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Assessing the need for community health nursing services in the UAE

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Assessing the Need for

Community Health Nursing Services

in the UAE

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Abstract

The rapid socio-economic development in the United Arab Emirates (UAE) has had a great impact on the establishment and growth of the health care system in the country. Despite the development of the health care system, various shortcomings interact with and impact upon health and the way the health system functions and operates. Hence, the aim of this study was to assess to what extent the introduction of Community Health Care Nursing (CHCN) services in the UAE would address some of these shortcomings. In order to achieve this aim, a better understanding of the UAE health care system and health needs was required. This was obtained through a comparison with the United Kingdom and Bahrain, with a special focus on Primary Health Care and CHCN services.

In recognition of the importance of the views of the public regarding any new service, fieldwork was conducted with a sample of the community and health services staff living in the city of Al Ain, UAE. The data required were collected by means of quantitative (questionnaires) and qualitative (the focus group technique and interviews) research methods.

The findings from this study demonstrated that some shortcomings characterising the current health services need to be addressed before planning and implementing the proposed service. Furthermore, the results suggested that CHCN, preventive, curative or both, could contribute to meeting some of the identified health care needs. The findings also indicated a lack of understanding on the part of the general public of the function of primary, secondary and tertiary health facilities, in particular that of hospitals. It is therefore argued that PHC centres could be suitable places to host a CHCN service in the country. The findings also indicated that, despite the many advantages of such a service, more effort needs to be made to tackle the barriers to its successful implementation and to raise public awareness of the proposed service within the UAE community.

Table of Contents

Chapter One: Introduction

Chapter Two: Health and Health Care Needs in the UAE

iii

Chapter Three: Primary Health Care-Based Community Health Care Nursing

Chapter Four: Research Instruments and Research Methodology

Chapter Five: Fieldwork Results

Chapter Six: Discussion and Conclusion

References

Appendices

List of figures

List of tables

Declaration

This thesis results entirely from my own work and has not been previously offered in candidature for any degree or diploma.

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Dedication

To my dear parents

To my wife

To my beloved children

Acknowledgements

Chapter One: Introduction

1.1 Introduction

In this introductory chapter the researcher will provide a general overview of the United Arab Emirates (UAE) and its health care system as a subject of study. This chapter will also include a statement of the research problem, the reasons for choosing the topic, and an outline of the objectives, structure and organisation of the thesis. The aim of this research was to explore both the ways in which a community health care nursing (CHCN) service might contribute to meeting the health needs of the UAE, and the feasibility of implementing such a service.

1.2 Overview of U.A.E.

The United Arab Emirates is located in the Arabian Peninsula between 22.5° and 26° north and between 51° and 56.25° east. The country is bordered to the north by the Arabian Gulf. The State of Qatar lies to the west and north-west, Saudi Arabia to the west and south, and Oman to the north, east and south west (UAE yearbook, 2002). The total area of the country is 83,600 square kilometres (32,400 square miles). The UAE has 700 kilometres of coastline, excluding islands, approximately 600 kilometres along the Arabian Gulf and 100 kilometres bordering the Gulf of Oman. Despite the fact that four fifths of its land area is arid desert, the UAE is a country of contrasting landscapes (UAE yearbook, 2002). The sand and gravel desert dominating most of the south and west of the country extends east to the jagged Hajar Mountain chain that divides the UAE from north to south in the

Northern Emirates and forms the eastern boundary of the UAE further to the south. The rocky slopes rise to 1300 metres within UAE territory, falling steeply to the UAE's East Coast on the Gulf of Oman where a fertile alluvial gravel plain separates the precipitous mountains from the ocean (UAE yearbook, 2002).

The UAE climate is warm and sunny in winter and hot and humid during the summer months. Winter daytime temperatures average a very pleasant 26° C, although nights can be relatively cool, between 12~15° C on the coast, and less than 5° C in the depths of the desert or high in the mountains. Local north westerly winds frequently develop during the winter, bringing cooler, windy conditions. Summer temperatures are in the mid~40s, but can be higher inland. Humidity in coastal areas averages between 50 and 60 per cent, touching over 90 per cent in summer and autumn. Inland it is far less humid (UAE yearbook, 2002). The UAE had a population of approximately 3,108,000 in 2000 (MOP, 2001), of which around 80% were foreign workers. The population is relatively young (approaching 90% are aged under 45) and the male-female ratio is 2 to 1 (See Table 1.1.1). Further information regarding demographic data and their indicators is presented in Chapter Two of this study. The official language of the state is Arabic and the state currency is UAE Dirhams. The majority of the population are Muslims.

Table 1.1.1 Population Estimate by age group and sex UAE, 2000

Age Group	Male Number	(%)	Female Number	(%)	Total Number	(%)
0-1	29,000	0.93	26,000	0.84	55,000	1.77
1-4	111,000	3.57	107,000	3.44	218,000	7.01
Total 0-4	140,000	4.50	133,000	4.28	273,000	8.78
5-9	147,000	4.73	134,000	4.31	281,000	9.04
10-14	137,000	4.41	122,000	3.93	259,000	8.33
Total 5-14	284,000	9.14	256,000	8.24	540,000	17.37
Total 0-14	424,000	13.64	389,000	12.52	813,000	26.16
15-19	109,000	3.51	95,000	3.06	204,000	6.56
20-24	182,000	5.86	98,000	3.15	280,000	9.01
25-29	310,000	9.97	111,000	3.57	421,000	13.55
30-34	299,000	9.62	101,000	3.25	400,000	12.87
35-39	287,000	9.23	87,000	2.80	374,000	12.03
40-44	211,000	6.79	52,000	1.67	263,000	8.46
Total 15-44	1,398,000	44.98	544,000	17.50	1,942,000	62.48
45-49	138,000	4.44	33,000	1.06	171,000	5.50
50-54	67,000	2.16	17,000	0.55	84,000	2.70
55-59	33,000	1.06	11,000	0.35	44,000	1.42
60-64	14,000	0.45	7,000	0.23	21,000	0.68
65-69	8,000	0.26	6,000	0.19	14,000	0.45
70-74	5,000	0.16	4,000	0.13	9,000	0.29
75-79	2,000	0.06	2,000	0.06	4,000	0.13
80+	3,000	0.10	3,000	0.10	6,000	0.19
Total 45+	270,000	8.69	83,000	2.67	353,000	11.36
Total	2,092,000	67.31	1,016,000	32.69	3,108,000	100.00

Source: Ministry of Planning, 2001.

The United Arab Emirates is composed of seven emirates: Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al-Quwain, Ras Al-Khaimah and Fujairah. The city of Abu Dhabi is the capital of the UAE.

This study focuses on Al Ain, the second largest city in the emirate of Abu Dhabi, after the capital itself. Its location is 160 km east of the capital and approximately 160 km south-east of Dubai, and is located on the border of the Sultanate of Oman.

The population of Al Ain grew from a few thousand in pre-oil boom days to around 310,000 in 2000 (MOP, 2001). As elsewhere in the UAE, the expatriate

residents make up the majority of the population, coming for the most part from the Indian sub-continent (there are fewer Europeans and North Americans than in Dubai or Abu Dhabi). Al Ain is considered to be the garden of the UAE, with tourist attractions such as the national museum and Al Hafeet Mountain. Al Ain is also regarded with affection as the hometown of many Abu Dhabians, who make the trip down at weekends to stay with relatives and friends (UAE annual yearbook, 2001).

The tribe has been the principal building block of UAE society since successive waves of migrations, beginning in the middle of the first millennium BC, brought Arab tribes to the region, initially from Yemen through Oman and later from central and northern Arabia. The varied terrain which these tribes inhabited, i.e., deserts, oases, mountains and coasts, dictated the traditional lifestyles that evolved over the centuries. This sustainable use of various resources was assisted by the age-old social structure in which each family was traditionally bound by obligations of mutual assistance to its immediate relatives and to the tribe as a whole. This was a homogeneous society where tribal affinities were reinforced by a common religion, Islam, and a common language, Arabic (The Emirates Center for Strategic Studies and Research, 2001).

Before the establishment of the UAE as an independent state, in the traditional government which existed in each individual emirate, the ruler of an emirate (the Sheikh) was the leader of the most powerful tribe. The rulers and chiefs maintained their authority only insofar as they were able to retain the loyalty and support of their people through free access to the sheikh, and were required to hold frequent and open daily receptions, or councils, in which their fellow-tribesmen

4

could voice their opinions (The Emirates Centre for Strategic Studies and Research, 2001).

The United Arab Emirates has existed in its present Federal form for 32 years (more than a quarter of a century, since 2nd of Dec. 1971), with the Supreme Council being the highest authority in the UAE political system. Historically, back in the late 1960s, the rulers of the seven emirates felt there was a need to unify the emirates in order to unify income and to form one solid nation in the face of emerging political and economic challenges, especially with regard to strong and large neighbouring countries such as Iran and Saudi Arabia. The desire was therefore to create a country that had a strong economy (Omran, 1987). The Supreme Council, which consists of the seven hereditary rulers, heads the federal hierarchy; it is the ultimate arbiter on all policy issues. Given that the country has deep-seated roots in a tribal system characterising most of the Arabian peninsula, this makes it different from the western-style systems of democracy. In the UAE, it is common practice for people to voice their concerns by consulting their tribal leaders.

The Council appoints the federal government and ratifies federal legislation. The Council also has the power to appoint and dismiss the Prime Minister and Supreme Court judges. The Supreme Council elects the President and Vice-President of the UAE for a five-year (renewable) term. However, the election is a mere formality, since the presidency of the UAE is in practice assigned to the ruler of the oil-rich emirates (i.e., Abu Dhabi and Dubai) (Omran, 1987).

The UAE's transition from a seafaring, fishing and pearl-diving nation to a modern urban country has taken barely 30 years. Today, very few people depend on

livestock or the sea for their livelihood. Most are engaged in government services, commerce, manufacturing or the service industry. The original injection of wealth came from the exploitation of oil reserves in 1960, which are still the major source of national revenue. However, local industries are steadily increasing in importance. The UAE's open economy encourages imports, but oil income and a developing manufacturing sector, including vigorous free zone activity, help maintain a favourable balance of trade. The export of non-oil products has grown five-fold since 1980, though from a very low base, while free trade encourages foreign investment and participation in enterprises from heavy industry to re-export and transit trade. (Shihab, 1992) (see economic indicators, Chapter Two, p. 44).

Despite the benefits of this dramatic progress achieved and experienced by the UAE, one cannot ignore or overlook its various negative effects, for example in terms of loosened family ties, increased pollution and a growing imbalance in demographic status. The latter is due to the large influx of expatriates and their growing ratio in comparison to the local population.

1.3 The Health Care System of the UAE

The rapid socio-economic development of the 1970s was reflected in the establishment of the health system and health institutions and services which replaced the traditional mode of medical care largely based on herbal medicine and some of the limited health care services which had been set up in 1956 through the opening of Al Maktoum Hospital in Dubai, and the Sara Horman Hospital founded in Sharjah. A small maternity ward was opened in Ras Al Khaimah while in the Emirate of Abu Dhabi there was no hospital as such. Dr. McAuley from the

Maktoum Hospital would occasionally go to Abu Dhabi to see some patients. The Oasis Hospital was opened in Al Ain in November 1960, while Al Ain Hospital was opened in 1968 and Tawam Hospital in 1979. These hospitals are now part of a network of government and private hospitals and primary health care centres which are distributed throughout the country (Mohmmed, 1994).

The Federal Government Ministry of Health (MOH) was established in 1971 and is the main provider of health care services in the UAE. The Minister of Health is the head of the MOH, assisted by Undersecretaries and Assistant Undersecretaries, each of whom is assigned to a specific field of health services (i.e., curative, preventive, finance, pharmacy, etc.). In addition to the (MOH) system as the main provider of health care, there are parallel health care systems provided by the Abu Dhabi General Authority for the Support and Development of Health Care (ADGAHC), the Dubai Health and Medical Services (DHMS), the Ministries of Defence (MOD) and the Interior (MOI), petroleum companies and the private sector (MOH, 2000). All these bodies/organisations provide health services for their staff and their families, who do not generally use MOH services; however, when a certain speciality is not available in their own health systems, they are then allowed access to MOH services.

The government health care system is organised into nine medical districts: three for the Emirate of Abu Dhabi and one for each of the other six emirates. These districts are intended to serve as units of primary, secondary and tertiary care and provide preventive and public health services. More will be said about this point in Chapter Two (section 2.4.4). Today, there is a comprehensive state medical system providing population access to a full range of largely free medical, dental and

paramedical services. Some small charges are made for issuing annual health cards (i.e., 300 Dhs: approximately equal to US $90), and for laboratory and radiological investigations.

The primary Health Care Department is the gateway to the medical care system in the UAE, and is intended to be the first level of contact of individuals, the family and the community with the national health system. In addition, there are specialised services such as general medicine, surgery, maternity and dental, cancer, psychiatric, geriatric, and rehabilitation centres.

The rehabilitation centres for the disabled are spread throughout the UAE and are affiliated to the Ministry of Labour and Social Affairs. Moreover, private medical facilities have been distributed across the UAE. Some of these facilities provide a comprehensive range of state-of-the-art medical and surgical services. Although people have to pay for the cost of treatment if they choose to go to private health facilities, it appears that some prefer private hospitals to public ones. This is mainly due to the desire to avoid long queues, to secure privacy, or to gain access to highly sophisticated services that may not be available in government hospitals on site (MOH, 2001).

Most of the health care professionals are expatriates, but it is planned that more UAE citizens will enter this field. The Ministry of Health has employed an experienced and highly capable nursing workforce mainly from Asia, the Middle East, North America and Western Europe. The proportion of UAE female nurses in the nursing workforce is very low: around 5% of the total nursing staff. Despite the fact that the Ministry of Health has founded a network of nursing schools across the UAE, and encouraged nationals by means of federal grants, the number of UAE

nationals entering this sector is still very small. This might be attributed mainly to the available study or work alternatives and/or cultural reasons (MOH, 2001).

Since 1984, the UAE University's Faculty of Medicine and Health Sciences has produced a total of 186 graduates, including 53 male and 133 female national doctors. The first School of Nursing was established in Abu Dhabi in 1973 with many branches throughout the UAE. They provide two nursing programmes and accept students of both sexes. A total of 587 students graduated from both programmes between 1973 and 2000, an average of about 20 graduates per year (MOH, 2001).

Health care services are financed from two main sources: the federal and/or local government in addition to the private sector, which is self-financed from the owner's private resources. Health registration in Primary Health Care (PHC) has been introduced for expatriates as well as for citizens of the country (Federal Law number 7, 1984). The recent adoption of a rationalisation policy, which came into use in the late 1980s, and the recognition of PHC as a means of implementing health policy and ensuring equity of distribution and improvement in the quality of the service, are characterised by a new trend in health policies (Bener et al., 1993). This trend is the adoption of an integrated comprehensive PHC service as a long-term strategy i.e., the integration of school health, public health, occupational health, geriatric health, environmental health and dental health services into PHC. It is worth mentioning here that most of these policies have not yet been adopted or implemented by the responsible health authorities.

1.4 Statement of the problem

The Al Ain population has experienced rapid growth and major structural developments. This rapid demographic expansion has imposed increasing demands on health care services; the statistics reflect an increase in hospital admissions of chronic patients with diabetes mellitus, hypertension, paraplegia, bedsores, etc., conditions which do not require inpatient care but could be followed up through PHC or home visits. Moreover, the workload of the Emergency Departments has increased dramatically during the last few years (MOH, 2000a, 2000b). A recent report from the Ministry of Health Central Statistics Department (MOH, 2002a, 2000b) revealed that the hospital polyclinics have experienced increased use by patients requiring routine consultations and that they have become a frequent first resort for many patients who prefer to use them rather than going to their local PHC clinic. This phenomenon has led to the development of many chronic problems in terms of more congested outpatient polyclinics around the year, long waiting lists in many critical clinics, the first available appointment being scheduled for three months or more ahead, and clinics becoming over-crowded with patients (emergency department referrals, follow-ups, routine walk-ins, medicine refills, etc.).

In addition, as will be explored in Chapter Two, diseases of the circulatory system and road traffic accidents are ranked first as causes of premature death in the age group in which productivity is highest and family commitments are most demanding. Sedentary living, smoking, high speed driving with a failure to wear seat-belts, and very weak rules regulating traffic, have all contributed to the

emergence of chronic diseases and disabilities that are in many cases preventable through health education and the promotion of health awareness.

The ALAIN outreach community health nursing service was established at Tawam Hospital to solve some of the problems mentioned above. It has been well accepted and received by patients. However, this service has been limited to a certain category of patients who are registered and eligible to be treated at Tawam Hospital. Expanding the service so that it is available in all the hospitals of the country will not help to solve the problem, because once again the service will be limited to patients who approach the hospital seeking health care. Therefore, in order to cover a wider proportion of the community, a national policy is needed based on the health care needs of the UAE population.

Such a policy, if adopted, should aim to ensure continuity of health care provided for patients with chronic diseases within the community. It could also minimise hospital bed costs and cut down expenditure on unnecessary investigations and needless treatment within the hospitals which involve high costs in money and manpower compared with the impact on service users (World Bank Report, 1997). In addition, it could be more practical for patients by solving transportation-related problems, especially for the elderly, handicapped and children, and less costly, and more convenient since the patients are kept in their own environment.

1.5 Reasons for choosing the topic

There were two principal reasons for community health care nursing as the topic of the present study. First, since the 1978 International Conference on Primary Health

Care held in Alma Ata, USSR and organised by the WHO and UNICEF, primary

health care has been recognised as the main vehicle for attaining the strategic goal

of the WHO – "Health for All" by the year 2000 (WHO, 1978). The UAE, like

other countries in the world, is trying to adopt this strategy by improving the

existing public health care system and by shouldering its responsibility to maximise

the cost-effectiveness, quality and efficiency of its health services. Second, while

the UAE is attempting to carry out the tasks listed above, problems in the existing

health system, including the increased pressure on current health services, the

dominance of hospital-based care and curative/treatment orientation, are a soource

of great strain and impede the achievement of the WHO goal (See Chapter Three:

section 3.3).

1.6 Objectives of the study

The ultimate aims of this research may be summarised in two main objectives:

1) To explore and discuss the evidence relating to the health and health care needs

of the UAE population.

2) To explore and discuss ways of providing community health care nursing in

order to propose the most appropriate system for the UAE community.

The comparative method

In this study, the researcher used a comparative method, comparing certain features

of the health systems of the UAE, Bahrain, and the UK. The purpose behind this

comparison was to gain a greater awareness and a deeper understanding of these

features in order to assess both the need for introducing CHCN into the UAE

community and the likely implications of different ways of organising CHCN services. One of the useful characteristics of comparative studies is that they emanate from "a desire to learn from the experience of other countries" (Hill, 1996, p. 39). Another advantage of comparative research, as May (2001, p. 203) notes, is that it makes it possible

> "to understand and explain the ways in which different societies and cultures experience and act upon social, economic and political changes, plus how these views relate to more general changes and thus shared experiences and actions in the face of similar concerns and pressures. The outcome of such research enables us to shape and act upon the future via a greater comparative knowledge of our present practices and their potential consequences."

The selection of the two countries for comparison with the UAE was based on the fact that the UK is a developed country with historical links with the UAE, while Bahrain is a neighbouring developing country, and both have an established community health care nursing services in place.

Historically, the use of the 'comparative method' was begun in the natural sciences in the conduct of experiments. In the social sciences, similar experiments were carried out when comparing the condition of two groups, where one was subject to an intervention and the other, an identical control group, was not. At a later stage, the contributors to comparative social policy moved away from comparison as a 'controlled experiment', arguing that it was not possible to standardise or control sufficiently to test models across countries (Mabbett and Bolderson, 1999).

Comparative studies in a variety of areas of social policy, such as health care systems, have developed apace in recent years, and this has highlighted new

issues in comparison and contributed to the development of new methodological approaches (Mabbett and Bolderson, 1999).

Hantrais (1996), in her discussion of comparative health systems, highlighted the following advantages of performing comparative studies. The author noted that learning about the health systems of other countries gives a perspective on one's own system, and that features from one system can offer lessons for another. She also commented that comparative studies provide an opportunity to learn about the influence of health systems on health status, and to observe strategies for achieving health equity under different circumstances with maximum efficiency. Furthermore, comparisons can lead to the identification of gaps in knowledge and may point to possible directions that could be followed and of which the researcher may not previously have been aware. Evans (2001) noted that comparative methods could be used to measure and compare the achievements and efficiency of health systems across countries.

Comparative studies are conducted by analysing similarities and differences (Hantrais, 1996). In this study, the researcher looked at the essential features of the three health systems, the elements that they have in common, the characteristics that are different, and the relevant outcomes. By analysing the differences, the researcher learnt what the other systems do differently to improve health status.

When using comparative methods, it is crucial to appreciate the importance of cultural, social and organisational diversity, especially if the aim is to learn 'lessons from abroad'. For instance, when comparing figures of health status indicators, the differences in the population structure of the three countries were taken into consideration in interpreting the results. The importance of cultural

14

diversity and cultural effects lies in the fact that, as Sue (1999, p. 92) points out, "Cultural beliefs, values, interpretations of physical conditions, and conflicts with the larger society may influence treatment patterns and prevent timely access to health services." Likewise, in a discussion of the cultural patterns linked with psychological disorders, Helman (2001, p. 180) asserts that "each culture provides its members with ways of becoming 'ill', of shaping their suffering into a recognizable illness entity, of explaining its cause, and of getting some treatment for it."

Cultural differences were also borne in mind considering the great impact culture has on people's perceptions of society at large, health being one aspect of society. People from different cultures view the health system and health care in different ways. Additionally, health carries different implications for people from different cultural backgrounds. Since this is the case, it needs to be emphasised that cultural differences exist between different societies at various levels and across diverse fields, the health sector being no exception. For example, a comparison between various aspects of the health care systems in the UAE and the UK reveals that there are some marked differences, resulting principally from societal and cultural factors.

1.7 Structure and organisation of the thesis

The thesis is divided into six chapters. Following this introductory chapter, Chapter Two analyses the health profile of the UAE in order to identify the UAE's health needs and health care needs. To achieve this goal, the researcher starts the chapter by discussing definitions of health, disease, illness, health care and health needs.

The researcher explores linkages between the health and other sectors in the UAE, including education, housing, income, etc. Health in the UAE is discussed in the light of specific health indicators and health care indicators and, as a consequence, the UAE's health needs and health care needs will be identified.

Chapter Three is divided into two sections. The first section includes a discussion of the definition of PHC in the light of the Alma Ata declaration and the available organisational models, specifically the community-based and the medical models. It discusses the status of PHC in the UK, an example of a developed country, in Bahrain, as a neighbouring Gulf country and in the UAE. The section on PHC ends by presenting arguments for a PHC-based health system in the UAE. In the second section of the chapter, definitions of CHCN and the available organisational models are presented. The roles played by the CHC nurse are highlighted. In a similar way to the outline followed in the PHC section, the status of CHCN in the UK, Bahrain and the UAE is identified. The chapter ends by presenting arguments for having PHC-based CHCN services in UAE.

Chapter Four, which deals with methodology, details the fieldwork, and covers three main components. First, it deals with the questionnaire technique used to obtain broad-spectrum feedback from the consumer and to explore the community's views and perceptions of the present health care system. Second, it discusses the focus group approach utilised to obtain a preliminary overview of the public's perceptions and expectations of a potential community health nursing service. Third, it offers a discussion of the in-depth interview technique employed to evaluate the potential responsiveness of another important stakeholder: the health

care team. In so doing, the researcher's aim was to assess how this service was perceived in terms of the needs and efficiency of the health system.

Chapter Five presents the results of the three instruments used in the fieldwork, namely the questionnaire, the focus group interview and the staff interview. Chapter Six, which is the concluding chapter, discusses these results in relation to five themes and in the context of the discussions of the literature provided in the previous chapter. These themes were derived by combining the objectives of the three instruments used, namely, the questionnaire, focus group, and staff interview, and the results of the literature review. These themes are: the use of the current service, knowledge and awareness of CHC nursing, the role of the CHC nurse, barriers to and facilitators for implementing the new service, and respondents' suggestions for implementation. This chapter ends with conclusions drawn from the fieldwork results. The final chapter also includes a discussion of the findings of the study and of the themes which could be the basis for further study and research.

Chapter Two:

Health and Health Care Needs in the UAE

2.1 Introduction

The purpose of this chapter is to analyse the health profile of the UAE in order to identify the UAE's health needs and health care needs. It is important to provide such an analysis in the initial stages of the study, since the success or failure of any new health service is closely related to the extent to which it can contribute towards meeting those needs. This is supported in Blackie (1998), who indicates that "assessment of these needs should play a key role in tailoring strategic intervention plans that tackle health problems effectively and measure outcomes in terms of health improvement".

To achieve the above purpose, the researcher will start the chapter by discussing definitions of health, disease, illness, health care and health needs. The researcher will attempt to explore linkages between health and other sectors in the UAE, such as education, housing, income, etc. Health in the UAE will be discussed in the light of specific health indicators and health care indicators and, as a consequence, UAE health needs and health care needs will be identified. Studies conducted by international organisations such as the World Bank and the WHO/UNDP, as well as other related studies and statistics from the UAE, the UK and Bahrain, through a 'comparative method', will be used as references for identifying the UAE's health needs and health care needs.

At the request of the UAE government, a number of global organisations, such as the WHO/UNDP and the World Bank, have conducted several surveys in which they looked into the health status and the health services of the UAE and identified shortcomings in some areas. The WHO/UNDP (1996) report researched the issues related to the laws adopted for financing and administrative issues such as purchasing, recruitment, etc. In 1997, the World Bank conducted a comprehensive analysis of the national health delivery system, analysed the role and functions of the MOH, the major constraints it faces in fulfilling its role, and presented recommendations to ensure the high quality of health services provided and to improve the system's efficiency and effectiveness (MOH, 1998). These studies have provided useful commentaries on the data available from official sources in the UAE.

2.2 Definitions of Health, Health Care and Health Needs

2.2.1 Definition of Health

In this study, the researcher sought to assess the need for introducing a community health care nursing service into the UAE community. In order to make such an assessment an explanation of the UAE's health status and health needs is seen necessary, but first we should explore the various definitions of "health" and its relationship to other concepts such as "disease" and "illness".

"Health" and "illness" have different connotations for each individual. Perceptions of and influences on states of health vary according to age, culture, geographic location, professional and personal responsibilities, and past experience with health or disease. To illustrate, Curtis and Taket (1996) argue that "illness" is the personal experience of the physical or mental discomfort of and the psychological

19

and/or social ramifications for the person who acknowledges that he or she is not well. "Disease", on the other hand, is a pathological condition of a part, an organ or a system of an organism resulting from various causes, such as infection, genetic defect, or environmental stress, and characterised by an identifiable group of signs and symptoms. Disease refers to the pathological signs and symptoms, while illness refers to the subjective feelings of being sick, such as feeling pain, discomfort, etc.

It has become conventional to divide discussions of concepts of health, illness and disease into "lay" and "professional" views. The examination of both views has revealed great diversity between and among them in the discourses of the subjects (Curtis and Taket, 1996).

From the several definitions of health available, it is apparent that no universal agreement exists. However, health is usually defined positively or negatively, as outlined below.

2.2.2 The Concept of Negative Health:

The negative definition of health is emphasised in the discourse of the biomedical model. In this model, health is defined as the "absence of disease". The model takes health as the baseline and measures ill health in terms of the amount of deviation from that baseline. When studying the health of a population, reliance on the negative definition of health can provide information only about a very small percentage of the population at any one time, around 20 %, leaving the health of the remaining 80 % undetermined. For instance, when studying a Western society, only approximately 15% of the general population will have chronic physical limitations and between 15 – 20 % will have psychiatric problems (Bowling, 1997). This approach has been

criticised in several respects by many authors as being unable to reflect the health of the whole population, for being unable to look at the person as a whole, and for separating mind and body (Nettleton, 1995).

The negative definition of health is too limited to determine whether or not one is healthy, because a person might not be showing signs and symptoms of illness and yet may not be healthy. The negative definition supports the notion that health care consists of responding to illness and that "health" is the absence of defined illness or disease. This is a definition that is widespread in contemporary Western societies. There are many who feel that one cannot think about health without the reality or possibility of disease (Stacey, 1991). Despite the criticisms, the biomedical model and its associated concept of health remain the basis for most Western health care systems (Curtis and Taket, 1996).

WHO Definition of Health

The most famous attempt to go beyond a conventional disease model when defining health is probably the definition of the WHO, which emphasised the development of measures of positive health. The most quoted definition was outlined by the WHO in 1984: " The extent to which an individual or group is able, on the one hand, to realize aspirations and satisfy need; and, on the other hand, to change or cope with the environment. Health is, therefore, seen as a resource for everyday living, not an object of living; it is a positive concept emphasizing social and personal resources as well as physical capacities." (WHO/EURO, 1984: 653-4).

The WHO definition reflects the socio-ecological discourse of health. The socio-ecological definition of health states that to reach a state of complete physical,

mental, and social well being (i.e. health), an individual or group must be able to identify and to realise their aspirations, to satisfy their needs, and to change or cope with the environment (Stacey, 1991). The socio-ecological definition of health seeks to enable the individual to take control of his/her own health and adjust to the environment. According to this definition, not only must there be an absence of disease, but an individual must be mentally and socially healthy.

Downie's Definition of Health

Downie et al. (cited in Blackie, 1998) suggested a broad model for the concept of health - a development of the WHO definition - in terms of positive and negative health aspects, in an attempt to explore the many components of health and the intricate web of their interrelationships (Figure 2.1.1).
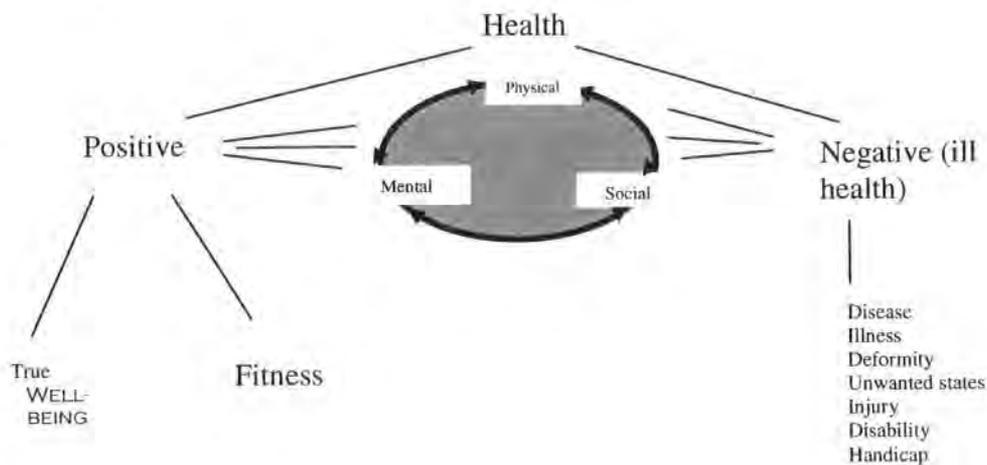
Figure 2.1 - A model of health (Downie et al., 1991, cited in Blackie, 1998)

In this context, it may be deduced that health means different things to different people. People may enjoy good health at variable ratios taking into consideration physical, psychological and social aspects. For instance, someone might

not be having any physical problems but yet be unhealthy due to psychological stress arising from problems at work, in the family, etc. The intricate interrelationships among the physical, psychological, social and environmental factors, and their impact on health must be addressed.

Different models of health have different implications for CHCN, the influence being on the role played by the CHCN. In a medical model, the curative role will be dominant, while in the socio-ecological model the focus will be on preventive and promotive roles in addition to the curative role. The latter model also places more emphasis on the involvement of the individual in his/her health and health care and less emphasis on the role of the expert professional. In this study, in line with the recommendations of the WHO, "health" will be considered in its broad sense, that is, according to the socio-ecological model. This model acknowledges the role that community nurses can play in meeting the health needs of the individuals in the community in a holistic way, whether these are physical, psychological, spiritual, etc. (Blackie, 1998).

An important point to be mentioned here is that in practice, whenever planning nursing care, the consumer's point of view about health needs to be taken into consideration, a crucial point for a successful service. This idea is supported by a study conducted by Cornwell (1984, cited in Pearson, 2002) about the definition of health from the people's perspective, which revealed that differences in their understanding of health were found to exist among various professionals and lay people, and therefore the author recommended that public health nurses need to allow these in their work and come to a shared view, before effective intervention can occur.

2.2.3 Definition of Health Care

In its limited sense, health care means services provided to individuals by qualified health care providers (Ham, 1999). Health care is divided into three levels. Primary health care refers to the basic provision of preventive services, or the treatment of common acute illnesses and conditions (e.g., sore throat, otitis media, pregnancy) or of routine chronic conditions (e.g., diabetes, hypertension, arthritis) in ambulatory settings. Simply put, it refers to the first point of contact with health care providers and may include referral to other providers. Secondary health care refers to more intensive or complicated care, usually provided in acute care settings (usually a hospital, e.g., open-heart surgery, treatment of complications of diabetes). Finally, tertiary health care is long-term care for complex, chronic, and complicated health problems (McEwen, 1998). Facilities, organisations, and providers at each of these levels vary among different health care systems. The way health care is supplied differs markedly from country to country, even within the industrialised West, ranging from, on the one hand, the UK National Health Service, to the more market-orientated system of the USA, on the other (Mooney, 1992). There is no general agreement on how best to deliver health care.

In its broad meaning health care involves caring for health in its positive sense, which involves services to meet the physical, social and psychological needs of individuals. A large proportion of this type of health care is provided by the family for its members. It includes, but is not limited to, service delivery through preventive or curative facilities, social care, such as nursing homes, physical environmental factors such as housing, ventilation, sanitation, the usage of medical technology, etc. (Ham, 1999).

2.2.4 The Concepts of Need and Health Needs Assessment

The definition of need is complex, and may have different interpretations and be measured from a variety of perspectives. In a well known analysis dating from the early 1970s, Bradshaws's taxonomy of social need outlines four types of need (cited in Baldock et al., 1999):

Normative need is the type of need defined by an expert or professional (such as a doctor, nurse, or dietician) according to his or her own standards and value judgements. Normative need may vary over what is the acceptable standard, and sometimes the values and standards of the experts might be different from those of their clients.

Felt need is the need which people feel, or, in other words, what they want. Felt need is subjective, and is affected by the knowledge and expectations of the individual about what could be available.

Expressed need is a felt need transformed into a demand by someone who may have the power to do so, such as a politician. However, not all felt need is turned into a demand. A lack of opportunity, motivation, or assertiveness could all prevent the expression of a felt need.

Comparative need can be identified by comparing standards achieved by groups within one society or in different societies, such as income, health service, etc. On this basis, this type of need may be defined in terms of the average standards/resources found between the compared communities or societies.

In addition to Bradshaw's taxonomy, Forder (1974) adds one more definition, which is the concept of technical need. This name is given to a need which emerges when a new form of provision is invented, or when existing provision is made much

more effective, as, for instance, with advances in medical technology, or new methods of treatment whether by intervention or medication.

Manning (1998) suggested a simple classification of three types of need, that are closely related to some of Bradshaw's concepts of need. The first are those needs which the people are aware of on their own, in other words, felt needs? The second type of need includes those needs defined for us by others, for instance, by doctors or teachers, but also by family and friends. This type of need compares with Bradshaw's concept of normative need. The third type of need identified by Manning is partly an extension of the second: it focuses on needs as revealed by a comparison with other people in the same social group. Here, individuals may be said to be in comparative need because others have something that they do not have.

The humanist Abraham Maslow (1954) developed the theory of motivation and hierarchy of needs (cited in Doyal and Gough, 1991). The hierarchy includes five levels of need, starting from the bottom with basic physiological needs, moving to the need for safety, and progressing upwards to the need for love and belonging, the need for self-esteem, with the need for self-actualisation at the top. Maslow argues that the physiological and safety needs, however, are dominant, and must be met before higher needs can be dealt with.

The needs theories presented above imply a view of the human being that is close to the view provided by the biomedical model. With reference to the health care field, this school of thought places emphasis on the problems and needs of individuals and the role of nurses in assessing and fulfilling these needs. However, health needs incorporate the wider social and environmental determinants of health, such as housing, education, nutrition, and employment. This wider definition suggests

26

that many health needs of the population are not amenable to medical intervention, necessitating a look at the wider influences on health, which lie beyond the barriers of the medical model (Wright, Williams, and Wilkinson, 1998).

Health needs assessment is a systematic method of identifying unmet health and health care needs and of making changes in order to meet these unmet needs (Wright, Williams, and Wilkinson, 1998). In the words of Jolly and George (1996, p.71, cited in Cowley, 2002) three methods for assessing health needs are identified. These are:

➢ Comparison – by seeing what is provided elsewhere.

➢ Consensus – by asking different groups of people what they want.

➢ Epidemiology – by assessing the burden of disease and the effectiveness of interventions to control it.

In this study, the researcher used the above-mentioned three methods to assess the health needs of the UAE. Comparisons were made with the UK and Bahrain; individuals were interviewed about their needs and wants; and epidemiological data were reviewed in order to describe health needs in terms of the distribution of specific diseases. The major challenge for the health services providers is how to make changes in order to meet the identified needs using the available resources in the best possible way. It is impossible to achieve this goal without acquiring a comprehensive knowledge of current and current needs and expectations, with the aim of obtaining accurate and complete information regarding the services most needed by the population, in addition to looking at the quality of services currently offered.

Health needs vary among societies and groups of people and are largely triggered and caused by epidemiological, societal and economic factors. In this sense, a health needs assessment must include data on a range of issues affecting health such as housing, education, social needs, social policy on health, health services, leisure, the environment and social services provision. These identified health needs can then give a direction to policies and plans and make it possible to identify weak points that demand attention. Assessment of these needs should play a key role in tailoring strategic intervention plans that tackle health problems effectively and measure outcomes in terms of health improvement (Blackie, 1998).

People share common needs, such as the need for housing, nutrition, safety, medical care...etc. However, there is no list of needs or standards which is rationalised and widely accepted by the community as a whole. Therefore, it is left to the individual community to determine its needs while taking into account the available resources, which also varies within and between societies.

In this study, the researcher will refer to the above concepts of need and health needs assessment as necessary in order to assess and determine the UAE's health and health care needs.

2.2.5 Quality in health care

In 1980, Donabedian, building on his renowned research work into health services, articulated a patient-centred concept of quality of health care. Donabedian defined quality care as care which is expected to maximise the welfare of patients (Fung, 2001). This perspective was broadened by the Institute of Medicine in 1990 to include the population at large, the health system, and prevailing professional standards. In

this context, quality health care was defined as the degree to which health services for individuals and populations increased the likelihood of desired health outcomes and was consistent with current professional knowledge (ibid.).

In a comprehensive study of the development of quality management in the United States, health system, Donabedian distinguishes two essential dimensions:

- The technical – the core service that is delivered to consumers

- The interpersonal – the relationships between producer and consumer in the provision of a service.

Looking at quality in health services, Donabedian (1966) argues for the need to consider quality in terms of structure, process and outcome (cited in Kemm, 1998).

i) *Structure* covers the resources, equipment, staff, finances available and the way these are organised and utilised.

ii) *Process* includes what is carried out by way of assessment, advice and other intervention in relation to the worker; it deals with technical and interpersonal aspects of service delivery.

iii) *Outcome* measures the results of the intervention by the physician or health service, such as a reduction in morbidity or in health risks. It covers improved health, knowledge, health behaviour and client dissatisfaction.

Another widely quoted definition of quality in the context of health care is the one formulated by Maxwell (1984), who described six criteria by which judgments on outcomes of health care can be made. These characteristics of health services, also referred to as the 3As and the 3Es, are as follows: Appropriateness, Accessibility, Acceptability, Effectiveness, Efficiency, and Equity of service. These criteria will be utilised later in Chapter Six where the researcher deals with the implications of the

health and health indicators and the findings reached in Chapter Five. The aim will be to assess whether or not the six different criteria apply in the context of the UAE health system.

One way of ensuring that health services have these six characteristics is by clinical audit whereby health professionals look at the performance of their service and try to improve it (cited in Kemm, 1998).

The following section will discuss the relationships and links between the health and other sectors, and their implications in the case of the UAE, with comparisons whenever applicable with the UK and Bahrain.

2.3 The Links between Health and Other Sectors

The health care sector cannot work in isolation from other social, economic, environmental and political activities. A recent report (Acheson, 1998) commissioned by the UK government argued the need for all these sectors to work in close collaboration in order to improve the health of the population. The Acheson Report, with a particular focus on reducing health inequalities, gathered together and discussed the range of evidence on the determinants of health. Health needs cannot be determined without discussing health in relation to several socio-economic factors that are either directly or indirectly related to it, for example, the links between health and education, housing, unemployment, income and the environment. The researcher has drawn on several reports in his discussion of the relationship between the health and other sectors, mainly on the Acheson report as a framework for the discussion, and the 1999 Department of Health report in the case of the UK, and on a variety of reports in the case of the UAE, such as the UNDP and World Bank reports. These

reports present a critical discussion of health outcomes in relation to socio-economic and environmental factors and provide relevant recommendations.

2.3.1. Health and Education

Education can contribute to a general improvement in health. Studies in the UK have revealed that people with a good level of education usually have a healthier lifestyle than those with minimal or inadequate education (Department of Health, 1999). Hence, the higher the educational level, the healthier the lifestyle. This brings into focus the unique role played by schools, being the only formal institutions besides the parents that are allowed close and daily access to school children, thus potentially exerting an influence on their lives and habits.

Likewise, schools offer a real opportunity to improve children's health through providing a healthy environment and health promotion. They can help provide necessary health-related services (health education, physical exercise, and cookery courses) that altogether might instil in children lifelong healthy habits and allow them to derive maximum possible benefit from their education (Acheson report, 1998). The adoption of health-related services in schools might minimise the prevalence of obesity, eating disorders, and poor dietary habits. Such unhealthy practices are likely to continue into adulthood, possibly causing heart diseases, vascular impairment, diabetes, hypertension, etc.

A study conducted in the UK has recommended that a coordinated school health education that addresses key health issues be developed and integrated into the national curriculum (Department of Health, 1999).

In the UAE, education has been a priority for the federal government since its establishment in 1971. All children between the ages of 5 and 17 attend public and private schools from kindergarten to grade 12, which represents 65% of the total UAE children population (MOH 2001), with free transportation and other support services that have been established across the emirates. The remaining 35% constitutes those children who have not yet reached school age. In the UAE, adult literacy was 76.3% in the year 2000 (UNDP, 2000).

A field study revealed that the national curriculum in the UAE does not contribute a great deal to the promotion of healthy practices (World Bank Report, 1997). This was attributed to the absence of two important components: a good quality physical education and a sequential, age-appropriate health education. The lack of the former component is attributed to a lack of the necessary facilities, a lack of competent staff qualified in physical education, and a lack of educational physical programmes that emphasise lifetime fitness (World Bank Report, 1997). The issue of school health education was not addressed with due attention; having a clinic staffed with a school nurse has been presumed sufficient to provide essential health education. However, experience has proved this assumption to be wrong, especially with the growing number of students. There is only one nurse for every 700 students on average (MOH, 2000). According to S.A. Othman, Director of School Health, Al Ain (personal communication, February 23, 2002), school health nurses are only available on a part-time basis (due to a shortage in numbers), provide first-aid care when needed, perform annual screening for pupils and give health education whenever possible. Their role in health promotion is limited for several reasons: scarce resources; not being granted enough time to spend with the pupils to perform

their role as school nurses; and finally most of the nurses employed in school health care are general nurses who have not received any specialist training to function as school nurses.

Most recently, unfortunately, cookery courses for intermediate and high school girls have been cancelled and removed from the national curriculum (they have never been provided for boys). Such courses could have been retained to promote healthy nutrition habits among the school children, the educators of the next generation. Selling junk food such as snacks and sandwiches in schools is another serious issue, which, if left uncorrected, will cause serious health problems among the school population (Workshop on Nutrition in Schools, Al Ain, 2000). Here, it is worth mentioning that the daily per capita supply of calories in the UAE is very close to that in developed countries (See Table 2.2.1, p. 38 below).

These shortcomings in health education in a relatively rich country like the UAE are unacceptable. Improvements in the national curriculum could institutionalise healthy lifestyles and healthy eating habits into community life. Such a policy could, within a reasonable time, support the role of PHC and its affiliated services such as CHCN services by working towards the same objective, which is improving the health of the public and preventing diseases through health education. Childhood is the period of life during which it is possible for education to have the greatest influence in promoting healthy habits and in encouraging good health among a larger proportion of the population. The school nurse could coordinate with a PHC-based CHCN service in planning and implementing such health education programmes. These two roles can be combined in the case of rural areas, but adequate training in performing the two roles would be essential.

2.3.2 Health and Housing

Shelter is considered a prerequisite for health. Acheson's report (1998) stated that poor quality housing is associated with poor health. The report highlighted the relationship between dampness and the incidence of respiratory diseases such as asthma, bronchitis, etc. There is a consensus over the importance of adequate housing that is furnished with all the accompanying basic infrastructure required for healthy living such as water, electricity, and sewerage. The development of better housing has had a positive effect on the health of individuals (Department of Health, 1999). Researchers have also discovered links between housing and general social and psychological well-being (Clarke A, 2001). Cramped living conditions, a lack of privacy, inadequate facilities and other housing problems can produce stress and be responsible for the onset of clinical depression. Undoubtedly, housing is vital, especially in countries with extreme climate conditions, as in the Arab Peninsula.

