even well-resourced community services are not meeting the needs of young people in their first psychotic episode or who are at risk for psychosis (Singh, 2010, p.343). Developing Early Intervention services might thus participate in ameliorating many people's prognosis by reducing delays in

treatment and addressing these people's needs more specifically¹² than general community health services; it would certainly explain the enthusiasm demonstrated by pre-emptive psychiatry's most fervent proponents.

However, considering that the rest of this chapter is dedicated to explaining in more detail what underlies and justifies the development of pre-emptive psychiatry from a medical perspective, the consideration of its economic impact becomes a more pressing question here. Indeed, in order to justify pursuing research on the prodrome of mental disorders to such an extent, its relevance must be argued for in terms of both medical results and cost-effectiveness.

2. Cost-Saving Measures

Unfortunately, cost-effectiveness, cost-benefit and cost-utility studies specifically centred on pre-emptive psychiatry remain relatively rare to this day and, in view of how recent the implementation of early intervention services is in most countries, long-term economic impact can only be estimated with difficulty. Again, most EIP services in the U.K. focus on young people who have already suffered from a first episode of psychosis: their goal is to provide them with the best available treatments, to support their recovery, and to prevent a relapse (Marwaha et al., 2016, p.186). However, boundaries between pre-onset at-risk individuals and post first-episode patients are not always clear-cut: criteria for an episode of psychosis can vary greatly, between a one week duration of frank psychotic symptoms to a slower functional decline (Ibid., p.186). Some of these centres have thus participated to clinical studies on pre-onset as well as early detection and interventions, like the Teesside EIP service which has provided 'early intervention for young people aged 14-18 years at high risk of or affected by psychotic illness' (Tiffin, Hudson, 2007, p.212). This exemplifies how pre-onset and early detection and interventions exist on what might be called a gradual spectrum.

¹² I will come back on several occasions to the claim that specific very early and early intervention services are more effective than general care services.

The question of resources management is primordial in mental health systems, for which funding is already overstrained; and doubts surrounding the cost-effectiveness of very early and early interventions in psychiatry remain persistent. Focused on the idea that 'the experience of pioneer services in the USA and Australia [had] convinced the UK Government to set aside millions of pounds to make dedicated early intervention teams an integral part of standard mental health services across the country', Pelosi and Birchwood discussed about this in the article I mentioned earlier: 'Is early intervention for psychosis a waste of valuable resources?' (2003). While Pelosi gave a clear 'yes' in answer to that question, Birchwood responded in favour of Early Intervention for psychosis (EIP).

In his virulent criticism of EIP services, Pelosi explains that early intervention teams do not possess any special technical skills setting them apart from mainstream services, merely describing in their writings 'some basic aspects of good practice in the management of psychotic disorders'; and that they waste resources on vulnerable individuals who are not in need of psychiatric treatment (Pelosi, Birchwood, 2003, p.196). Their inefficiency and, moreover, the danger they pose would reside in their misleading health policy-makers, thus diverting resources to specialised teams and 'making it even more difficult to provide decent care to people with severe and enduring mental disorders' (Ibid., p.196). It can be argued, following Pelosi, that EIP services are too costly, especially in view of their relative inefficacy.

In response, proponents of pre-emptive psychiatry highlight and insist on the higher success rates, in terms of clinical and functional outcomes, of treating psychotic symptoms earlier rather than after they have been present for some time, in association with a decrease of secondary disabilities (Pelosi, Birchwood, 2003, p.196). A few studies do provide detailed data and in-depth analyses of the cost-effectiveness of specific services, including the UK-based Early Intervention services that were the object of Pelosi and Birchwood's debate. In a comparative study between Early Intervention services for children and adolescents, and generic Child and Adolescents Mental Health Services (CAMHS), using data from the National Health Service clinical reporting systems for 2001-2008 and a time horizon of 6 months, the reduced length of hospital

admissions for patients of Early Intervention services was shown to allow cost-savings of £4814 per patient (McCrone et al., 2013, p.368). Several attempts to evaluate the economic impact of EIP services do seem to point to their capacity to provide direct healthcare savings over a period of 1 to 3 years, to both patients diagnosed with psychosis and at-risk individuals (Ibid., p.369).

The cost-effectiveness of early interventions depends in great part on the overall cost of treatment. The use of Cognitive Behavioural Therapy (CBT) for individuals at risk for psychosis, for example, could be more cost-effective than routine care because it is more likely to lower significantly the incidence of first-episode psychosis (Ising et al., 2015, p.1435). The treatment costs incurred by very early and early interventions through the use of psychotherapy and/or pharmacotherapy can be, at first, considerably higher than those of routine care, although perhaps not to the point of discrediting their overall cost-effectiveness. For instance, while early intervention costs were indeed shown to be higher than the cost of a mainstream needs-based type of intervention, it also incurred notably lower outpatient treatment costs over the medium term (Phillips et al., 2009, p.33). A problem encountered in this study and in others, though, is that no significant differences were established in the *total* treatment costs between the two options in the long term – in this case, within three separate time frames: treatment phase, short-term follow up and medium-term follow up (Ibid., p.33).

Granted, the cost-effectiveness of early interventions does not seem to be easily sustained in the long term: it is mainly over the period during which the service is offered that the effectiveness of early interventions appears strongest. A follow-up of participants in the OPUS trial, for example, found that the clinical improvements made by individuals two years after treatment by EIP services was not sustained up to five years (Singh, 2010, p.344). One could argue, though, as McCrone does, that 'even if the benefits are not maintained, a short-term 'gain' (through reduced costs and/or improved outcomes) is still worth aiming for unless by doing so, there are future negative consequences' (2013, p.372). Such negative consequences might include

increasing stigma and discrimination, which could affect employment and education possibilities, or use of services and social/recreational activities (Ibid., p.372).

Nevertheless, it is hoped that wider economic benefits than purely direct ones could be achieved through the use of pre-onset and early intervention services. These could compensate potential negative consequences, particularly in terms of quality of life and functional outcomes: although I intend to say more about this in Chapter 6, early interventions for psychosis have been shown to result in higher rates of vocational recovery than standard care (McCrone et al., 2010, p.381).

Retrospective accounts from schizophrenic patients and the observation of subthreshold symptoms have allowed researchers and clinicians to focus their attention on the prodrome of mental disorders, and more particularly on the prodrome of psychotic disorders. The magnitude of that attention, which has accrued considerably since the late 1990's, is justified by the potential medical and economic advantages of a pre-emptive approach compared to a palliative one. Clinical and functional outcomes have demonstrably been improved in subjects who followed early interventions in the short and medium term, primarily thanks to significantly lower outpatient treatment and hospitalisation costs. However, the long-term cost-effectiveness of early interventions tends to become equivalent to that of mainstream care once active treatment is discontinued. General consensus is needed on the assessment of prodromal symptoms and vulnerability traits, as well as on the treatments offered to at-risk patients. It is necessary if pre-emptive psychiatry is ever to become effective in terms of costs and therapeutic outcomes.

II. VULNERABILITY TRAITS AND PRODROMAL SYMPTOMS

McGorry and Yung were among the very firsts to have taken an interest in the definition of risk criteria for psychosis in the 1990's. In their efforts to identify valid

clinical features of the prodrome of psychosis, they first defined it as a period of pre-psychotic disturbance, representing a deviation from a person's previous experiences and behaviour (Yung, McGorry, 1996, p.353). But such changes in cognition, affect and behaviour, which reportedly precede the onset of frank psychotic symptoms, must be more precisely evaluated and assessed in order to be valuable in a clinical or research setting – especially if they are to be used prospectively instead of simply retrospectively.

Before I outline various models of vulnerability and explain how pre-onset early detection instruments may be used in clinical settings, it is indispensable for me to establish a clear account of the various ways in which vulnerability traits and prodromal symptoms have been characterised.

Psychosis is a mental disorder defined by a loss of contact with reality: thought processes and emotional responsiveness disintegrate, leading to false beliefs in the form of delusions and hallucinations (Addington, Heinszen, 2012, p.171). Paranoia, bizarre thinking, disorganised speech or thinking, social and occupational dysfunctions, are all symptoms of schizophrenia - a particular type of psychosis. Psychosis is characterised by its complex, multifactorial etiology: it is a multifaceted disorder, simultaneously hereditary/genetic, neurobiological, cognitive, psychosocial, etc. The characterisation of its prodrome, which is no less complex than the disorder itself, has to account for this variety of factors: 'a plausible model of the onset of psychosis needs to draw not only on neuroscience, but also on the insights of social psychiatry and cognitive psychology' (Broome et al., 2005a, p.23).

1. Cognitive Risk Profiles and Psychosocial Functioning

Young people at risk for psychosis are generally said to meet a certain profile: they tend to be help-seeking adolescents or young adults presenting attenuated positive psychotic symptoms (meaning an excess or a distortion of normal functions, such as

delusions or hallucinations), and sometimes high levels of negative symptoms (which are characterised by the diminution or the loss of normal functions, like emotional withdrawal or difficulties in abstract thinking). Their subjective quality of life appears to be substantially compromised (Broome, Fusar-Poli, Wuyts, 2013, p.783). They often experience impairments in academic performance and occupational functioning, or have difficulties with interpersonal relationships (Addington, Heinssen, 2012, p.173). Many of them also suffer from comorbid diagnoses and, in particular, anxiety, depression and substance use disorders (Broome, Fusar-Poli, Wuyts, 2013, p.783). The vast array of these difficulties has led to the delineation of more precise cognitive and psychosocial risk profiles.

It appears that poor cognitive functioning is a common difficulty experienced by at-risk individuals. Significant cognitive impairments have been consistently demonstrated in at-risk individuals when compared to control groups (Addington, Heinssen, 2012, p.174): 'while results are mixed for many individual tasks, enough converging evidence supports the assertion of relative impairments in verbal IQ, verbal memory and fluency, and attention for individuals at risk for psychosis'. This shows that there is an overall consensus about the existence of cognitive impairments in the prodromal phase of psychotic disorders. However, there isn't yet a way in which individual cognitive tasks can be used more precisely in order to help predict conversion on a more individual scale.

Poor social cognition is the other form of cognitive difficulty from which at-risk individuals tend to suffer. 'Social cognition' designates domains of cognitive functions that one often utilises in socially relevant situations: that includes emotion processing, social perception, theory of mind (or mental state attribution), and attributional style/bias, as well as social metacognition (Green, Harvey, 2014, p.e4). Several studies do indeed point to the existence of difficulties and perceived hostility biases in the at-risk population. One tool that is used in order to measure social cognition is the Ambiguous Intentions Hostility Questionnaire (AIHQ). A study led in 2010 showed that biased attribution style linked with paranoid symptoms may already have evolved prior to the onset of frank psychotic symptoms (An et al., 2010, p.54).

Therefore, impairments in social cognition begin in the prodromal phase of a psychotic illness, remaining stable over time (Green et al., 2012, p.854), and poor social cognition can be integrated into the assessment of prodromal symptoms and vulnerability traits.

There isn't yet much information on psychosocial vulnerability traits that could specifically increase chances of developing a psychotic disorder, but their role in the prodromal phase of various mental illnesses is rarely denied. Several researchers and practitioners advocate for a better incorporation of psychosocial factors into the elaboration of risk profiles, but the topic can be problematically laden with issues of xenophobia, racism, etc., since an urban upbringing, social isolation, and migration are often designated as important social risk factors (Broome et al., 2005a, p.24). Certain types of experience (bullying, victimisation, racism or alienation from mainstream culture) can increase the probability of biased appraisals, and thus the risk of psychosis (Ibid., p.29).

Poor social functioning is quite commonly observed in at-risk individuals (Addington, Heinssen, 2012, p.173). A scale has been elaborated in order to evaluate a person's psychosocial functioning: the Global Assessment of Functioning (GAF). It was used in several of the studies aiming to provide a better understanding of the prodrome of psychosis. Most of these studies point to significantly lower measures at baseline in groups of young people who later transitioned to full-threshold psychosis (Yung et al., 2003, p.27). However, the GAF is not an instrument specifically dedicated to the study of the vulnerability traits and prodromal symptoms associated with psychosis: it is used to measure general psychosocial functioning. Two new measures of global functioning have therefore been developed precisely for what I will, for now, call the 'clinical high risk period'¹³: the Global Functioning: Social (GFS), and the Global Functioning: Role (GFR) scales (Cornblatt et al., 2007, p. 688). The combination of these three measures provides detailed information on psychosocial functioning in at-risk individuals, and

¹³ Several formulations can be used to refer to that 'clinical high risk period', like the At-Risk Mental State' (ARMS), Clinical High Risk (CHR), Ultra-High Risk (UHR), etc. As specific sets of criteria correspond to these formulations, I will avoid referring to them before the occasion arises to elaborate on each of them.

confirmed that they do indeed display impaired social and role functioning at baseline (Ibid., p.688).

A comprehensive characterisation of the prodrome of psychosis would thus account for the possible 'interaction between the biological and psychological in a cascade of increasingly deviant development' (Broome et al., 2005a, p.27), seeing as both participate in making an individual more vulnerable.

2. Biomarkers of Vulnerability

Aside from cognitive and psychosocial vulnerability traits and prodromal symptoms, researchers have started to focus on biomarkers as a possible characteristic of being at risk for mental disorders, despite the fact that such biomarkers still have little clinical use.

Although the genetic/hereditary component of psychosis is globally acknowledged, its complexity (multiple genes are involved) and the fact that such multi-genetic illnesses are not easily analysable through common genetic linkage techniques have led to the conclusion that the search for a single, ideal and specific biomarker was doomed to fail. The 'complex, multidetermined nature of schizophrenia and other psychoses makes it unlikely that any single biomarker will be both sensitive and specific enough to unambiguously identify individuals who will later become psychotic' (Freedman et al., 2005, p.17).

Interestingly, it seems that genetic risk is also much more widespread than had been initially posited, and therefore a genetic analysis alone is not likely to allow for the detection of at-risk individuals (Freedman et al., 2005, p.22). Nonetheless, genetic research is not an unpromising impasse, as it does indicate higher risks than average. The Edinburgh High Risk Study was based on a high-risk sample of 163 young adults who had two relatives with schizophrenia, for example (Johnstone et al., 2005, p.18). Some studies have also brought to light interesting data on pathophysiological processes associated with the genetic transmission of schizophrenia (Freedman et al.,

2005, p.17). Ultimately, finding a combination of biological processes – not all necessarily genetic – which would be observable before the onset of psychosis could be of tremendous help in the detection of at-risk individuals.

A deeper understanding of the genetic and neural substrates of behaviour is therefore considered essential for the next generation of pre-emptive interventions, and so for a variety of reasons: biomarkers and endophenotypes might prove very useful in identifying those who are most in need of prevention; they might have implications for the treatment of some genetic and neural mechanisms; they might indicate ways in which biological vulnerabilities moderate the effects of environmental experience; and, in relation to this, they might also help identify situations in which interactions between biology and environment account for significant variations in outcomes and how neural systems, via epigenesis, programming, and neural plasticity are sensitive to environmental moderation across one's life span (Beauchaine, 2008, p.745).

Regarding neurocognitive markers, there is increasing evidence that neurocognitive deficits are found even in asymptomatic at-risk individuals (who were identified because they have at least one first-degree relative diagnosed with psychosis) (McGorry et al., 2014, p.213). There hasn't yet been a large enough number of longitudinal studies on the topic to draw definite conclusions, but the suggestions according to which 'neurocognitive impairment may reflect both neurodevelopmental trait vulnerabilities and progressive illness-related deficits in major psychiatric illness' (McGorry et al., 2014, p.214) are substantiated enough to merit further investigation. Neuroimaging studies constitute one of the main axes of research in the attempt to identify valid brain structural markers for early detection. At-risk individuals seem to show a 'steeper rate of cortical gray matter reduction compared with individuals without symptomatic progression and with healthy control subjects', for example (Cannon, 2006, p.147).

The study of changes and abnormalities in brain structure, both in at-risk individuals and in patients diagnosed with a full-threshold psychotic disorder, is

particularly complex. Nevertheless, in the search for reliable prognostic biomarkers, multivariate machine learning methods do appear particularly promising. They have demonstrated the 'feasibility to predict illness onset in clinically defined at-risk individuals using structural magnetic resonance imaging (MRI) data' (Koutsouleris, 2012, p.1234). Interestingly, these biomarkers tend to point to the further individualisation of risk: 'findings suggest that the early prediction of psychosis may be reliably enhanced using neuroanatomical pattern recognition operating at the single-subject level' (Ibid., p.1234). However, it seems that such findings might not yet be replicated in independent populations easily: further research is still necessary. Additionally, there are strong doubts with regards to the capacity to distinguish between markers of vulnerability, markers linked with the course of the disorder itself, and markers that might appear as an effect of pharmacological treatments: 'a key issue is to clarify the role of antipsychotic medication in progressive brain changes' (McGorry et al., 2014, p.215). It is of prime importance to be able to detect whether individuals at risk for psychosis have specific qualitative and quantitative differences in brain structure, compared either with controls or with patients who don't have a psychotic disorder. This could, as a result, help demonstrate that differential structural brain changes become more prominent with time, and as syndromal specificity increases (McGorry et al., 2014, p.215).

Neuroendocrine markers appear to indicate an impaired ability to cope with stress, biologically and psychologically speaking. They are thought to play a key role in the development and maintenance of psychiatric disorders (McGorry et al., 2014, p.216).

Fatty acid markers are another area of interest for those who seek to identify biomarkers of psychiatric vulnerability: evidence about the involvement of cell membrane polyunsaturated fatty acids (PUFAs) in the pathophysiology of major mood and psychotic disorders is mounting; and it seems that lipid metabolism could prove to be particularly relevant in the earlier stages of mental illness (McGorry et al., 2014, p.218): 'A recent meta-analysis of 18 studies in schizophrenia examining the four most frequently explored PUFAs (DHA, AA, docosapentaenoic acid, linoleic acid) concluded

that decreased levels of DHA and AA were present in antipsychotic-naïve patients' (Ibid. p.218).

The research on biomarkers is still inconclusive, but the data it has brought to the fore in different areas may offer new predictive criteria for major mental disorders in the near future. Additionally, these biomarkers could be included as characteristics of psychiatric vulnerability that highlight pathophysiological processes in the development of a disorder, as well as the impact of pharmacological treatments. As such, they might provide very valuable help in differentiating between developmental stages of several mental disorders. For example, recent data show that biomarkers differ in early and late-stage bipolar disorder - a type of information that could be usefully integrated into diagnostic models (Kapczinski et al., 2009, p.1366). Indeed, most diagnostic nosologies still focus heavily on the emergence of positive symptoms, which tends to appear later in the prodrome of mental disorders:

Diagnosing schizophrenia or bipolar disorder with the emergence of psychosis may be analogous to diagnosing coronary artery disease by myocardial infarction. One of the most hopeful approaches to reducing the morbidity and mortality of serious mental illness borrows a page from the cardiology playbook. By developing biomarkers for early diagnosis, we may be able to preempt many of the most disabling aspects of our most severe mental illnesses (Insel, 2009, p.130).

Profiles of at-risk individuals have gradually been delineated, drawing from data gathered across a very varied range of disciplines: cognitive sciences, psychology, genetics, neuroimaging, etc. However, when it comes to clinical psychiatry, even pre-onset early detection methods still rely on symptomatology more than anything else (and, more particularly, on attenuated positive symptoms). Practitioners focus on predictors such as recent experiences of subthreshold psychotic symptoms, long duration of symptoms, high levels of depression or reduced attention, a recent

significant decrease in functioning, often combined with a family history of mental health troubles (Yung et al., 2004, p.131). Several instruments and labels have been developed in order to bring an answer to the need for pre-emptive psychiatric interventions. They are judged mainly based on their predictive validity.

III. MODELS OF VULNERABILITY AND ASSESSMENTS OF RISK

Prevention programmes, in principle, can follow three different approaches – a universal, a selective and/or an indicated one – which reflect segments of the population as well as levels of risk. A universal prevention that targets the general population unspecifically as a whole is obviously not appropriate for a rare disorder of yet unknown, but certainly multi-factorial aetiology. Furthermore, a selective prevention approach to schizophrenia aiming at a segment of the population which is clinically healthy, but at a high risk for the disease (e.g., because of a genetic liability) would result in too many false positive and false negative cases. Therefore, an indicated prevention has currently the best prospects of success for schizophrenia, because it targets on persons who already show clinical signs and are possibly in a prodromal state. Thus, when referring to early detection and intervention projects, we focus on an indicated approach in a help seeking population with signs and symptoms associated with a relatively high risk of transition to psychoses and schizophrenia (Klosterkötter et al., 2005, p.164).

Several models of vulnerability have attempted to capture, in one way or another, the early phase(s) of mental disorders that would be indicative of high risks of transition: some have corresponded to the process outlined by Klosterkötter, while

others are situated elsewhere on the spectrum of prevention. Here again, insisting on the gradual evolution from pre-onset detection and interventions to early detection and interventions can be useful. I believe attenuated syndromes and staging models to be of particular interest, but I will also explore earlier models of vulnerability and risk. Various instruments for the detection of vulnerability traits and prodromal symptoms have also been elaborated to identify at-risk individuals for whom transition rates to full-threshold psychosis are significantly higher than for the general population.

1. The Attenuated Psychosis Syndrome

The At-Risk Mental State (ARMS) was among the first denominations used for the prodrome of psychotic disorders. It is closely related to two other notions: the Ultra-High Risk (UHR) and the Clinical High Risk (CHR) states. All of them tend to respond to similar criteria, and rely on the same diagnostic instruments. They aim to identify at-risk individuals in a late prodromal phase - one or to years before the onset of a full threshold disorder.

They encompass three different subgroups: people suffering from attenuated positive symptoms; those who have gone through brief intermittent psychotic states; and persons who have a genetic and familial risk for psychotic illnesses coupled with a recent and dramatic decline in functioning (Addington, Heinszen, 2012, p.271). I believe the Attenuated Psychosis Syndrome to be in the same lineage as these conceptualisations of psychiatric vulnerability (especially the first two subgroups just mentioned), although with one significant development: the notion of risk is absent from its appellation. It becomes, as such, a diagnosis in its own right rather than the early phase of another disorder.

The Attenuated Psychosis Syndrome (APS) is a DSM-5 diagnostic category which attempts to capture the symptomatology of the prodromal phase of psychotic disorders. The transition to full-threshold psychosis being uncertain at best, however, it was decided that a label integrating the notion of risk was more anxiety-inducing than helpful. The patients who might receive the APS diagnosis are seeking help: giving

them a psychiatric diagnosis corresponding to their symptoms is argued to be warranted, while informing them that it might lead to a full-threshold psychosis disorder would be less so.

The proposed criteria for the APS have been carefully defined. The patient has to show characteristic symptoms - at least one of the following in attenuated form, but of sufficient severity and/or frequency that it is not discounted or ignored: delusions; hallucinations; disorganized speech (American Psychiatric Association, 2013, p.783). These symptoms must have been present in the past month and must have occurred at an average frequency of at least once per week in this past month. Also, they must have begun in or significantly worsened during the past year. Distress and disability are among the most important criteria: the symptoms have to be sufficiently distressing and disabling for the patient to seek help. Finally, the symptoms just mentioned must not be better explained by any other DSM-5 diagnosis, including substance-related disorders (Fusar-Poli, 2012, p.221).

It is possible to notice that the criteria just described are mainly attenuated expressions of positive psychotic-like symptoms. Conversion to full-threshold psychosis is generally based on increasing symptom severity, which would result in the recognition and diagnosis - once such severity has reached a certain level - of actual psychosis (Carpenter, 2009). Consequently, the Attenuated Psychosis Syndrome leaves open the possibility of conversion to full-threshold psychosis without explicitly giving the 'at-risk' label to those diagnosed with it.

The APS diagnosis focuses specifically on the period of time immediately preceding an 'index' episode of psychosis (Corcoran, First, Cornblatt, 2010): conversion is not a certainty, but for those who will indeed be later diagnosed with a full-threshold psychotic disorder, the time period between the apparition of the first prodromal symptoms and the first serious psychotic episode rarely exceeds one or two years. This, combined with the heavy insistence on the help-seeking criterion, excludes from consideration any pre-symptomatic phase of the prodrome.

The presence of the APS in the latest version of the DSM has been quite reduced: it has been relegated to its Appendix, and only briefly mentioned in the main body at the end of 'Other Specified Schizophrenia Spectrum and Other Psychotic Disorder', section 3: 298.8 (F28) (American Psychiatric Association, 2013, p.122). This means that it is still possible to code it as a diagnosis in the USA, however.

2. Staging models

Other diagnostic models are suggested; not necessarily in opposition to attenuated syndromes like the APS, but as complementary to them: staging models account for the evolution of a disorder from an at-risk (but asymptomatic) state to the later phases of a chronic illness.

Staging models in psychiatry originated from the idea that traditional diagnostic categories were failing, especially in terms of clinical utility. The primary goal of a diagnosis must be to assist clinicians in improving their selection or sequencing of treatments, and to enable them to make more accurate prognostic statements in keeping with newer concepts and knowledge (Hickie, Scott, McGorry, 2013, p.461). Another criticism levelled at traditional diagnostic categories in psychiatry is their tendency to presuppose that independent causal pathways exist for each clinical phenotype – 'an assumption that is not supported by contemporary family, genetic, neurobiological or risk factor research' (Hickie, Scott, McGorry, 2013, p.461).

McGorry and colleagues proposed a staging model for major mental illnesses (including psychosis) that is, interestingly, nonspecific for the earlier stages. It starts with an 'at-risk' but asymptomatic state (stage 0); evolving to an initial stage of undifferentiated general symptoms – such as mild anxiety, depressive and somatic symptoms – followed by a worsening of these existing symptoms and the acquisition of new ones, associated clinically with hints of greater syndromal specificity, and with behavioural and functional decline (stage 1); then, further progression of illness may result in the occurrence of a first episode of a full-threshold syndrome(s) (stage 2),

which may in turn be followed by the development of persistent symptoms, frequent relapses and ongoing impairment (stage 3), or even severe, unremitting illness (stage 4) (McGorry et al., 2014, p.212).

The idea underlying such a staging model is profoundly embedded in the basis of pre-emptive psychiatry: remission and amelioration are possible at every stage, though it is less likely with each advancing stage (McGorry et al., 2014, p.212). It is indeed important to note that staging models are dynamic, not only in the sense that they account for the evolution of a disorder through distinct stages, but also in the sense that an individual's mental health can worsen or improve. Movement is possible across these stages in both directions, which is precisely why proponents of staging models advocate for interventions adapted to each stage: their aim is not only to stop progression to a further stage but, conjointly, to facilitate regression to an earlier stage (McGorry, 2007, p.859). There are many different possible development courses for an individual whose condition corresponds to the at-risk mental state, and specific and direct progression to a full threshold psychotic disorder is only one of them: 'several different outcomes are possible in a population considered to be at risk, including conversion to psychosis, symptomatic recovery, and stable presentation of prodromal symptoms' (Addington, Heinssen, 2012, p.278). In all cases, including with the APS model, the hope is to encourage full symptomatic recovery, of course. However, staging models might be more likely to account for various levels of improvement other than total symptomatic recovery.

'Staging suggests that disorders emerge via a limited set of overlapping and fluctuating symptom clusters (microphenotypes), some of which resolve, while others progress and stabilise into clinical presentations (macrophenotypes) that ultimately resemble more traditional diagnoses' (Hickie, Scott, McGorry, 2013, p.461). Indeed, the latest formulations of staging models tend to be 'agnostic to traditional symptom-based nosological boundaries' (McGorry et al., 2014, p.219). The research on biomarkers, notably, has cast doubts on the capacity of these 'traditional nosologies' to follow the same biological boundaries of actual disease entities. This would result in a failure to fulfil reliably the role of a clinical diagnosis: predicting outcome and helping the

selection of specific interventions. Proponents of staging models therefore consider it more useful to examine 'specific neurobiological domains that cut across diagnoses', focusing on 'cross-cutting dimensions rather than categorical distinctions' (McGorry et al., 2014, p.219):

A staging approach would do well to distinguish pathophysiology from etiological factors. As in the rest of medicine, disease staging based on clinical/biomarker measures may not necessarily map onto etiologically-based classifications. Genetic risk should also be interpreted agnostically, as it is unlikely to provide diagnostic specificity, but may be useful as a guide to disturbances in neurodevelopmental trajectories or aspects of neurobiological functioning. [...] a useful point of departure in staging across diagnoses might be a shift from the broad, non-specific presentation to the evolution of more specific syndromal pictures. Such an evolution may not only involve the emergence of new symptoms or the evolving syndromal coherence of symptom clusters, but also the development (or lack thereof) of disability and functional and social impacts (McGorry et al., 2014, p.219).

Differentiating several stages from one another in the progression of disorders can have a significant impact on the implementation of pre-onset early detection and interventions in psychiatry: the key outcome would be formulated in terms of success in preventing progression to more advanced stages or in facilitating regression to an earlier stage (McGorry, 2007, p.859). So here again, I want to insist on the idea that, within staging models, regression is possible at every stage, up to and including full symptomatic recovery. As such, staging models require 'an accurate understanding of the broad social, biological, and personal risk and protective factors that influence movement across stages' (Ibid., p.859). In the future, then, psychopathology might be more closely linked to the biological and psychological nature of disease processes (Müller-Spahn, 2008, p.92).

The research on the prodrome of mental disorders in general, and psychosis in particular, has led to the elaboration of detailed instruments dedicated to the assessment of clinical high risk. These instruments, in turn, are henceforth used in a research capacity, but also in clinical settings, for the diagnosis and treatment of patients.

3. Instruments for the Assessment of Psychiatric Vulnerability

Following the example of McGorry and Yung, several research teams across Australia, North America and Europe have conducted numerous studies in the past two decades so as to 'develop and test operational criteria for prospectively assessing psychosis liability over time' (Addington, Heinszen, 2012, p.171). The tools and instruments thus elaborated aim to identify at-risk individuals in a reliable and accurate manner. In order to fulfill that goal, they need to delineate precisely the characteristics of prodromal symptoms and vulnerability traits, and to have high predictive validity.

Currently, the series of instruments that has been elaborated to assess the prodrome of psychosis is aimed towards the highest level of specificity possible. The important proportion of false positives in the detection of at-risk individuals constitutes the largest obstacle for the development of pre-emptive psychiatry, in terms of medical results and economic effectiveness, but also for ethical reasons. The difficulty resides in the fact that, should the criteria for the 'at-risk' label be applied to the general population, they would see their predictive validity decreased considerably (Broome et al., 2005a, p.25). If one can see psychosis as 'a dimension extending well into the general population', then it is believed necessary to rely primarily on groups of individuals already suspected of being in a pre-psychotic phase and specially referred in clinical settings (Ibid., p.25). Predictive validity is thus the be-all and end-all of these instruments - the measure that determines their success or their failure.

The Comprehensive Assessment of At-Risk Mental States (CAARMS) is an interview and rating system developed by Yung, McGorry and colleagues in Melbourne. Its aim is to assess psychosis criteria prospectively. It encompasses three distinctive features of risk: attenuated positive symptoms, brief intermittent psychotic states, and genetic/familial risk for psychotic illness coupled with recent and dramatic decline in functioning (Yung, McGorry, 1996, p.353).

It is a very detailed interview, allowing clinicians to collect a vast array of information – primarily with regards to clinical symptomatology, but also integrating data from characteristics specific to the prodromal phase of psychotic disorders. ‘The CAARMS manual provides detailed definitions, questions, and anchor points for eliciting and rating 27 symptoms across seven dimensions of psychopathology, including positive symptoms, negative symptoms, deterioration of role functioning, sleep disturbance, and impaired tolerance to normal stress’ (Addington, Heinssen, 2012, p. 271). The CAARMS interview has subsequently been used in a very large number of studies as the process through which at-risk, or ultra-high risk (UHR) individuals are selected. Its efficacy, in terms of prediction, is generally recognised: ‘in early studies using CAARMS criteria, the risk of developing a psychotic disorder increased from the expected rate of approximately 10% in family high-risk groups to approximately 30% to 50% in clinical high-risk samples followed for one to two years’ (Addington, Heinssen, 2012, p. 271).

The Structured Interview of Prodromal Symptoms (SIPS) is another instrument frequently utilised in research. It was developed by the PRIME prodromal research team, led by McGlashan and Miller at Yale University. It is often associated with another tool elaborated by the same team: the Criteria of Prodromal Symptoms (COPS) (Miller et al. 2003). Building upon Yung and McGorry’s conceptual framework, the PRIME research team developed both instruments in order to evaluate the presence and the severity of 19 different symptoms, across four domains of psychopathology (Addington, Heinssen, 2012, p. 271). Its reliability has been demonstrated on several occasions. The SIPS/COPS criteria have, for example, been used in a large multisite study of psychosis risk states in North America, where they proved their excellent

inter-rater reliability (a high degree of concordance between different raters), and their acceptable predictive validity (Addington, Heinssen, 2012, p. 272). ‘This study, which includes the largest sample of prospectively followed clinical high-risk (CHR) subjects worldwide, found that approximately 25% of individuals who met COPS criteria initially developed a psychotic illness within one year, and 35% within two years’ (Ibid., p.272).

However, there is growing evidence that clinical pathways, distress, help seeking, and persistence may have a significant impact on predictive validity (Broome, Fusar-Poli, Wuyts, 2013, pp.784-785). If this is to be acknowledged adequately, disorders can only be understood ‘in relation to their place within the wider society and health system, rather than as free-standing nosological entities’ (Ibid., pp.785-786).

The work on the prodromal phase, and the continuum of psychosis, has forced psychiatry and mental health research to think about a conception of psychotic disorder and of schizophrenia that is less dependent on positive psychotic symptoms (Broome, Fusar-Poli, Wuyts, 2013, pp.784-785).

Some, especially in Europe, have therefore criticised the strong focus on attenuated positive psychotic symptoms of instruments like the CAARMS, SIPS and COPS, and of diagnostic models like the ARMS or the CHR. Such criticisms are often grounded in principles and concepts based on the continental European tradition of phenomenological psychopathology (Broome, Fusar-Poli, Wuyts, 2013, p.786). Alternatives have therefore been proposed which are centred on “clinically significant signs’ which can be very distinct from psychotic-like experiences and which may have no direct relation with positive symptoms as such’ (Ibid., p.786). ‘Self awareness’ and ‘subjectivity’ can be disturbed on a structural level, and these disturbances have been commonly associated with the development of schizophrenia: ‘expressions used by European phenomenologists, such as “loss of vital contact with reality”, “global crisis of common sense” or “loss of natural evidence”, and “loss of ego boundaries” refer to a

defective attunement between the self and the outside world' (Broome, Fusar-Poli, Wuyts, 2013, p.787).

The Bonn Scale for the Assessment of Basic Symptoms (BSABS) is thus a bit different than the previous instruments, as it relies on the concept of basic symptoms. It was developed by researchers in Germany, who decided to suggest an alternative approach for identifying individuals at clinical risk for psychosis (Addington, Heinsen, 2012, p. 272). The basic symptoms designate an assortment of emerging problems that are subjectively experienced by at-risk individuals. It was suggested that these may be present throughout the development of schizophrenia, even from its earliest stages. The reason why these phenomena are called 'basic symptoms' is because they are 'understood as direct phenomenological consequences of the underlying pathogenesis of the disorder' (Broome, Fusar-Poli, Wuyts, 2013, p.786). Basic symptoms aim to capture how 'subtle anomalies of subjective experiences can herald a first episode of psychosis long before attenuated positive symptoms are present' (Broome, Fusar-Poli, Wuyts, 2013, p.787). It became necessary to provide accurate accounts of these problems – what Huber described in the 1960's as subtle, often only self-perceivable deficits (Klosterkötter et al., 2001, p.158). An important characteristic of basic symptoms is thus their subjectivity: they are experienced and reported as 'disturbances or aberrations from 'normal' fluctuations in mental state known from the premorbid phase by patients themselves' (Schultze-Lutter, 2016, pp.31-32).

The BSABS is built as a semi-structured interview. Basic symptoms are not only reported by patients who suffer from a full-threshold psychotic disorder but also, retrospectively, during the prodrome. They are 'mild, often subclinical, but troublesome self-experiences of diminished drive and affect; problems with thought, speech, and perception; motor difficulties; and early vegetative symptoms' (Addington, Heinsen, 2012, p. 272). The BSABS was used in the Cologne Early Recognition (CER) study, which was specifically aiming to determine whether basic symptoms, as evaluated by the BSABS, could indeed predict the subsequent development of psychosis (Klosterkötter et al., 2001, p.159). The results of the CER study concluded that among the people identified as high risk, 49.4% developed schizophrenia during a 10-year

follow-up period (Addington, Heinssen, 2012, p. 272). As it turned out, basic symptoms were even able to predict a later diagnosis of schizophrenia with a probability of 70%: ‘a notable difference between the BSABS and the Melbourne/COPS criteria is that basic symptoms appear to identify individuals at an earlier stage of the psychosis prodrome than is possible with the Melbourne/ COPS criteria’ (Addington, Heinssen, 2012, p.272). Because of its excellent negative predictive ability, the BSABS and other instruments used for the detection of basic symptoms could be used to identify at-risk individuals in the general population (Klosterkötter, 2001, p.163).

Lastly, the Schizophrenia Proneness Instrument for adults (SPI-A) builds upon the BSABS and the CER study in its assessment of basic symptoms. Also commonly used, it aims to identify subthreshold symptoms in the earliest phases of the prodrome (Addington, Heinssen, 2012, p.272). The Schizophrenia Proneness Instrument for Child and Youth (SPI-CY) has been adapted for younger individuals. Additionally, another instrument also draws from the phenomenological psychopathology tradition: the Examination of Anomalous Self-Experience (EASE) is, once again, a semi-structured interview with a specific focus on disturbances in the structure of self-awareness and consciousness (Broome, Fusar-Poli, Wuyts, 2013, p.788). It contains five different domains: cognition and stream of consciousness; self-awareness and presence; bodily experiences; demarcation/transitivity; existential reorientation (Ibid., p.788).

The predictive validity of these various instruments, combined or alone, has been the object of numerous studies. The results of these studies were analysed in Fusar-Poli’s meta-analysis: ‘Meta-analysis of transition outcomes in individuals at High Clinical Risk’ (2012). It indicates that there was a consistent transition risk – independent of the psychometric instruments used – of 18% after 6 months of follow-up, 22% after 1 year, 29% after 2 years, and 36% after 3 years (Fusar-Poli, 2012, p.220).

It thus seems that clinical high risk is indeed rather highly predictive of a transition to full-threshold psychosis within the first 3 years (especially when compared

to the prevalence of psychotic disorders in the general population), and this risk increases across this period. Twenty-seven studies, published between 1996 and 2011, were integrated in that meta-analysis (Fusar-Poli, 2012, p.221). This seems to indicate that the series of tools and instruments used to assess clinical high risk (CHR) is 'reliable across different centers worldwide, despite differences in the way patients were ascertained and even though the criteria used were not identical' (Ibid., p. 225).

Interestingly, though perhaps unrelatedly, this study revealed, through its analysis of the potentially confounding effect of publication year, a small but significant decrease in the reported transition risks over time (Fusar-Poli, 2012, p.221). This is in line with current suggestions, from a variety of sources, that transition risks to psychosis in the CHR population do indeed seem to be decreasing. Different explanations could account for this phenomenon. Mainly, though, the integration of CHR groups in these studies often aims to test the efficacy of various early interventions – interventions that have been shown to have an impact on transition rates: 'we found some support for this hypothesis in the fact that transition risks were significantly lower in samples receiving active interventions (antipsychotic medication or psychological therapy) compared with those that were not' (Fusar-Poli, 2012, p.225).

In conclusion, the 'prodromal criteria based on the CAARMS, the COPS, and the BSABS/SPI-A have been validated in a range of studies, and these three assessment tools are the most widely used in current CHR research' (Addington, Heinssen, 2012, p. 272). Before delving into the ethical implications of either model, it is now time to consider the various forms of treatment available to at-risk individuals and the structures devoted to their care.

IV. PRE-ONSET EARLY INTERVENTIONS

Two broad categories of pre-onset early interventions can be implemented in psychiatry (although they are not the only possibilities): pharmacological treatments and psychotherapies. Within each of these categories, a large array of possibilities is

available. The efficacy, the benefits and the risks of these pre-onset early interventions have been the subject of many research studies in the past dozen of years.

1. Psychotherapies

Cognitive Behavioural Therapy (CBT) is often a first choice when it comes to testing the efficacy of psychotherapies in the prevention of a first psychotic episode. According to Addington and Heinssen, CBT interventions fit very well within a 'stress-vulnerability model', and focus on coping strategies that may offer protection against environmental stressors that are likely to precipitate conversion to psychosis (2012, p. 281):

It appears that CBT could be the model of psychological intervention that holds the greatest promise for being effective in (a) addressing the range of symptoms and concerns present in the CHR period and (b) teaching potentially effective strategies to protect against the impact of environmental stressors that may contribute to the emergence of psychosis (Addington, Heinssen, 2012, p. 281).

Not many studies have, to this day, focused on the effectiveness of CBT in comparison to other types of psychotherapies. CBT interventions have been integrated as a part of early intervention in numerous studies, but often in association with pharmacological treatments. One study did, though: its purpose was to determine whether Cognitive Behavioural Therapy was more effective in reducing the rates of conversion when compared to supportive therapy¹⁴ (Addington et al., 2011, p.54). In

¹⁴ The supportive therapy in question was an active psychological treatment aiming to assist directly individuals to cope with current problems: 'the therapy consisted of finding out how the previous week had been. Any crises were dealt with, and advice was offered to help with any immediate problems. No active CBT techniques were taught or used. Psychoeducational information about psychosis and managing stress was offered. There was a focus on listening, reflecting and empathizing, and demonstrating uncritical acceptance and genuineness. The therapy was non-confrontational, supportive and accepting' (Addington et al., 2011, p.56).

addition to that, it aimed to evaluate whether those who received CBT had better symptomatic recovery compared to those who received supportive therapy (Ibid., p.54). The results of that study indicate that both groups improved in attenuated positive symptoms, depression and anxiety and neither improved in social functioning and negative symptoms. However, the improvement in attenuated positive symptoms was more rapid for the CBT group. Interestingly, although there were no significant differences in conversion rates between the two treatment groups, these conversion rates were much lower than expected for a CHR group (Addington et al., 2011, p.54). According to another study, Cognitive Behavioural Therapy not only significantly reduced the likelihood of making progression to psychosis, it also significantly reduced the likelihood of being prescribed antipsychotic medication and of meeting criteria for a DSM IV diagnosis of a psychotic disorder (Morrison et al., 2004, p.291).

Therefore, it seems that psychotherapies are quite effective in the amelioration of positive symptoms in at-risk individuals. There is also strong evidence for the capacity of psychological interventions to lower conversion rates towards full-threshold psychotic disorders – or at least to delay a first episode.

2. Pharmacotherapies

Several clinical trials were designed to evaluate the efficacy of various pharmacological interventions. One of the first studies to address the efficacy of pre-onset early interventions during the pre-psychotic stage was carried out by McGorry and colleagues in the PACE clinic of Melbourne (Addington, Heinssen, 2012, p. 279). This randomised controlled trial compared two different early interventions in 59 CHR patients: a mainstream needs-based intervention, and a specific preventive intervention that comprised low-dose risperidone therapy and Cognitive Behavioural Therapy; treatment was provided for 6 months (McGorry et al., 2002, p.921). The results indicated that more specific pharmacotherapy and psychotherapy reduced risks of early transition to psychosis in young CHR individuals (McGorry et al., 2002, p.921). One problem with the framework of this study, however, was that the relative

contributions of psychotherapy and pharmacotherapy in lowering transition rates could not be determined. Subsequent trials have reached comparable conclusions and, 'taken together, results from the PACE and PRIME studies suggest that (a) the severity of prodromal symptoms can be reduced with atypical antipsychotic medications, and (b) it may be possible to delay the onset of the first psychotic episode by combining pharmacologic and psychological therapies' (Addington, Heinssen, 2012, p. 280). However, the problematic side-effects of the use of antipsychotic medication, especially in the case of young individuals who might never have come to be diagnosed with a full-threshold psychotic disorder, impeded research led on this type of pharmacological intervention.

A promising avenue of research with regards to pharmacological very early interventions in psychiatry was opened by a newfound focus on Omega 3/ ω -3. Given that ω -3 polyunsaturated fatty acids (PUFAs) are generally beneficial to health and without clinically relevant adverse effects, their preventive use in psychosis is said to merit investigation (Amminger et al., 2010, p.146). In a recent controlled clinical trial in which participants received either long-chain omega-3 (ω -3) polyunsaturated fatty acids (PUFAs) or placebos, results suggested that ω -3 PUFAs could have positive effects in a large range of psychiatric conditions, including schizophrenia, and that they may be particularly effective in the onset phase of psychosis (Amminger et al., 2015). Moreover, this investigation indicated that CHR patients with higher levels of ALA (a parent fatty acid of the ω -3 family) may specifically benefit from ω -3 PUFA supplementation, leading to the possibility of using them as a biomarker for treatment-responsiveness (Amminger et al., 2015). Fatty acids could potentially be used to inform prognostic evaluations and treatment decisions at the level of the individual. A previous study, built in a similar manner, had demonstrated that the cumulative conversion rates to psychotic disorder at 12 months were 4.9% (2 of 41) in the ω -3 group, and 27.5% (11 of 40) in the placebo group. The difference in risk of progression to psychosis between treatment groups was over 22.6%, and therefore quite significant (Amminger et al., 2010, p.149). Considering that ω -3 PUFAs have been shown to be very safe, they 'have the advantage of excellent tolerability, public acceptance, relatively low costs, and benefits for general health' (Amminger et al., 2010, p.152).

In terms of pharmacological treatments for at-risk individuals, then, those which are without clinically relevant adverse effects tend to be recommended over the use of antipsychotics. Despite their potential effectiveness, the latter are still deemed too problematic to be recommended in the case of at-risk individuals.

3. Existing Structures

The ‘explosion of interest’ towards Clinical High Risk for psychosis (CHR-P) has been remarkable enough that ‘the specialist CHR-P provision is currently being recognized as an important component of the clinical services for early psychosis intervention (eg, NICE guidelines; NHS England Access and Waiting Time [AWT] standard)’ (Fusar-Poli, 2017, p.4). Pre-onset early detection and interventions are slowly becoming an important part of psychiatric care worldwide, whether they are implemented in dedicated structures or part of a larger, more general system.

The Personal Assessment and Crisis Evaluation (PACE) clinic, created in Melbourne, Australia, in 1994, was one of the first of its type. It was originally a clinical research program that was specifically established to develop strategies for identifying young people at high risk of developing a psychotic disorder within a short period (Phillips et al., 2002). Since its creation, this program has participated in a series of investigations on the biological and psychological processes which are thought to underlie the development of psychosis. It was also used in the evaluation of potential preventive interventions (Phillips et al., 2002).

