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**The Health Education Needs of the Patient and Family
upon discharge
after a Myocardial Infarction**

**A DISSERTATION SUBMITTED TO THE
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**AS A PARTIAL REQUIREMENT FOR THE
DEGREE
OF
Master in Nursing (Critical Care and Trauma Nursing)**

**BY
SAWSAN GIRGUS RIZKALLAH**

SUPERVISOR: PROF. L R UYS

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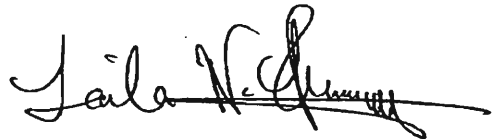
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This is to certify that this document has been edited and is deemed to be complete.

Revised by



**HELEN MICHAEL
MASTER OF EDUCATION
SENIOR ENGLISH TEACHER**



**LAILA WHITMAN RUMSEY (MED)
DIRECTOR, ENGLISH LANGUAGE
DEPT (I.O.N)**

DEDICATION

I dedicate this thesis to my family who have given me maximum support and encouraged me. I would also like to dedicate this thesis in honor of my late mother who gave me unlimited inspiration and confidence to complete this research successfully. Her and my father's spirit embedded in my heart.

ACKNOWLEDGEMENTS

I would like to express my gratitude to all who have helped me during the research and writing of this dissertation.

First and foremost, sincere thanks are due to Prof. Leana Uys, for her continuous advice throughout the preparation and writing of this dissertation and for her assistance and guidance in administering the research techniques.

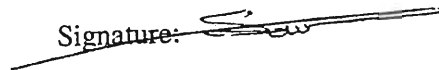
The author would also like to thank the Director, the Institute Of Nursing Abu Dhabi, Najah Mostafa, for her support and work time arrangements to facilitate this study.

Moreover, I would like to thank my husband for the unconditional support he offered and for giving me the courage and the awareness that high targets can be achieved.

DECLARATION

Except for referenced citations in text, this is the
researcher's original work.

Signature:



Sawsan Gergus Rizkallah.

Date:

January/ 2002

ABSTRACT

A knowledgeable person can deal with problems in a confident and flexible manner. This statement is certainly applicable in the area of health where an adequate knowledge helps clients to avoid complications.

This study was conducted to explore the perceptions of ischemic heart disease patients and their families regarding the content and format of health education they need, before discharge from the hospital.

A non-experimental survey study was conducted in the coronary care unit (ccu) of three governmental hospitals in Abu Dhabi, United Arab Emirates (UAE). A convenient sample of one hundred and twelve (112) participants consisting of eighty (80) patients and thirty two (32) relatives, were selected over a three month period.

A self-report approach was used to collect data and a questionnaire in the form of five point Likert scale, was developed with appropriate content matching the study purpose. Reliability was tested by test- retest for nine (9) patients not participating in the sample. A panel of experts tested its validity. The confidentiality of the participants was carefully considered.

The study has revealed that patients and their families indicate a strong need for health education. Most of the sample prefers health education during the hospital stay by the doctor, although nurses and different health service members were also seen as being important. The respondents perceived the health education function as increasing their confidence in dealing with the disease, while reducing their readmission and anxiety. They preferred a member

of the family to attend the session. They wanted comprehensive health education addressing a wide range of topics.

Since the study result agreed with other previous research results, it confirmed that people's perceptions about the need for information is similar in the UAE and everywhere else in the world.

TABLE OF CONTENTS

DEDICATION	.....	3
ACKNOWLEDGMENT	.....	4
DECLARATION	.....	5
ABSTRACT	.....	6
LIST OF APPENDICES	.....	9
LIST OF TABLES	.....	10
LIST OF FIGURES	.....	11
CHAPTER 1		
INTRODUCTION		
1.1	Background to the Study	12
1.2	Problem Statement	14
1.3	Purpose of the Study.....	15
1.4	Objectives of the Study	16
1.5	The Research Questions	16
1.6	Terminology.....	16
1.7	Significance of the Study.....	17
1.8	Conclusion	18
CHAPTER 2		
LITERATURE REVIEW		
2.1	Introduction.....	19
2.2	Content of Health Education.....	19
2.3	The Timing of Health Education.....	23
2.4	The Health Worker Responsible for Health Education.....	24
2.5	Function of Health Education.....	28
2.6	Target of Health Education.....	31
2.7	The Method of Health Education.....	33
2.8	Data Collection in Previous Studies.....	36
2.9	Conclusion.....	38
CHAPTER 3		
RESEARCH METHODOLOGY		
3.1	Introduction.....	39
3.2	Study Design.....	39
3.3	Population and Sampling.....	40
3.4	Data Collection	42
3.4.1	The Instrument	42
3.4.2	Reliability and Validity.....	43
3.4.3	Data Collection Procedure.....	44
3.5	Ethical Considerations.....	45
3.6	Statistical Analysis	46
3.7	Conclusion.....	46