The dramatic change that occurred as a result of the discovery of oil in the UAE has influenced all aspects of UAE society, and housing is no exception. Before this, inadequate housing and environmental sanitation, especially an unsafe water supply, improper sewage disposal and poor ventilation, contributed to most health problems (Ministry of Information, 2001, p. 291).

In the UAE, during the last thirty years, spacious houses have been built furnished with all the essential services, such as a safe water supply, electricity, sewerage and other necessary services, and have been allocated to UAE nationals by the Ministry of Public Works and Housing. However, there are many other housing schemes also executed by this ministry. Nationals may also receive long-term loans to build their own houses. Non-nationals, the bulk of the population, live in rented

accommodation that is either let privately or provided by their employer. Many of these houses have more or less the same specifications as those built for UAE nationals (Bonine, 1998). This applies to migrant people from different socio-economic levels. The low-skilled migrant labours such as housemaids, drivers and cooks might live in the household with their employer and are given a section in the house with essential facilities such as a bathroom and kitchen. However, others might reside in dormitory accommodation, in which they share such facilities (FEA report, 2002), and these conditions may, while meeting minimum standards, be less conducive to good health.

2.3.3 Health and Unemployment

When discussing the impact of unemployment, it is possible to distinguish between the material, physical and psychological aspects of job loss (Clarke, 2001). Employment plays a vital role in reducing poverty, thus contributing to raising standards of living and helping the individual to maintain adequate housing and to secure a good education and access to recreational activities for dependants. All these contribute not only to the physical but also to the emotional well-being of the workers and their dependants. Unemployment, especially long-term unemployment, increases the risk of illness and premature death. In the UK, it was revealed that men unemployed at the time of both the 1971 and 1981 censuses had a mortality rate double that of all other men in the same age group (Department of Health, 1999).

In the Gulf countries, the expatriate population is far larger than the indigenous population and expatriates constitute the majority of the labour force. A study conducted by Birks, Sinclair and Associates (1992) estimated the labour force

in the Gulf countries to be 7.4 million, of which 2.1 million were nationals (28.6%), and 5.3 million were expatriates (71.4%). This means that around three quarters of the labour force in the Gulf countries was imported. In the UAE in the early 1990s, the expatriates represented 70.9 % of the labour force, while UAE nationals represented was only 29.1% (GCC market report, 1992). Looking at the total UAE population, of which about 20% are nationals, it may be noted that the UAE nationals' contribution to the existing labour force is rather limited, as expected. This can be attributed to the following: a limited number of working national females partly due to custom and tradition, and partly to economic prosperity; an increased number of children in the total population, and an increased number of economically inactive working males, despite the fact that they are of working age (GCC market report, 1992).

The latter may be explained by the fact that many UAE male nationals rely on the high financial status of their parents, and thus do not feel the need to work in order to increase their income. Regarding the expatriates, around 40% are children and housewives who are financially dependent on the men as the breadwinners. It is worth mentioning here that certain new laws recently promulgated relating to maternity leave, working hours, etc. might make it possible for more national women to participate in the workforce (Ministry of Information and Culture, 2002). On the other hand, the expatriate female labour force has always been larger than that of UAE nationals, but by the early 1990s it still did not constitute a significant percentage of the total expatriate labour force (GCC market report, 1992).

National females who are fit for work but who are not working are more prone to have physical and mental problems such as depression and anxiety than those who are working. Similarly, unemployment affects the health of the non-

working national males (who are fit to work) negatively, but with different outcomes, such as an increased tendency towards drug abuse, criminal acts, road traffic accidents and the development of chronic non-communicable diseases in the long run (Ghanem, 2000). This association between unemployment and both physical and mental health was highlighted in the Acheson report (1998) although, in the UK, unemployment is more clearly associated with poverty.

The association between employment and health may be explained by the positive effect of being employed on the socio-economic and psychological status of the individual with the consequences of better health. However, this association may become negative depending on the working conditions provided to individuals. For example, the evidence shows that people in jobs which place high demands on them over which they have no control are at much higher risk of coronary heart disease (Department of Health, 1999). Armitage (cited in Henessey (1997)) stated that there are people whose working conditions expose them to health risks or increased danger from accidents. In some cases, regular doctors' appointments due to ill health might threaten continuing employment, and this is especially true for people who are employed in low paid jobs. These people might delay being seen by a physician in order to keep their job secure, which might have a negative impact on their health (Henessey, 1997).

2.3.4 Health and Income

Health and economic factors are closely interrelated and interdependent. The income of a person is very likely to be a determining factor of his/her lifestyle, pattern of spending, the quality of his/her purchases and the type of health care services he/she

would approach in the event of illness (Department of Health, 1999). Research clearly illustrates that low income is strongly associated with poor health (Clarke, 2001). An anonymous author (1989, p. 26) was cited in Clarke (2001) as saying, "the poorer you are, the more likely you are to die young".

The UNDP's report (1998) estimated that 99 % of the overall population of the UAE had access to health services, 95 % of the population had access to safe water, and 77% of the population had access to sanitation (for the period 1985 – 1995). More up to date data on the previously mentioned topics are not available; however, it is expected that these figures have risen in the past years with the continuous development in the health and other public services.

The GDP per capita for the UAE is much higher than the average of all other developing countries, and not significantly lower than the average GDP in the industrialised countries (See Table 2.2.1). In the UAE, employees' salaries – for nationals and non-nationals- are estimated to be among the highest in the world (UAE Annual Book, 2001). It is worth mentioning here that the high income among UAE nationals has had a negative as well as a positive impact on health, as it has encouraged a sedentary lifestyle, overeating without a good dietary balance, an increase in tobacco smoking, traffic and occupational accidents, etc. (Rosling, 1999), which have led to the emergence of chronic non-communicable diseases and disabilities. On the other hand, it was noted that life expectancy in the UAE has increased (this will be discussed later under "health status indicators").

This can be explained by the reciprocal relationship observed between health and economic development. Economic development policies tend to improve the health status of the population. Better health contributes to economic

development. Health increases human potential and improves the quality of human resources (Acheson report, 1998). Historically, the most significant improvements in the health of a population have been associated with improvements in nutrition and in environmental and public health, not only in medical care. Similarly, the high income in the UAE has led to improvements in environmental and public health, as will be discussed in section 2.3.5 below.

In conclusion, there is an intimate relationship between health and income; this relationship has both positive and negative implications (with the balance probably inclined towards the former). For the more financially secure a person is, the better his/her health condition. This gives rise to an interesting observation: there appears to be a relationship between inequalities in health and inequalities in income. This issue is beyond the scope of thesis, but nonetheless, it could be an interesting area for further study and research.

Table 2.2.1: International Human Development Comparisons, 1997

Indicator	UAE	All Developing Countries (average)	All Industrial Countries (average)
Real GDP per capita ($)	19.115	3.240	23.741
Adult literacy %	74.8	71.4	98.7
Daily per capita supplies of calories	3,366	2,628	3,377

Source: UNDP, Human Development Report, 1999.

2.3.5 Health and Environment

Physical and social environments play major roles in the health of individuals and communities. The physical environment components are the climate, air, water, soil,

39

etc. and the social environment (e.g., housing) which has been discussed previously. The physical environment affects people's health, manners, activities, traditions, customs and their relations with each other (Department of Health, 1999).

People with a healthy physical environment, which includes cleanliness, proper ventilation, temperate climate, etc., are more likely to enjoy good health, and this might be reflected positively in the individual's performance at work, and in his/her societal relations and family life (Department of Health, 1999).

Sometimes, the unavailability of a suitable environment might prevent some people from taking up a job: for example, a person who is bound to a wheelchair because of a physical impairment might experience this as a handicap because his environment lacks the necessary facilities for a wheelchair user, such as a transport facility or office accessibility (Henessey, 1997).

In the UAE, the government has made substantial progress in terms of providing clean water, safe food and adequate housing with effective waste management; therefore, the threat of infectious and parasitic diseases is minimal and not endemic. All food service facilities (restaurants, cafeterias, coffee and tea shops, bakeries, etc.) are inspected by health inspectors. The majority of workers in those areas are non-nationals. They are obliged to undergo routine medical check-ups, including a laboratory and radiology check-up every three months, to ensure that they are free from any bacterial, parasitic and/or viral infections. Infected subjects who are not UAE nationals are treated then deported out of the country (Ministry of Health, 2000).

An Environment Protection Agency has been created to protect the local environment (land, sea and air). In 1999, this agency created a federal law to protect

the environment by ensuring that all factories located in the state observe the respective rules and regulations (Federal law no. 24, 1999). Delay in treating the pollution resulting from sinking oil tankers, smoke from factories and car exhaust is due not to a lack of resources (human and material) but to the absence of coordination among the municipalities, oil companies and the Environment Protection Agency (World Bank Report, 1997). The pollution of the seashores warrants immediate attention and an active plan to minimise its negative effects on the sea life and the fishing industry. The latter is one of the main sources of food for the UAE population.

To summarise, using examples from the Acheson report (1998) relating to the UK and from reports and policy developments relating to the UAE, a range of socio-economic determinants of health have been discussed. There is considerable evidence of strong links between health and education, housing, unemployment, income and environment. The development of any new health care service, such as CHCN, needs to acknowledge these links in the way the service is set up, how it operates, the training of its staff and the targets that are set. An improvement in the health status of the population requires close collaboration and coordination among the social, economic, environmental and political sectors.

2.4 Health and Health Care Indicators in the UAE

Having examined the key issues that directly and indirectly affect the health of the UAE population, and that should consequently play a vital role in shaping the strategy drawn up by the state to meet national health needs, the indicators of health and health care indicators in the UAE will now be identified in terms of demographic, economic, health status, health service and health system

indicators. These indicators mirror the current situation in the UAE. This will help specify the priorities and the strategies required to deal with these priorities within the limits of the available resources.

In order to discuss the indicators, statistics and reports from the Ministry of Health, the UNDP, the World Bank, the WHO and others were used as references. Data obtained from these reports were combined to provide a comprehensive overview of the health and health care indicators in the UAE. It is assumed that the information contained in these reports is reliable since it has been collected by independent organisations known worldwide to be credible, and on the other hand there was no other source that could have been used as an alternative with higher reliability. On the other hand, the information contained in these reports cannot be considered up to date, a drawback discussed in the limitations of the study. Throughout the discussion, comparisons of the UAE data with data from the UK and Bahrain will be made.

2.4.1. Demographic Indicators

The UAE has experienced a major increase in population size since 1975. The population doubled between 1975 and 1980. According to the 1980 census (Ministry of Planning, 2000), the population was 1,043,225. In the subsequent decade, the population again almost doubled to reach 2,011,400 in 1992 (Ministry of Planning, 2000; see Table 2.3.1. The UNDP (2002) projected that the total UAE population would reach 3.2 million in 2015, with an annual population growth rate of 1.4% for the period between 2000 and 2015. However, statistics from the MOH (2002a) indicated that in the year 2000, the population had already reached 3,108,000,

reflecting a unique and unpredictable population growth rate. Similarly, a decrease in the size of the population might occur suddenly at any point in time without any previous indication, as happened during the second Gulf war in 1991 when large numbers of expatriates left the country over a very short period (Emirates Center for Strategic Studies and Research, 1998).

The researcher concludes that the population forecasts in general are unreliable, whether they are of a decline or an increment. As noted in Chapter One, the fabric of UAE society is heterogeneous, made up of approximately 20 percent UAE nationals and 80 percent multinational, multi-religious, multilingual expatriates who come from all over the globe (Bonine, 1998, p. 346). When compared with the percentage of non-nationals in the European Union countries, which is 5% to 6%, or that in the Gulf countries as a whole, which is 36%, this percentage reflects the unique structure of UAE society and, therefore, its unique needs (Ghanem, 2000). The biggest group of non-nationals are Asians (63.1%), with a smaller number from the Middle East (34.4%), Africa, Europe and North America (2.5%) (Emirates Center for Strategic Studies and Research, 1998).

Just over 1.00% of the population was aged 65 or older, while the majority (72.8%) was in the 15-64 age group in 2001 (MOH, 2001). In the UK, by contrast, mid-1999 statistics estimated the percentages for the age groups 16 to 64 and 65 and over to be 64% and 16% respectively (Office of National Statistics, 2001). These differences in the sizes of the age groups of the UK and the UAE populations can help to give direction to the respective governments when planning health care. The expatriate population is relatively young, with an average age of 35 years (Ghanem, 2000). On the other hand, it is estimated that the percentage of the population under

the age of 15 will decrease from 26% in the year 2000 to 21.1% in 2015, while the percentage of the older population (over 65) will increase from 1.07% in 2000 to 9.2% in 2015 (UNDP, 2002). The male-female ratio among the adult population is 2 to 1, due mainly to the disproportionate representation of expatriate males in the working age group (Ministry of Health, 2000).

Demographic indicators related to the UAE population forecasts – the fluctuations in population size, the male to female imbalance and the national to expatriate ratios, the increased number of people within the young adult age group currently and the expected increase in the number of people above the age of 65 in the future – are critical factors to be considered when assessing and identifying health and health care needs, and also when putting in place short- or long-term plans to meet those needs.

2.4.2 Economic Indicators

Since its formation in 1971, the UAE government's policy has been directed towards raising the standard of living for the UAE population by distributing the huge oil and non-oil revenues in the form of social and economic infrastructure, high salaries, and a high standard of social services, such as education, housing, etc.

In the five years from 1997 to 2001 (inclusive), Gross Domestic Product (GDP) escalated by an annual average rate of 6.6%. It rose from 187.6 billion Dirhams in 1997 to 248.9 billion Dirhams in 2001. Consequently, despite the rapid population growth, per capita income accelerated from 71.4 thousand Dirhams to 90.3 thousand Dirhams over the same years. At the same time, the share of the oil sector in GDP has declined and reached 28% in 2001. This has reflected the rising contribution

of non-oil sectors to the GDP. This rising contribution has been a consequence of the UAE, concentrated efforts to diversify its economic base. The service sector (commerce, restaurants, hotels, transport, etc.) is now the most important contributing sector to GDP (Federal Environmental Agency, 2002). Overall, the number of workers increased by 60,000 to 1.6 million in 2000. The wholesale, retail and maintenance sector was the biggest employer with 321,000 employees, accounting for 19.5% of the total workforce (Ministry of Planning, 2001).

The rate of inflation was 1.5% in 1999 (Ministry of Planning, UAE, 2000). No more up to date figures have been found. The UAE government's revenues come from oil, customs duties, corporate and sales taxes and services. There are no taxes on income, and public spending accounted for 16% of GDP in 1996 (Ministry of Planning, 1997). Total spending on health as a percentage of GDP was 3.4% in 1995 and 3.2% in 2000, while in the UK it was 7% and 7.3% for the same years (WHO, 2002). However, in the UAE, spending on the health sector has been low relative to spending on other sectors such as defence and security. For example, in 1997, the federal government budget was around 16 billion Dirhams, out of which around 8 billion Dirhams were spent on the defence and security sectors and only around 1.3 billion Dirhams were spent on the health sector (Ministry of Planning, 1998-1999, pp. 316-317).

As a percentage of the total expenditure on health, general government expenditure was 77.7%, while the private sector's share was 22.3% in the year 2000 for the UAE, while in the UK, government expenditure accounted for 81% and the private sector for 19% total spending on health in the same year (WHO, 2002).

Federal health allocations have dropped over the years relative to the rise in the population. The data provided in Figure 2.3.1 show a decline in MOH per capita health expenditure over the years, this being highest (AED 688) in 1989 and reaching its lowest (AED 455) in 1998 (MOH, 2000). There is no one single explanation for these assembled data. One possible explanation could be political decisions, which made the government focus more on spending in the security and the defence sector after the first and the second Gulf wars (Daggett and Pagliano, 1994). Another explanation could be that there was an annual increase in the Ministry of Health budget ranging from between 4.39% and 8.01% between the years 1992 and 2001), but per capita spending decreased due to the rapid increase in the size of the population (MOH, 2001). The estimated figures for public health expenditure, which includes treatment abroad, show that this amounted to approximately 3.6 billion Dirhams in 1994, for a per capita consumption of health services of 1,525 Dirhams, or US$ 421. This figure is low in comparison with the per capita spending on health in the UK, which was US$ 1,213, in 1993, and the per capita spending on health in Saudi Arabia, the UAE's Gulf Co-operation Countries (GCC) neighbour, which was US$ 560-700 for the same year. This could be a result of the UAE's demographic profile, or of a lower political commitment, or more efficient use of resources, or of other factors (World Bank Report, 1997).

However, reduced spending on the health services has resulted in shortcomings emerging in the long run: for example, the current shortage of beds resulting in long waiting lists for patients. Another shortcoming is the health workers' salary scale, that has remained fixed for years without any change, resulting in low staff morale and difficulties in recruitment (World Bank Report, 1997).

In the final analysis, despite these shortcomings as well as others, one cannot deny that, over the years, some improvements have been introduced to the health care sector, in the UAE; however, progress has been slow. The following table illustrates the UAE's MOH expenditure on health.

Figure 2.2: Health Expenditure in UAE MOH Budget (1989-98)
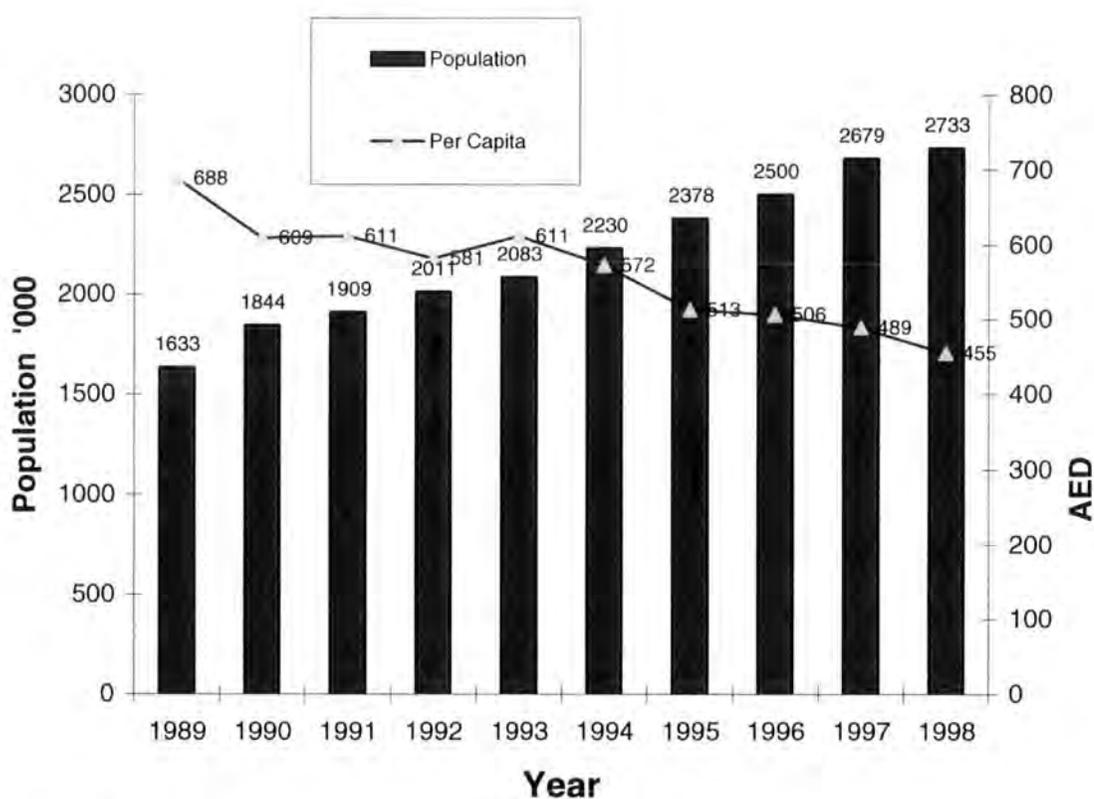
AED = Arab Emirates Dirhams (1US $ = 3.67 AED)
Source: UAE Statistical Book, Ministry of Health, UAE, 2000

2.4.3 Health Status Indicators

In this section, the researcher will discuss the indicators for health status in the UAE under the following headings: Child mortality rates, fertility and crude birth

rates, adult mortality rates, mortality and morbidity from non-communicable diseases, and control of communicable diseases. Under each heading, statistical information and comparisons with the UK and Bahrain will be presented as applicable, followed by a discussion of the patterns shown by the available figures. At this stage, it has to be noted that comparing health status data between countries with very different population structures presents certain limitations. For example, the UK and the UAE have very distinct population sizes and structures.

2.4.3.1 Child Mortality Rates

When examining the health status indicators for the UAE, it was noted that the infant mortality rate dropped from 10.6 per 1000 in 1991 to 8.5 per 1000 in 1997 (Table 2.3.3) and the mortality rate for under fives dropped from 14.05 per 1000 in 1991 to 11.7 per 1000 in 1997. According to the WHO report (1998), the UAE ranks second among developing countries which have achieved the fastest progress in reducing mortality among children below five years of age. This has been a major factor in the increase in life expectancy, that rose from 72.2 years in 1994 to 75 in 1997 (WHO report, 1998) (See Tables 2.3.1 and 2.3.2; note that the figures presented in the tables below cover all UAE residents).

Table 2.3.1: Health Indicators, UAE, Bahrain and UK, 1997.

Health indicators	UAE	Bahrain	UK
• Life Expectancy (years of Life at Birth)	75	73	77
• Infant Mortality Rate	8.5	8.4	6
• Under 5 Mortality Rate (per 1000 live births)	11.7	10.7	7
• Death under age 50 as % of total	32	38	5

Sources: World Health report, 1998
Annual Statistics Book, MOH, UAE, 2000.
Health Statistics, MOH, State of Bahrain, 1998.

Table 2.3.2: International Human Development Comparisons, 1997

Indicator	UAE	All Developing Countries (average)	All Industrial Countries (average)
Life expectancy (years)	75	64.4	77.7
Maternal mortality rate (per 100,000 live births)	26	491	13
Infant mortality rate (per 1000 live births)	8.5	64	6

Source: UNDP, Human Development Report, 1999.
Annual Statistics Book, MOH, 2000.

It can be argued that the UAE has achieved high standards of health as compared with other developing countries like Bahrain and even approaching the health standards of some developed countries like the UK (See Tables 2.3.1). When examining the goals set by the Task Force on Basic Social Services for All (BSSA), established by the United Nations Administrative Committee on Coordination (ACC) in 1995, it was noted that the UAE had already achieved the indicators set for the year 2015, which include an infant mortality rate below 35 per 1000 births, an under-5 mortality rate below 45 per 1000 and life expectancy greater than 75 years (World Bank, 1997).

2.4.3.2 Fertility and Crude Birth Rates

When examining the UAE biostatistics figures for the period from 1991 to the year 2000 (Table 2.3.3) one can see that the fertility rate and the crude birth rate have been decreasing, whereas the infant mortality rate fluctuated between 10.9 (in 1992) and 8.08, the latter being the year 2000 rate, the lowest rate ever achieved. It is worth mentioning here that those who are born in the UAE include nationals and non-nationals, with the number of non-national births exceeding that of the nationals. For example, in the year 2000, there were 22,723 registered national live births from a total national population of 712,315, and 32,116 registered non-national live births from a total expatriate population of 2,462,345 (Ministry of Health, 2000). Data on the average complete national and expatriate family size were not available at the time of the study, but the reduction in the fertility rate may be reflected in a decline in the size of families.

Table 2.3.3: Registered Biostatistics in the UAE 1991-2000

Data	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
IMR	10.6	10.9	9.49	9.44	10.01	8.44	8.5	8.62	9.57	8.08
FR	13.1	12.8	12.1	11.5	11.2	10.6	9.5	9.5	9.5	9.5
CBR	26	25.4	24.08	23.6	20.6	19.03	17.8	18	17.7	17.6

Source: Annual Statistics Book, **MOH, 2000**.
IMR=Infant Mortality Rate
FR=Fertility Rate
CBR=Crude Birth Rate

2.4.3.3 Adult Mortality Rates

It is notable that the percentage of deaths under the age of 50 is relatively high (32 % of the total deaths) in the UAE (MOH, 2001). This can be explained principally by the large proportion of the population within the age group 15 to 44 (approaching two thirds), most of whom are male. However, there is a high prevalence of non-communicable diseases, and in particular of accidents, among that age group, being the leading causes of morbidity and mortality. An examination of the UK statistics revealed that deaths per 1000 population for the age group 15 to 44 were 2.5 in the year 1999. This age group represents 42% of the total UK population (Office of National Statistics, 2001). This reflects a major difference from patterns of death in the UAE. Death itself has a few implications for health services. The demand and need for health services are directly associated with morbidity. However, morbidity and mortality are often related, i.e. people often have a period of sickness before they die.

In the UK, more efforts are expected to be directed towards the elderly population, since the majority of cases of serious morbidity and mortality are found among older people of the population, while in the UAE, health services should be targeting the under 50 age group for the time being, and redirecting their future efforts towards the elder age group which is predicted to increase as per population forecast.

2.4.3.4 Mortality and Morbidity from Non-Communicable Diseases

The leading causes of death in the UAE are shown in Table 2.3.4. On comparing the leading causes of death in the UAE, Bahrain and the UK for the year 1997, deaths

from cardiovascular diseases ranked first in the UAE, Bahrain and the UK. Deaths

from accidents come second in the UAE, third in Bahrain, and twelfth in the UK.

Deaths from cancer were ranked third in the UAE, second in Bahrain, and cancer was

also the second leading cause of death in the UK. While respiratory diseases are more

common in the UK, they rank fifth in the case of the UAE, with pneumonia and

bronchitis being most widespread, and sixth in the case of Bahrain (MOH, UAE,

2000; MOH, Bahrain, 1998; Department of Health, 1999). Despite these variations in

the ranking of the leading causes of deaths among the three above-mentioned

countries, one may say that they show similar patterns, except for the high number of

deaths from accidents in the case of the UAE.

Table 2.3.4: The leading Causes of Death in UAE, Bahrain and UK, 1997

Cause of Death	UAE	Bahrain	UK*
Cardiovascular	21.3%	27.6%	32%
Accidents	18.3%	9.1%	2%
Cancer	7.9%	12.2%	21%

* The UK figures represent the adult male deaths rates only
Sources: Ministry of Health, UAE, 2000; Ministry of Health, Bahrain, 1998;
Department of Health, UK, 1999.

All the data on the UAE need to be considered in the light of the

distinctive demographic features of the population. As mentioned earlier, the

expatriates represent around 80% of the total population. Most of them retire and

leave the country before the age of sixty, and, therefore, often before the appearance

of a chronic ailment. Cardio- and cerebrovascular diseases are the leading

contributors to death (MOH, 2002). Several related categories such as hypertensive

diseases, ischemic diseases, myocardial infarction and diseases of the cardiovascular system are included in this category.

The greater proportion of the expatriate population are males who are employed as construction workers, drivers, heavy equipment operators, farmers, etc. Such types of employment put them at a higher risk of severe and sometimes fatal injuries. Accidents constitute the second greatest contributor to mortality in the UAE. Road traffic accidents cause over 80% of all deaths from accidents (MOH, 2000). Road traffic accidents take the lives of 1.2 million men, women, and children around the world each year, while some become permanently disabled. The vast majority of these injuries have occurred in developing countries (WHO, 2003).

High-speed driving with failure to wear seat belts and the weak traffic regulations have all contributed to mortality and the development of disabilities resulting from road traffic accident injuries among the young age group, 15 to 44. In 1999, 425 deaths were caused by road traffic accidents (RTAs), the total number of deaths caused by all accidents for the same age grouping (MOH, 2000). Accident-related mortality peaks in the most active age group, 15-44 years, making accidents the leading cause of productive years lost in the UAE (MOH, 2000). High rates of RTAs have been reported in the UAE compared with Western countries such as the UK (Office of National Statistics, 2001). Although the overall rates declined from 8.46 per 1000 population in 1990 to 4.29 per 1000 population in 1998 (Bener and Alwash, 2002), the number may have increased due to the rapid increase in population. Another study by Ahmed et al. (2002) shows the same findings, and also shows that the severity of road traffic injuries tripled during the period 1985-1998, which might be attributed to increased speeding and careless driving.

Injuries sustained in the workplace account for most of the remaining balance. Death from injury overwhelmingly affects adult males and, when associated with the workplace, it predominantly affects expatriate males (Ministry of Health, 2000).

Ghanem (2000) argues that the facilities offered by the UAE government to its national population in all areas such as eligibility for housing loans, a free marriage fund, well paid salaries, etc., have caused the nation's youth to become very dependent, to lead sedentary lives, to change their eating habits, etc., which might be one of the reasons behind the emergence of chronic non-communicable diseases, which have overtaken infectious diseases as a major cause of death (Table 2.3.4). Other factors have also contributed to the increase in non-communicable diseases. For example, increased life expectancy results in more people reaching ages when they are more likely to develop health problems such as heart diseases, respiratory diseases, and cancer. Injuries and non-communicable diseases such as cardiovascular diseases, hypertension, diabetes mellitus, some cancers, and risky types of behaviour such as smoking, being overweight and road traffic accidents are currently are commonly presented at all sectors of the health services in the UAE. However, there is a severe lack of accurate statistics concerning morbidity from such problems.

The National Diabetes Study and Screening for Coronary Artery Disease Risk Factors in the United Arab Emirates (Bakir et al. 2002) was conducted in 1999-2000. The prevalence of adult-onset diabetes mellitus (DM) was found to be 22.3% and 20.4% in females and males respectively, while in the UK, it is notable that it (DM) affects only up to 3.3% of the adult population (DOH, 1997). The prevalence rates in the UK are higher among males (1.9%) than among females (1.4%) (Office of National Statistics, 1999). According to nationality, the prevalence of diabetes

mellitus was 25% in UAE citizens compared to 17% in expatriates. Obesity, as measured by BMI (30 and over), was 33% in the UAE, while the prevalence of being overweight (BMI 25 - 29.9) was 41%. Nearly three quarters of the population thus needed to lose weight.

Moreover, the 1995 Family Health Survey conducted in the United Arab Emirates showed that 18.3% and 0.04% of men and women respectively were smokers, compared with 28% of men and 25% of women in the UK (Department of Health, 1999). In the UAE culture, smoking is considered taboo for both genders, but more for women than men, which explains the low prevalence rate. However, in the UK, the proportion of both men and women who smoke has decreased over the last 20 years, more in men than in women, so that there is now little difference in the rates of men and women swho moke (Acheson Report, 1998). This UAE survey also showed that 9.8% of men and 11.9% of women, were reported not to have had a doctor diagnose cardiovascular disorder. It should be noted that such information has to be carefully interpreted because of the issue of the validity and reliability of diagnosis (Al Qassimi et al. 1996).

The cancer trends in the UAE closely follow the global trends. Cancers of the lung and breast are the leading cancers among UAE males and females respectively (Ministry of Health, 2002). Similar findings are present in the UK (Office of National Statistics, 2001).

2.4.3.5 Control of Communicable Diseases

Communicable diseases have become better controlled than ever. The incidence of many of these diseases, such as Hepatitis A, has decreased or the disease

has even been eradicated (such as Malaria) as a result of the environmental control measures directed at water and food supplies, adequate housing and the sewerage network.

In addition to the intensive preventive programmes, there is also the health screening of new arrivals, supervised by the Preventive Medicine Departments, which now operate all over the UAE. All these measures have played a key role in lowering the rate of death resulting from infectious diseases among infants, children and adults as well. Plans are still ongoing to control, eliminate and/or eradicate such diseases in the country.

Table 2.3.5: Immunisation Programme - Estimated Percentage Coverage by Antigen, UAE, 1981 – 1998

Year	% Coverage					
	BCG	OPV	DPT	HBV	Measles	MMR
1981	19	58	60	-	40	-
1983	37	60	60	-	51	-
1985	43	73	73	-	53	-
1987	80	84	84	-	56	-
1989	96	89	89	-	78	62
1992	98	91	91	-	85	70
1994	98	93	93	95	90	85
1996	98	94	94	95	95	90
1998	98	95	95	96	96	92

Source: Ministry of Health, UAE, 1998.

The frequency of occurrence of vaccine-preventable childhood diseases has declined sharply since the establishment of the Expanded Programme on Immunisation (EPI) in 1978 (Ministry of Health, 2000). The EPI includes vaccinations that are recommended under the WHO expanded programme of

immunisation. These include: Measles, Mumps, Rubella, Diphtheria, Pertussis, Tetanus, Poliomyelitis, BCG (tuberculosis), Hepatitis B and Hemophilus Influenza B (Table 2.3.5).

The strong commitment of the WHO to initiate, support and sustain the programme has succeeded in attaining high immunisation coverage, which has led to the interruption of the transmission of these diseases. The immunisation programme ensures that more than 90% of infants and toddlers receive the basic childhood immunisations. A poliomyelitis eradication programme and measles, tuberculosis and malaria elimination programmes are currently implemented in the UAE. The incidence of many of the previously discussed communicable and non-communicable diseases could be reduced or even prevented through health education programmes directed towards the public and the promotion of health awareness.

2.4.4. Health Service Indicators

The UAE government, through its Ministry of Health, provides most of the health services within the country. However, there are health care facilities managed and operated by private organisations that offer general medicine, dental care, routine laboratory and radiology services and surgery. With regard to the facilities managed by the government, they vary in size and in the level and quality of the services they offer. Some are limited in space and services and some are highly sophisticated and are referral hospitals for in vitro fertilisation procedures, oncology and neurosurgery cases.

Table 2.3.6 below provides some indicators of health service provision for the UAE. It is notable that the ratio of beds to population in the UAE is lower than in

other Gulf countries. For example, in 1998, the number of government and private beds per 1000 population was 1.3 in the UAE, as compared with 2.6 and 1.9 in Bahrain and Oman respectively, and 4.1 in the UK in the year 1999 (Ministriy of Health, 1998; Office of National Statistics, 2001). However, the UAE Ministry of Health was able to increase the number of beds by 2.12% in 2000 as compared with the year 1999. By the end of the year 2000, the total number of government hospital beds was 4473. The bed occupancy rate in hospitals ranged from 61% to 91% for the year 2000.

Regarding numbers of health care workers, there was one physician (including GPs) per 1319 of the population, and one nurse per 490 of the population. The total number of nurses working in PHC centres is 606, of whom 470 are females and 136 are males (MOH, 2001). The number of general practitioners was 1590 in private and government clinics in the year 2000 (Ministry of Health, 2000), reflecting one general practitioner per 1886 population for the same year. In the UK, in the year 1999, there was one physician (including GPs) per 943 of the population, one nurse per 337 of the population, and one general medical practitioner for every 1745 of the population, and one primary health care nurse per 136 of the population (this is an estimated figure) (Office of National Statistics, 2001).

In Great Britain, the total number of nurses working in community services is 59,316(14%) nurses out of a total nursing staff of 423,690 nurses. The above compared data indicate that the UAE is relatively under-provided with both doctors and nurses when compared with the UK. This does not necessarily imply that the number of doctors and nurses should be increased. Empirical research would need

to explore whether the numbers in the UAE were insufficient to meet the needs of the population.

Primary Health Care Centres have been constructed across the UAE. In the year 2000, there were 106 primary health care centres, which means one centre for every 29,321 people, of which 37 centres (34.9%) were located within the cities, and 69 centres (65.1%) in the remote areas (Ministry of Health, 2000). These cover larger populations than general practices in the UK. In the year 2000, each UK general practice served on average 5464 people (Office of National Statistics, 2001).

In the UAE, the PHC centres are of variable quality in terms of the level of medical care they offer, staff specialisation, the availability of sophisticated equipment and paramedical departments such as radiology and routine laboratory services. This largely depends on the location of the centres and the size of the population they serve. However, all PHC centres offer immunisation, well baby clinics and maternity services as well as general medical and nursing primary care services. It is evident from Table 2.3.8, which describes the attendance at PHC centres by type of service received for the year 2000, that medical treatment ranked first (63.16%), followed by nursing services (24.37%). Mother and child health services ranked third, i.e., 8.61%. Dental and speciality treatments came last at 2.72% and 1.1% respectively. These figures are of great value as they indicate that nurses already play a substantial role at PHC centres.

Further studies are needed in this regard to investigate the nature of these nursing services provided, their relationship with the health needs of the UAE community and with the CHCN as a suggested service.

Table 2.3.6: Health Service Indicators (MOH) in the UAE, 1980-2000

Indicators	1980	1990	2000
Hospitals	22	29	30
Beds	2979	4341	4473
Bed/1000	2.6	2.4	1.5
Nurses	2728	4212	6320
Population/Nurse	410	437	490
Physicians	1202	1493	2350
Population/physician	932	1232	1319
PHC centres	-	93	106

Source: Ministry of Health, UAE, 2000

Table 2.3.7: Attendances at PHC Centres by Type of Services, 2000

Services	N	%
General treatment	2854472	63.16
Dental Treatment	123231	2.72
Mother and Child Health services	389398	8.61
Speciality treatment	50549	1.1
Nursing services	1101675	24.37
Total attended	4519385	100

Source: Annual Statistical Book, MOH, UAE, 2000

The UAE has traditionally made use of specialist health services in other countries. mainly Germany, the UK, and the USA and sent patients for treatment abroad. This service is offered principally for UAE nationals, and is funded by the Ministry of Health. It covered around 133 patients in 2001 (MOH, 2001). However, this number does not include those patients sponsored by local government and the military service. It is worth mentioning here that the private sector has been growing rapidly over the years. For instance, in the year 2000, there were 21 private hospitals and 298 private clinics.

In addition, there are the services provided by the hospitals and clinics related to Abu Dhabi and the Dubai local government. The defence establishment, the

police and the oil companies should not be ignored, as all together they contribute to the provision of health care services in the UAE as a (parallel) health delivery system. These latter services are available for employees. However, this does not mean that these employees do not use the public (federal) health services as well. The services provided in Abu Dhabi and by the Dubai local government are open to all members of the population. Statistics from the defence, the police and the oil companies are not available (World Bank Report, 1997).

A common weakness observed in all these health care delivery services is a lack of communication and coordination, which leads to inefficient use of the available resources, the duplication of work, overlapping of budgets, deficiencies in some neglected areas, very slow progress and development, etc. (World Bank Report, 1997).

2.4.5 Health System Indicators

The UAE government health system was briefly described in the Chapter One. It should be noted that a highly centralised and bureaucratic system is in place with regard to the recruitment and appointment processes, supplies management, allocation of resources, etc. It is important to understand how planning and budgeting are constrained by the complexity of the existing delivery systems and financing mechanisms. According to the World Bank (1997), "the health care delivery system (in the UAE) has the following three features: a) parallel health care delivery systems targeted at different segments of the population, each with a complete complement of departments and little interaction with the others; b) multiple funding sources from different levels of government with different budgeting and spending requirements; and c) outdated accounting classifications used primarily for compliance with fund

source requirements". These three features of the system "combine to limit the ability of policy-makers to develop and implement budgets that reflect the true needs of the population and that are cost-effective" (World Bank, 1997).

The use of an inflexible funding system (World Bank Report, 1997) results in wastage (items are procured simply because they were included in the budget in previous years). Moreover, because the system is unable to shift resources from one budget to another due to the current strict regulations, its ability to respond to needs is compromised. The payment system does not ensure that funds follow patients' and/or health care needs. Another constraint is the long chain of lengthy and cumbersome procedures and controls that greatly slows procurement procedures. For example, the average elapsed time from estimation of needs by end-users to delivery of drugs is more than 27 months (World Bank, 1997). This pace makes it very difficult for health care institutions to respond in a timely manner to the needs of patients and clients; this lack of responsiveness is especially serious in the context of a very rapid and unpredictable population growth.

The financial statements available are scattered among many government bodies (Ministry of Finance, Civil Service Department, Purchasing Department, etc.) and do not lend themselves to rapid processing and retrieval. There is growing concern over the lack of cost analysis that characterises the whole range of health care services, and over the overlapping of budgets between the local and federal governments involved. For instance, two items of medical equipment (e.g. MRI machines) might be ordered simultaneously by local and federal governments each for its own health facility, as a result of a lack of coordination and communication

between the two bodies, and discovered accidentally at a later stage to be a duplicate order, meaning that one machine could have met the needs of both facilities.

The above health system indicators have a negative impact on the quality of services provided, for instance, PHC centres do not receive the needed financial support despite their spread across the country and the important role they may play in promoting health and controlling some health problems (World Bank Report, 1997). Many PHC centres lack the ancillary and diagnostic services (e.g., radiology and laboratory) required to deliver a full range of primary services. The problem of quality and effective health care has been brought up in several reports as an existing problem for the health care system.

Several strategies have been suggested for the assurance of quality, among them being the recommendations of the World Bank report (1997), which suggested the accreditation of hospitals, outpatients departments, and primary health care centres by respected independent accrediting institutions, and a review of the current assessment procedures in order to assess the professional qualifications of persons seeking to enter the health care profession, a point which was highlighted earlier in Chapter One (section 1.3).

Another characteristic of the current health system is the minimal, indeed almost non-existent, community participation in planning and evaluating the health care services (World Bank, 1997). The Alma Ata conference supported the principle of community involvement as a process whereby communities, families, and individuals assume responsibility for their own health and welfare and develop the capacity to contribute to their own and the community's development (WHO, 1993). Furthermore, the Alma Ata conference emphasised the role of the communities in

assessing their health needs. For community involvement to be effective, there are certain prerequisites, such as a clear national policy and commitment to support community involvement, decentralisation with delegation of responsibility, authority and accountability, and logistic support (WHO, 1993). With regard to the UAE, it may be said that the infrastructure needed for an effective community involvement is absent, especially with regard to the excessive centralisation in terms of the control of resources and decision-making and the lack of clear ideas of what communities should be expected to do.

The Federal National Council (FNC) was created in 1971 as a means for promoting a stronger sense of community at the federal level. The FNC has been the formal structure that approves, amends, or rejects draft laws. However, in practice, the body does not represent the people of the UAE in a meaningful way, because the members are selected by the ruler of each emirate (Peck, 1997).

Decisions regarding the development of services and allocation of resources are often made by political leaders, based on isolated or unusual events affecting their constituents. This decision-making process takes the place of a more formal definition of patient-centred priorities and exacerbates the poor distribution and duplication of services and facilities (World Bank Report, 1997). In the Ministry of Health, decisions are made by MOH officials and forwarded to the UAE cabinet for final approval.

2.5 Public participation in health care

Public involvement is an important factor in improving health outcomes and the performance of health systems. There is now a growing emphasis on involving people

in health care decision making, improving accountability to the public and developing

a stronger focus on the consumer or user of services. The aim is thus to plan and

deliver health and social care services in partnership with people whose views and

opinions, both as patients and ordinary people, help to develop and ameliorate health

care. According to Lugon and Scally (2000), "The way in which the public - whether

users, carers or interested citizens - contribute as co-producers of health care is

increasingly being seen as a test of the maturity and openness of the [health care

system]." For instance, as is pointed out by Bowling (2002: 42), patients' assessment

of the health care services provide invaluable information about "both the results of

health care (outcome) and the mode (process) of delivering that care."

The public is entitled to be involved at different levels: in both setting and agreeing

the systems for quality assurance. As regards individual health care professionals,

assuring quality involves initial registration, the continuing monitoring of

performance (through continuing professional development), appraisal and

revalidation, and the application of disciplinary measures when necessary. These

form an interrelated whole in which the involvement of the public is essential if a

patient-centred service is to emerge. Likewise, the public should have a role in the

bodies charged with setting standards for education and training. Involvement of the

public in these activities serves at least two valuable purposes. First, the public can

participate in the process of setting and reviewing the criteria for admission to the

profession, especially since the professional is going to be caring for members of the

public as patients. Secondly, public participation in this process serves as a guarantee

that the public's interests are safeguarded and as a reminder that the profession exists for the public.

However, there have also been arguments that there are substantial benefits in involving the public in broader issues around the planning and provision of health services. The citizen's voice and choice should make as significant a contribution to shaping health care services as the decisions taken at other levels of economic, managerial and professional decision making (WHO, 1996). For example:

a) Consumer and community participation in decision-making about healthcare and the conditions that predispose to health and illness is important - in fact essential - if we are to deal with the health policy challenges of the 21st Century (WHO, 1988). This is particularly useful since involvement of the community is "an important and effective mechanism for planning, implementing and evaluating health programmes" (WHO, 1993, p. 52).

b) Community participation is important for equity and inclusion and can redress imbalances. It is equally necessary as a method of improving service delivery, by ensuring that previously excluded needs are taken into account. This process can lead to more appropriate, relevant, effective and efficient services, especially where resources/services have to be rationalised (UKHFA, 1991)

c) Participatory approaches can shift people's thinking beyond individual illness problems to a consideration of how programmes and policies support or weaken the health of the community and illuminate a community's capacity to control and improve local conditions for a healthier society (Mittelmark, 2000).

d) There is a need to strengthen citizenship programmes for health. Civic skills entail health and life skills, and there is a need to increase democratic access to services and

information. Improving local participation through network and other activities such as deliberative polling, citizen juries, local action committees and the like is clearly indicated (Gillies, 2000).

e) Citizen participation in its various forms can make a vital contribution to living in social contexts. It allows citizens to provide their ideas and wishes as input into programme and policy planning and engenders a commitment to the project and a sense of control over it. Citizen participation is not a perfect solution, as not everyone can contribute and there are costs in time, energy and frustration. But this democratic process goes to the heart of many problems in social programming. (Bloom, 1996)

In the Arab world, the Gulf region specifically, rarely has such an initiative been taken (Gulf Security in the 21st Century, 1998). Therefore, it could be considered as a leading experience in its nature and an important and serious attempt to consider the consumer as one important stakeholder. An interesting question worth asking, following O'Rourke (2000), is: "Will moving away from the 'doctor centred model' land us in an entirely 'patient led' world, or can we halt the pendulum at some mid-point of collaboration and partnership?"