In a similar vein, the Department of Health for England has commissioned the development of Early Intervention in Psychosis (EIP) services, destined to provide access to care for 14- to 35-year-olds who are either at risk, or suffer from psychotic symptoms (Tiffin, Hudson, 2007). Young people suspected of being affected by prodromal or psychotic symptoms are initially referred to the team by generic Child

and Adolescent Mental Health Services (CAMHS). Following this referral, an assessment is conducted by an EIP care-coordinator. In order to be accepted in the program, the following conditions need to be fulfilled: either there is evidence that the young person has current psychotic symptoms, or they are deemed to be at high risk of developing a psychotic illness in the near future. Following that, a range of interventions are proposed in EIP services (Tiffin, Hudson, 2007).

The young persons and their families first receive written and verbal information relating to the 'At-Risk Mental State' as part of a psychoeducation process that includes familial as well as individual therapy, supportive counselling, etc. For some, it is then followed by a baseline medical evaluation, the role of which is to consider whether a trial of low-dose antipsychotic is warranted or not and, if it is, to provide information on risks and potential benefits (Tiffin, Hudson, 2007). Clinical examinations are performed by a general practitioner (ECG, blood tests) in order to decide the best treatment option: a Quetiapine trial or a Risperidone trial. Individuals who remain symptom-free following intervention usually receive at least 6 months of follow-up and, if they were prescribed antipsychotic treatment, they would still have to receive regular appointments with a psychiatrist. As for those who continue to experience psychotic-like symptoms, they are usually referred to more generic mental health services once they have reached the age of 18 (Tiffin, Hudson, 2007).

The Outreach And Support In South London program (OASIS) was created for people suffering from prodromal symptoms who were referred by a large range of community agencies. The program allowed them to be seen at their local primary care physician practice (Broome et al., 2005b, p.375). Over the first 30 months of the program, 180 clients were referred; and 58 (32.2%) met the criteria for an at-risk mental state. The main goal of OASIS was to evaluate whether or not it was feasible to provide a clinical service for people with prodromal symptoms in a deprived inner city area with a large ethnic minority population (Broome et al., 2005b, p.372). Clients of the program were provided with an intervention package that included social support, symptom monitoring plus Cognitive Behavioural Therapy, antidepressants and antipsychotic medication, depending on the presentation and the client's preferences

(Broome, et al., 2005b, p.375). A particular advantage of the OASIS program was that clinical contact was established with the clients outside of traditional mental health settings, and its staff was flexible about the timing of appointments. For these reasons, OASIS managed to provide at-risk individuals who were from underprivileged areas of the city with pre-emptive interventions (Broome et al., 2005b, p.375).

These are just a few examples of the structures and services that have been put in place specifically for pre-onset early detection and interventions in psychiatry. They illustrate their progressive integration into psychiatric practices and the growing recognition of their value in mental health care.

Chapter 3 - Re-Framing The Ethical Debate on Pre-Emptive Psychiatry

The development of pre-emptive psychiatry has gathered momentum in the past two decades - ever since Yung and McGorry published their research on the prodrome of psychotic disorders in 1996, and attempted to define viable risk criteria (Yung, McGorry, 1996; Addington, Heinssen, 2012). As researchers' interest in pre-onset early detection and interventions was piqued once more, the possibility of an implementation in clinical settings slowly became a conceivable outcome.

The culmination of these efforts was the proposal of a new diagnostic category for the fifth version of the *Diagnostic and Statistical Manual of mental disorders*, to be published in 2013: the APS was envisaged as a fully-fledged diagnosis, but still overlapped almost entirely with the Ultra-High Risk (UHR) group. As the likelihood of seeing this diagnostic category be integrated into the *Manual* grew stronger, detractors of pre-emptive psychiatry voiced their concerns, and started to draw attention to the potential impact this development could have on diagnosed patients, their families, and society at large.

The ethical debate that surrounded the development of pre-emptive psychiatry has sometimes been quite virulent, as the APS represented, for many, the embodiment of biomedical psychiatry's most problematic excesses. Recurrent criticisms were generally acknowledged by proponents of the APS, though their rhetoric turned progressively more defensive as their work was carefully scrutinised. In the end, the ethical issues that were highlighted with regards to the development of pre-emptive psychiatry were considered significant enough to curb its progression. The APS was relegated to the Appendix of the *Manual*, deemed insufficiently backed by compelling

evidence, but also set up for further research, thus leaving the door open for its eventual full integration.

Since then, the debate itself has evolved very little, circling around the same few issues that led to the postponement of the APS being officially and widely recognised as a valid diagnostic category. As such, these problems can often seem irresolvable, leading both proponents and detractors of pre-emptive psychiatry to remain adamantly fixated on their respective positions.

In this chapter, I argue that this debate on the ethics of pre-emptive psychiatry has missed an opportunity to discuss the development of pre-onset early detection and interventions in a more constructive manner. It has done so in several ways, some of them admittedly unavoidable, but others regrettably preventable.

Biomedical psychiatry is not without its fervent detractors (it has not been without them for quite some time, now), and the APS quickly became, in a manner of speaking, its infamous 'poster child' - the concrete manifestation of its most salient characteristics and/or flaws. One of the main features of this debate has thus been its integration into a much wider discussion about psychiatry and mental health. The issues addressed by proponents and detractors of pre-emptive psychiatry have often been seen as a particular instantiation of more general and pervasive problems in psychiatry. I consider that this larger framework has sometimes been too rigid for a detailed evaluation of pre-emptive psychiatry specifically, consolidating newer concerns into pre-existing arguments and blocking out pertinent lines of investigation.

In a similar vein, the debate on the ethics of pre-emptive psychiatry was quickly narrowed down to a few prevailing issues, such as overmedication, overdiagnosis, stigmatisation and over-medicalisation. Those have occupied such a dominant place in these discussions that they have sometimes eclipsed other relevant considerations: for example, while consent and information have occasionally been addressed in relation to stigmatisation, they have only rarely been analysed in the context of a 'right not to know'.

Related to this, participants in this debate have adopted an overwhelmingly consequentialist viewpoint: the repercussions of the development of pre-emptive psychiatry have been centre-stage in these discussions, and cost-benefit analyses have become the main method of negotiation between proponents and detractors of pre-emptive psychiatry.

This leads me to the last point I want to make in this chapter: it has too often been taken for granted that the APS was the primary model available for the implementation of pre-onset early detection and interventions in psychiatry, leading to many of the problems mentioned above. Various conceptualisations of psychiatric vulnerability should, instead, be at the heart of this conversation.

I. A RIGID FRAMEWORK

If I argue that the ethical debate surrounding the development of pre-emptive psychiatry is now in somewhat of a stalemate, it is because I consider that it has been crystallised around a series of specific issues and demands. If pre-onset early detection and interventions are ever to become an integral part of psychiatric care, they now have to respond satisfactorily to the specific challenges that have been laid out for them, first among which is the predictive validity of the diagnostic models proposed by their defenders. And if future research can base these models and practices on sufficient evidence, cost-benefit analyses would favour a proactive approach more clearly than they do now, making the development of pre-emptive psychiatry worth the 'ethical risks' it involves. As a result, the ethical debate has taken the form of a yes/no question: is pre-emptive psychiatry worthwhile, or is it not? A formulation like this one, however, cannot lead to the constructive conversation that needs to take place regarding this topic.

1. The Larger Debate

Psychiatry's history with controversial practices and treatments is fraught with nightmarish images of coerced patients, violence and mind-numbing drugs. Biomedical psychiatry has been a frequent target for those who, in the line of Foucault, see in it the strong arm of an institutional and disciplinary power, demarcating the normal from the abnormal so as better to control the latter. At the heart of these apprehensions is the DSM in each of its successive editions, as it is the main 'weapon' at the disposal of that power - a standardising mogul. In that sense, wider and older problematics have always run through the debate surrounding the development of pre-emptive psychiatry, especially with the APS at its forefront.

There is one thing I need to clarify, though: whether or not the issues raised by the antipsychiatry movement and which I mention here are justified is not the main focus of the coming section; what I aim to show is how these fairly rigid lines of thought could have impeded the development of a constructive conversation about pre-emptive psychiatry.

Some see the endeavour to define mental disorders as highly hazardous in and of itself. Bingham and Banner, for example, attempt to show that fact-based definitions of mental disorders relying on scientific theory and the idea of dysfunction (which is the approach adopted by the DSM) remain mostly unsatisfactory (Bingham, Banner, 2014, p.537). They do so by focusing on the way in which homosexuality can be (or fail to be) excluded from proposed definitions, which thus becomes somewhat of a 'litmus test'. New definitions of mental disorders rely heavily on the notion of dysfunction, which can supposedly be fact-based and demonstrated through the gathering of biomedical and/or statistical information. However, they are, according to Bingham and Banner, unable to account for situations in which mental or behavioural states happen to be negatively valued, or even oppressed, in the individual's societal context (Bingham, Banner, 2014, p.537). Going back to their example, this would mean that a homosexual person living in a particularly repressive community might indeed suffer

from their sexual orientation in a way that deeply affects their functioning, therefore leading to the potential inclusion of homosexuality as a mental disorder. In line with this, many see any attempt at 'adjudicating disorder from non-disorder' as troubling and leaving the door open to potential abuses: the implication that disorders can be distinguished from non-disorders by the application of scientific-looking criteria is the reiteration of a 'false reassurance' and 'an impotent safeguard' (Bingham, Banner, 2014, p.541). Identifying the neural or genetic biomarkers that are associated with a set of behaviours and/or symptoms cannot, by itself, distinguish what is pathological or disordered from what isn't (Ibid., p.538). Bingham and Banner conclude that there are good reasons to shift focus away from the complexities of defining mental disorders, and more towards the practice of psychiatry. The authors of the DSM-IV, like those of the latest version, actually recognised this difficulty, admitting that no definition adequately captures clear boundaries for the concept of mental disorder - at least not in a way that could be applicable to a large variety of situations (Blumenthal-Barby, 2014, p.533).

However, while the 'messiness' of the concept of mental disorder is undeniable, a thorough analysis of how it is defined and applied cannot be avoided in discussions surrounding changes in nosology (Ibid., p.533). To extend the definition of existing pathologies and disorders to the point of integrating what was previously seen as normal behaviour is hardly justifiable without a thorough reflection on what distinguishes disorder from non-disorder. On the contrary, this concern can be said to be 'vitally important', thus leading back once again to a necessary reliance on the ideas of disability, distress, and/or dysfunction (Carpenter, in Shrivastava et al., 2011, p.63). As such, it is a very large part of the DSM-5 project that can potentially be questioned: if there is no viable justification behind the determination of what counts as a mental disorder and what doesn't, new attempts to create diagnostic categories are liable to problematic attacks.

In a similar vein, accusations of 'disease-mongering' have been abundant in biomedical psychiatry. First and foremost, diagnostic categories like the APS are seen as the epitome of a worrying tendency of biomedical psychiatry, which sees the definition

of mental disorders being widened to the point of over-medicalisation and overdiagnosis. Both over-medicalisation and overdiagnosis are phenomena that are difficult to evaluate with precision: they are quite hard to quantify, hinging as they do upon hypothetical development courses, and the assumption that a significant part of a diagnosed population would not have gone on to be troubled by severe health problems.

Those who aim to discuss these tendencies do still attempt to quantify them when possible, but they are mostly interested by their consequences, and by the causal pathways by which they occur (Carter et al., 2016, p.705). Causal pathways, in particular, can help indicate why over-medicalisation and overdiagnosis are often unjustified, or responding to interests far removed from those of patients themselves. Such pathways can include, as mentioned previously, the expansion of disease definitions, the creation of 'pre-diseases', the increasing sensitivity of tests which are themselves more frequent and intensive, the commercial interests of those who seek to expand markets for treatments, and the increasing acceptance of risk reduction as an indicator for the effectiveness of an intervention (Carter et al., 2016, pp.705-706). As a result, behaviours and mental states which would have been perceived as nothing more than slight eccentricities just a few years ago are now considered pathological; and they might be under the careful scrutiny of the medical profession so as to be better treated and 'normalised'.

Worries have been raised about an 'epidemic of mental illness', for example. In a review of three recent and alarming publications on this topic (*The Emperor's New Drugs: Exploding the Antidepressant Myth*, by Irving Kirsch; *Anatomy of an Epidemic: Magic Bullets, Psychiatric Drugs, and the Astonishing Rise of Mental Illness in America*, by Robert Whitaker; and *Unhinged: The Trouble With Psychiatry—A Doctor's Revelations About a Profession in Crisis* by Daniel Carlat), Angell asks: 'are we simply expanding the criteria for mental illness so that nearly everyone has one? And what about the drugs that are now the mainstay of treatment?' (Angell, 2011). In doing so, she gives voice to widespread concerns that soon enough, everyone will meet established criteria for one mental illness or another. In support of that view, she mentions a large survey

sponsored by the National Institute of Mental Health (NIMH), conducted between 2001 and 2003, which discovered that 46 percent of a group of randomly selected adults did meet criteria established by the American Psychiatric Association for having had at least one mental illness at some time in their lives (Angell, 2011). What Angell's piece also illustrates is the strong association that is made between problems of over-medicalisation and the use of pharmacological treatments in psychiatry. The idea of a collusion between those responsible for the elaboration of diagnostic categories and pharmaceutical companies is deeply anchored in the antipsychiatry movement.

The motivations of those who work on clinical nosologies are challenged, in this. The progressive widening of diagnostic categories, integrating a growing number of individuals under their umbrella, is not without a suspicious beneficiary in the pharmaceutical industry. This powerful player can hardly be said to be transparent, and its considerable influence on how medicine is practised and advanced is increasingly acknowledged - although the scope of its reach remains ambiguous. If this 'epidemic of mental illnesses' is a moral crime, the motive would appear to be profit, and the culprits would be those who conspire with business tycoons to 'create new epidemics', creating a new need for their products.

When Blumenthal-Barby explains that psychiatry has once again 'broadened its nosology to include human experiences not previously under its purview', pointing out that 'a growing number of phenomena that were once clinically unremarkable are now labelled as mental disorders and will likely be treated pharmacologically' (Blumenthal-Barby, 2014, p.531), the spectre of these apprehensions is easily discernible. The growing attention given to preventive medicine has not gone unnoticed either:

Minor increases in the risk of future illness are portrayed as an ever increasing range of pre-conditions, including prehypertension, prediabetes, and pre-osteoporosis. The pattern is clear: opinion leaders linked to companies selling solutions meet to revise and refine the definitions of conditions

for which the latest treatments are then aggressively promoted, and, inexorably the boundaries of potentially treatable illness are widened (Goldbeck-Wood, 2010, p. 700).

The pharmaceutical industry has a lot to gain from the expansion of existing markets, and its influence on the medical profession (and on society) through 'financial ties with professional and patient groups and [through the] funding of direct-to-consumer advertising, research foundations, disease awareness campaigns, and medical education' could be far-reaching (Moynihan, 2012).

Medical professionals themselves would have little to lose in this kind of trade, as they might also have considerable interests in 'maximising the patient pool within their specialty' (Moynihan, 2012). Self-referrals by clinicians, or diagnostic and therapeutic technologies in which they have a vested commercial interest, could also be a driving motivation behind the widening of pre-existing diagnostic categories (Moynihan, 2012).

The publication of the DSM-5 was not spared these reflections, quite the contrary: by embracing this decried tendency to expand the definitions of mental disorders, and sometimes considerably so, it has been accused of unleashing multiple new 'false positive epidemics' (Moynihan, 2011, p.1055). Accordingly, the APS has often been seen as a particular instantiation of this wider problem.

The development of pre-emptive psychiatry did not start in a landscape bare of debate, and the questions and problematics that it prompts are generally not unique to it. It is rather the continuation of trends and dynamics that have modelled biomedical psychiatry as it is today, furthering its goals and amplifying pre-existing issues. Such trends have been at the heart of many discussions over the years, and have been thoroughly scrutinised. However, this rich background is not necessarily an advantage. It can - and I argue that it does - turn ethical considerations regarding the development of pre-emptive psychiatry into slightly 'calcified' lines of interrogation. The list of issues associated with pre-onset early detection and interventions is mostly limited to a few

predominant ones: over-medication (which is closely related to issues of over-medicalisation and overdiagnosis), stigmatisation, and confidentiality.

2. The Predominance of Particular Ethical Issues

Publications which are focused on the ethics of pre-emptive psychiatry offer a rather wide array of viewpoints and arguments, but most of them tend to focus heavily on the same few issues. Rare are those which go beyond these clearly identified problems. This subsection aims to outline what these recurrent concerns are, and how they have been treated in the literature.

Carpenter, who chaired the DSM-5 Psychosis Work Group, gave a representative list of some these concerns. First of all, there is, as mentioned in the previous subsection, the extension of the connotation of pathology to normal behaviour, associated with a failure to distinguish adequately between disorder and non-disorder. Secondly, the high rates of false positives could lead to unjustified clinical care. Thirdly, the presence of attenuated psychotic symptoms may lead to an excessive prescription of antipsychotic medication. And lastly, this would mean labelling young people with a diagnosis that could generate harmful stigma (Shrivastava et al., 2011, p.63). Confidentiality is another important concern in the development of pre-emptive psychiatry.

In order to avoid unnecessary repetitions, I am here going to approach the first three issues mentioned by Carpenter as closely related to one another; and I will focus more heavily on the potential overuse of antipsychotics, as it is the most compelling and alarming problem. Indeed, it is one of the major reasons why pre-emptive psychiatry is currently seen as more costly than beneficial for society. The authors of the previous version of the DSM themselves have expressed their reservations regarding the integration of the APS in the DSM-5, for this exact reason:

Some of the proposed new categories (eg, attenuated psychotic symptoms, mood dysregulation) will further promote what is already an alarming overuse of antipsychotic medication in children—sometimes causing obesity, diabetes, cardiovascular complications, and possible reduced life expectancy (Frances, Widiger, 2012).

They are certainly not alone in this, as the use of unnecessary medication has often been categorised as a ‘major problem’ associated with high rates of false positives (Shrivastava et al., 2011, p.61).

Whereas patients who were indeed going to make the transition to full-threshold psychosis might find the cost-benefit ratio of pharmacological intervention favourable, the considerable percentage of those who would not have done so might have a significantly different opinion on the matter. And a ‘considerable percentage’ it certainly is: 60 to 80% of those diagnosed under the APS criteria are said not to convert during the two-to-three years following their baseline diagnosis, therefore wearing a label that could expose a disproportionate number of them to unnecessary medications and stigma (Mittal et al., 2015, p.545). For Moynihan, such a high rate of overdiagnosis would be an outrage, exposing these people to unwarranted but permanent medical labels and lifelong treatments that would fail to benefit many of them (Moynihan, 2012).

If problems of over-medication are taken so seriously by all parties involved, it is because antipsychotics are no light treatment; their side-effects can be considerable, and their impact on a patient’s quality of life detrimental enough to proscribe their use unless absolutely necessary. It has been underlined that these treatments can influence young people’s ability to engage effectively in the developmental tasks of adolescence and early adulthood, such as dating, finding a career and establishing a secure identity (Bentall, Morrison, 2002, p.354). Olanzapine, which was used in the PRIME study in the United States, is given as an example, as it is notorious for inducing sexual dysfunction and weight gain (Ibid., p.354). Considering the age-range of patients who

fall under the umbrella of the APS diagnosis (they are mostly adolescents and young adults), these kinds of side effects are likely to be particularly noxious.

A second reason why the threat of over-medication is widely acknowledged is the legitimate possibility of a widespread use of these pharmacological treatments in general psychiatric services, despite recommendations to the contrary by proponents of pre-emptive psychiatry:

Despite evidence that some psychiatric patients fail to respond to antipsychotic medication, and that some do better with psychosocial support on its own, drug treatment is already considered the first line intervention for patients who have already developed a psychotic disorder, and it is rare to find patients who have been offered an alternative. The use of these drugs in the prevention of psychosis will increase the market for antipsychotics dramatically, and is sure to be encouraged by the pharmaceutical industry. In contrast we believe that prescribing antipsychotic medication in this way is unethical, and should be resisted (Bentall, Morrison, 2002, p.352).

This goes against hopes that the official recognition of the new APS category would educate clinicians about the 'relative lack of utility of antipsychotic medications in this population', and may actually reduce inappropriate antipsychotic use among youth (Tsuang et al., 2013, p.34).

In response to this, some have insisted on the fact that the APS exists as a syndrome in its own right, and not simply as the prodrome of psychotic disorders. It would therefore shift the focus away from the predictive validity of the UHR criteria. With the notion of risk removed from it, the APS is supposed to offer a better-fitting diagnostic category for help-seeking patients whose symptoms have already been a source of distress. The idea of dealing with high levels of false positives would then lose its potency, as all diagnosed patients would not be at-risk, but simply ill, based on

recognisable symptoms. Indeed, individuals who meet the APS criteria already suffer from multiple mental and functional disturbances, and exhibit various psychological and cognitive deficits along with morphological and functional cerebral changes (Ruhrmann et al., 2010, p.23). It is even said that the majority of help-seeking at-risk individuals fulfil DSM-IV's general criteria for mental disorders, and so can clearly be considered ill: they are patients with a need for and a right to treatment (Ibid., p.23). I will come back to this line of argumentation in more detail in Chapter 6, but I would like to note here that this does not necessarily undermine apprehensions regarding the overuse of antipsychotic medication, which might still be prescribed to patients who would not benefit from them.

Risks of undue stigmatisation are the second major issue that has been discussed in this debate on the ethics of pre-emptive psychiatry. Psychiatric diagnoses have often been associated with very negative connotations, and few more than schizophrenia and other psychotic disorders. Indeed, these tend to evoke the most negative stereotypes, emotional reactions, social distance and general pessimism across all mental disorders (Mittal et al., 2015, pp.547-548).

This issue becomes particularly complex in the case of the APS, especially in cases where risks of progression towards full-threshold psychosis are fully disclosed: it could attach a deeply discrediting label to diagnosed patients, reducing these persons 'from whole and normal to tainted and discounted' (Mittal et al., 2015, pp.547-548). On a personal basis, it is the patient's very sense of self which is at stake (Corcoran, 2005). This kind of stigma can lead the people to whom it is attached to have lower self-esteem, and to see their social circle drastically restricted or downright hostile. Identified APS patients have been shown to anticipate rejection from friends, family and coworkers, and can respond by withdrawing from those who could have provided a beneficial support network, or even by concealing their condition and treatments (Mittal et al., 2015, pp.547-548). The idea of being at serious risk for psychosis might also affect a person's choices in terms of education, employment and other life plans, or even the extent to which such plans and aspirations might be supported by loved ones (Corcoran, 2005).

The full extent of what stigma can do to at-risk individuals will be evaluated in Chapters 5 and 6; but I can mention here that proponents of pre-emptive psychiatry have highlighted, in response to those worries, the possibility to lower stigma by means of providing education and information about being at-risk, in addition to normalising responses from health professionals and support workers. In that sense, communicating a diagnosis like the APS may be beneficial for both patients and their families, as this can help lower anxiety about what were previously unexplained and distressing phenomena. APS patients can be provided substantial relief by being given clear explanations, and by having their experiences validated (Mittal et al., 2015, p.546). Great comfort might be taken in the feeling of receiving a diagnosis that fits with one's condition: the APS is not yet very well known by community providers, and attenuated psychotic symptoms can be quite diffuse, leading many patients and families to go through a series of incorrect diagnoses beforehand (Mittal et al., 2015, p.546). Accurate information about the syndrome and the risks associated with it might therefore be helpful in removing confusion and lowering stigma.

Lastly, confidentiality is a matter that is closely related to the stigma attached to psychotic disorders, and breaches of confidentiality have been regularly mentioned as a potentially dangerous repercussion of the APS. Some have pointed out that future insurability, in particular, could be threatened by these types of attenuated diagnoses (Corcoran et al., 2005, p.173).

The choice not to delve too deeply into the issues I mention in this section is a deliberate one - this will come at a later point. What I want to highlight here is how preponderant they all are in this debate. Concerns that were raised about the effects of receiving an 'attenuated diagnosis', or being labelled 'at-risk', were listed very early on - even before the elaboration of the APS for the DSM-5. The development of pre-emptive psychiatry clearly poses a series of specific problems, from individual patients' sense of identity and fear of stigma to the role of the pharmaceutical industry in the wider context of psychiatric services, or even the blurred border between normal and pathological variations in experience (Nelson, Yung, 2011). I do not dispute the

relevance of these concerns, nor do I want to undermine how problematic they really are. I am wary about the fact that they are sometimes presented as a comprehensive array of the ethical considerations at play regarding pre-emptive psychiatry, implying that if benefits/effectiveness/utility turned out to outweigh these kinds of costs, the simple answer would be that the development of pre-emptive psychiatry is indeed a worthwhile endeavour. This is a straightforward answer to an oversimplified problem.

3. Cost-Benefit and Cost-Effectiveness Analyses

The fact that an overwhelming majority of the publications treating the ethics of pre-emptive psychiatry adopts the format of a cost-benefit or a cost-effectiveness analysis is not without repercussions on the shape taken by this debate over the years. Mostly, by their very nature, cost-benefit and cost-effectiveness analyses will necessarily be formatted around one or several question(s) for which the answer must be one of two: either benefits/effectiveness outweigh costs, or they do not - a 'yes/no' type of inquiry that can lead too easily to oversimplified responses, or even to categorical dismissals.

A resolutely consequentialist approach like this one makes sense in the context of pre-emptive psychiatry. As in many areas of healthcare, where resources are limited and must be distributed in an efficient way, cost-benefit and cost-effectiveness analyses provide a well-known method to evaluate the impact (both positive and negative) of a measure, a policy, or a type of practice. For example, prevention specialists can refer to a series of questions in order to determine if a screening programme will do more harm than good, such as: Does the burden of disease warrant screening? Is there an effective preventive intervention? Is there a good screening test? Will the programme reach those who would benefit from it? Etc. (Warner, 2005, p.106). There does appear to be a large consensus on the idea that benefits outweigh risks in many studies focused on the treatment of first episode psychotic patients as soon as possible; in contrast, however, there is 'less consensus about pre-onset detection and intervention studies, the major concerns being the false positive rate of case identification, the evidence of benefit, the

side effects of treatment, the potential harm from being informed that one is at risk for psychosis, the false negative rate of case identification, and the inclusion of adolescents' (McGlashan, Miller, Woods, 2001, p.563). As such, the introduction of pre-onset early detection and interventions in psychiatry can be appraised in view of their capacity to bring something worthwhile to identified at-risk individuals and to society.

Nonetheless, cost-benefit and cost-effectiveness analyses can also restrict one's scope of ethical considerations by limiting the kinds of questions that can be raised and the kinds of answers that can be brought forward. To illustrate this point, I would like to cite what immediately follows the list of questions I outlined above from Warner's paper ('Does the burden of disease warrant screening? Is there an effective preventive intervention? Is there a good screening test? Will the programme reach those who would benefit from it?):

In the case of schizophrenia, the answer to the first question is a resounding 'Yes', but to the remainder the answers are 'No' or, at best, 'Doubtfully'. Looked at in this light, it does not appear likely that pre-illness screening for schizophrenia is likely to be successful (Warner, 2005, p.106).

Problems linked to the development of pre-emptive psychiatry are therefore conceptualised as risks faced by at-risk individuals, diagnosed patients and society. Titled 'Valuing prodromal psychosis: What do we get and what is the price?' (Drake, Lewis, 2010), Drake and Lewis' publication on the subject is rather telling of that tendency.

Once that is established, it remains to be seen how the cost-benefit or the cost-effectiveness ratio can be calculated, and whether or not taking such risks ends up being justifiable. In the case of pre-emptive psychiatry, it is the capacity to prevent or delay serious episodes and/or symptoms that must be counterbalanced with the more problematic consequences of the at-risk label or the APS diagnosis: 'there must be room for a trade-off between the harm brought about by screening and the harm brought

about by failure to screen' (Shickle, Chadwick, 1994, p.16). The advocates of pre-emptive psychiatry and the APS must be able to demonstrate the benefits/effectiveness of their models prior to the introduction of pre-onset early detection and intervention measures, meaning that an improved prognosis following the use of effective interventions will usually be the most important argument in favour of pre-emptive psychiatry.

In view of the severity of psychotic disorders and the considerable suffering endured by patients and their families, proponents of pre-emptive psychiatry have an advantage; any serious hope to delay or prevent disorders like these is an argument in their favour. A lot hinges upon the predictive validity of the diagnostic models and criteria proposed for early detection, as the analysis becomes less favourable towards treatment when the ability to target accurately those at severe risk of illness diminishes, and when the severity of likely side effects increases (Bentall, Morrison, 2002, p.353).

This explains the disavowal of pharmacological interventions even on the part of proponents of pre-emptive psychiatry: while some of these treatments have been shown to delay slightly the onset of psychosis and to have therapeutic effects on pre-psychotic symptoms (Addington, Heinssen, 2012, p.279), the level of evidence is still deemed insufficient. On the other hand, their serious side-effects and associated adherence problems are well-documented, in addition to the risk that antipsychotic medication might actually raise the chance of transition to psychosis once treatment is stopped (de Koning et al., 2009, p.440). It was concluded that antipsychotic medication should not be part of standard clinical practice for patients who are in the UHR state, when cognitive behavioural therapy and other forms of psychosocial support have considerably fewer side effects (Ibid., p.440).

An interesting byproduct of this widespread use of cost-benefit and cost-effectiveness analyses is that they establish a framework for thinking about ethical issues on a very collective level - much more so than on an individual one: 'expressing the benefit and/or harm component of overdiagnosis in population terms requires thinking statistically or probabilistically' (Carter et al., 2016, p.708). For example,

although overdiagnosis does occur in individuals, it can rarely be observed on such a small scale, at least not with certainty; it follows that, to be useful as a guide to policy and practice, the definition of overdiagnosis must be expressed at a population-level (Carter et al., 2016, p.708). The same might be said of issues of overmedication, which are mostly relevant in cases of false-positives. The goal, if issues of overdiagnosis were shown to be far-reaching, might be to alter diagnostic practices in such a way that ‘cases of overdiagnosis—the (largely unidentifiable) cases that would have aggregated to create the population-level rate of overdiagnosis—do not occur’ (Ibid., p.708). The full accounting of the risks of pre-onset early intervention should look broadly at the potential impact it has on the lives of patients in order to prevent or minimise such unintended negative consequences as stigma or discrimination (Corcoran et al., 2005). However, in the case of pre-emptive psychiatry, the alteration of the diagnostic practices in question might amount, purely and simply, to their cessation.

Cost-benefit and cost-effectiveness analyses are certainly not the only type of ethical considerations that have been developed in the context of pre-emptive psychiatry. Some have expressed more conceptual concerns about the expansion of pre-onset early detection and interventions, such as the possible confusion between ‘construct validity’ and ‘conceptual validity’. This idea was briefly evoked earlier, when I mentioned that identifying the neural or genetic biomarkers that are associated with a set of behaviours and/or symptoms (thus meeting the criteria for having construct validity) cannot, by itself, delineate what is pathological or disordered from what isn’t, thus failing to meet the criteria for conceptual validity (Blumenthal-Barby, 2014, p.532). Concerns related to the inability to distinguish between what constitutes a mental disorder and what doesn’t can be more conceptual than consequence-based; nonetheless, it is indeed the impact that these kinds of confusions may have on diagnosed patients that tend to prompt such concerns, linking them back to over-medication and overdiagnosis.

Cost-benefit and cost-effectiveness analyses are an undeniably useful tool at the disposal of those who wish to evaluate the negative impact that pre-emptive measures can have on at-risk individuals. They can help understand whether or not

these consequences are acceptable, from an ethical standpoint, in view of the benefits these measures could also bring about. Consequentialist approaches facilitate the examination of a large variety of issues, and allow for the integration of many different types of information. The problem I have with their preeminence is related to their internal structure. In order for a clearer debate to take place on the ethics of pre-emptive psychiatry, cost-benefit and cost-effectiveness studies must take for granted certain variables. In this case, it is often the idea that the APS (and other diagnostic categories related to it) are the only feasible option for the implementation of pre-emptive psychiatry.

II. RECOGNISING THE SHORTCOMINGS OF THE DEBATE ON THE ETHICS OF PRE-EMPTIVE PSYCHIATRY

The APS as such was not always so central in the debate surrounding the ethics of pre-emptive psychiatry, for the simple reason that it was developed as a precise diagnosis several years after pre-emptive psychiatry became a central preoccupation for researchers. It came about while the DSM-5 Task Force started its evaluation process, in view of a potential integration into the *Manual*. Nevertheless, the idea of an attenuated syndrome based on positive symptoms for the purposes of secondary prevention has always been prevalent, both medically and ethically speaking. Proponents of pre-emptive psychiatry themselves have focused heavily on the APS, in a way that might sometimes have obscured the existence of competing or complementary conceptualisations of vulnerability.

1. The Overrepresentation of the APS

To recapitulate, the At-Risk Mental State (ARMS) was the APS' predecessor, though not a diagnosis in its own right. Aiming to identify individuals in the prodrome of psychotic disorders, it outlined three different categories of risk: first, persons who

showed attenuated and positive symptoms (e.g., unusual thought content, suspiciousness, perceptual disturbances); secondly, people going through brief, intermittent psychotic symptoms; thirdly, people whose functioning had steeply declined and whose family had a history of schizophrenia (Corcoran, 2005). The three groups together are estimated by empirical studies to have an approximately 40% likelihood of developing psychosis by 12 months, and a 50% likelihood of developing psychosis within the next 24 months (Yung et al., 1996; Miller et al., 2002). More recently, the DSM-5 Psychotic Disorders Workgroup coined the term ‘Attenuated Psychosis Syndrome’ (APS) to ‘characterize subthreshold positive symptoms that co-occur with distress and/or disability’ (Jacobs et al., 2011, p.24). The criteria established for the APS closely follow those which were established for the ARMS.

This intense focus on the APS is far from unreasonable, considering that the proposal for the APS to be included in the DSM-5 is what cemented, for many, the possibility to see pre-emptive psychiatry become an integral part of psychiatric care. Ethical conversations were only bolstered by this circumstance, and many of the issues that occupy the spotlight in this debate are, as explained earlier in this chapter, closely associated with the DSM itself, and with biomedical psychiatry in general. The APS thus occupies an overwhelmingly dominant position in many discussions.

In a detailed outline of the ways in which the implications of the development of pre-emptive psychiatry must inform the parallel development of ‘ethically informed policies and practices’, MacDonald and her colleagues mention ‘psychosis risk syndromes’ (the plural form is rare enough to be noticed) (MacDonald et al., 2017). However, they quickly go on to explain that, while these psychosis-risk syndromes are not formally recognized by the medical community, or listed as a formal diagnosis in the DSM-5, the APS is indeed listed under ‘Conditions for Further Study’ (Section III), thus re-focusing almost immediately on one specific diagnostic model. The lack of official recognition for the APS is depicted as problematic for those trying to use mental health services, as well as for diagnosis and communication among health care providers. The confusion extends even beyond this, as the DSM sets the standard of

care for researchers, drug regulation, health insurance, pharmaceutical companies and the legal system (Macdonald et al., 2017).

Most of the publications evaluating the potential impact of pre-emptive psychiatry are similarly based on the APS, or on similar syndromes. In their article regarding competing ethical considerations surrounding the disclosure of the at-risk status, Mittal et al. focus exclusively on the ‘attenuated psychosis syndrome (APS), a label that involves subtle disturbances in thought, emotion, and behavior in adolescents and young adults, while simultaneously denoting elevated risk for developing a serious mental illness such as schizophrenia’ (Mittal et al., 2015, p.543). Or, for example, when the integration of early detection and early intervention in more general care structures was analysed in a paper from 2012, findings were entirely based on the APS, as illustrated by this informative introductory sentence: ‘schizophrenia and related disorders are often preceded by a period of attenuated psychosis-type symptoms, referred to as the ‘Attenuated Psychosis Syndrome’ (Jacobs et al., 2012). From then on, the discussion turns, in an almost ‘textbook’ manner, to problems of over-medication as they were outlined in the previous subsection: it appears that the practitioners who were interrogated about the APS designated antipsychotic medications as the treatment they selected more often than any other, in a finding consistent with those showing that 25% of the participants meeting UHR criteria were receiving antipsychotic medications at study intake (Jacobs et al., 2012). The authors then insist on the fact that few trials have provided evidence for the efficacy of antipsychotic medications in the treatment of attenuated symptoms, and that experts in the field have discouraged the prescription of antipsychotics for these patients (Ibid.): ‘given the particular vulnerability of young people to motor- and obesity-related side effects [...], prescribers might be well-advised to take a conservative stance when considering antipsychotic medications’ (Jacobs et al., 2012). The interest of this study lies in the information it relates regarding how people who fit in the APS category are usually treated in care structures other than Early Intervention services, by professionals who might not be fully acquainted with the APS diagnosis itself. Indeed, the data it discloses bring something very valuable to conversations on the ethics of pre-emptive psychiatry, as they give substance to apprehensions regarding risks of overmedication. What they

also do, though, is to describe the implementation of early detection to one conceptualisation of psychiatric vulnerability: the APS.

Some have highlighted problems linked to the APS as a diagnostic model meant to capture psychiatric vulnerability, although without really challenging its predominant position in the ethical debate. For example, Drake and Lewis mentioned that the syndrome encompasses only part of what constitutes a high risk phenotype: 'as the criteria acknowledge, it is clear from epidemiological research that there are many who experience psychotic symptoms who do not meet these criteria' (Drake, Lewis, 2010, pp.38-39). They go on to explain that there is ample evidence of a continuum of experiences across the population, with conventionally defined psychoses marking the greatest severity (Ibid., p.39), but it appears to be underlined as a characteristic of the APS, not as a plausible alternative option. Others, like McGorry, imagined a different version of the APS model before it was created, one which would specify the characteristics of various stages of psychotic disorders in the DSM-5. It was believed that it could provide a framework for the comparison of results from preventive efforts across many different centers, and may ultimately have implications for other psychiatric disorders (McGorry, 2007, p.860). While this appears to refer to the staging models McGorry would keep working on for years, he also became a defender of the APS once it was proposed (although he acknowledged its flaws, and the need for further investigations).

When alternative options to the APS are considered (mostly staging models depicting degrees of severity and approaches more focused on basic symptoms), they tend to be seen as part of the problem more than as a potential solution:

Intuitively, the move to capture severity rather than a simple dichotomous presence or absence of a disorder makes sense. But there seems to be a conceptual unclarity, or at least non-uniformity, about what it means to have a mild versus moderate versus severe form of a mental disorder (Blumenthal-Barby, 2014, p.533).

I consider that the existence of these different models should be acknowledged much more than it has been in this debate, as they propose significantly different conceptualisations of vulnerability. In doing so, they can have vastly divergent implications for the implementation of pre-emptive psychiatry. A more precise evaluation of these conceptualisations is therefore crucial, as they could affect the scope of our responsibilities to identified at-risk individuals, and determine the way in which we ought to respond to these vulnerabilities.

2. The Need to Focus on Conceptualisations of Vulnerability

One of the ways in which treating susceptibility is more complicated than treating disease is that disease is relatively well defined and susceptibility is not [...] Determining who is a suitable candidate for intervention entails narrowing down what constitutes compelling vulnerability (Corcoran, 2005).

Questions surrounding vulnerability, how it is defined and how we ought to respond to it as a society, or as medical professionals, have been implicitly present all throughout the debate on the ethics of pre-emptive psychiatry. Only rarely have they been explicitly at the heart of these discussions, though - a place I think they should occupy if we are to have a truly constructive conversation.

It is crucial to understand that the entire purpose of pre-emptive psychiatry is to provide a valid model of vulnerability. Similarly, it is important to acknowledge that the APS is not necessarily standing on its own as a suggestion.

In a way, this goes back to the issue of over-medicalisation, and the difficulty to appreciate the difference between vulnerability and disease: 'it is easy to envision a situation wherein a suggestion of vulnerability might be mistaken for a quasi-diagnosis'

(Corcoran, 2005). Not all models of vulnerability are equally compelling, and it would be a mistake not to go to the trouble of distinguishing them. Corcoran explains this by taking the example of the infant daughter of two parents with schizophrenia, who has a 50% chance of developing the disease herself - a statistical risk analogous to that of a 17-year-old boy who is currently experiencing attenuated psychotic symptoms (Corcoran, 2005). The crux of the matter is that the teenager appears to be at immediate risk, while the infant is not: 'because schizophrenia is a disease with delayed onset, there is an important difference between intervention that interrupts a presumptive premorbid period, potentially a time of relative health and normalcy, and intervention intended to address the imminent threat of disease' (Corcoran, 2005). These dual visions of early intervention are supported by different models of vulnerability.

Interestingly, interventions aiming to address 'imminent threats of disease', mostly promoted by attenuated syndromes like the APS, and which might appear to be the more ethical option thanks to the distress criterion, are not necessarily so: this is what focusing on conceptualisations of vulnerability can help highlight. I do want to insist on the fact that staging models are not in a frontal opposition with attenuated syndromes, though: by definition, they attempt to capture degrees of severity, thus integrating these syndromes within their own framework. What they do is provide a more evolutionary conceptualisation of vulnerability: it was theorised that staging models would help to avoid 'imponderabilities associated with the predictive character of a risk syndrome', thereby defining a mild expression along the psychotic continuum, marking a potentially increased, yet by no means obligatory, risk of progressing to full-threshold psychosis (Ruhmann et al., 2010, p.33).

The possibility to present staging models as an alternative to the APS became more visible once the latter was relegated to the Appendix of the *Manual*. Nelson published an article titled 'Attenuated psychosis syndrome: don't jump the gun' in 2014, which presented a number of conceptual and practical issues that should be addressed in deciding whether APS should be accepted as an official diagnosis in subsequent editions of the DSM. It discussed the relationship between attenuated psychotic

symptoms and other presenting non-psychotic disorders, as well as the difficulties of operationalising the 'attenuated' concept in standard clinical practice (Nelson, 2014, p.292). The key difference between the two conceptualisations of vulnerability (a risk-state or a disorder) is that 'a risk state calls for identification and prevention, whereas a disorder state calls for diagnosis and treatment' (Fusar-Poli et al., 2014, p.165). The first option places the emphasis on the possibility of preventing the development of psychosis rather than on clinical care (meaning active medical treatment for current symptoms). The confusion surrounding the availability of these different models helped fuel the ethical debate in a way that was not conducive to a constructive conversation. It was only amplified by the fact that it mostly took place in the process of revising the DSM, focusing excessively on the APS model.

Staging models, by proposing a more comprehensive integration of pluripotent risk, might lead to a redefinition of both the targets and the timing of therapeutic interventions (Fusar-Poli et al., 2014, p.182). This demands an accurate understanding of the broad social context in which psychiatric problems arise, of the biological etiology of specific symptoms, of personal risk and protective factors that can influence movement across stages; in other words, it demands a sufficiently thorough concept of vulnerability. Investigating the relative potency of various risk and vulnerability factors, and establishing whether they are malleable by current interventions, would therefore become absolutely crucial (McGorry, 2007, p.859):

The burgeoning arena of gene-environment interactions is directly relevant; these environmental variables such as substance abuse, psychosocial stressors, cognitive style, medication adherence, and social isolation may interact with genetic and other biological risk factors at a particular time in the pathogenesis of the illness. A clinical staging model, which maps the relationship of biological change to stage of illness, may help to validate or redefine clinical boundaries, distinguish true pathophysiology from epiphenomena or sequelae, and

enable much existing data to be better understood (McGorry, 2007, p.859).

This vision of vulnerability is perhaps more consistent with recent findings about the low predictive value of early signs of risk as to which condition is about to develop (if any at all), and the ensuing need to account for nonspecific pluripotential risks (Koren, 2013, p.236). Demarcating in this way different stages in the progression of a disorder can help create a new prevention-oriented framework in which 'key outcomes are prevention of progression to more advanced stages or regression to an earlier stage' (McGorry, 2007, p.859).

A more detailed analysis of the large impact these various models of vulnerability can have on pre-onset early detection and interventions in psychiatry will be developed in the last chapter of this dissertation. What I want to show here is how, by insisting on the importance of these conceptualisations, new avenues of reflection can start to bear on the ethical debate that surrounds these new practices.

For example, it can encourage discussions on positive or negative perceptions of vulnerability. In Koren's 2013 publication on pre-emptive psychiatry in the post-DSM-5 publication era, he mentions that labels which place more emphasis on the 'half full' (e.g. endangered resilience) than on the 'half empty' (e.g. psychosis risk) part of at-risk states are more likely to minimise unwanted risks of social stigma, and maximise desired outcomes such as willingness to seek help, hope and treatment compliance (Koren, 2013, p.236). A stronger focus on models of vulnerability could also encourage the reformulation of the goal of early interventions as the preservation and stimulation of intact (yet endangered) healthy functions, rather than as a cure for an emerging disease (Ibid., p.236). Similarly, this kind of shift could help integrate a deeper reflection on the implications of early detection for the family members of at-risk individuals, considering the role of genetics in some vulnerability models, and its quasi-absence in others (Cassetta, 2014). It could also shed light on the fact that, in becoming over-medicalised, vulnerability could become a problem imputed to at-risk individuals themselves, who would bear the responsibility of controlling and managing it, thus

overlooking the role of larger issues and societal structures in the development of some vulnerabilities (Blumenthal-Barby, 2014, p.532).

Variations in conceptualisations of vulnerability can be compelling enough that they might bring about a considerable reformulation of the ethical issues at play in the development of pre-emptive psychiatry. If the debate is re-framed, the opposition between proponents and detractors of pre-emptive psychiatry is abandoned in favour of one between the preservation of resilience and the treatment of an existing condition. This could, in turn, lead to vastly different types of conclusions. Before delving into this 're-framing' though, I feel it necessary to provide an overview of the moral significance of vulnerability: if this concept is so central in the ethics of pre-emptive psychiatry, it is because of its critical role in the definition and scope of our moral responsibilities more generally.

Chapter 4 - The Centrality of Vulnerability

To interpret the lack of focus on models of vulnerability in the ethical debate surrounding the development of pre-emptive psychiatry as a problem, one needs to show that considerable stakes hinge upon these models. This is not simply a matter of pragmatic demonstration, correlating specific medical practices and interventions to their more theoretical underpinnings (although this is indeed of great consequence and will be initiated later on). Indeed, before one is to recognise the relevance of each model's implications in medical practice, the moral significance of vulnerability must be acknowledged and analysed. It is the aim of this chapter to do so.

Medical research on pre-emptive psychiatry is openly and heavily focused on conceptualisations of vulnerability. As mentioned on previous occasions, the idea of prevention/pre-emption itself is substantially interlinked with the identification of both vulnerabilities and risks. In order to implement effective targeted interventions, specific vulnerabilities and risks must be adequately detected¹⁵. Providing the best model of the vulnerabilities that are constitutive of the prodrome of mental disorders thus becomes absolutely crucial. Historically speaking, pre-onset early intervention programs for psychosis soared when criteria facilitating the identification of at-risk individuals were elaborated: UHR, CAARMS, SIPS, COPS, SPI-A, etc. (Häfner & Maurer, 2006, p.130; Cornblatt & Auther, 2005, p.39).