CHAPTER 4

RESULTS AND ANALYSIS OF DATA

4.1	Introduction.....	47
4.2	Sample Description.....	47
4.3	Health Education Needs.....	54
4.3.1	The Content Needed.....	54
4.3.2	The Timing of the Health Education.....	56
4.3.3	The Health Worker Responsible for Health Education.....	56
4.3.4	Function of Health Education.....	57
4.3.5	Target of Health Education.....	57
4.3.6	The Method of Health Education.....	58
4.4	Comparing the Responses.....	59
4.5	Conclusion.....	63

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1	Introduction.....	64
5.2	Discussion.....	64
5.3	Proposed Discharge Plan.....	67
5.4	Recommendations.....	68
5.4.1	Implications for Service.....	68
5.4.2	Implications for Further Research.....	69
5.5	Limitation.....	69
5.6	Conclusion.....	70

REFERENCES

.....	71
-------	----

APPENDICES

.....	77
-------	----

LIST OF APPENDICES

Appendix 1	English letter and questionnaire.....	78
Appendix 2	Arabic letter and questionnaire.....	84
Appendix 3	Urdu letter and questionnaire.....	89
Appendix 4	Natal research ethics committee.....	94
Appendix 5	Institutional permission.....	95
Appendix 6	Health education policy.....	96
Appendix 7	Discharge teaching standards.....	98
Appendix 8	Health education material.....	100

LIST OF TABLES

Table 1	Number of patients discharged and/or transferred.	41
Table 2	Content validity of instrument.	44
Table 3	Comparison of two groups with regard to demographics.	52
Table 4	Average score of items about the content of the health education.	53
Table 5	Average score of items about the format of health education.	55
Table 6	Comparison between patient and relative responses about health education content.	60
Table 7	Comparison between patients and relatives responses about health education format.	62

LIST OF FIGURES

Figure 4.1	Gender distribution of respondents.....	48
Figure 4.2	Respondents' marital status.....	49
Figure 4.3	Hospitalization profile of respondents.....	49
Figure 4.4	Language of respondents.....	50
Figure 4.5	Number of Arab participants.....	51
Figure 4.6	Number of participants from UAE, Arab and non-Arab countries....	51
Figure 4.7	Number of respondents who strongly agreed with regard to health education content.....	54
Figure 4.8	Number of respondents who strongly agreed to different times for health education.....	56
Figure 4.9	Number of respondents who strongly agreed to different teachers.....	57
Figure 4.10	Number of respondents who strongly agreed with different methods of health education.....	58

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

It has been found and proved that most of the patients with myocardial infarctions (MI) do not return to work after discharge, because of cardiac factors such as cardiac damage and non cardiac factors such as lack of information (Hanisch, 1993). The discharge of patients following a period of hospitalization with none or inadequate knowledge of how to resume a normal life, is a problem for the patient and the health services (Mills & Sullivan, 1999).

Health education for the patient and his family during the period of hospitalization and on discharge will help them understand what the nature of the disorder is. It helps in understanding the changes as the result of the treatment, the objectives and improvement to be achieved in the next stage of care, and after discharge what activities are to be avoided and what to be encouraged in all areas of life (Mills and Sullivan, 1999 and Linne, Liedholm and Jacobsson, 2001).

The main function of information and education for patients and families is to reduce anxiety, improve compliance, and promote satisfactory performance of self-care and participation in the treatment as instructed and generating a feeling of safety and security (Taylor, Goodman & Luesley, 1993 and Department of Health, as cited in Mills & Sullivan, 1999).

This understanding enables the patient and his family to actively participate in the patient's care and thus avoid complications and alleviate stress resulting from the inadequate medical knowledge or appropriate intervention during emergency. It increases compliance to medication and medical advice, reduces hospital readmission, reduces the rate of long term service uses eg. operations, investigations, and advanced sophisticated machines (Clay, Wyatt & Norris, 1996 and Naylor, Brooten, Campbell, Jacobsen, Mezey, Pauly & Schwartz, 1999).

Discharge planning makes all of these benefits possible because it primarily ensures that patients who need further care have a program to be followed (Hanisch, 1993 and Kersten & Hackenitz, 1991). The process of preparing the patient to leave a health care agency and maintaining continuity of care should start on admission with an initial patient assessment and should continue during the hospital stay with ongoing multidisciplinary team assessment (Taylor, Lillis & Lemone, 1997; Closs, Tierney, 1993 and Arenth & Mamon 1985 and Summerton, 1998).

Although it was acknowledged that discharge planning is multidisciplinary in nature, nurses play a pivotal role because of their close proximity to patients in providing twenty- four hour care. The coordination of the care is usually the nurse's responsibility: she should ensure the family members are taught the necessary knowledge (Taylor, Lillis & Lemone, 1997).

Health education should be carried out with consideration of each patient's needs when moving to a different care setting, information about medication, diet, procedures, treatment, health promotion and activities should be provided. Referrals may be included in the teaching plan for discharge. It is also

concerned with the psychological needs and welfare of the family. According to Arenth & Mamon (1985), hospital staffs do not have time to provide patients with the information they require. The deficit of patient information is also related to the patient's poor ability to retain the information given. This demonstrates the need of the presence of a family member during the health education process.

The common methods of health education are audiovisual, verbal and written. Each type has advantages as well as disadvantages (Mills and Sullivan, 1999).