2.6 The Health Care Needs of the UAE

The section above has reviewed the recommendations of the WHO/UNDP (1996) and the World Bank (1997), the available reports and statistics from the UK, Bahrain and the UAE, in addition to the researcher's years of experience in health service administration. After assessing the different indicators that are directly or indirectly

67

related to health and health care, the following is a summary of the main points related to the health/health care needs:

1. As far as meeting health needs is concerned, as was discussed earlier in section 2.4.3 above, and based on studies such as that of the World Bank (1997), it can be noted that that there are a number of shortcomings in the contemporary UAE health care system. Under the economic indicators and the health system indicators sections, it was noted that issues related to bureaucracy and budgeting constitute real challenges to health care: for instance, a highly complex bureaucracy, the duplication resulting from multiple parallel health systems providers (local, federal, defence and police, etc), the lack of any link between budgeting and operational planning, the misallocation and misuse of the available resources with multiple systems of funding and health spending. Taking into account all these shortcomings in the UAE health care system, the researcher concluded that there is a need for a major reform or a change in UAE health policies. The change needs to be directed towards eliminating or decreasing existing shortcomings in all aspects of the health care system.

The above shortcomings in the UAE health care system seem to indicate that the performance problems of the system are rooted in fundamental defects in the way health care is organised and managed, for example, the reliance on secondary care rather than PHC facilities, the lack of materials and supplies management and the elaborate administrative systems and operating procedures put in place by the government in an effort to impose control over its health facilities. This bureaucratic apparatus limits the ability of health workers to respond to the needs of their clients or to function efficiently. The employment of expatriate staff on renewable, short-term contracts has further weakened the performance of the system. The lack of job

security is made much more crippling for many workers by declining skills and declining job mobility. There is thus a need for radical reforms with regard to the above-mentioned issues. In addition, there is a lack of Quality Assurance Programmes that may be used to evaluate and improve the quality of health services offered to the patients. There is therefore need to initiate Quality Assurance Programmes that can run concurrently with any other plans for improvement.

2. As was pointed out in section 2.4.3 with specific reference to the health status indicators, some leading causes of death may be eliminated through health education programmes aimed to raise the public's awareness of health-related issues. The defects in the performance of the current health care system, discussed under point 1 above, have led to a lack of the type of appropriate health education programmes in particular those related to leading causes of death such as cardiovascular diseases and road traffic accidents, and occupational and environmental safety. There is thus a need to introduce effective preventive health education programmes targeting and related to cardiovascular diseases, occupational, environmental and road safety.

3. As far as health needs are concerned, population data show the UAE to have a very special structure, with about 80% of the population composed of expatriate workers with a variable length of stay in the country; the majority of these are young males employed as construction workers or labourers, aged between 30-45 years. Thus, despite relatively high birth and low death rates, less than 15% of the UAE population are below 15 years of age, and less than 5% are aged 65 years or older. This unstable, fluctuating population structure and size need to be taken into account when improving current services or introducing new services. This is in accord with what was indicated earlier in section 2.4.1, where it was stated that the male-female and

national-expatriate ratios constitute one of the challenges that need to be addressed in the future.

4. In a community like that of the UAE, with its unique population structure that includes a large proportion of expatriates who come from different social and cultural backgrounds, it was found in reports such as that produced by the World Bank (1997), that community participation is minimal in planning and evaluating the health services. There may therefore be a need for community participation to be promoted. As is demonstrated in section 2.5 above, existing research has shown that involving the community in overall health plans will have positive influence on public satisfaction with the health care delivery system.

The points summarised above reflect the current health care needs of the UAE population. Most of the existing shortcomings and problems in the UAE health care system may be resolved by a better use of the available resources, which may help to improve the payment system and provide funds to hospitals and health centres primarily on the basis of their workload, by extensive patient education, by a greater reliance on primary health care, and by the implementation of quality assurance programmes and community participation in health planning and decision making according to the needs of the population.

This thesis is not concerned with providing a detailed discussion of the variety of reforms needed to tackle all the shortcomings of the UAE health care system, but instead focuses on one particular aspect: the introduction of a PHC based CHCN service. However, the defects in the system must be remedied, and this is important for the introduction of new services such as the proposed primary health care CHCN

service, since firstly, without improving the current health care system and related policy and procedures such as the payment system, supplies, workload, and increasing the focus on PHC, the new service may not get the support it needs to be a success. Secondly, quality assurance is an important and crucial tool for monitoring, evaluating and improving the proposed PHC-based CHCN service, if implemented. Thirdly, it is important to consider the unstable and fluctuating structure of the UAE population when deciding on the size and nature of the PHC-based CHCN service and related costs and outcomes. Fourthly, the knowledge that there is a need for health education programmes, especially those programmes related to an awareness of the leading causes of death, will give some direction to the proposed PHC-based CHCN service, and enable it to focus on the type of services needed. And finally, the promotion of the participation of the UAE community will help to make the proposed PHC-based CHCN service more effective, if the community has the opportunity to participate in planning, implementing and evaluating the type of service they require.

In order to identify the UAE's health and health care needs, the researcher has discussed several concepts related to health, health care and health needs and their relationship with socio-economic sectors, and has examined the indicators for health and health care. From a close examination of the health and health care needs of the UAE, it appears that these needs are interrelated, and might be partially met by improving cooperation and coordination among related sectors, by strengthening existing services in particular the PHC service, and by introducing new services, such as the proposed PHC-based CHCN service. The latter proposal will be explored in detail in the next chapter.

Chapter Three: Primary Health Care-Based Community Health Care Nursing

3.1 Introduction

The aim in this chapter is to review the available literature regarding primary health care-based community health care nursing. Having identified the health and health care needs of the UAE community in the previous chapter, and after acknowledging the importance of strengthening the primary health care (PHC) sector and its affiliated services (such as CHCN) as one of the means for meeting those needs, in this chapter the researcher will explore primary health care and community health care nursing concepts.

In this regard, the chapter is divided into two sections. The first section includes a discussion of the definition of PHC in the light of both the Alma Ata declaration and two models namely the medical model and the community-based model. An examination of the status of PHC in the UK, an example of a developed country, in Bahrain, as a neighbouring Gulf country and in the UAE, is then provided. The section on PHC concludes by presenting the arguments in favour of moving towards a PHC-based health system in the UAE. In the second section of the chapter, definitions of CHCN and a description of systems in the UK and Bahrain, and of what is available in the UAE, are presented. A discussion of the three aforementioned CHCN systems follows, with the emphasis on the following aspects: education and training, setting, role(s), accessibility of the service, budgeting, and links to other

health facilities. The chapter ends by presenting the arguments for having PHC-based

CHCN services in the UAE.

3.2 Primary Health Care

Primary health care (PHC) services form part of the infrastructure of most health care

systems. What varies is the strength of PHC within that infrastructure. A discussion

of the definition of PHC, PHC models, and the status of PHC in the UK, Bahrain and

the UAE is important in order to present the arguments for a PHC-based health care

system in the UAE.

3.2.1 Definition

In a narrow sense, the concept of PHC implies health services only. In the

broad sense, this concept comprises health services along with health education,

health promotion, disease prevention and sanitation (WHO, 1996). Since the 1978

International Conference on Primary Health Care held in Alma Ata, USSR, which

was organised by the WHO and UNICEF, primary health care was recognised as the

main vehicle for achieving the strategic goal of the WHO – "Health for All" by the

year 2000 (WHO, 1978). This goal was set in recognition of the fact that many people

are often denied access to health care, since it acknowledges that at present we have

only "health for some" or "health for the few" (Macdonald, 1993). Maglacas (1988),

as cited in McMurray (1993), explains that this commitment to "health for all" is "not

a cry for global eradication of disease or infirmity, but a pledge to consider health in

the broader context of social and economic development; an attempt to secure

socially and economically satisfying lives for all people" (p. 7).

With reference to the Alma Ata declaration, article VI, PHC has been defined as:

> Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. *It forms an integral part both of a country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community.* It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process (WHO, UNICEF 1978, p.6) [emphasis added].

From an examination of the above-stated definitions, the difference between the narrow and the broad concepts appears to be that, broadly defined, PHC is "a process concerned with equity, intersectoral action, community participation and involvement for security health gain", and not merely the delivery of medical care at a local level (Sharbarova, 2001). The Alma Ata declaration made a commitment to health for individuals, families and communities, rather than just to the treatment of disease. It defined PHC as the first point of contact for the individual with the health care system, but also as being linked to broader social and economic development. It emphasised the importance of primary health care as the main focus of any health care system, and the fact that meeting the basic health needs of each community can best be achieved through services provided as close as possible to where people live and work, readily accessible and acceptable to all. Finally, the declaration went on to emphasise public participation and the fact that efforts must include concern for the quality and cost-effectiveness of health care.

As Twinn et al. (1998) argue, some of the main factors that led to the WHO major policy initiative to achieve "Health for All", by shifting the provision of health

74

services to PHC, included increasing demands on health services, especially in the developed countries where the proportion of older people in the population is rising; increased emphasis on hospital-based health care, at the expense of primary and community-based care; the dominance of high technology secondary and tertiary services with a limited number of skilled personnel in relation to developing countries; and high levels of infant mortality, malnutrition and deaths from preventable diseases in developing countries, where most of the development is occurring in the secondary and tertiary health care sectors instead of in PHC, which is the service best equipped to address most of these problems.

Such trends and others were resulting in rapidly rising costs of health care, with no compensating improvements in the health status of the population.

According to the Alma Ata declaration (1978), eight elements or activities of PHC were identified to achieve basic health needs. These elements include:

- Education for the community on the health problems prevalent and on methods of preventing health problems from arising or of controlling them;

- The promotion of proper nutrition;

- The provision of an adequate supply of water;

- The provision of basic sanitation;

- Maternal and child health care, including family planning;

- Immunisation against major infectious diseases;

- The prevention and control of local endemic diseases;

- Appropriate treatment of common diseases and traumas.

It is clear from these elements that PHC implies much more than focusing on treating the ill: in other words, it goes beyond the negative definition of health dominant within the biomedical model (see Chapter Two). These elements emphasise the concepts of health promotion and disease prevention. In fact, historical epidemiological studies showed that significant improvements in life expectancy had been achieved through improved food supplies and sanitation long before the introduction of modern drugs and high technology (McKeown, 1977 cited in Kleczkowski et al. 1984).

In order to achieve the provision of the basic services set out in these eight elements, activities should be centred in three distinct but interlocking areas, according to Blackie (1998). This is true whether the care offered is in a system in a developing country or whether it is offered in more sophisticated health care systems. The three areas are:

- *Coordination and collaboration.* This must occur among all the sectors and agencies concerned directly with health and social care, as well as those agencies which also have an influence on the health of populations, such as education services, housing, environmental agencies and employers.

- *Developing a firm basis within a community.* This means that the active involvement of the community can be encouraged and the views and wishes of its members brought to bear in the provision and planning of local services. This activity aims to encourage self-reliance and self-determination and promote empowerment.

- *Gaining support from policy makers at national and local level.* In this way ideas and initiatives can be funded, encouraged and incorporated within the mainstream of the health service.

3.3 Primary Health Care Models

PHC and community health care nursing practice are linked and complementary activities (Blackie, 1998). In addition, it was mentioned previously that PHC must be the main focus of any health care system (Alma Ata declaration, 1978). Therefore, when planning to introduce a CHCN service to any health care system, it is worth looking at the different models of PHC and their implications for the shape and nature of a CHCN service. In this regard, the researcher will discuss the available models, namely, the medical and the community-based models, as they demonstrate the "narrow" and "broad" concepts discussed in the previous section.

3.3.1 The medical model:

The medical model of PHC is located within the community, but is concerned with diagnosing and treating diseases. It prioritises the medical treatment of disease, rather than community-based, preventive multi-sectoral strategies for health. The emphasis in this model is on the individual who is sick, rather than on the family or the community. This approach leads to missing out a whole range of strategies to improve health, and to leaving out a part of the population, for which risk identification and, therefore, disease prevention, could possibly have been achieved in a more focused community service where community nurses play the role for which they are qualified appropriately. Another disadvantage of this model is that it is very professionally led, while the role of the nurse, it has been argued, is one which is more task-oriented towards a specific population of individuals with medical problems.

One can conclude that the above description of the PHC medical model does not abide by the Alma Ata declaration. It may be categorised as an alternative, narrower, definition of PHC. This brings us back to the negative concepts of "health", focusing on disease and illness, pointed out in the biomedical model previously explored in Chapter Two.

3.3.2 The Community-based model:

Community-based PHC is derived from public health, and is characterised by a close collaboration between epidemiology, medicine and community health care (Blackie, 1998). Community-based PHC differs from the medical model in that it serves the community as a whole, families and individuals, those who are sick and those who are well. In this approach, community nurses work towards one goal, which is to identify and meet the needs of the society, preventive as well as curative. The nurse does not only respond to disease, but is proactive in identifying individuals' health needs in collaboration with them, and develops strategies to meet those needs.

This approach has been known as a family- and person-centred approach rather than as a disease-centred approach. Community-based PHC emphasises health promotion, a concept stressed in the Ottawa Charter (WHO, 1996b). It also emphasises the contribution of other aspects of society to health: the nurse should work in collaboration with other individuals and organisations outside the formal health care sector. In this regard, the community-based approach is closely linked to the Alma Ata definition of PHC, and to a broad-based, social definition of "health".

In the following section, the researcher will present the status of PHC in the UK, Bahrain and the UAE and attempt to determine whether each of these systems conforms more to a medical or to a community-based model.

3.4 PHC status in the UK, Bahrain and the UAE

3.4.1 PHC status in the UK

Community health nursing services can have an important role to play in primary health care and so it is useful to have an understanding of the structures, content and trends in this sector. In the UK National Health Service, the relationships between CHCN services and other elements of primary health care have changed over time, as have the focus and roles of the primary health care sector as a whole.

Overall, it has been argued that the medical model is dominant in the UK, where it has been criticised for preventing community health nurses from acting autonomously, and where the health needs of the society at large are considered unmet (Macdonald, 1993).

The concept of primary health care in the NHS has traditionally been a narrower one than is inherent in the WHO programme, focused on general practice. Since its inception, the NHS has included a strong role for GPs. Practically the whole population is registered with a GP and a very high proportion of total consultations are with GPs (Hennessy, 1997). GPs are also the "gatekeepers" to secondary care; patients access consultant, hospital and many community health services through referral by their GP. This has been a medically focused, primarily curative and individualistic model of primary health care. GPs, like other doctors, have seen their role as one of responding to the illnesses and injuries that individual patients bring to

them. All registered patients have access to PHC services provided by general practitioners. These services are funded by government taxes.

In the early years of the NHS, the other elements of community-based services were administered separately from general practice, by local authorities (Wall and Owen, 1999). Cooperation and collaboration between GPs on the one hand and district nurses, health visitors, school nurses and midwives on the other hand, were based mainly on personal relationships and initiatives.

The scope and emphasis of NHS primary health care have broadened to some extent in recent years. Despite the administrative separation of the different health professionals working in the community, the concept of 'primary health care teams', including a wide range of these professionals, including nurses, developed during the 1960s and has become a well-established way of working in general practice. Staff are 'attached' to specific practices, or are employed by the GPs themselves (e.g., practice nurses). This has brought GPs into collaborative work with members of staff who have a more preventive, public health emphasis to their work, such as health visitors (Twinn et al., 1998).

The Conservative reforms of the NHS in the early 1990s included incentives for GPs to engage in more health promotion and preventive work, much of which was carried out by nurses (Hennessy, 1997). The reforms also introduced GP fundholding, which gave participating practices more flexibility in managing the primary care budget for their practice populations, as well as control over part of the budget for secondary care services for their patients. These practices became responsible for negotiating contracts for some inpatient and outpatient services, as well as some community health services, with the providers, mostly NHS Trusts.

This not only shifted the balance of power between GPs and hospital-based consultants, but encouraged some GPs to start thinking on a 'practice population' basis, rather than just responding to the individual patient who presented with a problem. Responsibility for a budget, together with incentives to spend that budget efficiently, it has been argued, encouraged fundholders to begin to consider concepts such as 'health needs assessment' and 'health gain', and to recognise the difficult decisions associated with the allocation of scarce resources (Hennessy, 1997).

Opinions vary as to what extent fundholding improved the efficiency or effectiveness of primary care (Wall and Owen, 1999). However, there were concerns about equity, one of the key WHO targets, as not all the population were registered with fundholding practices. In addition, there was considerable opposition to the fragmentation and competition introduced by the 'internal market' of the 1990 Conservative reforms (Audit Commission, 2002). In primary care, it was argued that this was likely to lead to inequality of access and to difficulties in encouraging cooperation and collaboration among those working in different parts of the 'market'. For example, GP practices may compete for patients and so be reluctant to share 'good practice'. Community nurses working for Trusts competing for business from fundholders may find it difficult to be fully open with the GPs with whom they work, or may have to stick rigidly to the terms of their 'contract'. Thus, from the mid-1990s, there has been a shift away from market principles and towards an emphasis on 'partnership' in primary care.

Although this was begun under the Conservative government, it becomes clearest in the changes introduced after 1997 by the new Labour government (Sims, 1999). Fundholding was replaced by a system whereby all practices belonged to

primary care groups (PCGs). These were geographically-based groupings of a number of practices, which had responsibility, in cooperation with the local health authority, for developing a local health care strategy and for purchasing the services necessary to meet the health care needs of the population (Ham, 1999). They were also responsible for monitoring and improving the quality of primary health care provided by the GPs in the PCG. Although the boards that manage the PCGs were dominated by doctors, they included at least one community nurse. Over time, these PCGs are becoming Primary Care Trusts, responsible for allocating the overall NHS budget for the local population. It is significant for the future of CHCN services in the UK that it is anticipated that these new Trusts will directly employ community nurses, bringing together general practice and CHCN services more closely than ever before in the NHS (Ham, 1999).

These developments have been part of a broader shift towards a 'primary care-led NHS' in the UK since the mid-1990s (Department of Health, 1997). Those working in primary care (particularly GPs), it is argued, are the best people to act as 'agents' for the local population. They are closest to local people, see the widest range of health problems and are most familiar with the local environment. A major issue is how far this will remain a medically-orientated model of primary health care, unlikely to give the priority to the broader concepts of and influences on health emphasised in the WHO strategy. More specifically in relation to community health nursing, will nurses become equal partners with doctors in developing and putting into practice a health service contribution to improving health? Or are they likely to become employees of GPs, with their work patterns and content shaped by medical concerns, and a consequent threat to their professional autonomy, relationships with

local communities and, for some, the preventive and educational aspects of their work?

When examining the 1997-1998 distribution of the NHS budget, it was found that 24% of the total budget was spent on family health services, which include the GP services, while the biggest proportion (69%) of NHS expenditure went on hospital and community health services (Ham, 1999). In addition, resources for general practice are not spread equally across the country because in the past they followed investment decisions by GPs. Historic patterns of funding and staff have resulted in inequities across the country. The highest resourced areas have twice as much funding per head: for example, £63 in Oxfordshire compared with £33 in Gateshead (Audit Commission, 2002).

From the above description, it can be said that the PHC system in the UK has inclined more towards a medical model of PHC. However, recently, with the introduction of the PCTs, there might be a move towards a community-based model, emphasising the role of health promotion and prevention. According to Pearson (2002), "PCTs will have a very close responsibility for the health of their defined populations. They are a reasonable size for public health programmes to be effective and have close links with the new health authorities and non-governmental organisations. This presents a marvellous opportunity to increase the emphasis on public health".

It is still too early to judge this new direction of PHC. PCTs first need to be evaluated in terms of whether they are capable of meeting local needs. It has been argued that PCTs now have greater powers to shape general practice. There is now

greater emphasis on national standards and clinical accountability (Audit Commission, 2002).

3.4.2 PHC status in Bahrain

The government of Bahrain has been committed to the "Health for All" initiative managed by the World Health Organisation since 1979. The government spends a greater proportion of public funds on health and education compared with military services than in most other Gulf countries. Spending has continued to rise over the years (Ministry of Health, 1997). The MOH per capita expenditure on health was BD 87.4 in 1998 compared to BD 78 in 1991. The percentages from expenditure of the MOH budget were 59.1% on secondary care, 21.5% on primary care, and 19.4% on training, capital expenditure and administration and support services combined (MOH, 1998). It is interesting to note that the ratio is not very different from that found in the UK.

The Ministry of Health is the main provider of health care in the country at all levels (primary, secondary and tertiary) (Naseeb et al., 2000). Comprehensive primary health care is intended to be the basic first portal of entry to all levels of health care. Primary health care provides preventive and curative services through a network of primary health care centres (19 health centres and two medical clinics), which have been distributed throughout the country, minimising problems of accessibility (MOH, 1995). The Directorate of Health Centres was established in November 1975. Its main objective is to coordinate administrative activities and to improve medical services in all the regions of the country. Each health centre has been classified in one of three categories: A, B or C, according to the population in

the catchment area and the type of services provided to the public. The Directorate of Health Centres has a plan to change all the categories of Health Centre in the near future to type "A" that provide all primary medical services (MOH, 2002).

The Health Centres are concerned with curative and preventive activities. It is worth mentioning that a trial is in process in all of the PHC centres for self-management (auto-administration), including budget control. It is based on granting the centre full independence through a managing board consisting of a physician, a pharmacist, a chief technician, and two members of the community. This board is in charge of managing the administrative affairs of the centre and submits periodic reports on work progress to the MOH. On the basis of a personal communication with the Head of the Primary Health Care Nursing Department in the Kingdom of Bahrain, it appears that this step, if successful, may represent a qualitative move towards improving community health care in Bahrain. Through the auto-administration of PHC centres, the decision-making process is expected to be faster and problems associated with bureaucratic management (recruitment, supplies, etc.) might be overcome, leading to better services of community health (S. Al Sheikh, personal communication, 12 August, 2002).

Antenatal care, postnatal and family planning services, female screening services, premarital counselling, child health services, home visits to children and older people and health education activities are all provided through Mother and Child Health care services in Health Centres. Also, there are curative and preventive dental services, in addition to similar services offered by family physicians and general practitioners, and these are all based within the health centres (MOH, 2002). In general, health centres are well equipped and provided with supportive facilities,

e.g., laboratory services, radio diagnostic services, a pharmacy, clerical and medical records services. All health centre staff are salaried employees of the MOH. Most of the staff (around 92%) are nationals (MOH, 1998).

The WHO, in collaboration with many other world organisations, has examined the health care system in Bahrain. Their report concluded that the government's health policy, "which aims to achieve and maintain the level of health care among its population", conforms to the goals of the "Health for all" strategy through the provision of "equitable, free, and high level health services attainable by all" (Naseeb et al., 2000).

From the above description of the PHC system in Bahrain, it appears to be a similar model to that of the UK, i.e., a medical service-based model, but, with the integration of preventive functions, it can be presumed that a community model of PHC is also in place to some extent. However, from the practice side, it is difficult to estimate how deeply is this system applying all the elements of a community-based model (housing, education, environmental services, etc.), especially in the absence of an objective evaluation of the current PHC system.

3.4.3 PHC status in the UAE

The constitution of the UAE stipulates that health care is the right of every individual and that the state is responsible for providing health care facilities for prevention and treatment, health promotion and rehabilitation (MOH, 2000). The government adopted the PHC approach as its long-term strategy for achieving the goal of the Alma Ata declaration. This was supported by ministerial decree number 139/86 issued in 1986. Article 2 of this decree stated that comprehensive Primary Health

Care would be considered as the first and basic entry to the entire health service at all levels and would be considered as the means to reach the social goal of "Health for All by the Year 2000". The expansion and development of the PHC services across UAE have been noticeable over the years. For instance, the number of government PHC centres has increased from 93 centres in 1991 to 106 in 2000 (MOH, 2000). Furthermore, many of the existing PHC centres have been demolished and replaced by larger centres in response to the increase in population size, especially in the densely populated areas. However, this increase in number and size does not correspond with the rate of increase in population size (Ghanem, 2000).

In theory, access to secondary and tertiary care cannot be obtained except through referral from a PHC centre or through the emergency services; however, this system of referral has failed to be effective, first because of the absence of a health information system which facilitates communication processes between community-based PHC centres and hospitals; second, since although people are told to go the PHC centres instead of coming to the hospital polyclinic, some of them, in particular UAE citizens, old people and VIPs, have traditionally been allowed to be seen directly at the hospital polyclinic, thus bypassing the community PHC centres; third, because many PHC centres lacked the ancillary and diagnostic services (e.g., radiology and laboratory) required to deliver a full range of primary services (World Bank Report, 1997); and fourth, because community-based PHC centres provide only 54% of the nation's outpatient care (World Bank, 1997). Much of this, however, is specialist care, which is different from the UK, where the tradition of general primary care is much stronger. The World Bank (1997), in its study of the UAE health sector, found that PHC centres were not integrated clinically or organisationally with

hospitals, which hindered the continuity of patient care, for example, in the referral system between facilities (hospitals and PHC), and the patient information system (patients' medical records). This resulted in the PHC services being provided both through hospital-based speciality clinics (polyclinics) and emergency rooms and through community-based PHC centres.

PHC services include promotive, preventive and curative aspects centred on the seven components of PHC, which are as follows (MOH, 1990):

1. Maternal and child health

2. Family planning

3. Control of infectious diseases

4. Treatment of common diseases and injuries

5. Provision of essential drugs.

6. Health education

7. Immunisation against common diseases.

All PHC clinics provide curative, preventive and promotive services and, to a lesser extent, rehabilitation services. The clinics are open in both urban and rural areas for two shifts from 8:00am till 11:00pm during weekdays. After working hours, and on weekend days, the hospital emergency departments cover for emergency cases in urban areas, while rural areas have on-call cover for these cases through the PHC centres.

The influx of immigrant workers associated with rapid socio-economic development has led to the setting up of workers' PHC clinics – as part of the PHC system in coordination with the control system in the immigration department – that

undertake comprehensive examinations before immigrant workers can be locally employed and for legislation concerning the control of imported diseases. For instance, in the year 2000, a total of 821,708 workers were examined at these clinics (MOH , 2000).

The PHC staff, who include physicians, nurses, paramedical and administrative staff are employed by the federal or local government, except for in the private clinics, which are self-managed by their owners. The number of these private PHC clinics is smaller than that of the government PHC centres. The majority of PHC staff are non-nationals, making the UAE very different from Bahrain (MOH, 2000). The role of the nurse in the PHC centre is mainly curative or treatment-oriented, aimed at those clients who attend the facility seeking medical health care. His/her preventive and promotive roles are limited, but may include some health education programmes within the centre, follow-ups to ensure total immunisation coverage of children, monitoring physiological body functions for patients with chronic diseases such as hypertension and diabetes, and antenatal and postnatal care for uncomplicated pregnancies (World Bank Report, 1997). These nurses work wholly in the centres and do not go out into community and people's homes.

The structure of the PHC system in the UAE is more or less similar to the one in Bahrain. However, in the UAE, there are no PHC-based CHCN services, which inclines the system more towards a medical model than a community model. This applies to both public and private PHC clinics.

In conclusion, the international response to the WHO strategy varied in terms of the level of achievement of the "Health For All" goal, especially with regard to the

implementation of the Alma Ata declaration, and this is true for the UK, as well as for

Bahrain and the UAE.

3.5 Arguments in favour of a Primary Health Care-Based System for the UAE

In the UAE, many people still rely on emergency departments and polyclinics for

what is classified as basic care, resulting in an inefficient use of public resources. In

addition, this means that they do not benefit from the advantages of the primary care

services that encourage preventive measures, contribute to early detection and

intervention and provide continuity of care. So there is a need to focus on establishing

a strategy that ensures access to timely, coordinated and comprehensive primary and

preventive care for all. However, one should bear in mind that every community faces

a different challenge, depending on local environment, size of population and its

demographic structure, health needs, and available resources.

Arguments in favour of a PHC based health system in the UAE are presented

below. First, a recent report from the Central Statistical Department (MOH, 2000)

revealed that hospital polyclinics have experienced increased use by patients for

routine consultations and that they have become a frequent resort for many patients.

This phenomenon has lead to the development of many chronic problems, in terms of

more congested outpatient polyclinics around the year, and long waiting lists at many

clinics. Other problems include the first available appointment often being scheduled

for more than three months ahead and exhausted consultants having clinics

overcrowded with patients (emergency department referrals, follow-ups, routine

walk-ins, drug refills) and being left with insufficient time to carry out thorough and

adequate consultations with those patients suffering from serious and complicated

clinical conditions, thus jeopardising their clinical performance and the quality of patient care; and hence resulting in patients' dissatisfaction. Similarly, many of these patients arrive sicker than if they had had timely access to comprehensive primary care.

Records of patients attending the polyclinic services at Tawam Hospital were reviewed in 1998 in order to ascertain which were the most significant and most frequently treated conditions. It was noted with interest that of all consultations, 18% were mainly stable patients with problems that could have been followed up in PHC, and 10% of the patients came to the polyclinics on their own initiative, claiming that they felt more secure being seen by the specialist. However, 67% were complicated conditions that required specialised medical care. From these figures, one can conclude that between one quarter and one third of the cases could have been cared for at PHC centres (Tawam Hospital, 1999).

The second argument in favour a PHC-based health system is that the workload in most of the emergency departments (EDs) throughout the UAE has increased dramatically during the last few years (MOH, 2000). For example, data from Tawam Hospital reflect the large number of patients attending the ED for primary (non-urgent) care: care for conditions that are not life-threatening, do not require immediate care and could be treated at a primary care site, such as coughs, fevers and minor injuries due to domestic accidents (Table 3.1). Data analysis supports the fact that around 65 % of the patients seen in the ED (1998) are classified as patients having primary care problems. Reliance on EDs for primary care is less than ideal from both patient care and cost perspectives. For the patient it often means postponed care, long waits in the ED and episodic care that is not coordinated over

time. Emergency medicine is a crisis-oriented speciality that affords no opportunity for incorporating preventive measures and patient education into a visit.

Table 3.1: Patients presented at the ED of Tawam Hospital during the year 1998, Tawam Hospital statistics, 1999.

Patients' category	N	%
Category 1 – Immediate patients	112	0.21
Category 2 – Emergency patients	584	1.1
Category 3 – Urgent patients	17,621	33.35
Total - categories 1 to 3	**18,317**	**34.67**
Category 4 – Non-urgent	34,514	65.32
Total - All cases	**52,831**	**100**

Recognising the close relationship between health, disease and lifestyle (eating habits, physical activity, leisure time practices), affected by the rapid socio-economic development and increase in national wealth, it appears that PHC centres may play an important role in health education and in promoting health awareness within the community. This constitutes the third argument for a PHC-based health system in the UAE.

The promotion of health awareness within the community may be achieved by the following means: by devising tailored preventive programmes that promote healthy eating habits and the adoption of a healthy lifestyle; educating clients about maternal and child health care; setting up groups to control hypertension, diabetes, smoking, drug abuse, etc. In this way, the community is encouraged to accept the virtues of preventive medicine and health maintenance rather than an illness response approach.

PHCs could also be linked with other community services and organisations that are crucial for health (reflecting the broad-based definition of PHC) e.g. housing, environment, employment, education, etc.

A field study carried out by a team of UAE National physicians (Noaimi, 2000) concluded that PHC centres can play a key role in reducing morbidity and mortality through screening for a number of diseases such as: hypertension, diabetes mellitus, anaemia, blood disorders, urinary tract infections, obesity, depression, cancer of the breast and the cervix, malaria, tuberculosis, etc. Such screening would lead to early detection and a better chance of effective treatment subsequently. This constitutes the fourth reason for a PHC-based health system in the UAE.

3.6 Community Health Care Nursing:

Each country must decide for itself which methods can be used and which steps can be taken to develop a sound, vigorous, and effective community health programme, and within this, what role should be played by CHC nurses. However, the aim of the researcher in this study is to determine the most appropriate setting for establishing a CHCN service in the UAE. In this regard, the researcher will start by defining CHCN and then move on to describe the CHCN systems currently available in the UK, Bahrain and the UAE. A critical discussion of the CHCN systems in the previously mentioned countries will follow, and the chapter will end by presenting arguments in favour of setting CHCN services in the context of PHC in the UAE.

3.6.1 Definition of Community Health Care Nursing

There are a variety of definitions of Community Health Care Nursing (CHCN) and the following are some of these definitions from US and UK literature:

"Community Health Care Nursing combines the knowledge and skills of nursing with those of public health science to maintain, protect, and promote the health of specific populations, or aggregates" (Spradley, 1991, pp. 84-85).

"Community Health Care Nursing is much more than nursing practised in the community setting. It is the practice of simultaneously considering and enabling the health care needs of individuals, families, aggregates (population subgroups), and the total community" (McMurray, 1993, p.5).

"Community Health Care Nursing is a client-centred, health-based profession committed to holistic caring" (McFarlane, 1982 cited in Blackie, 1998).

"Community Health Care Nursing is a discipline created to integrate existing strengths of practice, in order to meet the broad range of health care needs within community settings" (Albarran and Whittle, 1999, p. 9, cited in Littlewood, 1999)

When looking at all the above definitions of CHCN, it is apparent that the curative, preventive and promotive aspects of health care have been addressed either directly or indirectly. The first definition emphasises the fact that qualified and trained professional staff must deliver the CHCN services. The first, second, and fourth definitions specify the community as the target group, while in the third definition, the individual should be the focus of health care. The notion of a community-based service is found in the second and fourth definitions.

From the above, it seems that there is no one definition of CHCN. Differences in the goals, levels of practice, roles and settings exist, and this is true of the different health systems, whether in the UK or the US. Community nurses are "as diverse in their characteristics, functions, practices and networks as in their individual appearances. Indeed, community nurses do not even subscribe to a consensus view of what community nursing is" (Hyde, 1995).

Since there is no single definition of CHCN that may be adopted to suit all communities, each country may develop its own pattern of community nursing services in accordance with its unique needs and available resources. However, there are fundamental issues already mentioned in the above definitions that must be looked at whenever considering this service. These include the different types of care: curative, preventive and promotive; the focus of health care being on individuals, families, and the community; and the qualifications and training of the nursing staff providing the service.

3.6.2 Developing a CHCN service

In developing and implementing CHCN service, one should look into different issues, such as whether to have one type of CHCN, or to allocate different specialist roles, as in the UK; whether CHC nurses should work in PHC centres, in people's homes, in other settings (e.g., school, work) or all of these; what should be the role or roles of CHC nurses; how they should be trained, managed, employed, etc; and various other issues.

There is no single ideal system or model for providing community health care nursing services, nor can any one model be applied at all places, times and conditions.

95

Accordingly, the researcher examined various different models. It was found that community health care nursing could operate on the basis of a number of such models. For example, some services are based in hospitals, while others work in a Primary Health Care setting.

This chapter will focus on the type of setting which might be appropriate for a community-based CHCN service in addition to other issues, namely, education and training, role(s), accessibility of the services, financing and budgeting, linkage to other health services, value of the service, and current issues and problems, by examining the available community nursing systems currently operating in the UK, Bahrain and the UAE.

3.6.3 CHCN systems in the UK, Bahrain and the UAE

3.6.3.1 Community nursing in the UK

In the UK, community nursing has been constantly developing and changing in response to government policy and to the changing needs of the communities served. Several factors have influenced the pattern of community health care in the UK, such as the Alma Ata declaration in 1978, the publication of the Health Act in 1999, the development of primary care trusts, demographic changes and economic demands, and the rapid technological and pharmacological developments (Sines et al., 2001).

In the UK, community nursing is divided into eight specialist branches. Some of these branches have their origins back in the nineteenth century. These branches include the following (starting with the first ones to be established until the most recent): Health visiting (1851); Occupational health nursing (1872); District nursing (1887); School nursing (1892); General practice nursing (1913); Community mental

health nursing (1954); Community children nursing (1954); Community learning disabilities (mid-1970s). The roles of the nurse in each of these branches have changed with time. If we take, for example, the initial role played by general practice nurses, they were mainly involved in the administration of medicines and providing treatment room services. Currently, general practice nurses have more experience in chronic disease management, health education, screening and lifestyle change (Unsworth, as cited in Spencer, Unsworth and Burke, 2001).

A review of the literature revealed that community nursing services in the NHS have been community- rather than hospital-based from the beginning of the NHS (Unsworth, 2001). In 1986, the Cumberlege Report (DHSS, 1986) reviewed the organisation of community nursing services and recommended many changes. It criticised the growing practice of attaching community nurses to general medical practices and suggested neighbourhood nursing services. The Cumberlege Report was not fully implemented and GP attachments continued as the most common pattern of organisation. The organisation of CHCN was again addressed in the Roy Report but no changes were implemented (NHSME, 1990).

Before 1990, there were Primary Health Care teams in many areas, which included GPs, district nurses and health visitors. GPs employed practice nurses to handle the work within the surgery (Rivett, 1998). The attachment of CHC nurses to general practice formed the "basic operational unit for the delivery of care to communities" (Blackie, 1998). After 1990, community trusts and GP fundholding practices were established, and were replaced later by Primary Care Groups (PCGs) in 1999. According to K. Jackson (personal communication, October 12, 2002) community nurses are based in communities close to GPs where they report directly

to the GP matters related to clients' care. Community nurses of the same health authority report their professional issues to a nursing supervisor. On a daily basis, these nurses are held responsible for whatever decision they make based on the concept of professional accountability.

PCGs are organised on the geographical basis of natural communities and comprise all GPs in an area together with community nurses. PCGs have some freedom to make decisions about how they deploy their resources. By April 2004, it is expected that all PCGs will become freestanding primary care trusts (PCTs) (Sines et al., 2001). Many PCTs include community health services transferred from NHS trusts. These services may include district nursing, health visiting, physiotherapy, speech therapy, etc.

Cain (1995) highlighted the importance of educational preparation for community nurses. He stated, " community nursing is a unique and separate nursing discipline for which further educational preparation is essential"(Cain, 1995). The UKCC (1994) report recognised community health care nursing as a specialist practice discipline and required that all university –delivered courses designed to prepare community health care nurses and health visitors for practice were validated at degree (or postgraduate) level (Sines et al., 2001). The course may be followed on a full- or part-time basis. All courses have a 50% mandatory supervised practice component, each focusing on the elected specialist area of study: general practice nursing, occupational health care nursing, community children's nursing, community mental health nursing, public health nursing (health visiting), school nursing, district nursing or community learning disability nursing.

The role that community nurses play is influenced by many factors, such as the speciality of the community nurse and the population number served. Theoretically, all types of community nurse should play a major role in prevention. However, due to the load of treatment work required of some, e.g., a district nurse, minimal time is spent on prevention. Health visitors and school nurses play a predominantly preventive role. Practice nurses play both curative and preventive roles.

In practice, the role of district nurses is mainly curative involving the provision of basic nursing skills. Health visitors' roles include caring for newborn babies from the age of 28 days, the families of young children and the children themselves. They provide community-based health promotion education and advice. The role of the school nurse is to promote health and well-being in the population of school children. They visit the schools to vaccinate the children and perform a general check-up. Practice nurses are employed by GPs and have varying degrees of responsibility. Some of them complement the doctor's work by giving vaccinations, carrying out treatment room work, performing adult health checks and screening the elderly. Counselling, health education and promotion, as well as administrative work, are a major part of the practice nurses' role. Community children's nurses who are community-based care for sick children in the community, while some community children's nurses work on a hospital outreach basis linked to specialist units. Establishing a community paediatric nursing service is difficult, especially if there are insufficient sick children per GP practice to merit the attachment to practices (Blackie, 1998). Community mental health nurses practise a wide variety of therapies ranging from behavioural psychotherapy, family interventions and grief counselling,

psychodynamic psychotherapy, relaxation and visualisation. Occupational health nurses are concerned with preventing ill health caused by employment and affecting the ability to work, promoting good health and developing health promotion strategies in the workplace. Community learning disability nurses provide support to people with learning disabilities and their families at home. The individuals visited by the community nurse include those who have always lived at home and those discharged from specialist learning disability hospitals (Sines et al., 2001).

The role played by CHCN is currently expanding through the initiation of the National Service Framework for Older People programme, which was published in March 2001 (Chief Nursing Officer Bulletin, 2002). Due to the load on acute services, the government has been putting increasing pressure on the NHS to develop intermediate care. Intermediate care is the care given to older people either to prevent admission to hospital or to facilitate a speedier discharge from hospital. CHCN can play a major role in the planning and delivery of this aspect of care (Chief Nursing Officer Bulletin, 2002).

There is a considerable push from the government for all community nursing services to be more focused around preventing ill health and promoting better health, rather than responding only to prompts for treatment of ill health. The issue of public health and primary care has been emphasised. Nurses, midwives and health visitors, the government argues, can deliver care in new ways, breaking down the traditional distancing between acute and primary care (NHS Plan, 2000).

As part of the government's strategy for nursing, midwifery and health visiting in England, Making a Difference, the NHS set up Integrated Nursing Teams (NHS Beacons Programme, 2001), which consist of practice nurses, health visitors

and district nurses, who use their skills in an integrated way to meet the needs of their client group. These teams work in partnership with general practitioners developing high autonomy within the practice. Such teams have been set up in some areas and are reported to be working well, at the Leicester Terrace Health Care Centre in the South East Region and Ferrybridge Medical Centre in Northern and Yorkshire (NHS Beacons Programme, 2001).

According to the Department of Health (1996D), "services should be reasonably accessible when clinically needed, to all people regardless of age, sex, ethnicity, disability or health status" (Blackie, 1998, p.5). In the UK, CHC services often have to be referred by a GP at no charge.

Service cost differs considerably due largely to variations in staffing levels and grade-mix. For example, district nursing services cost an estimated 650 million pounds in 1997/98. Between 75 and 80 per cent of this expenditure goes on staff salaries. But there are considerable variations between Trusts in the staffing resources dedicated to district nursing when compared with the population served (Audit Commission Report, 1999). These variations might be related to the differences in staffing levels between trusts, a richer grade-mix among registered staff, the efficiency and effectiveness of the service provided, etc. (Audit Commission Report, 1999). This is reminiscent of Maxwell's (1984) characteristics of quality in health care services outlined in Chapter Two (section 2.4.5. Quality in health care).

Referral to a district nurse is almost always carried out through the GP or GPs to whom the nurse is attached (Elias, 1999).

The availability of community nursing services for all the population had a positive impact reflected in the achievements of these services. For instance,

decreasing the length of hospital stay and relying on the follow-up by community children's nurses resulted in a reduction in the potential negative psychological impact of hospitalisation on children and a decrease in hospital-acquired infections (Whitting, 1999). Furthermore, the care provided by community health care nurses resulted in an increase in the number of elderly and terminally ill patients dying at home (Audit Commission Report, 1999). With the role the district nurses are playing in the 'Hospital-at-home' services, the Audit Commission's national survey reported an early discharge scheme, an admission prevention scheme, or both. 'Hospital-at-home' has ensured that hospital resources are targeted at patients who cannot be managed in the community (Audit Commission Report, 1999). It has been reported that clients are usually satisfied with the CHCN services (Blackie, 1998).

Despite the achievements and the high value of the CHCN services, a review of the Audit Commission report on General Practice in England (2002) revealed that CHCN was facing some problems. These problems included issues to do with the scope of practice nursing and the degree of specialisation. The role of practice nurses can sometimes overlap with that of district nurses, for example, in the management of leg ulcers. It has been suggested that the role of the practice nurses could be developed, for example, by developing triage in primary care.

Many aspects of district nursing services in the UK have been criticized: the shortage in staff numbers when compared with the number of patients referred to the service, the scarcity of resources needed to deliver a quality patient care, in addition to the problems caused by the open referral system (a system by which anyone may be referred and patients are rarely turned away) (Audit Commission, 1999). The problems associated with referral were highlighted in a survey conducted by the

Audit Commission (Audit Commission Report, 1999) and they included problems such as inappropriately referred patients or inadequate referral information.

3.6.3.2 Community nursing in Bahrain

In 1984, the CHCN services were officially introduced and integrated into the PHC system as the entry point to the health care system for the people of Bahrain. CHCN services are under the direct supervision of the Primary Health Care Department, Ministry of Health, and are not hospital-based services (S. Al Sheikh, personal communication, 12 August, 2002).

Nursing education in the state of Bahrain, as in most schools of nursing around the globe, teaches basic nursing knowledge and technical skills to nursing students, a two-year course taken in parallel with clinical training. To qualify as a community health care nurse, a one-year postgraduate course in community health care nursing skills and techniques has to be completed at the Faculty of Health Sciences together with a field training programme, on condition that the applicant has completed one year of clinical nursing experience (Interview with DON, PHC, March, 1998). The CHC nursing programme started in 1984 (Report by Al Kahtani Kh., Director of CHCN programme, 1996). In Bahrain, community nurses are trained as general community nurses, in contrast with the UK, where speciality community nursing training is available. This could be attributed to many factors such as the pattern of health, diseases prevalent locally, demographic profile, and finally to the fact that the PHC-based CHCN discipline is relatively new in Bahrain.

Bahrain's model is a community-based model. It functions through a team of community nurses. This team operates in the PHC clinic along with a number of

physicians and technicians, which covers a cross section of people. The CHCN team is led by a charge nurse who reports to the nursing administration of the PHC department at the MOH. This helps to avoid any shortages, as ensuring equitable coverage becomes somewhat easy (S. Al Sheikh, personal communication, 12 August, 2002). Earlier in Chapter Two (2.4.4.1 Quality in health care), it was noted that Maxwell (1984) identified six criteria for measuring the quality of health care, one of which is equity of service.