It does not follow from this, though, that ethical reflections on the development of pre-emptive psychiatry should necessarily adopt a similar focus on

¹⁵ Such a claim is now generally recognised and has been made by different parties in many instances, though it is well summed-up by Addington and Heinssen when they affirm that 'a precondition for early intervention is the accurate detection of prodromal states, i.e., knowing who may be at true risk of developing a psychotic illness' (2012, p.270).

models of vulnerability. In fact, as demonstrated in the previous chapter, specific issues which are seen to be direct consequences of pre-onset early detection and interventions (stigmatisation of at-risk individuals, overdiagnosis, over-medicalisation and overmedication) drew on themselves most of the attention dedicated to the ethics of pre-emptive psychiatry. Such concerns are indeed both central and legitimate; and the debate surrounding recent medical developments has not been sterile, bringing to light the problematic implications of an increased focus on prevention. It has also been impactful, given that the concerns expressed by detractors of the Attenuated Psychosis Syndrome were serious enough to dissuade the DSM-5 Task Force from integrating it fully as an official diagnostic category.

Nevertheless, the argument presented in the subsequent chapter maintains that concentrating on the models of vulnerability suggested for pre-emptive psychiatry provides a more pertinent ethical outlook on recent developments in the field. Indeed, most of the issues already identified can be said to arise, in one way or another, from our conceptualisations of vulnerability and our moral responses to it. It is therefore crucial to demonstrate that the moral significance of vulnerability is generally recognised in moral philosophy (albeit in different forms); to provide a clear and comprehensive account of vulnerability; and to delineate the kinds of responsibilities to which it ought to give rise on the part of society, policy-makers, medical practitioners and at-risk individuals themselves. This chapter and the next are both centred on these objectives.

I believe that moral theories cannot fail to address the notion of vulnerability in one way or another, nor fail to acknowledge the necessity of a moral response to it. One of the main objectives of the upcoming chapter is thus to consider how several high moral theories react to vulnerability - even those like libertarianism which are rarely thought to react to it at all. However, the selection of these theories has not been random, and it serves further purposes. First of all, I intend to show that, despite their divergent approaches to vulnerability, each of the theories I examine here brings out important features of the mid-level account of vulnerability I will defend later on. If I dedicate substantial subsections of this chapter to Held's work on the concept of

vulnerability within the ethics of care, to O'Neill's more deontological perspective, or to Goodin's defence of a strong duty to protect the vulnerable, it is because each of these has influenced the understanding of vulnerability (and of the moral responses we ought to bring to it) that I find most convincing. Even those theories from which I moved farthest have contributed to the delineation of this account, either by presenting challenging perspectives, or by representing the pitfalls I believe most important to avoid. For example, while I draw on many of Goodin's compelling insights and on his reasoning, I am in disagreement with one of the conclusions he draws from the realisation (this one in alignment with mine) that we ought to recognise strong moral responsibilities towards the people who are vulnerable to us: where he favours protection, I seek to promote relational autonomy and resilience. Working on his account and on several others thus allows me to lay down the foundations of a particular understanding of vulnerability, and of the mid-level approaches I intend to adopt in order to defend or dismiss specific normative responses to vulnerability.

The choice made in this dissertation to rely primarily on mid-level moral theories was justified by the idea that, if a common understanding of specific principles could be reached between partisans of various high moral theories and the common morality, providing practical and adaptable guidance to practitioners with regards to a variety of issues would become immediately more straightforward. The success of Beauchamp and Childress' principlist approach in biomedical ethics (Schöne-Seifert, 2006, p.109), which follows a similar line of reasoning, certainly seems to indicate a strong adherence to such methods from medical professionals and ethicists both.

This common understanding of principles would necessitate, first and foremost, a wide-ranging recognition of their moral value. In this specific instance, what needs to be acknowledged is the demandingness of vulnerability on a moral plane: cognisance of vulnerability, in oneself or in others, entails moral responsibilities. Accordingly, the very first step, here, will be to demonstrate that, despite their often incompatible theoretical commitments, all major high moral theories do recognise the necessity of a moral response to vulnerability. Depending on the accounts of vulnerability delineated within the framework of these theories, the response in itself

may vary widely, both in scope and in method. However, the acknowledgement of the moral demandingness of vulnerability is seen as sufficient to justify how central models of vulnerability such as the APS or staging models should be in the ethical reflections surrounding the development of pre-emptive psychiatry. Moreover, the depiction of selected moral theories' dealings with the concept of vulnerability will lay the grounds for the mid-level account I defend in Chapter 5.

This chapter is structured in a thematic way, outlining the array of moral responses that various theories deem appropriate in our dealings with vulnerability. I start with the ethics of care and feminist philosophy because of the role they played in openly placing the notion of vulnerability at the heart of their normative framework¹⁶. I follow with deontological theories in order to demonstrate that even those theories which are thought to neglect more vulnerable individuals and populations do recognise the moral significance of vulnerability. I finish with consequentialist theories and Goodin's work on vulnerability, as I consider his account of particular importance in the rest of this dissertation.

I. VULNERABILITY IN THE ETHICS OF CARE

One theory in particular has made of the recognition of vulnerability a cornerstone of its normative impetus¹⁷. The ethics of care posit that 'human beings are dependent for many years of their lives, that the moral claim of those dependent on us for the care they need is pressing, and that there are highly important moral aspects in developing the relations of caring that enable human beings to live and progress' (Held,

¹⁶ I will not dedicate a subsection to virtue ethics, as I consider that the work of the most prominent virtue ethicist who focused on vulnerability, MacIntyre, is too closely in line with that produced by care ethicists and feminist philosophers. His work will be mentioned in Chapter 5.

¹⁷ Care ethicists do not always name vulnerability as a primordial concept, but sometimes opt for closely related terms and notions: precariousness is, for example, particularly crucial throughout Judith Butler's bibliography (*Precarious Life: The Powers of Mourning and Violence*, 2004; *Frames of War: When is life grievable?*, 2010). Virginia Held is more likely to refer to ideas of dependence and caring relations (*The Ethics of Care: Personal, Political, and Global*, 2006). Authors like Sara Ruddick (*Maternal Thinking: Toward a Politics of Peace*, 1989), Annette Baier (*Moral Prejudices*, 1995), and Ellen Feder (*Making Sense of Intersex: Changing Ethical Perspectives in Biomedicine*, 2014) are more likely to refer directly to vulnerability.

2006, p.10). Often constructed in opposition to dominant moral theories, which are seen to put illegitimate emphasis on qualities historically associated with masculinity (rationality, impartiality and autonomy), the ethics of care aim to give to qualities of compassion and love their rightful moral gravity. Emotional and caring responses to vulnerability or suffering should not be devalued; on the contrary, according to care ethicists, the role they play in moral deliberations should be recognised as highly valuable (Gilligan, 1993, p.19).

1. Caring Relationships as a Societal and Moral Ideal

Originating from historically female experiences of caring within the private sphere (caring for vulnerable relatives such as children, the elderly or the sick) or in a professional context (such as nursing), the ethics of care have fully embraced the moral importance of one's partiality towards particular others. Nevertheless, to perceive the ethics of care as somehow more suited to regulate private lives and relations (which had indeed been mostly avoided by most philosophical thought until the rise of feminist ethics), while more dominant moral theories (deontology or utilitarianism, particularly) remain well-adapted for public life, would be a mistake. Reflections led by care ethicists are not to be limited to particular relationships, far from it. Many of them advocate for responses to one's own and others' vulnerability that extend past the private sphere to actively transform how wider society organises itself and responds to its neighbours.

The ethics of care addresses rather than neglects moral issues arising in relations among the unequal and dependent, relations that are often laden with emotion and involuntary, and then notices how often these attributes apply not only in the household but in the wider society as well (Held, 2006, p.13).

Instead of upholding the just repartition of riches and the protection of individual rights as the highest moral goods a society could aim for, care ethicists place more value on the cultivation of caring relations and support networks; on qualities like 'trust,

solidarity, mutual concern, and empathetic responsiveness' (Held, 2006, p.15). The traditional distinction between public and private holds no weight, here, as these qualities should guide our own relationships as well as larger societal goals.

In opposition to conceptualisations of morality which see moral responsibilities as arising from negatively formulated constraints (in the protection of individual rights), or from the equal and impartial consideration of everyone's interests (the maximisation of scarce resources), care ethicists defend the idea that it is from a shared, universal vulnerability that moral responsibilities originate. The implications of that shift drastically widen the scope of our moral reach, as vulnerable populations worldwide become legitimate beneficiaries of caring behaviour and policies; care thus becomes both a political and a moral ideal, advocating the meeting of needs for care as 'the highest social goal' (Tronto, 1993, p.175).

Care ethicists conceive of a society whose moral ideals of justice, fairness and impartiality supersede more clearly relational goods as a society that willfully blinds itself to the uncomfortable realities of the human and animal conditions - namely, the interdependence that inevitably binds people together from birth. Care ethicists explain that the rational, self-sufficient and completely autonomous subject postulated by dominant moral theories simply does not exist. Accordingly, deriving our moral judgements from that unattainable ideal, all the while taking its existence in ourselves and others for granted, becomes a particularly dangerous endeavour, as it tends to erase and deny universal experiences of vulnerability and dependence. Unequal relationships of dependence are ineluctable and, as such, should occupy a key position in our moral realm.

If one wants to condemn unequivocally relationships marked by dominating, controlling, paternalistic or exploitative characteristics, whether they are so overtly or insidiously, then it might appear delusive to aim (in an attempt condemned to fail) for absolute equality between individuals. The ethics of care therefore advocate for a theory of morality that places relationships at the centre of its normativity, before acts

themselves or even character traits. It is a theory of morality that makes of the analysis, the questioning and the betterment of relationships its first impetus:

Although persons often may and should reshape their relations with others—distancing themselves from some persons and groups and developing or strengthening ties with others—the autonomy sought within the ethics of care is a capacity to reshape and cultivate new relations, not to ever more closely resemble the unencumbered abstract rational self of liberal political and moral theories. Those motivated by the ethics of care would seek to become more admirable relational persons in better caring relations (Held, 2006, p.14).

Responses to others' vulnerability are therefore closely conjoined with the acknowledgement of one's own vulnerability: it is only because that condition is shared universally that one can cultivate appropriate (trustworthy, solidary and empathetic) relationships with others.

2. Caring for the Vulnerable

The ethics of care and more justice-centred moral theories have often been pitted against each other. However, while they tend to prioritise the value of care over that of justice, care ethicists do recognise the necessity to incorporate both of them for the elaboration of an ethic genuinely protective of vulnerability. Indeed, caring relationships can often be marked by unjust expectations or unfair access to resources that would allow for the minimisation of specific, unjustified vulnerabilities. Care ethicists themselves have sometimes been criticised (particularly by liberal feminists) over their tendency to put too strong an emphasis on care and an insufficient one on justice, seemingly reinforcing the stereotypical image of women as self-abnegating, selfless caretakers who subordinate their humanity to the needs of others (Nussbaum, 1999, p.13).

Because the caring qualities historically displayed by women were cultivated under patriarchal rules and societal organisations, the fear is that the ethics of care might 'deflect attention from the oppressive social structures in which [care] takes place' (Held, 2006, p.220). Mackinnon expressed such concerns eloquently in reference to Gilligan's famous identification of women's *different voice*:

I say, give women equal power in social life. Let what we say matter, then we will discourse on questions of morality. Take your foot off our necks, then we will hear in what tongue women speak. So long as sex equality is limited by sex difference, whether you like it or don't like it, whether you value it or seek to negate it, whether you stake it out as grounds for feminism or occupy it as the terrain of misogyny, women will be born, degraded, and die (Mackinnon, 1987, p.45).

Pointing to the necessity of promoting and prioritising justice and equality, which is at the heart of the feminist movement, these critics view the endorsement of care as an attitude that tends to encourage and reinforce the unjust assignment of caring work to women (Held, 2006, p22).

Beyond the scope of feminist thought, these remarks could also be applicable to other vulnerable populations. A discourse that emphasises so strongly the recognition and acceptance of caring, dependent relationships might leave aside crucial appeals for equality and justice in the face of unjustifiably exploitative relationships (or legitimate aspirations to a higher level of autonomy on the part of particularly vulnerable people). If the interdependence that links all living beings together and the existence of a shared vulnerability cannot be denied, there remain indeed some forms of vulnerability that are wrongfully shouldered by disadvantaged individuals; and the ethics of care need to guard themselves against the accusation of maintaining an unjust status-quo. It is especially important in the case of pre-emptive psychiatry, given the role that environmental, societal and familial adversities are said to play in the

development of serious mental health issues. Caring for at-risk individuals may well be of primordial importance, but if these adversities to which they owe many of their vulnerabilities could be lessened, shouldn't a normative moral framework encourage this line of action just as much as it enables caring relationships?

Additionally, though the significance of particular relationships is now more readily recognised by various ethical theories - including more dominant ones which were previously very reluctant to do so - the account given by care ethicists is still opposed by a wide range of moral philosophies that strongly adhere to universalism. O'Neill, whose work is in line with Kantian ethics, admits that emphasising the importance of existing relationships 'may be an understandable corrective or supplement to positions that treat impartiality or justice as the whole of ethics', but she strongly disagrees with the idea that particularism, as embodied by the ethics of care, can provide a convincing account of morality, especially since 'it must exclude those to whom we have either unwholesome attachments or commitments, or none at all' (O'Neill, 1996, p.97).

Care ethicists have therefore attempted to integrate both ideas of care and of justice into their moral reflections, although they do insist on the predominance of care as an essential value when justice can only appear, chronologically and functionally, as a secondary claim. Bubeck illustrates this when she makes clear that she supports the ethic of care as 'a system of concepts, values, and ideas, arising from the practice of care as an organic part of this practice and responding to its material requirements, notably the meeting of needs' (Bubeck, 1995, p.11). The partiality asserted in the value of caring is, in many instances, in direct conflict with the required impartiality of justice. The argument put forward by some care ethicists, however, determines that caring tends to be a more inclusive value (Held, 2006, p.72), and one which is also more effective in promoting respect for others through large networks of relationships, compared to the ideal of justice when it is detached from the realities of dependence and mutual support:

Universal human rights (including the social and economic ones as well as the political and civil) should certainly be

respected, but promoting care across continents may be a more promising way to achieve this than mere rational recognition. When needs are desperate, justice may be a lessened requirement on shared responsibility for meeting needs, although this rarely excuses violations of rights (Held, 2006, p.17).

As such, while the value of justice is recognised within the ethics of care, impartial and equitable responses to vulnerability are seen as secondary to caring ones. The rhetoric of rights remains too individualistic for many care ethicists, heralding the view of the rational, independent and autonomous subject and in denial of our inescapable vulnerability.

In conclusion, the ethics of care have made of the recognition of a shared, universal vulnerability the core impulse that generates moral responsibilities. It is in response to others' dependence and susceptibleness that one should cultivate beneficent relationships - relationships that avert degrading and exploitative connections between individuals and within the political, social, and economic organisation of communities.

As I intend to show in Chapter 5, I believe the responses to vulnerability brought forward by care ethicists to be a bit too focused on protection and care, and too wary of the principle of respect for autonomy. These two issues are, I argue, particularly problematic when dealing with the ethics of pre-emptive psychiatry. Nevertheless, Held's and other care ethicists' contributions still play a large role in the account of vulnerability I defend in this dissertation, as will become clear in the following chapter.

II. DEONTOLOGY

Deontology, as the moral theory which provided the necessary socle for universal human rights, might be said by some to be both quite adept at considering

and protecting vulnerable people and also, at the same time, the least likely approach to provide fully satisfactory responses to the existence of vulnerability.

It is thanks to this notion of rights that deontology manages this particular feat. Formulated simply (perhaps too simply, as will be shown further on), deontologists elaborate, on the one hand, a strong account of individual or collective rights, and of the obligations that correspond to these rights. They ensure in this way that everyone is guaranteed the freedom to exercise their agency and will as they see fit (unless it encroaches unjustifiably on someone else's liberty). On the other hand, the foundational premises of this moral theory favour the establishment of negatively-formulated duties, giving rise to human rights that can mostly be encapsulated by the idea of non-interference.

Defenders of welfare rights have been fighting for the recognition of positive obligations within the deontological framework with more or less success, often having to back down when facing libertarians' more straightforward reasoning. O'Neill, despite her defence of obligations of virtue, admits that a distinction between these different kinds of rights is undeniable:

Universal rights to goods and services, such as welfare rights, are in fact unlike liberty rights. It is true that rights of both sorts need institutional structures for their enforcement, but liberty rights do not need institutional structures to be claimable and waivable. By contrast rights to goods and services can be claimed or waived only if a system of assigning agents to recipients has already been established, by which the counterpart obligations are 'distributed' (O'Neill, 1996, p.131).

As a result, it is often alleged that 'it takes more to justify an interference than to justify the withholding of goods or services' (Foot, 2002, p.83).

Deontology, then, could be argued to provide too little assistance to vulnerable individuals and vulnerable populations if it fails to recognise the legitimacy of welfare rights, even though it does provide a solid protection to each against the interference of others. What I want to defend, in this section, is the idea that deontology can account for the ethical relevance of vulnerability, and recognises the necessity to provide morally adequate responses to it in one way or another - be it from an unapologetic libertarian standpoint, or from the welfare-rights position.

1. The Consideration of Vulnerability in Staunchly Libertarian Accounts

Let's start with the theory which is often perceived to be the least likely to address the existence of vulnerability satisfactorily: non-consequentialist libertarianism. It is indeed rather uncommon to think of libertarians as ardent defenders of disadvantaged and vulnerable people's interests. On the contrary, their steadfast assault on state interference and on welfare policies has had a tendency to make them the champions of more affluent people worldwide - the advocates of unbridled capitalism and private property rights.

Nonetheless, the position I defend here is that libertarianism does provide moral guidance that is specifically attuned to the recognition and management of particular kinds of vulnerability. Furthermore, if implemented meticulously and rigorously, it could actually allow for the legitimisation of compelling ways to protect vulnerable individuals and groups, albeit in a narrower way than other moral theories.

It might be said that any theory that grants universal rights, even if these are exclusively negative in their formulation, necessarily provides protection against specific harms and, as such, obviously does respond to vulnerability. Libertarianism, in that sense, recognises the reality of a shared, universal vulnerability to others - of the possibility to be wronged by them. A more relevant question then becomes: does libertarianism provide an adequate way to respond to this vulnerability?

Several justifications have been given by proponents of rights-based theories so as to ground indisputable rights. Granting an intrinsic dignity to all human beings - from which natural, inalienable rights to life, liberty and property would derive - is the way in which many deontologists have proceeded. Noggle calls it the 'nature to morality methodology': it draws on premises about human nature or the nature of persons (in this particular case, it is often the human capacity for rational thinking and decision-making) to support conclusions about the nature and structure of morality (Noggle, 2001, pp.531-532). As such, it can be argued that natural human rights derive from what are seen to be some of the most basic human needs: 'since men can think, feel, evaluate, and act only as individuals, it becomes vitally necessary for each man's survival and prosperity that he be free to learn, choose, develop his faculties, and act upon his knowledge and values' (Rothbard, 1978, p.33).

According to van Duffel, property rights could actually be argued to be the most essential category of rights in non-consequentialist libertarian accounts: 'property is the fundamental notion on which libertarians rely to distinguish between negative and positive rights. Property is fundamental to libertarianism in that it defines the boundaries that people must not cross' (van Duffel, 2004, pp.356-357). The notion of *individual dominion over property* is thus given a central role in van Duffel's account of non-consequentialist libertarian theories: it gives rise to liberty and autonomy rights by allowing for the delineation of boundaries that cannot legitimately be crossed by others without the owner's consent (van Duffel, 2004, p.366). Here, the only morally problematic form of vulnerability is then the risk of seeing one's rightful property - be it material or not - encroached by another.

If van Duffel is not convinced by a libertarian account of human natural rights, it is because 'the idea that people are sovereign beings does not allow us to infer that they have an obligation to respect each other's sovereignty' (van Duffel, 2004, p.371). The justification given of that account by non-consequentialist libertarians relies on the idea that liberty rights remain the only kind of rights that can be matched by universal obligations in a clear-cut manner, which would give them an edge over welfare rights and other positive rights, for example:

[Libertarians] point out that whereas liberty rights can be matched by duties that all can discharge, any universal rights to 'positive' action, for example, rights to goods, services or specifically to welfare, would demand corresponding obligations that cannot be discharged by all, if only because agents are embodied, hence spatially and temporally dispersed, so not all of them can have the access to one another that universal 'positive' intervention would demand (O'Neill, 1996, p.130).

The level of consideration of, and protection from, vulnerability is not insignificant in non-consequentialist libertarianism, however, even with a focus restricted on the respect of negatively formulated rights. While negative rights are deemed to be the only kind of universal human rights, and while welfare rights are more than likely restricted to legal considerations rather than moral ones, few would deny the necessity to implement institutional guards to ensure that such negative rights are widely respected, and that transgressions are punished. The enforcement of negative rights might actually have far-reaching implications, especially if one is to interpret the obligation not to injure in a strict manner:

If just lives and societies have to avoid systematic and gratuitous injury as far as possible, they must identify and seek to meet complex institutional demands that take account of actual capacities and capabilities for action of those involved and of their counterpart vulnerabilities to injury. Injury can destroy or damage bodies (including minds), bodily (including mental) functioning and so capacities and capabilities to (inter)act and to respond (O'Neill, 1996, pp.167-168).

It might even be argued that today's most vulnerable populations would have more to gain in seeing their negative rights not to be injured, exploited or oppressed strictly

enforced against their persecutors, than if they were to receive welfare benefits. In some instances, the latter might be more akin to a palliative measure while the former would be a more direct intervention against a fundamentally unjust situation. Populations suffering at the hands of militias who control mining practices and local natural resources would, for example, see their vulnerability reduced more from the condemnation of these paramilitary groups and the conglomerates who deal directly with them, than from being sent basic necessities: 'the rejection even of direct injury will require institutions that limit and control the power that some have over others, and hence also the vulnerability of those others' (O'Neill, 1996, p.169).

In the case of pre-emptive psychiatry, a normative framework so focused on the enforcement of negative rights might prove to be particularly compelling. If it is adequately recognised, a society's moral obligation to ensure that no person is victim of abuse, neglect, violence or of any other harm that impinges on their liberty (or its regular development) could have a far-reaching impact on that society's mental health.

However, there are some limitations to the capacity of libertarianism to account fully for particular kinds of human - negative - rights violations that should not be understated. Additionally, these particular kinds of violation could be argued to be amongst the most urgent and prevalent ones of this era. They are those which, grounded in the privatisation and globalisation of commerce, security, healthcare, etc. cannot be imputed directly to identifiable culprits - those which are systemic, ingrained, and diffuse at the same time. Here, the failure of libertarianism lies in its incapacity to recognise such harms as 'genuine human rights claims' (Ashford, 2006, p.218): 'in this kind of case, few or none of the agents who contribute to the causal chain can be singled out as responsible for the serious harm suffered by any particular victim and so be identified as the perpetrator of any particular human right violation' (Ashford, 2006, p.218). In view of the role that experiences of discrimination and racism are said to play in the development of mental health issues¹⁸, this limitation could be very problematic indeed.

¹⁸ I will come back to the role that experiences of discrimination and racism may have on the development of mental illnesses in Chapters 5 and 6.

One could argue, additionally, that the protection of people's autonomy and agency can only be meaningful if one already lives in conditions that are sufficiently prosperous. A person who is deprived of the most basic necessities might only see their right to choose their own goals for themselves and their right not to be interfered with as a sorry consolation prize but, more than that, as an unreachable daydream. 'Irrelevant' is the term used by Griffin to designate such rights: he illustrates his point by calling attention to the carelessness of a ruler who, respectful of his people's autonomy and self-determination, institutes votes for important decisions despite the fact that most are certainly too poor to make the necessary trip, or are illiterate and unable to read the ballots (Griffin, 2000, p.42).

Vulnerability, in that sense, is often defined as a condition which makes it more likely that one will be unable (presently or in the future) to enjoy fully the exercise of one's freedom and autonomy¹⁹. Thus, while one's vulnerabilities might encompass a lot more than a lack of access to basic necessities, and therefore might be satisfactorily addressed by the protection of one's liberty, an account of deontology that endorses the existence of welfare rights might prove to be a more convincing response to vulnerability.

2. Special Duties and Welfare Rights: Positive Moral Responsibilities in Regard to Vulnerabilities

Plenty of philosophers have questioned the moral significance of the distinction drawn by non-consequentialist libertarians between negative and positive duties. Norcross, who is one of them, has formulated the issue around the notions of actively harming (the immoral transgression of a negatively formulated constraint) and simply allowing/failing to prevent (an acceptable refusal to go beyond one's negative

¹⁹ Although Chapter 5 is focused on more complex conceptualisations and definitions of vulnerability, a common feature of these various accounts is the difficulty to withstand the impact of adverse events or situations to which vulnerable individuals or groups can be exposed. While ethicists of care insist on the recognition of positive aspects of vulnerability, they do not deny the existence of this facet.

duties). For example, the difference between killing and letting die: is there really a moral distinction so great between these two types of behaviour, which both lead to identical situations, that one of them should be allowed, while the other strictly forbidden? Depending on the answer to that question, the moral demandingness of vulnerability is to be perceived as more or less stringent: 'if there is no morally significant difference between killing and letting die in particular, and between doing and allowing in general, it is that much harder to justify our neglect of the underprivileged, both in our own country and abroad' (Norcross, 2009, p.95).

Griffin defends a specific account of personhood related to human rights, in which he interprets human rights as 'protections of agency'. As such, he does take note of dominant accounts of human rights, i.e. negatively formulated liberty rights, though he attempts to widen their scope in order to incorporate a requirement of necessary *minimum material provisions* - in other words, welfare rights of some degree and of a definite range (Griffin, 2000, p.29): 'whereas autonomy and liberty are *constituents* of personhood, minimum provision is only a necessary *condition* of it' (Griffin, 2000, p.31).

As seen previously, the burden of providing clear guidance regarding the relationship between claimants of rights and the corresponding bearers of obligations tends to be borne more forthrightly and more simply by non-consequentialist libertarians than by defenders of welfare rights. Indeed, negative obligations are purported to be universal, and thus rightfully and evenly distributed. This cannot be the case for the obligations that correspond to the exercise of welfare rights: two kinds of problems would immediately be opposed to a conceptualisation of welfare rights as being held against all others. These two issues have been formulated by Wellman as the 'problem of scarce resources' and the 'problem of pointless duplication' (Wellman, 1982, p.163). The problem of scarce resources arises from the moment when the demands imposed on each vastly exceed available resources: these demands subsequently cannot be recognised as genuine moral claims. As for the problem of pointless duplication, it is aptly titled: 'if every person, private organisation, and state government acted simultaneously to sustain the life of any individual claimant, their actions would largely duplicate one another' (Wellman, 1982, p.163). Obligations

corresponding to welfare rights must therefore be distributed to specific agents in order to overcome these issues. Welfare rights could potentially be more convincing if they were seen as *legal* rights rather than *human* ones, as the latter should, arguably, be universally recognised.

Griffin refuses to see these problems as conclusive, instead embracing fully the complexity of our moral life and the necessity to incorporate very practical considerations into our moral reasoning: commitments that are made to particular persons, being in a position to help when others are not, etc. (Griffin, 2000, p.32). To him, these elements actually provide rational ways to distribute the burdens of helping in a just manner; and once these obligations are assigned to specific agents according to such practical considerations, 'the problems of scarce resources and of senseless duplication no longer arise - that is, they are no greater than in fact we have them today' (Griffin, 2000, p.32). Grounded in human nature as the necessary condition for autonomy and liberty, the minimum provision of welfare would belong to the realm of human rights before it does that of legal ones. A similar line of reasoning is followed by Griffin in response to accusations of indeterminacy (indeed, how would one be able to define the 'minimum' provision necessary for the exercise of autonomy and liberty?). 'Messy practical considerations' are once again a decisive element in elaborating an applicable definition for relevant contexts: 'determinacy that comes only having consulted prevailing circumstances is not indeterminacy' (Griffin, 2000, p.35).

Griffin is not isolated in these considerations: the arguments of the defenders of welfare rights or other positive rights range from contemporary Kantian ethics to contractarianism: 'each destitute individual has a corresponding claim against each of the affluent agents who are failing to do their fair share, and all such agents share responsibility for violations of the welfare right' (Ashford, 2006, p.222). Their accounts are not too far removed from the one I believe to be the most applicable to the case of pre-emptive psychiatry, as will be shown in the next chapter of this dissertation.

3. O'Neill's Account of Deontic Virtues

One deontological account has been deemed of particular significance in this attempt to understand better the moral significance of vulnerability in non-consequentialist theories. O'Neill's elaboration of a constructivist account of practical reason and of moral obligations is an effort towards the reconciliation of justice (which generates perfect negative duties) and virtue (which allows for the inclusion of imperfect duties of beneficence), under the umbrella of inclusive universalism.

At the start of her book *Towards Justice and Virtue : a Constructive Account of Practical Reasoning*, O'Neill outlines the question that underlies her work on this topic: 'if the foundations for an inclusively universalist conception of justice were available, why should they not also serve to ground an inclusively universal account of the virtues?' (O'Neill, 1996, p.30). Indeed, O'Neill's aim is, amongst others, to refute the association often made between particularist visions of morality, and the idea of virtue - an association which, according to her, unjustifiably dominates all current discussions of virtue. O'Neill is firm in her aversion to particularism, especially when it is presented as an account of morality that is sufficient to cover the full scope of our moral lives: 'actual norms and traditions, actual preferences, attachments, and commitments can indeed guide action: but why should we conclude that they guide it virtuously?' (O'Neill, 1996, p.36).

Reluctant to consider theories which rely fundamentally on the 'discovery' of existing ethical principles, O'Neill instead proposes to construct ethical principles based on widely accepted and basic starting points. The account of practical reasoning that she outlines aims to provide solid enough grounds for the launch of her project. In answer to particularist criticisms of idealised accounts of 'rationality, of mutual disinterestedness, of impartiality, of autonomy, and of the person' which are too often assumed by fellow universalists without being sufficiently vindicated (O'Neill, 1996, p.42), O'Neill delineates two essential criteria for her account of practical reasoning: in

order for it to be 'followable'²⁰ by all concerned, it must be both intelligible and action-guiding (O'Neill, 1996, p.57). She makes a point to construct reasoning 'with all possible solidity from *available* beginnings, using *available* and *followable* methods to reach *attainable* and *sustainable* conclusions for relevant audiences' (O'Neill, 1996, p.63).

This is the first way in which O'Neill specifically, and openly, considers vulnerability - not simply in the elaboration of the obligations to which it might give rise, but also as a necessary component of the premises needed for a solid account of practical reasoning. She follows Sen and Nussbaum's distinction between individual capacities and socially-informed capabilities and functionings: 'here and hereafter I follow Amartya Sen in distinguishing individual capacities (eg. traits of character, talents, physical abilities) from socially effective capabilities, whose exercise relies on effective institutional structures as well as individual capacities. I shall also generally speak of absent capabilities as vulnerabilities' (O'Neill, 1996, p.41). The next chapter will highlight how much I believe such accounts of vulnerability and of related morally appropriate responses to be highly pertinent in the case of pre-emptive psychiatry.

After recognising how important it is to acknowledge moral agents' potential limitations and vulnerabilities in her account of practical reasoning, O'Neill makes a point of defining the moral scope of our actions in such a way that even the most vulnerable or remote people are duly considered. Her defence of inclusive universality is based on a short list of necessary assumptions for anyone's actions. Asserting that abstractions from culturally specific and locally intelligible act-descriptions can remain intelligible to those from whose daily 'thick' descriptions it abstracts (O'Neill, 1996, p.68), O'Neill outlines three assumptions which structure human activity, and therefore allow for the definition of the moral scope of a decision or action: these are the assumptions of *plurality*, *connection* and *finitude* (O'Neill, 1996, pp.100-101). More particularly, insisting on *finitude* is a way for O'Neill to highlight the existence of a tendency to exaggerate others' capacities and capabilities, leading to 'corresponding denials of their vulnerabilities' (O'Neill, 1996, p.109). This might be interpreted as a slight rebuke against libertarianism, which is often accused of doing just so: indeed,

²⁰ I am borrowing O'Neill's own formulation.

libertarianism could be said to be most suited to an idealised world in which all start with equal capacities, capabilities, and opportunities.

A major feature of O'Neill's work in deontology is her primary focus on obligations as opposed to rights, and on agents as opposed to recipients. While she agrees with libertarians' arguments regarding the preponderance of negatively formulated rights over positive ones, this leads her not to recognise solely the former (as they do), but to shift deontic focus from the idea of rights to that of obligations. If one were to accept that the scope of obligations exceeds greatly the scope of identifiable right-owners, the possibility to defend positive obligations without corresponding recipients would then become acceptable - which is exactly what O'Neill aims to do:

Practical reasoning that assigns priority to rights and to recipience rather than to obligation and to action is an unnecessary and damaging, if distinctive, feature of contemporary writing on ethics. Its predominance in universalist writing is a major reason why justice and virtue have come to be seen as competing rather than complementary orientations to life. For once rights rather than obligations are treated as the basic deontic category, both obligations which lack corresponding rights unless institutions are built, and those which lack corresponding rights altogether are quite simply hidden from view (O'Neill, 1996, p.140).

In order to acknowledge the distinction between negatively formulated obligations with corresponding negative rights, and positive obligations that lack specific recipients - all without denying any of them their status as *moral* obligations - O'Neill adopts the traditional Kantian terms of *perfect obligations* and *imperfect obligations* (O'Neill, 1996, p.145): '*Perfect obligations* (if there are any) can hold only between identifiable obligation-bearers and identifiable right-holders. *Imperfect obligations* (if there are any) will belong to identifiable obligation-bearers, but there will be no corresponding right-holders' (O'Neill, 1996, p.147). Universal or selective prevention

efforts might be justified by this kind of reasoning: a society could have an imperfect obligation to implement preventive measures or make available an array of resources to vulnerable individuals.

The specification of O'Neill's principles of action is based on the criteria of universalisation, as with most deontic theories. In accordance with non-consequentialist libertarian accounts, forbidding harm is a central requirement for perfect duties. If one's actions were to injure foreseeably the capacities and capabilities of another, their universalisability would immediately become a moot point, thus leading to the perfect duty not to injure (O'Neill, 1996, p.164). Here, similar points to the ones laid out in the sub-section dedicated to libertarian accounts of negative duties can be raised: a perfect duty not to injure offers an analogous level of consideration for vulnerabilities to that of negatively formulated rights. Once again, the level of consideration and protection at play are not insignificant if one is to interpret the obligation not to injure in a strict manner. O'Neill's insistence on outlining the ways in which we are all becoming 'more *deeply, variably* and *selectively* vulnerable to the action of the particular others and the particular institutions on whom we come to depend for specific and often for unavoidable purposes' is an illustration of this (O'Neill, 1996, p.192).

But O'Neill goes further, and follows a similar line of reasoning to Griffin's when she claims that 'the most just system for given conditions will have to do better than others in reliably sustaining capacities and capabilities for action, so limiting vulnerabilities, in those conditions' (O'Neill, 1996, p.170):

Human vulnerabilities are not only *characteristic* and *persistent* (so to speak, *species vulnerabilities*), but *variable* and *selective*. Just institutions can aim to avert and mitigate many of the injuries to which characteristic and persistent vulnerabilities lay people open, but cannot generally avert or mitigate activity that exploits individuals' more variable and selective vulnerability (O'Neill, 1996, pp.191-192).

The distinction she makes between direct injury and indirect injury also allows her to include complex networks of causal chains in her reflections, in a way that might be interpreted as a possible answer to Ashford's criticisms against her account. As mentioned earlier on, Ashford raised concerns over the case of multiplicative, negative harms - or harms regarding which it would be very difficult to single out clearly identifiable perpetrators. If the existence of such harms is to be recognised, then - according to Ashford - O'Neill would have to admit that 'the distinction between perfect and imperfect duties does not map onto the distinction between negative and positive duties', and it would follow from a refusal to do so that 'claims against many of the most prevalent and serious contemporary harms are not genuine human rights' (Ashford, 2006, p.233).

Multiplicative harms are indeed these harms which are the result of a multitude of contributing causal factors, each brought about by a different agent and which would not, on their own, lead to any significant harm. Ashford relies on the example of a group of unwitting torturers to illustrate her point: if each torturer is only responsible for inflicting a slightly biting sensation, unaware that it is replicated by several others, while the combination of all these acts becomes excruciatingly painful to their victim, would one be able to condemn any of these perpetrators? This shows, still according to Ashford, that 'it is not plausible to claim that serious harms can only count as human rights violations if we can identify the perpetrators of these violations, that is, the agent or agents specifically responsible for the serious harms particular victims have suffered' (Ashford, 2006, p.228). And, following this, if the identification of the agents responsible for the coming-about of multiplicative harms is not constitutive of the recognition of such harms as human rights violations, then O'Neill's distinction between perfect and imperfect duties becomes less relevant. Being deprived of a secure access to basic necessities may constitute a human rights' violation on the same level as the violation of a negative right which is not imputable to any identifiable perpetrator (Ashford, 2006, p.226).

However, one could argue that O'Neill's account does consider a very wide array of injuries, from specific, direct ones to indirect ones, including damage to the social fabric or the natural world, in a way that does condemn the agents responsible even for multiplicative harms:

Injustice can also arise from injury that is inflicted indirectly through damage to the social fabric or the natural world. Much action that damages the social fabric does so by direct injury to individuals: the effects of violence and hostility, of terror and intimidation spread from individuals to the institutions and practices amid which those individuals live. However, other sorts of injury work indirectly by way of destroying or damaging the social fabric, and in particular the trust which connects and sustains lives, relationships and communities, or by way of destroying or damaging the natural and man-made environments which are the material basis of lives and action (O'Neill, 1996, p.174).

If one were to grant Ashford's point, though, it might still be possible to argue that, while O'Neill fails to recognise some harms as human rights violations, she does condemn the transgressions of each perpetrator without fail: the fact that she shifts deontic focus from rights to obligations allows her to do so. Both perfect and imperfect duties are required of all agents, even if imperfect ones cannot be claimed as a matter of right (O'Neill, 1996, p.190). In that sense, I argue that O'Neill's account of deontic obligations is one of the most successful attempts of non-consequentialist theories to account for the existence of vulnerability, and to recognise the moral impetus to which it gives rise.

O'Neill's account of deontic virtue as an imperfect obligation has led her to respond to a recurrent criticism levelled against universalist accounts of justice from particularists (communitarians, but also care ethicists) - a criticism that has already been mentioned here on several occasions: the incapacity of these universalist theories

to accommodate the interconnectedness, interdependence and vulnerability that link people together.

Universal duties of virtue, in O'Neill's account, do allow for the consideration of 'the *specific* ways in which *specific* sorts of vulnerability are created and heightened by *specific* connections' (O'Neill, 1996, p.193). As such, while she recognises the necessity to reject ideals of autonomy, independence and rationality (in line with virtue ethicists and care ethicists), O'Neill also discounts the idea that abstraction or universal principles should therefore be set aside, or that they necessarily commit to such idealised images of the autonomous agent. On the contrary, it is still based on the criteria of universalisation that O'Neill discredits any principle which relies on indifference or the neglect of others, leading to positive obligations in the form of virtues towards at least *some* others (O'Neill, 1996, p.193).

Indeed, O'Neill once again rejoins Griffin's practical considerations at this point, claiming that, while indifference and neglect cannot be universalised and must therefore be rejected in the form of a positive virtue of caring, it remains impossible to construct a universal and perfect duty of care: 'those who reject indifference must rather take *some* care to sustain *some* others in *some* ways; they must seek to support *some* others by sustaining at least *some* of their capacities and capabilities, their plans and their projects, where and how they can' (O'Neill, 1996, p.195). Here again, direct and indirect forms of action must be considered, in the sense that one can care directly for specific individuals, or care indirectly for shared social worlds or for shared natural and manmade environments (O'Neill, 1996, p.200).

A particular chart of one's obligations is thus drawn by O'Neill. It is one which recognises perfect obligations of justice in the form of a universal rejection of injury, be it direct or indirect (and thus accounting for more systemic ways in which such obligations can be transgressed, including systematic or gratuitous deceit, incitement to hatred, damage to natural or man-made environments, etc); and obligations of virtue in the form of a rejection of indifference and neglect - once again directly and indirectly

(thus accounting for duties of beneficence, love, care, support for social life and culture, social reform etc.) (O'Neill, 1996, p.205).

One can therefore say that deontic accounts of morality generally recognise the moral significance of vulnerability, the importance of its adequate recognition and of the responses it must engage. O'Neill's own work, largely based on Kantian reasoning, provides an in-depth analysis of the necessity to provide an adequate moral answer to the existence of vulnerability. Even if one is to grant the libertarian idea that negatively formulated rights are the only ones that can be solidly grounded in universal obligations, current efforts to justify the existence of obligations of virtue - or even of welfare rights - are a demonstration that simply abstaining from harming others is not seen to be a sufficient response to the recognition of others' vulnerability.

III. CONSEQUENTIALISM

In contrast with rights-based accounts of morality - especially when welfare rights become an integral part of such accounts - consequentialist theories are rarely seen as an effective or an adequate line of defence for the protection, or the promotion, of vulnerable people's capacity to deal with risk.

This state of affairs is arguably due to a series of recurrent criticisms which are often levelled against consequentialism, and which have had a tendency to stick to it like glue: namely, the accusation of promoting the 'tyranny of the majority', and the incapacity to ground basic rights for each individual securely enough. Indeed, one might say that the principle of maximisation, by not recognising the separateness of persons, does not lend itself to the consideration and the protection of individuals who are particularly vulnerable to multiple others or to a system benefitting many to the expense of some; and this claim will be considered more thoroughly later on. Similarly, rights are not as strongly embedded in consequentialist theories (or, more specifically, in utilitarianism) as they can be in other moral theories: mostly, they tend to remain a useful mean to a maximising end.

Nonetheless, at the core of consequentialist and utilitarian accounts remain principles which are profoundly entrenched in the ideas of well-being and equal respect for all, be it with regards to preference satisfaction, welfare or pleasure. It is therefore argued in the upcoming subsection that protection from harm²¹ does occupy a preeminent place in consequentialist thinking - a quality that is made all the more notable by Goodin's substantive work on the notions of both vulnerability, and the moral responsibilities that arise from it. Goodin's contributions on the topic paved the ground for subsequent works regarding vulnerability theory and, although his openly consequentialist line of reasoning was later often discarded, it still highlighted persuasively consequentialism's capacity to recognise and react to the existence of vulnerability.

1. Consequentialism: Between Over-Demandingness and Impotence

The philosophical debates that engage with consequentialism have been particularly rich in whimsical and staggeringly tragic thought-experiments, full of unstoppable trolleys and maimed innocent victims. Not that such exercises cannot effectively emphasise the most salient points of relevant arguments and counter-arguments but, in the case at hand, I believe it is more pertinent to focus on a more realistic (if slightly simplified) case.

I will thus consider the array of consequentialist and utilitarian reactions to vulnerability through the scope of one particular example: many companies now outsource the production of their merchandise to countries in which labour forces are considerably less costly, in great part because local labour codes are not as stringent or

²¹ 'Protection from harm' is a controversial formulation in this context: the scope of morally adequate responses to the recognition of vulnerability spans wider than this rather limited perspective, or even see it discounted as unforgivably paternalistic. Similarly, the definition of vulnerability might go beyond simple exposition to harm, as will be seen later. Chapter 5 is dedicated to a more thorough analysis of the moral responsibilities that arise from the recognition of vulnerability in oneself and in others. At this point, though, 'protection from harm' remains the most common and widely accepted answer when confronting the existence of vulnerability.

demanding as those of most developed countries, affording their workers fewer protections. This allows these companies to sell their products back in their home countries in a way that directly reflects the inexpensiveness of their labour force. 'Fast fashion' retailers²² or the technology industries, for example, as well as consumers, have greatly benefited from this globalised system. In contrast, those who manufacture these products have often been subjected to exploitative working conditions. While, up until a few years ago, companies and consumers alike could potentially claim genuine ignorance of suppliers' and subcontractors' exploitative practices, a series of scandals has since then dragged them to the fore. The fashion retailer Gap, for example, has faced a succession of discrediting charges: in 1995, young female workers from El Salvador, some of them underage and paid under 60 cents an hour, denounced 'brutal working conditions' (Silverstein, 1995); in 2000, the BBC revealed in a documentary that Gap was linked to a factory in Cambodia using child labour and breaking their own anti-sweatshop rules (Kenyon, 2000); seven years later, *The Guardian* exposed Gap's reliance on child labour once again, this time in New Delhi, India (McDougall, 2007); in 2010, at least 27 workers died in Bangladesh when their manufacturing plant, which supplied clothing for Gap, burnt down, in great part due to poor fire safety (Hamaadi, Taylor, 2010); two years after this, Al Jazeera unveiled in a documentary Gap's continuing problems with regards to both workers' safety and child labour (Kamat, 2013). Despite the company's publicised desire to avoid the use of unreliable subcontractors, as well as the substantial improvements it made with regards to its oversight and safety regulations, Gap (like many other companies outsourcing their production) keeps being confronted to its own failures in this domain. At some point, one might argue that, with each new disclosure, the right to claim ignorance and blamelessness has been lost: the human cost of cheaply made products is all too blatant, be it in terms of lives lost, physical afflictions and mental suffering. In such a case, the suffering of the few for the benefit of the many seems to be, if not openly accepted, at

²² Fast fashion retailers aim to optimise the rapidity of their production chain, from design to accessibility in stores: 'fast fashion requires short development cycles, rapid prototyping, small batches and variety so that customers are offered the latest designs in limited quantities that ensure a sort of exclusivity' (Tokatli, 2008, p.23): their aim is a 'highly responsive supply chain' so that consumers have access to lines of clothing at a lower price, which are also very frequently renewed.

least tolerated (be it through legislative deficiencies, lack of effective prevention, or spending habits).

Prima facie, one might think that a consequentialist - and, *a fortiori*, a utilitarian - would be hard pressed to provide strong moral protections to these vulnerable workers. Indeed, if the accusations mentioned earlier (the tyranny of the majority, and the incapacity to ground basic rights for each individual solidly enough) were to be acknowledged as both warranted and genuinely threatening, the benefits reaped from current business models might very well trump the harms caused by severely exploitative practices. Although these accusations have rarely made any overt mention of the idea of vulnerability specifically, the notion can be argued (as is the case here) to have been implicitly present throughout the debates that have engaged with them: its filigreed influence will be highlighted on several occasions. Having struggled with such criticisms almost since its first developments, utilitarianism²³ has developed an array of responses - and so the central question becomes: can utilitarianism respond adequately to the existence and the recognition of vulnerability, or does it fail to acknowledge its moral significance?

The 'separateness of persons' charge has typically been a thorn in the side of many utilitarians. Formulated by Vallentyne, it goes - very succinctly - as follows:

[I]ndividuals have certain rights that may not be infringed simply because the consequences are better. Unlike prudential rationality, morality involves many distinct centers of will (choice) or interests, and these cannot simply be lumped together and traded off against each other.

The basic problem with standard versions of core consequentialism is that they fail to recognize adequately the normative separateness of persons (Vallentyne, 2006, p.29).

²³ Utilitarianism will be the main focus of this subsection: while other consequentialist branches of moral philosophy have been confronted to similar issues (and have led to the development of pertinent lines of reflection in response to them), utilitarianism in particular remains central in this demonstration.