1.2 PROBLEM STATEMENT

Chronic diseases account for a large portion of the deaths in the United Arab Emirates. In the year 2000, 28% were attributed to cardiac illness, specifically myocardial infarction (Annual Report, 2000).

According to the observations of the researcher the area of patient health education in United Arab Emirates (UAE) governmental hospitals might be neglected. There is no formal form of discharge plan in any of the hospital departments. It would seem that a lack of adequate discharge planning for such patients might seriously affect their quality of life and prognosis upon discharge (Closs & Tierney, 1993; David & Rexroth as cited in O'Halloran, 1997; Coulton as cited in Armitage & Kavanagh, 1998 and Wilson & Fordham as cited in Mills & Sullivan, 1999).

It is therefore important to explore the perception of patients and their families with regard to health education, in order to address any unfilled needs.

In her practice the researcher has found that many of the ischemic heart disease (IHD) patients are discharged and readmitted in a worse condition. When interviewed, they mention that their condition deteriorated shortly after their discharge. They complained that they did not know whom to contact or when, and that the regimen of their medication was not clear simply because the pharmacist had not properly explained to them how to take the medication. Some of them just blindly took the tablets without knowing its name, action, side effects or exact dose. Some of them tried to stay longer in the hospital because of their fear of the problem that might crop up after their discharge.

The trend towards shorter hospital stays after MI has increased the requirement for information to manage the immediate post discharge period safely and to make informed decisions about potential life style changes.

It is, therefore deemed important to the researcher to explore health education needs of patients and their families before a discharge planning program can be developed.

1.3 PURPOSE OF THE STUDY

The purpose of the study is to explore the perception of myocardial infarction (MI) patients and families about their health education needs upon discharge from the critical care unit (CCU). This will be done in order to develop a comprehensive health education plan for such patients, which involves their families as well.

1.4 OBJECTIVES OF THE STUDY

The objectives guiding the study were to:

- 1- Determine the patient and his/her family's perception about the health education needs, who should deliver the information, how and when it should be delivered.
- 2- Develop guidelines for a standardized discharge plan with items of education derived from the patients' and families' perceptions.

1.5 THE RESEARCH QUESTIONS

- 1- What are the perceptions of MI patients in CCU about their educational needs and that of their families?
- 2- What are the perceptions of the families of MI patients in CCU about their educational needs and that of the patient?
- 3 - How can these needs be addressed comprehensively in a standard discharge plan ?

1.6 TERMINOLOGY:

Family: Family is not an easy term to define as its constituents change with social trends, but for the purpose of my study we can consider persons whose social homeostasis is altered by the patient's entrance to the area of critical illness or injury and who are a significant part of the patients' lifestyle (Hudak, 1994).

Health education: This is a program to provide a knowledge base or skills needed to meet specific health care needs which stimulates to effect a change in patient's behavior (Zernike and Henderson, 1998).

Knowledge: Knowledge includes the facts that people have about their diagnosis, treatment and rehabilitation (Zernike and Henderson, 1998).

Perception: This is the personal view people hold on a subject, whether correct or incorrect (Kozier et al, 1993).

Comprehensive: This incorporates all aspects of the perceptions of the patients and their families.

Myocardial infarction: (MI): A person with this diagnosis made by medical practitioner as primary diagnosis.

Acute myocardial infarction (AMI): The acute period of this illness.

Critical Care Units (CCU): A unit designated as a specialized care unit for intensive care.

1.7 SIGNIFICANCE OF THE STUDY

Discharge planning is a process of assessing a hospital patient's need for care or other services once he or she is discharged. It involves coordinating resources and assessing patients and families in meeting their post- hospital health care needs. The world trend toward shorter hospital stays and early discharge, have made comprehensive discharge planning services a necessity.

Patient education is accepted as an important part of health care and is an established nursing activity, Taylor, Lillis and Lemone (2001) "US courts affirm the patient's right to know and view patient education as the legal duty of the nurse" (p.107). Learning outcomes in terms of knowledge, attitude skills

and behavior changes are very important areas for the MI patients, since their condition is a chronic one and should influence their lifestyle, reduce the period of hospitalization and ensure that the patient is compliant with the plan.

Learning outcomes should also improve quality of service to patients and meet his/her individual needs and improve patient's well being during rehabilitation and increase the quality of life.

1.8 CONCLUSION

It would seem that the UAE cardiac patient and relatives may need a discharge plan that would enable the patient to resume his/her normal life again through the increased awareness' provided by the health service team. Before the researcher deals with the body of the research, she would first present some of the key elements found in literature with regard to the main focus of this research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

As discharge planning is essentially a health education process, educational needs should be assessed for individual patients. Literature was reviewed concerning patient and family perceptions about the content of the information, the appropriate time, the right person to deliver the information, the function of the education, the important person to attend, and how the information should be delivered.

2.2 CONTENT OF HEALTH EDUCATION

In an unmentioned country, a study of cardiac patients who had been discharged from institutions that did not have an organized cardiac rehabilitation program was conducted almost twenty years ago. In North America a sample of 17 patients believed that all educational topics of organized cardiac rehabilitation programs were important. These topics included diet, medication, risk factors, activity limitations, sexual activity, pulse-taking, CCU admission policies and procedures, and emotional response (Moynihan, 1984).