The tasks and responsibilities of such a team, which has a specific job description, range from performing curative duties (change of a bladder catheter) to preventive duties (follow-up of children's vaccinations, development) and health education (diabetes mellitus complications). Such services can be provided in the health centres or in homes or schools. The average team consists of 4 nurses and a person in charge for a PHC centre serving a population of between 30,000 and 40,000 (MOH, Bahrain, 2000), given the fact that the majority of the members of such a team are qualified community nurses. Community nurses report about their patients to the GP of that same clinic. The average daily load of a team is between 15 to 20 patients (S. Al Sheikh, personal communication, 7 October, 1998).

The accessibility of health services to individuals in need at an affordable cost and when needed is one of the indicators of quality, a point discussed in Chapter Two (section 2.4.4.1 Quality in health care). The MOH in Bahrain imposes only nominal fees on all the residents (locals and expatriates) seeking health care at any level. The fees do not exceed 10% of the actual cost of the health care service (S. Al Sheikh, personal communication, 7 October, 1998).

Health services are mainly under the control of the central government, which focuses on providing medical supplies, staff salaries, and on building, maintaining and renovating facilities. For the past several years, Bahrain has suffered a drop in government funding causing a budget deficit in the health sector, as is the situation with the neighbouring Gulf Cooperation countries. In some instances, deficits were made up by using savings taken from other sectors' budgets whenever available (S. Al Sheikh, personal communication, 7 October, 1998). This shows that funding for health in Bahrain has witnessed a decrease.

A study of the health sector in Bahrain (Bahrain MOH, 1993) showed that no clear policy exists with regard to budget allocation for the CHCN services. This is in the main as a result of the fact that the CHCN service is part of PHC, which suffers from a shortage of funds. This shortage is due to the following factors: scarcity of resources; imbalance in priorities; and absence of a taxation system or national insurance premium.

In Bahrain, there is a hospital referral system in place to and from the PHC centres and thereafter to CHCN services (S. Al Sheikh, personal communication, 7 October, 1998). The patient who is discharged from hospital is referred to a GP in the clinic where he is registered. The latter will refer the patient to a community nurse, if needed.

From a review of the Health Information Directorate and the health statistics for the year 2000 (MOH, Bahrain, 2001), and from communications with the Director of Nursing in the PHC clinics of Bahrain (S. Al Sheikh, personal communication, 31 May, 2003), it is possible to argue that the introduction of community nursing services to the Bahrain health care system has led to certain achievements, namely: an

increase in the rate of vaccination from 90% to 95% as a result of the follow-up of defaulters at their homes; a decrease in the average period of hospitalisation from 10 days to 3 days for mothers, children and the elderly, in addition to post-operative cases, as a result of follow-up at homes; a decrease in the incidence of hereditary diseases (mainly blood diseases), resulting from the introduction of premarital counselling by community nurses; and an increased awareness on the part of mothers of the importance of breastfeeding, children's screening and family planning. On the basis of these achievements, community nursing services may be valued for the role they have played in preventing and promoting the health of families in particular, and of community in general.

As discussed earlier, the current issues facing CHCN in Bahrain include financial problems, and the lack of specialisation within the field of community nursing. At the moment, no clear directions from the Bahrain Ministry of Health have been given for dealing with these issues.

3.6.3.3 Community nursing in the UAE

In the UAE, the only community health care nursing service available is the one located at Tawam hospital within the Al Ain medical district.

The CHCN service at Tawam Hospital was set up in 1985. Currently, the staff involved in the provision of this service include three registered nurses and a driver. They work from 0700 to 1700. There is no on-call or weekend service. In the event that one of their patient's conditions requires out-of-hours medical or nursing attention, the patient has to go to the clinic or hospital.

The CHCN service at Tawam Hospital is a hospital outreach service. It provides direct patient care in the community, in accordance with Tawam Nursing Procedural guidelines and physicians' orders.

The scope of the practice includes follow-up services for chronically ill patients and for patients discharged from hospital but still in need for nursing care, and providing health education for the patient, family, and others involved in providing care. Their role is preventive, promotive and curative but targeted primarily at inpatients and outpatients who have been registered at that hospital.

It is worth mentioning here that the nurses working within the PHC centres do perform some of the duties of a community nurse, although they are not qualified or trained as such and do not work outside the PHC centres.

The Institutes of Nursing in the UAE do not offer any programme related to community nursing. The only nursing programme available is a three-year post-secondary school diploma, following which graduates can function as general nurses in primary or secondary health care settings. However, there is a plan to introduce post-basic programmes in the Institutes of Nursing in the near future, and a CHCN programme will be one of them. The nurses working in the CHCN service at Tawam hospital are all expatriates, mostly from Western European countries such as the UK, Sweden and Germany, who have received their education and training in community nursing outside the UAE.

Access to the service is restricted to UAE nationals registered at Tawam, oncology patients, whether nationals or non-nationals, and staff members. The Tawam community nurses cover patients in remote and urban areas within Al Ain.

There is no separate budget allocated for this service. The required resources for the service come from various departments within the hospital. For example, the staff costs are paid from the budget allocated to the nursing department, and the drugs and the medical supplies are obtained from the hospital pharmacy and store (Tawam Hospital annual report, 2002). The patients seen by the nurses of this service are referred by a doctor from Tawam Hospital.

From the information presented above, it is obvious that there are variations in the CHCN services provided in the UK, Bahrain and the UAE, with respect to the education and training needed by the nurses, the setting, the role of the nurses, accessibility, budgeting, and linkage with other health services. These differences are attributable to several factors such as the differences in the health needs and the existing health system of each country, and the availability of resources. However, the roles played by CHC nurses in the UK and Bahrain suggest it is worth looking at the development of such a service in the UAE.

3.6.4 Discussion of the CHCN systems in the UK, Bahrain and the UAE

Following the WHO Expert Committee meeting on Community Health Nursing in Geneva in 1974, the members encouraged "each country and each community within the country to develop its pattern of community nursing services in accordance with its unique needs and available resources" (WHO, 1974, p.21). From this statement, one may conclude that there is no one organisational structure of CHCN that may be considered ideal. In this regard, CHCN services are differently organised from one country to another. When comparing the CHCN systems in the UK, Bahrain, and the UAE, several similarities and differences were found.

Of note, the academic and training requirements specified to qualify a registered nurse as a community health care nurse are quite similar in the U.K and Bahrain, though the basic course is three years in UK, as opposed to two years in Bahrain. However, in the UK, the individual has to specialise in one of the areas of community nursing. In both countries, pursuing further education and updating one's knowledge by attending continuous nursing education courses is encouraged. Likewise, both countries train and employ their own nationals as CHC nurses. In the UK, renewal of registration will not be granted without presenting evidence of having accomplished a certain number of hours of continuing education (K. Jackson, personal communication, October 12, 2002), which does not apply to Bahrain.

With regard to the setting from which the service operates, Bahrain and the UK share a primary care set-up, while in the UAE current services are limited to a hospital outreach pattern. The organisational models for CHCN showed that the service might function from different settings, each having its own advantages and disadvantages. Community health care nurses might be employed in a primary, secondary, or tertiary health care setting.

The Roy Report suggested five different models for organising and managing nursing practice in the community (Sines et al., 2001, p. 155). These models are:

a. Stand Alone Model

This is a separate organisation with separate administrative structure and staffing. It provides services according to referrals from hospitals, Primary Health Care Clinics, social service organisations and other facilities and individuals (Roy Report, 1990).

A Stand Alone Model, due to its separation from other facilities, might be able to adhere to its mission most easily. However, it would be more costly because it uses

the fewest existing resources. This is in addition to issues of collaboration and communication across administrative boundaries.

b. Locality Management/Neighbourhood Nursing Model

This model has a separate administrative structure, but uses a mix of Primary Health Care staff and staff hired for the CHCN programme. These mixed teams are grouped geographically, possibly around PHC centres.

The Locality Management /Neighbourhood Nursing Model is located close to the communities it serves. On the other hand, the use of an administrative structure distinct from the facilities within which the staff work, and the use of some members of staff belonging to the local facility could create role confusion and administrative conflict.

c. Expanded Family Health Services Authority Model

This model uses an existing social services organisation as a purchaser of services from Primary Health Care. This health organisation would also contract from other community health departments for the services of other specialised care givers and might also employ its own staff for the CHCN programme.

The Expanded Family Health Services Authority Model could be helpful in taking a broader view of needs beyond those related to health and would maximise use of existing CHCN staff. On the other hand, this model requires a well-developed social or health services organisation that is capable of managing a complex programme.

d. Vertical Integration or Outreach Model

This model combines acute and community facilities in a variety of possible approaches. Examples include community mental health nursing outreach from a secondary facility psychiatric unit; a community unit with acute outreach, as in programmes that provide hospice care for terminally ill cancer patients or care of high risk pregnant women on bed rest at home with mild pregnancy-induced hypertension.

The Vertical Integration Model is well positioned to identify patients needing follow-up after discharge. It may be too closely connected to the acute setting to be accessible to those in need of care who have not been recently hospitalised or whose need is preventive in nature.

e. Primary Health Care Managed Model

this model brings the CHCN programme under the management of PHC, including all services- whether community mental health or other community or acute speciality areas. The size of the team and the range of services provided vary according to local needs. The team's work may be focused around a PHC centre or other geographic distribution.

The Primary Health Care Managed Model brings all CHCN services under the PHC administrative structure. While this model may be cost-effective and have a good awareness of community needs, there could be a lack of connection to hospital discharge systems and potential role conflict for staff working under the control of PHC but belonging to another facility. This is in addition to the necessary expansion of the powers of PHC which have to be achieved by convincing officials that the use of this model would provide services that would contribute to the promotion of health

111

standards on the one hand, and to cutting the costs, on the other. This would be shown in the diverting of a number of cases that were reporting to high-cost hospitals, to the PHC system. This model already has in place the essential infrastructure that would assist in cutting down the costs in terms of its inception and management, which is available at the PHC centres. Moreover, less modification would be needed in the overall health care system than in case of the other models.

Overall, the Roy Report "identified advantages of general-practice managed primary health care teams as offering an integrated approach to previously divided roles and responsibilities of practice nurses and health authority employed nurses." It is worth mentioning here that although the models suggested by Roy were never fully implemented, the PCT in the UK and the Bahrain PHC model may come close to the last one.

The role played by the community nurses in the three above-mentioned systems is preventive, promotive and curative. How much time and effeort are being spent on any one of these roles relies on several factors, such as the nurse's own training, the definition of his/her role, the ratio of nurse to population served, population needs, available resources, etc. Nursing practice in community settings differs considerably from practice in the hospital. And, just as nursing practice in acute care institutions varies greatly from one area to another (operating room differs from intensive care unit, which differs from post-partum, which differs from acute psychiatric care), it can be very different between community settings. However, just as there are similarities in nursing practices in acute care settings – following physicians orders, medication administration, and taking vital signs – there are similarities throuhout community settings - health promotion, teaching, counselling,

and the advocacy and ensuring of the continuity of care are always important features of care in these settings (Burley et al., 1997; Littlewood, 1999).

CHCN can deal with human health needs at an individual, family or community level. At any of these levels, the CHC nurse can act as an educator, supporter, counsellor, care provider and role model (Burley S., et al., 1997). In practice, the amount of time spent on each role varies from setting to setting, patient to patient, and day to day. Within community care, nurses have extended their roles into diverse fields, namely psychiatry, children, mental handicap, occupational health, school nursing, etc. (Littlewood, 1999).

In the UK as well as in Bahrain, access to CHCN services is granted to whomever is in need of that service, provided that the patient was referred by a health care professional, usually by a GP. Self-referral is rarely practised. However, there are policies that control eligibility for the service. These policies are important because they render the service more organised and allow a fair distribution of workload among different community nurses. However, the 1999 Audit Commission Report suggested that the guidelines for GP referral were widely ignored. In addition, the variations in skill mix and the numbers of staff per head of population referred to earlier suggest a very uneven distribution of workload.

It seems that the UK and Bahrain health systems conform to the WHO recommendations with regard to the strategies implemented to achieve "Health for All". In both countries, the CHCN services are PHC-based, though the model of PHC, at least in the UK, tends to be a rather narrow, medical one, and the service is accessible to all people in the community. In the UAE, availability of the service as a

113

hospital outreach limited to one hospital in one geographical area means that service accessibility is very limited.

The financing and budgeting of the health care sector seem to be an ongoing concern for any government. References from many countries have shown that the health care systems have been going through continuous reform with considerable implications for the budgeting and financing divisions (World Bank, 1997). In the UK, the source of funding has remained the same, i.e., principally from general tax revenues. The mechanisms through which money is allocated and the organisation of service delivery have changed. In Bahrain, the Ministry of Health funds CHCN services from the budget allocated to the PHC services, while in the UAE, it is part of the budget allocated for the nursing services at Tawam hospital. Variations in the budget size depend mainly on the total budget allocated for the Ministry of Health by the government, rather than on the real needs of the community.

In the UK, linkage between the CHCN services and hospitals is poor and inadequate. The Audit Commission (1999) highlighted the fact that some patients with a high dependency level are discharged from hospital without being given a referral to a district nurse because of ineffective discharge planning and poor communication between the hospital and community nursing staff. This has resulted in slower rehabilitation and recovery, and in the worst cases, there has been a need to readmit patients because of a deterioration in their condition.

In the state of Bahrain, there is no direct, sound linkage between the hospital being the secondary care facility, and the PHC facilities as the front line care giver. Referral of patients from the hospital to the PHC centres and vice versa is conducted by means of an old, outdated patient referral system characterised by the lack of an

information network system between the hospitals and the PHC department, i.e., poor

communication, and finally, a lack of coordination between the two bodies, i.e., the

lack of a system for the transfer of relevant information. These constitute a serious

handicap to maintaining adequate post-discharge health services. No service can

develop and succeed in isolation. Therefore, the hospitals, as an integral part of the

health system, should work in partnership and properly coordinated at all levels with

the other health sectors (S. Al Sheikh, personal communication, 7 October 1998).

After comparing the CHCN systems in the UK, Bahrain and the UAE, the

researcher is able to conclude that there is no system without shortcomings. There

will always be room for improvement even if the current services are well perceived

by the community and are capable of meeting the needs of the people served.

3.7 Arguments in favour of a PHC-based CHCN service in the UAE.

With reference to the Alma Ata declaration, the needs of the community can best be

met by adopting a PHC approach. This aims to maintain a rational balance among the

curative, maintenance, preventive, promotive and rehabilitative components.

Community health care nursing is an essential tool for the maximum use of the

primary care approach.

With reference to the arguments previously raised in this chapter regarding a

PHC-based health system, the description of the CHCN systems in the UK, Bahrain

and the UAE, and the discussion in Chapter Two about the need for strengthening the

PHC approach, the researcher presents below the arguments in favour of a PHC-

based CHCN service in the UAE.

The World Bank Report (1997) and recent government reports (Ministry of Health, 2001) show an increase in hospital admissions of chronic patients with diabetes mellitus, hypertension, paraplegia, bedsores, etc., conditions which do not require inpatient care but could be followed up through home visits by the community health nurse (as an active ingredient of the PHC) and, should it be necessary, by the family physician. Such a policy, if adopted, would ensure continuity of health care for the chronic patients within the community. It would also minimise the hospital bed costs and cut down the expenditure on unnecessary investigations and needless treatment within the hospital, which involve high costs in terms of both money and manpower (World Bank Report, 1997). In addition, it is more practical for the patients, can solve transportation-related problems, especially for very old people, the handicapped and children, is less costly and more convenient, since the patient is kept in his/her own environment.

In the UAE, the PHC centres are fairly distributed geographically among different communities. Therefore, having a CHCN service based in these settings might ensure easy access for the overall population to preventive, promotive and curative services. This has been noticed in the UK and Bahrain experiences. As mentioned previously, every individual in the UK is GP-registered, which facilitates his/her access to community nursing services. Similarly, the availability of CHCN within the PHC clinics in Bahrain facilitates access to these services.

Introducing a CHCN service to the PHC centres would incur minimal cost because of the use of existing infrastructure, a characteristic that the UAE government demands in its newly adopted policies, reflected in the ongoing decreased expenditure on health care, and the redirection of budget allocation to other sectors

mainly security and defence (personal communication, Director of Planning, Ministry of Health, 10 October, 2002). The UAE government supports the strengthening of existing PHC centres rather than the building of new ones, the focus being more on quality rather than on quantity (ibid.).

The Tawam Hospital outreach community health nursing service has been well accepted and received by patients. However, it has been limited to a certain category of patients who are eligible to be treated at Tawam Hospital. Expanding the service so that it is made available in all the hospitals of the country will not solve the problem, because once again the service would be limited to a small number of those patients who have approached the hospital seeking health care or to those who are registered within the hospital. Therefore, in order to cover a larger proportion of the community, including those whose health status indicates that they do not currently require medical attention, a PHC-based community nursing service would be the solution. In this situation, the preventive, promotive as well as the curative roles of the community nurses will be performed.

Bahrain's experience with the PHC-based CHCN services, Bahrain a neighbouring country with a culture very similar to that of the UAE, is yet another point of argument in favour of the adoption of a similar CHCN structure by the UAE. In this situation, the key point will be to examine the positive values of, as well as the problems associated with the UK and Bahrain systems, and try to learn from these experiences.

Since the UAE government and the recommendations of many studies (such as the World Bank Report) have supported the Alma Ata declaration, PHC-based

CHCN services could be the vehicle for achieving the PHC goals stated in the declaration.

On the basis of the above arguments, the researcher recommends that the most appropriate location for introducing CHCN services be in the PHC centres. However, this does not mean that placing this service in other locations is not acceptable. Once the service is implemented, a need may arise for hospital-based CHCN services, and from the literature it appears that CHCN services have already been established in hospitals, PHC centres or other community settings in many countries, such as the UK.

3.8 Conclusion

In this chapter, the researcher has presented the concepts and models related to Primary Health Care and Community Health Care Nursing. In addition, the practical experiences of some countries with PHC and CHCN services have been highlighted. The researcher concluded the chapter by arguing in favour of a PHC-based CHCN service in the UAE. However, the opinions of the individual members of UAE society (being the end-consumers of such a service) regarding this issue should not be neglected. Arguments for and against PHC-based CHCN services could arise among the UAE community. Some people might be critical and dissatisfied with the modality of care delivery. They might consider any home visit and close follow-up as an unnecessary intrusion into their daily lives, thus placing little value on the impact of such care.

With this in mind, the researcher conducted fieldwork for the purpose of exploring public opinion concerning several issues related to the health care delivery

system in the UAE, in particular opinions about the existing PHC system and the possibility of introducing CHCN services. Professionals' opinions in this regard were also investigated. The fieldwork methodology is the focus of Chapter Four.

Chapter Four:

Research Instruments and Research Methodology

4.1 Introduction

The purpose of this chapter is to provide an account of the methodology that has been used in this research. The chapter also details the research instruments used in this study, and then presents a discussion of the mode of analysis used in the research and describes the rationale surrounding it.

As well as explaining the concepts of PHC and CHCN, and discussing the arguments for having a PHC-based CHCN service for the UAE, the research involved exploring the views and attitudes of a range of potential stakeholders regarding several issues related to CHCN. The methods employed in this fieldwork are described and discussed in this chapter.

The fieldwork included three main components:

1. Using a questionnaire, broad-spectrum feedback from the potential users was obtained. The researcher sought to explore the following areas: community awareness of and willingness to collaborate with providers of a CHCN service, their expected care needs from this service, their expected health educational needs, the type of setting seen as best for the service and their levels of satisfaction with the present health care system.

2. Using a focus group approach, a preliminary overview of the participants' perceptions and expectations of a potential community health nursing service was obtained. On the basis of the main stakeholder opinion (users of health care), the researcher assessed the participants' perceptions of the role of community health nursing, the keys to the success of such a service and the barriers that may affect it.

3. Using an in-depth interview technique, an evaluation of the potential responsiveness of another important stakeholder – the health care team – was obtained. The researcher assessed whether this service was perceived necessary by the staff, whether they viewed the present health system as sufficient, and if a community health nursing service was introduced, which areas were seen as priorities and in which location it would be most effective.

The users of health care in question were varied in terms of culture, ethnicity, language, nationality and health problems. The users of health care in this study were all inhabitants of Al Ain. He/she could be living there by birth or as a result of temporary or permanent immigration. Naturally, it was necessary to use a number of different approaches in order to obtain a holistic view of this service.

Consulting the community regarding certain health issues is changing the health agenda tremendously around the world, bringing it back to its basic mission: care, prevention and health promotion, taking into consideration the associated cost (Bowling 2002, p. 6) emphasised the fact that "it is essential to include the perspective of the lay person in health service evaluation and decision making". This consultative approach has the capacity to suggest the potential extent of participation and acceptance in the future.

In this study, consulting the public about the community health nursing service and calling for their views could reveal enthusiasm and positive expectations or could reveal a lack of enthusiasm and negative expectations. This alone can help to predict the level of success of such a service and to suggest the kind of service that is most likely to be successful and any barriers there are likely to be.

In order to achieve this goal, the researcher (a health authority administrator) solicited participants' perceptions and views regarding the health care services and the proposed new CHCN service in Al Ain district. However, being a known health authority figure in the district had to be considered a double-edged sword. The advantages of the researcher status were that the discussion would be more serious, since people have more trust in the practitioner researcher to intervene in the clinical environment to test out changes or improvements in practice (Reed and Procter, 1995). Another advantage, as mentioned by Kinchleon and McLaren (cited in Denzin and Lincoln, 1994, p. 149), is as James Garrison (1989) contends, "that practitioner research tends to distort reality less often than expert research because the practitioner is closer to the purposes, cares, everyday concerns, and interests of work".

Practitioner researchers are part of the culture they are researching before and afterwards. Therefore, their commitment to developing knowledge and understanding will necessarily be motivated by their positions (Reed and Procter, 1995). An advantage for the practitioner researcher position is the ease of access of the setting because it is his/her own practice setting. Another advantage is that the practitioner researcher has insight and knowledge concerning the unit, making him/her well informed from the start (Reed and Procter, 1995). It may thus be said that the strength of practitioner research lies in the integration of research with practice.

The disadvantages of the practitioner researcher status were that the interviewees might be inhibited from expressing their frank opinions for fear of being misjudged, might be unable to express themselves, or might be saying what they thought the authority or (expert) figure wanted to hear rather than offering their frank opinion.

In an attempt to minimise these problems, the researcher stressed that he was not there in his role as a senior health service manager, but as a student keen to learn their honest opinions, and that all they said would be confidential.

The expected outcome was a gathering and analysis of opinions that would help administrators and health care managers to base their decisions on a solid background. This chapter will offer a discussion of the research design and will provide an overview of the research instruments used in this study. It will also discuss the data collection process regarding each instrument used, including a description of the sample and setting, descriptions of the methods of measurement of each research instrument and issues of reliability and validity

4. 2. Research Design and Techniques

The research design helps to inform the structure of the study. In the design, the researcher will focus step by step on the questions addressed in his study, the population to be questioned, the measuring techniques and analysis. It is like a blueprint for any study (Burns & Grove, 1999, p. 39). This study made use of both quantitative and qualitative approaches in its research design.

The quantitative approach is defined by Burns and Grove (1999, p.23) as being "A formal, objective, systematic process in which numerical data are used to obtain

information about the world. This research method is used to describe variables, examine relationships among variables and determine cause and effect interactions between variables." Similarly, Strauss and Corbin (1998, p. 10) define 'qualitative research' as being " Any type of research that produces findings not arrived at by statistical procedures or other means of quantification."

Quantitative and qualitative approaches have been referred to as positivistic and naturalistic studies respectively, delineating the philosophical underpinning of each type. Quantitative research methods were originally developed in the natural sciences to study natural phenomena, and can only help in the identification of quantifiable data, while qualitative methods were developed in the social sciences to enable researchers to study social and cultural phenomena (May, 2001). Quantitative researchers are concerned with the identification and explanation of causal relationships between events; they argue that this sort of explanation is inappropriate when the subject matter of research is the actions of human beings. Appendix 1 presents some of the most important differences between quantitative and qualitative research methods.

The attribution of causality to human actions is not considered by qualitative researchers to be legitimate, because meanings arise from the mind, which is not observable or measurable. In short, qualitative research is often associated with the search for reasons rather than causes. In contrast to quantitative methods, whose aim is often to explain why something happens, qualitative approaches seek to understand the interpretations and motivations of people. One strength of qualitative methods is that the investigator is free to shift his/her focus as the data collection progresses, as long as the process does not become disorganised.

While quantitative researchers seek objectivity, which means that facts must be presented in a manner not influenced by the feelings, opinions or bias of the researcher, qualitative researchers emphasise the importance of subjectivity, in the sense that factual knowledge is based on the private experience of the researched. However, subjectivity in qualitative research also means that researchers reveal their own values, interests and commitments that might influence the research (Porter, 2000). Throughout this study, the researcher tried to approach the research in as open-minded a way as possible, while acknowledging the importance of subjectivity, both in terms of the way he approached and chose to research the area, and in terms of his own values and objectives (for example, a commitment to a PHC-based approach). An important strength of quantitative studies lies in the ability to generalise findings from the sample to a larger population, a characteristic that is difficult to apply in qualitative studies. However, one demonstrable advantage of qualitative research over quantitative methods has been shown in situations in which there is little pre-existing knowledge, or where the issues are sensitive and complex. In such cases qualitative studies are particularly useful in that they serve to tap participants' views and opinions which may not necessarily be quantified or measured.

Although quantitative approaches are contrasted with qualitative approaches, and although each mode of inquiry provides different types of data, they are "most fruitfully viewed as complementary rather than in opposition" (Tripp-Reimer and Kelly, 1999, p. 43). Some researchers have suggested combining a variety of research methods in the one study, a strategy known as triangulation (Denzin, 1970, cited in MacDonald and Tipton, 1998).

Denzin (ibid.) proposed four kinds of triangulation to be used in social research. The first is data triangulation, which means that the data should be collected at different times and places and from different people or groups. This can also include using multiple sources of data collection. The second is theory triangulation, which consists of using more than one theoretical approach to the analysis. The third kind is investigator triangulation, which involves using multiple rather than single observers of the same object. The fourth is methodological triangulation, entailing the use of multiple methods to collect the data and of multiple measurements within the same method. In this study, the researcher used methodological triangulation because of its advantage in enhancing the validity of findings (Bowling, 2002). There is a growing recognition within sociology of the value of qualitative and quantitative methods together to answer research questions. By combining the different perspectives, a more comprehensive research design can be constructed. Together they provide a more complete understanding than can be obtained by using either approach singly. As noted by Denzin (1989, cited in Bowling, 2002, p. 202), triangulation elevates the researcher 'above the personal biases that stem from single methodologies. By combining methods and investigators in the same study, observers can partially overcome the deficiencies that flow from one investigator or one method'.

The choices of designs for this research were made taking into account both the problem and purpose of the study. The research purpose was to explore both the ways in which a community-based nursing service could contribute to meeting the health needs of the UAE, and the feasibility of implementing such a service. This service is an innovative approach for health care in the UAE. Therefore, if it is to be introduced, its success depends heavily on planning.

Assessment being the first step in any planning process, an assessment of the perceptions and the expectations of the consumer about such a service is therefore necessary. Collecting the data about knowledge, attitudes, and expectations from a large sample of the population of interest and the application of descriptive measures to calculate them justifies the use of the quantitative approach. Studying views and attitudes necessitates a discussion back and forth between the researcher and the informant, which justifies the use of a qualitative approach (Bowling, 2002). Hence, the eclectic approach in this study is supported by other examples where the shortcomings of one approach were compensated by the other (Bryman, cited in May and Williams, 1998), therefore the triangulation method was applied in this study.

The following section provides an overview of the research instruments used in this study. Based on the study design discussed earlier, each aspect necessitated a different technique. The different instruments used are the questionnaire, the focus group, and the in-depth interview.

Throughout the various stages of the research, the role of male facilitator was acknowledged. With regard to the male groups, the researcher applied the same principles, as has been discussed previously in this chapter.

4.2.1 The questionnaire technique

The questionnaire is a common method of data collection in quantitative research. It can contribute to the collection of broad-spectrum data about facts, beliefs, levels of knowledge and attitudes (Burns & Grove, 1999 p. 272). According to De Vaus (1996, p. 80), questionnaires are:

"The most widely used survey data collection technique...
Questionnaires can be filled out by the respondent and returned to the
researcher or administered by interviewers. The questionnaire is a
highly structured data collection technique whereby each respondent
is asked much the same set of questions."

The questionnaire, being a structured self–report instrument, was used in this study as a

data collection tool for the quantitative aspect, making use of the advantages mentioned

in Appendix 2. Questionnaires that are designed with open-ended questions can be used

as a tool during semi-structured or unstructured interviews to collect qualitative data

(Burns & Grove, 1999). A more detailed assessment of the advantages and

disadvantages of the questionnaire instrument is presented in Appendix 2.

To develop a questionnaire, a number of important guidelines need to be

considered, according to Gilbert (1998, pp. 104-107): The content of the questions

should be relevant to the participants: is the participant able to answer those questions?

The wording of the questions should be clear and simple; it should avoid jargon, and

use uncomplicated sentences. The style of the questions should not be leading to the

answers or contain more than one question (commonly known as double-barrelled

questions). The structure of the question should not contain double negatives or

hypothetical questions. The order of the questions should be logical. In asking the

questions, one should plan to avoid vague responses such as "regularly" or "frequently"

and also avoid sensitive direct questions. They may lead to under-reporting or over-

reporting.

There are two forms of questions which may be asked: closed questions and

open questions. "Closed questions are drafted in advance, complete with all the

possible answers which could be given. Each respondent is asked to choose from one of

the answers... For example, questions such as "Are you married?" are only answerable by "yes" or "no" (Gilbert, 1998, p. 101). With regard to open questions, these are: "Those that allow individuals to respond in any way they wish. For example, asking the open question "What do you enjoy doing in your leisure time?" will allow the respondent or interviewee to state any activity from abseiling to zither-playing." (Gilbert, 1998, p. 102).

Closed questions are more difficult to construct, much easier to score and the subject can answer them more quickly than is the case for open questions. However, closed questions do not give respondents the chance to express their opinions in detail when compared with open questions that allow the respondent to express some depth and shades of meaning in the answer (Scheaffer et. al., 1986. p.31).

For this study, both closed and open questions were included in the questionnaire with more focus on the closed questions, to facilitate the process of data handling and analysis, given the large sample planned to be included.

Questionnaires may be administered in different ways. They may be self-administered (self-completed questionnaire), or administered via face-to-face interviews. A self-administered questionnaire is "given to respondents for them to fill in", while in the face-to-face interviews, "interviewers need to be provided with some form of document to guide questioning... Interviewers may record responses directly onto an interview schedule for later transcription" (Gilbert, 1998, pp. 96 & 97).

The advantages of self-administered questionnaires are that they can be of use when the researcher wants to collect information from a large number of subjects, distributed over a large geographical area; it is a relatively cheap method; and the respondents fill them in their own time, when it is convenient for them (May, 2001). In

contrast, the disadvantages of self-administered questionnaires are that the researcher cannot probe beyond the given answers; there is no control over who answers the questionnaire; the response rate may be low (a lot of people avoid responding to the questionnaires); or the answers may be incomplete, illegible or incomprehensible (May, 2001).

In this study, due to time constraints and the large sample size distributed over an extended geographical area within and around Al Ain city, questionnaires were self-administered, rather than completed by means of face-to-face interviews. Another reason for selecting this method of data collection was the practicality issue in relation to the multicultural society of the UAE, such as finding a convenient visiting time, concerns about allowing strangers into the house, etc. Furthermore, the researcher wanted to take advantage of the multi-method approach (self-administered questionnaire used in the quantitative study, and focus group and face-to-face interviews in the qualitative study) previously mentioned in triangulation, as different data collection methods might yield different types of data that complement each other.

4.2.1.1 Developing indicators for the questionnaire's topics

A major objective in this part of the research was to assess the consumers' view of the current health services (PHC and hospitals) and their expectations of the new proposed CHCN service.

In developing the questionnaire, the researcher sought to explore the opinions of members of the community regarding the quality of the current services, since their degree of satisfaction could provide a direction for whatever changes might be made

with regard to the available services or the need to introduce additional ones. In addition, an assessment of the awareness of the community about the CHCN service was made since this could help in giving direction to the amount and type of work needed to promote the new service, in the event it were implemented. Then the researcher asked if the community would be prepared to welcome the likely scenario were this service to be implemented; would the community be willing to collaborate with the providers of this service? What are their expectations and needs? Where do they suggest this service be located? The answers to these questions will help in designing a CHCN system that will contribute to meeting the health needs of the public. These questions led to the choice of the following topics:

- The community's satisfaction with the present health care services

- The community's awareness of the CHCN service

- The community's expectations of this service

- The community's willingness to collaborate with the providers of CHCN services

- The community's vision of the ideal setting in which CHCN could be provided.

In some cases, indicators were basically straightforward and simple. In other cases, choosing the correct indicators required more work. The approach used involved brainstorming all questions relevant to each topic, selecting the most interesting and meaningful ones, choosing the measurement techniques for these indicators, and wording, piloting and refining them. The following section on constructing the questionnaire will elaborate further on this approach.

4.2.1.2 Constructing the questionnaire

The first section of the questionnaire is usually descriptive and straightforward. It includes general information about the sample representing the community in question. The indicators are simple and well established: age, gender, marital status, etc. They usually measure the independent variables. These are commonly demographic variables.

Because of their level of abstraction and complexity, the subsequent sections necessitated more intense work. The first step was to list all relevant indicators for each concept. Then, by elimination, to choose the most relevant indicator(s), that is (are) directly related to the objectives of the research (there could be one indicator or many for each concept). Afterwards, it was necessary to classify them as one of the following three types: 1) transmitting facts, 2) reflecting behaviour and 3) measuring attitudes. Each type depicts a way of wording and presenting the question.

For instance, to find indicator(s) for community awareness of the concept of such a service concept, many indicators could be used, but the most direct one is "had you heard of this service before?" This indicator is measured by a 'yes' or 'no' answer and it indicates a fact (although not necessarily a truth). Another example concerned whether the participants perceive such a service to be important. The direct indicator in that case was to ask them their opinion about the importance of such a service. One way to measure this is by having scales: "Very important" to "not important at all." A third example for reflecting behaviour is measuring their present use of the health service. The question would involve checking the type of health care facility visited during the last illness.

Throughout this process of abstraction and construction, the basic principles of proper wording of the questions were adopted: namely, simple, clear, non-leading questions, using uncomplicated sentences. Also, the order of the questions and the idea of listing them in a logical flow was taken into consideration.

4.2.1.3 Pre-Testing

As a first step in the pre-test phase, a covering letter containing an introduction to the research subject, the confidentiality agreement and instructions on how to fill in this questionnaire was designed (Appendix 4). A final draft of the questionnaire, which included a variety of choices was then constructed. It included closed questions, open questions, rating scales, a checklist, ranking formats, choice of attitudes, and intensity of attitudes. It was simply and logically worded. Furthermore, the validity and reliability of the questionnaire were tested, as indicated by De Vaus (1996, p. 54):

> "Having developed indicators, we have to make sure that they measure the concept we think they are measuring (validity) and ensure that we can rely on the answers people give to our questions. A question is of little use if people answer it one way one day and another way the next (this is a question of reliability)."

1. Content validity testing: "This approach to evaluate validity emphasizes the extent to which the indicators measure the different aspects of the concept" (De Vaus, 1996 p.56). For instance, the question on using the present health care system may list all possible government institutions but miss out private institutions. Pre-testing enables the researcher to identify missing variables.

2. Construct validity: "This approach evaluates how well the measurement used conforms with the theoretical expectations" (De Vaus, 1996, p.56). For example, when assessing where they were expecting this service to be set up the respondents in the

pilot study answered that they understood it as an occupational service set-up. The question then had to be reworded in order to reflect the definition of a community-based nursing service.

The strategies adopted to test the validity and reliability of the tool included the following:

i. The questionnaire was sent to the supervisor for revision and comments on its structure and content. Accordingly, a number of changes were made.

ii. Using informants' opinions: 9 nurses working in Al Ain were asked to get one of their family members to fill in the questionnaire and give feedback on the context and content of the questionnaire, the flow of the questions, and the clarity of the content. The choice for this pilot sample was made based on their English proficiency, on the one hand, and on their professional expertise, on the other hand. This testing strategy proved to be useful in indicating the flaws and correcting them.

iii. An expert panel in Al Ain was consulted too. An epidemiologist from the Community Medicine Department gave her critical ideas about the questionnaire design and content. Another member of the panel is a psychologist, a lecturer in the social studies department at the UAE University. His contribution was crucial, especially for wording, simplicity, and the measurement of attitudes and behaviour. Finally, an instructor at the nursing institute who has experience in community health nursing made her critical comments. The result of these different strategies was the final draft of the English version of the questionnaire.

4.2.1.4 Translation

The original version of the questionnaire, which was in English, was given to a professional translator whose native language is Arabic and to a nursing administrator whose native language is Urdu. They both translated it into their respective languages. Then another professional translator was given the Arabic version to translate back into English, and the Urdu version was given to another person (a member of the nursing staff) to translate back into English. Once discrepancies had been identified, relevant corrections were made to the Arabic and Urdu versions. The end result was a questionnaire in three different languages: Arabic, English and Urdu.

4.2.1.5 Coding

A coding system for the answers to the closed questions was designed. This step is crucial before administering the questionnaire. Coding saves energy and unjustifiable costs. It helps to organise the analysis.

4.2.1.6 Sampling

The technique used for sampling was the stratified random technique. According to Scheaffer et al., (1986, p. 79), "A stratified random sample is one obtained by separating the populations elements into non-overlapping groups, called strata, and then selecting a simple random sample from each stratum." The aim of stratified sampling is to enhance representativeness, "a method of increasing the precision of the sample.... This method might ensure that the different groups in the population (strata) are correctly represented in the sample in the proportions in which they appear in the total population" (Bowling, 2002, p. 185).

The total population targeted in this study is the Al Ain community. By law, all expatriates and their families living in the country are registered with the primary health care system as a routine requirement for having their residence visa issued or renewed. Nationals are also registered in the PHC register in order to be issued with a health card. Therefore, all people aged 18 years and above and residing in Al Ain should have their names registered in the primary health care register. Hence, this register was seen as the most suitable document representing the population targeted by the questionnaire.

The size of the sample was selected with the aim of achieving a balance between accuracy and numbers despite the fact that the population is heterogeneous. Hoskins (1998) noted that sample sizes larger than 1,000 to 2,000 subjects from populations of more than 100,000 are unnecessary since the increased accuracy of the statistics gained from larger samples does not justify the larger number and costs.

Taking the primary health care register of the Al Ain medical district, which contains 99,700 names of individuals aged 18 and above, the first sample was chosen according to a power calculation based on estimating the prevalence rate of people using the public and private health care facilities in the Al Ain medical district at 50% (since no information is available on the precise or exact prevalence rate), and allowing for an error of 3.0%, a level of significance (Type-1 error) of 1%, and 99% confidence limits. It was computed by an EPI INFO 6.2a database computer program that a sample containing 1,794 subjects would be needed for the study (Dean, et al., 1996).

The stratification may be based on a wide variety of attributes. For this study, the total population (99,700) was divided into three groups or strata according to nationality in order to ensure representativeness: UAE, Arab and non-Arab. Using the

SPSS computer program, the selected sample size (1794) was obtained from every stratum, the size of each corresponding to the proportion of that nationality in the total study population. A list of the names and telephone numbers of the first sample was printed. The final result was a total of three lists of names from the three nationalities (UAE, Arab and Non-Arab), as indicated in Table 4.1 (Appendix 3).

4.2.1.7 Administering questionnaires

Interviewers team & Orientation: The researcher decided to have a team administering the questionnaires instead of himself, mainly for practical reasons and for the purpose of minimising bias from the respondents, since many members of the public know the researcher as a health authority figure. The team was recruited on the basis of several criteria: speaking at least one of the three languages, working in the health care services for several years, having an adequate background in the UAE society and culture, and most importantly showing an interest in being a research assistant.

The team was made up of 9 nurses. Training was given to them by the researcher himself and a psychologist. The training agenda included: purpose of the study, role of the team (call people and get their agreement to participate in the study, subsequently administer the questionnaire), appropriate communication techniques. In this respect, certain important skills and practices were emphasised:

a) The timing of the phone calls was planned to avoid naptime, which usually extends between 1 p.m. and 5 p.m.

b) The conversation scheme: greeting the person, introducing oneself as a nurse from the district, introducing the study and its purpose, explaining how the person was selected, giving the person the option of not agreeing to participate in the study without

asking the reason. If the person wwas willing to participate, agreeing on where to give them the questionnaire. The following options were given: 1) to have the questionnaire delivered to their home by a nurse who would collect it in two days' time. In this situation, the participant's full address was taken; 2) to come to the nearest PHC clinic where the nurse was appointed to meet the subjects and give them the questionnaire; or 3) to send the questionnaire by post. The interviewees might fill in the questionnaire by themselves or they might seek help from the nurse or any family member.

The advantages of this approach were that the number of respondents might increase, the respondents would be able to fill the questionnaire in at their own pace and time, those who were illiterate and elderly people would not be at a disadvantage and the questionnaire might be completed in its entirety, especially since the respondents could seek the help of the nurse with a question that was not understood. The disadvantages were that the respondent's answers might be influenced by the opinion of the person who was helping him or her and that the respondent might not give enough attention or focus to their answer.

Challenges:

The team started to make the phone calls over a two week period. However, out of the 1794 subjects included in the first sample, only 250 persons agreed to fill in the questionnaire, of whom only 51 actually completed it (a 2.8% response rate out of the total sample). In order to compensate for the high non-response rate, another, larger sample was obtained from the PHC register using the same technique. This time 3000 names were selected. The same process was repeated with the new sample, and from

3000 telephone calls, only 325 subjects agreed to participate and only 67 questionnaires were actually completed.

The problems with this strategy were found to be mainly associated with the inaccuracy of the PHC register rather than with a high refusal rate. Some people had died and their names were still on the list, many telephone numbers were wrong, as some people had changed their telephone number or moved to another area, many telephone lines had been cut, and some people had left the UAE but their names were still there. In addition, some subjects were housemaids, and their sponsors refused to give them permission to contribute. Lastly, many subjects did not show up at the clinic on their appointment day, without any prior notice or excuse. Most of the above problems could be attributed to the lack of an efficient information technology system either in the health care facilities or in the other departments such as immigration and the telephone company. This had allowed the PHC registers to become out of date, or else brought up to date too slowly. As a result of these two attempts, the total sample collected from the Primary Health Care register added up to 118. These responses were included in the data later on.

A preliminary scanning of the answers revealed that the last question in the questionnaire was either left blank or misunderstood. The researcher decided to change it from an open-ended question to a multiple choice question with the option of ticking more than one answer and of adding others if needed.

Alternative strategy:

With these results, the researcher opted to change the strategy adopted. He contacted to three large institutions in Al Ain in order to obtain a random sample from their staff to participate in the study. The main reason for selecting this

alternative was that the employees of these institutions had the same attributes identified for the previous sample, i.e., they might be UAE nationals, Arabs or non-Arabs, and they were aged over 18. However, with this strategy, major groups (those not in labour force, e.g., housewives and retired people) were excluded, a limitation of the study to be discussed later. The institutions contacted were: Etisalat, a private institution; the Municipality, a government institution; and the department of commercial building, a semi-government institution.

The same technique for selecting the sample size and stratification was followed. The sample size was 800. The questionnaires were distributed to the selected individuals from these institutions and were collected after two days. Out of the 800 names, 513 responded. Table 4.2 summarises the size of the three samples selected, and highlights the response rate in every attempt (Appendix 3).

As an outcome, the total number of participants came to 631. 8 questionnaires were discarded because they were incomplete, while the rest were almost complete, only a few of them had one or more questions missed out. All the questionnaires were self-completed, and the interviewers did not complete any, their role being limited to recruiting people to fill in the questionnaires, and to making the necessary arrangements for delivering the questionnaire form to the location specified by the subject (home-work place, etc.) and collecting it again. In a very few cases, where the subject was illiterate or an old person, permission was given to obtain assistance from a family member in completing the questionnaire.

The sample size was thus 623. It included people from different nationalities grouped as UAE nationals (29.5%), Arabs (31.8%), and non-Arabs (38.7%). The non-Arabs included Indians, Asians, Europeans, etc. Table 4.3 (Appendix 3) presents a

comparison of the percentage of each nationality between the respondents and the total study population.

The socio-demographic data of the respondents are presented in Table 4.4 (Appendix 3), followed by the socio-demographic data of the UAE population. Table 4.4 reveals that UAE nationals accounted for 30% of the sample, while in the total UAE population they represent only 20% (although the data from the Ministry of Planning, 1999, on the Al Ain population suggested a higher figure of 25.5%). This might be explained by the fact that emiratisation has been in progress for several years now, and most big institutions have been supporting this process. There are no more detailed data available on the distribution of nationalities in the total UAE population other than the nationals: non-nationals ratio, which made the comparison of Arab and non-Arab populations impossible. With regard to gender, the males are over-represented in the sample (80.1%), even more so than in the total population (72%). This issue was discussed in Chapter One and it is not strange that this should be the case, particularly since the samples were drawn from workplaces. The majority of the respondents were in the age group 26 to 45 years, which is almost compatible with the representativeness of this age group in the total population, being 57.6% and 63.5% respectively. The age group 46 to 55 was represented among the respondents at double its percentage in the total population (22% and 11.1% respectively), while the opposite was true for the young age group, below 25 years (11.1% and 21.2% respectively).