If seen through the scope of the example outlined above, the 'separateness of persons' charge appears to underline utilitarianism's failure to recognise adequately the exploited workers' plight: even if global utility were to be maximised through current business practices, these workers would not reap the benefits of this calculus in any significant way. Their suffering would not be alleviated at all by a multitude of others' interests or preferences being satisfied. According to the proponents of this charge, utilitarianism commits the unforgivable mistake of aggregating what is inherently self-contained and distinct: peoples' welfare - or their interests. Thus, not only unsuccessful in protecting vulnerable persons so long as the maximisation of utility does not advocate it, utilitarianism might actually amplify their vulnerability by sacrificing their vital interests for the sake of utility.

A response to this accusation has been developed by Scarre, and appeals to the value of self-respect. The example selected here can be seen as particularly challenging, in the sense that many people, nowadays, do consider this sacrifice of the crucial interests of some for the sake of others' benefit acceptable. In this sense, and since 'self-respect is plausibly seen both as a necessary condition for happiness, and as a major source of it' (Scarre, 1996, p.156), the insistence on the potential (and deeply damaging) loss of one's self-respect when one causes great harm to others offers an interesting perspective on this issue:

If one fails to respect humanity in other persons, by refusing to treat them as ends in themselves, one loses the basis for respecting one's own humanity and seeing oneself as an end. One cannot devalue other human beings without implicitly devaluing oneself, making the growth of self-respect impossible (Scarre, 1996, p.158).

This response provides a convincing line of defence against the accusation that utilitarianism is susceptible to justify harmful actions, though it does not address the question of vulnerability specifically.

Norcross' own response to this often reiterated criticism is also unequivocal: 'the separateness of persons objection poses no special threat to consequentialism' (Norcross, 2009, p.76). His reasoning points to what he considers a problematic inconsistency. On the premise that the best attempts to formulate such deontic constraints on aggregation must appeal to rights, there is no convincing way, according to Norcross, to acknowledge the existence of rights that might trump overall utility, all the while rejecting corresponding rights that would be in favour of promoting utility (Norcross, 2009, p.89). The distinction between negative rights and positive rights is indeed closely related to that between the doing and allowing distinction that Norcross rejects: if one has a duty not to actively harm a worker who is in a situation of vulnerability, one therefore also has the duty to ensure that this worker is not exploited, which is more likely to require positive action. Such distinctions are already - as was seen in the previous subsection - at the heart of deontic reflections regarding vulnerability, and are thus once again deemed crucial in the consequentialist case. Going back to the example at hand, though, this also means that any consideration of the exploited workers' positive rights must be counterbalanced by the acknowledgement that the rights of consumers to have access to affordable clothing, for instance, might actually need to be prioritised for the sake of maximisation (here, the more instrumental nature of rights in a consequentialist framework is made evident).

Once again, it is not within the realm of this project to determine whether or not Norcross is right in rejecting the distinction between doing and allowing, and thus the separateness of persons charge; the primary aim, in this instance, is to demonstrate that consequentialism in general - and utilitarianism more specifically - does address the question of vulnerability within its moral framework.

Norcross' commitment to what Sen calls 'outcome utilitarianism' (Sen, 1979), with its normative implications, appears to be an outright concession that the separateness of persons, or the protection of 'inalienable rights', cannot (and must not) impose limits on aggregation. One might think that this is equivalent to admitting that the existence and the recognition of particular vulnerabilities are not to play any

determinant role in utilitarian lines of thinking. Nonetheless, Norcross reaches a conclusion that appears more in line with the utilitarian line of thinking developed by Singer. Both are convinced that this means, on the contrary, that utilitarianism is particularly ambitious with regards to our moral duties to vulnerable individuals and populations, even supposing that this opens the door to the over-demandingness charge that has often been the counterpart of the separateness of persons charge.

Indeed, just as debates surrounding welfare rights in deontic morality have shown, the acknowledgement that positive rights ought to be recognised just as negative ones are has far-reaching implications for Norcross: it would make it considerably harder to 'justify our neglect of the underprivileged, both in our country and abroad' (Norcross, 2009, p.95). Wealthier consumers might then have the duty to change their spending habits, or pressure fast-fashion retailers into better-controlled dealings with their subcontractors. In this sense, Norcross and Singer's demanding account of our moral responsibilities towards vulnerable others can be interpreted as the demonstration that consequentialism is indeed not completely unequipped to deal with the moral demands that arise from the recognition of vulnerability.

One reason why the trend towards allowing current business practices to remain unchanged (which was outlined in the first brief consideration of the example at hand) might be reversed in this way can be explained as follows: utilitarians claim to have at their disposal a series of ways in which to condition the aggregative process so as to account for the severity or the urgency of specific needs. Singer's reference to the point of marginal utility in his famous essay 'Famine, Affluence and Morality' offers one rather clear-cut method through which one can aim to demonstrate that the obligations that arise from great suffering are rather considerable themselves. Only the loss of something which is of comparable moral importance to the needs of another person could put an end to the moral obligations one has towards him or her (Singer, 1972, p.231). This is where utilitarianism is argued to fall into the trap of over-demandingness.

Many consider the point of marginal utility to be a psychologically unrealistic, or even a morally objectionable end: by excluding the possibility of supererogatory actions, utilitarianism supposedly transforms moral subjects into inhuman calculating machines deprived of any moral autonomy. The accusation is harsh, but Singer's rigorist view is not so widely accepted, even amongst utilitarians, who often 'allow that there are limits to the amount of self-sacrifice which can legitimately be expected from individual agents in the name of the general good' (Scarre, 1996, p.182). Quite often, it is actually through the idea of maximisation that Singer's opponents attempt to inflect his position, arguing in one way or another that giving individuals the opportunity to pursue their own goals and to flourish is a better way to promote utility. Nonetheless, Singer's mention of the Bangladesh Liberation War refugees to illustrate his claim offers a convincing substantiation for his argument: even a relatively small amount of money donated could have far-reaching and rather straightforward consequences on the lives of many.

But, over-demandingness notwithstanding, the example selected here highlights the existence of a few further complications. If the aim is to apply Singer's argument to the case at hand, it would be possible to point out that - on an individual scale - most consumers are very probably in a position to sacrifice more of their income than they usually do for the sake of a more respectful production process. However, as Singer himself points out, one cannot count on concerted action in order to determine the scope of one's moral responsibilities: ideal repartitions of duty have no bearing on situations in which people simply do not fulfill such obligations (Singer, 1972, p.233). And, in the case of exploitative business models, the scope and impact of individual action can be said to be severely limited: only through profound, systemic change could one hope to see the situation of exploited workers changed for the better. If Singer's reasoning were to be strictly followed, it is possible to point out that, in this case also, donations could be much more immediately effective than a transformation of one's spending habits, or a commitment to activism so as to encourage stricter regulations and checks. Would this really provide an adequate answer to exploited workers' vulnerability, though?

Regarding actions and moral responsibilities on a wider scale - a scale which could arguably be more suited in this situation - utilitarianism is said once again to be ill-equipped to deal adequately with particularly vulnerable individuals and populations. Rawls, in particular, in *A Theory of Justice*, has endeavoured to demonstrate this, and developed his renowned argument in favour of the maximin principle: just social and institutional arrangements should be designed in such a way that the interests of the least advantaged (or the worst-off) individuals are maximised (Rawls, 1973, p.328)²⁴. Rawls' theory, which is more firmly anchored in political philosophy than in moral philosophy, will not be analysed in much depth throughout this analysis, but it does provide a pertinent counterpoint to utilitarian lines of reasoning on this larger scale.

Some utilitarians, though, such as Harsanyi, readily defend utilitarianism's capacity to champion successfully welfare-centred approaches, and reject the maximin principle as leading to serious paradoxes (Harsanyi, 1975, p.594). Indeed, Harsanyi deems Rawls' theory of justice (which is more assertive in its prioritisation of vulnerable individuals and populations than utilitarianism) to be 'extremely irrational': the matter is mostly one of probability calculation, in the sense that the maximin principle is said to violate an important continuity requirement when it encourages people in the original position to make their 'behavior wholly dependent on some highly unlikely unfavorable contingencies *regardless of how little probability you are willing to assign to them*' (Harsanyi, 1975, p.595). Harsanyi's utilitarian sensibilities are bothered by what he considers to be an unforgivable transgression of the egalitarian requirement closely associated to utilitarianism:

I feel it is important to resist the solutions [Rawls] proposes for these problems. We should *resist* any moral code which would force us to discriminate against the legitimate needs and interests of many individuals merely because they happen to be

²⁴ Rawls' work, despite its substantial focus on the 'worst-off' individuals, has been criticised on many occasions by proponents of vulnerability theory and others (including Martha Nussbaum): the severely disabled and other vulnerable people are said to be somewhat excluded from an idealised world in which 'all citizens are fully cooperating members of a society over a complete life' (Rawls, as cited by Richardson, 2006, p.420).

rich, or at least not to be desperately poor; or because they are exceptionally gifted, or at least are not mentally retarded; or because they are healthy, or at least are not incurably sick, etc. (Harsanyi, 1975, p.605).

Utilitarianism thus appears to embrace its commitments to welfare, consequentialism, aggregation and maximisation, be it on an individual scale or a larger one. So how can one argue that utilitarianism responds to vulnerability specifically, and that it recognises its moral significance? It is in the construction of utilitarian - and, more generally, consequentialist - reasoning that one can start to see that vulnerability does indeed play quite a meaningful moral role. A response to vulnerability can even be argued to be inherent to and inbuilt in the structure of consequentialist theories. Goodin is the first author to have made this reliance of consequentialism on the notion of vulnerability explicit - it is even the cornerstone of his theory of moral responsibility.

2. Goodin and the Protection of the Vulnerable

Admittedly, vulnerability is the most fundamental concept in Goodin's work, and the consequentialist framework within which it is analysed might be said to be relegated to somewhat of a backdrop. Nonetheless, I would like to argue that Goodin's primary claim - that vulnerability is what gives rise to moral duties - is entwined with his utilitarian sensibilities in an indissociable manner.

The idea is actually plainly stated on several occasions in his well-known publication, *Protecting the Vulnerable*: 'Anyone starting from those premises will regard the injunction to "protect the vulnerable" as just a special case of the injunction to "maximize utility" (or "maximize distribution-weighted utility" or "maximize the primary goods of the worst-off")' (Goodin, 1985, p.14). However, Goodin almost systematically amends such statements by insisting on the compatibility of his vulnerability theory to other moral approaches: 'although the principle of protecting the vulnerable is fundamentally consequentialistic in form, the sort of consequentialism

it embodies is broadly consistent with all the standard sorts of nonconsequentialist ethics' (Goodin, 1985, p.114). As will be seen later on, this aspiration towards general consensus is not without its drawbacks.

How, then, are the ideas of utilitarianism and vulnerability so interdependent in Goodin's work? Utilitarians are primarily concerned with the consequences of their actions and their fundamental aim is - as stated by Goodin - the maximisation of utility. Very succinctly, it is the impact that one's acts are expected to have on oneself and on others which determines whether a decision is the right one in a particular set of circumstances, and 'responsibility thus amounts to being held to account for the consequences of your actions and choices' (Goodin, 1985, p.113). If a person's interests/preference satisfaction/welfare are susceptible to be affected by one's act, it is indeed their vulnerability to oneself that gives rise to moral obligations: 'analytically, the notion of consequences seems central to the notions both of vulnerability and of responsibility. Vulnerability amounts to one person's having the capacity to produce consequences that matter to another' (Ibid., p.114). Proceeding from this, Goodin then follows standard lines of utilitarian thinking: in cases of conflict between duties, the responsibility to 'protect' a vulnerable person can be overridden if overall utility is maximised by the prioritisation of other moral responsibilities (Goodin, 1985, p.118); and 'lots of little vulnerabilities and responsibilities can combine to trump some larger ones' (Ibid., p.119).

Within this utilitarian framework, the distinction between negative and positive duties, or negative and positive rights, loses its pertinence: the line between moral obligations and supererogatory acts is nothing if not blurred in most utilitarian accounts, or even erased altogether in the more uncompromising ones. As such, an individual can be vulnerable both to action and to passivity on the part of those who can influence his or her interests/preference satisfaction/welfare: 'the duty to protect the vulnerable is a duty to prevent harm from occurring; it is equally compelling whether it requires positive action or refraining from action' (Goodin, 1985, pp.110-111).

As such, if one is to consider vulnerability through the scope of a utilitarian framework - as an integral part of utilitarian lines of reasoning, like Goodin's - the moral responsibilities that arise from it can quickly spread over a very wide range of preventive actions and behaviours. However, the more precise identification of such duties, and their breadth, heavily depends on how one defines the notoriously plastic notions of interests, preference satisfaction, or welfare. In a bid to make his account of vulnerability accommodating to a variety of moral theories other than utilitarianism, however, Goodin appears reluctant to delve into a deeper analysis of the notion of interests, and leaves it somewhat malleable. He argues that the principle of protecting the vulnerable can retain specific content despite such definitional disparities, so long as one focuses on the idea of 'vital interests', or 'primary goods': food, clothing, and shelter (Goodin, p.1985, p.111). Protecting the vulnerable is thus, according to Goodin, primarily a matter of 'protecting those people whose vital interests are particularly vulnerable to our actions and choices' (Ibid., p.111).

However, the supposedly more restrictive notion of 'vital interests' might not be as helpful in the delineation and clarification of one's responsibilities to vulnerable others as Goodin suggests, in view of its own plasticity and intricacy: arguably, there is no more easy consensus on the definition of 'vital interests' or needs than there is about interests or welfare in general. If anything, Goodin's own - rather Rawlsian - tergiversations on the potential recognition of self-respect and civil liberties as equally indispensable for the pursuit of any other particular end is a demonstration of that. I would argue that Goodin's account of the duty to protect the vulnerable, like any theory of vulnerability, must rely upon a precise and structured understanding of vulnerable people's interests/preferences/welfare in order to provide pertinent moral guidance, especially in the case of pre-emptive psychiatry. The forthcoming chapter will address this in more detail, with a particular focus on Rogers, Mackenzie and Dodds' work on vulnerability, Martha Nussbaum's capabilities approach, as well as Beauchamp and Childress' principlist stance. Despite Goodin's lack of commitment to a comprehensive definition of the notion of interests, though, he does emphasise the necessity to understand it as encompassing more than 'narrowly material' features (Goodin, 1985, p.111): emotional needs and responsibilities are evoked frequently in his work.

With this more limited notion of ‘vital interests’, Goodin still attempts to outline a series of moral responsibilities that could be said to arise in response to vulnerability. Before that, however, it is crucial to note that, within the utilitarian structure outlined above, Goodin’s account is first and foremost a relational one: a person or a group can only be vulnerable to another person or group. The origin of a risk to a person or a group (natural, social, individual, etc.) matters significantly less than the capacity others have to curtail it: ‘one is always vulnerable to particular agents with respect to particular sorts of threats’ (Goodin, 1985, p.112). The presence of one or several agents capable of willingly influencing the course of a situation is seen by Goodin as a necessary implication in situations of vulnerability. If no one has this kind of power, vulnerability ceases to be an appropriate term, given that the absence of such a relationship necessarily gives rise to more fatalistic outcomes: a person is not vulnerable anymore, but condemned. This insistence on the relational aspect of vulnerability has the merit of allowing for a rather clear-cut allocation of duties. By focusing on moral agents’ ‘special ability to help’ even more than on vulnerable people’s needs and interests (Goodin, 1985, p.35), Goodin’s theory allows for an intransigent imposition of duties to both individuals and groups, thus sidestepping the issue met by the holders of positive rights with no clearly-identified responsible ‘dischargers’ of duties:

Saying that “A needs X” might imply that A should get X; but it says nothing about who should be instrumental in A’s getting X. Vulnerability, in contrast, is a relational notion: a full specification will tell us who is vulnerable to whom with respect to what (Goodin, 1985, p.118).

This relational account does not deny the existence of what I will call, for now, ‘natural vulnerabilities’²⁵ such as those from which at-risk individuals may suffer if they are genetically predisposed to mental health issues. It highlights, however, the

²⁵ These would correspond to the account of inherent vulnerabilities that I will outline in Chapter 5.

relational aspects of even these kinds of vulnerabilities: it is because pre-onset early interventions can be seriously envisaged and proved to be effective that at-risk individuals' vulnerabilities have become more relevant. If absolutely no course of action could be taken to help at-risk individuals, their vulnerabilities would become, according to Goodin, fateful features.

Several considerations can then influence the more precise determination of each agent's responsibilities, according to Goodin. Two such considerations occupy a preeminent place: on one side, the type and urgency of the vulnerable person(s)'s needs and, on the other, the type and cost of the assistance the morally responsible agent is in a position to provide (Goodin, 1985, p.165). Goodin remains loyal to the utilitarian assurance that no one's interests/preferences/welfare matters more than any other's: geographical, chronological, or emotional distance only carry weight insofar as it can have an impact on how one's acts of help affect the vulnerable people in question. The equal consideration of everyone's interests is still at the heart of Goodin's philosophy. If flexibility is introduced in Goodin's account, it is arguably in his acknowledgement that geographical, chronological, or emotional distance is likely to diminish the effectiveness of one's help to distant others:

On balance, persons relatively near to us in space and in time probably *will* be rather more vulnerable to us. [...] My analysis would seem to allow (indeed, to require) us, in effect if not in intention, to show *some* bias toward our own "kind," however defined (Goodin, 1985, p.121).

As such, the obligations one has towards one's children (to borrow Goodin's own example), despite the fact that others might be more suited to the job, have to do with nonmaterial vulnerabilities: even answers to material needs can become symbols of affection and love (Goodin, 1985, p.83). Furthermore, this also allows Goodin to account for cultural variances in the perception of vulnerability as well as in the moral responses it should engender (Goodin, 1985, p.35), and to recognise the necessity of some cultural boundaries.

Nonetheless, while this might appear to belie the assurance of impartiality characteristic of utilitarianism, Goodin's account remains morally demanding with regards to a variety of moral agents, both individual and institutional. Because situations of vulnerability are oftentimes collective rather than individual, networks of mutual accountability and the implementation of cooperative arrangements become a precondition for the more general distribution and reception of aid. This explains Goodin's strong commitment in favour of the welfare state and international assistance strategies: such schemes are an integral part of the acknowledgement that moral (as well as social and political) responsibilities arise from vulnerability:

This is, first and foremost, an argument in favor of the welfare state. That institution is the principal mechanism through which we discharge our collective responsibilities to protect our vulnerable compatriots (Goodin, 1985, p.145).

Importantly here, causation is deemed irrelevant in the distribution of moral responsibilities; power is the only thing that matters. Even if a vulnerable person is 'to blame' for their situation, those who are in a position to provide necessary assistance have the moral responsibility to do so, even supposing they are simply random and innocent bystanders. Goodin makes a distinction between causal responsibility and moral responsibility. The determination that one has an obligation to provide help to a vulnerable person becomes entirely separate from the question of tort liability: 'the latter is a question of deciding who should effect a rescue; the former is a question of who should pay for it' (Goodin, 1985, p.131).

As will be seen later, however, this purely relational account of vulnerability and all it implies might be too restrictive, both in terms of understanding and in terms of assignment of responsibilities.

It is now possible to go back to the example of exploited workers in the fast-fashion industry in order to consider the concrete implications of Goodin's

vulnerability theory. The most salient point that can be made concerns the collective vulnerability of these workers, both to corporations themselves and to worldwide consumers. Once again, here, individual action remains considerably limited - especially within a utilitarian framework: personal changes in habits have little impact on the precarious situation in which exploited workers find themselves. It does not provide them with any alternative means to earn sufficient resources to gain in autonomy, nor does it lessen more directly their exposure to exploitative practices.

In that sense, I wish to argue that Goodin's account of our moral responsibilities towards vulnerable people does support a strong incentive for collective reaction: 'although distant strangers may be largely invulnerable to each of us, they can be highly vulnerable to *all of us*' (Goodin, 1985, p.138). Contrary to Singer, Goodin embraces the idea of a conjugation of limited individual consequences as crucial if one aims for significant and broad impact. Instead of pointing to this as an apology for laziness and apathy (if others fail to 'pull their weight', why even bother trying to improve a situation that is doomed to remain unchanged?), Goodin attempts to highlight the stringency of the collective responsibility that we share. Where Singer chooses to focus on the impact a single individual can have on others' lives, Goodin selects a radically cooperative approach and openly favours political and societal responses to wide-ranging issues. In support of this view, Goodin insists on the maximisation of relevant data and resources when efforts are pooled together.

However, failure must still be considered as that of each individual comprising the group (Goodin, 1985, p.138), as this underlines the importance of such collective obligations: 'saying that the responsibility is a collective one does not exempt individuals from responsibility; it merely changes the character of their responsibilities' (Goodin, 1985, p.163). This collaborative approach has several advantages. The first one is that it will mostly favour political and institutional responses to collective vulnerabilities, rather than simply individual acts of help, or even person-to-person aid programmes. Such programmes - especially in the situation considered here - are often accused of providing stopgap answers to issues that have wide-ranging economic, social and political roots, thus doing nothing to address the wider context that engenders

vulnerability in the first place. Exploited workers might very well benefit from being provided with food or any other basic resources through charitable organisations, at least in the short term, but such solutions are a simple bandaid at best, and actively harmful at worst. For example, in the case at hand, it might be argued that it discourages local governmental bodies from reinforcing workers' rights and security, or exploited workers from demanding better social protections. International trade agreements, Non-Governmental Organisations' vigilance, legal prosecutions and convictions as well as other institutional responses would provide more effective solutions and address more directly the sources of widespread vulnerability.

3. The Limits of Goodin's Vulnerability Theory

Despite the considerable advances made by Goodin with regards to the consideration of vulnerability in moral philosophy, there remain a series of problematic assumptions in his work. Some criticisms are levelled against Goodin more regularly than others, but most of them have been iterated by care ethicists.

The first problem I would like to focus on is the lack of challenge to the preexisting distribution of moral responsibilities in Goodin's account. While the straightforwardness of Goodin's reasoning for the allocation of duties is appealing in many ways (the sheer existence of a distributive process is already a considerable advantage), it also has problematic drawbacks. With a relational account of vulnerability and the affirmation that those who have the capacity to produce consequences that matter to another are those who bear moral responsibility towards them, Goodin's account relies (too) heavily on pre-existing relations of dependence. It also leaves very little leeway to highlight the potentially unjust, or even coercive, underpinnings of such relationships: some individuals and groups might find themselves unfairly burdened with responsibilities to vulnerable others, while members of society who have historically been unassociated with caretaking roles remain exempt from many of these responsibilities.

For example, women, who are traditionally responsible for children's and vulnerable family members' emotional and daily needs, have little ground to argue for a more equitable repartition of responsibilities within Goodin's framework: children and vulnerable family members have become more vulnerable to them than to the male adults of their families. Goodin himself openly endorses that reliance on pre-existing relationships of dependence:

Here I merely want to say that the existing allocation of responsibilities, whatever its initial basis, should now be treated as a "social fact." [...] The main alternative to assigning responsibility for protecting the vulnerable to those people to whom they are vulnerable is - to employ a pun that is all too often mistaken for an argument - to assign responsibility to those who are responsible (Goodin, 1985, p.125).

This particular objection is not meant to play a crucial role in this project (the main actors are at-risk individuals, medical professionals, social workers and policymakers), but it is still important to recognise the issue that it raises. It also remains pertinent, to some extent, in the sense that family members of at-risk individuals are more and more involved in pre-emptive measures and in the control of environmental risk factors, especially through psychoeducation sessions - pre-existing relations of dependence can thus become a relevant factor in the determination and distribution of moral responsibilities.

A second, more problematic issue can now be raised; and it is somewhat kindred to the first one: it, too, is an accusation of complacency with an unsatisfying status-quo. Goodin is so focused on demonstrating that the existence of vulnerability does give rise to undeniable moral responsibilities that little is done in his work to diminish this vulnerability. In order to be fair, one must recognise that Goodin seems at least quite aware of this potential shortcoming, as he himself mentions on several occasions the necessity to promote vulnerable people's autonomy and freedom from dependence or exploitation. Nonetheless, this reflection is arguably not developed

much further than as a passing consideration. While one might think that Goodin's inclination for collective and institutional responsibilities could provide an adequate playing field for tackling dependencies or vulnerabilities that are 'created, shaped, or sustained, at least in part, by existing social arrangements' (Goodin, 1985, p.191), he actually spends little time challenging what some might consider to be highly unjust forms of vulnerability. The main priority, for him, is the elaboration of a convincing line of argumentation in favour of protecting the vulnerable; it is more about providing incentives and reasons for preventive action than it is about questioning the vulnerabilities in question themselves.

So, Goodin does acknowledge the potentially crucial role that social arrangements can play in the development of various vulnerabilities:

All of this goes to show that any dependency or vulnerability is arguably created, shaped, or sustained, at least in part, by existing social arrangements. None is wholly natural. We can go further still: some of the most important dependencies and vulnerabilities seem to be almost wholly social in character (Goodin, 1985, p.191).

However, if institutional and political responses can easily be envisaged within the framework of Goodin's account, many forms of vulnerability might need to be analysed and diminished in ways that cut across such rigid boundaries. Here, Goodin's work remains problematically limited. Exploitation is perceived to be at the core of our 'moral objections to vulnerability and dependency relationships' (Goodin, 1985, p.193), and it is through mutuality that it can be counterbalanced. If all the parties involved in a situation are mutually dependent on each other, risks of exploitation supposedly become diminished. But our control - societal or individual - over the development of unjust dependencies and vulnerabilities is often too limited to challenge or prevent them effectively. Many of them, thus, can be seen as 'genuinely "natural," inevitable and immutable' (Ibid., p.203). By readily accepting that some vulnerabilities are unavoidable, the risk might be to create a strong impetus for the protection of the

vulnerable but to neglect how unjustly both responsibilities and vulnerabilities are distributed across a population.

Lastly, a purely relational account of vulnerability might also lead to a certain disregard for personal moral responsibilities. I will not dispute Goodin's relational account of vulnerability, but I do believe that it should integrate more clearly the idea that vulnerable persons may also bear moral responsibilities in view of their own vulnerabilities. It is, I argue, a shortcoming of Goodin's account that it does not do so more openly. Even if one grants Goodin's point that causal responsibility cannot bear much weight on the allocation of moral duties to protect and help, an argument can be made that some forms of vulnerability are not fundamentally 'bidirectional': there are preventive measures that can only be undertaken by the vulnerable persons themselves. In the case of pre-emptive psychiatry, while the decisions and actions of policymakers and medical professionals alike are of crucial importance, as is the support of a community or family, at-risk individuals cannot be said to bear no moral responsibilities at all towards the preservation of their own welfare.

If one conclusion is to be drawn from the array of theories outlined in this chapter, it is that conceptualisations of vulnerability engender very specific moral responses. As varied as the ones I have just outlined in this chapter may seem, these theories still contribute substantially to the account of vulnerability (and of the moral responses we ought to bring to it) that I find most useful and applicable to pre-onset early detection and interventions in psychiatry. This chapter has allowed me to highlight the most relevant, convincing or problematic features of these lines of argumentation, and it is now time to incorporate some of these elements into a coherent account tailored to the particular case of pre-emptive psychiatry. While the models of vulnerability proposed within the framework of pre-emptive psychiatry (be it attenuated syndromes or staging models) may be constructed as purely medical, they do have philosophical significance and implications.

Chapter 5 - Defining Vulnerability and Responding to It

The claim that I outlined in the last chapter - that one has a moral responsibility to answer to vulnerability - cannot be said to be overly ambitious: indeed, it leaves the door open for a wide variety of interpretations and conceptualisations. Vulnerability matters, morally speaking, but what it is exactly and how we should respond to it remains woefully imprecise. The array of theories I evaluated in the last chapter bring forth some of the most salient features of our moral responses to vulnerability, and they will inform the account I defend here in a substantial manner.

At this stage of my argument, vulnerability is often seen as a threat, very simply put, and I have made no further commitment than this thin evaluation (although it is both descriptive and normative). Nevertheless, as useful as an open-ended conceptualisation of vulnerability can be in some circumstances, it is inadequate in this particular case.

I have established earlier that the ethical debate that arose with the development of pre-emptive psychiatry, encased in a wider discussion regarding mental health and biomedicine, has been focused almost exclusively on a few issues, thus mostly disregarding the existence of different models of vulnerability. The reason why these models should be acknowledged as crucial is because they offer sometimes vastly different appreciations of what psychiatric vulnerability is, just like they can have vastly different implications regarding the interventions made available to at-risk individuals. In order to encourage a constructive conversation about the ethics of pre-emptive psychiatry, I thus need clear and practical answers to the following questions: how can vulnerability be defined? And how should we (collectively or individually) respond to it? The answers to these questions must go beyond purely medical considerations and

involve philosophical ones, as they will dictate what models and interventions are ethically acceptable, when others are not. This chapter is dedicated to both these questions, starting with the first one.

The first thing I need to address, in this bid to outline a pertinent account of vulnerability, is the aforementioned tension between vulnerability as a universally shared condition, and vulnerability as an increased risk incurred by particular groups or individuals. I refer to Rogers, Mackenzie and Dodds' account of inherent, situational and pathogenic vulnerabilities to bridge this gap satisfactorily. I also intend to clarify what is at stake in the identification of vulnerabilities: should risks be formulated in terms of interests, rights, preferences, welfare, or goods? As I explained earlier, the methodology I selected for this purpose is best described as a 'mid-level' one. I called upon 'higher-level' theories and principles to demonstrate the existence of a wide-ranging agreement that vulnerability is never morally neutral. However, I intend to renounce any form of top-to-bottom application of such theories in favour of approaches compatible with a Rawlsian type of reflective equilibrium. I focus, in particular, on the insights provided by the concepts of capabilities, fertile functionings and corrosive disadvantages with regards to vulnerability which, I argue, are distinctly well-suited to the task at hand.

I. MULTIFACETED VULNERABILITIES

Despite my earlier claim that the statement 'vulnerability gives rise to moral obligations' cannot be said to be overly ambitious, I do have to acknowledge that some might disagree with the underlying idea that vulnerability must therefore be something negative. I touched upon these kinds of objections in the subsection dedicated to care ethicists and their treatment of vulnerability. Depending on whether one focuses on vulnerability as a universally-shared, animal condition, or on vulnerability as capturing the increased risks incurred by a few, our responses to it will vary. The case of pre-emptive psychiatry requires a definition of vulnerability that does integrate the possibility to detect those who, among the general population, are more vulnerable to

certain kinds of risks; however, neglecting universally-shared vulnerability might bring forth its own share of problems. I propose an account of vulnerability that attempts to address both these forms of vulnerability by concentrating on the interactions between inherent and situational vulnerabilities, and on the necessity to avoid pathogenic responses to them. Formulating vulnerability and risk in terms of threatened capabilities will help me delineate what an adequate response to psychiatric vulnerability can be.

1. The Difficult Task of Defining Vulnerability

If vulnerability is to be defined in contrast with its antonym ‘invulnerability’, the fact that it is a condition shared by all living things becomes undeniable. We are all exposed to the possibility of dying or being deprived of what we need²⁶ to survive. Going beyond mere survival to the idea of flourishing only expands the scope and the nature of these needs. Human beings, in particular, as ‘complex, embodied, social, affective, and intelligent beings’, have a very wide range of needs which must be met in order to flourish, from basic needs for nourishment and shelter through to complex social needs such as friendship and meaningful work (Rogers, Mackenzie, Dodds, 2012, p.22). Human vulnerability arises from our embodiment; it is a disposition of ‘embodied, social, and relational beings for whom the meeting of needs and the development of capabilities and autonomy involve complex interpersonal and social interactions over time’ (Dodds, 2014, p.182).

As outlined in Chapter 4, refusing to acknowledge this common condition can lead some to postulate a (nonexistent) rational and completely autonomous subject. Taking the existence of that ‘completely autonomous’ subject for granted, without ever questioning how he or she might come to be, can have a dangerously deleterious effect on our moral judgements, which would then be premised on an unattainable ideal. Vulnerability, on the contrary, because it ‘expresses the condition of all life as able to be

²⁶ I will refer to needs in relation to vulnerability for the time being - until I develop the account of capabilities that I think captures more adequately the stakes attached to psychiatric vulnerability.

hurt, wounded and killed', and because it 'must be considered as a universal expression of the human condition', requires integrity to be recognised as a 'basic principle for respect for and protection of human and non-human life' (Kemp, 2008, p.240). Theorised in this way, the requirement to protect vulnerable persons could be said to create a bridge between moral strangers in a pluralistic society, and to encourage more respectful policymaking in modern welfare states (Kemp, 2008, p.240). As Kemp remarks:

The ethic of care for others is not simply a matter of protecting those who are incapable of acting autonomously (the most vulnerable forms of life). Rather, it is an ethic that builds on the premise that we are all capable of being wounded by the uncaring (and sometimes paternalistic) actions of others (Kemp, 2008, p.247).

But insisting too much on the need to acknowledge the existence of a universally-shared vulnerability is not without danger, as it can also slowly erode the salience of particular vulnerabilities. If humans cannot escape their animal condition, if vulnerability is so widespread as to be universal and our needs so wide-ranging that interdependence is ineluctable, then our assumptions that moral agents are perfectly autonomous will indeed be severely damaged. The other side of that coin, though, is that our vulnerabilities and needs might cease to call for a distinct moral response. Failing to recognise the existence of context-specific vulnerabilities can therefore become problematic, normalising relations of dependence and generating apathy.

There is a fine balance to be struck between failing to pay adequate attention to the particular manifestations of universal dependencies and vulnerabilities and focusing on them so much that some people are hived off into special categories that lend themselves to social and political marginalisation (Leach Scully, 2014, p.219).

What the development of pre-emptive psychiatry highlights is that we are not all equal when facing risks of seeing our needs unmet: the whole aim of the endeavour is indeed to provide an accurate, precise and highly predictive profile of at-risk individuals in order to implement efficient preventive measures. Some of us appear to be identifiably more vulnerable than others, no matter how universally-shared a condition vulnerability really is. A satisfactory account of vulnerability must therefore integrate the idea that some people are more likely to suffer from certain harms than are others.

Here again, though, a too exclusive focus on particular vulnerabilities or vulnerable groups may eventually become harmful²⁷. Labelling people as vulnerable, combined with a somewhat dulled awareness that no one can actually boast about invulnerability or perfect autonomy, can lead to specific forms of discrimination and the stereotyping of whole groups as ‘incapable of caring for their own needs or of being self-determining’ (Rogers, Mackenzie, Dodds, 2012, p.16). Such classification of whole groups as vulnerable has been shown to lead to unwarranted and unjust paternalistic responses.

For example, the Council for International Organizations of Medical Sciences recently revised its International Ethical Guidelines for Biomedical Research, which now includes a guideline entitled ‘Research Involving Vulnerable Persons’ (CIOMS, 2002). The individuals or groups designated as vulnerable in the guideline are identified as follows: ‘vulnerable persons are those who are relatively (or absolutely) incapable of protecting their own interests. More formally, they may have insufficient power, intelligence, education, resources, strength, or other needed attributes to protect their own interests’ (Macklin, 2003, p.474). It is possible to assess how double-edged such a definition can be, as the need to provide effective protections for people who might be exploited in the context of biomedical research wages war with the necessity to respect their autonomy and to forgo overly paternalistic approaches.

²⁷ I will expand on pathogenic vulnerabilities in the next subsection; what I want to illustrate here are cases in which harmful responses to vulnerability arise specifically because the experience of vulnerability is entirely separated from that of less vulnerable, ‘autonomous’ agents.

In the case of research subjects who live in developing countries and are recruited by wealthy western pharmaceutical companies, concerns have been expressed regarding the subjects' educational level or lack of familiarity with modern scientific concepts, their poverty or powerlessness, their lack of access to good healthcare, their possibly mistaken belief that the purpose of research is to benefit them rather than to gain new knowledge (Macklin, 2003, p.474). The CIOMS' new guideline does not shy away from identifying whole groups that have been 'overused' in biomedical research, including the lowest socioeconomic classes, students in investigators' classes, residents of long-term care facilities, subordinate members of hierarchical institutions, or prisoners (CIOMS, 2002). While it recognises that such groups should not be categorically excluded from research protocols, it does identify as unjust and exploitative their 'overuse' in biomedical research. In the past few years, though, tensions between the will to provide effective protections to these vulnerable groups and the duty to respect the autonomy of individual members of such groups were brought to the fore. Guidelines like the CIOMS, which emphasise the need to avoid harm to vulnerable groups, have sometimes participated in their further marginalisation: they have resulted in their exclusion and discrimination at a time when user involvement in both research and health service developments is increasingly meaningful (Smith, 2008, p.248). It is possible, here, to recognise the need to balance and specify duties and norms arising from Beauchamp and Childress' principles of nonmaleficence, beneficence and respect for autonomy.

For a significant amount of time, questions raised about the notion of vulnerability have mostly focused on whether there was a need to add a particular group under the umbrella of that label and, to a lesser degree, what form of special protections these groups ought to receive (Levine et al., 2004, p.44). More recently, though, problematic implications of this use of the concept of vulnerability have been under scrutiny: it was said to stereotype whole categories of individuals, without distinguishing between those in the group who might indeed require increased protective measures, and those who do not: 'particular concerns have been raised about considering all poor people, all pregnant women, all members of ethnic or racial

minorities, and all people with terminal illness as inherently vulnerable' (Levine et al., 2004, p.47).

The tensions I just briefly outlined between a vision of vulnerability as a universal, ontological condition of human life, and one more centred on the existence of special vulnerabilities separating those able to give informed consent, to care for their own needs or to self-determine from those who are not, illustrate the need for a more comprehensive account of vulnerability. An attempt to reconcile these is thus necessary. What this did show, though, is that the treatment of vulnerability is at a crossroad between several of the principles of biomedical ethics outlined by Beauchamp and Childress: beneficence in the drive to protect the vulnerable and nonmaleficence in the duty not to harm or exploit them, as well as respect for autonomy in the rejection of paternalistic measures.

2. Inherent, Situational and Pathogenic Vulnerabilities

I consider the work of Rogers, Mackenzie and Dodds a particularly appropriate framework for the case of pre-emptive psychiatry. The distinctions they establish between inherent, situational and pathogenic sources of vulnerability allow for a clearer and more articulate formulation of the issues raised by models of psychiatric vulnerability, and accurately emphasise their most salient features.

While the work that has been done in biomedical ethics regarding the concept of vulnerability does highlight the existence of a tendency towards either normalising apathy or proactive paternalism (depending on the perspective adopted), it fails to provide enlightening and pragmatic guidance in many instances. Such is the case with the growing capacity to detect individuals at risk for psychosis and other mental disorders.

As I stated earlier, the development of pre-emptive psychiatry presupposes a model of vulnerability that integrates fully the idea of particular vulnerabilities and/or particularly vulnerable groups. Once granted, though, that point leaves open many options for the definition and identification of these groups: are they vulnerable for reasons related to who they are, by nature? Are the threats they face simply higher than the norm? Can we - ought we - attempt to decrease their vulnerability, or rather protect them from risks? The definition of vulnerability as the incapacity to protect one's own interests, which is commonly used in biomedical ethics, does little to bring answers to these questions. I deem such answers essential, however, in the ethical evaluation of models aiming to implement the pre-onset early detection of, and pre-onset early interventions for, vulnerable individuals. Rogers, Mackenzie and Dodds' tripartite definition thus offers a compelling and fitting framework for the delineation of various sources of vulnerability.

Applying the insights of feminist philosophy and of the ethics of care about how universally interdependent and exposed to harm we are as living beings, Rogers, Mackenzie and Dodds consider sources of *inherent* vulnerabilities to be ingrained in the human condition. They are those vulnerabilities that arise from our 'corporeality, our neediness, our dependence on others, and our affective and social natures' (Rogers, Mackenzie, Dodds, 2012, p.24).

Formulated in such a way (as opposed to notions of vulnerability that refer more directly to the idea of universality), I argue that inherent vulnerabilities might be better able to account for sometimes strong individual disparities in the level of risk admittedly faced by all humans. Corporeality, for example, while it does indeed define all living beings' relationships to the world and to others, remains at the same time a profoundly singular, embodied and finite experience which is dependent in great part on individual material and physical features. It cannot simply be a universally-shared condition; it must also be irreducibly individual, and thus influence each person's neediness, dependence, or affective and social nature in a particular manner. As such, inherent vulnerabilities, differentiated from other possible sources of vulnerability,

correspond strikingly well with what researchers and psychiatrists involved in pre-onset early detection and interventions present as early *markers* of risk.

For example, epidemiological evidence on the at-risk status for psychotic disorders points to several pathophysiological traits of vulnerability, from cognitive markers and brain-structural markers to chronobiological, neuroendocrine and genetic ones (McGorry, 2014). The search for valid biomarkers in pre-emptive psychiatry is thus one illustration amongst others of the pertinence of drawing a distinction like this one: models which integrate these biomarkers refer to a conceptualisation of vulnerability that recognises not only the ways in which being vulnerable can *affect* a person's life, but also the ways in which one *is inherently and particularly* vulnerable. Social and cognitive markers may be another representative example of vulnerabilities that are at least partly inherent: attenuated delusions, or persecutory ideational content, might be interpreted as signs of vulnerability that are in great part tied to our affective and social natures. The development of personalised medicine and the progressive individualisation of risk also rely implicitly on the idea of inherent vulnerabilities.

On the other hand, *situational* vulnerabilities - by which are meant vulnerabilities that are context-specific - are generally caused, or exacerbated by 'the personal, social, political, economic, or environmental situation of a person or social group' (Rogers, Mackenzie, Dodds, 2012, p.12). The tensions outlined earlier between universal and particular vulnerabilities are interestingly reproduced within the 'situational' category, seeing as, while everyone can be negatively affected by contextual adversities, some people might be distinctly more susceptible to them. This account is thus consistent with the terminology used by many mental health professionals, who often present markers of inherent vulnerability as increased susceptibility, and context-specific vulnerabilities as potential triggers/risk factors.

The distinction between inherent and situational sources of vulnerability is pertinent on its own in the case of pre-emptive psychiatry. But the possibility of pathways between both kinds of vulnerability is markedly more so: 'biologically grounded vulnerabilities are intrinsically linked to and often exacerbated by

vulnerabilities that arise from contextual factors, such as discrimination, poverty, and dependency' (Rogers, 2014, p.72). Rogers refers to Beauchamp and Childress' principles of beneficence and nonmaleficence in biomedical ethics to illustrate how complex this network of influences can be, explaining that these principles are required in the first place because humans are universally and inherently vulnerable to ill health, and situationally vulnerable to the actions of healthcare providers. Situational factors like poverty can 'increase the likelihood of ill health and the need for health care, while a lack of education or an imbalance in knowledge and skills between a doctor and a patient may further exacerbate inherent biological vulnerability' (Ibid., p.72). Rogers also refers to 'social vulnerability', deeming it a useful term for the designation of individuals and groups who suffer from deprivation related to the social determinants of health, putting them at higher risk of poor health (Rogers, 2014, p.79). Not only do those affected face increased risks of ill health, but also, by virtue of their social vulnerability, they may be limited in their capacity to look after themselves and their interests (Ibid., p.78).

This influence of inherent vulnerabilities over situational ones is therefore mirrored by the influence of situational vulnerabilities over inherent ones. Situational vulnerabilities may indeed exacerbate or set off inherent vulnerabilities. For example, it has been shown that the early exclusion of anxious solitary children may have a significant influence on the subsequent 'stability of anxious solitude they exhibit' (Gazelle, Ladd, 2003, p.274). A hypothesis brought forward by the authors of that study contends that 'anxious solitary children who are not excluded by their peers may be able to overcome their social fears because these fears have not been confirmed by their social experiences, allowing these children to gradually learn that they do not have cause to be fearful' (Ibid., p.72). Conversely, those anxious solitary children who do encounter that kind of peer exclusion likely experience the opposite: a confirmation, and perhaps the intensification, of their social fears. (Gazelle, Ladd, 2003, p.274). In that sense, character-traits like being shy, verbally inhibited and solitary, can contribute to the risk of being mistreated by one's peers at a young age, for the precise reason that these traits signal vulnerability as well as inspire peer dislike (Ibid., p.275).

With regards to the development of psychotic disorders, I can mention here again the accumulation of evidence that a series of adversities, in childhood and later, have been associated with psychosis in later life. Social deprivation, stigma, sexual abuse, neglect and exposure to deviant parental communication, separation from parents, urban upbringing and migration, etc. are all situational features in one's life that can both generate and exacerbate vulnerabilities. That there is a form of interaction between the biological and the psychological 'in a cascade of increasingly deviant development' (Broome et al., 2005a, p.24) is now generally recognised indeed; and adopting Rogers, Mackenzie and Dodds' terminology allows for a finer understanding of what this can mean. Some of those psychological factors - a propensity to view the world as hostile and dangerous, or a guarded and distrustful attitude, for example (AMA, 2013, p.784) - might be typecast as inherent vulnerabilities if their etiology points to neurocognitive features. On the other hand, having a solid grasp of the impact that situational vulnerabilities can have on the development or the aggravation of such inherent characteristics is crucial, especially when one's aim is to develop a reflection on the ethics of proposed responses to such vulnerabilities. Both inherent and situational vulnerabilities must therefore give rise to both moral and political responses; and this leads me to the third source of vulnerability identified by Rogers Mackenzie and Dodds: *pathogenic* vulnerabilities.

As I mentioned earlier, labelling whole groups as vulnerable so as to support the implementation of protective measures against exploitation or harm has been said to encourage possibly stigmatising, stereotyping and paternalistic attitudes. Some responses to the identification of vulnerabilities may indeed exacerbate them, or even generate new ones. Rogers, Mackenzie and Dodds' work insists heavily on the harm that can be produced by such inadequate reactions to vulnerability - enough so that that these pathogenic vulnerabilities are often presented separately from inherent or situational ones.

I feel it is necessary, however, to categorise more clearly such pathogenic responses as a specific subset of situational vulnerabilities: despite how useful the concept of pathogenic vulnerabilities may be - it is otherwise entirely applicable and

pertinent to the case of pre-emptive psychiatry - leaving any doubts about the nature of these vulnerabilities would not, I feel, help serve the purpose of preventing them. Pathogenic vulnerabilities might arise from targeted responses to perceived preexisting vulnerabilities (inherent or situational), but they remain wholly context-based, and thus situational themselves.

To illustrate my point, I wish to focus on the idea that integrating the notion of risk into diagnostic models for psychiatric vulnerability, and informing patients of that risk, might lead to 'self-fulfilling prophecies' (McGlashan, Miller, Woods, 2001, p.568). Anxiety and stress are considered to be (either directly or indirectly through depression, demoralisation, or self-stigmatising behaviours like withdrawal and isolation) important risk factors (Ibid., p.567; Pyle et al., 2015, p.133). Additionally, for parents of children having an elevated risk of psychotic illness, these vulnerabilities were shown to be 'anxiety-provoking in a way that other medical conditions were not' (Hercher, Bruenner, 2008, p.2359): their anxiety about the spectre of psychiatric disease affected decision-making and planning for the future with regard to their affected child, and 'family members spoke of the burden of watchfulness and their concern about whether they might either overreact to behavioral issues or misinterpret signs of incipient mental illness' (Ibid., p.2359). Openly labelling identified vulnerable individuals for psychosis as 'at-risk' might thus be a representative manifestation of what Rogers, Mackenzie and Dodds call a pathogenic response to vulnerability, as it exacerbates these people's vulnerabilities, or even generates new ones. The reasoning behind the choice to remove the idea of risk from the APS, although not referring directly to pathogenic vulnerabilities, follows nonetheless a very similar course: a label like this one was seen to be more harmful than helpful for those concerned.