Meanwhile a group of studies found that patients wanted specific information about their condition after an individual educational needs assessment, according to Hinds, Streater and Mood (1995) and Dodge (1972). Brandt, Griffiths & Leek (as cited in Mills, 1999) specified that the majority of patients want all information, both good and bad, relating to their condition.

A later study (Casy, O'Connell & Price, 1984) was conducted to compare the opinions of physicians, ICU nurses, and patients who were four to seven days post-MI. Results indicated that the three groups generally agreed about the type of information that should be included in education programs for such patients. The topics that all three groups rated as most important were: knowing how to modify or change personal risk factors, knowing the names, dosages, side effects of medications and knowing personal risk factors which agree with Moynihan's study. Patients, in both the acute and convalescent phases, rated both risk factors and medication information as very important needs (Gerard & Peterson, 1984 and Erwin, 1999).

Another study of patient perception of educational health needs after discharge from the oncology center showed that there are specific educational needs according to the patient's diagnosis. Arenth and Mamon (1985), in structured interviews three days after discharge, revealed that the most common needs mentioned, with different percentages from each patient, are the activities of daily living and eating, which concur with other studies. The bed/chair transferring, personal hygiene, dressing and bathing are specified needs for cancer patients. Another study (Coombs, 1987) was conducted to identify informational needs of first-time coronary artery bypass graft (CABG) patients. The result showed that the highest ranking information needs was knowledge about atherosclerosis, risk factors, mental preparation, emotional reaction to surgery, and allowed activities.

Millar (1989) reviewed the literature and realized that few studies have attempted to analyze the needs of the family when a relative is critically ill in an ICU, yet the family may play a critical role in patient care and affect his or

her emotional status. A study was conducted trying to answer the following three questions a) what are the needs of the family? b) Are these needs being met? c) by whom? A list of common needs was identified: to reduce anxiety, a need for information, to be near the patient, for support, to be helpful. It was also found that the family would be willing to learn how to help, and they also want to know whom and when to ask questions. The information needed showed that there is a need for psychological and administrative support, which is influenced significantly by the nature of the families

In addition to the educational needs mentioned in Coombs' (1987) study, the anatomy and physiology of the heart, coronary artery disease, medical follow-up, return to work and community resources were pinpointed by patients as respondents in studies by Hanisch (1993) and Naylor (1999).

The Department of Health of the United Kingdom (as cited in Mills & Sullivan, 1999) highlighted another side of the information by mentioning that the hospital should offer patients clear and sensitive explanations of what is happening on practical matters such as where to go and who to see, as well as and clinical matters such as nature of the illness and its proposed treatment. Martinali, Bolman, Brug & Borne (2001) added further weight for the coronary artery disease patients' informational needs about their health status, desirable adjustment to their lifestyle, and possible problems that they may experience in coping with their disease. When 13 ventilator dependent patients living at home were asked by Thompson and Richmond, (1990) to describe the ideal discharge instruction, the patients believed that teaching should occur at the bedside, and attention be paid to the practical side by explanation and demonstration of airway and equipment maintenance and use of emergency

care. The implication of this study are that the health care team needs education and reinforcement in the task of providing care and instruction for patients and families. Furthermore, uniform instruction should be made to help reduce the intimidating effect of mechanical ventilation.

Steinke (2000) examined patients' experience with sexual counseling in the acute care setting. Out of 96 post MI patients, only one third reported receiving information while hospitalized about resuming sexual activity. Most patients (71%) believed their sexual concerns should be addressed while they were still hospitalized. They also listed information mentioned in previous studies cited this review, such as stress management, medication, risk factors, nutrition, self care after discharge .

Nurses frequently question whether patients, who have had an MI, are able to absorb, retain, and use the information given to them in the hospital. Duryee (1992) examined the research literature on inpatient education after MI, published between 1975 and 1989 to determine patients' perceptions about the most important information to provide to ensure optimal patient care and to make the most efficient use of time during hospitalization. According to his/her review, patients identified risk factors as their primary concern.

In general, most of the reviewed literature showed that the patient and his family's or staff's perception of educational needs is the information about the nature of his disease, medication, lifestyle modifications, treatment, expected problems diet, resumption of sexual and daily activities, follow up visits and practical skills specified for each condition. Health education, therefore, needs to be comprehensive and address all these topics.

2.3 THE TIMING OF HEALTH EDUCATION

Scalzi (1980) conducted a study consisting of 32 post-MI patients using a control and an experimental group. The experimental group participated in an organized educational program designed to increase knowledge of coronary heart disease and reduce risk factors. The results of this study indicated that the retention of information in the acute phase was minimal for both groups. A specific conclusion of the result, from my point of view, is that it doesn't mean that the patient shouldn't be educated during the acute phase but the need is for repetition of information later. However in another group of patients investigated by Gerard & Peterson (1984), the results suggested that such explanations would be better received during the convalescent phase of illness. Information given early immediately after admission is too difficult to retain, most of the study sample requested more repetition of information, especially given immediately after hospital admission (Bramwell, 1986). The same result was repeated with the study of cardiac patients during the post hospital recovery phase who believed that they were given information too soon after the cardiac event and that educational topics should be reinforced throughout all three phases of cardiac rehabilitation (Liddy and Growley, 1987).