The reason for the lower figures for the young age group might be related to the policy in the country that does not permit people who are less than 24 years old to be employed in government institutions. Data on the types of occupation of the total population are not available; therefore comparison with the sample results was not

possible. People with a diploma/ university level education were over-represented in the sample (41.7%, compared with 11.4% in the total population), while people with a primary education level were under-represented (10.1%, compared with 31.7% in the total population). This resulted from the fact that the respondents were mainly from workplaces that employed a relatively highly educated workforce. People who were married were over-represented in the sample, even more than they are in the total population (83.3%, compared with 66.5% in the total population), while single people were under-represented in the sample (11.7%, compared with 31.4% in the total population).

It must be noted here that the comparison made between the socio-demographic data of the respondents and those of the UAE population is of limited accuracy because the figures were based on the 1995 population survey, in the absence of more recent data (Appendix 3).

4.2.2 The focus group technique

Merton et al., (1956) (Denzin and Lincoln, 1994, p.365) coined the term "focus group" to apply to a situation in which the interviewer asks group members very specific questions about a topic after considerable research has already been completed. Kreuger defines a focus group as a "carefully planned discussion designed to obtain perceptions in a defined area of interest in a permissive, non-threatening environment" (1988, p. 18). The focus group technique is one method used in qualitative research. The focus group technique helps to: "capitalize on group dynamics and allow a small group of respondents to be guided by a skilled moderator into increasing levels of focus and depth on the key issues of the research topic" (Debus and Novelli 1986, p. 8). More

details regarding the uses, advantages and disadvantages of the focus group instrument are provided in Appendix 5.

With reference to the purpose of this study, the aim of the focus group interviews was to help the researcher to explore the opinions and attitudes of the informants about specific issues related to the introduction of the new CHCN service.

In setting up a focus group discussion, certain guidelines should be followed: the group size and composition should be carefully considered: the larger the group, the less likely it is that all will participate. Merton et al. suggested that the "size of the group should manifestly be governed by two considerations...it should not be so large as to be unwieldy or to preclude adequate participation by most members nor should it be so small that it fails to provide substantially greater coverage than that of an interview with one individual" (Merton et al., 1990, p.137). It is desirable to have a degree of homogeneity among the group members with regard to certain characteristics such as education level, social class, etc. Morgan (1988) stated that meeting with others whom they think of as possessing similar characteristics or levels of understanding about a given topic, will be more appealing to people than meeting with those who are perceived to be different.

In conclusion, the group should neither be too homogeneous nor totally heterogeneous: participants need to feel comfortable with each other. A focus group interview should not last longer than one and a half to two hours, since lengthy groups tend to be tiring. The amount of information obtained determines the number of focus groups required, that is, ideally, groups should be conducted until the outcome conforms in a general way with previous results. Accessibility and familiarity with the set-up where the group will be meeting eases the gathering. Also, the seating

arrangements should be considered to allow the moderator to keep an eye on every participant and enable a sharing environment (Debus & Novelli, 1986).

There are different styles of moderating focus groups. Two primary aspects are discussed: the questioning technique and focus group flow. According to Debus and Novelli:

> The questioning technique can be either directive or non-directive. The flow of the focus group can be either structured or non- structured.......A directive moderating approach uses questions that are very pointed and that specifically restrict the range of responses that might arise........A non-directive moderating approach uses questions that are open-ended and non biasing.

They go on to assert that

> This type of question permits respondents' honest feeling to emerge, minimizes the moderator's influence........In a structured focus group the moderator works from a prepared topic guide that contains the issues.......A non structured focus group is conducted using a very sketchy topic guide. The group participants themselves largely determine the content and flow of the group" (Debus & Novelli, 1986, p. 30).

There are also advantages of structured focus groups over non-structured ones. All data can be coded and categorised and the discussion can be run by the researcher her or himself or by any other person identified by the researcher. The major disadvantage, however, is that there is no freedom for respondents to choose the way the discussion should go.

The non-structured focus group has the advantage of allowing the informants complete freedom to express their views and of identifying the aspects of the topic that are important to group members. However, the disadvantages of the non-structured type include the fact that the moderator has little control over time; the data are more difficult to analyse; and the questions are not planned in advance.

In this study, a non-directive semi-structured moderating approach was used. Therefore, a topic guide was foreseen to be a necessity. A topic guide is defined as "a list of topics or question areas that are to be covered in the focus group... Serves as a summary statement of the issues and objectives to be covered in the focus group" (Debus & Novelli, 1986, p. 24). When preparing a topic guide, the following points need to be considered: a list of specific questions related to the topic of interest should be prepared; the moderator and the researcher (if two different people) should work together on the topic guide so that the moderator is very well versed in the subject matter of the group; and the flow of the topics or questions should be logical and not cover too many issues (Debus & Novelli, 1986 p. 24).

The moderator in focus groups plays a crucial role. During the meeting, the moderator group facilitator will need to promote debate, perhaps by asking open questions. He will need to probe for details, or move things forward when the conversation is drifting or has reached a minor conclusion. He will also have to ensure that everyone participates and gets a chance to speak (Gibbs, 1997). At the same time, the moderator is encouraged not to show too much approval (Kreuger 1988), so as to avoid favouring particular participants. He must avoid giving personal opinions so as not to influence participants towards any particular position or opinion.

4.2.2.1 Research Questions

A set of questions was designed to focus on the topics around which the discussion should evolve. Questions were carefully selected and phrased to elicit maximum responses by all participants. The formulated questions were derived from one of the study's two main objectives, which was to assess the consumers' perceptions and

expectations of the new service. These questions were related to the questionnaire questions about the CHCN service, but in a focus group interview, a deeper probing of the elicited ideas can be achieved with a richer discussion of points of view. These questions were meant to validate and further explore the respondents' answers to the questionnaire, in particular the section related to the proposed service. It was a way of applying triangulation. The five research questions are presented in the Focus Group Topic Guide in Appendix 6.

4.2.2.2 Focus group methodology

In this section, the researcher will describe the process followed from the beginning of site and sample selection, including the characteristics and variations of the participants, the sample size, recruitment of participants and description of the groups held.

Choosing a site and gaining access (Majlis): The predominant Islamic religion and the Arabic language mark Al Ain society out as an Arabic Islamic society. The Arabic culture has always been known for its social gatherings. People, mainly educated and literate, from one gender, meet together to discuss, share and debate different issues. This is commonly known as Majlis. These conventions become more and more popular during Ramadan. Ramadan is the holy month of Islam when people fast from dawn to sunset and come together to break their fast at sunset. Then people go for special prayers, followed by a warm, joyful get-together which may sometimes last until dawn. This ritual is followed for almost 30 days every year. It was during the holy month of Ramadan, and taking advantage of those Majlis – that were happening anyway as a natural means for people to get together – that the focus groups were run.

For men, this usually takes place in a tent put up, especially during Ramadan, in the front yard of the house. Women usually meet inside the house, in the female living room where the lady of the house usually entertains her friends throughout the year.

The type of sampling: The types of sampling used were the maximum variation type and the homogeneous type. Crabtree (1992, pp. 37, 38) stated that maximum variation sampling "documents diverse variations and identifies important common patterns", and this "occurs when one seeks to obtain the broadest range of information and perspectives on the subject of the study." Maximum variation was observed in terms of inviting participants from different professions. Criteria for inclusion in the group included representing different professions such as medical doctors, engineers, Shariah law, businessmen, etc., and being from different national and cultural backgrounds. Homogeneous sampling "focuses, reduces, simplifies, facilitates group interviews" (Crabtree, 1992 p.37). The groups were homogeneous in terms of education. The recruitment of participants was based on higher level of education: This criterion was observed in order to ensure that discussion was maintained at a certain intellectual level, and a clear vision could be anticipated.

Another criterion of homogeneity was that they shared the same ethnic background (Muslim). Theyere able to reflect the views of the mainly Muslim society in terms of their beliefs (knowing the importance of the Holy Koran in the daily life of the Muslim). The third criterion of homogeneity observed was that they all had a similar experience of living in Al Ain (for at least ten years), that they had an adequate background in the community's constitution, and that socio-economically they were almost homogeneous. The fourth criterion observed was that of language. In order to

make the discussion coherent to all, the Arabic language, the native language of the country, was chosen as the original language for the group discussion. Hence, the group members had to speak Arabic fluently in order to be active participants. This homogeneity enabled the group members to understand one another well, interact with each other and eventually open up for discussion.

The selected participants were not intended to be representative of the target population. They were selected for the purpose of gaining a deeper and more objective insight into the topic from the perspective of educated people representing different professions and having different cultural backgrounds. The focus group sessions allowed a process of sharing and comparing among participants. The information obtained generated a rich understanding of the topic, mainly regarding the implementation of the newly proposed CHCN service.

Cultural Values: In the Arab world, gender segregation is almost universal. At weddings and social gatherings, at school, in all these settings, females and males are separated. The only places where females and males interact are at home or in the workplace. Therefore, it was sensible and culturally sensitive to have two different groups each time: one for females and another for males.

Sample size: An ideal number for a focus group is eight to ten participants. The smaller the group, the more interaction is possible among the participants. The larger the group is, the more limitations there are: for instance, speaking time for each participant is reduced, frustration and dissatisfaction can grow, and there is increased pressure on the moderator to be directive in order to control the flow of the discussion

(Debus and Novelli, 1986, p. 13). In this study, 20 males and 20 female subjects were selected to participate, since ultimately not all of them were expected to attend, especially the females, who might have family and social commitments. Each focus group was formed from 6-10 members. This small number enabled universal participation. The researcher selected this number for three reasons: first, because the ideal number of participants in a focus group is between eight and ten; second, because the purpose of the group was to generate as many ideas as possible; and third, because of the nature of the Ramadan Majlis, which requires a minimum of six persons.

Sample recruitment: The researcher invited the participants one week prior to the session by phone. Then, he contacted the participants by phone two days prior to the session to confirm their attendance. A reminder call was also made on the day of the session. It is worth mentioning here that out of all those who were selected to participate, three could not attend for personal reasons. However, this did not affect the planned sample size, because over-recruitment was considered initially. They got together at the researcher's home where coffee, dates and other refreshments were served as normal.

Group description: A total of four focus groups were held: two male groups and two female groups. The age range of the group members for both genders was between 22 and 65. They were from different nationalities: Emirati, other Arabs and Asians. All were Arabic speakers.

For the males, their professional background varied among doctors, engineers, businessmen, marketing men, teachers and policemen. The females were housewives,

students, technicians and administrative personnel. Each focus group lasted from one to three hours.

The male and female groups were held simultaneously in the same house, since two different people facilitated them: a male facilitator and a female facilitator.

4.2.2.3 The research team

The Facilitators: In order to observe the cultural traditions of the country, the facilitator of the female groups was a female UAE national and the facilitator of the male groups was the researcher himself.

The female facilitator:

The female facilitator was a UAE national who is a medical doctor. She was born in Al Ain. She is known to the researcher to have good communication skills and as being capable of raising the enthusiasm of women for communication and interaction, which encouraged the researcher to select her from among other candidates. It was anticipated that her presence would be well accepted. The researcher met with her on several occasions to introduce the study, explain the purpose of these focus groups and the main techniques used in facilitating focus groups. It was emphasised that the communication must have few preconceived ideas and be more open to new ideas, have little authority but good control and be rather informal and friendly. In addition, the style of communication had to be clear, probing and eloquent. Certain ground rules that had to be observed included ensuring that every participant contributed to the discussion, avoiding dominance by certain group members, treating each and every opinion as important data components and respecting all the group members. (Debus & Novelli, 1986)

Taping and recording the discussions: In the male groups, the proposal to record the discussion did not encounter any objection. Therefore, an audio-visual technician was assigned to handle the equipment and supervise the recording process in an unobtrusive and discrete manner.

The role of the audio-visual technician was clearly explained to him. First, confidentiality had to be strictly observed. Second, there was to be no interference whatsoever during the discussions. Third, he was to control the recording process from beginning to end:

A multi-directional microphone was placed in the middle of the Majlis. The recording process consisted of having all connections ready ahead of time between the microphone and the audio system. It was important to make sure enough blank tapes were available, labelled with the number of the session, the date and the series of tapes for this particular session. A rehearsal was essential in order to ensure the clarity of the recording. During the session, the technician was responsible for starting the tape once the consent for recording had been signed. He was to change the tape once it had finished, and to hand the tapes to the researcher at the end of the session

With the female groups, reflecting the traditions of the country, the women showed a reluctance to be recorded. To avoid embarrassment, the recording of the female sessions was abandoned, and this increased their freedom to express opinions and active participation. However, as a method for data collection and recalling, a scribe was assigned to take notes in shorthand.

The scribe's role was clearly explained to her: confidentiality had to be strictly observed; no interference whatsoever was to be allowed in the discussion; she should sit in a place where she could hear all the discussion but remain as discreet as possible;

151

she should be ready to take notes as soon as the consent had been signed, to label those notes according to the session number and date, and to hand the notes to the facilitator as soon as the session was finished.

The Observers

An observer was present at all group sessions. The observer for the male groups was a psychologist, and for the female groups, an instructor from the school of nursing. Despite the fact that the presence of observers might make the groups more formal and inhibited, the researcher still opted to have them present at every session to play the role assigned to them. Their role was to take notes of the discussion, and to watch as well as to listen, since non-verbal cues can sometimes be more meaningful than verbal responses. Both observers were informed about the following:

o   Confidentiality of information must be strictly maintained

o   The observer is not allowed to participate in the discussion, and should focus on the tasks assigned to him/her.

o   The observer may brief the facilitator after the session

o   The feedback of the observer helps identify the strengths and weaknesses of the facilitator's style, hence correcting certain mistakes in the group's dynamic.

o   Also, their being present helps in recalling certain information, which can help during the analysis stage.

The observers were handed the objectives of the study and the topic guide, which were discussed with the researcher two days prior to the first focus group session.

4.2.2.4 Data Collection Process

The setting being the Majlis, people began coming in gradually as soon as they had finished their prayers. Therefore, the beginning of each group discussion usually started with social chats and informal discussion. This could take from fifteen minutes to an hour. Only after no more participants were going to arrive was the formal objective of the Majlis addressed.

Introduction: As an introduction to every group discussion, a few welcoming words were spoken by the facilitator to the group members, thanking them for joining the group discussion, and explaining the subject matter of the focus group; that is to introduce and discuss the concept of a community health nursing service in Al Ain. To clarify the subject matter, the facilitator relayed the Bahrain experience of community nursing services. He/ she explained to them the sort of activities the service engaged in, the way it operated and how people were responding to this service. This introduction and explanation formed the basis of the discussion.

Confidentiality Agreement

In spite of the informal atmosphere, sound research procedures were observed. A confidentiality agreement was distributed to all group members, assuring them that their identity would be held in strict confidentiality and that the information obtained would be used for the purpose of the study only. Also, the researcher emphasised the fact that eligibility for medical care, as well as other statutory rights, would not be affected by any information provided. All members of the group signed this document.

Once this document had been read and signed by all, the actual collection of data started.

Consent for recording

In the male groups, after the introductory agreement, the members were asked whether they objected to having the discussions recorded. Once again, the confidentiality of the participants' identities was assured and that the tapes would be used solely for the purposes of data collection and recalling information. Once a unanimous agreement was obtained, the taping process started.

Flow of discussion

As far as possible, the communication was kept informal and friendly. Using the questions (mentioned earlier in this chapter) as a map for the discussion, the facilitator would steer the communication by asking the first question and expecting the groups to interact by responding with their points of view. There was usually more than one opinion expressed on a particular issue by different people. If they were agreed on one issue, the facilitator would repeat what had been said to confirm that this was exactly their view and no additions would be made.

For example, during the first female session, the facilitator asked what could be the potential barriers to the service being implemented, and almost unanimously, all the participants responded by saying:

C.20 " language barrier" " Language is important in communications between client and nurse."

Once this barrier had been acknowledged by all participants, the facilitator asked the

question:

Facilitator "You all said language is a barrier, right?
C.18: Yes. But people now are more educated and this may overcome this barrier
because there is always someone at home for example who can speak English. "

If they disagreed on a particular issue, the facilitator would probe for more information

in order to collect all points of view from the participants.

For example, during the first male session, there were a variety of opinions on what

could be the role of the community health nurse: preventive or curative:

Preventive more than curative. " (B.15)

Facilitator: *Why?*

"Cure is the responsibility of the doctor. " (B.15)

"Both, preventive and curative. " (A.2)

Facilitator: *" Can you explain in more detail?"*

"The load on hospitals and clinics is a justification for these roles. They complement
the work done in hospitals whether it is curative or preventive. " (A.3)

"The role of the nurse is both preventive and curative. " (A3)

Facilitator: *"why do you say this?"*

"Both roles are important if done under medical supervision. A nurse can give
appropriate treatment and render health education at the same time. " (A.3)

Once the ideas on one topic were exhausted, the facilitator might move on to a second

question. However, in some instances, new ideas might be generated from among the

group members that could be relevant to the study and yet were not included in the

155

topic guide. The facilitator's role was to treat the extra information with care and attention and also try to get them to elaborate further on what they meant and obtain additional responses from all the members. This vigilance is highly important from the perspective of the facilitator, because this could act as a basis for data generation by the consumers which may have been neglected or not foreseen by the researcher. For example, during the first female session, D.25 mentioned the issue of the invasion of family privacy:

"The community nurse may be intruding on some of the family secrets and she could be passing them from one house to another. This could be a big problem." (D.25)

Facilitator: *"Do you think this is a potential barrier for implementing this service?"*

"This is a cultural issue that should be considered. The nurse should focus on her/his job only, observe confidentiality and avoid social relationships with the family members."(D.25)

The discussion would proceed until all issues had been covered and all ideas exhausted. This could be after an hour and a half. In between, the participants had their coffee, tea, dates and food were served.

At the end of each session, the facilitator again thanked the group members for their invaluable input and once again assured them of the anonymity of the information obtained.

4.2.3 The interview technique

The interview is another data collection technique. The interview method involves questioning or discussing issues with people (Blaxter et al., 2001, p. 172). Interviews may take place face to face, or at a distance, e.g., over the telephone or by email.

Gilbert (1998, p.135) recognises the interview to be a " key method of attitude research...It has a central role in a diversity of research designs."

There are three main types of data that are characteristically generated from an interview: people's experience and accounts of events; their opinions, attitudes and perceptions about phenomena; and biographical and demographical details (Cormark D., 2000, p.290). Appendix 7 offers an outline of the main advantages and disadvantages of the interview technique.

A one to one, face-to-face interview was seen as the best method in this case for the purpose of avoiding reluctance to express divergent opinions or criticisms if more than one interviewee were present, given that the interview participants were all members of the health care team working within the same district. Furthermore, a face to face, rather than a telephone interview, was selected because, first, it could allow more probing into the issues discussed in a friendly environment (the interviewer and the interviewee were colleagues) and second, it was seen as a feasible option given the small number of interviewees.

As mentioned previously, one of the major goals of this study was an evaluation of the potential responsiveness to the introduction of a CHCN service of an important stakeholder: the health care team. Using the interview technique, the researcher endeavoured to assess whether this service was perceived as necessary by the staff, whether the present health system was sufficient and, once introduced, which areas would be seen as priorities.

As with the questionnaire and the focus group, interviews may be structured or non-structured, but may also be semi-structured. Semi-structured interviews include a

set of questions that the interviewer intends to cover in the course of the conversation but without having a fixed order to follow (Gilbert, 1998).

The type of interview used in this research was of the semi-structured design, whereby the interview questions were prepared ahead of time. The reason this design was chosen was because, as in focus groups, it allows one to focus on particular issues without loosing the freedom for the respondents to elaborate and explore new ideas. It is also easier to analyse than the non-structured interview. However, the interviewer fixed neither the order nor the range of possible responses. As Gilbert (1998, p.136) states " the interviewer is free to alter their sequence and to probe for more information." The advantages of semi-structured over structured interviews are that the questions do not have to take a rigid direction and may be asked in a flexible way and that there is more freedom and more scope for individual expression.

The researcher asked the participants to complete a questionnaire on the same topics as discussed in the interview at the end of the session. The reason behind this was that by having a written document filled in by the interviewee, any possibility of bias from the researcher's side might be decreased. Furthermore, comparisons might be made later on among the notes taken by the observer, the interview recorded on the tapes and the completed questionnaire.

4.2.3.1 Research Questions

Brainstorm and refinement:

In order to construct the interview questions, the researcher needed to decide what were the expected outcomes from this method. Gilbert (1998 p.143) suggests, "Jot down questions which express puzzlement." So all relevant questions were listed: the extent

of belief in this service, perceptions of the additions this service would bring, and, if implemented, to whom and in what setting it should be given.

Then, in an attempt to refine the document, a public health nurse reviewed the questions and, accordingly, certain questions were deleted and others rearranged, so that the final document is an outline displayed in a logical, orderly sequence. The researcher did not conduct any other piloting of the interviews for two reasons: first, the concepts covered in the interview questions are similar to those covered in the questionnaire, and second, because the target group in the interview were professionals in the health care field, so it was presumed that understanding the questions would not be a problem.

In addition, to facilitate the interviewing process, certain probing questions were designed to help the interviewer generate more ideas during the interview. These were not included among the interview questions but kept aside for possible use. The interview questions were also typed up in the form of a questionnaire. Each question was stated clearly and multiple choices for answers were given, while for the last open-ended question (about the location), free space for comments was made available. As described earlier, the questionnaire was self-administered at the end of every interview session (A copy of the Questionnaire is included in Appendix 8).

4.2.3.2 Choosing the population and sample recruitment for individual interviews

The health care team in Al Ain Medical District encompasses a variety of disciplines in different settings. In selecting the respondents for the interviews, the discipline was taken into consideration especially those services which are directly related to the areas of the research questions.

The sampling choice

When choosing the stakeholders for this method, certain criteria were kept in mind. The first criterion was being a health care professional working in the Al Ain medical district, the second was that individuals should come from different disciplines, i.e., a consultant surgeon at a hospital, a consultant in endocrinology at a hospital, a general practitioner at a primary health care centre, a nurse at a primary health care centre, an administrator at a primary health care centre and a community health nurse based in a hospital set-up. This choice was based on the level of input expected from their field of work. A surgeon would definitely give his/ her view regarding patients discharged from the hospital and make suggestions on the best follow up method. A general practitioner would be able to describe the present community primary health services and offer suggestions as to what might make a potential community nursing service effective and efficient, based on his/her knowledge of the community.

The third criterion observed was the level of experience and knowledge of the Al Ain community (10 years or more). Again, using people who were well acquainted with the culture and habits of the community would enrich the service with hints that would ensure its success.

Sample size

Once these criteria were set, identifying suitable personnel was a matter of scanning through the list of Al Ain staff. The researcher nominated those that fit the above criteria and by elimination ended up with a group of 6 from the health care team

members. The sample size was limited to 6 because a "key informant" approach was followed.

Sample recruitment

The researcher being a known figure in the area, the recruitment was made through his office. Personnel were contacted by the researcher himself and asked if they were willing to participate in this interview, making it clear that there was no pressure to agree. It is worth mentioning here that none of the recruited subjects was managed by the researcher. Once all had agreed, a suitable appointment was made to meet with the researcher.

Choosing a site and gaining access

The site chosen was known to everyone, and was the meeting room of the Al Ain medical district administration. The building is central in town, easily accessible and the meeting room provides enough privacy to conduct an interview. People were asked to arrive early enough to the appointment to avoid any delay, and also so that they would have the chance to go through the interview questions and ask for any clarification.

The set-up did not cause any problems. The time for these interviews also was convenient: 5:30 p.m. This time was suitable because all personnel worked morning hours on the one hand, and the administration was very quiet, so there would not be any interference except for serving coffee and biscuits at the beginning.

Group description

The age range of the persons interviewed was 26 to 55 and they were of both genders. They were from different nationalities: Emirati, other Arabs, Asians and South Africans. Their professions were administrator, community medical doctors, primary health care nurse, surgeon, medical consultant and senior community health nurse (the table for the sample description) (Appendix 6).

4.2.3.3 The research team

The interviewer

As in the male focus groups, the interviewer was the researcher. Again, assurance of the confidentiality of the interview was reiterated. The same styles of communication and ground rules were applied, namely: informal, friendly and open to ideas. Also, probing for clarification and interpretation of views was encouraged. Again, the authority figure of the interviewer created an atmosphere of tension among some of the interviewees. Once this was detected, pleasant jokes and anecdotes were thrown into the discussion from time to time to reduce the tension.

The observers

The researcher decided to have an observer during the interview session in order to reduce the tension possibly created by his position as an authority figure, although on reflection it is acknowledged that the opposite effect could have resulted. One disadvantage of having an observer present is that the interviewee might not feel free to express his/her personal opinions honestly.

The observer was the same for all the interview sessions: a nursing instructor from the school of nursing. The observer's role in this interview method was to take care of certain logistics. First, to make sure that the interviewee arrived on time before the appointment, and to ensure that he/she had read the interview questions and to ask if he/she needed any clarification. During the interview, the observer was to ensure that no external interruption was made, to ensure privacy and continuity of conversation. The observer's role also included controlling the recording process. The observer took notes of the interview communication and tried to cover all the discussion to facilitate transcribing. The observer was also responsible for observing the feedback of the interviewee and, if necessary, was to intervene to clarify an issue or probe for more information.

Taping & recording the discussions

The meeting room table is oval shaped. An audio recorder was placed in the middle of the table. Testing for the quality of tape recording was carried out before the interview. The tape recorder was not connected to a microphone, and was thus as unobtrusive as possible. Once started, it could be very easily ignored. Tapes were numbered and labelled and kept in separate files for each individual interview along with the notes and the completed staff questionnaire.

The notes taken by the observer were kept attached to the questionnaire completed by the interviewee. The three types of data collected were filed in a secure place for analysis.

4.2.3.4 Data Collection Process

As mentioned earlier, the observer made sure the interviewee had read the interview questions and all issues raised were clarified ahead of time. Once in the meeting room the interview started.

Introduction: By was of an introduction, the interviewer introduced himself as being there as the researcher interested in their opinions and not as the administrator of the medical district. The introductory sentence is an icebreaker and might help reduce any inhibitions on the part of the respondent.

Then, the researcher explained that the observer was there to assist with certain logistics of the interview. Then, verbally, the researcher started to introduce the aim and goals of the interview and of the study, and also the reason they had been chosen to participate in that research. Going on from that point and after making sure that it was clear, he asked again for their open and honest opinion about all aspects.

Confidentiality Agreement

In the covering letter to the interview questions, a special paragraph was included emphasising the confidentiality with which the information would be handled. Also, and once again, it was stressed that there would be no effect whatsoever on their eligibility or statutory rights resulting from any frank opinion or even a refusal to answer the questions.

It was deemed necessary to repeat this again and again in order to generate in-depth and honest data from the respondents.

Consent for recording

The respondents were asked whether or not they agreed to the recording of the interview, with the emphasis on the fact that recording was for the purposes of recalling and collecting all data and would not be used for any other purpose. Once agreement on recording had been received the interview was started. It is worth mentioning that all participants agreed to taping.

Flow of discussion

The beginning of each interview necessitated icebreakers, pleasant jokes and a friendly approach. Once the conversation started to warm up, then probing and prompting the respondent was deemed important. According to Gilbert (1998, p.145), at the beginning of interviews, respondents tend to give "socially accepted responses" because they represent "convenient ways of dealing with interviewers rather than expressing the respondent's actual view".

Asked about the age group to which this service should be targeted, Respondent P. first said:

"from birth to 17 because most of the chronic diseases start in childhood"

Then with probing and clarification about this issue, respondent P. said:

"If we are targeting all sectors of the society and not only the nationals then the middle age group is important".

Therefore, repeating the question more than once and inquiring more into certain points ensures that the respondent is expressing his honest and considered

165

opinion. Questions like: Why? What do you mean? Can you elaborate more? were frequently used. In certain instances, the interviewer observed a lack of understanding of an issue, and had to clarify it with examples or rewording to make sure that it was consistent with the interview question. In many instances, the interviewer had to repeat the words used by the respondents to make sure that this was exactly what he/she was saying and avoid misinterpretation.

There were differences noted from one interview to another depending on the respondent him/herself. The interviewer tended to be more verbose with personnel having rich and intense ideas. It was a challenge to get the best out of them, and to be more reticent when the respondent was unable to give an appropriate response, with the aim of not having any influence over what the quiet interviewee wanted to say.

However, the style of moderation throughout all interviews fluctuated between friendly and open discussion to challenging in some instances and laid back in others. At the end of each interview session, the facilitator made sure that the interviewee had nothing to add, gave him/her the questionnaire to complete, and thanked them for their time and willingness to share their ideas.

4.3 Modes of analysis

4.3.1 Questionnaire data analysis

The data were coded and entered into a computer and processed on an IBM PC computer using the Statistical Package for the Social Sciences (SPSS) V10.1. In order to fulfil the researcher's aim of getting the distribution of informants' opinions, the researcher expressed the results as means, percentages and standard deviations.

Cross-tabulations and Chi-square statistics were performed to test for differences in proportions of categorical variables between and within two or more groups and to obtain detailed information about the informants' responses. The level $p<0.05$ was considered as the cut-off value for significance. The Chi-square test tells us only of the probability that a relationship between two variables is present, but it does not tell us what the strength of the relationship between the observed variables is (May, 2001). For this purpose, a measure of association is used which computes a value depending upon the strength of the association. Cramer's V test was performed for this purpose.

Cramer's V test measures the association between the variables based on the Chi-square test. The value ranges between zero and 1, with zero indicating no association between the row and column variables, and values close to 1 indicating a high degree of association between the variables. The researcher considered Cramer's V values of a minimum of 0.2 to indicate a noteworthy level of association (May, 2001).

4.3.2 Handling the Focus Group Data

The raw data collected from both each group were different.

For the male groups: data obtained from the male groups were on tapes. The first step was to transcribe the data verbatim. Therefore, all information was included in the written notes.

For the female groups: The raw data were written notes. However, there was no guarantee that all information had been included. It is question of how efficient the scribe was in taking notes. If two people were talking at the same time, there was no possibility of writing down that was said. Therefore, having slight differences in the

methodology of data collection and in order to correct for this limitation, the researcher requested that the observers review the raw data together with the facilitator, in order to complete possibly incomplete notes, as far as possible, prior to the analysis.

The written notes from all the groups were taken individually. The five research questions were written as titles on different sheets. Then all the relevant information from each focus group, related to each research topic, was grouped on these sheets. Therefore, twenty different sheets were obtained, with the data gathered into five categories. Using the topic guide helped creating the categories. Julia Brannen (1992, p. 66) points out that "the fact that the guide organizes each group's discussion around the same set of topics in the same order is a strong point in its favour during analysis."

This process has some advantages, such as the unification of the format of the data, the categorisation of the information under specific headings and simplification for analysis. However, this process presents the disadvantages that certain information might be missed out or might not fit into any category, or might be interpreted in a way that fits in with the pre-existing categories. This was avoided by having a separate sheet for 'uncategorised' information.

The researcher dealt with any missing information or unclear answers by referring back to the tapes and to the observers' notes. In the case of uncategorised information, a separate sheet was used. However, the amount of such information was negligible.

Strauss and Corbin (1998, p. 58) highlighted the element of "the interplay that takes place between data and researcher in both gathering and analysing the data. This interplay by its very nature is not entirely objective as some researchers might wish us to believe. Interplay, by its very nature, means that a researcher is actively reacting and

working with the data." The researcher tried to minimise the bias associated with this inevitable subjectivity by working according to the following principle: of determining objectively what was actually said, rather than of reporting the perceptions of each of the participants in the setting. This was achieved by trying to retain the exact words uttered by the participants, rather than drawing conclusions from what was mentioned. Hence, the end results ready for analysis were four sheets containing five categories answering the five research questions.

A professional translator then translated the treated data into English. The basic analysis approach used for this research is the ethnographic summary rather than content analysis. Julia Brannen, (1992, p. 64) differentiates between the two basic approaches to focus group analysis as follows: "Ethnographic approach relies more on direct quotation of the group discussions, while the content analysis typically produces numerical descriptions of the data". The reason for selecting the ethnographic approach for the data analysis was related to the researcher's aim in conducting focus group interviews, which was to probe deeply into the issue of the proposed new CHCN service, rather than to quantify the respondents' opinions.

The analysis was done manually. The option not to use specific software was taken on the basis that the data collected were manageable manually.

Identifying the concepts: Once the identified categories were ready, the data themselves were grouped into these categories; the next step was to classify the data into meaningful concepts. The way to do this was to revise the data more than once within the same sheet, and between the different sheets. For each sheet, the information was read and reflected upon, while frequently asking the questions: "What is said?" "How frequently?" "How do they link?" (Revision within the sheet). Comparisons were made

between different sheets for repeated information. In summary, both questioning and comparing techniques were used in order for the concepts to emerge.

For example, looking at the role of the nurse, what was said among the group members in the first group discussion?

"The preventive role is more than the curative role because treatment is the responsibility of the doctor and in this case the role of the community health nurse is follow-up provided she is qualified to do that" (A.8)

So what A.8 is trying to say?: The curative role is the role of the doctor. The preventive and follow-up roles are those of the nurse, provided she has the necessary qualifications.

Then, looking at other members of the same group the following questions were asked: Is the same concept being repeated more than once? Is there a general agreement? Are there discrepancies in views etc? Following that, looking at other sheets for other groups and comparing them with each other, the same questions were asked: are they voicing the same view? Are they disagreeing? In the analysis, similarities and variations of opinion between and within group members were highlighted.

4.3.3 Interview Data Handling

Three types of data collection were identified. The first type involved the audio tapes. This was carried out by listening to each tape and transcribing word by word what was said. In a one to one interview rather than a focus group, it is much easier to collect all the conversation, as there are only two people speaking to each other, so it is less likely that more than one person will be speaking at any one time. The second type of data

collection involved writing down everything the respondent said. The notes from the observer taken during the interview facilitated the process of transcribing from the tapes, because basically, since the discussion had already been transcribed, listening to the tapes helped in making sure that all notes were collected and that any confusing or missing part was corrected. Finally, the third type involved filling in the interview questionnaire. The interviewee wrote down all the information on the questionnaire and handed it in to the researcher.

Thus, by the end of each session, three forms of the interview had been collected: audio tapes, notes and a completed questionnaire. These three types of data were all used in the analysis process.

Step 1: Each of the notes taken was reviewed from beginning to end. Then they were compared with the audio cassettes. This step was important in order to make sure that there was no missing information on the one hand, and that there was no misunderstanding on the part of the observer who was taking the notes, on the other hand.

Step 2: The corrected notes were compared with the completed questionnaire as well to ensure that there were no major discrepancies: none were found.

4.3.3.1 Interview Data Analysis Approach

Identification of categories:

Having the research questions already prepared helped in categorising the data. The categories identified were as follows: a) Views on present services in relation to primary health care and in relation to hospital, and b) Perceptions of future perspectives

on community health nursing: What could it add to the present service? Who should the target population be? What is it important for? Where should it be located?

When analysing the interview data, relevant quotations were selected for use chiefly to identify and represent emerging categories. These categories are slightly different from the research questions mentioned earlier to facilitate the categorising of the data obtained, and therefore to facilitate the analysis.

Identifying the concepts

The relevant quotes for each category were retrieved. That is, when the interviewee was responding to the question regarding his/her opinion about the current primary health care service, his/her answers were listed under the category of 'view on present service in relation to PHC'. The end result of this separation of the raw data was pages of quotes headed by the six categories. From these categorised data, the researcher analysed what had been said for each category in order to identify the major concepts that had been mentioned repeatedly, or which might be seen as important information for the study.

Linking of concepts. Once the relevant conceptual categories had been generated and identified, the next step was to use coding which contributed to the grouping and classifying of concepts and categories. In so doing, the researcher analysed the data with a view to looking at the overall picture and understanding in a coherent sense the respondents' views and perceptions.

4.4 Conclusion

The fieldwork carried out for this study involved three different data collection techniques for which a description was presented, and the rationale for utilising each one was discussed. Advantages and disadvantages were identified and the field application of each one was described. Each technique led to the gathering of a rich amount of data that will be presented in Chapter Five and which will be analysed and discussed in Chapter Six.

Chapter Five:

Field work results

In this chapter, the researcher will present the results from the application of the three data collection instruments used in the fieldwork, that is, the questionnaire, the focus group interview and the staff interview. The results from the public questionnaire will be presented in the form of frequencies and cross-tabulations according to the direction of the research objectives. A range of frequencies and cross tabulation analyses were computed to look for interesting patterns and variations across the range of data provided by the respondents. The tables included in this chapter were selected based on the level of relevance to the main study objectives, and on the level of significance and association of the findings. Other tables of less significance or association are included in Appendix 9. Whenever deemed necessary, further statistical testing was performed. The staff interview and the focus group results will be presented in a narrative form supported by some quotations from the participants who took part in the focus group instrument. Having said this, it has to be noted that most of the discussion pertaining to the findings from the questionnaire, focus group and interview data collection instruments will be provided in the next chapter.

5.1 Questionnaire Results

As was stated in Chapter One, the ultimate objectives of this research were to explore the health and health care needs of the UAE population and the proposed introduction of the

174

a CHCN system to the UAE community. The major needs of the health care system in the UAE were indicated in Chapter Two (section 2.4).

The results of the questionnaire will be discussed in the light of the above-mentioned main objectives of the study, which were further broken down into sub-objectives, each of which was analysed separately. A comparison between some factors and indices will be pinpointed and explored as they inform and illuminate the needs of the health care system in the UAE. These were mentioned in Chapter Two (section 2.4), and the sub-objectives are:

1. To assess the use of available government and private health facilities available.

2. To evaluate the public's satisfaction with the current services used.

3. To assess community awareness of a Community Health Care Nursing service.

4. To identify the importance of CHCN service and the role that such a service could play from a community perspective.

5. To assess the perceived need for health education related to common health problems.

6. To explore the potential barriers and facilitators to implementing the CHCN service.

7. To investigate the type of setting needed for the CHCN service from a community perspective (PHC, home, other, etc.).

As was pointed out in Chapter Four (section 4.2.1.7), 623 participants responded to the questionnaires: 29.5% were UAE nationals, 31.8% were Arabs and 38.7% were non-Arabs. In terms of gender, the major of the respondents (80.1%) were male. The whole process of collecting the quantitative and qualitative data required for the present investigation lasted from September to December 2001.

175

5.1.1 The use of available government and private health facilities

In this assessment, the researcher attempted to explore the experiences of the participants of the services provided by PHC centres and hospitals. In so doing, he sought to investigate the needs of the health care system in the UAE (Chapter Two: section 2.4). Participants were first asked which PHC clinic they usually visited. This was identified as either a government or a private facility. Making this assessment would provide an overview of some of the strengths and weaknesses of the current services through PHC/hospital facilities from the public's point of view. This might give help to suggest a shape for the proposed CHCN service, especially in relation to the location, type of service, etc. The use of government and private primary health care facilities was then compared according to nationality, occupation, gender, educational level and age group.

Table 5.1.1: Cross-tabulation between use of government and private PHC and nationality.

Nationality	Government PHC		Private PHC		Total	
	N	%	N	%	N	%
UAE	152	82.6	32	17.4	184	100
Arab	174	87.9	24	12.1	198	100
Non-Arab	144	59.8	97	40.2	241	100
Total (n=623)	470	75.4	153	24.6	623	100

UAE = UAE Arab nationals – Arab= Non-UAE Arabs – Non-Arab= Non-UAE's non-Arabs.
(Chi-square is significant at level 0.00, and Cramer's V test showed a value of 0.293).

Table 5.1.1 above shows that there was a general tendency to use governmental PHC more than private PHC centres. It is evident that non-Arabs tended to use private PHC more than the other nationality groups, while Arabs opted for the use of government PHC services more than UAE nationals and non-Arabs. The results concluded from the Chi-square test reveal significant differences and the level of Cramer's V indicates an association between nationality and the use of government or private PHC centres.

176

Of all the different occupation categories, the unemployed depended only on government PHC centres for health care (100%). Almost all housewives used government PHC centres (96.1%), followed by retired people (88.9%), and then students (87.5%). People who were unskilled ranked first in using private PHC centres (40%). Regarding educational levels, those with a diploma or university degree ranked first (37.9%) in using the government PHC centres, followed by secondary school graduates (22.3%). The percentages of those who were illiterate, or who had a primary or preparatory level of education, who attended government PHC centres were almost equal. Similar ranking was observed in the use of private PHC centres with regard to different educational levels. With regard to the different age groups, old people aged 66 and over indicated that they depended only on government centres for health care (100%), followed by those in the 56 and 65 years age group (86.8%), and then the young adult group 26 to 35 years (76.6%). With regard to gender, females appeared to use governmental PHC more than males (86.3% versus 72.7%) (Appendix 9: Tables 9.1 – 9.4).

For the purpose of finding out more about the use of the health facilities available, the researcher solicited answers to the following questions:

- Think about the last time you were sick enough to seek health care, when was that? Which health care facility did you visit?

- What problems did you have?

- How has it been managed?

It was hoped that this would shed more light on the needs of the UAE in terms of health care, as outlined in Chapter Two (section 2.4).

A high usage of health services was reported, since nearly ¾ of the respondents indicated they had sought health care in the last year, and aproaching 40% in the last month. Half of the respondents had used public hospitals/polyclinics for their latest health problem. 29.7% had used private hospitals/clinics; only 19.4 % had used PHC clinics. The majority of the respondents sought health care for an acute health problem (81.9%) while only 9.1% went because of a chronic health problem. The majority of the health problems were treated by medication alone (90.9%) or in conjunction with other forms of treatment. Apart from vaccination, public hospitals and polyclinics were the main source of care for all types of problem in the health care facility visited (See Tables 9.5 – 9.9 in Appendix 9).

5.1.2 Public satisfaction with the current services used

The main objective of this part of the questionnaire was to measure public satisfaction with the current services provided by the primary health care (PHC) centres and hospitals, and also to identify shortcomings and areas of weakness. In so doing, the researcher sought to explore the quality of health care in the UAE, as discussed in Chapter Two (section 2.4.4.1).

To assess the public's satisfaction with the current services, the researcher sought to explore what the respondents liked and disliked about the services provided by both the PHC centres and the hospitals.

Table 5.2.1: Which of the following do you dislike at your PHC clinic?

Disliked at PHC	Yes Frequency	% Within yes response
Lack of cleanliness	593	95.2
Absence of doctors	571	91.7
Too much paperwork	548	88.0
Bad treatment	540	86.7
Crowdedness	430	69.0
Lack of specialists	418	67.1
Waiting	249	40.0

Note: Others category has been discarded because of insignificance

As the above table suggests, many respondents had complaints about the clinic: lack of cleanliness ranked first (95.2%), followed by the absence of doctors (91.7%), then the excessive amount of paperwork (88%). "Waiting" appears to be the only aspect mentioned by fewer than half the respondents

Table 5.2.2: Which of the following do you like at your PHC clinic?

Liked at PHC	Yes Frequency	% Within yes response
Accurate appointment	515	82.7
Good treatment	446	71.6
The period of consultation is long enough	407	65.3
The staff are friendly	396	63.6
Physician's approach to your health problems	391	62.8
Availability of free medicine	390	62.6
Easy access	370	59.4

Others category has been discarded because of insignificance

'Accurate appointments' ranked first among the 'likes' at the PHC clinic (82.7%), followed by 'good treatment' (71.6%), and then by 'adequate consultation period' (65.3%). The apparent contradiction between the 'like' and 'dislike' answers,

especially as far as 'waiting' (dislike) and 'accurate appointments' (like) are concerned, could be explained by the fact that appointments were given to the patients as a date but not a time, and once at the clinic, the patients were seen on a "first come, first served" basis.

Furthermore, while 86.7% of the respondents said that 'bad treatment' was something they disliked at their PHC clinic, 71.6% indicated that 'good treatment' was something they liked. It would seem that this was due to the varied experiences these respondents had such that they had both good and bad treatment during their visits to hospitals or PHC centres. As will be stated in Chapter Six (section 6.1), many patients go through unsatisfactory experiences as regards the health systems in their respective countries for various reasons, including long queues, lack of good care and inconvenient timing. Others, on the other hand, hold positive views of the health system in their country due to the facilities, good treatment and/or easy access. It could also be argued that many respondents understood the question to imply that they were required to tick all the boxes that reflected their views of what they would like rather than their actual experiences.

Table 5.2.3: How do you find the quality of service at your PHC clinic?

Quality of service in PHC	Frequency	Percent
Excellent	129	20.7
Good	264	42.4
Do not know	17	2.7
Acceptable	191	30.7
Poor	22	3.5
Total	623	100.0

63.1% of the respondents rated the quality of service at the PHC clinic as excellent or good; 30.7% describned it as acceptable.

Table 5.2.4: Which of the following do you dislike at your hospital? (You can tick more than one).

Disliked at Hospital	Frequency	% Within yes response
Lack of cleanliness	589	94.5
Absence of doctors	559	89.7
Bad treatment	521	83.6
Too much paperwork	481	77.2
Lack of specialists	473	75.9
Crowdedness	383	61.5
Waiting	188	30.2

Others category has been discarded because of insignificance

Lack of cleanliness ranked first among the hospital dislikes (94.5%), followed by absence of doctors (89.7%), then bad treatment (83.6%).

Table 5.2.5: Which of the following do you like at your hospital? (You can tick more than one).