To analyse more in depth what Rogers, Mackenzie and Dodds mean by 'pathogenic vulnerabilities', I want to refer to a case from English law and public policy outlined by Dunn, Clare and Holland in 2008. This is closely related to the idea mentioned earlier regarding harmful responses to vulnerability which occur specifically because the experience of vulnerability is strictly separated from that of less vulnerable, 'autonomous' agents. Nevertheless, here, what justifies intervention is no longer tied to

a specific decision, as the person might have been ‘judged explicitly as having the mental capacity to make the decision in question autonomously’ (Dunn, Clare, Holland, 2008, p.236); the simple fact that that person is categorised as vulnerable appears sufficient to justify the Court’s involvement.

Dunn, Clare and Holland refer to the case of G, an adult who was deemed able to decide autonomously whether or not to have contact with her father. However, prior experience demonstrated that ‘contact with her father led to a significant deterioration in G’s mental state, rendering her likely to lose the mental capacity to make a range of decisions in the future, including the decision to have contact with her father’ (Ibid., p.236). As a result, pre-emptive intervention to restrict contact between daughter and father was justified so as to maintain her mental state, and maximise her mental capacity to make decisions. We can see here that the framework within which such a decision can be made is introduced as a protective one - and perhaps even as an overprotective one, if it is made despite G’s established capacity to make a decision autonomously: it is supposed to safeguard the interests of the vulnerable, and it relies heavily on ‘accounts of vulnerability that have constructed this individual as a vulnerable subject facing a heightened risk of being unable to protect him/herself from the malign influence of another person’ (Ibid., p.238). Here, the presence of inherent vulnerabilities is seen as magnifying, in an almost automatic manner, risks that the person in whom they have been identified will be unable to escape negative influences, thus increasing situational vulnerabilities (Dunn, Clare, Holland, 2008, p.239).

The authors pinpoint the root of what they deem to be an inappropriate response in the remnants of a more universal vision of vulnerability (‘justifying substitute decision-making on the basis of situational vulnerability could lead to interventions that are potentially infinite in scope and application’ - Dunn, Clare, Holland, 2008, p.241). This leads them to defend a better integration of the ‘subjective experience of being vulnerable’ into our understanding of vulnerability, in addition to more objective assessments of inherent and situational vulnerabilities. I do not disagree with their conclusion (as I will shortly explain, I actually envision a very similar resolution to this issue), but I believe that Rogers, Mackenzie and Dodds’ account of

pathogenic vulnerabilities stimulates a better apprehension of the problems caused by inadequate responses to vulnerability than a call for subjective narratives. G's case shows, despite the fact that the Court's readiness to interfere on grounds of situational vulnerability might be seen by some as *overzealous*, that the problem of adaptive preferences might not be inapplicable here. Formulating the issue in terms of pathogenic vulnerabilities gives, it seems to me, stronger and more objective grounds to evaluate the appropriateness of responses to vulnerability than the integration of subjective accounts of being vulnerable.

Nevertheless, I am in full alignment with Dunn, Clare and Holland when they reach the conclusion that empowerment and resilience should be the first moral, political and legal response to vulnerability, before selecting outright protective measures:

New legislation would need to recognise that exposure to risk is a corollary of self-determination and that, prior to intervention, every attempt should be made to support adults with autonomous risk management regardless of the circumstances within which that risk manifests itself (Dunn, Clare, Holland, 2008, p.253).

However, before I launch into a more detailed defence of this idea in Chapter 6, I need to lay the groundworks for this affirmation: vulnerability and risk, especially in the case of pre-emptive psychiatry, are better understood in terms of threatened capabilities.

II. VULNERABLE INDIVIDUALS' CAPABILITIES AT RISK

At this stage of my dissertation, I have been talking of vulnerability and risk in a rather 'fluctuating' manner. In the previous subsection, I referred to human *needs*,

either basic or more complex, in order to express the universality of vulnerability; in the previous chapter, a person's *interests* were centre-stage. How should such needs and interests be defined, though? Do they refer to people's preferences, their rights, their objectively-defined well-being or their quality of life?

Depending on the perspective adopted to formulate the *stakes* that vulnerability and risk both raise - to formulate what is valued, what can be diminished, lost or harmed - the responses brought to vulnerability might differ more or less significantly. In this section, I aim to show that the capabilities approach fittingly emphasises what at-risk individuals face, in terms of their own vulnerability and mental health, but also with regards to the psychiatric pre-onset interventions made available to them.

1. A Fitting Approach

Before I delve into the application of the capabilities approach to the case of pre-emptive psychiatry, I need to make clear that it is, first and foremost, a political doctrine: its primary aim is to guide public policy regarding distributive issues. I do not intend to depart too much from this original goal, as the diagnostic models that I evaluate do have an impact on how mental health care is provided and distributed on a large scale. These models inform public-policies and the kinds of resources or interventions which are made available to the public and to identified vulnerable individuals.

The capabilities approach does not recommend any comprehensive ethical doctrine, and it isn't built upon one (Nussbaum, 2011, p.93), which is why I classify it as a mid-level approach. In concordance with the methodology I outlined in Chapter 1, Nussbaum relies on a form of reflective equilibrium: 'like Rawls, I attempt to show that the approach offers good basis for political principles in a pluralistic society, by demonstrating that it could, over time, become the basis for an 'overlapping consensus' among holders of the main religious and secular views' (Nussbaum, 2011, p.79).

On account of the distinction that is slowly taking shape between protection and empowerment as possible responses to vulnerability, I consider that the capabilities approach is primarily competing with two other possibilities: a broadly egalitarian resourcist approach, or a consequentialist one. Rather than analysing vulnerability and risk, advantage or disadvantage in terms of resources or preference satisfaction, capability theorists value 'states of being'; they think of capability as a set of vectors of functionings, reflecting the person's freedom to lead one type of life or another (Wolff, de-Shalit, 2007, p.37). The main differences between the resourcist and the capabilities approaches have often been said to hinge upon the recognition - or lack thereof - of individual disparities between people, such as their physical and mental characteristics, their social situation, their gender, etc. Resourcists appear not to take in consideration these disparities into their distribution schemes, while capability theorists insist on doing so (Pogge, 2010, p.23). Capability theorists 'value the goods persons have access to by reference to the specific needs and endowments of each particular person', which tends to make them more sensitive to personal heterogeneities (Pogge, 2010, pp.23-24).

Nussbaum, on the other hand, while she also tends to situate what distinguishes the capabilities approach from resourcist accounts in the idea of heterogeneity, focuses on the good itself as much as on its recipients. By referring to the Aristotelian notion of flourishing, Nussbaum rejects any account of the overall end of political planning that posits some single homogeneous goal which would vary only in quantity (Nussbaum, 2011, p.127): 'what makes Aristotle of continuing centrality for political thought is the way in which he coupled an understanding of choice and its importance with an understanding of human vulnerability' (Ibid., p.127). I would agree with Pogge (2010, p.24), though, that these arguments excessively accentuate differences between resourcists and capability theorists, and that both types of heterogeneity could be integrated into a resourcist framework. Nevertheless, I do think that the capabilities approach is more likely to highlight why empowerment should prevail over more strictly protective responses to vulnerability.

As for its other rival, the capabilities approach is not actually in a frontal opposition to consequentialism, although it does reject utilitarian definitions of the good (whether it is as preference-satisfaction, as QALYs, or as welfare), as well as it does the process of maximisation. The capability metric, which is objective, is argued to be superior to a subjective metric like preference satisfaction or QALYs, as only an objective metric can 'satisfy the demand for a public criterion of justice for the basic structure of society' (Anderson, 2010, p.81). According to Anderson, an objective metric focuses on ends rather than means, which would indicate that it is better suited to handle discrimination against the disabled and is, once again, 'properly sensitive to individual variations in functioning that have democratic import', especially regarding the just delivery of public services in health and education (Ibid., p.81). By refusing aggregative calculations and by favouring sufficientarian standards, the capability metric may thus impose stronger obligations on the part of the state to respond to the needs of the least advantaged. Welfare-based utilitarian accounts that rely on an objective metric might be able to withstand these attacks much better than those that are preference-based, but would then face their own sets of problems, amongst which are notorious issues regarding dominant-end conceptions of happiness to which all other goals are 'radically subordinated' (Scarre, 1996, p.139).

Various forms of utilitarianism are thus at odds with the capabilities approach, but they are much more so than consequentialism itself. Nussbaum even goes so far as to consider the capabilities approach a 'cousin of consequentialism', or even 'a form of political, nonwelfarist consequentialism' (Nussbaum, 2011, p.95). Her own approach is indeed outcome-based, in the sense that the success of a decision or policy depends entirely on its impact; and it is, as such, far removed from the 'proceduralist views that are often preferred by deontologists' (Nussbaum, 2011, p.95). Parallels might even be drawn between it and a more inclusive-end conception of happiness as presented by Scarre: 'the most fruitful happiness-enhancing service which utilitarians can render is generally to facilitate individuals' own efforts to live the lifestyle of their choice' (Scarre, 1996, p.142). But such a conception might indeed very well represent 'a considerable move beyond conventional utilitarian positions', thus fitting better under the umbrella of consequentialism, rather than that of utilitarianism (Ibid., p.146). And where

inclusive-ends conceptions of happiness might face trouble in specifying a 'clear-cut criterion for arriving at moral evaluations' (Scarre, 1996, p.146), the capabilities approach proposes the development and enhancement of central, substantial freedoms.

If I elected to formulate risks and vulnerabilities in terms of threatened capabilities, it is because the framework of which they are a part encompasses crucial characteristics of psychiatric vulnerability. Furthermore, this allows me to address many of the concerns which were expressed in the ethical debate surrounding pre-emptive psychiatry in a more constructive manner. The notion of combined capabilities, for example - these 'substantial freedoms', associated with actual opportunities to choose and to act (Nussbaum, 2011, p.20) - provides a needed normative counterbalance to the more descriptive accounts of inherent and situational vulnerabilities. Basic capabilities (the innate faculties that make any later development and training possible - Ibid., p.24) like speech, or emotional and social intelligence, must be trained and developed in interaction with a beneficent and cooperative environment in order to become internal capabilities. Based on this, inherent vulnerabilities are those internal features which might hinder the development of a person's own abilities, while situational vulnerabilities designate a political, social, familial and economic environment which restricts, rather than encourages, that person's actual freedom and opportunities. Identified vulnerabilities can signal specific capability deficits and vice versa (Mackenzie, 2014, p.49).

Nussbaum identifies ten central capabilities: life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; control over one's environment (Nussbaum, 2011, pp.33-34). Only a few of those are not threatened, in one way or another, by the risk of developing a serious mental disorder such as psychosis or bipolar disorder: one might argue that a person's capability to have concern for other animals, for plants and the for environment at large might remain undisturbed, but even bodily integrity might become insecure in some instances.

People with psychotic disorders are, for example, more likely to be victims of violence: in a 2004 study, one in six individuals with a psychotic disorder reported being a victim of violence in the previous year (Chapple et al., 2004, p.836). It appears that the odds of being a victim were greater for women, homeless persons, those with a lifetime history of substance abuse, those who had been arrested in the previous 12 months, or those with poorer social and occupational function (Ibid., p.836). This is without addressing risks of involuntary hospitalisations, which have been shown to concern 72% of substance abusers and 31% of non-abusers in the two years following a first psychotic episode (Opsal et al., 2011, p.198). Patients diagnosed after a first psychotic episode also have an elevated suicide risk, as well as higher all-cause mortality, which appear to be exacerbated by impulsive behavior such as self-harm, having a family history of severe mental disorder or substance use (Björkenstam et al., 2014, p.6). Up to 40% of individuals with psychotic disorders will attempt suicide during their lifetime (Robinson et al., 2010, p.1). Even without delving into the clinical symptoms of psychotic disorders themselves, it is possible to see how early symptoms could pose a threat to several central capabilities, especially if they are distressing enough for a person to seek medical help. Hallucinations, magical thinking, perceptual aberrations, difficulties in concentrating or disorganised speech might have a deleterious impact on senses, imagination, and thought, as well as on practical reason; while delusions, distrust, hypervigilance, anxiety, social withdrawal and sleep disturbances might negatively affect a person's affiliations and emotions. The risks faced by identified at-risk individuals are thus far-reaching, despite the fact that transition rates are not excessively high - especially in view of Nussbaum's assessment that affiliation and practical reason are two capabilities which play a distinctive architectonic role in organising and pervading other capabilities (Nussbaum, 2011, p.39).

By formulating risks and vulnerabilities in terms of threatened capabilities rather than those of lacking resources or unsatisfied preferences, I can start to determine better the types of responses that ought to be selected when dealing with recognisable vulnerabilities. The persons who are yet to get above an acceptable capability threshold, or those who must attempt to maintain that level when it is

threatened, should receive support (Nussbaum, 2011, p.24). That support must not simply aim to protect vulnerable persons, however; it should strive to provide the opportunities necessary to develop one's capabilities, as well as the environment in which one has the ability to act on them. The capabilities approach offers a framework in which pathogenic responses to vulnerability might hopefully be better identified and avoided.

There are, however, potentially problematic criticisms that have been raised against the capabilities approach - mostly around the idea that it may lead to guilt-inducing, oppressive and even discriminating practices. Because the capabilities approach advocates 'altering' people by allocating resources sufficient to compensate for deficits or promote fertile capabilities, it can actually turn out to be quite costly and encourage oppressively judgmental practices (Slivers, Pickering Francis, 2005, p.54). The negative impact of soft paternalism mentioned by Beauchamp and Childress can be cited again, seeing a slide from stigmatising a certain type of behaviour to stigmatising people who engage in that behaviour. Those who fall short of the capability thresholds that have been set can also be (and feel) stigmatised; and they also have to 'pay their share with hard work or pain for the acquisition' of these capabilities (Ibid., p.54). These criticisms are particularly relevant in the case of pre-onset early detection and interventions in psychiatry, in view of the efforts at-risk individuals themselves might be asked to invest in the preservation and promotion of their own capabilities. Even early interventions based on psychotherapies such as CBT require a significant involvement on the part of at-risk individuals, in addition to resources such as time. It is crucial not to underestimate the pressure that might be put on at-risk individuals not to make any choice that would go against their objectively-defined interests - in other words, pressure for them to live risk-free, 'aseptic' lives.

To illustrate this, I can mention employers who have been using 'the "stick" approach to wellness programs in the workplace', and have produced some negative feelings on the part of employees (Cavico, Mujtaba, 2013, p.112). These employers have been categorised as being invasive, intrusive, and paternalistic; and 'employees who are obese, or smoke, or who are chronically diseased, or engage in unhealthy behaviours

may feel penalized, even by an incentive-based program, and thus feel pain' (Ibid., p.112). Moreover, employees might be reasonably concerned that their private and personal health information could be made public and misused, resulting in embarrassment or discrimination (Ibid., p.112).

However, while I recognise the importance of these apprehensions, I believe that the capabilities approach is able to set acceptable limits to the pressure that can be put on at-risk individuals. Indeed, 'people are free to have capabilities that meet the standard for the species without exercising them' (Slivers, Pickering Francis, 2005, p.54). Capabilities must be understood as areas of substantial freedom: combined capabilities encompass both the fluid and dynamic abilities residing inside a person, but also the freedoms or opportunities created by a combination of personal abilities and a certain political, social, and economic environment (Nussbaum, 2013, p.20). Again, the capabilities approach is '*resolutely pluralist about value*' and strongly adheres to political liberalism (Nussbaum, 2013, p.18). Normatively-speaking, its goal is to ensure that persons are able to live their lives in a way that fulfils the goals they have set for themselves - not to impose a certain set of functionings. It does not attempt to determine what well-being objectively consists in, sometimes despite people's own preferences to the contrary; it adopts an inclusive-end view of well-being. I would argue that the capabilities approach emphasises the importance of substantial freedoms enough that the danger of seeing at-risk individuals discriminated or stigmatised for making choices against their objectively-defined interests is sufficiently lessened.

2. Applicable Guidance

The capabilities approach offers a normative and complementary framework to the account of vulnerability outlined by Rogers, Mackenzie and Dodds, and I believe that it is the most suited approach to determine the kinds of responses we ought to bring to vulnerability. A comprehensive and multilayered definition of vulnerability, such as the one I outlined at the start of this chapter, must play a signalling role; it must become an appropriate indicator of the harms and risks that 'may result from particular capability deficits' (Mackenzie, 2014, p.50). In turn, the capabilities approach provides

the normative structure that highlights, substantiates and specifies ‘the obligation to address those deficits in order to remediate vulnerability’ (Ibid., p.50): instead of competing theories of justice, an ethics of vulnerability and capabilities theory should be seen as mutually informative (Mackenzie, 2014, p.54). This is what prompts me to defend one diagnostic model over another, just as I advocate for responses that favour empowerment and resilience over those that are primarily protective. Before any attempts to establish how harmful and pathogenic some of these responses can be, though, I aim to show that focusing on capabilities does provide applicable guidance.

Within the capabilities framework, the positive obligations of a democratic state are to ensure that each citizen has a claim to a sufficient capability set - a set that enables a person to function as an equal to all others in society (Anderson, 2010, p. 83). Such a sufficientarian standard, with an established acceptable threshold, thus delineates very specific obligations for a state like this one to provide any form of necessary assistance to those citizens who are yet to reach the threshold, or who are unable to convert their resources into actual functionings (Mackenzie, 2014, p.53). This is why capability theory is seen to be so adept at accounting for individual variations in ability and disability, as well as variations in vulnerability: the basic structure on which it relies promotes policies and measures that must provide each citizen with ‘access to a package of resources adjusted to that person’s individual ability to convert resources into relevant functionings’, and be ‘sensitive to environmental factors and social norms that also affect individuals’ conversion abilities’ (Anderson, 2010, p.87).

Both inherent and situational vulnerabilities can therefore be said to be at the heart of the capabilities framework: they are the main impetus for political and social action. And, as long as those capabilities which are indispensable for the determination of an acceptable threshold are clearly identified, the way in which one must evaluate measures and decisions can be clearly established and specified. For a reason that might appear obvious, though, the establishment of a threshold below which a person is entitled to assistance is not directly relevant to the case of pre-emptive psychiatry. There is a reason why most of the work that gave rise to the capabilities approach pertains to developing nations (although I do agree with Nussbaum’s assertion that ‘all

nations are developing nations' - 2011, p.16): people who are below that threshold are the primary recipients of political and social action. In the case that preoccupies me, just like in many other instances, the problem with the sufficientarian standard is that it fails to grasp the ideas of risk and uncertainty satisfactorily. At-risk individuals may very well enjoy a capability set that is above the established threshold on all counts, but their inherent and situational vulnerabilities threaten the sustainability of these capabilities, both in time and in scope. It is for that reason that I believe Wolff and de-Shalit's account of fertile functionings and corrosive disadvantages to be a crucial contribution to the capabilities approach (despite their choice to speak in terms of functionings rather than capabilities).

I have already outlined some of the basic tenets of Wolff and de-Shalit's contribution to the capabilities approach in Chapter 1. My aim here is thus less to explain their account than it is to directly apply it to the problem at hand. The ethical issues that arise from the development of pre-emptive psychiatry are more closely tied to a form of powerlessness in front of corrosive disadvantages and the difficulty to promote and maintain fertile functionings than they are to the necessity to ensure a sufficient level of combined capabilities for all.

I have explained why I believe that formulating psychiatric vulnerability in terms of threatened capabilities is the most pertinent option, and that conviction is only exacerbated by the idea that the most serious disadvantages occur when, for some reason, several of them cluster together (Wolff, de-Shalit, 2007, pp.9-10). I will not list again the series of adversities that appear to increase risks of serious mental health problems in a person's life; suffice to say that the idea of a cluster of disadvantages corresponds to the concerns expressed by those who highlight a correlation between the presence of inherent and situational vulnerabilities and a lack of access to care. Persons who suffer from psychotic disorders and/or at-risk individuals might not be part of the 'worst-off', at least as described by Wolff and de-Shalit, but they are indeed concerned by the compounding effects of clustering disadvantages. Altogether, what can be derived from their view of corrosive disadvantages and fertile functionings is a precise and comprehensive policy proposal; and one which is fully pertinent with

regards to pre-emptive psychiatry. Such a proposal determines that a society of equals is a society in which 'disadvantages do not cluster, a society where there is no clear answer to the question of who is the worst off' (Wolff, de-Shalit, 2007, p.10). It is precisely because capabilities are far from isolated from one another, and because they form networks of opportunities that interact and inform one another, that politicians can have both more precise indications and more compelling reasons to dedicate scarce resources on the improvement of the most fertile capabilities and the reduction or elimination of corrosive disadvantages (Nussbaum, 2011, pp.98-99).

One of the most salient features of Wolff and de-Shalit's work is therefore how they integrate the notion of risk - or, further than that, that of extreme and pervasive risk and insecurity - into their conceptualisation of disadvantage. They do so in a way that the capabilities approach on its own mostly fails to do, focused as it is on the necessity to bring people up to the established threshold in the first place. Here, the full extent of how pervasive risk can really be, how it may slowly erode a person's seemingly stable and secure capabilities in an increasingly vicious cycle, becomes starkly apparent. The qualifier selected to speak of this kind of amalgamating disadvantage, 'corrosive', was decidedly well chosen.

In turn, formulating the risks faced by those in whom psychiatric vulnerabilities have been detected in terms of threatened capabilities helps me highlight the corrosive disadvantages to which they might be exposed, depending on the response (or lack thereof) brought to their situation. It would be a mistake to think of such risks as straightforward or relatively uniform (for example: that person may either develop a serious mental disorder, or not). I have already explained why, even expressed as such, a risk like this one may render a variety of capabilities insecure, and so on multiple levels. But showing how interrelated these capabilities are, and how one kind of risk may give rise to several others, illustrates how delicate it might be to react to vulnerability adequately (and ethically).

Going back to concerns that the anxiety and stress caused by receiving the 'at-risk' label might lead to self-fulfilling prophecies, or cause depression,

demoralisation, or self-stigmatising behaviours, it is possible to extrapolate this kind of ripple effect outside of purely medical concerns. That a very stressed and anxious person may see his or her emotional well-being, mental health and bodily health threatened is clear (and in the case of at-risk individuals, such threats to mental health take a more specific and severe connotation): 'fear and anxiety is a common consequence of the perception that one is at risk [...] bearing in mind that often risks do not lead to adverse consequences, whereas fear and anxiety can be omnipresent in someone's life' (Wolff, de-Shalit, 2007, p.68). But this kind of poor health can have adverse consequences of its own, given that when one's capabilities and functionings become insecure involuntarily, as is the case here, one might become forced to make other capabilities and functionings insecure in order to secure the first ones (Wolff, de-Shalit, 2007, p.72).

For example, at-risk individuals may accept to take antipsychotic medications with known adverse effects (antipsychotic medications are associated with an increased likelihood of sedation, sexual dysfunction, postural hypotension, cardiac arrhythmia, and sudden cardiac death - Young, Taylor, Lawrie, 2015, p.353), despite being aware that predictive validity is generally around 30% in the two years following detection. This is not to say, necessarily, that a decision like this one is either unjustified or inefficient, but it does capture a significant aspect of disadvantage, which is that 'very often people are disadvantaged because they are exposed to risks which they would not have taken had they had the option, or are forced to take risks that in one way or another are bigger than others are being exposed to or take' (Wolff, de-Shalit, 2007, p.66). This idea of being 'forced' to take risks, meaning that there would be no reasonable alternative available (Ibid., p.67), is particularly interesting in the context that concerns me. Indeed, as I will demonstrate in the last chapter of this dissertation, both mental health professionals and identified at-risk individuals might be led to think that preventive options are somewhat limited, depending on the diagnostic model selected. The kinds of risks incurred by would-be patients, if a diagnosis like the APS was to be the primary model for early detection, are certainly acknowledged and well-known, by now. Nevertheless, using Wolff and de-Shalit's framework to specify them will allow me to distinguish those responses to vulnerability that might be more

ethically acceptable from those that are decidedly less so, all the while shying away from a simple rejection or approval of pre-emptive psychiatry as a whole.

I also find O'Neill's claim that 'capabilities for injuring and oppressing' should be limited (O'Neill, 1995, p.149) very pertinent in this instance. The link between these 'capabilities for injuring' and the existence of disadvantage is not made explicit in Wolff and de-Shalit's work, but I would argue that it can be strong, especially if limiting those capabilities which would damage or undercut others' is seen as the necessary counterpart of limiting vulnerability (O'Neill, 1995, p.149). Here, securing capabilities that empower vulnerable persons must also be strengthened. O'Neill's contribution highlights the necessity not to think of declustering corrosive disadvantages while promoting fertile functionings solely in terms of adequate policies and responsive distributive measures, but also in terms of our own behaviours and relationships, both on an individual and on a collective level.

As I intend to demonstrate in the last chapter of this dissertation, the fact that diagnostic models can have a certain influence on mental health professionals' attitudes and reflexes towards identified at-risk individuals matters considerably: these models may promote empowerment over treatment, or inversely. This also ties in with Nussbaum's insistence that it is crucial to acknowledge and understand the role of emotions in the realisation - or the loss - of capabilities: if we can understand how 'malleable these emotional tendencies are', it might provide precious guidance in the design of interventions (in the family, in schools and in other social settings) that channel them in a direction that supports the development of central capabilities (Nussbaum, 2011, p.181).

This all leads me to the conclusion of this section: concentrating on the necessity to secure capabilities and fertile functionings, and the parallel necessity to reduce corrosive disadvantages and vulnerabilities, must lead to 'a view in which both empowerment and liberty can be taken seriously' (O'Neill, 1995, p.144). Vulnerability might not have been explicitly or precisely defined in Beauchamp and Childress' principlist approach to biomedical medical ethics (Rogers, 2014, p.71), but it is now

possible to identify which of these principles must be the central focus of an adequate response to vulnerability, especially in the case of pre-emptive psychiatry: a balance must be found between autonomy and beneficence. In the coming section, I intend to explore various responses to vulnerability, from protection to the promotion of autonomy, and I will defend the need to favour the latter over the former.

III. MORAL RESPONSIBILITIES ARISING FROM VULNERABILITY

I outlined, in Chapter 4, the various ways in which moral theories recognise and respond to vulnerability. My own purpose was to highlight that these diverse normative frameworks can at least find some common ground in their acknowledgement that vulnerability is morally significant. Of the array of approaches I presented there, I think that Goodin's consequentialist defence for the protection of the vulnerable stands out as the most comprehensive argument, as it is focusing explicitly on moral obligations that arise from vulnerability itself. It is also one of the most influential arguments in the literature surrounding vulnerability theory: Goodin's work laid the foundation of subsequent contributions in this domain, pointing out the necessity to pay more attention to this notion. In selecting to interpret vulnerabilities as threatened capabilities, though, I steer away from the delineation of purely protective moral obligations towards vulnerable persons, which I believe can often become pathogenic, and ascribe priority to more empowering measures.

1. Pathogenic Responses to Vulnerability

The account that Goodin develops regarding morally appropriate responses to vulnerability focuses heavily on our obligations to protect the interests of the vulnerable whenever it is in our power to do so. While he is undoubtedly aware that dealing with the sources of vulnerability should be encouraged, his main priority is quite clearly to advocate for a collective acknowledgement that this duty of protection

exists and should be fulfilled. The welfare state is both his intended target audience, and what he defends. What I find striking in Goodin's work, along with other philosophers who work on vulnerability, is that obligations to protect are plainly favoured over other kinds of obligation that could arise from the recognition of vulnerability - especially obligations to 'foster resilience and autonomy in those who would otherwise be vulnerable' (Dodds, 2014, p.189).

Goodin, I believe, leads in *Protecting the Vulnerable* a battle against those who would attempt to deny altogether the existence of any kind of positive moral obligation towards the vulnerable. I have touched upon their rhetoric in Chapter 4 when depicting the libertarian emphasis on negative rights and duties over contractual positive ones, for example (Goodin himself specifically addresses voluntarist accounts of duties). In front of such denial, his utmost priority is to introduce a convincing first response: the larger debate in which his argument is framed asks whether we are morally bound to respond to vulnerability at all, and his answer must be a resounding 'yes' in order to trump his challengers. More precise evaluations of the kinds of responses we ought to bring to vulnerability go too far beyond that, already rooted in the premise that a response is indeed necessary. I do think this context weighed on Goodin's choice to favour protection over empowerment and resilience, but I agree with Goodin's detractors when they point out that his consequentialist approach potentially opens the door to overly protective, pathogenic responses to vulnerability (Mackenzie, Rogers, Dodds, 2014, p.16).

If the first impulse one must have when confronted with vulnerability is to protect, it might be said that one fails to question the presence of vulnerability in the first place, thus grounding it in fact. According to Kittay, Goodin's emphasis on the 'fact' of a dependent's vulnerability to another person 'overlooks questions concerning the justice or moral worth of the relationship that makes one person dependent on another' (Dodds, 2014, p.194). Goodin's account does little to facilitate awareness of the ways in which policy discourses on vulnerability and protection can oftentimes single out certain social groups as especially vulnerable, and be used to 'justify objectionably paternalistic and sometimes coercive forms of intervention' (Mackenzie, 2014, p.37).

More than that, it may fail to appreciate fully the necessary distinction between inherent and situational vulnerabilities, therefore becoming more likely to increase pathogenic responses. I have established earlier that situational vulnerabilities are 'primarily the result not of unavoidable biological processes but of interpersonal and social relationships or economic, legal, and political structures' (Mackenzie, 2014, p.38), but to focus solely on the duty to protect is to assume that vulnerability is mostly an unfortunate but inescapable, uncomplicated condition.

That medical practices can easily embolden and lend themselves to paternalistic attitudes is nothing new: many of the debates that agitate bioethicists focus on the need to find an adequate balance between respect for autonomy and duties of beneficence. Cases surrounding informed consent or cessation of treatment are emblematic of this, but the turn taken by this inclination in the case of public health is revealing of some of the most notable ethical issues of pre-emptive psychiatry. One might argue that the whole purpose of public health measures is to 'impose structures on individuals and communities in the name of collective welfare' (Bayer, Fairchild, 2004, p.475) - by nature a very paternalistic endeavour. Preserving or promoting the autonomy of individuals might thus very well be meaningless - or even contraindicated - when one's aim requires 'the subordination of the individual for the common good' (Ibid., p.474). Those who work for the prevention and limitation of epidemics and pandemics may require access to personal health-related information, for example, or insist on travel restrictions, vaccination, examinations, etc. in the name of the public interest.

When it comes to the development of pre-emptive psychiatry, however, such encroachments on personal autonomy might appear considerably less justifiable: the impact of mental health disorders is much more circumscribed to the persons who suffer from them, and their close relatives. The way in which public interest might come to be weighed against personal autonomy has thus less to do with concerns of wide-scale and spreading health issues than with the idea of avoidable costs to society. While improved long-term prognoses remain the primary motivation of those who support the development of pre-onset early detection and interventions in the medical

community, the reduced costs associated with a decrease in hospitalisations and long-term treatments are still a large part of their line of argumentation. Knowing the kinds of wide-scale benefits that can be brought about by the development of pre-emptive measures in psychiatry, both in terms of health outcomes and of resource-management, could it be said that there exists a duty to seek help and adhere to treatment? That, in order to spare themselves and their loved ones future ordeals as well as spare society long-term costs, at-risk individuals should abide by the preventive measures recommended to them? In other words, do they have a duty to accept the protection that is offered to them? Depending on the kinds of early interventions eventually selected, a duty like this one could have far-reaching implications - especially in view of the account of corrosive disadvantages disclosed earlier:

Interventions that target specific groups identified as vulnerable and subject them to restrictions or forms of surveillance not applied to the rest of the community [...] and that are primarily focused on reducing perceived risks to society rather than concerned with fostering autonomy count as objectionably paternalistic (Mackenzie, 2014, p.47).

Purely protective responses to vulnerability - and, beyond that, protective responses that one might be duty-bound to accept - are more likely than others to become pathogenic, first by failing to question the *fact* of that vulnerability, and secondly by pressuring vulnerable people into accepting potentially corrosive relations of dependence or risking further capabilities. Inadequate conceptualisations of psychiatric vulnerability and of the ways we ought to respond to it can lead to harmful healthcare practices: in the absence of accessible, non-stigmatising and empowering pre-onset early interventions, many at-risk individuals may become, in their own eyes and in the eyes of everyone else, patients suffering from an identifiable illness. They may then become more hesitant or unable to pursue their education or to secure regular employment, suffer from social isolation, etc.

Understanding vulnerabilities as threatened capabilities emphasises the existence of duties to empower vulnerable people. The existence of universal and inescapable vulnerability cannot be denied, just like the fact that some individuals or groups are more vulnerable than others should not be ignored, but to respond through protective measures alone can give rise to new, pathogenic forms of vulnerability. However, giving such prominence to the idea of autonomy in the context of vulnerability might appear somewhat antithetical to many: after all, isn't vulnerability in great part relational - a form of necessary dependence on others? Wouldn't care and protection be the marks of morally acceptable relations of dependence, rather than a push towards an eventually unreachable autonomy? In the next subsection, I argue for the compatibility of my account of vulnerability as threatened capabilities with that of relational autonomy.

2. Against a Frontal Opposition Between Autonomy and Vulnerability

If autonomy were to be defined as freedom from influence and control, or as a form of independence, at-risk individuals might very well be said to be inescapably impressionable and dependent on others, exposed as they are both to internal and external influences. Their vulnerabilities would compel them to rely on others' support and protection, on their care, so as to be able to live fulfilling, if not truly self-ruling, lives.

I have brought up such accounts of the ideally autonomous and rational agent on a few occasions already: they assert that the decisions and actions of persons who are unable to exert a certain amount of control over the influences that their circumstances, their socialisation and other people might exert on them can never be genuinely their own in the manner that autonomy requires (Benson, 1991, p.385). The idea behind this is that 'unchosen membership in a community represents a threat to personal autonomy' (Cristman, Anderson, 2005, p.128).

A handful of examples can be used to illustrate how uncontrolled influences might be said to rob one of the ability to decide and act in a truly autonomous fashion. The construction of gender-based norms and their internalisation is a frequent one. However, in order to stay closer to the topic that concerns me, I prefer to focus on the impact that perceived discrimination can have on one's life and mental health. For instance, there are many reports in the United Kingdom and The Netherlands of high rates of psychotic disorders and psychotic symptoms in populations of African and Caribbean origin - populations who are likely subjects of racial discrimination - leading to claims that the association between ethnic group and psychosis is compounded by racial discrimination (Janssen et al., 2003, p.71). The findings of one study suggest that perceived discrimination can predict incident delusional ideation, which might be explained by the influence that chronic experiences of discrimination may have on attributions of daily events²⁸, thus 'facilitating an understandably paranoid attributional style' (Janssen et al., 2003, pp.73-74).

It appears that elevated rates of psychoses among Black and Minority Ethnic (BME) groups are unlikely to be entirely confounded by socio-economic status. In the UK, Pakistani and Bangladeshi women are concerned by elevated rates in the same way that Black African and Black Caribbean men are: 'After controlling for current socio-economic status, schizophrenia was ubiquitously raised in these groups: between two- and threefold that of the White British group' (Kirkbride et al., 2008, p.23). It was suggested that migratory or post-migratory experiences present a set of risk factors that may explain these raised rates of psychoses among BME groups (Ibid., p.23). In addition to that, though, an association between perceived discrimination and increased incidence of schizophrenia among immigrants has been the focus of several research projects. Another study carried out in The Hague established that the incidence of psychotic disorders varied across ethnic minority groups by degree of perceived discrimination; the data presented suggested that 'belonging to an ethnic minority group perceiving a high degree of discrimination is a risk factor for psychotic disorders, rather than immigration per se' (Veling et al., 2007, p.765). Stigmatisation and

²⁸ Attribution designates, in psychology, the process through which a person explains the causes of behaviours and events.

discrimination are linked to poor mental health, physical illness and academic underachievement, and so not only 'in individuals who perceive direct interpersonal discrimination, but also in those who experience that their group is discriminated against and stigmatized' (Ibid., p.765). Experiences of interpersonal discrimination, including verbal abuse or physical assault, have been shown to have an impact on the likelihood of developing psychosis; but the need to determine more definitively whether it is experiences of racism that influence mental health, or if symptoms of depression or psychosis predispose an individual towards increased perception (or experiences) of racism (Karlsen et al. 2005, p.1801) is particularly relevant here.

Whatever the answer, however, an at-risk individual's thought processes might be said to be heavily influenced by the experience and internalisation of discrimination. Standard accounts of autonomy consider this kind of 'socially perpetrated deception' as a threat to autonomy (Benson, 1991, p. 397). Even if this is only the case when the deception 'blocks critical reflection entirely or insulates it from motivating action', it is easy to see how paranoid attributional styles, for example, might warp one's reflective capacities: there are ways in which 'deception systematically misdirects the substance of reflection by limiting an agent's ability to assess her actions rationally' (Benson, 1991, pp.397-398). I find troubling the conclusion one might draw from such an account of autonomy - that at-risk individuals and persons who suffer from serious mental health problems might simply be categorised as non-autonomous because less able (or unable) to regulate their actions through critical reflection on their motives.

I intend to defend the claim that any account of personal autonomy that is construed on such an idea of independence from influence and control is problematic. The normative implications of autonomy-as-independence, as seen, for example, in negative-rights-based libertarian accounts, might culminate in a view of justice that allows individuals to develop their personally selected pursuits with little interference from others (Cristman, Anderson, 2005, p.128). The main purpose of public institutions would therefore be to reduce any kinds of restrictions on such pursuits, letting individuals become autonomous by gaining independence from everyone and

everything else. Nevertheless, I do not intend to launch myself into an elaborate criticism of libertarian political philosophy. In order to dismiss interpretations of autonomy which see it as a form of free will, unrestricted and uninfluenced, I intend to rely on a more direct process, and follow Meyers in saying that these interpretations of autonomy will be unintelligible unless such a free agent can be found (Meyers, 1989, p.42).

I believe that one of the main accomplishments of feminist philosophy is its success in undermining this vision of the independent, autonomous and free-willed agent. The relationships that link us to each other, to our environment and to our communities are marked by an ineluctable interdependence. From birth to death, we count on the presence and the care of others to flourish, to learn and to thrive. Self-determination and, even more than that, rational thinking itself, certainly do not appear out of thin air: both are complex skills that can only be acquired through time and practice, and 'from within a network of relationships that tie us to each other' (MacIntyre, 1999, p.5).

More traditional accounts of autonomy may also integrate the idea of a slow transition into rationality and self-determination, but where they postulate a move *away* from others and their influence, feminist philosophy attempted to show how rationality and self-determination can only come to be *through* relations with others. One's self can only make such a transition through one's history of contact, care and exchange with particular others 'whose presence or absence, intervention or lack of intervention, are of crucial importance in determining how far the transition is successfully completed' (MacIntyre, 1999, p.73). These relationships are necessary for the provision of the most basic necessities that make autonomy achievable in the first place (access to food and shelter in one's early life, care, education, etc.), but also for the development of those many faculties that allow a person to think of himself or herself as able to determine his- or herself:

Autonomous people are not vouchsafed a glimpse of their inner selves that other people are denied. Rather, they possess and

exercise skills that maintain a fluid interaction between their traits, their feelings, their beliefs, their values, their extended plans, their current possibilities for realizing these plans, and their conduct (Meyers, 1989, p.55).

In this case, autonomy ceases to be a circumstance (that of independence and freedom from interference and influence) and becomes instead a learned competency - a skill, in and of itself. And that skill can only be cultivated through one's relationships to others: this account is thus of *relational autonomy*.

In the framework I am attempting to delineate so as to allow for a more constructive conversation regarding the ethics of pre-onset early detection and interventions in psychiatry, the difference between persons who are particularly vulnerable and those who are less so depends on the capabilities they have at their disposal. There ceases to be a necessary discrepancy between being vulnerable and being autonomous; on the contrary, the acknowledgement of a shared - if unequal - vulnerability becomes clearer, as we are all 'much more vulnerable and needy than the liberal model has traditionally represented [us] as being' (Cristman, Anderson, 2005, p.129). 'Relational approaches thus uphold the value of individual autonomy while eschewing the individualism associated with some liberal and especially libertarian conceptions of autonomy' (Mackenzie, 2014, p.42).

When it comes to responding adequately to the identification of vulnerabilities, therefore, the duty to empower more vulnerable individuals and to support the development and the preservation of their capabilities would supersede the moral obligation to protect them. Vulnerability, ceasing to be a condition that thoroughly separates those marked by it from those who are not (and, perhaps, ceasing also to be a pathology), becomes quite entwined with the notion of autonomy. Rather than irremediably incompatible opposites which would see autonomy increase as vulnerability lessens (and vice versa), the acquisition of autonomous capabilities is founded on the experience of vulnerability and interdependence: 'the highest form of autonomy, then, does not consist in the vindication of vulnerability, but in the

mediation of both notions in the social order' (Hetteema, 2014, p.496). More traditional models of autonomy tend to see it as something developed separately from others and their influence, and even sometimes against these others' claims, but relational accounts understand the ways in which we depend on one another through networks of familial, social and institutional interdependencies as providing the cognitive and practical conditions of possibility for self-determination (Leach Scully, 2014, p.212):

It is an impressive accomplishment that, on the path from helpless infancy to mature autonomy, we come to be able to trust our own feelings and intuitions, to stand up for what we believe in, and to consider our projects and accomplishments worthwhile. [...] the shift to a more social account gets its normative point – namely, that one's autonomy is vulnerable to disruptions in one's relationship to others (Cristman, Anderson, 2005, pp.129-130)

Therefore, since the relational theorists with whom I side understand autonomy as a 'socially constituted capacity, in the twin senses that its development and exercise require extensive social scaffolding and support and that its development and exercise can be thwarted by exploitative or oppressive interpersonal relationships and by repressive or unjust social and political institutions' (Mackenzie, Rogers, Dodds, 2014, p.17), my account of the ethics of pre-emptive psychiatry is premised on the idea that both vulnerability and autonomy must be understood together.

What I intend to do, now, is explore in more detail how a relational account like the one I just developed can integrate the many ways in which one's environment (one's family, community, society, etc.) may either enable or inhibit one's ability to behave as an autonomous agent and to flourish as a capable and resilient person. I have already explored, at points, how at-risk individuals may be more likely to see their capabilities threatened through a complex combination of inherent vulnerabilities and situational ones, all potentially exacerbated or accompanied by pathogenic vulnerabilities. Their capacity for self-determination can be equally imperiled. For

example, neuroticism, which encompasses traits like irritability, anger, sadness, anxiety, worry, hostility, self-consciousness, excessive negative emotional responses, self-criticism, sensitivity to the criticism of others, and feelings of personal inadequacy (Lahey, 2009, p.241), has been said to increase risks of developing psychotic symptoms (Krabbendam, 2002, p.1). Several of these traits are, however, central in the progression of autonomy-related capabilities. Encouraging the development of certain attitudes toward oneself, such as self-trust and self-respect, is necessary if one is to become able to make 'life-guiding decisions': the very idea of self-determination must be internalised (Leach Scully, 2014, p.212), and the process is a slow-going one.

These psychological traits - self-trust, self-respect, and self-esteem - are now widely recognised to be 'crucially important to one's autonomy, to personal integrity, and more generally to the real possibility of formulating and pursuing one's conception of the good life' (Anderson, 2014, p.141). Such psychological qualities are thus foundational, in the sense that their impact trickles down to many areas of an individual's mental, familial and social life: 'self-respect is better understood as comprising all those aspects of cognition, valuation, affect, expectation, motivation, action, reaction, and interaction' (Dillon, 1997, p.228). Low self-esteem, self-trust or self-respect are particularly insidious and corrosive disadvantages. Individuals need strong inner resources to resist their message, without which it will be hard for them to think of themselves as free and equal persons (Cristman, Anderson, 2005, pp.132). In this sense, their autonomy can be harmed by damaging, stigmatising and pathogenic relationships to others (in this case, to caretakers and healthcare professionals in particular), just as autonomy can be promoted and thrive within a network of empowering relationships. The 'practical relation-to-self', to quote Cristman and Anderson, that psychiatric vulnerability may threaten is an essential component of autonomy; and relational accounts recognise that the development and maintenance of that practical relation-to-self necessitates proactive and collective action.

Those people who have a healthy dose of confidence and respect for themselves possess something that is integral to living a satisfying and meaningful life, while those whose self-respect is damaged or fragile are 'thereby condemned to live

constricted, deformed, frustrating lives, cut off from possibilities for self-realization, self-fulfillment, and happiness' (Dillon, 1997, p.226). A judgement like this one can seem dire, especially if one is inherently and situationally more likely to see their sense of self damaged or warped with time, as might be the case for at-risk individuals. Having a better and more comprehensive understanding of the conditions which might either favour or undermine one's autonomy-related traits and capabilities should therefore be a priority.

Encouragingly, there seem to be promising prospects for this (Anderson, 2014, p.143), but they necessitate, first, an acknowledgement that the psychological factors that appear to play such a significant role in an individual's capability set and mental health are not solely a *personal* problem depending on that individual's *personal* responsibility. I strongly agree with Dillon's statement that the source of some damage to self-respect is an implicit interpretive framework of self-perception which is not solely a private phenomenon, but is a feature of the historical and sociopolitical situatedness of individuals (Dillon, 1997, p.243) - in other words, of situational and pathogenic vulnerabilities. The whole point of the account of inherent, situational and pathogenic vulnerabilities that I have outlined, and its integration within the capabilities framework, has been to underline as emphatically as possible the existence of a *collective* moral responsibility to promote at-risk individuals' capacities for resilience, without over-medicalising their condition.

There are ways in which a person's autonomy can be diminished and impeded, especially through damage to the social relations that should support it (Cristman, Anderson, 2005, p.127). What this means is that some 'forms and degrees of vulnerability are antithetical to autonomy' (Anderson, 2014, p.135). Whether these are inherent, situational or pathogenic, pre-emptive practices (including both pre-onset early detection and pre-onset early interventions) must aim, first and foremost, to protect the relational autonomy of the at-risk individuals they concern: 'carefully designed and responsive social and legal institutions aimed at reducing (everyone's) situational vulnerability or supporting the development of resilience may reduce some forms of dependency, in particular those that risk pathogenic vulnerability [...] On a

relational approach to autonomy vulnerability is not to be contrasted with invulnerability but with resilience' (Dodds, 2014, pp.197-198).