Many studies support the importance of commencing health education for discharged patients from patient admission and continuing and repeating it during the period of hospitalization (Moynihan, 1984; Luker et al 1996, and Summerton, 1998). Here the point is gradual administration of information starting from admission up to discharge rather than repetition only. A similar result was achieved by the two following authors who showed that education is

a systematic process of preparing the patient to leave the health care agency and for maintaining the continuity of care (Bauman, 1991 and Hester, 1996), However some patients prefer to wait until after discharge. (Steinke, 2000).

Millar (1989) highlighted that families in crises often have difficulties in processing and storing information, so it should be repeated frequently during hospitalization and upon discharge. Similarly Steinke (2000), Coombs (1987), and Liddy & Crowley (1987) found that cardiac patients believed that information given soon after admission is probably not retained because they are too anxious and this prevents absorption of the details unless the information is repeated during the hospital stay period.

In summary therefore, the appropriate time to give health education to a patient about his/ her needs has to be determined. Some literature showed that patients should be taught on admission and the education reinforced during the period of hospitalization.

2.4 THE HEALTH WORKER RESPONSIBLE FOR HEALTH EDUCATION

Nurses do not always succeed in this task. According to Arenth & Mamon, (1985) hospital nurses consistently failed to accurately assess the physical, social, emotional and functional needs of patients after discharge, since they do not always recognize the value of discharge planning. Some studies investigated nurses' characteristics that are able to assess the patients and families needs. More empathetic nurses may be better able to assess accurately the needs of family members than less empathetic nurses (Murphy and Price, 1992).

According to Millar (1989) information to be given to the patient can be separated into two obvious types: that given by the doctors, such as prognosis, and that given by nurses who complement the doctor. Other studies mentioned that the most important and most reliable source of information for patient is their doctor (Greenfield, as cited in Martinali et al, 2001 and Delaney, Albert & Meredith, 1994).

Wyness (1990) makes the point that educational material might take the place of a person giving the information. It was found that after discharge, patients may have read the material they received in hospital at home and learned from it.

Discharge planning is ideally a comprehensive multidisciplinary approach that should assess a variety of health related needs and fill the needs by organizing available social support and community resources (Johnson, 1989, Johnson, Hamrin & Larsson 1994, Bilodeau & Degner, 1996 and Wilkinson, 1995). Well coordinated patient and family education can be achieved through collaboration among all health care disciplines.

Interdisciplinary education and discharge plans are useful tools for meeting the overall complex needs of any patient because each discipline brings its unique perspective and expertise to the development of an integrated education plan (Clay et al, 1996). Rehnberg, Absetz, & Aro (2001) used a combination of fixed-choice and open ended questions in order to explore breast biopsy in breast cancer women's experiences about satisfaction with informational amount, quality, timing, and sources. A variety of information and sources were highlighted by doctor, nurse, social worker, peer counselor and rehabilitation counsellor.

The process does not only includes professional assessment of health education needs but also depends on the patients and their families. In a very real way patients and their families are therefore part of the teaching team (Bouman, 1984).

Gloss et al (1999) conducted a study on discharge planning and found that information and advice to patients and carers could be given verbally or in writing. They also found that for effective and efficient discharge planning, good communication between all the relevant health professionals, the patients and their carers were essential.

In a survey done in the USA, fifty six percent (56%) of the nurses in a study sample agreed that they are responsible primarily for discharge planning, and sixty three percent (63%) agreed that social workers are the responsible profession for the discharge plan. Sixty six percent (66%) percent agreed that having a special discharge-planning department would make nurses' work easier (Lowenstein and Hoff, 1994).

According to Hagland (1995) nurses could improve the post discharge care by their good skills of communication and listening to patient's needs because they have a chance to visit the patient in the ward following their discharge from the critical care areas and encourage them to reflect on their experience, Bowling (1992), found that patients considered nurses to be a significant source of information, when they were asked directly by the researcher. But they may not always give them sufficient high priority in mentioning them spontaneously, in response to the questionnaire.

Benner & Wrubel (as cited in Zernike & Henderson, 1998) mentioned that nurses play a pivotal role in identifying factors which inhibit or enhance education as they have regular contact with patients and are, therefore, in the position to assess not only patient education needs but also their readiness to learn.

In a study that addressed the importance of early intervention and management of the patient with coronary artery disease in the community, nurses stated that in cases of early discharge it is essential to provide patient with education regarding prevention, early intervention and management (Arnold, 1998). The research showed that rapid assessment and detection decreased the time from onset of infarction to thrombolytic therapy, while post discharge information ensured that appropriate medical therapy was instituted to reduce mortality and prevent a future cardiac event.

Medical-surgical nurses can play a crucial role in reducing mortality and morbidity associated with AMI through ensuring that patients and their family members know how to recognize the signs and symptoms of a heart attack by increasing patients' awareness and knowledge of them, and promoting immediate action by patients and those around them. All of this is administered through pre- discharge education (Crumlish and Hand, 1999).