Liked at Hospital	Yes Frequency	% Within yes response
Accurate appointment	490	78.7
Good treatment	430	69.0
Easy access	422	67.7
The staff are friendly	408	65.5
The period of consultation is long enough	391	62.8
Physician's approach to your health problems	387	62.1
Availability of free medicine	368	59.1

Others category has been discarded because of insignificance

One of the things that respondents liked most at the hospital was the 'accurate appointments' as this was ranked first by 78.7%, 'good treatment' came second, with 69.0%, followed by 'easy accessibility' (67.7%), 'staff courtesy and friendliness' (65.5%), 'adequate consultation time' (62.8%), physician's approach to the health

problem (62.1%), with availability of free medicine last (59.1%). As noted already in relation to the responses to questions about what respondents liked and disliked about their PHC clinic, the answers appear to be contradictory. There could be a variety of explanations for this and so when interpreting these responses, it is important to be cautious.

Table 5.2.6: How do you find the quality of service at your hospital?

Quality of service	Frequency	Percent
Excellent	144	23.1
Good	279	44.8
Do not know	15	2.4
Acceptable	163	26.2
Poor	22	3.5
Total	623	100.0

67.9% of the respondents rated the quality of service at the hospital as excellent or good; 26.2% rated it as acceptable.

Table 5.2.7: Cross-tabulation between the quality of service at the PHC clinic and the quality of service at the hospital.

Quality of service at the PHC clinic	Stat.	Quality of service at the hospital					Total
		Excellent	Good	Acceptable	Poor	Do not know	
Excellent	N	99	19	7	2	2	129
	%	15.9	3.0	1.1	0.3	0.3	20.7%
Good	N	31	205	25	-	3	264
	%	5.0	32.9	4.0	-	0.5	42.4%
Acceptable	N	10	50	123	6	2	191
	%	1.6	8.0	19.7	1.0	0.3	30.7%
Poor	N	3	1	5	13	-	22
	%	0.5	0.2	0.8	2.1	-	3.5%
Do not know	N	1	4	3	1	8	17
	%	0.2	0.6	0.5	0.2	1.3	2.7%
Total	N	144	279	163	22	15	623
	%	23.1%	44.8%	26.2%	3.5%	2.4%	100.0%

(Chi-square is significant at level 0.00, and Cramer's V tests showed a value of 0.575).

Overall, more respondents rated the quality of service at the hospital as 'excellent' or 'good' compared with those who thought the quality of service at the PHC clinic was good or excellent (67.9% and 63.1%, respectively) (see Chapter Two: section 2.4.4.1). Further analysis came out to explore whether far those respondents who rated the quality of services high at their hospital were the same or different individuals from those who rated the quality of service high at their PHC clinic (Chapter Two: section 2.4.4.1). 15.9% responded that the quality of care was excellent at both facilities, PHC centres and hospitals, compared with 32.9% who rated the quality of care as good at both facilities. The findings from the Chi-square test revealed significant differences, and Cramer's V level indicated a high association between participants' opinions regarding the quality of service at both PHC clinics and hospitals.

5.2.8. How far is the nearest PHC clinic from your home by car?

Time	Frequency	Valid Perc
Less than 5 minutes	132	21.2
From 5 to 10 minutes	249	40.0
From 10 to 15 minutes	132	21.2
From 15 to 20 minutes	49	7.9
From 20 to 25 minutes	37	5.9
From 25 minutes to more	24	3.9
Total	623	100.0

Tables 5.2.8 and 5.2.9 show that most UAE residents live within easy reach of both PHC and hospital facilities. More people lived very near a PHC clinic: more than 60.0% were less than 10 minutes away by car, compared with around 40.0% for hospitals. However, only 11.2% lived more than 25 minutes away from a hospital by car (3.9% from a PHC clinic).

5.2.9. How far is the nearest hospital from your home by car?

Time	Frequency	Valid Percent
Less than 5 minutes	71	11.4
From 5 to 10 minutes	186	29.9
From 10 to 15 minutes	154	24.7
From 15 to 20 minutes	85	13.6
From 20 to 25 minutes	57	9.1
From 25 minutes to more	70	11.2
Total	623	100.0

5.1.3 The importance of a CHCN service from a community perspective.

To assess the importance of CHCN from the respondents' points of view and the roles that a CHCN was envisaged to play, the researcher set three questions and sought participants' opinions regarding three specific issues: people who had been discharged from hospitals, chronically ill patients and health education.

1. How important a role could CHCN play in caring for people who have been discharged from hospital?

2. How important a role could CHCN play in providing home visits to chronically ill patients (e.g. diabetic, hypertensive, etc.)?

3. How important a role could CHCN play in implementing health education programmes?

Table 5.3.1: In your opinion, how important a role could CHCN play in caring for people who have been discharged from hospital?

Importance level	Frequency	Percent
Very important	343	55.1
Important	184	29.6
Undecided	65	10.5
Moderate importance	17	2.7
Not important at all	13	2.1
No response	1	0.16
Total	623	100.0

The majority of the respondents (84.7%) agreed on the potential importance of CHCN for people who had been discharged from hospital.

Table 5.3.2: In your opinion, how important a role could CHCN play in providing home visits to chronically ill patients (e.g. diabetic, hypertensive, etc.)?

Importance level	Frequency	Percent
Very important	368	59.1
Important	165	26.5
Undecided	45	7.2
Moderate importance	14	2.2
Not important at all	31	5.0
Total	623	100.0

The majority of the respondents (85.6%) agreed on the potential importance of CHCN for chronically ill patients.

Table 5.3.3: In your opinion, how important a role could CHCN play in health education?

Importance level	Frequency	Percent
Very important	492	79.0
Important	101	16.2
Undecided	20	3.2
Moderate importance	3	.5
Not important at all	7	1.1
Total	623	100.0

The majority of the respondents (95.2%) agreed on the potential importance of a CHCN role in health education.

Table 5.3.4: Ranking the opinion of the respondents about the potential importance of CHCN for people discharged from hospital, for chronically ill patients, and in health education.

Do you think that CHCN could play an important role for:	N	Minimum	Maximum	Mean	Std. Deviation
Health education	623	1	5	4.71	0.66
People who have been discharged from hospital	622	1	5	4.33	0.92
Chronically ill patients	623	1	5	4.32	1.05

Upon comparing the mean rank values of the potential importance of a CHCN service could play, the results showed a slight preference for a role in health education and more diversity of views in relation to hospital discharge and (most of all) chronic illness.

Although the number of older respondents appeared to be small, the role of CHCN in caring for people who had been discharged from hospital seems to be very important for people aged 66 and above, but not as important for the other age groups. Old people (66 years and above) also said that CHCN could play a very important or important role (95.0%) in helping chronically ill patients, compared with all other age groups. With regard to health education, both genders agreed on the importance of a CHCN service in health education, although females were more supportive of this idea (See Appendix 9: Tables 9.10, 9.11 and 9.12).

Table 5.3.5: Cross-tabulation between 'Do you think that CHCN is important for chronically ill patients?' and nationality.

Nationality	Count	Very important	Important	Undecided	Moderate importance	Not important at all	Total
UAE	NO	128	45	6	3	2	184
	%	69.6	24.5%	3.3%	1.6%	1.1%	100.0%
Arab	NO	129	52	8	4	5	198
	%	65.2	26.3%	4.0%	2.0%	2.5%	100.0%
Non-Arab	NO	111	68	31	7	24	241
	%	64.1	28.2%	12.9%	2.9%	10.0%	100.0%
Total	NO	368	165	45	14	31	623
	%	59.1	26.5%	7.2%	2.2%	5.0%	100.0%

(Chi-square is significant at level 0.00, and Cramer's V test showed a value of 0.201).

However, the only cross-tabulation that demonstrated some staistical significance was that provided in Table 5.3.5. While almost all nationalities ranked the importance of CHCN to chronically ill patients as 'very important', more UAE nationals (94.1.2%) ranked it as important than Arabs and non-Arabs (91.5% and 92.2%). The results of the Chi-square test indicated significant differences, and the level of Cramer's V indicates an association between nationality and the importance of CHCN for chronically ill patients.

5.1.4 The community's awareness of the Community Health Care Nursing service

In order to assess community awareness the researcher set two questions as follows: Had the participants ever heard of Community Health Care Nursing (CHCN) before receiving this questionnaire? Had they ever received any type of CHCN services before receiving this questionnaire?

Table 5.4.1: Had you ever heard of CHCN before receiving this questionnaire?

CHCN Heard	Frequency	Percent
Yes	478	76.7
No	145	23.3
Total	623	100.0

This table shows that 76.7% of the respondents had heard about CHCN.

Table 5.4.2: Have you ever received any type of CHCN service?

CHCN Received	Frequency	Percent
Yes	62	10.0
No	561	90.0
Total	623	100.0

This table demonstrates that 90% of the respondents had never received a CHCN service.

5.1.5 The need for health education related to common health problems

This assessment was directed at exploring the participants' opinions about their perceived need for health education programmes related to common health issues, since CHCN can play an important role in relation to health education. The aim was also to explore further the needs dicussed previously in Chapter Two (section 2.4). To fulfil this objective the researcher asked the following two questions:

1. Have you ever received health education related to certain health issues, and what was your source of information?

2. Which of the suggested health education programmes could CHC nurses implement?

Table 5.5.1: Have you ever received health education related to the following

Health Education related to	Yes Frequency	% Within yes response
Chronic diseases (e.g. Diabetes Mellitus,Hypertension, etc.)	503	80.7
Road safety	490	78.7
AIDS/STD	487	78.2
Nutrition/nutritional problems	474	76.1
Smoking	462	74.2
First Aid	458	73.5
Exercise and physical fitness	456	73.2

Others category has been discarded because of insignificancy

188

The 'health education programmes on chronic diseases' option was ranked first (80.7%), with 'road safety' next (78.7%), followed by AIDS/STD (78.2%). Nutrition-related issues: 'smoking, 'first-aid', 'exercise and fitness programmes were rated more or less equally. It appears that around three quarters or more had received health education.

Table 5.5.2: Source of information related to health education

Source of information	Yes Frequency	% Within yes Response
Family member	617	99.0
Friends	615	98.7
Books and magazines	575	92.3
Health professional	550	88.3
Media	528	84.8
Health education programme	498	79.9

Nearly 90% claimed to have received health education from health professionals, although an even greater number had received it from family, friends, books and magazines.

Table 5.5.3: Which of the following suggested health education programmes could CHC nurses implement? (Note: You may tick more than one programme)

Health Education could be implemented	Yes Frequency	% Within Yes response
Road safety	412	66.1
Exercise and physical fitness	328	52.6
AIDS/STD	309	49.6
Nutrition/nutritional problems	283	45.4
First aid	270	43.3
Smoking	267	42.9
Chronic diseases (e.g. Diabetes Mellitus, Hypertension, etc.)	203	32.6

'Others' category has been discarded because of insignificance

This gives an idea of the priorities that people would like a CHCN service to have in health education. About two thirds specified 'road safety', compared with around half the respondents who specified 'exercise and physical fitness' and AIDS/STD.

Within occupation, unskilled workers and students, although in small numbers, prioritised health education on topics related to chronic diseases. People aged between 36 and 45 years supported the idea of receiving health education related to chronic diseases more than other age groups, but still well below half of them. This implies that they thought it was more important than other health education programmes. There was also a high demand for health education programmes related to road safety by the 'under 25' and over 66 age groups. Not working, unskilled and student participants topped the list of those who were in favour of health education related to road safety (See Appendix 9: Tables 9.13 – 9.16).

5.1.6 The potential barriers to and facilitators of implementing the CHCN service

In this assessment the researcher attempted to measure perceptions of the likely acceptance or rejection of CHCN services by the UAE multinational and multicultural community, and

the perceived likely barriers to and facilitators of successful implementation. To meet this objective, the researcher asked three questions, which were:

1. Do you think the UAE multicultural society will accept a CHCN service?

2. Which of the cited factors would impede the implementation of CHCN services in the UAE?

3. Which of the cited factors would make implementation of CHCN services in the UAE more successful?

Table 5.6.1: Do you think the UAE multicultural society will accept a CHCN service?

CHCN acceptance	Frequency	Percent
Yes	223	35.9
No	399	64.1
Total	622	100.0

Only 35.9% of the respondents thought that the UAE multicultural society would accept a CHCN service, as opposed to 64.1% who thought that this service would not be accepted.

Table 5.6.2: In your opinion, which of the following factors would impede the implementation of CHCN services in the UAE? (You may choose more than one)

CHCN implementation barriers	Yes Frequency	% Within yes response
Demographic instability	561	90.0
Religion	535	85.9
Violation of home privacy	515	82.7
Lack of trust	462	74.2
Low educational level	442	70.9
Tradition and customs	414	66.5
Language	399	64.0
Inadequate understanding of the service	373	59.9

Turnover of expatriates rated the highest (90%) among the factors that were thought likely to impede the implementation of the CHCN service in the UAE, whereas the language barrier and an inadequate understanding of the service scored the lowest (64.0 % and 59.9%) respectively, but were still cited by well over half of the respondents.

Table 5.6.3: Lack of trust in CHC nurses' skills as impeding the implementation of CHCN in the UAE by nationality.

Nationality	Stat	Yes	No	Total
UAE	Count	114	70	184
	%	62.0%	38.0%	100.0%
Arab	Count	145	53	198
	%	73.2%	26.8%	100.0%
Non-Arab	Count	203	38	241
	%	84.2%	15.8%	100.0%
Total	Count	462	161	623
	%	74.2%	25.8%	100.0%

(Chi-square is significant at level 0.00, and Cramer's V test showed a value of 0.209).

It was mainly non-Arabs who felt that a lack of trust in CHC nurses' skills could be a barrier to the implementation of CHCN in the UAE. The Chi-square test results yielded significant differences and the level of Cramer's V indicated an association between nationality and the lack of trust in CHCN nurses' skills impeding the implementation of CHCN in the UAE

Table 5.6.4:Crosstabulation between the tradition and customs that may impede the implementation of CHCN in UAE and nationality

Nationality	Stat	Yes	No	Total
UAE	Count	113	71	184
	%	61.4%	38.6%	100.0%
Arab	Count	112	86	198
	%	56.6%	43.4%	100.0%
Non-Arab	Count	189	52	241
	%	78.4%	21.6%	100.0%
Total	Count	414	209	623
	%	74.2%	25.8%	100.0%

(Chi square is significant at level 0.00, and Cramer's V test showed a value of 0.205).

Non-Arabs in particular presumed that tradition and customs could be a barrier to implementing a CHCN service. The findings from the Chi-square test revealed significant statistical differences and the level of Cramer's V yielded an association between nationality and the idea that tradition and customs may impede the implementation of CHCN in the UAE.

A relatively high proportion of all nationalities presumed that religion might impede the implementation of CHCN in the UAE, but slightly more non-Arabs than UAE nationals and Arabs. Arabs and non-Arabs in particular thought that a low educational level could be a barrier to the implementation of a CHCN service in the UAE. Language was seen as a barrier to the implementation of CHCN by similar proportions of the different nationalities. Regarding the inadequate understanding of the service, 66.0% of the non-Arabs, 59.1% of the Arabs and just over half of the UAE nationals (52.7%) thought that an inadequate understanding of the service might impede the implementation of CHCN in the UAE.

Of the different nationalities 92.4% of the UAE nationals considered demographic instability to be a barrier to the implementation of CHCN in the UAE, as opposed to 89.6% of the non-Arabs, and 88.4% of the Arabs. Non-Arabs (87.6%) perceived violation of home privacy to be a potential barrier to the implementation of CHCN in the UAE that is more than Arabs (81.8%) and UAE nationals (77.2%) (See Appendix 9: Table 9.22).

Table 5.6.5: In your opinion, which of the following factors would be most important in contributing to the successful implementation of CHCN services in the UAE? (You may choose more than one):

CHCN implementation supporting factors	Yes Frequency	% Within yes response
Solve transport-related problem	477	76.6
Individuality of health care	437	70.1
Eliminate risks associated with lack of medical follow-up	406	65.2
A new type of nursing service	392	62.9
Accessibility of CHCN services	378	60.7
Reduce congestion in the hospitals	368	59.1
Spare patients the trouble of waiting in the clinics	344	55.2
Help early detection of some diseases	327	52.5

With regard to the facilitators of implementing CHCN services in the UAE, the results revealed that solving transport-related problems if the service were provided at home was the most important contributory facilitator of this service (76.6%), while early detection of diseases came last (52.5%).

71.8% of the non-Arabs thought that 'Accessibility of CHCN services' could be a facilitator to the implementation of CHCN in the UAE, as opposed to 60.6% of the Arabs, and only 46.2% of the UAE nationals. More than half (57.1%) of the Arabs agreed that early detection of diseases could be a potential facilitator for the implementation of the new service, as opposed to half of the UAE nationals and non-Arabs. Furthermore, 76.8% of the non-Arabs believed that 'Individuality of health care' could be a facilitator for the implementation of CHCN in the UAE, compared with 70.7% of the Arabs and 60.9% of the UAE nationals. 'Reducing congestion in the hospitals' was seen as a facilitator for the implementation of a CHCN service in the UAE by 65.6% of the non-Arabs, 56.6% of the Arabs and more than half of the UAE nationals.

Non-Arabs' and Arabs' opinions about 'Sparing patients the trouble of waiting in the clinics' being a facilitator for the implementation of a CHCN service were similar (58.1% and 57.1% respectively), while half of the UAE nationals supported this idea. All nationalities agreed that solving patients' transportation problems could be one further facilitator for the implementation of CHCN in the UAE.

More non-Arabs than Arabs and UAE nationals believed that CHCN "being a new modality of nursing service promoting health education" could be a facilitator for implementing such a service in the UAE. On the other hand, 71.0% of the non-Arabs and 63.6% of the Arabs supported the role of CHCN in eliminating the risks associated with a lack of medical follow-up as being a facilitator for the implementation of this service, compared with only 59.2 % of the UAE nationals (See Appendix 9: Tables 5.6.13-5.6.20).

5.1.7 The type of setting needed for the CHCN service from a community perspective (PHC, home, other..)

This assessment aimed to seek suitable locations and settings that could play a key role in the success of the CHCN service. Therefore, two questions were set to highlight public opinion and vision in this regard as one of the basic requirements of implementing a new service such as CHCN.

The questions were as follows:

1. Where would the participant, or his/her family member, like to receive the CHCN service? And why?

2. If the participants received treatment at a hospital and required follow- up nursing care, which location would be more convenient to them?

Table 5.7.1: If you or a member of your family were to receive services from a community nurse, where would you like to be seen? (You can choose more than one location)

Location Selected	Yes Frequency	% Within yes response
Visit you at home	349	52.3
See you at PHC	296	44.4
See you somewhere else	22	3.3

More than half of the respondents said they would like to be seen at home by a community nurse (52.3%), while 44.4% said they would like to be seen at a PHC clinic, and only 3.3% suggested another place such as work.

Table 5.7.2: Reasons for choosing to be seen at home.

Reasons for choosing home	Frequency	% from total responses
More convenient	98	46.0
No need for transport	45	21.1
Avoid waiting in clinic	24	11.3
Individualized care	24	11.3
Family involvement	12	5.6
Better for health education	10	4.7
Total responses	213	100.0

The total number of those who said they would to be seen at home was 213. After categorising these responses, the reasons were identified as follows: more convenient (46.0%), followed by solving transport-related problems (21.1%), while avoiding waiting in the clinic and receiving individualised care both ranked third equally (11.3%).

Table 5.7.3: Reasons for choosing to be seen at PHC centre.

Reasons of choosing PHC	Frequency	% From total responses
Facilities Availability	124	61.4
More convenient and quiet	45	22.3
Specialist personnel	20	9.9
For health education	11	5.4
Accurate appointments	2	1.0
Total responses	202	100.0

After categorisation, the reasons behind preferring to visit the PHC centres rather than being visited by the CHC nurse were as follows:

1) Availability of the facilities ranked first (61.4%);

2) Being more convenient and quieter (22.3%);

3) Availability of specialist medical staff (9.9%);

4) Provision of health education sessions (5.4%); and

5) Punctuality, which was only mentioned by (1.0%).

Table 5.7.4 If you had received treatment at a hospital and required follow-up nursing care for at least one week, which of the following options do you think would be more convenient for you?

	Frequency	Percent
Staying in hospital and continuing to receive nursing care	194	31.1
Discharged home with regular follow-up at the hospital	140	22.5
Discharged home with regular nursing care provided at home	132	21.2
Discharged home with regular follow-up at the PHC clinic	88	14.1
No Response	69	11.0
Total	623	100.0

Participants were asked to state their preferences for nursing care as a follow-up to hospital treatment. Nearly one third of the respondents said they would prefer to stay in hospital to receive nursing care. 22.5% preferred to be discharged home, but to go back to the hospital for follow-up treatment. 21.2% said they would like to have the follow-up nursing care at home. Only 14.1% wanted their treatment to be followed up at the PHC clinics.

The results concluded from the Chi-square test revealed that the participants' responses reflected gender-related differences that were statistically significant. However, the results achieved from the analysis of Cramer's V test indicated that there was no association between gender and the choices made of the follow up nursing care after discharge from the hospital (see Appendix 9: Table 9.34). It would seem, therefore, that gender does not appear to be a determinant factor as far as this questionnaire item is concerned. This is particularly so considering the distribution of the male-female samples

which are not representative of the whole population, i.e. 434 male and 120 female participants.

The results also showed some variation according to marital status. To stay in the hospital and to continue receiving nursing care ranked first for married, single, and divorced/widowed respondents, but whereas only around three quarters of married and single respondents made this choice, over half the divorced/widowed respondents did so. To be discharged home and to have regular follow-ups at the hospital ranked second for married people (26.0%), and third for single (23.2%) and divorced/widowed respondents (17.9%). To be discharged home with regular nursing care provided at home ranked second for single (29.0%) and divorced/widowed respondents (25.0%), and third for married people (23.0%). To be discharged home with regular follow-up at the PHC clinic was the last option for married, single and divorced/widowed respondents (See Appendix 9: Table 9.31). Very few divorced/widowed respondents chose this option (3.6%), whereas the figure was around 16% for the other groups.

The findings from the analysis of the data further revealed that highly educated people were keener on receiving nursing care at home, while the largest group among all the other respondents (secondary education level and below) preferred to stay in hospital to receive nursing care (see Appendix 9: Table 9.32). However, these variations by marital status and level of education were not statistically significant. The respondents were also asked if follow-up care for chronically ill patients could be better provided through a PHC-based CHCN at home, rather than by the present hospital-based system. The answers revealed some opposition to this idea. Nearly 64.5% responded negatively (Appendix 9: Table 9.33).

The findings from the questionnaires revealed that there is a general tendency to use government facilities rather than the private services. Moreover, it is clear that the respondents' satisfaction with the current services varies. The findings further yielded the information that the respondents generally would welcome the new services, although potential barriers and facilitators were identified. It also seems evident that there was an overall agreement amongst the participants that the three settings were acceptable, with some preference for the home setting. Having obtained this information, it is interesting to look at the views and opinions of the focus group, and this is the point I turn to now.

5.2 Focus Group Results

As was stated in Chapter Four (section 4.2.2.1), the aim behind the use the focus groups was to explore the opinions and the attitudes of the informants about specific issues related to the introduction of the new CHCN service. A total of 17 male and 12 females participants (aged 22 to 65) participated in the focus groups (Appendix 10) during the holy month of Ramadan in November 2000. The participants were of different nationalities and from diverse professional backgrounds, as was described in Chapter Four (section 4.2.2.2).

In the following analysis, the quotes are identified by a letter indicating the group to which the participant belongs. The letters A and B are used to refer to the male groups, while the females were identified by the letters C and D. Within each group, a digit is used to identify individual participants. Group A participants were given numbers 1 to 9 while Group B participants were given numbers 10 to 17. For Group C, the participants were given numbers 18 to 23 whilst Group D members were identified by the

numbers 24 to 29. For example, in the analysis that follows, I will be using A3 to refer to

participant number 3 within Group A who is an engineer (Appendix 10).

These focus groups were intended to contribute to exploring:

1. The role of the community health nurse

2. The enabling and reinforcing factors for implementing such a service

3. The potential barriers that may hinder the application of the community nursing

services

4. The channels and tools that could be effective for the implementation of CHC nursing

5. Health education topics needed

5.2.1 The role of the community health nurse

The focus group members were asked about their views on the role of the community

health nurse. From the responses offered by the members of the focus group, it was clear

that the role of the nurse was viewed by the members as both curative and preventive, but

with more emphasis on her preventive role provided she had medical supervision and the

resources to enable her to fulfil her duties. Curative care is important because the nurse is

an integral element of the health care team but this role is limited and narrow:

"She assists the medical doctor in caring for the patient" D.23.

"She can do certain procedures such as vital signs checking, wound care, and post operative care. All these procedures should be performed in close coordination with the doctor. Together, they should share the responsibility for patients' care."

B.14 "She can identify early signs of the disease and refer them to medical care" C. 23

"She can give first aid care" A.2.

The majority of participants agreed that *"she can do both: curative and preventive"* D.27" *her curative role is a doorway to prevention" B.17*

However, her major and extended role was seen to be in the prevention of diseases.

"Her preventive role is indispensable" A.6.

The preventive role should be directed towards the individual, family and society.

To the individual, the community health nurse can

"give health education while giving insulin to a diabetic patient" C.20

"the nurse can prevent complications" D.27

To family members, the role of the nurse in prevention was seen to be through education, changing lifestyle and the early detection of diseases:

"The nurse can educate family members about the patient's disease, especially if the problem is hereditary, and common in the UAE, such as diabetes and heart diseases." C.18

"The nurse can give psychological support to the patient and family members." B.10

"The nurse can detect certain diseases early. While at the home, the nurse can assess other family members who might be at risk of having certain illnesses by detecting any unhealthy behaviour, such as eating fatty food, and being overweight, and give them advice about what should be done" B.12

In the society at large, it was thought that the nurse could play a major role in education, the early detection of diseases and health promotion:

"The nurse's role lies in serving the immediate neighbours and family members" C.21

"Community nurses can educate the public about certain diseases" A.5

"Community nurses can detect certain diseases early, especially in remote areas" A.9

However, accepting both roles would be conditional. She could be

"a link between the doctor and the patient... provided she has enough support and training" D.26

"Her major role is to follow up patients on condition she be appropriately trained for this job" C.20

Also, her role would be conditional on her being under medical supervision:

"She can play both roles: curative and preventive, provided it is under the doctor's supervision and following his instructions" B.16

This reserved attitude towards the autonomy of the community health nurse unless

"She is under medical supervision" was noted by male participants only:

"She has two roles: preventive by giving health education to the immediate family of the patient. Her curative role is limited to a few practices such as changing dressings, catheter care, giving injections and medication, and referring to the doctor as necessary." A.5.

A.4 approved what A.5 said,

" Her curative role should not exceed her nursing responsibilities"

A.4 and added

"The CHCN role shouldn't be very open. She should contact the doctor all the time, not only as necessary, in order to ensure complete follow-up of the case" A.4.

"One has to understand the management care: the diagnosis and treatment plan should be carried out by the doctor, the primary follow-up to be done by the nurse under medical supervision. Subsequent follow-up can be done by the nurse" B.13

The female participants, on the other hand, posited that the nurse could function freely in both fields – curative and preventive. Nowhere did they say that her practice should be conditional on being supervised:

She can follow up the cases and detect certain complications early so that she can prevent them" C.18

A few group participants suggested that, through home visits, the CHN would be capable of

"identifying the different topics for education"

"Improved health education will reduce diseases, reduce consumption of care and reduce crowding" A.7

During the home visit, the CHN may carry out certain examinations for blood pressure and diabetes:

"With regular medical check –ups compliance increases" D.23

and this would also lead to a

"reduction in complications from diseases"D.24

and most important would be the

204

"early detection of diseases" C.21

5.2.2 Factors enabling the implementation of the community health nursing service

The second category explores the second research question: What are the enabling and reinforcing factors for implementing such a service?

The focus group members identified certain enabling factors that could facilitate the implementation of the community health nursing service. Among those factors were:

"Availability of health centres in different communities" A.7

"Access to more information" A.6

"Affordability of recruiting specialist personnel" A.1

"The availability of different nationalities" C.21

"[It] reduces exposure to risk factors found in hospitals, such as infectious diseases especially for cancer patients" D.29.

It would be a

"More friendly atmosphere, patients are more relaxed at home"

and they would have *"fewer transportation problems" D.27.*

From a cost benefit perspective, it was perceived that carrying out home visits would

"take away a big burden from doctors [which would eventually give them] *More time to do more important things in health facilities" A.4*

and would

"decrease the amount of hospitalisation and health expenditure, because at the present time, there are patients who are staying in hospital for a long time unnecessarily, in particular those who have had a successful procedure or treatment and they just need a follow-up by a nurse at home for wound care, blood glucose monitoring, etc. All this would lead to making available more beds for those patients who are in urgent need" B.11

Good training of staff could be another facilitator for the success of the programme:

"Proper training would help in making the service accepted" A.7

"if nurses are well trained and highly skilled this would ensure the perpetuation of the service" B.13

"Training is of the utmost importance. The nurse has to know how to deal with different age groups, different nationalities. The nurse has to be highly educated and have good communication skills" B.14

"The nurse has to be professional and avoid personal relations with family members, because if the relationship between the nurse and the family became very personal, some of the family members might reject the CHCN service, and consider it as an intrusion into the family" D.22

5.2.3 Barriers that may hinder the implementation of a community nursing service

The third category answers the research question: What could be the potential barriers that may hinder the implementation of the community nursing services? Different barriers were identified in traditions and habits, in religion, in language and in the society. Other barriers, such as the fear of a lack of confidentiality and a lack of training were mentioned. A lack of understanding of the traditions and habits of the society on the part of the expatriate nurses was seen to be a problem:

"The community health nurse should be highly oriented to the local rules and traditions" A.6

206

"punctuality is not observed among most people in the UAE community, especially if the nurse has to pay the visit in the morning" B.10

Therefore, owing to the local norms and practices, nurses need to be made aware of such cultural sensitivities.

Some thought, however, that Emirati nurses were not good candidates for a community health service:

"In the case of a local nurse, her parents would not allow her to pay home visits" C.19

"A female local nurse cannot provide care to a male person. According to the culture this is not allowed, especially if that male patient is from the same city, and the female local nurse is single. This could make it difficult for her to get married. Having expatriate nurses from both genders shouldn't be a problem for a wealthy country like the UAE" C.18.

C.20 responded to what was said by C.18:

"Both genders should be available for the service, and neither the culture nor the religion oppose the idea of a female nurse taking care of a male patient, because qualifications and experience are more important than the gender" C.20.

It has to be noted that this conversation was conducted by female participants. It may be argued that gender could also be a barrier in the service:

"A male prefers a male ... gender differences should be respected" B. 16

Religion, despite the fact that by itself it is not a barrier, should be highly respected by the community health nurse:

"Religion is not a barrier and the proof is that many maids, cooks, drivers are living in homes where they have different religious backgrounds" B.11

"Religious beliefs have to be respected"

and

"Religion could be a barrier for older people"

"Assess the client and take into consideration language and religion" B.11

Language as a means of communication could be another barrier:

"Choose a nurse who speaks different languages" A.2

"Language is a barrier, but not an important one as it could be overcome by teaching the nurse Arabic" C.20

Societal acceptance and understanding of the role of the community nurse occupied most of the attention of the participants:

"The society has to understand the role of the community nurse" A.4

"Society does not know and is not prepared" A.6

"Elderly people do not understand this service" C.18

"It needs a good educational level to understand that the care giver is a nurse rather than a medical doctor" B.13

The community service is seen by some people as posing a threat in terms of the possible disclosure of family secrets by the nurse if she comes into close contact with the family:

"Some people are afraid that the nurse will disclose their family secrets to other families and this is a big problem" C.16

"Society could not accept the idea that a local nurse would visit, the would society prefer an expatriate for reasons of confidentiality" C.16

A few people were concerned about the issue of coverage. Their opinions were:

"the service is limited and cannot cover all houses. Presently, this type of service is limited only for Tawam patients which is unfair because it is against the privileges that individuals get from having a health card" B.10

Few others were concerned about the expenses. They said:

"This service is expensive" B.13

5.2.4 Tools and channels to prepare the society for this service

Opinions varied among the group members about the tools which might be used to

promote this service and the best methods of implementing it.

Suggestions for the implementation process

"Allow at least one year for preparation" A.8

and try to

"Learn from other countries' experiences"

or maybe

"Learn from the local experience at Tawam Hospital ". D.29

On the implementation process, they frequently repeated the importance of

209

"Providing proper resources: staff, equipment, transportation" A.8

and also of *"Setting up an effective system of networking between different components of the service (mass media, municipality) prior to implementation "*

also

"Establish a system for volunteers targeted at promoting the new service in different communities because the direct implementation of such a service without good marketing within the community could lead to a misunderstanding of the service. Therefore, it is important that those who are marketing the service be qualified and have a deep understanding of it" D.26.

"Implement in stages: pilot communities first then generalise to prove cost-effectiveness" A.8

Make sure your staff are satisfied by giving "Incentives: provide enough staff to overcome workoverload and maintain a certain standard for the service" A.4

5.2.5 Suggestions for a community campaign to promote the service

Among the possible tools the participants listed the following:

1. *"Mosques, Friday's preaching"*

2. *"School radios"*

3. *"Television programmes in different languages by different nationalities"*

4. *"Posters, leaflets"*

5. *"Announcements in hospitals"*

6. *"Lectures in clinics, hospitals"*

7. *"Mass media coverage"*

8. *"People already exposed to service to talk about their experience"*

9. *"Hotline for questions and inquiries"*

5.2.6 Health Education topics needed

In response to the question about the health education topics needed, different groups suggested different health education topics. By doing a simple count of the topics most frequently mentioned in the four focus groups, these topics came in the following order of priority by frequency of occurrence: exercise and fitness (16), nutrition (13), chronic diseases (12), first aid (10). Then other topics were also mentioned, namely: antenatal care (8), maternity and child health (8), smoking (6), AIDS (5), road safety (which is seen as requiring a multidisciplinary approach by the police and health authorities) (4), care of the elderly (3), vaccination (3), family planning (3), drug addiction (2), infectious seasonal diseases (1), and hereditary diseases (1). It is therefore evident that exercise and fitness was the most popular topic of health education amongst the focus group members, followed in order of importance/priority by chronic diseases. In contrast, it seems that care of the elderly, vaccination, family planning, drug addiction, infectious seasonal diseases, and hereditary diseases were considered the least important by the focus group participants.

5.3 Staff Interview Results

A total of six members of staff were interviewed: a consultant surgeon at a hospital, a consultant in endocrinology at a hospital, a general practitioner at a primary health care centre, a nurse at a primary health care centre, an administrator at a primary health care centre and a community health nurse based in a hospital set-up. When using sample quotations from the interviewees' reports, the researcher used the coding system S1 to S6

to identify the accounts by interviewee. To illustrate, S1 was utilised to refer to the consultant surgeon and S5 referred to the administrator (Appendix 11).

The areas covered by the staff interview were:

1. Staff perception of the present hospital and primary health care services provided to discharged patients, to chronically ill patients at home and to health education.

2. Staff expectations of the contributions the new service would make to the current services.

3. Staff opinion regarding the major roles, the target group and the best location for the proposed service.

In a similar way to the focus groups, quotes are identified by a letter or number, the key to which is in Appendix 10.

5.3.1 Current Services

5.3.1.1 Caring for people discharged from hospital

Follow-up after discharge from hospital was seen as poor and being only available for locals who are served by Tawam Hospital.

"This service is only available for Tawam Hospital patients, and not Al Ain Hospital or PHC patients. A number of patients have asked to be referred to Tawam Hospital to access the service, and this was done specially for chronically ill patients, who might benefit from the service" S2.

Respondents expressed critical views regarding the role PHC plays in terms of caring for people discharged from the hospital. Post-discharge care is deficient because of the lack

of an adequate referral system, feedback and systematic coordination between the hospital and the PHC and vice versa to ensure follow-up care.

"What makes our work difficult is that the patients coming to the PHC centre might be transferred from the hospital without any referral report. Even if we request a referral from the hospital concerned, it reaches us late.... This is why there is a need to link the hospitals with the PHC centres with an updated technological system" S.4.

Respondents perceived the service as lacking the following: adequate coordination between the various specialities, sound referral procedures and community health nurses to cover a wide area. A few respondents viewed it as going on in a satisfactory manner for some patients. A few patients take the initiative and go back for routine post-discharge consultation at the hospital. There was a common feeling among the respondents that such a service must be taken over by a well established and organised CHCN service to remedy the existing gaps and maintain adequate post-discharge care for those in need.

Many concerns were voiced about the widening gaps growing between the inpatient (hospitals) and the outpatient (PHC) services due to the absence of a linkage and referral system between primary and secondary health care facilities. Others were not sure whether discharged patients were keen to be followed up in the PHC service or not. However, some respondents who work in PHC pointed out that they usually take the initiative to call the hospital to find out further relevant information and call the patient him/herself to check on him/her. Other respondents blamed the family for being negligent and inconsistent about the post-discharge care.

As to the hospital's role in providing adequate post-discharge care, some of the health care givers identified some sort of referral system for patients in need of dressing

changes and medicine refills. However, they receive no substantial feedback on the patient's progress. So the referrals made are inadequate due to a serious lack of communication and coordination between the inpatient and the outpatient services.

The problem of the gaps (in terms of miscommunication and absence of collaboration and coordination) between the health sectors needs to be addressed and redressed. It may require a follow-up authority that orients and channels patients to the right post-discharge care and monitors their compliance with follow-up appointments. Such authority should also be able to reach the people in need.

"From my experience as a community nurse, the post-discharge patients have always been positive about the service, and have expressed the need to expand this service and make it accessible to all patients throughout the district". S.6

5.3.2 Home Visits

The home visit service to chronically ill patients is viewed as poor due to inadequate staffing and associated facilities. Again, Tawam Hospital is the only local health care facility offering home visits to chronically ill patients to a very limited extent. Many families in the community welcome these home-nursing visits and there is an obvious growing need to provide health care services in the home. Members of staff perceive that the local people are keen to receive more attention from of the health care authorities in terms of CHCN. Once again the PHC role in providing home visits is minimal. With regard to primary health care centres, the respondents noted that the home visits service to chronically ill patients is non-existent or minimal, and is restricted to cases selected by the medical staff and able to be referred to the community nurse service from Tawam hospital for a home visit and follow-up. The reason behind this limited home visit service is the lack of necessary resources in terms of adequate staff and essential facilities.

"We do not do home visits because of the lack of qualified staff and transportation problems. Consequently, we have to receive all the patients who present to the PHC which results in crowdedness in the clinic, a long waiting time, and a short consultation period" S3.

However, one of the district hospitals offers a very basic home visit service to very small number of patients living on the outskirts of the city. This home service brings a primary-level care into the homes of patients whose condition no longer calls for continuous attention from medical staff and the services of a hospital. However, there is unanimous concern that the present community health care service is poor, in terms of inadequate staffing and facilities. This is consistent with what was noted in my discussion of the different needs of the UAE in terms of health care, in Chapter Two (section 2.4). It does not therefore meet the growing needs and demands of the community. With the growing number of elderly, the disabled and patients with chronic diseases, the need for a home care service (to be complementary to and not compete with the hospitals / PHC centres) becomes very pressing. The introduction of the CHCN system could be the solution.

5.3.3 Health education

Some respondents believed that health education is being carried out in the PHC at a satisfactory level. At the PHC centres, health education programmes on diabetes, obesity, hypertension, anti-smoking, and antenatal care are offered on a regular basis. On some occasions nurses go to schools to offer collective health education. In contrast, some respondents described the health education given by PHC as poor or lacking adequate time or attractions.

"The duration of the health education sessions conducted at the clinics is short, because the nurse has to compromise between giving health education and performing other jobs she/he is assigned to accomplish. On the other hand, the audio-visual resources available are limited, leading to the sessions being unattractive. However, this does not negate the fact that people are getting some benefits from these sessions" S5.

However, a small number described it as quite contradictory and unacceptable by some patients. On the other hand, health education offered at the hospitals in relation to specific chronic diseases was recognised to be important and available, although on a scale from poor to good (see Chapter Two: section 2.4.4.1). Mainly diabetes patients receive a lot of attention and health education at the hospital-based clinics. However, overbooking of patients and short health care visits limit the ability of health care givers to provide adequate health education. In addition, language and gender barriers detract from health education efforts. Cultural diversity and many health problems need to be addressed. Respondents were unanimous about the urgent need and importance of establishing a sound health education system integrated with the hospital outpatient and inpatient services (rather than in primary care). Health education is perceived by the majority as an important tool for promoting health awareness within the community and for helping people adopt a healthy life-style. Therefore, every effort should be made to incorporate health education into the care system. Health education could be made part of the CHCN service so that the CH nurses could educate the patients and their family members while providing nursing care and by training relatives to do things that currently need professional attention.

Once again this raises due concern about the efficiency of such health education in promoting health awareness among members of the community and reveals the

potential for using CHCN as a vehicle to disseminate health education knowledge throughout the community.

5.3.4 CHCN adding to the current service

Respondents indicated that adding a CHCN service could contribute to the promotion of health awareness among members of the community and help afflicted people cope better with chronic conditions and disabilities, as well as allow nurses to enrich their professional experience and sharpen their nursing skills. There is a perception among the respondents that CHCN services should help to alleviate many problems within the health care delivery system and that they should be founded upon an action plan that targets both priorities and individual needs on a daily basis. Some respondents pointed out that a greater scope of needed health care services could be better served by the CHC nurses or the PHC centres if transportation were provided. Respondents were hopeful that the addition of home care services – being one element of CHCN - to the PHC centres would improve health care delivery for patients with chronic diseases and those who are handicapped and elderly. One of the interviewees described the Tawam Hospital outreach CHCN service as follows:

"It is noted that the patients who are getting the service have a faster improvement in their condition when compared to those who are not. In addition, the interval between follow-up visits is longer for those who are getting the service than the others" S1.

There were a few respondents, in particular those who were hospital-oriented, who believed that CHCN services would do little for the community or to improve PHC services.

"This service may reduce the pressure in the hospital outpatient clinics but will not do much for improving PHC services" S2

5.3.5 Target groups

There was a perception among the respondents that CHCN services should contribute to the early detection of several diseases and reach out to people in remote areas through home visits. In general, CHCN services were seen as needing to strike a balance between the follow-up care service and the promotion of health awareness, education, prevention and rehabilitation. Some respondents were positive about the CHCN service as a vehicle which would enable all age groups to get easier, faster and more direct access to health services. However, there are seemingly different opinions about which age group the CHCN should be aimed at.

Evaluating and combining responses led the researcher to conclude that the age group 18-46 is the group most vulnerable to RTA, associated disabilities and chronic diseases, and hence demands immediate attention. This group was also seen as being influential over both older and younger groups as well as more amenable to change. The youngest group, however, was seen as having the least need because they receive school health services. The oldest group was little mentioned, except as requiring therapeutic services. Of the three age groups, the 18-46 group was seen as the most amenable to health education, and the group that would promote health awareness among the rest of family members. In contrast, there was a general feeling among many respondents that the CHCN service should be strengthened to cover all age groups in all aspects of their lives. Disabilities secondary to RTAs and chronic diseases affect mostly the age group (18-46). It seems that the rate of chronic diseases is higer among older age groups but the

numbers are high in the 18-46 age group because of the high percentage of the population who are in this group.

This warrants the need for adding CHCN to the present health care system in order to minimise their pain and ease their tragedy by assisting their rehabilitation. The CH nurse could also educate the patient in how to manage the easy part of his care and teach his immediate family members to do the same. Health education can aim to reduce risk factors (part of primary prevention), to screen for signs of disease, to maximise recovery and rehabilitation for ill/injured individuals, or to help people to cope with chronic diseases. The approach and target groups are likely to be different depending on the model.

5.3.6 Role of CHCN

The main finding from the staff interview was that a community health nurse should have the following roles:

1. To improve the health awareness of the community by implementing health education sessions, in particular for the age group 18 to 46.

2. To care for people afflicted with chronic diseases to avoid or delay complications, as well as caring for the handicapped and elderly who have difficulty visiting a health care centre due to transportation problems or physical disability.

3. To detect diseases in the early stages by thorough screening and assessment.

4. To care for people residing in remote areas.

5. To give follow-up care for people discharged from hospital such as changing dressings or giving injections.

As far as the nurses are concerned, the new service will give them an opportunity for a new experience and might even stimulate some to pursue further education and specialisation in community nursing so they can join the new service.

The majority of the respondents saw that CHCN as pivotal in offering necessary follow-up care to people discharged from hospital. A few respondents were concerned that people may become too dependent on CHCN services and would make no effort to use other parts of the PHC service, and that the CH nurse would not be able to focus on all their needs. One respondent thought that CHCN services should focus on providing health education rather than post-discharge care.

The majority of the respondents were in favour of CHCN conducting home visits to chronically ill patients. However, one respondent stressed that there is some danger that such visits may be translated into a social justification for depending on CHCN as a source of treatment for their existing illness.

'The CHCN visit should not totally replace the follow-up visits to the physician in the hospital or the PHC in order to avoid unnecessary complications' S2.

In this case, the CHC nurses might become overwhelmed by trying to meet all the curative and preventive needs of the clients. Some respondents were of the opinion that the real value of CHCN services lies more in the promotion of a healthy lifestyle, i.e., improving health and well-being than in providing curative care.