More specifically, given the impact that corrosive disadvantages can have on young, vulnerable at-risk individuals, what needs to be encouraged are personal, familial, social and therapeutic relationships that recognise and understand the sources of their vulnerabilities and the need to preserve and promote their autonomy and resilience. Psychotic disorders have a genetic component (Seidman et al., 2006, p.507), meaning that many at-risk individuals grow up with at least one parent suffering from severe mental health problems, in an environment that might compound their own inherent vulnerabilities. The pre-emptive measures which should be prioritised ought to integrate various sources of stress in at-risk individuals' family lives, for example, and aim to make accessible information, education and support so as to form the kinds of relationships needed to promote resilience. The difficulty of balancing the vulnerabilities of parents with mental health problems and the vulnerabilities of their children has been highlighted by Cousin and Mullin: supporting these parents can sometimes conflict with the realisation that their children's needs are not being met (Mullin, 2014, p.276). Several kinds of measures can be envisaged in order to provide helpful, non-pathogenic support and to supplement at-risk individuals' and their parent's capabilities and autonomy: psychoeducation, facilitated access to outdoors activities or academic support are a few examples amongst others. The next chapter will explore these possibilities in more detail.

I defend the idea that respecting and fostering autonomy must be absolutely central to the normative obligations arising from vulnerability. Being better able to identify and understand psychiatric vulnerabilities should not lead to considering them as a pathology in and of themselves, creating a strong separation between vulnerable individuals and non-vulnerable ones. At-risk individuals should be acknowledged as more inherently and situationally vulnerable than others may be, but it should also be recognised that these vulnerabilities affect everyone. Otherwise, those discourses of vulnerability that focus on protection first and foremost may 'open the door to objectionably paternalistic and coercive forms of intervention' (Mackenzie, 2014, p.33).

On the contrary, at-risk individuals are more in need of targeted forms of assistance which would preserve their capabilities and allow the conversion of their resources into functionings. Recognising that vulnerabilities primarily threaten one's capabilities therefore ought to encourage, whenever possible, interventions designed to mitigate them and enhance resilience.

Chapter 6 - Defending Staging Models

I argued in Chapter 3 that the ethical debate that has surrounded the development of pre-emptive psychiatry ‘missed the mark’, in a sense, in that it mostly missed an opportunity to focus on what underlies many of the issues under consideration, and that it was not constructive enough. The claim is not insignificant, nor is it particularly charitable, but I would argue that it is justified: I believe that articulating this debate around conceptualisations of vulnerability is much more compelling. Doubtlessly, stigma, discrimination, overdiagnosis, disadvantage, anxiety, over-medicalisation and overmedication are crucial concerns when considering pre-onset early detection and interventions in psychiatry. Nevertheless, to focus directly on these worrying (potential) repercussions of a generalised implementation of pre-emptive measures fails to acknowledge that these measures are not a homogeneous or a universally agreed-upon form of psychiatric care. On the contrary, several diagnostic models, early detection instruments, and forms of pre-onset early intervention have been proposed throughout the past twenty years. And, while some people might put forward the idea that the proponents of pre-emptive psychiatry do seem to work in a cohesive manner - if not necessarily in close collaboration - towards a concerted outcome, I want to point to the moral significance of such divergences.

This appearance of a united front might have more to do with the necessity to counter a perceived lack of scientific, medical and ethical credibility than with actual concurrence. At the end of a collection of essays aiming to outline the ‘state of the art’ and future perspectives of early detection and early intervention in psychosis, its editors, Riecher-Rössler and McGorry, conclude that the relegation of the Attenuated Psychosis Syndrome to the Appendix of the DSM-5 - with an encouragement for further research - still leaves the door open for an official (and visibly much hoped for) introduction of this diagnostic category into the next *Manual*:

Some are still questioning the validity of the 'attenuated psychosis syndrome' [...] The DSM-5 working group therefore only integrated it into the appendix of the DSM-5 as a condition for further study. Nevertheless it still states, '...that secondary prevention of full psychosis may offer substantial life-course benefits. It seems likely that psychiatry will move in this direction with a number of disorders in the future' (Riecher-Rössler; McGorry, 2016b, p.186).

To anyone who reads this collection of papers attentively, this allusion to the APS as the embodiment of pre-emptive psychiatry's future might seem somewhat surprising - perhaps even strikingly unambitious. Indeed, if one thing can be said to emerge in particular relief from this precise outline of the current state of pre-emptive psychiatry and its future perspectives, it is the idea that many hopes hinge upon further discoveries in neuroimaging, genetics or neurocognition, and not solely upon clinical symptomatology. It appears as though a series of somewhat conflicting notions have therefore been underlying recent developments in this field, each drawing it towards different forms of implementation.

In that sense, the APS model on its own can sometimes appear quite limited, especially in view of the opportunities opened by new research projects and pre-onset early interventions as they were exposed in Riecher-Rössler's and McGorry's publication. Rather, the increasing focus on biomarkers, or even on the notion of basic symptoms, seems to point to a form of prevention that could allow for very early detection - before the onset of the positive clinical symptoms that are the core target of the APS category. This attachment to the APS model might be explained, amongst other reasons, by its reliance on a criterion that is often deemed essential if pre-emptive psychiatry is ever to be perceived as an ethically-acceptable form of care: at-risk individuals must seek help of their own volition, meaning that their clinical symptoms must already be distressing enough for them to undertake such a course of action. Clearly, many proponents of pre-emptive psychiatry are convinced that this is the only thing that might legitimise the introduction of a new diagnostic category into the

DSM. A full-threshold diagnosis like schizophrenia would remain ill-fitted for patients whose symptoms are not (yet) severe enough to justify such a label, but their distress still needs to be adequately addressed within a psychiatric framework: ‘A strong consensus exists that individuals meeting APS criteria (which includes a criterion for help-seeking) are symptomatic and in need of clinical care. [...] Thus, treatment is clearly justified, regardless of the justification of reduction of risk or prevention’ (Yung et al., 2012, p.1130). Nevertheless, some might think that the importance of the help-seeking criterion is destined to lessen if valid early markers were one day discovered: it certainly seems like several research projects are currently aiming to do just that.

Thus, I argue that a sharper focus on the various conceptualisations of psychiatric vulnerability that have been suggested by proponents of pre-emptive psychiatry allows for a more constructive examination of their ethical implications. In chapters 4 and 5, I outlined why vulnerability calls for strong moral obligations, for attention to how it is to be defined and to the types of moral duties to which it gives rise; these chapters will now serve as a basis for the coming analysis of available diagnostic models and associated interventions, which will put a strong emphasis on the ideas of resilience and relational autonomy. Through evaluating in more detail, firstly, the ethical implications of diverse models of vulnerability and, secondly, those of the pre-onset early interventions they stimulate, I therefore defend staging models over attenuated syndromes, despite remaining pragmatic and ethical challenges.

I. THE THERAPEUTIC AND ETHICAL IMPLICATIONS OF DIVERSE MODELS OF VULNERABILITY

The second chapter of this dissertation was dedicated to an exploration of the current state of research regarding pre-emptive psychiatry. It proposed a succinct outline of the different instruments that were designed for the early detection of at-risk

individuals, of the various diagnostic models and labels that were elaborated by researchers and psychiatrists, and of the existing structures intended to provide care for at-risk individuals. Far from the very descriptive purpose of that chapter, the goal, here, is to present a commentary on the implications (both ethical and therapeutic) of these various instruments, labels and structures. Indeed, their relations of interdependence or dissociation are meaningful in ways that have too often been overlooked in the debate that has surrounded the development of pre-emptive psychiatry. I have thus identified a series of relevant notions at play in conceptualisations of psychiatric vulnerability, each pulling the development of pre-emptive psychiatry one way or another; and it is now time to focus on them in a way that addresses their various ramifications.

1. Primary Prevention and Secondary Prevention

This particular distinction is significant in many ways; one could even say that it is actually quite symbolic of the continuity and of the tensions that run through the elaboration of valid detection and intervention methods in pre-emptive psychiatry. The most salient point to be made here is that both primary prevention and secondary prevention²⁹ are on the same spectrum: what differentiates them is related to incremental or chronological factors, but there are no necessarily significant differences in the nature of these interventions. They share the same goal (to delay or prevent entirely the decline of a person's mental health), and rely on similar kinds of inclusion criteria, but they are adaptive to both the current state of health of the person concerned, and the degree to which that person can be said to be specifically at risk of relapse or deterioration. Similarly, what distinguishes various early detection methods in pre-emptive psychiatry has more to do with scope and scale than with categorisation. Nevertheless, these differences remain highly pertinent from an ethical standpoint.

²⁹ In order to give a working definition of primary prevention and secondary prevention, I can cite the explanation given by the Institute for Work & Health: 'Primary prevention aims to prevent disease or injury before it ever occurs. This is done by preventing exposures to hazards that cause disease or injury, altering unhealthy or unsafe behaviours that can lead to disease or injury, and increasing resistance to disease or injury should exposure occur'; while 'Secondary prevention aims to reduce the impact of a disease or injury that has already occurred. This is done by detecting and treating disease or injury as soon as possible to halt or slow its progress, encouraging personal strategies to prevent reinjury or recurrence, and implementing programs to return people to their original health and function to prevent long-term problems' (IWH, 2015, p.2).

An argument could be made, as Kolsterkötter did, that what pre-emptive psychiatry is all about are actually different subsections of primary prevention: either universal, selective or indicated prevention (Klosterkötter, 2016, p.2). Use of the APS would then be a form of indicated (primary) prevention, as it targets persons who are already suffering from 'first complaints and impairments and who are actively seeking advice and help' (Ibid., p.2). I would contend, however, that this refers to a form of indicated *secondary* prevention, and not to a later stage of primary prevention: after all, considering that secondary prevention aims to reduce the impact of a disorder that has already occurred, any argument that stresses that the APS is a diagnosis in its own right - and indeed there are plenty - would put what Klosterkötter designates as indicated prevention more clearly in that category. For the sake of simplicity, I will thus speak mostly of primary and secondary prevention rather than of selective and indicated primary prevention.

Very briefly, in the case of pre-emptive psychiatry, primary prevention methods would target larger sections of a community than the Ultra-High Risk group (UHR) currently does, although it would very probably remain more selective than universal. Nevertheless, a universal approach is not unimaginable in pre-emptive psychiatry, nor is it doomed to inefficacy. Awareness that promoting well-being in an entire community could have a significant impact on that population's mental health, for example using a 'whole systems approach', is growing. The role of public health could therefore become crucial in universal primary prevention, and has actually grown steadily: 'public mental health models of 'risk' and 'protective' factors exist at the individual, family and community levels to describe the processes associated with mental health problems' (Bhui, Dinos, 2011, p.417).

Many obstacles still face those who would favour a public health and universal approach to prevention, though: psychiatric vulnerability is such a multifaceted condition that attempting to prevent it on a universal scale would require immense politico-social will, means, and reach. Several goals would have to be pursued simultaneously: addressing the causes and the consequences of childhood adversities

and vulnerabilities; avoiding the aggravation of existing disabilities or illnesses 'either through preventing progression of distress or through dealing with behaviours that compound disability, for example substance misuse or minor offending behaviour'; limiting the possibilities for an 'intergenerational transmission of violence, abuse, trauma, poverty and inequalities to the children of adults experiencing mental health problems' (Bhui, Dinos, 2011, p.418). The repartition of responsibilities for these ambitions (between healthcare professionals, social workers, policy-makers, politicians and others) is, in itself, an incredibly arduous and complex task - though still one worth pursuing. One worry regarding this type of wide-ranging and universal preventive action is that it might take resources away from secondary and tertiary approaches, or even from selective and indicated primary prevention. However, it is not out of the realm of possibility that, rather than compete with these other kinds of preventive measures, a universal approach may actually allow for a finer adaptation of pre-onset early interventions to varying degrees of vulnerability and risk. Universal primary prevention could be integrated within a broader network of measures, which would benefit from the input of specialised teams, all the while encouraging generic policies and actions. Unfortunately, I will not have the opportunity to delve deeper into this particular deliberation at this stage; I will simply point out that universal primary prevention in mental health should not be disregarded as unattainable or ineffectual too quickly.

Selective primary prevention in pre-emptive psychiatry, on the other hand, might appear to be more readily implementable. It would aim at increasing identified at-risk individuals' resilience when confronted with adverse circumstances, mental health issues and other risk factors, all the while reducing the latter. Here, the target population is already narrowly selected but, because of the wider scope of primary prevention in comparison to secondary prevention, associated interventions do tend to be less clinically-based, and are often integrated into a more holistic and general promotion of health. Translated to the case of pre-emptive psychiatry, this could mean the encouragement of lifestyle changes, or a more accessible provision of psychosocial support: 'The public health approach relies on primary prevention, promoting individual responsibilities and resilience, while also sustaining existing services and

tackling inequalities' (Bhui, Binos, 2011, p.417). A detailed analysis of such interventions will be proposed below.

Secondary prevention, on the other hand, targets individuals who are already afflicted with a latent disease or disorder, although it is to be implemented prior to the apparition of serious symptoms. The goal is to detect and start treating an existing disorder as early as possible. The UHR group, significantly more at risk than the general population and already seeking help, is thus the primary objective of such secondary prevention in pre-emptive psychiatry. Treatments envisaged have included the use of antipsychotic drugs, Cognitive Behavioural Therapy (CBT) or a combination of the two, pharmacological substances like omega-3 (ω -3), and other forms of supportive counselling (Bechdolf et al., 2012, p.22; Addington, Heinssen, 2012, p.279). Here again, though, the more comprehensive account of these measures will be outlined later on. If one is to evaluate the development of pre-emptive psychiatry from an ethical standpoint, the distinction between primary prevention and secondary prevention matters greatly in that, depending on the diagnostic model selected, one could be greatly favoured over the other. As was just briefly pointed out, this could have a significant impact on the form and implementation of pre-onset early detection and interventions in psychiatry, and on at-risk individuals at large.

The Attenuated Psychosis Syndrome (APS) was developed as a self-contained diagnostic category, and was clearly intended to encourage a form of secondary prevention for psychotic disorders. This focus on a secondary approach is anchored in a very tangible idea: although, in principle, primary prevention can be offered either universally or, more selectively or indicatively, to healthy individuals with known risk factors for psychotic disorders, it cannot be implemented effectively - at least to date - due to the low incidence of psychosis in the general population and the lack of sufficient knowledge regarding etiology and risk factors (Klosterkötter, 2016, p.2). Insofar as this remains the case, targeting persons whose symptoms are distressing enough that they seek psychiatric help is still the best way to go, and so for many proponents of pre-emptive psychiatry. At this point, I feel that the proposed criteria for the APS, as established in the Appendix of the DSM-5, should be outlined again:

- a. At least one of the following symptoms is present in attenuated form, with relatively intact reality testing and is of sufficient severity or frequency to warrant clinical attention:
 - Delusions
 - Hallucinations
 - Disorganized speech.
- b. Symptom(s) must have been present at least once per week in the last 1 month
- c. Symptom(s) must have begun or worsened in the past year
- d. Symptom(s) is sufficiently distressing and disabling to the individual to warrant clinical attention
- e. Symptom(s) is not better explained by another mental disorder, including: Depressive or bipolar disorder with psychotic features and is not attributable to physiological effects of a substance or another medical condition
- f. Criteria for any psychotic disorder have never been met (APA, 2013, p.783).

These criteria emerged in great part from the work of people like McGorry and Yung in the late 1990's, while they attempted to develop clinical instruments such as the Comprehensive Assessment for the At-Risk Mental States, or CAARMS (Addington, Heinssen, 2012, p.270), in a bid to identify individuals that they would later deem to be 'Ultra-High Risk' (UHR). Within the framework of the APS, early detection thus relies almost entirely on (positive) symptomatology; and no provision is made in the APS' brief outline for a form of pre-symptomatic detection. The distress criterion is highlighted on several occasions, though, as it embodies the all-important safeguard against accusations of disease-mongering with which psychiatrists and researchers are all too familiar.

In the same vein, I want to insist once more on the fact that the notion of risk was strategically removed from the APS' appellation, and so for two reasons. If the APS was to be seen as capturing the prodrome of psychotic disorders, it would fail to account for other trajectories potentially taken by a patient's symptoms (towards either non-psychotic disorders or gradual dissipation), and it might cause undue stress and anxiety in diagnosed individuals. Both these pitfalls are made especially problematic by the high number of false positives still disclosed by studies which are concerned with transition rates from UHR to full-threshold psychosis (Blumenthal-Barby, 2014, p.532), hence the 'proposed reconceptualization of APS as a self-contained rather than an at-risk syndrome' (Rutigliano, Manalo, Fusar-Poli, 2016, p.61). On the surface, then, the APS is presented as a fully-fledged diagnostic category, and not as the prodrome of psychotic disorders.

Nonetheless, the APS benefits from any detection method or instrument that enhances transition rates to full-threshold psychosis: the more at-risk its target population, the more justified it becomes in the eyes of clinicians, other mental health professionals, ethicists, and even society at large. Inversely, 'the analysis becomes less favourable towards treatment as the ability to accurately target those at severe risk of illness diminishes, and as the severity of likely side effects increases' (Bentall, Morrison, 2002, p.353). The acceptability of the APS as a diagnosis is thus directly proportional to its accuracy with regards to transition rates. Even with the notion of risk or any other hint at an evolutive trajectory removed from it, the core ambition behind the inclusion of the APS in the newest version of the DSM remains profoundly preventive. If the parentage of the APS did not speak for itself (in a way, it is a direct descendant of Yung and McGorry's At-Risk Mental State and of the UHR criteria), the whole rhetoric surrounding it is markedly focused on the idea of countering transition towards full-threshold psychosis (Carpenter, van Os, 2011, p.460; Woods et al., 2010, p.199). Elaborated as a form of secondary prevention, the APS diagnosis conceptualises psychiatric vulnerability as an identifiable medical condition - a source of distress that manifests itself through a series of specific clinical symptoms.

It is important to note that non-specific staging models, which I would present as the main counterpart to the APS, are actually far from incompatible with this conceptualisation of vulnerability. On the contrary, they concur wholly with the criteria established by the APS, which is why their proponents are generally ready to defend them wholeheartedly. What staging models do, though, is go beyond the idea of vulnerability as a rigidly defined moment directly preceding a transition towards full-threshold psychosis. Their approach is more evolutionary and dynamic, accounting for a variety of development courses and pre-symptomatic forms of vulnerability:

Further risk stratification is urgently needed to identify subgroups with specific needs and response patterns and thus improve the cost-benefit ratio of preventive interventions. Hence, it has been suggested to develop prediction models that integrate information from various assessment domains, including psychopathology, sociodemographic characteristics, neurocognition, blood parameters, neuroimaging, and neurophysiology (Studerus, Pappmeyer, Riecher-Rössler, 2016, p.117).

The earlier stages (and in particular stage 0) delineate states of vulnerability thus characterised by the presence of biomarkers and other prospectively-defined risk criteria, and by the absence of clinical symptoms. For example, research has demonstrated that subtle structural brain changes can be observed in non-symptomatic relatives of schizophrenic patients, therefore putting them, it seems, more at risk for psychotic disorders (McGorry et al., 2014, p.214; Fusar-Poli et al., 2007, p.465). Within the framework of staging, primary and selective prevention could then once again become part of pre-emptive psychiatry's purpose. More than that, it openly becomes an ideal target for pre-onset early intervention, even if not implementable just yet: 'stratified or personalized interventions remain aspirational, yet potentially within reach' (McGorry, 2014, p.211). Findings have shown that intervening early is associated with an improved long-term prognosis (Addington, Heinssen, 2012, p.270): it would

make sense to aim for detection methods that allow for intervention as early as possible, so long as therapeutic benefits can be demonstrably improved by this.

Even so, whether or not intervention in the prepsychotic phase alters long-term pathophysiology, it might still very well enable at-risk individuals to be 'successful with life milestones that are essential to future well-being such as successful education, being employed, having a love relationship, and supportive social network' by providing accessible forms of support early on (Carpenter, 2016, p.IX). The British government's 'Public Health White Paper for England' on preventive measures in psychiatry, for example, adopted a public health approach (HM Government, 2010). It set out to outline recommendations for (universal and selective) primary prevention measures, specifically underlining the importance of strengthening protective factors (e.g. social capital, family relations, educational and academic achievement) by helping people become more resistant or resilient to the risks imposed by adverse circumstances, encouraging public health experts to 'ensure research into resilience, and monitor inequalities for early signs that they are worsening or remaining static' (Bhui, Dinos, 2011, p.418).

From a life-course perspective, new knowledge is required at developmental stages preceding APS, including a broader definition of vulnerability to psychopathology at stages where primary prevention is considered, stages where vulnerability is manifest and prevention of psychopathology such as that defined in APS can be addressed. As the field moves toward psychopathology prevention, the classification of established mental disorders becomes less decisive, and a focus on symptom domains and underlying behavioral constructs is more heuristic. Therapeutic discovery at present is focused on reducing manifest psychopathology, but prevention discovery in the future will be based on intervention targets ranging from interruption of pathways to vulnerability and, in the

vulnerable, enhancing resiliency (Fusar-Poli et al., 2014, pp.184-185).

With staging models, attention can be paid more openly to a vast array of risk factors that are known to increase vulnerability and lifetime risk for psychosis from a very early age, despite the fact that they are not yet 'sufficiently predictive to allow the development and application of 'selective' prevention measures targeting asymptomatic persons at risk' (Klosterkötter, 2016, p.3). Among these risk factors are neurobiological markers or environmental circumstances, such as exposure to viral agents in the second trimester of pregnancy, birth complications, childhood trauma, migration, the quality of the rearing environment, socioeconomic disadvantage, urban birth and upbringing, and using illicit drugs, particularly cannabis (Klosterkötter, 2016, p.3; Broome et al., 2005, p.24). While all these risk factors would be meaningful even if the APS model were to remain overwhelmingly prevalent in pre-emptive psychiatry (they could be used for the more individualised risk profile and prognosis of a diagnosed patient), they do play a very significant role within staging models.

The great advantage of staging models is that they account for the evolution of psychopathology during the development of mental illnesses starting from their earliest phases; they can therefore become an indispensable instrument in altering the course of these illnesses 'by providing appropriate interventions that target individual modifiable risk and protective factors' (McGorry et al., 2014, p.211). More than that, they can facilitate the integration of 'new data on the biological, social and environmental factors that influence mental illness into clinical and diagnostic infrastructures' (Ibid., p.211) in a way that the APS on its own cannot. In terms of pre-onset early intervention, staging models can put a stronger emphasis on the future possibility to make available a form of selective, primary prevention to larger subgroups of the population identified as vulnerable, if not necessarily in the UHR group yet. By expanding the scope of preventive efforts to integrate a form of selective primary prevention, proponents of staging models therefore offer a more dynamic conceptualisation of mental illness and of psychiatric vulnerability. Furthermore, identified at-risk individuals don't necessarily

have to be seen as patients, or be diagnosed with a specific condition like the APS, helping pre-emptive psychiatry move beyond a purely medical setting.

Speaking about at-risk adolescents and young adults, Professor Jan Scott, who works on the early detection of bipolar disorders and other mental health disorders through the application of staging models, says:

You mustn't change their identity into someone who has a diagnosis of mental illness – just because they have some symptoms that increase their risk of an illness; it has to be remembered that only 20-30% will make that transition. The earlier we intervene with low key, considered support, the better their chances to avoid a serious diagnosis in the future.

(Professor Jan Scott, interviewed in Newcastle upon Tyne on the 15th of January, 2015).

Through clinical staging, vulnerability can become a multifaceted and interactive condition, the trajectory of which can be altered on a multitude of levels. Our responses to it, be they medical, psychosocial, or even political, should be adaptive to identifiable factors. Referring back to Rogers, Mackenzie and Dodds' tripartite definition of vulnerability, both inherent and situational forms of vulnerability might thus start to be addressed as such by staged approaches. I would like to argue that, while working with the APS does leave open the possibility to account for these risk/vulnerability factors so as to increase predictive validity, it would inevitably lead to overwhelmingly medical (and potentially pathogenic) responses.

It is necessary to develop a more acute awareness of what, ethically speaking, is at stake when determining which forms of prevention (primary and/or secondary, universal, selective and/or indicated) are best suited to pre-emptive efforts in psychiatry. It would, without a doubt, facilitate the promotion of a more constructive debate on this question. Likewise, the choice between specific and nonspecific approaches is certainly not anodyne.

2. Specific and Nonspecific Approaches

The APS, just like the ARMS and the UHR criteria, was specifically developed as the diagnostic manifestation of the prodrome of psychotic disorders. Its legitimacy as a diagnosis relies heavily on its predictive validity, and the only outcome that is used to measure it is actual transition to a full-threshold psychotic disorder. However, current research, especially that related to staging models, has started to question the pertinence of staying so attached to the idea of specificity, at least with regards to the earlier stages of a disorder. Depending on whether pre-emptive psychiatry should strive for specificity or allow for nonspecificity, conceptualisations of vulnerability (and of the answers to bring to it) might change considerably.

Recent discoveries related to pathophysiology (and, more particularly, to biomarkers indicative of psychiatric vulnerability) seem to point out that current clinical nosologies might not be the most adequate tool for early detection:

Diagnostic categories, such as schizophrenia or psychosis, may be neurobiologically heterogeneous, comprising a variety of conditions with differing aetiologies. It may thus be unlikely that there will be a single neuroimaging feature that predicts transition to psychosis in every high-risk subject (Dwyer, McGuire, 2016, p.89).

The limitations linked to a lack of consideration of the brain changes in people at risk for disorders other than psychosis (bipolar disorder, depression, anxiety, or obsessive compulsive disorder) are now more widely recognised: ‘the extent to which the findings reviewed here are specific to the risk for psychosis, as opposed to other disorders or mental illness more generally is thus unclear’ (Dwyer, McGuire, 2016, p.89). Additionally, the ‘genes mediating each neural system endophenotype’ could be only partially distinct from each other: ‘a substantial degree of overlap appears likely for a

number of the most promising genes associated with schizophrenia' (Cannon et al., 2006, p.284).

Actually, the elaboration of a new diagnostic category designed for at-risk individuals whose symptoms are mostly attenuated doesn't actually have to aim systematically for specificity. A new 'attenuated' syndrome needn't be the precursor of a particular full-threshold disorder; one could imagine, on the contrary, that it indicates non-specific vulnerability. Nonetheless, if the APS represents the archetype of such elaborative attempts, it would appear that this diagnostic model does indeed tend to go hand in hand with the idea of specificity.

The APS is supposed to be a highly predictive instrument for the identification of individuals who are just a few years away from transition into full-threshold psychosis (Yung et al., 2012, p.1130).

The clinical high-risk syndrome is unusual as a research diagnostic entity in that it specifies risk for a future disorder. Its utility as a research diagnostic entity thus depends in large part upon whether it can indeed predict increased likelihood of conversion to psychosis and whether it can do so with specificity relative to other incident disorders' (Webb et al., 2015, p.1072).

And the APS is indeed rather specific: several studies have, it seems, confirmed that at-risk individuals identified with CHR criteria are indeed more likely to develop a psychotic disorder than incident bipolar disorders, non-bipolar mood disorders or anxiety disorders (Fusar-Poli, 2017, pp.44-45). The vast majority of comorbid disorders observed in individuals who do not go on to develop psychosis is already present at the baseline (Ibid., pp.44-45).

However, it has also been shown repeatedly that outcomes other than psychotic disorders in the at-risk population cannot be ignored. While the hope is that

diagnosing people this early will help delay or prevent a first psychotic episode, little mention is made of other possible courses for patients diagnosed with the APS, be it towards another, non-psychotic mental disorder, or simply towards natural remission; and this, despite the fact that the version of the APS proposed for the DSM-5 establishes that only 32% of help-seeking UHR cohorts transition towards full-threshold psychosis in the three years following detection (APA, 2013, p.785). In a UHR sample, 28% of the participants reported attenuated psychotic symptoms; 'over the follow-up period, 68% experienced nonpsychotic disorders: mood disorder in 49%, anxiety disorder in 35%, and substance use disorder in 29%. For the majority (90%), non-psychotic disorder was present at baseline, and it persisted for 52% of them' (Lin et al., 2015, p.249).

In support of specific diagnostic models, findings related to the long-term efficacy of generic care versus more disorder-specific interventions can be mentioned. Indeed, while targeted care for at-risk individuals has demonstrably shown its efficacy, patients who are later directed towards generic primary care tend to lose the benefits gained earlier:

Early intervention in psychosis services produce better clinical outcomes than generic teams and are also cost-effective. Clinical gains made within such services are robust as long as the interventions are actively provided. Longer-term data show that some of these gains are lost when care is transferred back to generic teams (Singh, 2010, p.343).

Recommendations for generic teams are thus to provide high-quality assessments and then channel identified at-risk individuals into disorder-specific pathways for long-term interventions. Following from this kind of evidence, 'the really important question for service planners and commissioners is the future of generic teams in an increasingly specialised world' (Singh, 2010, p.344).

However, I would like to point out that, while generic supportive care for at-risk individuals has indeed proved to be less effective than specialised interventions, disorder-specificity is not necessarily the most salient characteristic of the more successful option. Other factors can be considered, including the way in which addressing attenuated symptoms and risk has become absolutely central in early-intervention centres. Generic forms of primary care, in contrast, aim mostly for the provision of broad support. Patients who do not undergo enhanced monitoring and CBT tend to be given fewer opportunities to communicate and open up about their condition, or to understand their symptoms. The provision of CBT adapted to the UHR group has been shown to give them a chance to reappraise their most distressing (negative, unusual, paranoid) beliefs and to evaluate collaboratively the difficulties they face (Byrne, 2013, p.8). Vulnerability and risk can therefore be addressed more thoroughly in early-intervention centres than in generic primary care, but disorder-specificity might not be as crucial in that as the provision of a space in which at-risk individuals have the opportunity to express and understand their experiences.

Whether or not pre-emptive psychiatry finally takes the form of a series of attenuated syndromes along the trajectory of specific disorders (psychosis, bipolar disorder, depression, etc.), the aim for specificity is nevertheless far from sterile. Despite the fact that many biomarkers and early signs of vulnerability appear to be nonspecific, hope remains that some will prove to indicate more distinctive development courses: 'by examining the relationship between various biomarkers and both syndrome and stage, it may be possible to distinguish between those biomarkers that possess a degree of syndromal specificity from those that do not' (McGorry et al., 2014, p.211). For example, cognitive and motor functioning deficits are thought to be promising candidates for the prediction of psychosis specifically, as 'hallmark features of schizophrenic psychoses' which precede the onset of full-threshold psychosis by several years and which can be assessed at a relatively low cost (Studerus, Papmeyer, Riecher-Rössler, 2016, p.116). Interestingly, such cognitive deficits have been observed in children and adolescents who later developed schizophrenia, but not in those who later developed depression or bipolar disorder (Ibid., p.118). However, available evidence also suggests that these cognitive measures remain less predictive than other,

more clinical measures (Ibid., p.128). As such, specificity still remains somewhat elusive, at least with regards to the earliest signs of a given disorder.

In the end, some promising forms of specificity in pre-emptive psychiatry might have less to do with disorder-specificity than with the exploration of symptom etiology. A dynamic trend can be observed in research projects that investigate the pathways and mechanisms that lead from specific adversities to specific symptoms. For example, communication deviance in parents has been implicated in the appearance of thought disorder in their children³⁰; childhood sexual abuse has been linked with auditory and verbal hallucinations; and events disrupting relations of attachment, like neglect, may have a strong effect on the development of paranoid symptoms: 'current research on psychological mechanisms underlying these symptoms suggests a number of symptom-specific mechanisms that may explain these associations' (Bentall et al., 2014, p.1011). Even so, diagnostic categories like the APS remain quite ill-equipped to account for new discoveries in these matters: the kind of specificity these attenuated syndromes call for is decidedly not one that can do away with traditional nosologies. On the contrary, they only make sense as the attenuated versions of existing disorders, and directly on the pathway to them: broad diagnoses - and not specific symptoms - are the outcome of vulnerabilities, adversities and risk factors.

Because diagnostic categories like the APS are based almost entirely on clinical manifestations and positive symptoms, the idea that the earliest signs of a disorder would be indicative of a coherent and linear trajectory towards that disorder has often remained unquestioned. Yet, the earliest vulnerability traits and risk factors - those which form the foundational basis for the elaboration of predictive criteria in current research - actually tend to remain 'relatively crude' and nonspecific (McGorry et al., 2014, p.211). It is only over time that more specific syndromes emerge from undifferentiated and nonspecific signs of vulnerability and symptoms. Indeed, it is not

³⁰ The expression 'communication deviance' was originally introduced by Singer and Wynne in an article published in the 1960's, which described a style of communication commonly found amongst parents who had children with schizophrenia. Communication deviance is said to occur between parents and children when the first fail to communicate effectively what they mean: this failure can be attributed to confusing or illogical speech patterns, for example. Such deviances can range from vagueness to outright contradictions, and even to non-verbal forms of communication.

my intention to dismiss the importance of identifying specific early symptoms as they do start to manifest themselves. Evidence-based interventions, protocols and treatments have been associated with such specific symptoms and diagnoses, and so should be favoured whenever specificity becomes attainable. The need to adapt evidence-based pre-onset early interventions to each identifiable phase of a disorder is the primary aim of staging models.

Before specificity does become available, though, the overlaps between both early symptoms and markers of vulnerability are too important to be able to differentiate efficiently between at-risk states: 'it has become increasingly evident that the concept of 'ultrahigh risk' might usefully be broadened to one of a 'pluripotential risk state', rather than being considered specific to psychosis alone' (McGorry, Goldstone, 2016, p.17). This lack of specificity matters a great deal, in the sense that adolescents and young adults are primarily concerned (at risk groups tend to be composed of individuals between 12 and 25 years old): there remains a significant possibility that even those who meet UHR criteria may actually be at risk for another underlying mental disorder, or simply going through 'a merely transient phenomenon':

The classification of symptoms with psychometric equality constitutes a challenging task that reaches far beyond mere comorbidity or 'clinical noise'. Symptoms that are common to adolescents with potential risk for psychosis are also found in other mental disorders and conditions and thus constitute a considerable overlap along various diagnostic spectra, reaching from benign, normal developmental, and transient features to severe and disabling psychotic symptoms. Adolescents frequently present as diagnostic conundrums and may not be assigned to one specific diagnostic category. Although such an approach is at odds with the traditional concept of classifying mental health disorders into single categories, diagnoses may overlap in terms of symptoms with no necessary clear water between single categories (Simon, 2016, pp.50-51).

Following this, several staging models embrace the idea of nonspecificity for the earliest stages of mental disorders. One of them, for example, determines that once the first, at-risk but asymptomatic stage (0) is followed by undifferentiated general symptoms (such as mild anxiety, depressive and somatic symptoms), syndromal specificity can increase slowly through a worsening of these existing symptoms and the acquisition of new ones, associated clinically with behavioural and functional decline (stage 1) (McGorry, 2014, p.212). New clusters of symptoms could emerge from this that might not follow the bounds of current clinical nosologies. Here, then, referring to staging models - instead of relying solely on differentiated 'attenuated' diagnoses for every mental disorder - can help highlight how enriching the idea of nonspecificity can be:

We need to stop putting people into boxes so soon. These are youths with problems and a large percentage of them will grow out of these problems, while sadly others won't. Whilst we can't always tell exactly what the exact nature of the problem will be, we are becoming quite good at predicting which of these adolescents will go on to have more serious problems in the future.....and there are 'transdiagnostic' interventions that can improve health and wellbeing for all these young people.

(Professor Jan Scott, interviewed in Newcastle upon Tyne on the 15th of January, 2015).

The integration of nonspecificity into pre-emptive psychiatry could have a large impact on diagnostic and clinical approaches, as it encourages a stronger focus on cross-cutting symptoms and signs of vulnerability or risk, which resonates with the accounts of capabilities, fertile functionings and corrosive disadvantages I outlined earlier. Each early symptom/vulnerability could then become the focus of more limited interventions that would not necessarily be part of a larger framework.

To illustrate this point, a lot of research has been carried out on sleep patterns and sleep disturbances with regards to risk for psychotic or bipolar disorders. If it turned out, as many think is the case, that sleep disturbances are indeed either an early marker or a risk factor, they could become the focus of limited interventions, as they are treatable. It is not yet known whether such interventions can potentially prevent the emergence of psychopathology or bipolar disorder in identified at-risk individuals, but further studies may finally determine that treating sleep disturbances is likely to have preventive value (McGorry et al., 2014, p.216). The same goes for nonspecific cognitive markers:

Neurocognition and social cognition are potentially highly valuable markers within the staging model. They may provide clues regarding underlying pathophysiology and/or genetic etiology (i.e., endophenotypes). They are also strongly related to functioning and disability across a range of psychiatric disorders (which form a key element of defining the stage of illness) independently of symptoms, can be relatively easily assessed within the clinical setting, and are amenable to intervention (McGorry et al., 2014, p.213).

A non-specific staging approach provides a way to address questions surrounding the overlaps and heterogeneity that characterise the course, symptoms and outcomes of mental disorders. Were attenuated syndromes like the APS to remain the unique model available, clinical diagnoses would still need to form complex trees of comorbidities in order to make sense of these overlaps. In the end, 'a neurobiologically-informed staging approach that crosses current diagnostic silos may bring clarity to such complexity' (McGorry et al., 2014, p.219).

The capacity of staging approaches to be 'agnostic to traditional symptom-based nosological boundaries' (Ibid., p.219) can thus become a considerable advantage. If future research on biomarkers and other signs of vulnerability establishes that the biological substrates of mental illness do not correspond to the diagnostic

categories that are delineated based on clinical symptoms alone, nonspecific staging models would be able to integrate that fact more efficiently. The capacity to predict outcome and to select among available pre-onset early interventions depends largely on a diagnostic model's neurobiological and clinical pertinence and, in that sense, nonspecificity can be a significant asset: 'such an approach is likely to help characterize differential predictors of outcome based on cross-cutting dimensions rather than categorical distinctions' (McGorry et al., 2014, p.219).

By putting conceptualisations of vulnerability at the heart of an ethical examination of the development of pre-emptive psychiatry, I want to emphasise the significance of a distinction between specific and nonspecific approaches. Further than that, I would hold that nonspecific staging models offer the more comprehensive and pertinent option: by insisting on the evolution from broader and nonspecific signs of vulnerability to more specific and familiar syndromes, clinical staging opens new opportunities to assess 'the development (or lack thereof) of disability and functional and social impacts' (McGorry et al., 2014, p.219). Both inherent forms of vulnerability (through biomarkers) and situational ones (through neurocognitive and psychosocial factors) become more fully integrated into a staged approach. This leads me to a last distinction that can have far-reaching implications in pre-emptive psychiatry - that between two possible aims of preventive action: psychosocial functioning or symptomatic recovery.

3. Prioritising Psychosocial Functioning Over Symptomatic Recovery

One could easily imagine that preventive and pre-emptive measures in psychiatry would have a unified and clear-cut objective: to delay or prevent entirely the decline of a person's mental health. This is not necessarily the case, however, as this seemingly straightforward objective can be translated differently depending on that person's own priorities and on the diagnostic model selected. Here, I want to focus on

two possible interpretations of pre-emptive psychiatry's main goal: it can be focused on preserving and promoting psychosocial functioning, and/or on symptomatic recovery.

While it is pertinent to underline the existence of a significant distinction between these two possible goals, I want to insist here on the fact that these ambitions are not necessarily in competition with one another. On the contrary, a conjugation of both would probably be an optimal solution. But I argue that the danger lies in greatly favouring symptomatic recovery over psychosocial functioning, which is a very possible outcome depending on the diagnostic model selected for pre-onset early detection and intervention. This distinction can be paralleled by one between a focus on attenuated positive psychotic symptoms and a focus on negative symptoms and subjective, experienced disturbances (basic symptoms).

Indeed, limiting pre-emptive psychiatry to attenuated syndromes like the APS might have as a (mostly unintended) consequence the overwhelming prioritisation of symptomatic recovery - especially in view of the central place they give to the clinical manifestations of vulnerability and risk. In all fairness, though, favouring a strong focus on symptomatic recovery is far from senseless. Such an approach would be in line with what proponents of the APS and those of staging models defend wholeheartedly - that UHR individuals are 'probably at risk, but certainly ill' (Ruhrmann, Schultze-Lutter, Klosterkötter, 2010). These individuals are in enough distress that they seek psychiatric help, and their symptoms (despite not being severe enough to warrant a full-threshold diagnosis) are no less problematic: a meta-analysis has demonstrated that high-risk subjects are 'as impaired as psychotic patients in quality of life' (Rutigliano, Manalo, Fusar-Poli, 2016, p.64), in great part because of their symptoms. By insisting on the legitimacy of the APS as a diagnosis in its own right and by removing any reference to the idea of risk, proponents of this diagnostic model tend to put symptom recovery at the heart of early intervention in psychiatry, favouring it substantially over prediction and prevention (Rutigliano, Manalo, Fusar-Poli, 2016, p.64).

If the APS becomes the predominant model without being integrated into a staged approach, chances are that pre-emptive psychiatry over the world will mostly

fail to incorporate psychosocial functioning as an end to be pursued just as assiduously as symptomatic recovery. The main issue has to do with the formation of psychiatrists and other healthcare professionals: finding ways to educate clinicians so that they can diagnose symptoms, risk and comorbidities more precisely and efficiently, communicate results in a way that is not traumatising or stigmatising, and deliver care according to the needs of a particular patient remains a considerable challenge (Riecher-Rössler, McGorry, 2016, p.184).

Additionally, striving for the preservation and amelioration of psychosocial functioning might require resources and institutional frameworks that would not be as necessary if symptomatic recovery was the sole aim of pre-onset early intervention in psychiatry: the prescription of pharmacological and nonpharmacological treatments, the provision of CBT and other psychotherapies could be envisaged within existing mental healthcare structures, especially if early intervention centres were unavailable. Limiting pre-emptive psychiatry to diagnostic models based on the APS therefore runs a significant risk of focusing almost exclusively on symptomatic recovery in many circumstances, and more particularly in situations where early intervention centres and trained clinicians are inaccessible. Here, the response to vulnerability is therefore highly medicalised, and centred on the treatment of its symptoms first and foremost. I want to argue that this restrictive approach is problematically flawed:

The emphasis on relapse prevention should [...] be balanced with a focus on functional recovery and the cost of long-term continuous antipsychotic treatment, which evidence suggests may contribute to the longer-term suppression of functioning (McGorry, Goldstone, 2016, p.20).

Offering identified at-risk individuals services that aim for both symptom recovery and psychosocial functioning gives them a better chance to live 'meaningful, connected, and satisfying lives' (McGorry, Goldstone, 2016, p.15). Here, it is important to highlight that a decrease in psychosocial functioning is neither dependent on nor generated by psychotic symptoms alone. On the contrary, it has been shown that 'social

disability occurs way before the onset of the first psychotic symptoms' (Müller, Bechdorf, 2016, p.153). The main conclusion that can be drawn from this is that at-risk individuals would benefit greatly from more behaviourally-driven and sociotherapeutic support (Ibid., p.153):

Arguments in support of giving priority to evidence-based psychotherapy in favor of antipsychotic treatment in CHR are that (1) psychotherapy is more acceptable, tolerable and less stigmatizing to clients, (2) there is lesser risk of exposing false-positive persons to pharmacological side effects, (3) psychotherapy may be an effective treatment for false-positive persons (depression, anxiety disorders) and (4) psychotherapy is similarly effective in preventing transition to first-episode psychosis as antipsychotics, as well as in improving symptoms and functioning in CHR (Müller, Bechdorf, 2016, p.144).

Pre-onset early interventions could then become more focused on functional outcomes in a way that clearly aims for the enhancement of resilience and the capacity of at-risk individuals to deal more effectively with the risk factors and adversities they encounter in their daily lives, such as stress, and with 'less emphasis placed on psychosis prevention' (Rutigliano, Manalo, Fusar-Poli, 2016, p.65).

In a similar line of thought, positive symptoms have often been the main target of therapeutic interventions, both in pre-emptive psychiatry with the APS and in psychiatric care more generally. Recently, however, negative symptoms have started to be more thoroughly investigated, and the role they play in the development of full-threshold psychosis appears to be significant: 'there is increasing evidence to suggest that negative symptoms as well as cognitive and social functioning meaningfully restrict the prognosis' (Rutigliano, Manalo, Fusar-Poli, 2016, p.65). This has led to the conclusion that therapies and interventions which encourage at-risk individuals to work on their capacity to recognise emotions, for example, could have considerable benefits, as these would help them navigate social interactions more easily

and in a less anxiety-inducing manner. While the APS may indeed serve as a platform for these kinds of interventions (Rutigliano, Manalo, Fusar-Poli, 2016, p.65), the full array of possible preventive measures focused on psychosocial functioning remains, I argue, better incorporated into more comprehensive approaches. For instance, the level of unemployment in at-risk individuals remains considerably higher than in other groups; and ‘employment is an important pathway to other areas of functioning, and increases the opportunities for social and economic participation’ (McGorry, Goldstone, 2016, p.21). The implementation of measures to support employment in this particular group, like individual placement and support, could substantially help these young people remain more integrated into their community and into active life, in addition to helping them support themselves financially.

The impact of these kinds of measures aiming to preserve and increase psychosocial functioning in at-risk individuals is potentially considerable, and could be ‘the most effective model for promoting vocational recovery’ (McGorry, Goldstone, 2016, p.21). However, this requires the constitution of accessible support services and specialised early intervention centres, something which is encouraged more easily by a staged approach to psychiatric vulnerability than by DSM categories on their own: ‘the clinical staging model, which has been widely used in somatic medicine but virtually ignored in psychiatry, provides a coherent clinicopathological framework which can restore the utility of diagnosis and promote early intervention’ (Broome, Fusar-Poli, Wuyts, 2013, p.792).

To conclude, there is a tension between seeing psychiatric vulnerability as ‘a syndrome and collection of mental state abnormalities, if a somewhat fuzzy category, and as a region of the psychosis continuum with somewhat arbitrary borders’ (Broome, Fusar-Poli, Wuyts, 2013, p.793). What I defend here is the pertinence of identifying and analysing the implications of these distinctive conceptualisations of pre-emptive psychiatry in order to have an informed and productive ethical debate on the subject. Between primary and secondary prevention (or even selective and indicated prevention), between specificity and nonspecificity, and between symptomatic recovery and psychosocial functioning, two diagnostic models start to become distinguishable.

Where the APS and other attenuated syndromes that aim to encompass the prodrome of a specific disorder target ultra-high risk groups who are vulnerable by virtue of their clinical and positive symptoms, staged approaches open a wider scope of pre-onset early detection and intervention measures. Staging models are not in conflict with a diagnosis like the APS, but they expand the breadth of prevention in psychiatry beyond what the APS proposes, in a way that I deem ethically significant. Within staging models, vulnerability becomes an evolutive, deeply multifaceted and complex condition that can be affected in myriad ways, at different levels, by different people and institutions, adaptive to individual and chronological factors. It is now time to focus on the concrete interventions and structures that emerged from both these models, and evaluate how they address and respond to vulnerability.