In summary, most studies suggest that nurses are the right people for this type of health education. Continuous communication with the patient and their families around the clock gives his/her a chance to utilize every single teaching opportunity based on an early assessment of the patient and his/her family's educational needs, which is reinforced during the hospital stay and later upon discharge. However, a few studies have suggested that doctors are more

knowledgeable and better equipped for offering information. But some doctors and nurses prefer that social workers, who are familiar with all the referral centers in the community, should provide the information, or they could be a part of a multi- profession committee.

In general, few studies have evaluated discharge planning from the perspective of the patient and families. The focus is on the health professional's perceptions.

2.5 FUNCTION OF HEALTH EDUCATION

Good discharge planning can provide patients and carers with the knowledge, understanding and support to prevent or minimize further episodes of ill health (Department of Health of the United Kingdom as cited in Summerton, 1998). It also encourages compliance with the treatment and rehabilitation plan. One third of the research sample presented with increased satisfaction and accelerated speed of recovery after discharge planning in a study conducted by Moran, Jarvis, Ewings and Parkin (1999).

It is well recognized that comprehensive discharge planning and appropriate after care services can reduce future length of stay, decrease hospital re-admissions, reduce overall cost and improve the long term health status of the patient. This area of study was researched by Naylor et al (1999). Clay (1996) and Lowenstein & Hoff (1994) reached the similar conclusion that discharge planning will minimize cost by moving patients out of the hospital as soon as medically possible and encourage self care and appropriate care by family members. It will also provide information and resources that enable patients to adhere to treatment and increase control of their care.

In contrast, Barlett (as cited in Clay, Wyatt & Norris,1996) concentrated on the ultimate goal of patient education for both the patient and the family, which is enabling them to cope with the patient's health problems at home. The function of education is not only for patients and family, but also for the nurses to facilitate access of information to the critically ill patient (Wilkinson, 1995). Scalzi (1980), however, concentrated only on reducing anxiety as a function of the given information.

Almost the same result was found when the following authors investigated patients' perception about the function of information. Hinds, Streater & Mood (1995) interviewed a convenient sample of 83 patients before and /or after radiotherapy to determine their perceptions about the functions served by the information they received from general hospital staff. Patients indicated that they considered information to serve three main functions: enabling them to actively participate in their treatment, reducing anxiety, and enabling them to prepare for the future (Hinds, 1995).

Another exploratory study was conducted in Australia to develop and evaluate the patients' outcome after discharge planning. A sample of 29 patients was selected from three medical wards in a hospital in Sydney. Semi-structured interviews of participants at home, after discharge from the hospital, were conducted. Their perception of hospital discharge and continuity of care needs were investigated. The study demonstrated that there were deficiencies in the hospital discharge procedures which impacted on continuing care and that patients can contribute useful information for evaluating and improving discharge planning (Armitage, & Kavanagh, 1998).

Moreover, specific empirical results were achieved by the following studies. Six empirical studies evaluated the effects of information on patients undergoing chemotherapy and radiotherapy. The information showed that more self-care behaviors were initiated, anxiety scores were reduced and the patients reported less disruption in their daily activities (Ream & Richardson, 1996). The same results were achieved by Brown (1995) & Karlike (1987).

A retrospective chart review for 2409 persons hospitalized with acute myocardial infarction between October 1992 and July 1993, in 37 hospitals in Minnesota, was done to study the effect of information on the length of delayed hospital presentation in these patients. The conclusion was that the educational interventions that encourage the prompt use of emergency medical transport services, specially for a person with cardiac risk factors is the most successful in reducing the length of delay and improving the outcome of patient with acute myocardial infarction (Gurwitz et al, 1997). A number of problems were reported by the community in respect of continuity of care in the Netherlands (Kerston & Hackenitz, 1991). In that country there are separate organizations for delivering nursing care to a patient in the hospital and to a patient at home. This separation creates extra difficulties in organizing continuous care for patients discharged from hospital and who need nursing after care. They did a study to investigate how to bridge the gap between hospital and home which was conducted using an eight - item Likert scale to measure the extent of continuity problems. The results revealed that special arrangements have to be made to prevent the patient from having serious problems. They recommend that a discharge plan is the best structure to organize patient care between hospital and community.

Furthermore, when Duryee (1992). investigated if the inpatient education increased patient's knowledge, and the effect of the anxiety on the level of learning, and whether inpatient education is able to produce lifestyle changes after discharge, the study showed that patients were able to absorb new information even though anxiety was present, especially regarding activity after discharge. Important education also spurred some lifestyle change after discharge, particularly in the area of activity and smoking cessation.

In a clustering of the literature as cited in Mills & Sullivan(1999) the following functions were listed as having adequate support: gaining control, reducing anxiety, improving compliance, creating realistic expectation, promoting self care, and generating a feeling of safety.

2.6 TARGET OF HEALTH EDUCATION

Bubela (1990), highlighted in an article that the family members should be available as caregivers. Health care providers very often give the family members a realistic image of what to expect since care responsibilities often go on 24 hours a day, 365 days a year. It is important to establish effective communication with patients and families before discharge in order to involve them completely in planning.