The respondents argued that health education should be a major component of the CHCN care package. It should not, however, be dealt with in isolation. It must be integrated into all CHCN activities: the prevention of sickness and the promotion of good health.

5.3.7 Best setting for CHCN

There was a strong feling among some respondents that CHCN services are best given at home:

"Linking the hospital with the home setting through a CHCN programme might make the follow-up of cases much easier. In addition, these visits give us an idea about the patients' home environment, which helps us in planning the treatment" S1.

However, major concerns were voiced about cultural problems and constraints that might impede the CHCN, for example a female local nurse cannot provide care to a male person. Therefore, the respective health workers should be made aware of the existing traditions and social conditions and should adopt practical and relatively simple approaches that can be effectively implemented to meet the community's needs.

Evaluating the responses received revealed that most respondents support PHC-based CHCN services.

"Since the PHC centres are geographically well distributed, and taking into account the limits in the hospital outreach programme, clients are more willing to go to a PHC centre than to wait for the community nurse to come from the hospital" S6

Some respondents argued that CHCN should be based in the hospitals, provided that a comprehensive programme be integrated with promotional, preventive and curative aspects. The service envisaged would deal with the elderly, the disabled and those with chronic debilitating diseases. Although the aim is to maintain them at home, the hospital's role should not be overlooked, and some argued that it must act as the base of the service and serve as back-up for the care given by the CHCN. Despite acknowledgement of the importance of CHCN home visits, there was a reluctance to accept it as a service to be provided solely and exclusively on a home visit basis in order

to ensure proper follow-up for patients, especially those with chronic diseases who may need a further follow-up at the hospital outpatient clinic or PHC centre as necessary.

In sum, the majority called for a well established, well organised and sound PHC-based CHCN service with a home service and good referral and feedback systems. Those who were in favour of PHC-based CHCN services justified their choice in that PHC facilities provide better follow-up management in terms of laboratory and radiological investigations whenever indicated compared to waiting for hospital appointments to perform these investigations. CHCN would handle routine patients in remote areas who failed to attend the PHC centres and could also make an enormous reduction in the number of patients crowded in the PHC for routine follow-ups that do not require medical attention.

The findings from the interviews make it clear that there was a general perception amongst the participants of the importance of community health care nurses in both preventive (health education, particularly for the 18-46 age group) and curative (follow-up of the patient's discharge from hospital) services. Furthermore, the respondents thought that the CHCN service would be a positive addition to the current health services in the UAE. The current services, therefore, need more support and improvement both quantitatively and qualitatively. Finally, the interview respondents varied in their opinions regarding the setting of the CHCN service between hospital, home and PHC-based. Some of these results were consistent with the results obtained from the questionnaire and focus group data; others displayed some differences, which will be

discussed in the following chapter. Similarly, the findings from the staff interviews and staff post-interview questionnaires were also consistent.

5.4 Conclusion

The aim of this chapter was to present and analyse the findings obtained from the questionnaire, focus groups and interview data. On the basis of the results of the analysis of the data collected through the three techniques, it is evident that there is general agreement on the importance of the role which CHCN can play in general, especially as regards health education and health promotion. In addition, there is agreement on the shortcomings pertaining to the current health services.

Similarly, there appears to be an overall emphasis on the likely importance of introducing CHCN into UAE society. The findings further suggest that there are a number of enabling facilitators for the service, but that certain challenges and potential barriers will need to be addressed prior to its implementation.

In the next chapter, the researcher will provide a discussion of the findings obtained in the present chapter, and will also present the conclusion to this thesis.

Chapter Six:

Discussion and Conclusion

This chapter presents a discussion of the results of the questionnaire, the focus group interview and the staff interview in relation to four themes. These themes are: the current services, knowledge and awareness of CHC nursing, the role of the CHC nurse, barriers and facilitators for implementing the new service, and respondents' suggestions for implementation. These themes were derived by combining the material from the three instruments used, namely, the questionnaire, the focus group and the staff interviews. All through the discussion, correlation with information presented in the previous chapters will be made whenever applicable. In addition, the methodological limitations of the study will be highlighted.

6.1. The current services

The researcher explored the opinions of the study participants on various topics and issues relating to the current services provided by the PHC centres and the hospitals. The purpose behind this was to assess the current services, and to explore levels of satisfaction with them, in order to identify whether there was a need for the introduction of a CHCN service. This would be useful in illuminating the issues regarding the quality of health care, as discussed in Chapter Two (section 2.2.5).

On the basis of Maxwell's (1984) model, it was noted in Chapter Two (section 2.4.5.) that there are six different criteria that characterise the quality of a health system: Maxwell's (1984) 3As and 3Es were given as: Appropriateness,

Accessibility, Acceptability, Effectiveness, Efficiency, and Equity of service. These are useful in informing the findings from the participants' data discussed here.

In Chapters One and Two of the thesis, after comparing the demographic, economic, and health and health service indicators of the UAE with those of a developed country like the UK, and those of a neighbouring developing country like Bahrain, it was evident that the UAE is providing reasonably *acceptable* health services, *accessible* to all of the UAE population (Maxwell's Accessibility and Acceptability).

However, as far as *efficiency* is concerned, multiple funding systems, an imbalance in resource distribution, and irrational budget allocation are evident in the management of the health care sector. With regard to the health services provided, it may be concluded that the preventive aspect is weak, reflected in the limited health education programmes on offer, as is the curative aspect, reflected in the people's tendency to seek health care in the secondary and tertiary facilities, rather than in the primary health care facilities. Sometimes this results in patients being sent abroad for further health management.

Another area of concern is that related to *appropriateness*. According to the World Bank Report (1997, p. 2), "Given the high proportion of young healthy males, expected total demand should be lower in the UAE than in high-income countries generally. However, the opposite is in fact the case."

It can therefore be concluded that these shortcomings were evident in the available MOH and World Bank reports. Fieldwork results confirmed most of the above-mentioned shortcomings. For example, in a World Bank study of the health sector in the UAE, it is reported that

225

> "many patients are dissatisfied with the nation's health
> care system because of lengthy queues, hurried care and
> inconvenient hours of operation. The government is
> also concerned about the high cost, limited range and
> low quality of services that are being provided.
> Therefore, major improvements in the efficiency and
> utilization of health services are being sought."
>
> (World Bank, 1997, p. 1)

Based on the discussion above, it appears that Maxwell's 3 A and 3 E criteria are not thoroughly and adequately met in the context of the UAE health system. Additionally, it would seem that a number of shortcomings still characterise health and health care in the country, as discussed in Chapter Two (2.6). Having found this, it can be said that strengthening the existing services, specifically the PHC services, and introducing the proposed PHC based CHCN service may help in meeting the health needs of the UAE population.

On another level, the results from the questionnaire revealed that the majority of the participants, regardless of their nationality, gender, occupation, age group or educational background, usually attended the government PHC centres rather than private health centres. This may be due to the presence of the government PHC centres in the vicinity and the availability of diagnostic facilities such as X-ray, laboratory, dental clinic and pharmacy at relatively lower prices compared with private facilities. Other reasons could be that every UAE resident is a holder of a health card, which makes the person eligible to be seen at a government PHC clinic at almost half the cost that a person with no health card would pay, and at a lower cost than at a private PHC clinic.

This result is true irrespective of the fact that the number of private clinics in the UAE, used primarily by labourers, exceeds the number of government clinics, as mentioned in Chapter Three (298 versus 106 clinics respectively, MOH, 2000). The easy access to PHC centres could be attributed to the even

distribution of the PHC centres across the district, i.e., the existence of a PHC centre in almost every residential area while private facilities are located in the city centre. It is worth mentioning that the City Planning Department in the UAE includes locations for PHC centres in every residential area, as deemed necessary. This fact could be considered as one further argument for having the proposed CHCN service based at the PHC centres, since this would enable equal and fair access to the new service.

However, the results also indicated that people tend to go to hospitals even for acute problems that could be treated at the primary health care centres. This might be explained by the presence of specialist personnel, the availability of more sophisticated facilities, and the feeling that more personal and holistic attention can be gained, which is why hospitals appeal more in general to many respondents. This is one of the arguments used for strengthening current PHC centres, already discussed in Chapter Two of this study. The weaknesses of the available referral system between PHC and hospitals, previously highlighted in Chapter Three, might be another explanation. For these same aforementioned reasons, the quality of care at hospitals was rated higher than at of the PHC clinics.

The tendency of the public to go to secondary care facilities for health care has been addressed in several countries such as UK, where it has been dealt with by strengthening the primary care and by limiting access to most secondary care facilities to those referred by their GP. The respondents' comments about the liked and disliked aspects of both the PHC centres and hospitals are important factors to be looked at if one aims at improving the current existing services. These were found to be virtually identical between the PHC centres and the hospitals. The majority of the respondents agreed that accurate appointments were

227

among the things they liked best about the PHC centres and the hospitals. However, "waiting" was highly rated as a disliked issue, thus contradicting the previous result, which can be explained by the easy accessibility of the public to any health care facility, therefore interfering with the system of appointments in operation. In fact, easy accessibility scored highly among the liked issues in both facilities, allowing patients to be seen even without prior appointment, leading the PHC and polyclinics to function frequently on a "first come first served" basis. As was noted earlier in this chapter, some responses appear to be contradictory, thus requiring further explanation. These seemingly contradictory answers present some difficulty of interpretation, and caution is therefore required when attempting to interpret these responses.

There was common agreement among the staff interviewed that the systems of caring for people discharged from hospital, home visits, and health education are currently poor and must be taken over by a well established and organised CHCN service to remedy the existing gaps and maintain adequate post-discharge care for those in need.

From the discussion of the results of the fieldwork and the literature review, the researcher concludes that the current services provided require further development in both the preventive and the curative domains. The proposed CHCN service might remedy some of the shortcomings existing in the current service and might positively influence the available health services, both preventive or curative: for example, in the follow-up of hospital discharged patients and in providing health education for individuals and their families.

The results of the questionnaire further revealed the fact that the majority of the respondents had never received a CHCN service. Regarding the few respondents who had received such a service, these were either Tawam Hospital

patients, or expatriates who had received it in their own countries. This result was expected, especially since the current nursing services are limited to the hospitals and clinics in both private and public sectors. If the same questionnaire were given to the Bahrain community, different results would have been obtained, as the CHCN service has been implemented at most of the PHC centres since 1946.

However, some of the respondents were aware of the existence of such a service. This could be attributed to the multinational structure of the population and the continuous influx of expatriates.

These results demonstrate the novelty of such a service, since it does not as yet exist in UAE society, and the ways in which it may contribute to meeting health care needs. The results might also have an implication for the implementation process of the service, in the sense that intensive public preparation will be required before implementing the service. This issue will be elaborated under the fourth theme.

6.2 Role of CHCN:

The objective in the discussion of this theme was to illustrate the expected role of the CHC nurse, comparing the findings of the literature review in Chapters Two and Three with the respondents' points of view. For example, should the service focus on a preventive and/or curative role, on caring for people discharged from hospital, on carrying out home visits for patients in need (i.e., cancer patients, elderly people, etc.) or on implementing health education?

From the discussion in Chapters Two and Three, it may be concluded that the CHCN can perform two roles, preventive and curative, depending on the need, the resources available and other factors. When examining the role of the CHCN in the UK, Bahrain, and the UAE, it was noticed that the focus on one role or the

other depends on the type of service provided, as well as on the setting. For instance, in the UK, the role of the CHCN ranges between preventive (health visiting), curative (district nurse), or both (school nurse) depending on the type of service provided. In Bahrain, the PHC-based CHCN service plays both roles. In the case of the UAE, the nurses at Tawam Hospital outreach programme perform a predominantly curative role, with some prevention.

The questionnaire respondents gave the role of the CHC nurse in implementing health education the top priority, followed by follow-up care for post-discharge patients and care of chronically ill patients. The need for health education was also supported in the results of the staff interview, which indicated that the current health services make a poor contribution to the health education domain.

From an age group perspective, the CHCN role in caring for post-discharge patients and chronically ill patients was deemed most important by the 66 and over age group, and least important by the other age groups. This could be attributed to the fact that it is the elderly who are most likely to be suffering from chronic diseases which require frequent visits to the health care facilities, and such a CHCN service might solve transportation-related problems, problems related to physical disability and other problems as well (Chapter Two: section 2.4). Despite the fact that this age group constitutes a small percentage of the sample, and represents less than 5% of the total UAE population, and although the result was not statistically significant, the researcher opted to comment on this finding due to the importance it might have in the future, since this elderly population is expected to increase (Chapter Two: section 2.4.1).

Further, the findings of the survey revealed that both genders almost equally supported the key role of the CHCN service in implementing health

education programmes. This reflects the need of the UAE residential population for such programmes to empower themselves with adequate knowledge in order to maintain or promote well-being.

The findings from the staff interview also revealed that a community health nurse might perform the following different roles. Firstly, in line with the priorities selected by the respondents to the questionnaire, to improve the health awareness of the community by implementing health education sessions in particular for the age group 18 to 46, which constitutes the largest group in the community. By raising the health awareness of the people in this age group, general well-being might be maintained or even improved, a healthier lifestyle might be adopted, health problems might be detected earlier, and therefore the emergence of chronic diseases might be delayed or even better controlled. In addition, the increased awareness of the UAE nationals of that same age group might positively influence others who are older or younger, because in the UAE community extended families often live in the same neighbourhood. The priority for health education was also indicated in the questionnaire results.

Secondly, staff suggested that a CHCN service could play a role in caring for people afflicted with chronic diseases in order to delay the onset of complications, as well as to care for disabled and elderly people who have difficulty visiting a health care centre due to transportation problems or physical disability. Thirdly, the detection of diseases at an early stage through screening and assessment was mentioned. This role of the CHCN may be considered crucial in a country like the UAE, where chronic diseases such as diabetes mellitus and cardiovascular diseases are considered among the leading causes of morbidity and mortality, as discussed in Chapter Two. Finally, care for people residing in remote

areas, and follow-up care for people discharged from hospital such as changing dressings or giving injections, was considered to be an appropriate role.

The role of the nurse as viewed by the focus group members was both curative and preventive but again with more emphasis on her preventive role. Curative care is important because the nurse is an integral element of the health care team, but this role is perceived as limited and narrow, especially by the male participants (they saw the CHCN as only able to operate under close medical supervision). The preventive role is directed towards the individual, the family and society. At the individual and family level, the community health nurse could give health education to the patient and family members. The role of the nurse in prevention would be through education, changing lifestyle and the early detection of diseases. The nurse could also give psychological support to the patient and to family members. At the level of society, the nurse could play a major role in education, the early detection of diseases and in health promotion, especially in remote areas.

With regard to priority of health education programmes to be conducted by a CHCN service, the choices that the questionnaire respondents made reflected their high interest in road safety programmes. This is due to the high incidence of road traffic accidents and related morbidity and mortality in the UAE. In contrast, the focus group discussions revealed a high demand for exercise and physical fitness programmes that can be explained by the prevalence of obesity resulting from changes in lifestyle and adopting habits that are not conducive to good health such as sedentary living and over-eating on the part of the residential population of the UAE.

This problem was previously highlighted in the discussion of health status indicators (Chapter Two: section 2.4.3). Health education on nutrition and

associated problems is needed because of the lack of awareness across the country regarding proper diet. This is reflected in the increase in disease burden associated with high cholesterol levels in blood, hypertension, osteoporosis, etc., due to significant changes in dietary habits.

The need for health education programmes on AIDS and STD is related to the taboo imposed on discussing such diseases in the UAE and giving them a very low profile, which means people have to search for the relevant information independently. There was a low demand for health education programmes on first aid, chronic diseases and the dangers of smoking, due to the fact that there are already plenty of programmes dealing with such topics being conducted across the country by all kinds of media. However, no studies have been conducted to assess the effectiveness of these programmes. Other topics were also requested namely: antenatal care, maternity and child health, care of the elderly, vaccination, family planning, drugs, infectious seasonal diseases, and hereditary diseases.

When examining the focus groups' suggested list of topics for health education to be implemented by the CHC nurse, it was found that the list almost matched the leading causes of death and contributory lifestyle factors in the UAE. The leading causes of death in the UAE are cardiovascular diseases, traffic accidents and cancer, as discussed in Chapter Two.

The community health nurse was referred to in both the male and the female focus groups as "her" all the time, which indicates a stereotypical view of this role. Internationally, gender differences are quite wide. Stereotyping the nurse as female and the doctor as male infer the common phenomenon of gender sensitivity and segregation. Being a patriarchal society, the UAE community emphasises the role of the male as being the head of the family, the decision maker, and the breadwinner. One can only wonder if this could be a reason why

the participants (especially those who are male) emphasised the point on more than one occasion that the community health nurse (referred to as 'she') should work under the supervision of the doctor (referred to as 'he').

It may be concluded that the participants in the focus groups indicated an assumption that a CHCN service would be staffed by females in the UAE. However, this cannot be generalised to the total population; having CHC nurses of both genders is preferable, similar to that which is currently available in the health care facilities, whether hospitals or PHC centres. With reference to the culture factor, there are male patients, especially among the elderly, who refuse to have a female nursing them. Although it is difficult to find female nationals caring for male patients in the UAE nursing service, there are some found in different parts of the country who attend to male patients. Therefore, a mixed pool of CHCN staff could meet the needs of different people.

From the above, it is noticeable that there is a broad level of support for all three roles of the CHCN – without large differences between them –showing at least as much support for the preventive/educational as for therapeutic/curative role, as was pointed out in Chapter Three (section 3.6.3) where a discussion of the CHCN system in the UK, Bahrain and the UAE is given.

6.3 Barriers and supporting factors

An examination of this theme provided the researcher with information that reflects the potential acceptance or rejection of CHCN services by the UAE multinational and multicultural community. Should such a service be introduced and implemented with the future at a wider range? In addition, details about the barriers and the facilitating factors for implementing this service will be explored.

As mentioned in Chapter One and discussed in Chapter Two under demographic indicators, expatriates constitute 80% of the total population, coming from different countries, with different languages, beliefs and values, which makes development of an appropriate and acceptable service a complex matter. However, the researcher tried to obtain feedback on this issue from the respondents by means of the three research methods, for the purpose of establishing a baseline about possible barriers and facilitators.

The results of the questionnaire revealed that although some respondents believed that the UAE multicultural society would accept the CHCN service, more thought that such a service would not be accepted. The wide range of opinions might be caused by the many variations that exist in the UAE society in terms of cultural background, education level and demographic instability, as well the novelty of the service. These negative views must be taken into account. However, they do not necessarily mean that a CHCN service should not be introduced. The respondents were being asked their views on whether UAE society as a whole would accept the service. Their personal views on such a service seemed to be much more positive, as indicated by their responses when asked about possible roles for the community health nurses.

However, the widespread view that substantial difficulties may face the introduction of CHCN into the UAE should not be ignored. Therefore, care should be taken to identify and tackle such difficulties in the planning and implementation stages. Thus, when comparing the results of the questionnaires and the focus groups in relation to the barriers and supporting factors for the implementation of the new service, the following results were found.

The barriers identified were as follows: demographic instability, religion, violation of home privacy and confidentiality issues, lack of trust in the skills of

CHCN nurses, low educational level of some patients, language, inadequate understanding of the service, traditions and customs, and the nationality and gender of the CHCN nurses.

Those barriers were accorded a different weight in the two instruments used. The questionnaire respondents gave top priority to demographic instability and religion, while language, nationality and gender were of prime concern to the focus group members.

Demographic instability is a fact of UAE society that is reflected in the high turnover of expatriates coming from around 45 different countries worldwide. Given an unpredictable population forecast in terms of number and/or composition makes planning for the new proposed service a very difficult task. It also makes the introduction of a service that emphasises continuity of care – a major strength of many primary health care services – very difficult.

Therefore, a careful recruitment of staff will be necessary to avoid misunderstandings. For example, having Arabic-speaking nurses who have lived in the country for a while and who understand the UAE people's traditions would be more appropriate when caring for national patients, rather than recruiting staff from outside the country who do not possess a suitable community background.

The view expressed by some respondents that gender is a barrier does not have any religious support. A female nurse is supposed to give care to anyone regardless of sex in the eyes of Islam. Nevertheless, a good system of allocation of staff will avoid certain unhappy situations. Having enough male nurses to meet the needs when they arise is an example.

The participants of the focus group gave issues of confidentiality as a barrier. Visiting homes means invading home privacy. This may be a threat to the service if not emphasised frequently to members of staff. The issue of family

secrets is a major barrier in the UAE, where extended families live in the same territory. By way of example, various health, social and emotional problems could be hidden behind closed doors and should be tackled with great seriousness and respect for privacy and confidentiality. The findings presented in Chapter Five (section 5.1.7: Table 5.7.3) indicated that people seemed to like the idea of the 'convenience' of home visits, but were concerned that the 'technical' aspects of care would not be so well catered for.

The potential lack of trust in the skills of the CHC nurses mentioned by the subjects of the questionnaire and focus groups might be explained by the lack of understanding of the nature of the proposed service, or the general low opinion of PHC centres compared to hospital services. To overcome the low opinion held of PHC services, orientation programmes on the role of the PHC services in society are needed. Additionally, extensive preparation is required, especially in informing the public that CHCN is one speciality within the nursing education field and that the nurses are highly trained staff and very experienced within their field. Through this suggested strategy, the barrier that might be posed by the low educational level of some patients might be overcome, as they might have a better understanding of the proposed service.

In an attempt to overcome the disadvantages created by the above-mentioned barriers, in Table 6.1 below, the researcher provides some suggestions that might be looked at when implementing the service.

Table 6.1: Potential barriers and suggested solutions

Barriers	Suggestions
Demographic instability	1. Regular population surveys: nationalities, ethnic backgrounds, culture, language, etc,.... 2. Establish a very flexible workforce in terms of composition and numbers.
Religion	1. Recruit nurses from different religious backgrounds. 2. Recruit staff who have experience with transcultural nursing care.
Violation of home privacy and confidentiality issues	1. Reinforce patients' rights to the staff with main focus on the issue of confidentiality. 2. Explain the patients' rights to the clients. 3. Pre-arrange home visits 4. Recruit nurses who are trustworthy. 5. Offer option of coming to clinic where possible. 6. Establish a patient information system that controls accessibility to records and patients' data. 7. Avoid recruiting nurses to work in their home community.
Lack of trust in the skills of the CHC nurses	1. Recruite highly qualified, well trained nurses in the community nursing field. 2. Improve public awareness of the specialist training of the nurses in the CHC nursing field. 3. Improve status and reputation of PHC.
Low educational level of some patients	1. Prepare a group of nurses to deal with this type of patient. 2. Get assistance from an educated family member. 3. Simplify instructions given to the patients.
Language	1. Recruit multilingual CHCN staff 2.Offer Arabic language courses for non-Arabic speaking nurses.
Inadequate understanding of the service	1. Proper use of the media when advertizing for the new service. 2. Use the public Majlises, mosques, and schools to announce this service. 3. Get assistance from community leaders such as religious persons, authority figures, etc..
Traditions and customs	1. Have one pool of CHCN staff and orient them to the UAE culture, as well as to the other available cultures. 2. Coordinate with the cultural clubs available in the community.
Gender of the CHC nurses	1. Recruit staff of both genders. 2. Take into consideration the patient's attitude towards gender differences when planning the visits.

With respect to data regarding the facilitators for implementing the new service derived from both instruments, these were:

1. If the new CHCN service will solve transportation problems for some clients, such as the elderly and housewives.

2. If the CHC nurse visits the patient at home, individuality of health care will be ensured.

3. If the CHCN service will eliminate risks associated with lack of medical follow-up especially for non-compliant clients with chronic diseases such as hypertension and heart problems, and for post-operative patients. In addition, this will help the early detection of some diseases through close observation and assessment of the patient and his/her family members.

4. If the CHCN service will be perceived by the community as a new modality of nursing service, as an extra service in addition to the currently provided nursing services at the hospitals and the PHC centres, rather than a lower-level substitution.

5. If the congestion in hospitals will decrease, since follow-up of cases can be carried out at home or at the PHC centres.

6. If waiting problems in the clinics will be reduced, as some patients will be seen at home.

7. If health education topics will be identified based on needs assessment.

In conclusion, good planning could tackle the barriers identified by the respondents. However, one should not forget that during implementation, other barriers and challenges are likely to arise. Therefore, a system capable of responding to these should be sought from the initial phases to ensure success, e.g. a continuous formative evaluation of the service should be taken into consideration, a feedback system to the planning team should be established.

Similarly, the above-mentioned facilitators need to be considered when planning and implementing the new service, and any further facilitating factors that emerge should be identified and feed back into the development of the service.

6.4 Study participants' suggestions relating to implementation

The objectives behind the discussion of this theme are to explore public opinion regarding the suitable settings and marketing for the new proposed service. In relation to the setting, the fieldwork explored the participants' preferences with regard to the location where a CHC nurse could see them, whether at a hospital or PHC centre or somewhere else they might prefer. It also aimed to explore the best location for receiving follow-up nursing care, post-hospital discharge in particular. With regard to the suitable marketing of the service, suggestions for preparing the public before introducing the service and the process of implementation were obtained.

As disscussed in Chapters Two and Three, the setting of CHCN may vary between hospital outreach, such as the Tawam Hospital Programme, or a PHC setting, as in the Kingdom of Bahrain, or a home setting, as in some of the work of community nurses in the United Kingdom.

Just over half (52.3%) of the respondents to the questionnaire supported home visiting by the CHC nurse, while around 45.0 % supported a PHC location. The reasons given by the respondents for choosing the home setting were that this would be more convenient and that no transport would be needed on their part.

From the setting point of view, the results showed that male respondents were keener on home visits by the CHC nurse than females. This could be attributed to the following: full-time working men do not have enough time to spare for visiting the PHC centres during working hours, whereas women have more time; there is an increased incidence of chronic diseases (diabetes, hypertension, cardiovascular and related ailments) among men than women (Ministry of Health, 2000). An unfavourable progression of these diseases might be avoided by close patient follow-up care at home.

Female respondents displayed a preference for PHC centres as a more appropriate location for receiving CHCN services than being visited at home. The availability of diagnostic facilities, proximity of the PHC centre, avoiding intrusion into the home privacy could be some of the reasons that made women prefer approaching the PHC centre for health care and follow-up.

From a nationality perspective regarding the setting of CHCN, non-Arabs were more in favour of home visits by the CHC nurse than Arabs and UAE nationals. This might be due to the fact that the non-Arabs – mainly Asians who constitute the low income labour population in the UAE – had the impression that the distribution of the questionnaire coincided with an increment in the health service fees, and that such a service would be free of charge, whereas they have to pay a fee for a clinic appointment. This could apply to some of the Arab residents with lower incomes as well. Or maybe this was because non-Arabs were less concerned about the invasion of their privacy and confidentiality issues, etc.

With regard to national perspectives on nursing follow-up care, it was found that no nationality favoured PHC clinics for post–discharge nursing care. However, the largest group of UAE nationals preferred to be discharged home and to receive regular nursing care at home. The largest group of Arabs and non-Arabs preferred to stay in hospital until the completion of the nursing care, rather than to receive such care at home. This could be explained by the fact that most expatriates do not have their families with them, so when they are sick, they prefer to stay in the hospital for health care. The reverse is true of UAE nationals, who would be surrounded by family members in the event of illness, as part of the culture.

Almost two thirds of the respondents (64.5 %) disagreed with the opinion that follow-up treatment for chronically illpatients could be provided through

241

PHC- based CHCN at home. Various reasons were given for this disagreement such as the easy access to the PHC facilities, home being an inappropriate environment for receiving nursing care, being sceptical of the staff's competence, and home visits being just inconvenient for some.

The reasons given by the one-third who preferred nursing follow-up care by the PHC-based CHCN at home (35.5 %), rather than at PHC centres, were that better follow-up would be ensured, home being more convenient and safe; there would be better care from a physical and an emotional point of view, avoiding waiting and being away from the excessive crowdedness at the clinics. There was, therefore, a strongly felt view among some respondents of the staff interview that CHCN services were best provided at home. Major concerns were voiced about the cultural problems and constraints that might impede the CHCN service. The members of the focus group identified culture, which incorporates various factors such as religion, language, traditions and customs, as a potential barrier. For instance, the UAE culture does not allow an Emirati female nurse to visit other people's homes. Her parents would object to the idea and even the families visited were cautious because of family privacy.

In order to avoid this barrier, it may be necessary to recruit a non-national workforce in the initial stages in the hope that time will help to dissolve this barrier. On the other hand, some expatriates are unable to understand the language, or have difficulty in being culturally sensitive, both to UAE nationals, and to the much larger non-national group. Therefore, the respective health workers should be made aware of the existing traditions and social conditions and should adopt practical and relatively simple approaches that can be effectively implemented to meet the community's needs. Most respondents believe that health education should be a major component of the CHCN care package. It

should not, however, be dealt with in isolation. It must be integrated into all PHC activities whether the emphasis is on the prevention of sickness or the promotion of health.

Only two of the staff interview respondents, who were the hospital doctors, argued that CHCN must be based at the hospitals, provided that a comprehensive programme be integrated with promotional, preventive and curative aspects. Whenever indicated the CHC nurse would go out and visit. Any planning of the CHCN services must ensure an understanding of the local culture. The service envisaged would deal with the elderly, the disabled and those with chronic debilitating diseases. Although the aim would be to maintain them at home, the hospital's role should not be overlooked and must form the basis of the service and serve as back-up for the care given by the CHCN.

However, the majority of the staff respondents were in favour of PHC-based CHCN services and justified their choice in that PHC facilities are capable of providing follow-up management in terms of laboratory and radiological investigation whenever necessary, rather than having patients queuing outside hospital outpatient clinics, as was stated earlier in Chapter Five. CHCN would handle routine patients in remote areas who failed to attend the PHC centres, and would also vastly reduce the number of patients crowded in the PHC centres for routine follow-ups that do not require medical attention.

Opinions varied among the focus groups' members between tools to promote the new service and the best way of implementing it. regarding respondents suggested allowing at least one year to prepare the public and to try to learn from other countries' experiences, or possibly from the Tawam experience. Regarding the implementation process, they frequently reiterated the importance of providing proper resources such as staff, equipment and transportation, and

also setting up an effective system of networking between different components of the service prior to its implementation. Other suggestions were to implement in stages, that is pilot communities first, then generalise to probe cost-effectiveness, and make sure the staff is satisfied by giving incentives, by providing enough staff to deal with work overload and maintain a certain standard for the service.

An awareness campaign to launch this service was seen as necessary. Such a campaign would aim to introduce the service but also to collect suggestions on how to make it better. Among the tools to be used in this campaign the participants listed the following: Mosques, Friday's preaching, school radios, television programmes in different languages by different nationalities, posters, leaflets, announcements in hospitals, lectures in clinics, hospitals, mass media coverage, that people already exposed to the service should talk about their experience, and a hotline for questions and inquiries.

The above discussion under the four themes conveys a broad view of the present situation of the available health care system. It indicates that community awareness about CHCN is limited and needs to be improved through the use of several awareness tools, and also that there is a degree of doubt about the acceptance of a CHCN service in the UAE. However, there is a broad level of support for the preventive/ educational, as well as the therapeutic /curative, role of the CHC nurse. A list of health education topics to be implemented by the CHC nurse was suggested. The researcher suggested strategies for overcoming possible barriers when implementing the service. The success of this service was seen to be conditional on a thorough awareness campaign. In summary, the researcher can conclude, from the focus groups and staff interviews, that the participants would like to see a well established organised and sound PHC-based CHCN service with home service, and good referral and feedback systems. However, the planning of

any service must not ignore the reservations expressed by many of the questionnaire respondents – by far the largest group – and must attempt to identify and tackle the potential barriers.

6.5 Conclusion

On the basis of the above discussion of the findings of the fieldwork presented in Chapter Five, in addition to the research literature review (Chapters Two and Three), the researcher may in conclusion make the following points:

1- The current health system in the UAE suffers from a number of problems, such as a poor distribution of resources, bureaucracy, lack of community participation, etc, that need to be tackled in order to facilitate the introduction of a CHCN system, as was pointed out in Chapter Two (section 2.4).

2- The current priorities for health service improvement needs in the UAE may be summarised as the need for strengthening primary health care, initiating a quality assurance programme, introducing effective preventive health education programmes, and tackling the current shortcomings.

3- The role of CHCN, whether preventive or curative, is important for the UAE community in meeting some of the identified health needs.

4- The PHC centres may be an appropriate location for the setting of the proposed CHCN service in the UAE. This conclusion is subject to the possibility of strengthening the current PHC services.

5- The barriers and the facilitating factors identified by the study participants, need to be taken into account when planning for the implementation of the proposed CHCN service.

This research is the first of its kind to be carried out in the UAE. It has demonstrated the feasibility of collecting community and staff views on the development of a new service and the value of such an exercise, for example, in identifying the issues that should be taken into account when planning and implementing the service. It is anticipated that the fieldwork will contribute to the practical work of developing a primary health care-based CHCN service in the UAE. However, it is important to be aware of some methodological limitations. For example, the limited availability of statistical data and literature on UAE health and health care (and on Bahrain) made comparison with the UK difficult. The health registration data system in the UAE was found to be out-of-date and disorganised, indicating a pressing need for reform, but also posing difficulties for the sampling for the questionnaire. An alternative, successful sampling method was used, but this reduced the representativeness of the sample.

However, despite such methodological limitations, the data from all three stages of the fieldwork, as well as the discussion of health and health care needs, indicate that a primary health care-sbased CHCN service could play a valuable role in improving health service provision in the UAE, providing the necessary efforts are made to tackle the barriers to its successful implementation and to raise public awareness of the potential benefits of such a service.

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251

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Appendix 1

Differences between quantitative and qualitative methods of enquiry

Quantitative approaches	Qualitative approaches
- Scientific	- Ethnographic
- Empirical	- Derived from the humanities
- Highly structured & well-defined stages	- Fluid & loose design, interactive
- Hard	- Soft
- Human	- Natural
- Predictive	- Interpretive, evaluative
- Confirmatory	- Descriptive, exploratory
- Quantifiable observations	- Holistic/qualitative information
- Positivistic	- Phenomenological, constructivist
- Hypothesis-testing, hypothetico-deductive	- Hypothesis-generating
- Problem-solving	- Problem-finding
- Systematic measurement	- Naturalistic observation
- Strong knowledge base	- Weak knowledge base
- Starts with theory	- Theory & concepts arise from the enquiry
- Variables are the means (vehicle)	- Variables are the product
- Experimental methods, statistical analysis & mathematical models	- Case studies, ethnography, narrative reports & participant observation

[Adapted from Erickson (1986); Husen (1988); Sowden (1988), Brannen (1992)]

Appendix 2

Advantages and disadvantages of the questionnaire technique

As a technique of data gathering, questionnaires have a number of advantages. They are easy to distribute and complete; they can be given to a large sample of respondents at the same time; pre-coded responses are easily quantified and analysed; a written questionnaire provides a vehicle for expression without risk of embarrassment to the respondents; and last but not least, people in remote or distant areas can be reached by postal questionnaires, a relatively economical method (Bowling, 2002).

However, questionnaires in general also have a number of disadvantages: some respondents do not give honest answers; there can be considerable costs associated with entering results into a computer for analysis; structured questionnaires might force respondents to choose answers that do not represent their own points of view; they do not enable the researcher to go deeply into the meaning of responses, especially in relation to information about attitudes, behaviour and social processes and the response rates can also be low (Bowling, 2002). The following is a summary of the main virtues and drawbacks of the questionnaire tool:

Advantages and disadvantages of the questionnaire instrument

Advantages
- Easy to administer and quick to fill in
- More uniform and standard data since the same questionnaire is given to all subjects
- More accurate data since it is usually given to all subjects at the same time
- Data are quantifiable
- Allows direct responses of both factual and attitudinal information
- Makes tabulation of responses quite effortless
- Provides direct comparison of groups and individuals
- Adequate for large groups of subjects at the same time
- Information of a sensitive nature is shared more easily when anonymity is assured

259

Disadvantages

- Analysis is time-consuming
- Some answers may not be honest
- Inappropriate where spontaneous responses are required
- No guarantee that the right person completes the questionnaire
- Inappropriate for subjects who cannot read or write
- Effectiveness depends very much on the reading ability and comprehension of the individual
- Hard to design in-depth and probing questions
- Low response rate, due to fear of intrusiveness or lack of anonymity
- No assurance that the questions used are properly understood and correctly answered

[(adapted from Moser and Kalton (1971), Seliger and Shohamy (1990), McKernan (1991), Gay (1992) and Hopkins (1993)]

Appendix 3:

Table 4.1: A comparison of nationalities' distribution between original study populations with the first sample taken

Nationality	Original Study Population*		First Sample	
	N	%	N	%
UAE	25424	25.5	457	25.5
Arabs	27617	27.7	497	27.7
Non-Arabs	46659	46.8	840	46.8
Total	99700	100	1794	100

*Source: PHC register, Al Ain District, UAE, 2000.

Table 4.2: Summary of the size of the three samples selected, the number of persons who agreed to respond, the response number and the response rate.

Population	Sample size	Agreeable N.	Response N.	Response rate out of sample size
P.H.C. 1	1794	250	51	2.8
P.H.C. 2	3000	325	67	2.2
Employees	800	800	513	64.1
Total	5594	1375	631	11.2

Table 4.3: A comparison of nationality distribution between the total study population and the respondents

Nationality	Total Study Population*		Respondents	
	N	%	N	%
UAE	25424	25.5	184	29.5
Arabs	27617	27.7	198	31.8
Non-Arabs	46659	46.8	241	38.7
Total	99700	100	623	100

*Source: PHC register, Al Ain District, UAE, 2000.

Table 4.4: Socio-demographic data of the respondents compared with those of the UAE population (1995; 15 years of age and above)

Variable	Respondents		UAE Population*	
	Frequency	Percent	Frequency	Percent
Nationality				
UAE	184	29.5	381979	21.5
Arab	198	31.8	1394668	78.5
Non-Arab	241	38.7		
Total	623	100.0	1776647	100.0
Gender				
Male	499	80.1	1279411	72.0
Female	124	19.9	497236	28.0
Total	623	100.0	1776647	100.0
Age group				
Less than 25	69	11.1	376659	21.2
From 26 to 35	137	22.0	635792	35.8
From 36 to 45	222	35.6	491930	27.7
From 46 to 55	137	22.0	197365	11.1
From 56 to 65	38	6.1	49350	2.8
66 and above	20	3.2	25386	1.4
Not stated	0	0.0	165	9.3×10^{-3}
Total	623	100.0	1776647	100.0
Occupation				
House wife	51	8.2	Not available	Not available
Skilled	227	36.4	Not available	Not available
Professional	297	47.7	Not available	Not available
Unskilled	15	2.4	Not available	Not available
Student	8	1.3	Not available	Not available
Retired	9	1.4	Not available	Not available
Not working	4	.6	Not available	Not available
Not stated	12	2.0	Not available	Not available
Total	623	100.0	1776647	100.0
Educational Level				
Illiterate	74	11.9	392381	22.1
Primary	63	10.1	580547	32.7
Preparatory	82	13.2	216068	12.2
Secondary	144	23.1	380441	21.4
Diploma/University	260	41.7	203352	11.4
Not stated	0	0.0	3858	0.2
Total	623	100.0	1776647	100.0
Marital Status				
Married	519	83.3	1182057	66.5
Single	73	11.7	557656	31.4
Divorced/widowed	31	5.0	33350	1.9
Not stated	0	0.0	3584	0.2
Total	623	100.0	1776647	100.0

* Source for the UAE population: Annual Statistical Abstract, 1998-1999, Ministry of Planning, UAE

(12 respondents did not specify their occupation).

Appendix 4:

Public Questionnaire (Covering Letter)

Dear Sir / Madam:

May I begin by thanking you for your valuable time spent reading this and, hopefully, completing the questionnaire attached.

This questionnaire has been designed to collect information regarding your awareness of, and potential response to, the introduction of Community Health Care Nursing (CHCN) services in the UAE. Your kind assistance in providing the requested information will be of great value to me. I assure you that any information you provide will be held in strictest confidence and used only for the purpose of this research. Your eligibility for medical care and other statutory rights will not be affected by any information you provide or by refusal to complete part or all of the questionnaire.

If you kindly agree to participate in completing the questionnaire please first read the following explanatory paragraph to assist your responses:

"Community Health Care Nursing (CHCN) is a specialized branch of nursing, which refers to the context of people's lives in their ability to attain and maintain good health. They are qualified nurses with special training to be able to meet the health care needs of individuals, families and the community. This service can be provided at home, and/or at public health clinics and/or be hospital-based.

<u>Community Health Care Nursing services can provide for:</u>

1) Patients suffering from chronic illnesses (e.g., diabetes, high blood pressure, heart condition...etc).

2) The acutely or terminally ill patient (e.g. cancer and post-surgery... etc.).

3) Health education for the individual patient and their carers.

4) Early detection of ill health and the surveillance of high-risk groups (e.g. the very young, very old, chronically sick.... etc).

May I now ask you to answer the questions by inserting the requested information in the appropriate box.

Thank you...

<u>**Salem AlDarmaki**</u>

PART 1 (SOCIO-DEMOGRAPHIC DATA):-

1. <u>*Nationality:*</u>
    ☐ UAE National   ☐ Arab   ☐ Non-Arab

2. <u>*Gender:*</u>
☐ **Male**   ☐ **Female**

3. <u>*Age:*</u> _____ years

4. <u>*Marital status:*</u>
☐ Married   ☐ Single   ☐ Divorced   ☐ Widow/Widower

5. <u>*Occupation:*</u>
....

6. <u>*Education Level:*</u>
☐ Cannot read/write   ☐ Primary   ☐ Preparatory
☐ Secondary   ☐ Diploma   ☐ University

☐ Other, please Specify...

1) Which PHC clinic do you usually visit?

....(Please state the name).

2) How do you find the trip to your PHC centre?

☐ Very easy   ☐ Easy   ☐ Difficult

☐ Very difficult   ☐ Don't Know

3) Think of the last time you were sick enough to seek health care?

a) When was that?

☐ One week ago   ☐ More than one week to one month ago

☐ More than one month to   ☐ More than one year ago
one year ago

b) Which health care facility did you visit?

☐ A polyclinic   ☐ A health care centre

☐ A private clinic   ☐ A public hospital.

☐ A private hospital   ☐ Other, please specify

c) What problem did you have?

i) **Please tell me about it..**
....
....
....

ii) **How it has been managed?...**
....

d) What means of transport did you use to get there?

☐ Walking   ☐ Own car   ☐ Relative's car

☐ Taxi   ☐ Bus   ☐ Ambulance

☐ Other, please specify
....

4) How far is the nearest PHC clinic to your home by car?

☐ Less than 5 minutes   ☐ From 5 to 10 minutes
☐ From 10 to 15 minutes   ☐ From 15 to 20 minutes
☐ From 20 to 25 minutes   ☐ From 25 minutes or more

5) How far is the nearest hospital to your home by car?

☐ Less than 5 minutes   ☐ From 5 to 10 minutes
☐ From 10 to 15 minutes   ☐ From 15 to 20 minutes
☐ From 20 to 25 minutes   ☐ From 25 minutes or more

6) Which of the following, do you dislike most at your PHC clinic?
(You can tick more than one).

☐ Waiting   ☐ Bad treatment
☐ Absence of doctors   ☐ Crowdedness
☐ Lack of specialists   ☐ Lack of cleanliness
☐ Too much paperwork   ☐ Other, please specify

                              ....

7) What of the following do you like most at your PHC clinic?
(You can tick more than one).

☐ The period of consultation is long enough.
☐ Physician's approach to your health problems.
☐ The staff are friendly   ☐ Accurate appointments
☐ Availability of free medicine   ☐ Good treatment
☐ Easy access.
☐ Other, please specify...

8) How do you find the quality of service at your PHC clinic?

☐ Excellent   ☐ Good
☐ Acceptable   ☐ Poor
☐ Do not know

9) Which of the following, you dislike most at your Hospital ?
(You can tick more than one).

☐ Waiting   ☐ Bad treatment
☐ Absence of doctors   ☐ Crowdedness
☐ Lack of specialists   ☐ Lack of cleanliness
☐ Too much paper work   ☐ Other, please specify

                              ....

10) **Which of the following do you like most at your hospital?**
    (You can tick more than one).
☐ The period of consultation is long enough.
☐ Physician approach to your health problems.
☐ The staff are friendly   ☐ Accurate appointments
☐ Availability of free medicine   ☐ Good treatment
☐ Easy access.

☐ Other, please specify..

11) **How do you find the quality of service at your Hospital ?**
☐ Excellent   ☐ Good
☐ Acceptable   ☐ Poor
☐ Do not know

PART III (Community Health Care Nursing)

1) **Had you ever heard of Community Health Care Nursing (CHCN), before receiving this questionnaire?**

☐ Yes   ☐ No

2) **Have you ever received any type of CHCN service?**
☐ Yes   ☐ No

3) **If your answer was (Yes) in question 2 above:**
1st)   Where? ....
2nd)   What type? ....