II. PRE-ONSET EARLY INTERVENTIONS IN RESPONSE TO PSYCHIATRIC VULNERABILITY

I have already touched upon the divergences of approaches regarding the aim(s) of pre-onset early intervention in psychiatry between the two models at hand in the previous subsection, when I argued that staging models facilitated a focus on psychosocial functioning in addition to symptomatic recovery. The coming segment will further this line of thought, analysing how the structures in which pre-onset early detection and interventions take place apprehend the vulnerability of identified at-risk individuals. I have explained earlier why I place the ideas of relational autonomy and resilience at the heart of an ethical response to vulnerability. Here, then, one of the main problematics at play is centred on the manner in which pathogenic responses (to borrow Rogers, Mackenzie and Dodds' terminology) - meaning responses that can engender undue anxiety, stigma or over-medicalisation, to name a few - can be avoided in pre-emptive psychiatry.

The ambition of my dissertation has been to show that conceptualisations and modellings of vulnerability should be at the centre of the ethical debate on pre-emptive

psychiatry, seeing as pre-onset early detection and pre-onset early interventions hinge upon such conceptualisations, and ought to be able to integrate them in all their intricacy. It is now time to evaluate in more detail possible interventions in pre-emptive psychiatry.

1. Holistic Models of Youth Mental Health

One of the main concerns I articulated in my dissertation has to do with the inevitable slide of pre-emptive practices in psychiatry towards over-medicalisation, especially if diagnostic categories like the APS were to remain predominant. I believe that staging models, despite their heavy reliance on the identification of the 'neurobiological underpinnings of mental ill health' are, paradoxically, not diminishing at all 'the central value of psychological and social dimensions of illness and therapy': 'on the contrary, if fulfilled, it could add greatly to achieving the dream of a holistic preemptive psychiatry' (McGorry, 2013, p.394).

Indeed, while specialised early intervention centres have now started to be developed in several countries, like Australia, Germany or the United Kingdom, general psychiatric services will remain the first response available to many help-seeking at-risk individuals. The construction of useful and accessible early intervention centres requires considerable investments into (youth) mental health, with all the infrastructures, means and trained personnel that entails. Such expenditures cannot be taken for granted, especially in view of how limited healthcare resources already are. The selection of a diagnostic model or another must therefore account for how well it can be integrated into more general care structures, and how well it can encourage the creation of early intervention services. As such, I argue that the APS diagnosis on its own, while proven useful in specialised services, is more likely to lead to problems of overdiagnosis, overmedication, and over-medicalisation, discrimination and stigma. For example, while, in many instances, 'a patient will require a formal diagnosis to be eligible for healthcare benefits', and 'receiving an APS label may help defray initial costs with support from select insurance providers', this

might only compound the potential threat of discrimination by insurance companies (Mittal et al., 2015, p.553).

In this, I do join many of those who already expressed ethical concerns in the debate that surrounded the development of pre-emptive psychiatry - those who 'argued that the diagnosis of APS in general practice may lead to excessive therapeutics doing more harm than good as well as adding a significant burden, in terms of stigma, to persons experiencing attenuated psychotic symptoms' (Rutigliano, Manalo, Fusar-Poli, 2016, p.65). Because psychiatry is rarely subdivided into specialties in the way somatic medicine often is, non-specialised psychiatrists, who remain a large majority, are tasked with keeping up-to-date with research regarding a large variety of mental disorders. The DSM has thus become a widely used clinical tool, as it provides a way to standardise mental health research and diagnostic practices across borders and clinics, despite the fact that it doesn't include information or guidelines regarding treatment options.

To be fair, I want to insist again on the fact that proponents of the APS have clearly denounced resorting too early to the use of antipsychotics in the treatment of at-risk individuals. While the few studies that have been led on the potential for antipsychotics to delay or prevent a first psychotic episode have tended to yield rather positive short-term results (Addington, Heinssen, 2012, p.280), their use remains widely discouraged. This reluctance arose from the very same concerns mentioned just earlier, meaning the risks of stigmatisation that are associated with these treatments and their problematic side-effects, especially in view of the high rates of false positives (Conus, 2016, p.160). These side effects can include the development of metabolic syndrome, important weight gain, or sexual dysfunction (Ibid., 2016, p.160), which are admittedly very troubling in young persons who are at a crucial stage of their lives and for whom self-image remains pivotal. In addition to this, the long-term follow-ups of the medication trials cited above have 'revealed their failure to durably influence the rate of transition to psychosis' (Conus, 2016, p.160).

Correspondingly, the types of pre-onset early intervention that have been promoted by those who wish to see pre-emptive psychiatry gain traction generally tend to be as low threshold, as low stigma and as available away from traditional psychiatric settings as can be (Riecher-Rössler, McGorry, 2016b, pp.182-183). And this is so even if the APS were to remain the first and major instrument for early detection: the approach defended for UHR individuals is centred on the need to address problems and symptoms of which they are already aware (and which led them to seek help in the first place). In that sense, even though risks of a worsening of these individuals' condition and a transition to full-threshold psychosis should not be concealed, they should not be presented as the actual main issue (Riecher-Rössler, McGorry, 2016b, pp.182-183). Nonetheless, despite this strong awareness that the best responses to the UHR state should not be overly medical, a wider development of pre-emptive psychiatry worldwide makes the possibility of a slide towards over-medicalisation distinctly conceivable. I believe it would be amplified if the APS and other diagnostic categories following a similar model remained the sole focus of early detection methods, for the reasons outlined above.

Nevertheless, I am not arguing either that integrating the APS into the wider framework of nonspecific staging models would provide a comprehensive and satisfying solution to this problem. Early intervention services would remain the best option over general care structures, and would thus still require considerable investments in youth mental health. However, I contend that if the APS were to be more clearly encompassed within staging models and combined with the ideas of primary prevention, nonspecificity and psychosocial functioning, risks of over-medicalisation would be decreased in the wider development of pre-emptive psychiatry. Staging models offer a detailed conceptual framework that is integral to the good development of pre-emptive psychiatry. By providing a more comprehensive account of the vulnerabilities shared by at-risk individuals, they might be helpful in bringing better awareness of possible - and less 'pathogenic' - responses (at different levels and by different agents). Therefore, I want to outline the kinds of pre-onset early intervention that nonspecific staging models could help bring to the fore.

The fact that the concept of graduation is built into the framework of staging models grants them a considerable advantage. They are, at their core, turned towards the adaptation of treatment to each identifiable stage of a disorder. Their aim is twofold: lessening risk factors, and enhancing resilience. As such, they can facilitate a more far-reaching integration of what proponents of pre-emptive psychiatry argue should be a progressive answer to psychiatric vulnerability: ‘simple, safe and benign interventions’ as a first line, only followed by more complex treatments for UHR individuals who do not respond to these (however, the optimal duration - or tapering down - of these interventions before reaching such a conclusion remains unclear) (Riecher-Rössler, McGorry, 2016b, p.185). Another asset of nonspecific staging models resides in the ‘individualisation’ of risk that they promote (likely better than the APS on its own can, as it relies so heavily on clinical features of vulnerability):

A sufficient estimation of the individual time to transition by clinical variables alone does not seem expectable. Including measures of neurobiological processes associated with the development of a first manifest psychosis could fill this gap and might enable an improved estimation of the magnitude of risk (Ruhrmann, 2016, p.134).

Multifactorial prediction models (specific and nonspecific) could help tailor both the detection of vulnerabilities, and the interventions best suited to them. Because staging models facilitate the integration of these various facets of risk, they can help bolster more targeted (and less invasive) interventions, all the while covering a wider array of vulnerabilities: ‘another important step will be the inclusion of courses related measures, including changing patterns of environmental risk and protective factors and their interaction with the dynamic individual state of vulnerability and resilience’ (Ruhrmann, 2016, p.139). So what shape can these more ‘benign’ and targeted interventions take? Can they really be implemented in non-stigmatising settings?

At-risk individuals and their families need clear information from mental health professionals who deal with prevention regarding the notions of risk and

vulnerability, as well as assistance in coping with this kind of information. In that sense, a variety of interventions can become particularly pertinent, such as monitoring, motivational interviewing concerning substance use (a recognised risk factor), supportive therapies, cognitive behavioural therapy, and family therapy (Müller, Bechdorf, 2016, pp.153-154). For example, Integrated Psychological Interventions (IPI) can include up to 55 sessions over a period of 12 months, including individual therapy, group sessions, cognitive remediation and counselling for relatives (Ibid., 2016, pp.149-150). Individual therapy sessions ‘incorporate a number of different modules including psychoeducation, symptom management, stress management and crisis management’; group sessions are composed of ‘activity schedules and work on positive affect such as mood and enjoyment, social skills and problem solving’; while cognitive remediation ‘involves computer-based training of attention, memory and concentration’ (Müller, Bechdorf, 2016, pp.149-150). These kinds of integrative interventions aim to operate on several levels: they are supposed to help at-risk individuals and their families understand risk and vulnerability better so as to encourage them to take measures when possible, or react to adverse circumstances in a non-detrimental manner.

According to the literature, specialised early detection services can help at-risk individuals cope with their attenuated symptoms, their social isolation, and even lessen potential stigma instead of enhancing or causing it (Uttinger, Pappmeyer, Riecher-Rössler, 2016, p.69). Psychoeducational Multi-Family Group (PMFG) treatment can be made accessible to at-risk adolescents and their primary caregivers. Participants have reported benefiting from group sessions like these, and they have demonstrated improvement in symptoms and functional outcome: ‘family processes and individual coping skills hypothesized to underlie changes in symptoms and functional outcome did change significantly over time in predicted directions’ (O’Brien, 2007, p.330).

Several pre-onset early intervention programmes have attempted to implement this more holistic vision of mental health. First among them is Headspace, the National Youth Mental Health Foundation in Australia, headed, among others, by

McGorry. Headspace provides pre-onset early intervention mental health services to identified at-risk youth (between 12 and 25 years old, generally). Programmes like this one are mostly non-medicalised: they cover four core areas: mental health, yes, but also physical health, work and study support, and alcohol and other drug services. Their first objective is to provide participants with an accessible, safe and non-stigmatising environment. Professor Jan Scott, interviewed in Newcastle upon Tyne on the 15th of January, 2015, explained the reasoning that drives these programmes:

We need youth mental health. We need to make services easily accessible to young people who usually don't go see their GPs, who don't think in terms of mental illness and don't want to see middle-aged, middle-class people in suits sitting in offices. We see in the programme in Australia (Headspace clinics) young people who are failing at school or at work, and who may have any spectrum of diagnoses or no clear diagnosis at all. As well as inputs from a keyworker (and medics if necessary), they can attend a group-class two or three afternoons a week for things like physical fitness, art classes (which help facilitate discussion of emotions, etc)... And in the middle of the afternoon there are 'tea-time sessions' which give them the occasion to talk about sleep patterns, coping with stress, and other topics. We observed that boys initially prefer physical activities, while girls favour art classes; but gradually they all start to take part in everything. The important thing is that they get social interactions; they get more structured routines in their days because they are expected to turn up to most of the sessions...this makes life a little less stressful, a little more predictable and a bit more understandable and manageable... Eventually, you can help get them back to school or employment. That's not about diagnosis – it has very little to do with it, actually.

Following the findings highlighted by proponents of staging models, Headspace and other programs like it thus favour a holistic model of support. Within the staging framework, then, environmental, modifiable factors, as well as underlying pathophysiology, become major targets for preventive intervention.

The problem of making these interventions as widely accessible and non-stigmatising as possible remains. While ‘centrally located buildings with a loose or no visible association to psychiatry (e.g. not in the same building as acute psychiatric wards) would be best suited for that matter’ (Uttinger, Pappmeyer, Riecher-Rössler, 2016, p.77), pre-emptive psychiatry cannot always take place in such dedicated environments. Accessibility is particularly decisive here, as more vulnerable populations tend to be those who suffer from a lack of access to these interventions the most:

Evidence suggests that there are disparities in the prevalence of mental health problems and access to mental healthcare for high-risk groups [...] These disparities call for a change of practice that will enhance inclusivity and accessibility to safe and effective services as part of a total systems approach to public health (Bhui, Dinos, 2011, p.418).

Several solutions have been envisaged to facilitate access to early intervention services and other structures: simplifying referral pathways, for example, or the cultivation of close links with local providers, as well as the ‘youth-friendliness’ of the service and its structure, which lies in part in its detachment from overly medicalised settings (McGorry, Goldstone, 2016, p.23). Regarding the Headspace programme, young people, it seems, were often more likely to present with mood and anxiety symptoms and disorders, ‘self-reporting their reason for attendance as problems with how they felt’. However, while client demographic characteristics did tend to reflect population-level distributions, and clients from regional areas and of Aboriginal and Torres Strait Islander background were particularly well represented, those who were born outside Australia were underrepresented (Rickwood et al. 2014, p.108).

All in all, relying solely on the APS and similar diagnostic categories to promote the development of pre-emptive psychiatry, by limiting the idea of vulnerability to its clinical and symptomatic manifestations, arguably leaves the door more open to problems of over-medicalisation. By being integrated into staging models, though, it could encourage the promotion of a more holistic vision of both psychiatric vulnerability and mental health, bringing a larger array of pre-onset early interventions to the fore. Hopefully, it would also help highlight the need for specialised youth mental health services, separate from more traditional and clinical settings and better able to place the ideas of resilience and relational autonomy at the heart of pre-emptive psychiatry.

2. Relational Autonomy and Resilience in Pre-Emptive Psychiatry

I reach, at this stage, the crux of the argument I want to bring forward in this dissertation: by re-centring the ethical debate that surrounds the development of pre-emptive psychiatry around conceptualisations of vulnerability (and their integration into possible diagnostic models), it becomes possible to go beyond a somewhat simplistic challenge to pre-emptive psychiatry as a whole. Incorporating specific diagnostic categories like the APS into the larger framework of nonspecific staging models accentuates the existence of various developmental courses in at-risk individuals. This, in turn, facilitates the promotion of less medicalised pre-onset early interventions, which would - as far as possible - take place in non-stigmatising settings that offer holistic forms of support.

In a bid to avoid pathogenic responses to identifiable vulnerabilities, resilience and relational autonomy can therefore become centre-stage in pre-emptive psychiatry. Of course, this doesn't erase the ethical concerns which were raised on several occasions throughout this debate. Nevertheless, I argue that this shift in focus encourages more constructive conversations on this topic, in a way that a frank

opposition between tenants of 'biomedical psychiatry' and its detractors cannot really do.

There is a certain wariness surrounding attempts to deal with young people's vulnerability: many of these responses are perceived to be more pathogenic than actually helpful. One of the main reproaches levelled against such attempts is related to their links with the mental health sector and their 'medicalising' rhetoric or services. Adolescents and young adults who go through social and emotional struggles should not necessarily be under the supervision of mental health professionals: the assumption that 'discourses and practices associated with 'mental health' are necessarily helpful, meaningful or desirable to young people experiencing distress, or for those struggling to manage difficult circumstances' should perhaps be questioned more than it currently is (Fogg, 2016).

However, while the rates of false positives in the identification of individuals specifically at-risk for psychosis have been mentioned on several occasions throughout this dissertation, I want, now, to point to the other side of that coin: the (potential) duty to inform these same individuals when preventive and pre-emptive measures can be envisaged and have been shown to be helpful:

Full disclosure promotes autonomy, allows for the clearest psychoeducation about additional risk factors, helps to clarify and/or correct previous diagnoses/treatments, facilitates early intervention and bolsters communication between providers but there are important considerations involving heritability, comorbidity, culture, and stigma. Non-disclosure advances non-maleficence by limiting stigma and stress (which may inadvertently exacerbate the condition), and confusion (related to the rapidly evolving diagnosis) in a sensitive developmental period but is complicated by varying patient preferences and the possibility that, as new treatments without adverse effects become available, the risk with false positives no longer

justifies the accompanying loss of autonomy (Mittal et al., 2015 p.543).

While predictive validity remains lower than could be hoped for (and perhaps too low to justify some labels or the recourse to pharmacological and/or medical treatments), transition rates for at-risk individuals remain significantly higher than for the general population. Here, vulnerability starts to be identified at a level that could justify the involvement of mental health professionals. Nonetheless, it has been argued that at-risk individuals may have a legitimate interest in not knowing about their vulnerabilities and exposure to risk, so as to avoid deleterious psychological consequences:

A person who learns to be at high risk of developing a disorder that is stigmatised and associated with a lifetime of struggle can suffer psychological harm or discrimination. A person who is diagnosed with such a disorder can lose hope and self-esteem and thus compromise the successful management of his or her symptoms (Bortolotti, Widdows, 2011, p.673).

This 'right not to know', despite the criticisms levelled against it, has been 'explicitly recognised by various recent ethical and legal instruments relating to biomedical issues' and can be seen as an 'expression of autonomy' (Andorno, 2004, p.436). But such a right cannot be presumed: it must be 'activated' by the individual's explicit choice (Ibid., 2004, p.435). In that sense, at-risk individuals, and more particularly those who seek help, should be made aware of the measures they can take or of the interventions in which they can partake so as to overcome their difficulties. Whether or not the notion of risk should be an integral part of the pre-emptive discourse is a question that has been directly addressed or subjacent throughout this dissertation, and so will not be addressed here. Identifiable at-risk individuals are generally at a stage in their lives when they are 'finishing their education and beginning their working lives, developing intimate relationships, and moving from their families of origin to establish themselves as independent adults' (McGorry, Goldstone, 2016, p.16). It is therefore crucial to

elaborate pre-onset early interventions that account for this in a satisfying manner, without undue pressure, stigma, or unjustified treatments.

Interestingly, the few studies that have been concluded on potential stigma experienced by at-risk individuals tend to show that fear of stigma itself has been more detrimental to them than actual experiences of it: there is an 'existing gap between the fear of disclosing their problems that causes patients to withdraw and the actual support and acceptance they experience in real life if they are able to overcome the fear' (Uttinger, Pappmeyer, Riecher-Rössler, 2016, p.74). The argument follows that helping these young at-risk persons acquire relevant understanding and knowledge about their condition, as well as supporting them in becoming more autonomous and resilient, can actually play an important role in lessening this fear of stigma. This 'internalised' stigma seems to be rooted in the same kinds of (very common) stereotypes about mental illness that could generate the stigmatising responses that they fear so much. This, in combination with the insight that some of their own experiences (or attenuated symptoms) are anomalous, can engender very damaging chain-reactions: the uncertainty about what they feel is 'wrong with them' and the fear of 'going mad' can contribute in a problematic way to long delays in seeking help and reaching early intervention services (Uttinger, Pappmeyer, Riecher-Rössler, 2016, p.75). This is a particularly vicious circle:

Comparison of the risk symptoms with internalized cultural norms by the patient (e.g. negative prejudices against psychic illnesses among the general public) may result in catastrophic appraisals, such as 'I am crazy and totally different to other people'. Such an appraisal could exacerbate symptoms, as well as feelings of depression and anxiety, which are then maintained by safety behavior and through poor perception of the self and others. Interventions incorporating strategies, such as normalization, and addressing cognitions and cognitive core beliefs with flexibility are therefore important (Müller, Bechdolf, 2016, p.149).

As such, giving these young people access to services and centres in which these experiences are overtly discussed and normalised can be extremely helpful in overcoming such kinds of anxieties - and have been said to be so by participants themselves. Conversations using informal and everyday language, or the lack of dramatic or catastrophic reactions on the part of trained professionals and support workers can play a significant role in this (Uttinger, Pappmeyer, Riecher-Rössler, 2016, p.77). It seems that early detection services help at-risk individuals 'cope with symptoms and potential stigmatization rather than enhancing or causing the latter' (Uttinger et al., 2015). Additionally, Interpretative Phenomenological Analysis (IPA) have also been used to conduct an in-depth qualitative study of a small sample of EIP service-users: 'it appears that participants' accounts were interpreted as representing a shift from an initial avoidance of acknowledging their experiences, towards an acceptance of their presence' (Harris et al., 2012). 'Initial contacts with the EIP service encouraged participants to confront their experiences. Whereas, later on, the service provided an opportunity for some participants to talk about the experiences and develop ways of recognizing symptoms, both of which were interpreted as initial steps towards an acceptance and control of their experiences' (Ibid.).

One of the main reasons why I claim that relational autonomy can occupy a central place in psychiatric pre-emptive care is to be found in the forms of support offered in integrated psychological interventions, and, in particular, in psychoeducation. Available to at-risk individuals themselves or their family members, psychoeducation groups are entirely turned towards the provision and integration of first-hand information that can enable participants to deal with the difficulties they face, and to flourish within their families, social circles and communities. Self-help and support groups, in particular, do so with the understanding that transfers of information between people who go through similar experiences, in a safe and non-judgemental place, can provide a valuable opportunity to vent one's frustrations and share one's concerns, insights or strategies. Psychoeducational programmes for at-risk individuals have been shown to be beneficial with both objective measures and patient's subjective evaluations (Hauser et al., 2009, p.141).

Here, autonomy arises from both comprehension and sharing; and the importance of that capability cannot be understated: 'patients with psychotic disorders who receive psychoeducation have lower relapse and rehospitalization rates, higher social and global functioning, and improved quality of life compared to patients who receive standard treatment alone' (Müller, Bechdolf, 2016 p.145). The impact of psychoeducation sessions on at-risk individuals have also been investigated: a significant 'increase in knowledge, higher quality of life, a reduction of the feeling of being entrapped by the risk symptoms and an improvement in the global clinical impression' were thus established (Ibid., 2016, p.145).

The provision of holistic, multimodal interventions are, in this way, more effective in enabling young at-risk persons maintain or regain their capability to interact with others in various social settings, and pursue their academic or professional careers. Elements like these ones can be critical in pre-emptive psychiatry, and are more clearly tied to staging models than to attenuated syndromes like the APS:

A holistic and integrated biopsychosocial approach to clinical intervention, which takes into account the developmental stage of the young person, as well as the stage of their illness; the focus of treatment is not only on the amelioration of distressing symptoms and achieving symptomatic remission, but also strongly emphasises psychosocial interventions designed to assist the young person to maintain or regain their normal educational, vocational, and social developmental trajectory to enable a full functional recovery (McGorry, Goldstone, 2016, p.23).

As such, reducing the development of pre-emptive psychiatry to the elaboration of diagnostic categories like the APS can be problematic, both on the part of proponents and of detractors of pre-emptive psychiatry. It can lead to a stronger focus on medicalised interventions than is really warranted, thus disregarding the need

for multimodal, nonspecific and holistic approaches to mental health, which are all the more crucial in the earliest stages of mental disorders.

Despite the efforts taken by those who defend the prospects for pre-emptive psychiatry to be good for at-risk individuals (and society more generally), however, several obstacles remain - some pragmatic, others more theoretical or ethical. If preventive measures are to become a cornerstone of psychiatric and psychological care, these problems will need to be overcome in a satisfying manner.

III. REMAINING CONSIDERATIONS, BOTH PRAGMATIC AND ETHICAL

The development of pre-emptive psychiatry has not gone smoothly, to say the least. As I mentioned in Chapter 3, its proponents immediately had to face well-known criticisms against overdiagnosis, discrimination, stigmatisation, overmedication, and over-medicalisation. Working on the earliest stages of mental disorders is, for its detractors, a new way to widen pre-existing diagnostic categories, thus participating in the 'disease-mongering' efforts of those who are often suspected to collude with the pharmaceutical industry. In reaction, defenders of prevention in psychiatry sometimes adopt an overly cautious and calculating stance, which (I argue) actually works against them in this instance. Their strong fixation on the distress criterion, which is closely associated with positive symptoms, the UHR state and the APS diagnosis often diverts attention from the more holistic and multimodal pre-onset early interventions they are attempting to implement. This, in addition to difficulties in grounding early detection methods and less medicalised pre-onset early interventions in evidence-based practices, accentuates risks of seeing pre-emptive psychiatry adopt a more pernicious form.

1. Grounding Pre-Emptive Psychiatry in Evidence-Based Practices

In order to garner attention, investments and recognition from public policy-makers, scientists, medical professionals and the general public, developing practices must be grounded in evidence. Exploring whether or not this requirement is really legitimate and sensible is, unfortunately, beyond the scope of this project. What remains is that the pursuit of evidence is the primary preoccupation of those who want to develop pre-emptive psychiatry. Early identification methods and pre-onset early interventions must imperatively be proved effective if they are to become an integral part of mental health care.

Even in terms of cost-effectiveness or cost-utility, reaching accurate estimations regarding preventive measures can become quite arduous. The development of early intervention services in Australia and in the United Kingdom showed that some governments were ready to invest considerable sums of money in order to develop pre-onset early detection and interventions as part of standard mental health services. The rationale behind this is that 'there is a higher success rate if psychotic symptoms are treated early than if they are treated after they have been present for some time', and that it decreases the 'psychosocial impact of a psychotic illness that leads to secondary disability' (Pelosi, Birchwood, 2003, p.196). But these assertions need to be empirically demonstrated in order to justify the continuation of this use of limited resources, when some remain convinced that proponents of pre-emptive psychiatry's 'wishful thinking has misled health policymakers who are diverting resources to specialised teams, making it even more difficult to provide decent care to people with severe and enduring mental disorders' (Ibid., 2003, pp.196-197).

Nonetheless, while short-term costs have been shown to be significantly higher in specialised early intervention services compared to more traditional care structures, long-term costs are said to be greatly decreased thanks to lower outpatients

costs (Phillips et al., 2009, p.28; McCrone et al., 2010, p.381). This could be in large part because early intervention services tend to lead to better vocational and quality of life outcomes (McCrone et al., 2010, p.377). Specific preventive interventions are thus said to save substantial resources in the longer term, first because they reduce treatment costs associated with full-threshold psychotic disorders (by preventing or delaying severe episodes, or by improving long-term prognosis), and secondly, because they improve UHR individuals' overall experiences and quality of life (Phillips et al., 2009, p.34). However, quality of life is notoriously difficult to integrate adequately into cost-utility studies, even though its significance is now more widely recognised (Roberts, Reich, 2002, p.1055; McCrone et al., 2010, p.381).

Additionally, encouraging a more universal public health approach relies on the idea that youth mental health services can have a considerable impact - an idea which needs to be substantiated. Strengthening protective factors like social capital, family relations, educational and academic achievement by 'helping people become more resistant or resilient to the risks imposed by adverse circumstances' (Bhui, Dinos, 2011, p.418), requires a stronger focus on public mental health and models of vulnerability. Therefore, it is vital for the future of pre-emptive psychiatry to consolidate evidence showing that balancing universal or selective interventions with more directed ones for those who are most vulnerable is a necessity. However, these kinds of short-term, massive investments into public and youth mental health often require a high level of evidence themselves, both of their economical and of their medical utility.

Evaluating the actual impact of inequalities, discrimination, trauma and other early adversities remains quite arduous, considering how multifaceted they can be. Just like evaluating how the strengthening of resilience can really ameliorate a person's condition and prevent a deterioration of that person's health can be exceedingly challenging. Professor Jan Scott explained how so, based on her experiences in the Australian Headspace programme:

One of the projects I am working on in Australia at the moment is all about finding young children with environmental risks, and who may be showing some 'soft' signs of vulnerability (e.g. they might be more anxious than their peers, etc). We're looking at mentoring schemes and 'out of school' activities to develop self-confidence, self-esteem, etc. The idea is to make them more resilient and see if, in 10 years' time, they're less likely to have serious problems. Even this intervention with children, you could argue, is getting to be too late. The problem is that, at these very early stages, unless you offer such interventions for a lot of children, you won't be able to show that it stopped a progression to psychosis or bipolar disorder in adolescence or early adulthood. The interventions and outcomes won't be specific enough; there will only be very generic changes in population resilience with this 'public health' type strategy. So the number of children who develop or demonstrate problems in adolescence is lower at the end. However, to show an impact on severe mental disorders you probably need to use a 'closing-in strategy' targeting youth at risk and focus a study on groups of adolescents that are already around stage 1-2 and in the peak age range for onset of 'adult'-type mental disorders. This is probably where you have more chance of showing a difference in transition rates i.e. that this many converted versus did not.

(Professor Jan Scott, interviewed in Newcastle upon Tyne on the 15th of January, 2015).

One of the reasons why medication remains so widely used and unquestioned in psychiatry is related to the fact that intensive psychosocial interventions, which could become an integral part of psychiatric care (pre-emptive or not), are not yet evidence-based (McGorry, Goldstone, 2016, p.20). Further exploration of these kinds of intervention has thus become a key issue for future research.

2. Pre-Onset Early Detection of Psychiatric Vulnerability and Pre-Onset Early Interventions Outside of Psychiatry

The researchers who have been the driving force behind the development of early detection methods for at-risk individuals mostly come from the field of psychiatry. They were the first to try and elaborate criteria to recognise the prodrome of psychotic disorders and identify vulnerability markers.

If transition rates between the at-risk mental state or the APS and full-threshold psychosis have reached the level they did, it is because psychiatrists have concerned themselves with the necessity to ameliorate the prognosis of their patients, and studies appeared to point to pre-onset early intervention as their best hope. Unacceptable delays in reaching a correct diagnosis have been said to be responsible for the fast deterioration of many patients' mental state, and so the early and accurate identification of those individuals who are on the path towards full-threshold psychosis became crucial. It might appear, then, that the development of pre-onset early detection and interventions is firmly anchored in psychiatry.

What I want to highlight, however, is the need for psychiatrists themselves to allow for and encourage pre-emptive measures that they might not, as psychiatrists, be best placed to carry out. The response to psychiatric vulnerability must exceed the bounds of purely psychiatric care.

I have already mentioned difficulties related to the decline of transition rates in the past few years, which could be explained by the fact that individuals who have been identified as at-risk are simultaneously accessing pre-onset early intervention services. It is not simple to assess which of these interventions has proved more effective than others, and what might clarify this downward curve in transition rates. In line with what was developed earlier in this chapter, it seems that some of them have a lot to do

with the provision of supportive networks and relationships to at-risk individuals, with the time taken to inform and educate them about their condition, or with their access to non-stigmatising environments in which they can find their marks again.

As mentioned previously, two broad categories of pre-onset early interventions can be implemented in psychiatry: pharmacological treatments and psychotherapies. If the latter are deemed more appropriate and ethically-justifiable than the former (when the pharmacological treatments in question are characterised by problematic side effects), the role of psychologists and other therapists is to become integral in the development of holistic models of youth mental health. The prevalence of CBT in pre-onset early intervention could be questioned, and its efficacy tested against other approaches to psychological therapy (or combined to them). Teachers, educators, social workers and a multitude of other professionals could also see their role in the primary prevention of serious mental health disorders extended, in great part thanks to the inputs and data produced by psychiatric research.

Defending staging models over attenuated syndromes means defending a vision of pre-emptive psychiatry that highlights the necessity for a cohesive and wide array of responses to vulnerability, many of which are related to education, social support and other fields, more than they are to medical and psychiatric care. A remaining challenge for proponents of pre-emptive psychiatry is thus to actively encourage and promote a wider recognition of our duties to vulnerable individuals.

As I pointed out in Chapter 5, Nussbaum's capabilities approach, associated as it is with the notions of fertile functionings and corrosive disadvantages developed by Wolff and de-Shalit, indicates that a society of equals is a society in which 'disadvantages do not cluster, a society where there is no clear answer to the question of who is the worst off' (Wolff, de-Shalit, 2007, p.10). One of the aims of pre-emptive psychiatry might thus be to participate in a more general effort to encourage the dedication of scarce resources to the improvement of a population's most fertile capabilities and the reduction or elimination of corrosive disadvantages (Nussbaum, 2011, pp.98-99).

I hope that the arguments I have presented in this dissertation can convince psychiatrists and other medical professionals, as well as policy-makers and ethicists working on the development of pre-emptive psychiatry, to pay closer and more direct attention to the concept of vulnerability, and on the way it is integrated within various diagnostic models. Despite its crucial role in the elaboration of both pre-onset early detection and pre-onset early interventions in psychiatry, as well as in the ethical debate that has surrounded them, the notion of vulnerability has too rarely been acknowledged as central. The main contribution I hope to have made in this domain is the proposition of a re-framing of this debate around vulnerability, focusing first and foremost on morally acceptable or imperative responses to our growing ability to identify and detect those individuals who are more likely to suffer from mental health problems in the future. I strongly believe that this can lead to more constructive and collaborative conversations on this topic. I would welcome the presentation of competing accounts of vulnerability - accounts which might encourage different kinds of moral responses or which might fit better with alternative diagnostic models. So long as this discussion moves away from the simplified and dichotomous yes/no question outlined at the start of this dissertation regarding the worth of implementing pre-onset early detection and interventions in psychiatry, I believe that it can contribute more readily to the promotion of ethically-informed pre-emptive measures in psychiatry.

Conclusion

One of the driving forces of this project has been my wish to contribute constructively to the debate surrounding the ethics of pre-emptive psychiatry. In contrast to my initial intent to establish and highlight the existence of a series of problematic ethical issues linked with the development of pre-onset early detection and interventions in psychiatry, I became convinced that I needed to leave behind the more conservative reflexes which can be characteristic of applied ethics.

It is the role of those who concern themselves with ethical considerations to alert others about the potential outcomes, the hidden dangers or the ungrounded assumptions attached to the development of a new practice or technique. The development of pre-emptive psychiatry was not spared these kinds of cautionary predictions and forewarnings: to list them all once again would have brought little else than a new drop in an already large ocean of objections. Proponents of pre-emptive psychiatry, made well-aware of these potential pitfalls, had integrated these reflections into their own deliberations already, well-enough that the full introduction of a new diagnostic category into the DSM was delayed.

However, the debate on the ethics of pre-emptive psychiatry had become more subdued, on the brink of deeming pre-emptive psychiatry as a whole too perilous for at-risk individuals, and in wait of further evidence-based criteria and measures - either to bring it back to the realm of ethically-acceptable practices, or to condemn it definitively as harmful. In order to come out of this deadlock and contribute something of value to this discussion, I thus believed it necessary to appraise whether or not the debate on the ethics of pre-emptive psychiatry had fulfilled its own role adequately.

I hope to have been successful in showing that, in some ways, it failed to do so: re-framing this conversation around what is really at the heart of current pre-emptive efforts - meaning models of vulnerability - has allowed me to consider the possibility of

developing ethically-informed pre-onset early detection and intervention measures in psychiatry.

I have found that, in a considerable number of publications on the subject, the Ultra High Risk criteria, the At-Risk Mental State and the Attenuated Psychosis Syndrome remained the sole focus of ethical enquiries, neglecting other models of vulnerability proposed for the development of pre-emptive psychiatry. This led the debate on the ethics of pre-onset early detection and interventions in psychiatry to be built around one central question, which can be formulated as such: is pre-emptive psychiatry worth the risks to which it gives rise? A simple yes/no question, which set proponents of pre-emptive psychiatry on one side, and its detractors on the other. But exploring various models of vulnerability and the repercussions they might have on the implementation of pre-onset early detection and intervention measures sheds a different light on the potential dangers that are associated with them.

The concept of vulnerability is widely recognised to generate strong normative statements, whatever philosophical tradition serves as a frame of reference. It might thus be possible to identify and understand more adequately the responsibilities and duties we have when faced with the possibility to detect vulnerability, so as to assess and test different diagnostic models and suggested interventions against them. In order to do that, however, a precise account of vulnerability and of the normative framework within which it stands was much needed. I thus determined that Rogers, Mackenzie and Dodds' work on inherent and situational vulnerabilities, the latter including the generation of pathogenic vulnerabilities, offered a conceptualisation of vulnerability that fit strikingly well with the preoccupations and findings of researchers working on early detection in psychiatry.

It allowed me to formulate available diagnostic models in a philosophically-rich manner, which also exposed the explanatory power of Rogers, Mackenzie and Dodds' account, in line with the methodological criteria I had outlined in Chapter 1. As for the normative framework associated with this conceptualisation of

vulnerability (to which the notion of pathogenic vulnerabilities already alluded), I established that Nussbaum's capabilities approach and her outline of central capabilities, combined with Wolff and de-Shalit's notions of fertile functionings and corrosive disadvantages, provided a clear, adaptable and comprehensive structure. In consonance with Childress and Beauchamp's principles of autonomy and beneficence, which must be specified and balanced against one another, this normative framework highlights our responsibilities to preserve and promote vulnerable individuals' autonomy, and the necessity to favour empowerment over outrightly protective responses.

Based on the inputs of these various accounts, I found that two models of vulnerability could be said to compete with each other in pre-emptive psychiatry. On one side, attenuated syndromes like the APS, tailored for indicated secondary preventive measures, specific and turned towards symptomatic recovery, which could be argued to conceptualise vulnerability as a diagnosable disorder in need of medical intervention and treatment. On the other hand, staging models of psychiatric vulnerability, which encompass attenuated syndromes within a wider framework, integrating the possibility of selective primary prevention and nonspecificity, and turned towards psychosocial functioning in addition to symptomatic recovery. Staging models, I argued, are more in line with the account of vulnerability I developed previously, facilitating the elaboration of measures and interventions which aim to preserve and promote at-risk individuals' capacities for self-determination and resilience, and which rely on supportive and empowering networks, relationships and environments.

My aim was not to attack or dismiss attenuated syndromes as models of vulnerability, but to stress the importance of integrating them into a more comprehensive and adequate conceptualisation of vulnerability - in other words, of integrating them into the framework of staging models of vulnerability. Despite remaining challenges, which point to the difficulty of relying on evidence-based pre-onset early detection methods and early interventions, as well as to the necessity of responding to psychiatric vulnerability through fields other than psychiatry itself, I

therefore conclude that staging models offer a solid opportunity to develop ethically-informed pre-emptive measures in psychiatry.

I hope that this dissertation has brought something of value to the debate surrounding the ethics of pre-onset early detection and interventions in psychiatry by re-framing it around conceptualisations of vulnerability. I am convinced that, in doing so, the conversations we may have around their development can take on a more constructive outlook. There are obviously several ways in which one might decide to dispute the account of vulnerability I have outlined here, favouring another alternative and defending different responses to it as more ethically acceptable. But it would also mean that the current form of the debate, which sees pre-emptive psychiatry as a whole under fire and questioned for the threat it poses to at-risk individuals, has been somewhat remodelled.

By following more closely the preoccupations of the mental health professionals who are involved in the elaboration of early detection methods and associated interventions, I believe that ethicists can offer inputs which might cease to be solely incapacitating. What current pre-emptive efforts have shown is that we are now capable of identifying and predicting psychiatric vulnerability to a level that was previously unknown: it seems to me more beneficial to explore the responsibilities we may have in view of these growing capacities, rather than focus immediately on the problems that arise with them.

It is also my hope that mental health professionals, and all others who are involved in preserving and promoting at-risk individuals' capacities for self-determination and resilience while lessening the impact of risk factors, will be better able to articulate their motivations when these are not entirely therapeutic. The work they carry out requires considerable confidence and investments into youth mental health, in a way that goes beyond simple psychiatric care: public health in general has a considerable role to play in the prevention of serious mental disorders. Despite my misgivings about Goodin's relational account of vulnerability, I strongly agree with what drives it: the conviction that we have, as a state and as a society, a

strong responsibility to react adequately to vulnerability. Where Goodin speaks of protection, I favour empowerment and relational autonomy, but the weight of that responsibility is no less important.

I have no wish to downplay the relevance of the ethical issues that the development of pre-emptive psychiatry generates, but I believe that it is the duty of ethicists to accompany and help guide these developments, rather than simply warn against them. The efforts of mental health professionals, policy-makers and others involved in pre-emptive psychiatry must be substantiated and promoted if they are to receive sufficient backing and investments to become ethically viable.

Hopefully, this dissertation can contribute to a more general shift away from a debate that I have often found oversimplified, rigid and dichotomous, and towards a more enriching conversation about how we ought to respond to our growing capacity to identify vulnerabilities in both individuals and populations.

Re-framing the debate on the ethics of pre-emptive psychiatry around models of vulnerability is a first step towards developing ethically-informed pre-onset early detection and intervention measures. It helps delineate several models of vulnerability from each other, which could have vastly different implications in the development of pre-emptive measures. Staging models, in that sense, encourage the implementation of pre-onset early interventions respectful of at-risk individuals' need for support in the preservation and the promotion of their capacities for self-determination and for resilience.

Bibliography

Addington, J., Epstein, I., Liu, L., French, P., Boydell, K.M. and Zipursky, R.B. (2011) 'A randomized controlled trial of cognitive behavioral therapy for individuals at clinical high risk of psychosis', *Schizophr Res*, 125(1), 54-61, available: <http://dx.doi.org/10.1016/j.schres.2010.10.015>.

Addington, J. and Heinssen, R. (2012) 'Prediction and prevention of psychosis in youth at clinical high risk', *Annu Rev Clin Psychol*, 8, 269-89, available: <http://dx.doi.org/10.1146/annurev-clinpsy-032511-143146>.

Alder, R.G., Young, J.L., Russell, E.I., McHardy, D.R. and Linscott, R.J. (2013) 'The impact and desirability of news of risk for schizophrenia', *PLoS One*, 8(4), e62904, available: <http://dx.doi.org/10.1371/journal.pone.0062904>.

Alloy, L.B., Abramson, L.Y., Urosevic, S., Walshaw, P.D., Nusslock, R. and Neeren, A.M. (2005) 'The psychosocial context of bipolar disorder: environmental, cognitive, and developmental risk factors', *Clin Psychol Rev*, 25(8), 1043-75, available: <http://dx.doi.org/10.1016/j.cpr.2005.06.006>.

Alvarez-Jimenez, M., Bendall, S., Lederman, R., Wadley, G., Chinnery, G., Vargas, S., Larkin, M., Killackey, E., McGorry, P.D. and Gleeson, J.F. (2013) 'On the HORYZON: moderated online social therapy for long-term recovery in first episode psychosis', *Schizophr Res*, 143(1), 143-9, available: <http://dx.doi.org/10.1016/j.schres.2012.10.009>.

Alvarez-Jiménez, M., Martínez-García, O., Pérez-Iglesias, R., Ramírez, M.L., Vázquez-Barquero, J.L. and Crespo-Facorro, B. (2010) 'Prevention of antipsychotic-induced weight gain with early behavioural intervention in first-episode psychosis: 2-year results of a randomized controlled trial', *Schizophr Res*, 116(1), 16-9, available: <http://dx.doi.org/10.1016/j.schres.2009.10.012>.

American Psychiatric Association (APA). DSM-5 Task Force. (2013) *Diagnostic and Statistical Manual of Mental Disorders : DSM-5*, 5th ed., Washington, D.C.:American Psychiatric Association.

Amminger, G.P., Mechelli, A., Rice, S., Kim, S.W., Klier, C.M., McNamara, R.K., Berk, M., McGorry, P.D. and Schäfer, M.R. (2015) 'Predictors of treatment

response in young people at ultra-high risk for psychosis who received long-chain omega-3 fatty acids', *Transl Psychiatry*, 5, e495, available: <http://dx.doi.org/10.1038/tp.2014.134>.

Amminger, G.P., Schäfer, M.R., Papageorgiou, K., Klier, C.M., Cotton, S.M., Harrigan, S.M., Mackinnon, A., McGorry, P.D. and Berger, G.E. (2010) 'Long-chain omega-3 fatty acids for indicated prevention of psychotic disorders: a randomized, placebo-controlled trial', *Arch Gen Psychiatry*, 67(2), 146-54, available: <http://dx.doi.org/10.1001/archgenpsychiatry.2009.192>.

An, S.K., Kang, J.I., Park, J.Y., Kim, K.R., Lee, S.Y. and Lee, E. (2010) 'Attribution bias in ultra-high risk for psychosis and first-episode schizophrenia', *Schizophr Res*, 118(1-3), 54-61, available: <http://dx.doi.org/10.1016/j.schres.2010.01.025>.

Anderson, E. (2010) 'Justifying the capabilities approach to justice' in Brighouse, H. and Robeyns, I., eds., *Measuring Justice: Primary Goods and Capabilities*, Cambridge: Cambridge University Press, 81-100.

Anderson, J. (2014) 'Autonomy and Vulnerability Entwined' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 134-161.

Andorno, R. (2004) 'The right not to know: an autonomy based approach', *Journal of Medical Ethics*, 30(5), 435-439.

Angell, M. (2011) 'The epidemic of mental illness: why?', *The New York Review of Books*, 58(11).

Angermeyer, M.C. and Matschinger, H. (2003) 'The stigma of mental illness: effects of labelling on public attitudes towards people with mental disorder', *Acta Psychiatr Scand*, 108(4), 304-9.

Anglin, D.M., Greenspoon, M.I., Lighty, Q., Corcoran, C.M. and Yang, L.H. (2014) 'Spontaneous labelling and stigma associated with clinical characteristics of peers 'at-risk' for psychosis', *Early Interv Psychiatry*, 8(3), 247-52, available: <http://dx.doi.org/10.1111/eip.12047>.

Ashford, E. (2006) 'The inadequacy of our traditional conception of the duties imposed by human rights', *Canadian Journal of Law and Jurisprudence*, 19(2), 217-236.

Baier, A. (1995) *Moral Prejudices : Essays on Ethics*, Cambridge, Mass.: Harvard University Press.

Barnes, J. and Stoll, R.J. (2007) 'Preemptive and preventive war: a preliminary Taxonomy', available:
<http://www.bakerinstitute.org/research/preemptive-and-preventive-war-a-preliminary-taxonomy/>. [accessed 11/2017]

Baschetti, R. (2002) 'Ethical analysis in public health', *Lancet*, 360(9330), 416, available: [http://dx.doi.org/10.1016/S0140-6736\(02\)09590-9](http://dx.doi.org/10.1016/S0140-6736(02)09590-9).

Bayer, R. and Fairchild, A.L. (2004) 'The genesis of public health ethics', *Bioethics*, 18(6), 473-492.

Beauchaine, T.P., Neuhaus, E., Brenner, S.L. and Gatzke-Kopp, L. (2008) 'Ten good reasons to consider biological processes in prevention and intervention research', *Dev Psychopathol*, 20(3), 745-74, available:
<http://dx.doi.org/10.1017/S0954579408000369>.

Beauchamp, T.L. and Childress, J.F. (2009) *Principles of Biomedical Ethics*, 6th ed., New York ; Oxford: Oxford University Press.

Bechdolf, A., Wagner, M., Ruhrmann, S., Harrigan, S., Putzfeld, V., Pukrop, R., Brockhaus-Dumke, A., Berning, J., Janssen, B., Decker, P., Bottlender, R., Maurer, K., Möller, H.J., Gaebel, W., Häfner, H., Maier, W. and Klosterkötter, J. (2012) 'Preventing progression to first-episode psychosis in early initial prodromal states', *Br J Psychiatry*, 200(1), 22-9, available: <http://dx.doi.org/10.1192/bjp.bp.109.066357>.

Bedi, G., Carrillo, F., Cecchi, G.A., Slezak, D.F., Sigman, M., Mota, N.B., Ribeiro, S., Javitt, D.C., Copelli, M. and Corcoran, C.M. (2015) 'Automated analysis of free speech predicts psychosis onset in high-risk youths', *NPJ Schizophr*, 1, 15030, available: <http://dx.doi.org/10.1038/npjshz.2015.30>.

Begon, J. (2015) 'What are adaptive preferences? Exclusion and disability in the capability Approach', *Journal of Applied Philosophy*, 32(3), 241-257, available:
<http://dx.doi.org/10.1111/japp.12102>.

Benson, P. (1991) 'Autonomy and oppressive socialization', *Social Theory and Practice*, 17(3), 385-408.