Thompson and Richmond (1990), recommended that patient education should be carried out with one or two of the family members present. Chandle (1982) & Breu (as cited in Murphy and Price, 1992) mentioned that when significant others are incorporated into patients care, anxiety is decreased in the critically ill patients.

One of the most significant recent changes in health care is shorter hospitalization of four to five days following coronary artery bypass graft surgery. Preparation of patients and their families for the new style of life after discharge is vital. Incorporating teaching into patients care, and when possible including a family member during instruction to clarify misconceptions and to decrease anxieties about managing patient care at home, is important (Torres, 1998; Department of Health as cited in Summerton, 1998). According to Thompson and Richmond (1990), as discharge preparation begins, health care providers should assess the learning needs of patients and caregivers and include them in setting goals for the instruction.

A few studies (cited in Summerton, 1998) were conducted to explore who the best person might be to attend the health education session with the patient. It is recommended that one member of the patient's family has to attend the health education session to avoid any misunderstanding and to ensure more compliance when the patient tends to forget something.

Although all studies (Closs and Tierney, 1993; Lowenstein & Hoff, 1994; Glass, Grap and Battle, 1999 and Millar, 1989) recommended one family member to attend the health education session, none of them specified which family member should attend. A longitudinal, descriptive study by Beach et al (1992), specified the spouse as an important supportive person. A convenient sample of seventeen spouses was selected from an urban medical center and two private hospitals in the Midwest of America. Data were collected at four intervals: before discharge, and one week, three months and six months after discharge. Wives were seen as valuable resources during the rehabilitation process because they can assist their spouses in physical and emotional

adaptation to the cardiac illness. It was also mentioned that the attitude of other family members may have a profound effect on the patients' reaction to their medical regimen, and their spouses' comfort with sexual activity was shown to be highly correlated with recovery in the patients with AMI.

Therefore, it seems to be generally recommended that attendance of one family member for the health education session will help to memorize the information and avoid misunderstanding.

2.7 THE METHOD OF HEALTH EDUCATION

Literature was reviewed to identify the function of patient information, method of providing information, the nurses' role in giving information and the factors influencing information seeking for patients who have been diagnosed with cancer. The result showed that the information was a very individualized aspect of care, there was no definitive method of providing information that would suit every one, and patients remain dissatisfied with the lack of information (Mills & Sullivan, 1999).

Recommendations for patient discharge education to be effective must be a two-way process: the service must give patients what they want and it must listen and respond to their needs. The three most common methods of patient education are audiovisual, verbal and written, but the written data serve as a permanent record to patients and families to refresh their memory and clarify any misconceptions (Mills and Sullivan, 1999).

The use of clear verbal and written communication regarding discharge arrangements with all the necessary agencies is important. The patients should always be at the center of all discharge planning arrangements (Department of

Health, as cited in Summerton, 1998). Furthermore, teaching should be for no more than 30 minutes at a session, and make use of demonstrations (Thompson and Richmond, 1990). Active participation may enhance the probability that patients' receive and retain the information they need (Martinali, Bolman, & Brug, 2001).

The respondents in Moynihan's (1984) study also indicated that participation in groups with other MI patients would have been helpful to attain educational goals throughout convalescence. A telephone follow-up was considered important in an investigation by Coombs (1987), and home visits were also suggested.

A number of researchers (Closs & Tierney, 1993; Crumlish & Hand, 1999) have reported that teaching is the key to achieving home care success and promoting health. These researchers agreed with Mills (1999) saying that teaching should be individualized to suit each patient and his/her family. Videotapes, booklets, observations and mannequin demonstrations are among the important material available for patient's education. Methods that ensure that the patient's memory can be refreshed, his misconceptions clarified and also experience participation was mentioned as a good method of education (Haynes, Raine, and Rushing, 1990).

Numerous teaching strategies are useful for patients and families and include question and answer sessions, problem-solving scenarios, and discussions. Before the patient is discharged, the family should perform a skills return demonstration, to increase their confidence and to assess their learning (Haynes, Raine, & Rushing, 1990).

Wyness (1990) described how the structured educational program of Warfarin therapy before discharge from hospital increased the patient information and allowed them to understand more about certain factors essential to safe therapy. Satisfaction with the education provided was similar for both groups who attended structured and unstructured educational programmes.

In another study (Zernike & Henderson, 1998) to evaluate the structured patient centered education, forty patients were assessed to determine their knowledge level regarding the management of risk factors related to hypertension. A pre-test was used shortly after admission, two post-tests were performed, one at the time of discharge and the other approximately eight (8) weeks after discharge. It was shown that a structured approach to health education was more effective in improving patient knowledge about their condition than relying on ad hoc information that the patient traditionally receive during their hospitalization.

When other authors investigated which teaching methods are most effective, it was found that the most effective type of teaching methods are the audiovisual methods and one to one patient teaching (Duryee, 1992 and Rehnberg, 2001).

Two further studies showed that discharge teaching is often based on the health professional's perception of what patients need to know and how they can learn it best. Educational methods most preferred by patients were written materials, individual discussions with a health care professional and a video tape reviewed after discharge (Steinke, Patterson & Midgley, 1998 and Glass, Grap, & Battle, 1999).