4) **In your opinion, how important is CHCN to the following:-**

a) **Caring for people who have been discharged from hospital**
☐ Very Important   ☐ Important   ☐ Undecided
☐ Of little importance   ☐ Not important at all

b) **Home visits to chronically ill patients (e.g. diabetic, hypertensive..etc**
☐ Very important   ☐ Important   ☐ Undecided
☐ Of little importance   ☐ Not important at all

c) Health education
☐ Very important   ☐ Important   ☐ Undecided
☐ Of little importance   ☐ Not important at all

5) *If you or a member of your family were to receive services from a community nurse, where do you like to be seen? (You can choose more than one location):*

Location	Why? (Please justify your selection):
☐ Visit you at home	
☐ See you at PHC clinic	
☐ See you somewhere else (please specify):	

6) *Have you ever received Health Education related to:*

Health Education programmes	Yes	No	Source of information
1. Smoking			
2. Nutrition/Nutritional Problems			
3. Chronic disease (e.g. diabetes mellitus,hypertension ..etc.			
4. AIDS			
5. Exercise and physical fitness			
6. First Aid			
7. Road Safety			
8. Other, please specify			

7) *Do you agree that CHCN can play an important role in implementing Health Education programmes?*
☐ Strongly Agree   ☐ Agree   ☐ Undecided
☐ Disagree   ☐ Strongly disagree

268

8) Depending on your answer to question (7) above, which of the following Health Education programmes might apply? (Note: You may tick more than one programme):

☐   Smoking
☐   Nutrition/Nutritional Problems
☐   Chronic disease (e.g., diabetes, high blood pressure, heart condition   etc)
☐   AIDS
☐   Exercise and physical fitness
☐   First Aid
☐   Road Safety
☐   Other, please specify

....

9) If you have received treatment in a hospital and required follow- up nursing care for at least one week, which of the following choices do you think would be more convenient?

☐   Staying in the hospital and continuing to receive nursing care.
☐   Discharged home with regular follow-up at the hospital.
☐   Discharged home with regular follow up at PHC Clinic.
☐   Discharged home with regular nursing care provided at home.

10) Do you think that follow- up of chronically ill patients can be better provided through PHC-based CHCN at home?

☐   **Yes**
☐   **No**

If yes or no, specify the reason

....

....

....

11) Do you think the UAE multicultural society will accept a CHCN service?
☐ Yes   ☐ No   ☐ Unsure   ☐ Don't Know

12) In your opinion, which of the following factors would impede the implementation of CHCN Services in the UAE? (You may choose more than one):-

☐ Traditions & Customs	☐ Language
☐ Religion	☐ Inadequate understanding of the services.
☐ Low educational level	☐ Demographic instability due to expatriate influx .
Lack of trust in CHC nurses' skills.	☐ May violate home privacy.
Other, please specify	☐
	☐
	☐

13) In your opinion, which of the following factors would make implementation of CHCN Services in the UAE more successful? (You may choose more than one):-

☐ **Accessibility of CHCN services.**	☐ **Spare patients the trouble of waiting in the clinics.**
☐ **Help early detection of some diseases.**	☐ **Solve transport-related problem.**
☐ **Individuality of health care.**	☐ **A new modality of nursing services that help promote health education level.**
☐ **Reduce congestion in the hospitals.**	☐ **Eliminate risks associated with lack of medical follow-up.**
Others, please specify	☐
	☐
	☐

270

Appendix 5:

Advantages and disadvantages of the focus group technique

Focus groups can be used at any point in a research programme. Stewart and Shamdasani (1990) summarised the more common uses of focus groups to include: Obtaining general background information about a topic of interest; generating research hypotheses that can be submitted to further research and testing using more quantitative approaches; stimulating new ideas and creative concepts; diagnosing the potential for problems with a new programme; generating impressions of products, programmes, services, institutions, or other objects of interest; learning how respondents talk about the phenomenon of interest which may facilitate quantitative research tools; interpreting previously obtained qualitative results (Stewart and Shamdasani, 1990, p. 15).

However, certain disadvantages are identified. The researcher should not expect all invitees to attend. Certain groups, such as elderly or disabled people, are less likely to attend due to mobility or convenience reasons. Sometimes they are difficult to control: certain participants may not voice their opinions at all or be reluctant to express unpopular opinions in groups (Gilbert, 1998, p. 142). It should not be assumed that the individuals in a focus group are expressing their own definitive individual view. They are speaking in a specific context, within a specific culture, and so sometimes it may be difficult for the researcher clearly to identify an individual message. On a practical note, focus groups can be difficult to assemble. Finally, focus groups are not fully confidential or anonymous, because the material is shared with the others in the group

(Gibbs, 1997). The following is an outline of some important advantages and disadvantages of the focus group technique:

Advantages

- It is an excellent technique for obtaining detailed, in-depth information and goes beyond the superficial.
- It is spontaneous.
- The dynamics of the group process mean that lively discussion reveals agreements, disagreements, different perspectives, and related ideas.
- The moderator can control the interview, clarify misunderstandings, probe for more information, and pick up non-verbal cues.
- It can be supported by means of visual aids such as slides and photos, for example.
- It is relatively fast and easy to conduct.
- It is more flexible than mailout surveys.
- The opinions or ideas of individual group members can be taken and refined by the group, resulting in more accurate information.
- As the questions of the moderator are directed at a group rather than at individuals, the degree of spontaneity of resultant answers is often greater in a focus group interview.

Disadvantages

- A highly skilled moderator is required.
- Respondents lack anonymity and some may be intimidated.
- Reaches a limited number of people. The ideal size is eight to ten individuals per group and they should be relatively homogeneous.
- Require a considerable amount of time, effort, and expense per respondent. Therefore, very few people are interviewed.
- The moderator can introduce significant biases into the proceedings.
- Attendance is not always guaranteed, for example, amongst the elderly and the disabled.
- Possible reluctance to express certain personal opinions in the presence of others.
- Lack of full confidentiality.

[adapted from Stewart and Shamdasani (1990); Gibbs, 1997]

Appendix 6:

Focus Group Discussion Covering Letter

Dear Sir / Madam:

May I begin by thanking you for agreeing to participate and also for your valuable time.

This guide has been designed to collect information regarding your awareness of, and potential response to, the introduction of Community Health Care Nursing (CHCN) services in the UAE. Your kind assistance in providing the requested information will be of great value to me. I assure you that any information you provide will be held in strictest confidence and used only for the purpose of this research. Your eligibility for medical care and other statutory rights will not be affected by any information you provide or by refusal to participate in the discussion.

"Community Health Care Nursing (CHCN) is a specialized branch of nursing, which refers to the context of people's lives in their ability to attain and maintain health. They are qualified nurses with special training to be able to meet the health care needs of individuals, families and the community. This service can be provided at home, and/or at public health clinics and/or be hospital-based.

Please find attached a topic guide for the discussion. Your participation is highly appreciated.

Thank you…

Salem AlDarmaki

Focus Group Topic Guide

The questions covered in the focus group discussions included the following:

1. What is the role of the community health nurse: is it preventive or curative? Or both?

2. What are the enabling and reinforcing factors for implementing such a service?

3. What could be the potential barriers that may hinder the application of the community nursing service?

4. What are the channels thought to be most effective in promoting a community health nursing service?

5. What are the most important health education topics?

Appendix 7:

Advantages and disadvantages of the interview technique

Face to face interviews have advantages and disadvantages when compared to questionnaires. The advantages are that they can be more flexible; extract more information and be in greater depth; there are no literacy requirements for respondents; and response rates are generally higher than with other types of interview (Bowling, 2002). The disadvantages are that they are expensive (cost of interviewer, travel) and time-consuming; and there is the potential for interviewer bias caused by personal interest (Bowling, 2002). The major advantages and pitfalls of the interview instrument are summarised as follows:

Advantages and disadvantages of the interview technique
Advantages

- The interview allows a great degree of flexibility in the questioning process
- The interview allows a great degree of control over the interview situation
- The interview allows the interviewer to probe areas of interest as they arise during the interview
- Usually the personal interview results in a higher response rate than the questionnaire
- The interviewer can gather supplementary information about the subject

Disadvantages

- The cost of the interview is significantly higher than the cost of the questionnaire
- The interview is highly vulnerable to the subjectivity and bias of the interviewer
- The interview lacks anonymity, which the questionnaire typically provides

[Adapted from McKernan (1991) and Nachmias and Nachmias (1987)]

Appendix 8

Staff Questionnaire

Dear Sir / Madam:

May I begin by thanking you for your valuable time spent participating in this interview and, hopefully, completing the questionnaire that will be distributed at the end of the interview phase.

This interview has been designed to collect information regarding your awareness of, and potential response to, the introduction of Community Health Care Nursing (CHCN) services in the UAE. Your kind assistance in providing the requested information will be of great value to me. I assure you that any information you provide will be held in strictest confidence and used only for the purpose of this research. Your employment and eligibility for medical care and other statutory rights will not be affected by any information you provide or by refusal to participate in the interview.

Your participation is highly appreciated.
Thank you...

Salem AlDarmaki

1) _Nationality :_

☐ UAE National   ☐ Arab   ☐ Asian
☐ European   ☐ South African   ☐ North American
☐ Other, Specify...

2) _Gender:_
☐ Male   ☐ Female

3) _Age:_ _____ years

4) _Position:_
....

5) _What is the proper age group you recommend that the CHCN service might focus on:_
☐ Birth-17years old   ☐ 18 to 45 years old   ☐ 46 years and above

6) _What do you think a CHCN service could add to the current PHC services in the UAE?_

7) _To what extent do you think that the PHC service in its present state is achieving its objectives with regard to the following:_

Caring for people who have been discharged from hospital.
☐ Very Good   ☐ Good   ☐ Satisfactory
☐ Poor   ☐ Not Available

Home visits to chronically ill patients(e.g. diabetic, hypertensive ..etc
☐ Very Good   ☐ Good   ☐ Satisfactory
☐ Poor   ☐ Not Available

Health education
☐ Very Good   ☐ Good   ☐ Satisfactory
☐ Poor   ☐ Not Available

8) _To what extent do you think that the hospital service in its present state is achieving its objective in terms of the following:_
A) Caring for people who have been discharged from hospital.
☐ Very Good   ☐ Good   ☐ Satisfactory
☐ Poor   ☐ Not Available

277

B) *Home visits to chronically ill patients(e.g. diabetic, hypertensive ..etc.)*
- ☐ Very Good ☐ Good ☐ Satisfactory
- ☐ Poor ☐ Not Available

C) Health education
- ☐ Very Good ☐ Good ☐ Satisfactory
- ☐ Poor ☐ Not Available

9) Please specify the degree of importance, if CHCN were classified into:

A) *Caring for people who have been discharged from hospital.*
- ☐ Very Important ☐ Important ☐ Undecided
- ☐ Unimportant ☐ Not important at all

B) *Home visits to chronically ill patients(e.g. diabetic, hypertensive ..etc)*
- ☐ Very Important ☐ Important ☐ Undecided
- ☐ Unimportant ☐ Not important at all

C) *Health education*
- ☐ Very Important ☐ Important ☐ Undecided
- ☐ Unimportant ☐ Not important at all

10) If such a service were to be provided, in your opinion which of the following locations would be more suitable?

Location	PLS justify your selection:
☐ At home	
☐ At PHC clinic	
☐ Other, please specify………	

278

Appendix 9:

Public Questionnaire result tables

Table 9.1: Cross tabulation between government and private PHC and occupation.

			Occupation							Total
			House wife	Skilled	Professional	Unskilled	Students	Retired	Not working	
PHC Government or Private	Government PHC	Count	49	184	203	9	7	8	4	464
		% within PHC Government or Private	10.6%	39.7%	43.8%	1.9%	1.5%	1.7%	.9%	100.0%
		% within Occupation	96.1%	81.1%	68.4%	60.0%	87.5%	88.9%	100.0%	75.9%
		% of Total	8.0%	30.1%	33.2%	1.5%	1.1%	1.3%	.7%	75.9%
	Private PHC	Count	2	43	94	6	1	1		147
		% within PHC Government or Private	1.4%	29.3%	63.9%	4.1%	.7%	.7%		100.0%
		% within Occupation	3.9%	18.9%	31.6%	40.0%	12.5%	11.1%		24.1%
		% of Total	.3%	7.0%	15.4%	1.0%	.2%	.2%		24.1%
Total		Count	51	227	297	15	8	9	4	611
		% within PHC Government or Private	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%
		% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%

279

Table 9.2: Cross-tabulation between government and private PHC and education level.

			Education					Total
			Illiterate	Primary	Preparatory	Secondary	Diploma/University	
PHC Government or Private	Government PHC	Count	64	58	65	105	178	470
		% within PHC Government or Private	13.6%	12.3%	13.8%	22.3%	37.9%	100.0%
		% within Education	86.5%	92.1%	79.3%	72.9%	68.5%	75.4%
		% of Total	10.3%	9.3%	10.4%	16.9%	28.6%	75.4%
	Private PHC	Count	10	5	17	39	82	153
		% within PHC Government or Private	6.5%	3.3%	11.1%	25.5%	53.6%	100.0%
		% within Education	13.5%	7.9%	20.7%	27.1%	31.5%	24.6%
		% of Total	1.6%	.8%	2.7%	6.3%	13.2%	24.6%
Total		Count	74	63	82	144	260	623
		% within PHC Government or Private	11.9%	10.1%	13.2%	23.1%	41.7%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.9%	10.1%	13.2%	23.1%	41.7%	100.0%

Table 9.3: Cross-tabulation between government and private PHC and age groups.

			new age group						Total
			less than 25	from 26 to 35	from 36 to 45	from 46 to 55	from 56 to 65	66 and above	
PHC Government or Private	Government PHC	Count	49	105	161	102	33	20	470
		% within PHC Government or Private	10.4%	22.3%	34.3%	21.7%	7.0%	4.3%	100.0%
		% within new age group	71.0%	76.6%	72.5%	74.5%	86.8%	100.0%	75.4%
		% of Total	7.9%	16.9%	25.8%	16.4%	5.3%	3.2%	75.4%
	Private PHC	Count	20	32	61	35	5		153
		% within PHC Government or Private	13.1%	20.9%	39.9%	22.9%	3.3%		100.0%
		% within new age group	29.0%	23.4%	27.5%	25.5%	13.2%		24.6%
		% of Total	3.2%	5.1%	9.8%	5.6%	.8%		24.6%
Total		Count	69	137	222	137	38	20	623
		% within PHC Government or Private	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%
		% within new age group	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%

Table 9.4: Cross-tabulation between government and private PHC and gender.

| | | | Gender | | Total |
			Male	Female	
PHC Government or Private	Government PHC	Count	363	107	470
		% within PHC Government or Privet	77.2%	22.8%	100.0%
		% within Gender	72.7%	86.3%	75.4%
		% of Total	58.3%	17.2%	75.4%
	Private PHC	Count	136	17	153
		% within PHC Government or Privet	88.9%	11.1%	100.0%
		% within Gender	27.3%	13.7%	24.6%
		% of Total	21.8%	2.7%	24.6%
Total		Count	499	124	623
		% within PHC Government or Privet	80.1%	19.9%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	80.1%	19.9%	100.0%

Table 9.5: Think of the last time you were sick enough to seek health care, when was that?

Last time health care sought	Frequency	Percent
One week ago	91	14.6
More than one week to one month ago	142	22.8
More than one month to one year ago	227	36.4
More than one year ago	163	26.2
Total	623	100.0

Table 9.6: Which health care facility did you visit?

Health care facility visited	Frequency	Percent
Public hospital/Polyclinic	317	50.9
PHC	121	19.4
Private hospital/Polyclinic	185	29.7
Total	623	100.0

Table 9.7: What problem did you have?

Health Problem	Frequency	Percent
Acute	425	81.9
Chronic	47	9.1
Follow-up	30	5.8
Emergency	15	2.9
Vaccination	2	.4
Total	519	100.0

281

Table 9.8: How has it been managed?

Type of management	Frequency	Percent
Medication	566	90.9
Surgery	31	5.0
Investigation	15	2.4
Referral	11	1.8
Total	623	100.0

Table 9.9: Cross-tabulation between 'What problem did you have' and health care facility visited.

			What problem did you have?					Total
			Acute	Chronic	Vaccination	Emergency	Follow-up	
Which health care facility did you visit?	Public Hospital/Poly clinic	Count	201	33		10	20	264
		% within Which health care facility did you visit?	76.1%	12.5%		3.8%	7.6%	100.0%
		% within What problem did you have?	47.3%	70.2%		66.7%	66.7%	50.9%
		% of Total	38.7%	6.4%		1.9%	3.9%	50.9%
	PHC	Count	90	8	1	3	4	106
		% within Which health care facility did you visit?	84.9%	7.5%	.9%	2.8%	3.8%	100.0%
		% within What problem did you have?	21.2%	17.0%	50.0%	20.0%	13.3%	20.4%
		% of Total	17.3%	1.5%	.2%	.6%	.8%	20.4%
	Private Hospital/clinic	Count	134	6	1	2	6	149
		% within Which health care facility did you visit?	89.9%	4.0%	.7%	1.3%	4.0%	100.0%
		% within What problem did you have?	31.5%	12.8%	50.0%	13.3%	20.0%	28.7%
		% of Total	25.8%	1.2%	.2%	.4%	1.2%	28.7%
Total		Count	425	47	2	15	30	519
		% within Which health care facility did you visit?	81.9%	9.1%	.4%	2.9%	5.8%	100.0%
		% within What problem did you have?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	81.9%	9.1%	.4%	2.9%	5.8%	100.0%

Table 9.10: Cross-tabulation between 'Do you think that CHCN could play an important role in caring for people who have been discharged from hospital' and age group.

			Do you think that CHCN is important for caring for people who have been discharged from hospital?					Total
			Very important	Important	Undecided	Moderate importance	Not important at all	
new age group	less than 25	Count	37	21	7	3	1	69
		% within new age group	53.6%	30.4%	10.1%	4.3%	1.4%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	10.8%	11.4%	10.8%	17.6%	7.7%	11.1%
		% of Total	5.9%	3.4%	1.1%	.5%	.2%	11.1%
	From 26 to 35	Count	81	37	14	3	2	137
		% within new age group	59.1%	27.0%	10.2%	2.2%	1.5%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	23.6%	20.1%	21.5%	17.6%	15.4%	22.0%
		% of Total	13.0%	5.9%	2.3%	.5%	.3%	22.0%
	from 36 to 45	Count	117	70	22	7	5	221
		% within new age group	52.9%	31.7%	10.0%	3.2%	2.3%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	34.1%	38.0%	33.8%	41.2%	38.5%	35.5%
		% of Total	18.8%	11.3%	3.5%	1.1%	.8%	35.5%
	from 46 to 55	Count	68	46	19	2	2	137
		% within new age group	49.6%	33.6%	13.9%	1.5%	1.5%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	19.8%	25.0%	29.2%	11.8%	15.4%	22.0%
		% of Total	10.9%	7.4%	3.1%	.3%	.3%	22.0%
	from 56 to 65	Count	23	9	3	1	2	38
		% within new age group	60.5%	23.7%	7.9%	2.6%	5.3%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	6.7%	4.9%	4.6%	5.9%	15.4%	6.1%
		% of Total	3.7%	1.4%	.5%	.2%	.3%	6.1%
	66 and above	Count	17	1		1	1	20
		% within new age group	85.0%	5.0%		5.0%	5.0%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	5.0%	.5%		5.9%	7.7%	3.2%
		% of Total	2.7%	.2%		.2%	.2%	3.2%
Total		Count	343	184	65	17	13	622
		% within new age group	55.1%	29.6%	10.5%	2.7%	2.1%	100.0%
		% within Do you think that CHCN is important for caring for people who have been discharged from hospital?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	55.1%	29.6%	10.5%	2.7%	2.1%	100.0%

283

Table 9.11: Cross-tabulation between 'Do you think that CHCN is important for chronically ill patients' and age group.

			Do you think that CHCN is important for chronically ill-patients?					Total
			Very important	Important	Undecided	Moderate importance	Not important at all	
new age group	Less than 25	Count	45	19	3	2		69
		% within new age group	65.2%	27.5%	4.3%	2.9%		100.0%
		% within Do you think that CHCN is important for chronically ill-patients	12.2%	11.5%	6.7%	14.3%		11.1%
		% of Total	7.2%	3.0%	.5%	.3%		11.1%
	from 26 to 35	Count	88	32	10	3	4	137
		% within new age group	64.2%	23.4%	7.3%	2.2%	2.9%	100.0%
		% within Do you think that CHCN is important for chronically ill-patients	23.9%	19.4%	22.2%	21.4%	12.9%	22.0%
		% of Total	14.1%	5.1%	1.6%	.5%	.6%	22.0%
	from 36 to 45	Count	128	57	16	5	16	222
		% within new age group	57.7%	25.7%	7.2%	2.3%	7.2%	100.0%
		% within Do you think that CHCN is important for chronically ill-patients	34.8%	34.5%	35.6%	35.7%	51.6%	35.6%
		% of Total	20.5%	9.1%	2.6%	.8%	2.6%	35.6%
	from 46 to 55	Count	71	41	14	3	8	137
		% within new age group	51.8%	29.9%	10.2%	2.2%	5.8%	100.0%
		% within Do you think that CHCN is important for chronically ill-patients	19.3%	24.8%	31.1%	21.4%	25.8%	22.0%
		% of Total	11.4%	6.6%	2.2%	.5%	1.3%	22.0%
	from 56 to 65	Count	21	12	1	1	3	38
		% within new age group	55.3%	31.6%	2.6%	2.6%	7.9%	100.0%
		% within Do you think that CHCN is important for chronically ill-patients	5.7%	7.3%	2.2%	7.1%	9.7%	6.1%
		% of Total	3.4%	1.9%	.2%	.2%	.5%	6.1%
	66 and above	Count	15	4	1			20
		% within new age group	75.0%	20.0%	5.0%			100.0%
		% within Do you think that CHCN is important for chronically ill-patients	4.1%	2.4%	2.2%			3.2%
		% of Total	2.4%	.6%	.2%			3.2%
Total		Count	368	165	45	14	31	623
		% within new age group	59.1%	26.5%	7.2%	2.2%	5.0%	100.0%
		% within Do you think that CHCN is important for chronically ill-patients	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	59.1%	26.5%	7.2%	2.2%	5.0%	100.0%

Table 9.12: Cross-tabulation between 'Do you think that CHCN could have an important role in health education?' and gender.

			Do you think that CHCN is important in Health Education?					Total
			Very important	Important	Undecided	Moderate importance	Not important at all	
Gender	Male	Count	390	81	20	1	7	499
		% within Gender	78.2%	16.2%	4.0%	.2%	1.4%	100.0%
		% within Do you think that CHCN is important in Health Education	79.3%	80.2%	100.0%	33.3%	100.0%	80.1%
		% of Total	62.6%	13.0%	3.2%	.2%	1.1%	80.1%
	Female	Count	102	20		2		124
		% within Gender	82.3%	16.1%		1.6%		100.0%
		% within Do you think that CHCN is important in Health Education	20.7%	19.8%		66.7%		19.9%
		% of Total	16.4%	3.2%		.3%		19.9%
Total		Count	492	101	20	3	7	623
		% within Gender	79.0%	16.2%	3.2%	.5%	1.1%	100.0%
		% within Do you think that CHCN is important in Health Education	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	79.0%	16.2%	3.2%	.5%	1.1%	100.0%

Table 9.13: Cross-tabulation between 'Health education could be implemented: chronic diseases (e.g. diabetes mellitus, hypertension, etc.)' and occupation.

			Occupation							Total
			House wife	Skilled	Professional	Unskilled	Students	Retired	Not working	
Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	Yes	Count	11	102	71	9	4	1		198
		% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	5.6%	51.5%	35.9%	4.5%	2.0%	.5%		100.0%
		% within Occupation	21.6%	44.9%	23.9%	60.0%	50.0%	11.1%		32.4%
		% of Total	1.8%	16.7%	11.6%	1.5%	.7%	.2%		32.4%
	No	Count	40	125	226	6	4	8	4	413
		% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	9.7%	30.3%	54.7%	1.5%	1.0%	1.9%	1.0%	100.0%
		% within Occupation	78.4%	55.1%	76.1%	40.0%	50.0%	88.9%	100.0%	67.6%
		% of Total	6.5%	20.5%	37.0%	1.0%	.7%	1.3%	.7%	67.6%
Total		Count	51	227	297	15	8	9	4	611
		% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%
		% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%

Table 9.14: Cross-tabulation between health education might apply: chronic diseases (e.g. diabetes mellitus, hypertension, etc.) and age groups.

				new age group						Total
				less than 25	from 26 to 35	from 36 to 45	from 46 to 55	from 56 to 65	66 and above	
Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	Yes		Count	18	45	82	45	9	4	203
			% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	8.9%	22.2%	40.4%	22.2%	4.4%	2.0%	100.0%
			% within new age group	26.1%	32.8%	36.9%	32.8%	23.7%	20.0%	32.6%
			% of Total	2.9%	7.2%	13.2%	7.2%	1.4%	.6%	32.6%
	No		Count	51	92	140	92	29	16	420
			% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	12.1%	21.9%	33.3%	21.9%	6.9%	3.8%	100.0%
			% within new age group	73.9%	67.2%	63.1%	67.2%	76.3%	80.0%	67.4%
			% of Total	8.2%	14.8%	22.5%	14.8%	4.7%	2.6%	67.4%
Total			Count	69	137	222	137	38	20	623
			% within Health Education might apply: Chronic Diseases (e.g. Diabetes Mellitus, HT etc)- Health Education	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%
			% within new age group	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			% of Total	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%

Table 9.15: Cross-tabulation between health education might apply: road safety and age groups.

				new age group						Total
				less than 25	from 26 to 35	from 36 to 45	from 46 to 55	from 56 to 65	66 and above	
Health Education might apply: Road Safety-Health Education	Yes		Count	47	83	150	90	25	17	412
			% within Health Education might apply: Road Safety-Health Education	11.4%	20.1%	36.4%	21.8%	6.1%	4.1%	100.0%
			% within new age group	68.1%	60.6%	67.6%	65.7%	65.8%	85.0%	66.1%
			% of Total	7.5%	13.3%	24.1%	14.4%	4.0%	2.7%	66.1%
	No		Count	22	54	72	47	13	3	211
			% within Health Education might apply: Road Safety-Health Education	10.4%	25.6%	34.1%	22.3%	6.2%	1.4%	100.0%
			% within new age group	31.9%	39.4%	32.4%	34.3%	34.2%	15.0%	33.9%
			% of Total	3.5%	8.7%	11.6%	7.5%	2.1%	.5%	33.9%
Total			Count	69	137	222	137	38	20	623
			% within Health Education might apply: Road Safety-Health Education	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%
			% within new age group	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			% of Total	11.1%	22.0%	35.6%	22.0%	6.1%	3.2%	100.0%

Table 9.16: Cross-tabulation between health education might apply: road safety and occupation.

				Occupation							Total
				House wife	Skilled	Professional	Unskilled	Students	Retired	Not working	
Health Education might apply: Road Safety-Health Education	Yes		Count	37	152	186	13	6	6	4	404
			% within Health Education might apply: Road Safety-Health Education	9.2%	37.6%	46.0%	3.2%	1.5%	1.5%	1.0%	100.0%
			% within Occupation	72.5%	67.0%	62.6%	86.7%	75.0%	66.7%	100.0%	66.1%
			% of Total	6.1%	24.9%	30.4%	2.1%	1.0%	1.0%	.7%	66.1%
	No		Count	14	75	111	2	2	3		207
			% within Health Education might apply: Road Safety-Health Education	6.8%	36.2%	53.6%	1.0%	1.0%	1.4%		100.0%
			% within Occupation	27.5%	33.0%	37.4%	13.3%	25.0%	33.3%		33.9%
			% of Total	2.3%	12.3%	18.2%	.3%	.3%	.5%		33.9%
Total			Count	51	227	297	15	8	9	4	611
			% within Health Education might apply: Road Safety-Health Education	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%
			% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			% of Total	8.3%	37.2%	48.6%	2.5%	1.3%	1.5%	.7%	100.0%

Table 9.17: Cross-tabulation between 'Do you think that religion would impede the implementation of CHCN in the UAE' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that religion would impede the implementation of CHCN in the UAE?	Yes		Count	157	163	215	535
			% within Do you think that religion would impede the implementation of CHCN in the UAE?	29.3%	30.5%	40.2%	100.0%
			% within nationality	85.3%	82.3%	89.2%	85.9%
			% of Total	25.2%	26.2%	34.5%	85.9%
	No		Count	27	35	26	88
			% within Do you think that religion would impede the implementation of CHCN in the UAE?	30.7%	39.8%	29.5%	100.0%
			% within nationality	14.7%	17.7%	10.8%	14.1%
			% of Total	4.3%	5.6%	4.2%	14.1%
Total			Count	184	198	241	623
			% within Do you think that religion would impede the implementation of CHCN in the UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

289

Table 9.18: Cross-tabulation between 'Do you think that lack of trust in CHC nurses' skills would impede the implementation of CHCN in the UAE' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that a lack of trust in CHC Nurses skills would impede the implementation of CHCN in the UAE?	Yes		Count	114	145	203	462
			% within Do you think that lack of trust in CHC Nurses skills would impede the implementation of CHCN in the UAE?	24.7%	31.4%	43.9%	100.0%
			% within nationality	62.0%	73.2%	84.2%	74.2%
			% of Total	18.3%	23.3%	32.6%	74.2%
	No		Count	70	53	38	161
			% within Do you think that lack of trust in CHC Nurses skills would impede the implementation of CHCN in the UAE?	43.5%	32.9%	23.6%	100.0%
			% within nationality	38.0%	26.8%	15.8%	25.8%
			% of Total	11.2%	8.5%	6.1%	25.8%
Total			Count	184	198	241	623
			% within Do you think that lack of trust in CHC Nurses skills would impede the implementation of CHCN in the UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.19: Cross-tabulation between 'Do you think that language would impede the implementation of CHCN in the UAE' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that language would impede the implementation of CHCN in the UAE?	Yes		Count	114	122	163	399
			% within Do you think that language would impede the implementation of CHCN in the UAE?	28.6%	30.6%	40.9%	100.0%
			% within nationality	62.0%	61.6%	67.6%	64.0%
			% of Total	18.3%	19.6%	26.2%	64.0%
	No		Count	70	76	78	224
			% within Do you think that language would impede the implementation of CHCN in the UAE?	31.3%	33.9%	34.8%	100.0%
			% within nationality	38.0%	38.4%	32.4%	36.0%
			% of Total	11.2%	12.2%	12.5%	36.0%
Total			Count	184	198	241	623
			% within Do you think that language would impede the implementation of CHCN in the UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.20: Cross-tabulation between 'Do you think that inadequate understanding of the service would impede the implementation of CHCN in UAE' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that inadequate understanding of the services would impede the implementation of CHCN in The UAE?	Yes		Count	97	117	159	373
			% within Do you think that inadequate understanding of the services would impede the implementation of CHCN in the UAE?	26.0%	31.4%	42.6%	100.0%
			% within nationality	52.7%	59.1%	66.0%	59.9%
			% of Total	15.6%	18.8%	25.5%	59.9%
	No		Count	87	81	82	250
			% within Do you think that inadequate understanding of the services would impede the implementation of CHCN in the UAE?	34.8%	32.4%	32.8%	100.0%
			% within nationality	47.3%	40.9%	34.0%	40.1%
			% of Total	14.0%	13.0%	13.2%	40.1%
Total			Count	184	198	241	623
			% within Do you think that inadequate understanding of the services would impede the implementation of CHCN in the UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.21: Cross-tabulation between 'Do you think that demographic instability would impede the implementation of CHCN in the UAE?' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that demographic instability would impede the implementation of CHCN in UAE?	Yes		Count	170	175	216	561
			% within Do you think that demographic instability would impede the implementation of CHCN in UAE?	30.3%	31.2%	38.5%	100.0%
			% within nationality	92.4%	88.4%	89.6%	90.0%
			% of Total	27.3%	28.1%	34.7%	90.0%
	No		Count	14	23	25	62
			% within Do you think that demographic instability would impede the implementation of CHCN in UAE?	22.6%	37.1%	40.3%	100.0%
			% within nationality	7.6%	11.6%	10.4%	10.0%
			% of Total	2.2%	3.7%	4.0%	10.0%
Total			Count	184	198	241	623
			% within Do you think that demographic instability would impede the implementation of CHCN in UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.22: Cross-tabulation between 'Do you think that violation of home privacy would impede the implementation of CHCN in the UAE?' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Do you think that violation home privacy would impede the implementation of CHCN in the UAE?	Yes		Count	142	162	211	515
			% within Do you think that violation of home privacy would impede the implementation of CHCN in the UAE?	27.6%	31.5%	41.0%	100.0%
			% within nationality	77.2%	81.8%	87.6%	82.7%
			% of Total	22.8%	26.0%	33.9%	82.7%
	No		Count	42	36	30	108
			% within Do you think that violation of home privacy would impede the implementation of CHCN in the UAE?	38.9%	33.3%	27.8%	100.0%
			% within nationality	22.8%	18.2%	12.4%	17.3%
			% of Total	6.7%	5.8%	4.8%	17.3%
Total			Count	184	198	241	623
			% within Do you think that violation of home privacy would impede the implementation of CHCN in the UAE?	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.23: Cross-tabulation between accessibility of CHCN services and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Accessibility of CHCN services	Yes		Count	85	120	173	378
			% within Accessibility of CHCN services	22.5%	31.7%	45.8%	100.0%
			% within nationality	46.2%	60.6%	71.8%	60.7%
			% of Total	13.6%	19.3%	27.8%	60.7%
	No		Count	99	78	68	245
			% within Accessibility of CHCN services	40.4%	31.8%	27.8%	100.0%
			% within nationality	53.8%	39.4%	28.2%	39.3%
			% of Total	15.9%	12.5%	10.9%	39.3%
Total			Count	184	198	241	623
			% within Accessibility of CHCN services	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.24: Cross-tabulation between 'help early detection of some diseases' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Help early detection of some diseases	Yes		Count	93	113	121	327
			% within Help early detection of some diseases	28.4%	34.6%	37.0%	100.0%
			% within nationality	50.5%	57.1%	50.2%	52.5%
			% of Total	14.9%	18.1%	19.4%	52.5%
	No		Count	91	85	120	296
			% within Help early detection of some diseases	30.7%	28.7%	40.5%	100.0%
			% within nationality	49.5%	42.9%	49.8%	47.5%
			% of Total	14.6%	13.6%	19.3%	47.5%
Total			Count	184	198	241	623
			% within Help early detection of some diseases	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.25: Cross-tabulation between 'individuality of health care' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Individuality of health care	Yes		Count	112	140	185	437
			% within Individuality of health care	25.6%	32.0%	42.3%	100.0%
			% within nationality	60.9%	70.7%	76.8%	70.1%
			% of Total	18.0%	22.5%	29.7%	70.1%
	No		Count	72	58	56	186
			% within Individuality of health care	38.7%	31.2%	30.1%	100.0%
			% within nationality	39.1%	29.3%	23.2%	29.9%
			% of Total	11.6%	9.3%	9.0%	29.9%
Total			Count	184	198	241	623
			% within Individuality of health care	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.26: Cross-tabulation between 'reduces congestion in the hospitals' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Reduce congestion in the hospitals	Yes		Count	98	112	158	368
			% within Reduce congestion in the hospitals	26.6%	30.4%	42.9%	100.0%
			% within nationality	53.3%	56.6%	65.6%	59.1%
			% of Total	15.7%	18.0%	25.4%	59.1%
	No		Count	86	86	83	255
			% within Reduce congestion in the hospitals	33.7%	33.7%	32.5%	100.0%
			% within nationality	46.7%	43.4%	34.4%	40.9%
			% of Total	13.8%	13.8%	13.3%	40.9%
Total			Count	184	198	241	623
			% within Reduce congestion in the hospitals	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.27: Cross-tabulation between 'spares patients the trouble of waiting in the clinics' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Spare patients in the trouble of waiting in the clinics	Yes		Count	91	113	140	344
			% within Spare patients in the trouble of waiting in the clinics	26.5%	32.8%	40.7%	100.0%
			% within nationality	49.5%	57.1%	58.1%	55.2%
			% of Total	14.6%	18.1%	22.5%	55.2%
	No		Count	93	85	101	279
			% within Spare patients in the trouble of waiting in the clinics	33.3%	30.5%	36.2%	100.0%
			% within nationality	50.5%	42.9%	41.9%	44.8%
			% of Total	14.9%	13.6%	16.2%	44.8%
Total			Count	184	198	241	623
			% within Spare patients in the trouble of waiting in the clinics	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.28: Cross-tabulation between 'solve transport-related problem' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
Solve transport-related problem	Yes		Count	133	155	189	477
			% within Solve transport-related problem	27.9%	32.5%	39.6%	100.0%
			% within nationality	72.3%	78.3%	78.4%	76.6%
			% of Total	21.3%	24.9%	30.3%	76.6%
	No		Count	51	43	52	146
			% within Solve transport-related problem	34.9%	29.5%	35.6%	100.0%
			% within nationality	27.7%	21.7%	21.6%	23.4%
			% of Total	8.2%	6.9%	8.3%	23.4%
Total			Count	184	198	241	623
			% within Solve transport-related problem	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.29: Cross-tabulation between 'a new modality of nursing services that help promote health education' and nationality.

				nationality			Total
				UAE	Arab	Non-Arab	
A new modality of nursing services	Yes		Count	105	111	176	392
			% within A new modality of nursing services	26.8%	28.3%	44.9%	100.0%
			% within nationality	57.1%	56.1%	73.0%	62.9%
			% of Total	16.9%	17.8%	28.3%	62.9%
	No		Count	79	87	65	231
			% within A new modality of nursing services	34.2%	37.7%	28.1%	100.0%
			% within nationality	42.9%	43.9%	27.0%	37.1%
			% of Total	12.7%	14.0%	10.4%	37.1%
Total			Count	184	198	241	623
			% within A new modality of nursing services	29.5%	31.8%	38.7%	100.0%
			% within nationality	100.0%	100.0%	100.0%	100.0%
			% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.30: Cross-tabulation between 'eliminates risks associated with lack of medical follow-up' and nationality.

			nationality			Total
			UAE	Arab	Non-Arab	
Eliminate risks associated with lack of medical follow up	Yes	Count	109	126	171	406
		% within Eliminate risks associated with lack of medical follow-up	26.8%	31.0%	42.1%	100.0%
		% within nationality	59.2%	63.6%	71.0%	65.2%
		% of Total	17.5%	20.2%	27.4%	65.2%
	No	Count	75	72	70	217
		% within Eliminate risks associated with lack of medical follow-up	34.6%	33.2%	32.3%	100.0%
		% within nationality	40.8%	36.4%	29.0%	34.8%
		% of Total	12.0%	11.6%	11.2%	34.8%
Total		Count	184	198	241	623
		% within Eliminate risks associated with lack of medical follow-up	29.5%	31.8%	38.7%	100.0%
		% within nationality	100.0%	100.0%	100.0%	100.0%
		% of Total	29.5%	31.8%	38.7%	100.0%

Table 9.31: Cross-tabulation between 'If you have received treatment at a hospital and required follow-up nursing care for at least one week, which of the following options do you think would be more convenient?' and marital status.

			Marital Status			Total
			Married	Single	Divorced/widow	
If you have received treatment in a hospital and required follow-up nursing care for at least one week which of the following choices do you think more convenient	Staying in the Hospital & continuing to receive NC	Count	157	22	15	194
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more convenient?	80.9%	11.3%	7.7%	100.0%
		% within Marital Status	34.4%	31.9%	53.6%	35.0%
		% of Total	28.3%	4.0%	2.7%	35.0%
	Discharged Home with regular follow up at the hospital	Count	119	16	5	140
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more convenient?	85.0%	11.4%	3.6%	100.0%
		% within Marital Status	26.0%	23.2%	17.9%	25.3%
		% of Total	21.5%	2.9%	.9%	25.3%
	Discharged Home with regular follow up at the PHC Clinic	Count	76	11	1	88
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more convenient?	86.4%	12.5%	1.1%	100.0%
		% within Marital Status	16.6%	15.9%	3.6%	15.9%
		% of Total	13.7%	2.0%	.2%	15.9%
	Discharged Home with regular nursing care provided at home	Count	105	20	7	132
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more convenient?	79.5%	15.2%	5.3%	100.0%
		% within Marital Status	23.0%	29.0%	25.0%	23.8%
		% of Total	19.0%	3.6%	1.3%	23.8%
Total		Count	457	69	28	554
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more convenient?	82.5%	12.5%	5.1%	100.0%
		% within Marital Status	100.0%	100.0%	100.0%	100.0%
		% of Total	82.5%	12.5%	5.1%	100.0%

297

Table 9.32: Cross-tabulation between 'If you have received treatment at a hospital and required follow-up nursing care for at least one week, which of the following options do you think would be more convenient?' and education level.

			Education					Total
			Illiterate	Primary	Preparatory	Secondary	Diploma/ University	
If you have received treatment in a hospital and required follow-up nursing care for at least one week which of the following choices do you think more convenient	Staying in the Hospital & continuing to receive NC	Count	32	23	32	48	59	194
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more	16.5%	11.9%	16.5%	24.7%	30.4%	100.0%
		% within Education	50.0%	41.8%	49.2%	39.0%	23.9%	35.0%
		% of Total	5.8%	4.2%	5.8%	8.7%	10.6%	35.0%
	Discharged Home with regular follow up at the hospital	Count	10	14	18	35	63	140
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more	7.1%	10.0%	12.9%	25.0%	45.0%	100.0%
		% within Education	15.6%	25.5%	27.7%	28.5%	25.5%	25.3%
		% of Total	1.8%	2.5%	3.2%	6.3%	11.4%	25.3%
	Discharged Home with regular follow up at the PHC Clinic	Count	7	9	8	18	46	88
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more	8.0%	10.2%	9.1%	20.5%	52.3%	100.0%
		% within Education	10.9%	16.4%	12.3%	14.6%	18.6%	15.9%
		% of Total	1.3%	1.6%	1.4%	3.2%	8.3%	15.9%
	Discharged Home with regular nursing care provided at home	Count	15	9	7	22	79	132
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more	11.4%	6.8%	5.3%	16.7%	59.8%	100.0%
		% within Education	23.4%	16.4%	10.8%	17.9%	32.0%	23.8%
		% of Total	2.7%	1.6%	1.3%	4.0%	14.3%	23.8%
Total		Count	64	55	65	123	247	554
		% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do you think more	11.6%	9.9%	11.7%	22.2%	44.6%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.6%	9.9%	11.7%	22.2%	44.6%	100.0%

Table 9.33: Do you think that follow-up of chronically ill patients can be better provided through PHC-based CHCN at home?

Response	Frequency	Valid Percent
Yes	221	35.5
No	401	64.5
Total	622	100.0
System Missing	1	–
Total	623	–

Table 9.34: Gender * If you have received treatment in a hospital and required follow up nursing care for at least one week, which of the following choices do you think more convenient Cross-tabulation?

Gender		If you have received treatment in a hospital and required follow up nursing care for at least one week, which of the following choices do you think more convenient?				
		Staying in the Hospital & continue receiving NC	Discharged Home with regular follow up at the hospital	Discharge Home with regular follow up at the PHC Clinic	Discharged Home with regular nursing care provided at home	Total
Male	Count	164	116	67	87	434
	% Gender	37.8%	26.7%	15.4%	20.0%	100.0%
	% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do u thing more convenient	84.5%	82.9%	76.1%	65.9%	78.3%
	% of Total	29.6%	20.9%	12.1%	15.7%	78.3%
Female	Count	30	24	21	45	120
	% Gender	25.0%	20.0%	17.5%	37.5%	100.0%
	% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do u thing more convenient	15.5%	17.1%	23.9%	34.1%	21.7%
	% of Total	5.4%	4.3%	3.8%	8.1%	21.7%
Total	Count	194	140	88	132	554
	% Gender	35.0%	25.3%	15.9%	23.8%	100.0%
	% within If you have received treatment in a hospital and required follow up nursing care for at least one week which of the following choices do u thing more convenient	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	35.0%	25.3%	15.9%	23.8%	100.0%

Appendix 10

List of participants in the four focus group discussions

Male groups:

Group A	Profession	Age	Nationality
A.1	Businessman	46	UAE
A.2	Teacher	52	Indian
A.3	Engineer	26	Indian
A.4	Marketing executive	41	Pakistani
A.5	Army officer	40	UAE
A.6	Solar Energy technician	38	Iraqi
A.7	Professor	40	UAE
A.8	Bank manager	50	Palestinian
A.9	Police officer	36	UAE
Group B	**Profession**	**Age**	**Nationality**
B.10	Consultant	56	Egyptian
B.11	Shariia Court	40	Syrian
B.12	Professor	40	UAE
B.13	Insurance company	45	Jordanian
B.14	Engineer	44	UAE
B.15	Administrator	51	Sudanese
B.16	Lawyer	38	UAE
B.17	Computer Technician	35	UAE

301

Female groups

Group C	Profession	Age	Nationality
C.18	Housewife	65	UAE
C.19	Housewife	50	UAE
C.20	Teacher	30	Egyptian
C.21	Secretary	28	Pakistani
C.22	Banker	38	Egyptian
C.23	Teacher	45	Omani
Group D	Profession	Age	Nationality
D.24	University student	22	Indian
D.25	Laboratory Technician	25	Omani
D.26	Administrator	35	Lebanese
D.27	Housewife	45	Bengali
D.28	College student	25	UAE
D.29	Accountant	36	Saudi

Group A, Group B being the male groups
Group C, Group D being the female groups
Group members will be referred to according to the key. (I.e. D.26 being administrator, 35 years old and Lebanese).

Appendix 11

List of participants in the staff interviews

Code	Job Title	Age	Nationality	Place of Work
S1	Consultant-Surgeon	52	Jordanian	Tawam Hospital
S2	Consultant-Internal Medicine	46	Indian	Al Ain Hospital
S3	GP	43	Egyptian	PHC
S4	Nurse	33	UAE	PHC
S5	Administrator	32	UAE	PHC
S6	CHC Nurse	30	South African	Tawam Hospital