Bentall, R.P., de Sousa, P., Varese, F., Wickham, S., Sitko, K., Haarmans, M. and Read, J. (2014) 'From adversity to psychosis: pathways and mechanisms from

specific adversities to specific symptoms', *Soc Psychiatry Psychiatr Epidemiol*, 49(7), 1011-22, available: <http://dx.doi.org/10.1007/s00127-014-0914-0>.

Bentall, R.P. and Morrison, A.P. (2002) 'More harm than good: the case against using antipsychotic drugs to prevent severe mental illness', *Journal of Mental Health*, 11(4), 351-356.

Berk, M., Malhi, G.S., Hallam, K., Gama, C.S., Dodd, S., Andreazza, A.C., Frey, B.N. and Kapczynski, F. (2009) 'Early intervention in bipolar disorders: clinical, biochemical and neuroimaging imperatives', *J Affect Disord*, 114(1-3), 1-13, available: <http://dx.doi.org/10.1016/j.jad.2008.08.011>.

Bhui, K. and Dinos, S. (2011) 'Preventive psychiatry: a paradigm to improve population mental health and well-being', *Br J Psychiatry*, 198(6), 417-9, available: <http://dx.doi.org/10.1192/bjp.bp.110.091181>.

Bingham, R. and Banner, N. (2014) 'The definition of mental disorder: evolving but dysfunctional?', *J Med Ethics*, 40(8), 537-42, available: <http://dx.doi.org/10.1136/medethics-2013-101661>.

Björkenstam, C., Björkenstam, E., Hjern, A., Bodén, R. and Reutfors, J. (2014) 'Suicide in first episode psychosis: a nationwide cohort study', *Schizophr Res*, 157(1-3), 1-7, available: <http://dx.doi.org/10.1016/j.schres.2014.05.010>.

Blumenthal-Barby, J.S. (2014) 'Psychiatry's new manual (DSM-5): ethical and conceptual dimensions', *J Med Ethics*, 40(8), 531-6, available: <http://dx.doi.org/10.1136/medethics-2013-101468>.

Bond, G.R. (2004) 'Supported employment: evidence for an evidence-based practice', *Psychiatr Rehabil J*, 27(4), 345-59.

Bortolotti, L., Broome, M.R. and Mamei, M. (2014) 'Delusions and responsibility for action: insights from the Breivik case', *Neuroethics*, 7(3), 377-382, available: <http://dx.doi.org/10.1007/s12152-013-9198-4>.

Bortolotti, L. and Widdows, H. (2011) 'The right not to know: the case of psychiatric disorders', *Journal of Medical Ethics*, 37(11), 673-6, available: <http://dx.doi.org/10.1136/jme.2010.041111>.

Brenner, R., Madhusoodanan, S., Puttichanda, S. and Chandra, P. (2010) 'Primary prevention in psychiatry--adult populations', *Ann Clin Psychiatry*, 22(4), 239-48.

Broome, M.R., Woolley, J.B., Tabraham, P., Johns, L.C., Bramon, E., Murray, G.K., Pariante, C., McGuire, P.K. and Murray, R.M. (2005a) 'What causes the onset of psychosis?', *Schizophr Res*, 79(1), 23-34, available: <http://dx.doi.org/10.1016/j.schres.2005.02.007>.

Broome, M.R., Woolley, J.B., Johns, L.C., Valmaggia, L.R., Tabraham, P., Gafoor, R., Bramon, E. and McGuire, P.K. (2005b) 'Outreach and support in south London (OASIS): implementation of a clinical service for prodromal psychosis and the at risk mental state', *Eur Psychiatry*, 20(5-6), 372-8, available: <http://dx.doi.org/10.1016/j.eurpsy.2005.03.001>.

Broome, M.R., Fusar-Poli, P., Wuyts, P. (2013) 'Conceptual and ethical issues in the prodromal phase of psychosis' in Fulford, K.W.M. ed., *The Oxford Handbook of Philosophy and Psychiatry*, Oxford: Oxford University Press, 779-801

Brown, W.A. and Herz, L.R. (1989) 'Response to neuroleptic drugs as a device for classifying schizophrenia', *Schizophr Bull*, 15(1), 123-9.

Bubeck, D.E. (1995) *Care, Gender and Justice*, Oxford: Clarendon Press.

Butler, J. (2004) *Precarious Life : the Powers of Mourning and Violence*, London: Verso.

Butler, J. (2010) *Frames of War : When is Life Grievable?* , London: Verso.

Byrne, R.E. and Morrison, A.P. (2014) 'Young people at risk of psychosis: their subjective experiences of monitoring and cognitive behaviour therapy in the early detection and intervention evaluation 2 trial', *Psychol Psychother*, 87(3), 357-71, available: <http://dx.doi.org/10.1111/papt.12013>.

Cannon, T.D. and Keller, M.C. (2006) 'Endophenotypes in the genetic analyses of mental disorders', *Annu Rev Clin Psychol*, 2, 267-90, available: <http://dx.doi.org/10.1146/annurev.clinpsy.2.022305.095232>.

Carpenter, W.T. (2009) 'Anticipating DSM-V: should psychosis risk become a diagnostic class?', *Schizophr Bull*, 35(5), 841-3, available: <http://dx.doi.org/10.1093/schbul/sbp071>.

Carpenter, W.T. and van Os, J. (2011) 'Should attenuated psychosis syndrome be a DSM-5 diagnosis?', *Am J Psychiatry*, 168(5), 460-3, available: <http://dx.doi.org/10.1176/appi.ajp.2011.10121816>.

Carpenter, W.T. (2016) 'Foreword' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis, State of the Art and Future Perspectives*, Basel, Switzerland: Karger, VII-IX.

Carter, S.M., Degeling, C., Doust, J. and Barratt, A. (2016) 'A definition and ethical evaluation of overdiagnosis', *J Med Ethics*, available: <http://dx.doi.org/10.1136/medethics-2015-102928>.

Cassetta, B.D. and Goghari, V.M. (2015) 'Ethical Considerations of Screening and Early Intervention for Clinical High-Risk Psychosis', *Ethics & Behavior*, 25(1), 1-20.

Cavico, F.J. and Mujtaba, B.G. (2013) 'Health and wellness policy ethics', *Int J Health Policy Manag*, 1(2), 111-3, available: <http://dx.doi.org/10.15171/ijhpm.2013.19>.

Chadwick, R. (2000) 'Ethical issues in psychiatric care: geneticisation and community care', *Acta Psychiatr Scand Suppl*, 399, 35-9.

Chapple, B., Chant, D., Nolan, P., Cardy, S., Whiteford, H. and McGrath, J. (2004) 'Correlates of victimisation amongst people with psychosis', *Soc Psychiatry Psychiatr Epidemiol*, 39(10), 836-40.

Christman, J.P. and Anderson, J. (2005) *Autonomy and the Challenges to Liberalism : New Essays*, Cambridge ; New York: Cambridge University Press.

CIOMS (2002) *International Ethical Guidelines for Biomedical Research Involving Human Subjects*, available: <https://cioms.ch/shop/product/international-ethical-guidelines-for-biomedical-research-involving-human-subjects-2/> [accessed 08/2017].

Conus, P. (2016) 'Nonpharmacological substances for early intervention' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 159-167.

Corcoran, C., Malaspina, D. and Hercher, L. (2005) 'Prodromal interventions for schizophrenia vulnerability: the risks of being "at risk"', *Schizophr Res*, 73(2-3), 173-84, available: <http://dx.doi.org/10.1016/j.schres.2004.05.021>.

Corcoran, C.M., First, M.B. and Cornblatt, B. (2010) 'The psychosis risk syndrome and its proposed inclusion in the DSM-V: a risk-benefit analysis', *Schizophr Res*, 120(1-3), 16-22, available: <http://dx.doi.org/10.1016/j.schres.2010.03.018>.

Cornblatt, B.A. and Auther, A.M. (2005) 'Treating early psychosis: who, what, and when?', *Dialogues Clin Neurosci*, 7(1), 39-49.

Cornblatt, B.A., Auther, A.M., Niendam, T., Smith, C.W., Zinberg, J., Bearden, C.E. and Cannon, T.D. (2007) 'Preliminary findings for two new measures of social and role functioning in the prodromal phase of schizophrenia', *Schizophr Bull*, 33(3), 688-702, available: <http://dx.doi.org/10.1093/schbul/sbm029>.

de Koning, M.B., Bloemen, O.J., van Amelsvoort, T.A., Becker, H.E., Nieman, D.H., van der Gaag, M. and Linszen, D.H. (2009) 'Early intervention in patients at ultra high risk of psychosis: benefits and risks', *Acta Psychiatr Scand*, 119(6), 426-42, available: <http://dx.doi.org/10.1111/j.1600-0447.2009.01372.x>.

Dillon, R.S. (1997) 'Self-Respect: Moral, Emotional, Political', *Ethics*, 107(2), 226-249.

Dodds, S. (2014) 'Dependence, care, and vulnerability' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 181-203.

Drake, R.J. and Lewis, S.W. (2010) 'Valuing prodromal psychosis: what do we get and what is the price?', *Schizophr Res*, 120(1-3), 38-41, available: <http://dx.doi.org/10.1016/j.schres.2010.03.013>.

Dreier, J.L. (2006) *Contemporary Debates in Moral Theory*, Malden, Mass. ; Oxford: Blackwell.

Dunn, M.C., Clare, I.C.H. and Holland, A.J. (2008) 'To empower or to protect? Constructing the 'vulnerable adult' in English law and public policy', *Legal Studies*, 28(2), 234-253.

Dwyer, D.B. and McGuire, P. (2016) 'Structural and functional MRI in the prediction of psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 83-94.

Fogg, P. (2016) *Re-Storying Vulnerability: Young People's Narratives of 'Hard Times'* available: <https://www.sheffield.ac.uk/education/research/ccpe/re-storying> [accessed 10/2017]

Foot, P. (2002) *Moral Dilemmas : and Other Topics in Moral Philosophy*, Oxford: Oxford University Press.

Formosa, P. (2014) 'The role of vulnerability in Kantian ethics' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 88-109.

Frances, A.J. and Widiger, T. (2012) 'Psychiatric diagnosis: lessons from the DSM-IV past and cautions for the DSM-5 future', *Annu Rev Clin Psychol*, 8, 109-30, available: <http://dx.doi.org/10.1146/annurev-clinpsy-032511-143102>.

Freedman, R., Ross, R., Leonard, S., Myles-Worsley, M., Adams, C.E., Waldo, M., Tregellas, J., Martin, L., Olincy, A., Tanabe, J., Kisley, M.A., Hunter, S. and Stevens, K.E. (2005) 'Early biomarkers of psychosis', *Dialogues Clin Neurosci*, 7(1), 17-29.

Friedman, M. (2014) 'Moral responsibility for coerced wrongdoing: the case of abused women who "fail to protect" their children' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 222-241.

Fusar-Poli, P., Perez, J., Broome, M., Borgwardt, S., Placentino, A., Caverzasi, E., Cortesi, M., Veggiotti, P., Politi, P., Barale, F. and McGuire, P. (2007) 'Neurofunctional correlates of vulnerability to psychosis: a systematic review and meta-analysis', *Neurosci Biobehav Rev*, 31(4), 465-84, available: <http://dx.doi.org/10.1016/j.neubiorev.2006.11.006>.

Fusar-Poli, P., Bonoldi, I., Yung, A.R., Borgwardt, S., Kempton, M.J., Valmaggia, L., Barale, F., Caverzasi, E. and McGuire, P. (2012) 'Predicting psychosis: meta-analysis of transition outcomes in individuals at high clinical risk', *Arch Gen Psychiatry*, 69(3), 220-9, available: <http://dx.doi.org/10.1001/archgenpsychiatry.2011.1472>.

Fusar-Poli, P., Carpenter, W.T., Woods, S.W. and McGlashan, T.H. (2014) 'Attenuated psychosis syndrome: ready for DSM-5.1?', *Annu Rev Clin Psychol*, 10, 155-92, available: <http://dx.doi.org/10.1146/annurev-clinpsy-032813-153645>.

Fusar-Poli, P. (2017) 'The Clinical High-Risk State for Psychosis (CHR-P), Version II', *Schizophr Bull*, 43(1), 44-47, available: <http://dx.doi.org/10.1093/schbul/sbw158>.

Gazelle, H. and Ladd, G.W. (2003) 'Anxious solitude and peer exclusion: a diathesis-stress model of internalizing trajectories in childhood', *Child Dev*, 74(1), 257-78.

Gilligan, C. (1993) *In a Different Voice : Psychological Theory and Women's Development*, Cambridge, Mass. ; London: Harvard University Press.

Gilson, E.C. (2014) *The Ethics of Vulnerability : a Feminist Analysis of Social Life and Practice*, New York: Routledge.

Goldbeck-Wood, S. (2010) 'Commentary: female sexual dysfunction is a real but complex problem', *BMJ*, 341, 698-701, available: <http://dx.doi.org/10.1136/bmj.c5336>.

Goodin, R.E. (1985) *Protecting the Vulnerable : a Reanalysis of Our Social Responsibilities*, Chicago ; London: University of Chicago Press.

Government, H. (2010) *Healthy Lives, Healthy People: Our Strategy for Public Health in England*, The Stationery Office.

Green, M.F., Bearden, C.E., Cannon, T.D., Fiske, A.P., Helleman, G.S., Horan, W.P., Kee, K., Kern, R.S., Lee, J., Sergi, M.J., Subotnik, K.L., Sugar, C.A., Ventura, J., Yee, C.M. and Nuechterlein, K.H. (2012) 'Social cognition in schizophrenia, Part 1: performance across phase of illness', *Schizophr Bull*, 38(4), 854-64, available: <http://dx.doi.org/10.1093/schbul/sbq171>.

Green, M.F. and Harvey, P.D. (2014) 'Cognition in schizophrenia: past, present, and future', *Schizophr Res Cogn*, 1(1), e1-e9, available: <http://dx.doi.org/10.1016/j.scog.2014.02.001>.

Griffin, J. (1996) *Value Judgement : Improving Our Ethical Beliefs*, Oxford: Clarendon Press.

Griffin, J. (2000) 'Welfare rights', *The Journal of Ethics*, 4, 27-43.

Haddix, A.C., Teutsch, S.M. and Corso, P.S. (2003) *Prevention effectiveness : a guide to decision analysis and economic evaluation*, 2nd ed., Oxford ; New York: Oxford University Press.

Hamaadi, S. and Taylor, M. (2010) 'Workers jump to their deaths as fire engulfs factory making clothes for Gap', *The Guardian*, Bangladesh, December 14.

Harris, K., Collinson, C. and das Nair, R. (2012) 'Service-users' experiences of an early intervention in psychosis service: an interpretative phenomenological analysis', *Psychol Psychother*, 85(4), 456-69, available: <http://dx.doi.org/10.1111/j.2044-8341.2011.02043.x>.

Harsanyi, J.C. (1975) 'Can the maximin principle serve as a basis for morality? A critique of John Rawls's theory', *The American Political Science Review*, 69(2), 594-606.

Hauser, M., Lautenschlager, M., Gudlowski, Y., Oztgürdal, S., Witthaus, H., Bechdorf, A., Bäuml, J., Heinz, A. and Juckel, G. (2009) 'Psychoeducation with patients at-risk for schizophrenia--an exploratory pilot study', *Patient Educ Couns*, 76(1), 138-42, available: <http://dx.doi.org/10.1016/j.pec.2008.11.003>.

Held, V. (2006) *The Ethics of Care : Personal, Political, and Global*, New York ; Oxford: Oxford University Press.

Hercher, L. and Bruenner, G. (2008) 'Living with a child at risk for psychotic illness: the experience of parents coping with 22q11 deletion syndrome: an exploratory study', *Am J Med Genet A*, 146A(18), 2355-60, available: <http://dx.doi.org/10.1002/ajmg.a.32466>.

Hettema, T.L. (2014) 'Autonomy and its vulnerability: Ricoeur's view on justice as a contribution to care ethics', *Medicine, Health Care and Philosophy*, 17(4), 493-498.

Hickie, I.B., Scott, J. and McGorry, P.D. (2013) 'Clinical staging for mental disorders: a new development in diagnostic practice in mental health', *Med J Aust*, 198(9), 461-2.

Häfner, H. and Maurer, K. (2006) 'Early detection of schizophrenia: current evidence and future perspectives', *World Psychiatry*, 5(3), 130-8.

Insel, T.R. (2009) 'Translating scientific opportunity into public health impact: a strategic plan for research on mental illness', *Arch Gen Psychiatry*, 66(2), 128-33, available: <http://dx.doi.org/10.1001/archgenpsychiatry.2008.540>.

Institute for Work & Health (2015) 'What researchers mean by... Primary, secondary and tertiary prevention', *At Work*, (80), available: https://www.iwh.on.ca/system/files/at-work/at_work_80.pdf.

Ising, H.K., Smit, F., Veling, W., Rietdijk, J., Dragt, S., Klaassen, R.M., Savelsberg, N.S., Boonstra, N., Nieman, D.H., Linszen, D.H., Wunderink, L. and van der Gaag, M. (2015) 'Cost-effectiveness of preventing first-episode psychosis in ultra-high-risk subjects: multi-centre randomized controlled trial', *Psychol Med*, 45(7), 1435-46, available: <http://dx.doi.org/10.1017/S0033291714002530>.

Jacobs, E., Kline, E. and Schiffman, J. (2011) 'Practitioner perceptions of attenuated psychosis syndrome', *Schizophr Res*, 131(1-3), 24-30, available: <http://dx.doi.org/10.1016/j.schres.2011.06.022>.

Jacobs, E., Kline, E. and Schiffman, J. (2012) 'Defining treatment as usual for attenuated psychosis syndrome: a survey of community practitioners', *Psychiatr Serv*, 63(12), 1252-6, available: <http://dx.doi.org/10.1176/appi.ps.201200045>.

Janssen, I., Hanssen, M., Bak, M., Bijl, R.V., de Graaf, R., Vollebergh, W., McKenzie, K. and van Os, J. (2003) 'Discrimination and delusional ideation', *Br J Psychiatry*, 182, 71-6.

Johnstone, E.C., Ebmeier, K.P., Miller, P., Owens, D.G. and Lawrie, S.M. (2005) 'Predicting schizophrenia: findings from the Edinburgh High-Risk Study', *Br J Psychiatry*, 186, 18-25, available: <http://dx.doi.org/10.1192/bjp.186.1.18>.

Kamat, A. (2013) 'Made in Bangladesh', *Al Jazeera*, Fault Lines.

Kapczinski, F., Dias, V.V., Kauer-Sant'Anna, M., Brietzke, E., Vázquez, G.H., Vieta, E. and Berk, M. (2009) 'The potential use of biomarkers as an adjunctive tool for staging bipolar disorder', *Prog Neuropsychopharmacol Biol Psychiatry*, 33(8), 1366-71, available: <http://dx.doi.org/10.1016/j.pnpbp.2009.07.027>.

Kapczinski, F., Magalhães, P.V., Balanzá-Martinez, V., Dias, V.V., Frangou, S., Gama, C.S., Gonzalez-Pinto, A., Grande, I., Ha, K., Kauer-Sant'Anna, M., Kunz, M., Kupka, R., Leboyer, M., Lopez-Jaramillo, C., Post, R.M., Rybakowski, J.K., Scott, J., Strejilevitch, S., Tohen, M., Vazquez, G., Yatham, L., Vieta, E. and Berk, M. (2014) 'Staging systems in bipolar disorder: an International Society for Bipolar Disorders Task Force Report', *Acta Psychiatr Scand*, 130(5), 354-63, available: <http://dx.doi.org/10.1111/acps.12305>.

Karlsen, S., Nazroo, J.Y., McKenzie, K., Bhui, K. and Weich, S. (2005) 'Racism, psychosis and common mental disorder among ethnic minority groups in England', *Psychol Med*, 35(12), 1795-803, available: <http://dx.doi.org/10.1017/S0033291705005830>.

Kemp, P. and Dahl Rendtorff, J. (2008) 'The Barcelona Declaration. Towards an integrated approach to basic ethical principles', *Synthesis Philosophica*, 23(2), 239-251.

Kenyon, P. (2000) 'Gap and Nike: No Sweat?', *Panorama*.

Kinon, B.J., Kane, J.M., Johns, C., Perovich, R., Ismi, M., Koreen, A. and Weiden, P. (1993) 'Treatment of neuroleptic-resistant schizophrenic relapse', *Psychopharmacol Bull*, 29(2), 309-14.

Kirkbride, J.B., Barker, D., Cowden, F., Stamps, R., Yang, M., Jones, P.B. and Coid, J.W. (2008) 'Psychoses, ethnicity and socio-economic status', *Br J Psychiatry*, 193(1), 18-24, available: <http://dx.doi.org/10.1192/bjp.bp.107.041566>.

Klosterkötter, J., Hellmich, M., Steinmeyer, E.M. and Schultze-Lutter, F. (2001) 'Diagnosing schizophrenia in the initial prodromal phase', *Arch Gen Psychiatry*, 58(2), 158-64.

Klosterkötter, J., Ruhrmann, S., Schultze-Lutter, F., Salokangas, R.K., Linszen, D., Birchwood, M., Juckel, G., Morrison, A., Vázquez-Barquero, J.L., Hambrecht, M. and VON Reventlow, H. (2005) 'The European Prediction of Psychosis Study (EPOS): integrating early recognition and intervention in Europe', *World Psychiatry*, 4(3), 161-7.

Klosterkötter, J. (2016) 'Early detection of psychosis - state of the art and future perspectives' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 1-14.

Koren, D. (2013) 'Early detection and intervention in psychiatry in the post-DSM-5 publication era: is it time to rethink the trees we bark up?', *Early Interv Psychiatry*, 7(3), 235-7, available: <http://dx.doi.org/10.1111/eip.12081>.

Koutsouleris, N., Borgwardt, S., Meisenzahl, E.M., Bottlender, R., Möller, H.J. and Riecher-Rössler, A. (2012) 'Disease prediction in the at-risk mental state for psychosis using neuroanatomical biomarkers: results from the FePsy study', *Schizophr Bull*, 38(6), 1234-46, available: <http://dx.doi.org/10.1093/schbul/sbr145>.

Koutsouleris, N. and Kambitz, J. (2016) 'Pattern recognition methods in the prediction of psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 95-102.

Krabbendam, L., Janssen, I., Bak, M., Bijl, R.V., de Graaf, R. and van Os, J. (2002) 'Neuroticism and low self-esteem as risk factors for psychosis', *Soc Psychiatry Psychiatr Epidemiol*, 37(1), 1-6.

Krabbendam, L. and van Os, J. (2005) 'Schizophrenia and urbanicity: a major environmental influence--conditional on genetic risk', *Schizophr Bull*, 31(4), 795-9, available: <http://dx.doi.org/10.1093/schbul/sbi060>.

Lahey, B.B. (2009) 'Public health significance of neuroticism', *Am Psychol*, 64(4), 241-56, available: <http://dx.doi.org/10.1037/a0015309>.

Leach Scully, J. (2014) 'Disability and vulnerability: On bodies, dependence, and power' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 204-221.

Levine, C., Faden, R., Grady, C., Hammerschmidt, D., Eckenwiler, L. and Sugarman, J. (2004) 'A response to commentators on "the limitations of 'vulnerability' as a protection for human research participants"', *American Journal of Bioethics*, 4(3), 44-9.

Lin, A., Wood, S.J., Nelson, B., Beavan, A., McGorry, P. and Yung, A.R. (2015) 'Outcomes of nontransitioned cases in a sample at ultra-high risk for psychosis', *Am J Psychiatry*, 172(3), 249-58, available: <http://dx.doi.org/10.1176/appi.ajp.2014.13030418>.

London, A.J. (2001) 'The independence of practical ethics', *Theor Med Bioeth*, 22(2), 87-105.

Lotz, M. (2014) 'Parental values and children's vulnerability' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 242-265.

Lustig, B.A. (1992) 'The method of 'principlism': a critique of the critique', *J Med Philos*, 17(5), 487-510.

Macdonald, A., N., Goines, K., B., Novacek, D., M. and Walker, E., F. (2016) 'Psychosis-risk syndromes: implications for ethically informed policies and practices', *Policy Insights from the Behavioral and Brain Sciences*, 4(1), 88-95.

MacIntyre, A.C. (1999) *Dependent Rational Animals : Why Human Beings Need the Virtues*, London: Duckworth.

Mackenzie, C. (2014) 'The importance of relational autonomy and capabilities for an ethics of vulnerability' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 33-59.

Mackenzie, C., Rogers, W. and Dodds, S. (2014) 'What is vulnerability, and why does it matter for moral theory?' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 1-29.

MacKinnon, C.A. (1987) *Feminism Unmodified : Discourses on Life and Law*, Cambridge, Mass.: Harvard University Press.

Macklin, R. (2003) 'Bioethics, vulnerability, and protection', *Bioethics*, 17(5-6), 472-486.

Marshall, M., Lewis, S., Lockwood, A., Drake, R., Jones, P. and Croudace, T. (2005) 'Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review', *Arch Gen Psychiatry*, 62(9), 975-83, available: <http://dx.doi.org/10.1001/archpsyc.62.9.975>.

Marwaha, S., Thompson, A., Upthegrove, R. and Broome, M. (2016) 'Fifteen years on – early intervention for a new generation', *The British Journal of Psychiatry*, 209, 186–88.

McCrone, P., Craig, T.K., Power, P. and Garety, P.A. (2010) 'Cost-effectiveness of an early intervention service for people with psychosis', *Br J Psychiatry*, 196(5), 377-82, available: <http://dx.doi.org/10.1192/bjp.bp.109.065896>.

McCrone, P., Singh, S.P., Knapp, M., Smith, J., Clark, M., Shiers, D. and Tiffin, P.A. (2013) 'The economic impact of early intervention in psychosis services for children and adolescents', *Early Interv Psychiatry*, 7(4), 368-73, available: <http://dx.doi.org/10.1111/eip.12024>.

McDougall, D. (2007) 'Child sweatshop shame threatens Gap's ethical image', *The Observer*, Business, October 28

McGlashan, T.H., Miller, T.J. and Woods, S.W. (2001) 'Pre-onset detection and intervention research in schizophrenia psychoses: current estimates of benefit and risk', *Schizophr Bull*, 27(4), 563-70.

McGlashan, T.H., Zipursky, R.B., Perkins, D., Addington, J., Miller, T., Woods, S.W., Hawkins, K.A., Hoffman, R.E., Preda, A., Epstein, I., Addington, D., Lindborg, S., Trzaskoma, Q., Tohen, M. and Breier, A. (2006) 'Randomized, double-blind trial of olanzapine versus placebo in patients prodromally symptomatic

for psychosis', *Am J Psychiatry*, 163(5), 790-9, available:
<http://dx.doi.org/10.1176/appi.ajp.163.5.790>.

McGorry, P.D., Yung, A.R., Phillips, L.J., Yuen, H.P., Francey, S., Cosgrave, E.M., Germano, D., Bravin, J., McDonald, T., Blair, A., Adlard, S. and Jackson, H. (2002) 'Randomized controlled trial of interventions designed to reduce the risk of progression to first-episode psychosis in a clinical sample with subthreshold symptoms', *Arch Gen Psychiatry*, 59(10), 921-8.

McGorry, P.D. (2007) 'Issues for DSM-V: clinical staging: a heuristic pathway to valid nosology and safer, more effective treatment in psychiatry', *Am J Psychiatry*, 164(6), 859-60, available: <http://dx.doi.org/10.1176/ajp.2007.164.6.859>.

McGorry, P.D., Nelson, B., Amminger, G.P., Bechdolf, A., Francey, S.M., Berger, G., Riecher-Rössler, A., Klosterkötter, J., Ruhrmann, S., Schultze-Lutter, F., Nordentoft, M., Hickie, I., McGuire, P., Berk, M., Chen, E.Y., Keshavan, M.S. and Yung, A.R. (2009) 'Intervention in individuals at ultra-high risk for psychosis: a review and future directions', *J Clin Psychiatry*, 70(9), 1206-12, available:
<http://dx.doi.org/10.4088/JCP.08r04472>.

McGorry, P.D. (2013) 'Early clinical phenotypes, clinical staging, and strategic biomarker research: building blocks for personalized psychiatry', *Biol Psychiatry*, 74(6), 394-5, available: <http://dx.doi.org/10.1016/j.biopsych.2013.07.004>.

McGorry, P.D., Keshavan, M., Goldstone, S., Amminger, P., Allott, K., Berk, M., Lavoie, S., Pantelis, C., Yung, A., Wood, S. and Hickie, I. (2014) 'Biomarkers and clinical staging in psychiatry', *World Psychiatry*, 13(3), 211-23, available:
<http://dx.doi.org/10.1002/wps.20144>.

McGorry, P.D. and Goldstone, S. (2016) 'Early intervention in emerging psychosis: state of the art and future perspectives' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 15-28.

Meyers, D.T. (1989) *Self, Society, and Personal Choice*, New York ; Oxford: Columbia University Press.

Miller, T.J., McGlashan, T.H., Rosen, J.L., Somjee, L., Markovich, P.J., Stein, K. and Woods, S.W. (2002) 'Prospective diagnosis of the initial prodrome for schizophrenia based on the Structured Interview for Prodromal Syndromes: preliminary evidence of interrater reliability and predictive validity', *Am J Psychiatry*, 159(5), 863-5, available: <http://dx.doi.org/10.1176/appi.ajp.159.5.863>.

Miller, T.J., McGlashan, T.H., Rosen, J.L., Cadenhead, K., Cannon, T., Ventura, J., McFarlane, W., Perkins, D.O., Pearlson, G.D. and Woods, S.W. (2003) 'Prodromal assessment with the structured interview for prodromal syndromes and the scale of prodromal symptoms: predictive validity, interrater reliability, and training to reliability', *Schizophr Bull*, 29(4), 703-15.

Mittal, V.A., Dean, D.J., Mittal, J. and Saks, E.R. (2015) 'Ethical, Legal, and Clinical Considerations when Disclosing a High-Risk Syndrome for Psychosis', *Bioethics*, 29(8), 543-56, available: <http://dx.doi.org/10.1111/bioe.12155>.

Morrison, A.P., French, P., Walford, L., Lewis, S.W., Kilcommons, A., Green, J., Parker, S., Bentall, R.P. (2004) 'Cognitive therapy for the prevention of psychosis in people at ultra-high risk', *The British Journal of Psychiatry*, 185(4), 291-297.

Moynihan, R. (2011) 'Medicalization. A new deal on disease definition', *BMJ*, 342, d2548.

Moynihan, R., Doust, J. and Henry, D. (2012) 'Preventing overdiagnosis: how to stop harming the healthy', *BMJ*, 344, e3502.

Mulgan, T. (2007) *Understanding Utilitarianism*, Stocksfield: Acumen.

Mullin, A. (2014) 'Children, vulnerability, and emotional harm' in Mackenzie, C., Rogers, W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 266-287.

Müller-Spahn, F. (2008) 'Individualized preventive psychiatry: syndrome and vulnerability diagnostics', *Eur Arch Psychiatry Clin Neurosci*, 258 Suppl 5, 92-7, available: <http://dx.doi.org/10.1007/s00406-008-5020-4>.

Müller, H. and Bechdolf, A. (2016) 'Psychological methods of early intervention in emerging psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 142-158.

Nelson, B. and Yung, A.R. (2011) 'Should a risk syndrome for first episode psychosis be included in the DSM-5?', *Curr Opin Psychiatry*, 24(2), 128-33, available: <http://dx.doi.org/10.1097/YCO.0b013e32834190cd>.

Nelson, B. (2014) 'Attenuated psychosis syndrome: don't jump the gun', *Psychopathology*, 47(5), 292-6, available: <http://dx.doi.org/10.1159/000365291>.

Noggle, R. (2001) 'From the nature of persons to the structure of morality', *Canadian Journal of Philosophy*, 31(4), 531-565.

Norcross, A. (2009) 'Two dogmas of deontology: aggregation, rights, and the separateness of persons', *Social Philosophy and Policy*, 26(1), 76-95.

Nussbaum, M.C. and Sen, A. (1993) *Quality of life*, Oxford: Oxford University Press.

Nussbaum, M.C. (1999) *Sex & Social Justice*, New York ; Oxford: Oxford University Press.

Nussbaum, M.C. (2011) *Creating Capabilities : the Human Development Approach*, Cambridge, Mass. ; London: Belknap.

O'Brien, M.P., Zinberg, J.L., Bearden, C.E., Daley, M., Niendam, T.A., Kopelowicz, A. and Cannon, T.D. (2007) 'Psychoeducational multi-family group treatment with adolescents at high risk for developing psychosis', *Early Interv Psychiatry*, 1(4), 325-32, available: <http://dx.doi.org/10.1111/j.1751-7893.2007.00046.x>.

O'Donoghue, B., Walter, M., Huber, C.G. and Lang, U.E. (2016) 'Pharmacological intervention in first-episode psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 168-178.

O'Neill, O. (1995) 'Justice, capabilities, and vulnerabilities' in Nussbaum, M. C. and Glover, J., eds., *Women, Culture, and Development: A Study of Human Capabilities* Oxford: Oxford University Press, 140-152.

O'Neill, O. (1996) *Towards Justice and Virtue : a Constructive Account of Practical Reasoning*, Cambridge: Cambridge University Press.

Opsal, A., Clausen, T., Kristensen, O., Elvik, I., Joa, I. and Larsen, T.K. (2011) 'Involuntary hospitalization of first-episode psychosis with substance abuse during a 2-year follow-up', *Acta Psychiatr Scand*, 124(3), 198-204, available: <http://dx.doi.org/10.1111/j.1600-0447.2011.01700.x>.

Pelosi, A.J. and Birchwood, M. (2003) 'Is early intervention for psychosis a waste of valuable resources?', *Br J Psychiatry*, 182, 196-8.

Phillips, L.J., Cotton, S., Mihalopoulos, C., Shih, S., Yung, A.R., Carter, R. and McGorry, P.D. (2009) 'Cost implications of specific and non-specific treatment for young persons at ultra high risk of developing a first episode of psychosis', *Early Interv Psychiatry*, 3(1), 28-34, available: <http://dx.doi.org/10.1111/j.1751-7893.2008.00106.x>.

Pogge, T. (2010) 'A critique of the capability approach' in Brighouse, H. and Robeyns, I., eds., *Measuring Justice: Primary Goods and Capabilities*, Cambridge: Cambridge University Press, 17-60.

Powers, M. and Faden, R.R. (2006) *Social Justice : the Moral Foundations of Public Health and Health Policy*, New York ; Oxford: Oxford University Press.

Pyle, M., Stewart, S.L., French, P., Byrne, R., Patterson, P., Gumley, A., Birchwood, M. and Morrison, A.P. (2015) 'Internalized stigma, emotional dysfunction and unusual experiences in young people at risk of psychosis', *Early Interv Psychiatry*, 9(2), 133-40, available: <http://dx.doi.org/10.1111/eip.12098>.

Rawls, J. (1973) *A Theory of Justice*, London: Oxford University Press.

Richardson, H.S. (2006) 'Rawlsian social-contract theory and the severely disabled', *The Journal of Ethics*, 10(4), 419-462.

Rickwood, D.J., Telford, N.R., Parker, A.G., Tanti, C.J. and McGorry, P.D. (2014) 'Reply headspace - Australia's innovation in youth mental health: who are the clients and why are they presenting?', *Med J Aust*, 200(8), 454.

Riecher-Rössler, A. and McGorry, P.D. (2016a) 'Preface and Introduction' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, X-XIV.

Riecher-Rössler, A. and McGorry, P.D. (2016b) 'Early detection in psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 179-189.

Roberts, M.J. and Reich, M.R. (2002) 'Ethical analysis in public health', *The Lancet*, 359(9311), 1055-1059.

Robinson, J., Harris, M.G., Harrigan, S.M., Henry, L.P., Farrelly, S., Prosser, A., Schwartz, O., Jackson, H. and McGorry, P.D. (2010) 'Suicide attempt in first-episode psychosis: a 7.4 year follow-up study', *Schizophr Res*, 116(1), 1-8, available: <http://dx.doi.org/10.1016/j.schres.2009.10.009>.

Robinson, R. (1993) 'Cost-utility analysis', *BMJ*, 307(6908), 859-62.

Rogers, W. (2014) 'Vulnerability and bioethics' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press 60-87.

Rogers, W., Mackenzie, C. and Dodds, S. (2012) 'Why bioethics needs a concept of vulnerability', *International Journal of Feminist Approaches to Bioethics*, 05(2), 11-38.

Rothbard, M.N. (1978) *For a New Liberty : the Libertarian Manifesto*, Rev. ed. 1st Collier Books ed., New York: Collier Books.

Ruddick, S. (1989) *Maternal thinking : towards a politics of peace*, London: Women's Press, 1990.

Ruhrmann, S., Schultze-Lutter, F. and Klosterkötter, J. (2010) 'Probably at-risk, but certainly ill--advocating the introduction of a psychosis spectrum disorder in DSM-V', *Schizophr Res*, 120(1-3), 23-37, available: <http://dx.doi.org/10.1016/j.schres.2010.03.015>.

Ruhrmann, S. (2016) 'Electroencephalographic predictors of psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 133-141.

Rutigliano, G., Manalo, M. and Fusar-Poli, P. (2016) 'The psychosis high-risk state' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 55-68.

Scarre, G. (1996) *Utilitarianism*, London: Routledge.

Schmidt, A. and Borgwardt, S. (2016) 'Connectivity abnormalities in emerging psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 103-115.

Schultze-Lutter, F. (2016) 'First signs of emerging psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 29-41.

Schöne-Seifert, B. (2006) 'Danger and merits of principlism: meta-theoretical reflections on the Beauchamp/Childress-approach to biomedical ethics' in Rehmann-Sutter, C., Düwell, M. and Mieth, D., eds., *Bioethics in Cultural Contexts: Reflections on Methods and Finitude*, Dordrecht: Springer, 109-119.

Seidman, L.J., Giuliano, A.J., Smith, C.W., Stone, W.S., Glatt, S.J., Meyer, E., Faraone, S.V., Tsuang, M.T. and Cornblatt, B. (2006) 'Neuropsychological functioning in adolescents and young adults at genetic risk for schizophrenia and affective psychoses: results from the Harvard and Hillside Adolescent High Risk Studies', *Schizophr Bull*, 32(3), 507-24, available: <http://dx.doi.org/10.1093/schbul/sbj078>.

Sen, A. (1979) 'Utilitarianism and welfarism', *Journal of Philosophy*, 76(9), 463-489.

Shickle, D. and Chadwick, R. (1994) 'The ethics of screening: Is 'screeningitis' an incurable disease?', *Journal of Medical Ethics*, 20, 12-18.

Shrivastava, A., McGorry, P.D., Tsuang, M., Woods, S.W., Cornblatt, B.A., Corcoran, C. and Carpenter, W. (2011) "'Attenuated psychotic symptoms syndrome" as a risk syndrome of psychosis, diagnosis in DSM-V: The debate', *Indian J Psychiatry*, 53(1), 57-65, available: <http://dx.doi.org/10.4103/0019-5545.75560>.

Silvers, A., Pickering Francis, L. (2005) 'Justice through Trust: Disability and the "Outlier Problem" in Social Contract Theory', *Ethics*, 116, 40-76.

Silverstein, S. (1995) 'Garment workers describe conditions of labor: Women are visiting U.S. to make American consumers aware of abuses', *Los Angeles Times*, August 09.

Simon, A.E. (2016) 'Psychosis high-risk states in adolescents' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 42-54.

Singer, M.T. and Wynne, L.C. (1966) 'Principles for scoring communication defects and deviances in parents of schizophrenics: Rorschach and TAT scoring manuals', *Psychiatry*, 29(3), 260-88.

Singer, P. (1972) 'Famine, Affluence, and Morality', *Philosophy & Public Affairs*, 1(3), 229-243.

Singh, S.P. (2010) 'Early intervention in psychosis', *Br J Psychiatry*, 196(5), 343-5, available: <http://dx.doi.org/10.1192/bjp.bp.109.075804>.

Smith, B. (2011) *Particularism and the Space of Moral Reasons*, Palgrave Macmillan UK.

Smith, L.J. (2008) 'How ethical is ethical research? Recruiting marginalized, vulnerable groups into health services research', *Journal of Advanced Nursing*, 62(2), 248-257.

Straehle, C. (2017) *Vulnerability, Autonomy, and Applied Ethics*, Routledge.

Studerus, E., Pappmeyer, M. and Riecher-Rössler, A. (2016) 'Neurocognition and motor functioning in the prediction of psychosis' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 116-132.

Thompson, J. (2014) 'Being in time: ethics and temporal vulnerability' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 162-178.

Tiffin, P.A. and Hudson, S. (2007) 'An Early Intervention in Psychosis Service for adolescents', *Early Intervention in Psychiatry*, 1(2), 212-218, available: <http://dx.doi.org/10.1111/j.1751-7893.2007.00024.x>.

Tokatli, N. (2008) 'Global sourcing: insights from the global clothing industry—the case of Zara, a fast fashion retailer', *Journal of Economic Geography*, 8, 21-38.

Tong, R. (2014) 'Vulnerability and aging in the context of care' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 288-308.

Tronto, J.C. (1993) *Moral Boundaries : a Political Argument for an Ethic of Care*, New York ; London: Routledge.

Tsuang, M.T., Van Os, J., Tandon, R., Barch, D.M., Bustillo, J., Gaebel, W., Gur, R.E., Heckers, S., Malaspina, D., Owen, M.J., Schultz, S. and Carpenter, W. (2013) 'Attenuated psychosis syndrome in DSM-5', *Schizophr Res*, 150(1), 31-5, available: <http://dx.doi.org/10.1016/j.schres.2013.05.004>.

Urban Walker, M. (2014) 'Moral vulnerability and the task of reparations' in Mackenzie, C. R., W. and Dodds, S., eds., *Vulnerability: New Essays in Ethics and Feminist Philosophy*, Oxford: Oxford University Press, 110-133.

Uttinger, M., Koranyi, S., Pappmeyer, M., Fend, F., Ittig, S., Studerus, E., Rameyad, A., Simon, A. and Riecher-Rössler, A. (2015) 'Early detection of psychosis: helpful or stigmatizing experience? A qualitative study', *Early Interv Psychiatry*, available: <http://dx.doi.org/10.1111/eip.12273>.

Uttinger, M., Pappmeyer, M., Riecher-Rössler, A. (2016) 'Early detection of psychosis: helpful or stigmatizing experience for those concerned?' in Riecher-Rössler, A. and McGorry, P. D., eds., *Early Detection and Intervention in Psychosis: State of the Art and Future Perspectives*, Basel, Switzerland: Karger, 69-79.

Van Duffel, S. (2004) 'Libertarian natural rights', *Critical Review*, 16(4), 353-375.

Veling, W., Selten, J.P., Susser, E., Laan, W., Mackenbach, J.P. and Hoek, H.W. (2007) 'Discrimination and the incidence of psychotic disorders among ethnic minorities in The Netherlands', *Int J Epidemiol*, 36(4), 761-8, available: <http://dx.doi.org/10.1093/ije/dym085>.

Warner, R. (1985) *Recovery From Schizophrenia : Psychiatry and Political Economy*, London: Routledge & Kegan Paul.

Warner, R. (2005) 'Problems with early and very early intervention in psychosis', *Br J Psychiatry Suppl*, 48, s104-7, available: <http://dx.doi.org/10.1192/bjp.187.48.s104>.

Webb, J.R., Addington, J., Perkins, D.O., Bearden, C.E., Cadenhead, K.S., Cannon, T.D., Cornblatt, B.A., Heinssen, R.K., Seidman, L.J., Tarbox, S.I., Tsuang, M.T., Walker, E.F., McGlashan, T.H. and Woods, S.W. (2015) 'Specificity of Incident Diagnostic Outcomes in Patients at Clinical High Risk for Psychosis', *Schizophr Bull*, 41(5), 1066-75, available: <http://dx.doi.org/10.1093/schbul/sbv091>.

Wellman, C. (1982) *Welfare Rights*, Totowa, N.J.: Rowman and Littlefield.

Welsh, P. and Tiffin, P.A. (2013) 'Attitudes of patients and clinicians in relation to the at-risk state for psychosis', *Early Intervention in Psychiatry*, 7(4), 361-367, available: <http://dx.doi.org/10.1111/eip.12062>.

Wolff, J. and de-Shalit, A. (2007) *Disadvantage*, Oxford: Oxford University Press.

Woods, S.W., Walsh, B.C., Saks, J.R. and McGlashan, T.H. (2010) 'The case for including Attenuated Psychotic Symptoms Syndrome in DSM-5 as a psychosis risk syndrome', *Schizophr Res*, 123(2-3), 199-207, available: <http://dx.doi.org/10.1016/j.schres.2010.08.012>.

Young, S.L., Taylor, M. and Lawrie, S.M. (2015) "'First do no harm." A systematic review of the prevalence and management of antipsychotic adverse effects', *J Psychopharmacol*, 29(4), 353-62, available: <http://dx.doi.org/10.1177/0269881114562090>.

Yung, A.R. and McGorry, P.D. (1996) 'The prodromal phase of first-episode psychosis: past and current conceptualizations', *Schizophr Bull*, 22(2), 353-70.

Yung, A.R., Nelson, B., Stanford, C., Simmons, M.B., Cosgrave, E.M., Killackey, E., Phillips, L.J., Bechdolf, A., Buckby, J. and McGorry, P.D. (2008) 'Validation of "prodromal" criteria to detect individuals at ultra high risk of psychosis: 2 year follow-up', *Schizophr Res*, 105(1-3), 10-7, available: <http://dx.doi.org/10.1016/j.schres.2008.07.012>.

Yung, A.R., Phillips, L.J., Yuen, H.P., Francey, S.M., McFarlane, C.A., Hallgren, M. and McGorry, P.D. (2003) 'Psychosis prediction: 12-month follow up of a high-risk ("prodromal") group', *Schizophr Res*, 60(1), 21-32.

Yung, A.R., Phillips, L.J., Yuen, H.P. and McGorry, P.D. (2004) 'Risk factors for psychosis in an ultra high-risk group: psychopathology and clinical features', *Schizophr Res*, 67(2-3), 131-42, available: [http://dx.doi.org/10.1016/S0920-9964\(03\)00192-0](http://dx.doi.org/10.1016/S0920-9964(03)00192-0).

Yung, A.R., Woods, S.W., Ruhrmann, S., Addington, J., Schultze-Lutter, F., Cornblatt, B.A., Amminger, G.P., Bechdolf, A., Birchwood, M., Borgwardt, S., Cannon, T.D., de Haan, L., French, P., Fusar-Poli, P., Keshavan, M., Klosterkötter, J., Kwon, J.S., McGorry, P.D., McGuire, P., Mizuno, M., Morrison, A.P., Riecher-Rössler, A., Salokangas, R.K., Seidman, L.J., Suzuki, M., Valmaggia, L., van der Gaag, M., Wood, S.J. and McGlashan, T.H. (2012) 'Whither the attenuated psychosis syndrome?', *Schizophr Bull*, 38(6), 1130-4, available: <http://dx.doi.org/10.1093/schbul/sbs108>.