In summary, the most preferred method of education were written materials, individual discussions with a health care professional, and videotape on sexual concerns to be viewed after discharge.

2.8 DATA COLLECTION IN PREVIOUS STUDIES

Most of the empirical studies reviewed in the literature which deal with patients, families or nurses perceptions use a survey design and a questionnaire (Burdette as cited in Hanisch, 1993 and Duddy & Parahoo, 1992). To evaluate the community coronary specialist nursing service in Northern Ireland, a survey approach used 25 items for a questionnaire which was posted to a random sample of 70 clients from a 211 population. Only 48 of the 70 questionnaires were returned giving a response rate of 68.5%. Lack of time did not allow for reminders to be sent. The study pointed to clients being highly satisfied, but in fact the 31.5% who did not respond may be dissatisfied with the service. The same happened with Kersten & Hackenitz (1991) when they sent questionnaires to all Dutch regional community nursing organizations to analyze the effect of the measures taken by them to bridge the gap of nursing care continuity between hospitals in the Netherlands. The response percentage was 71% which is high since 60% response rate is probably sufficient for most purposes (Polit & Hungler 1999).

To avoid such a problem in this study respondent will be asked to answer the questionnaire one- day before discharge.

Another way used to assure the participants' reply in a study to measure knowledge, three months after the education program about the treatment with USAID, was that the intervention group was given information and the control

group received conventional information. Three months later, knowledge was tested by means of a questionnaire which was given before discharge from the hospital or for an out patient visit (Linne, Liedholm & Jacobsson 2001).

Meanwhile, in another study to evaluate the structured education programme for 23 patients taking warfarin with unstructured program for 10 patients, Wyness (1990) used interviews with a mentioned schedule before and after discharge.

Another form of self reported instrument was used by Armitage (1998) when he investigated the perception of hospital discharge and continuity of care needs by telephone interview with a sample of 29 patients. From my point of view, telephone contact is appropriate because of the small sample in this case, but for a bigger sample it will be a problem.

Some literature showed that authors used the questionnaires of other studies. For example, a questionnaire used in the study of Hanish (1993) was originally developed by Burdette (1988) to measure the extension of congruence when comparing patient and nurse perceptions of ostomy patient's learning needs. It was subsequently modified to change information areas of ostomy and replace it with information items pertaining to cardiac patients. Content validity were tested by cardiac rehabilitation coordinators at the two institutions where the accessible population was obtained.

Very few studies used another instrument of self report, such as Wilkinson (1995), who conducted a qualitative study in United Kingdom to establish the self-perceived needs of family members of patients in a general intensive care unit. Sampling continued until saturation occurred since the researcher used unstructured interviews. Participants were invited to discuss their experience of

visiting a critically ill relative, particularly in relation to the needs of the relative. The unstructured interview is time consuming and needs specific preparation to the participants, in addition to a communication barrier (Polit and Hungler, 1999). From all characteristics mentioned, unstructured interviews are appropriate with qualitative and not quantitative studies. It was cited in the same study (Wilkinson, 1995) that a sample of 199 AMI patients was surveyed to evaluate the efficacy of traditional cardiac rehabilitation programs to meet patients' needs. A questionnaire of 10- point scaled, closed ended items was used. (1= no agreement, 10= strongly agree).

2.9 CONCLUSION

In brief, the literature indicates that there is a need on the part of the patient and their relatives to know how to deal with their illness and rehabilitation after the discharge of the patient. However, the exact nature of the content as well as the format of the patients' health education differed between individuals and groups. Hence, situation-specific needs analyses are indicated. In the following chapter the methodology of the research to do such a needs analysis in the UAE is outlined.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter will provide an account of the research process employed for this study. Included in the chapter is a description of the focus of the study, the research design, participant selection, and the information-gathering process. The chapter will conclude with an examination of the ethical considerations.

3.2 STUDY DESIGN

A non-experimental survey study was conducted at the CCUs of Mafraq, Al-Jazeera and Central governmental hospitals in Abu Dhabi, in the United Arab Emirates.

Since the survey design was characterized by its ability to describe a real life situation, more data was obtained regarding knowledge, perception, attitude, behavior, opinion and values, which was considered appropriate for this study, since it deals with human perception.

Also, there was flexibility in the data collection, since the questionnaire could be distributed and collected by anyone other than the researcher, which enabled the researcher to collect data from more than one hospital.

The research design allowed for broadness of scope, applicability to different populations and it focused on a wide range of topics in order that all the aspects of education could be covered (the 6 aspects mentioned in the

literature review). The collection of data did not interfere with the usual daily routine of the place of data collection (Polit and Hungler, 1996).

3.3 POPULATION AND SAMPLING

A non-random convenient sample was selected from MI or any type of ischemic heart disease patients and their families who were available in the CCU in the aforementioned hospitals during the three months of data collection. All MI or IHD patients discharged from CCU during the three months (June, July, and August 2001) were seen as the population.

To be eligible for the study, the person had to understand, speak, read and write Arabic or English, or both. Although Urdu was initially an exclusion criteria, this was changed after a discussion of the instrument with experts. (see p.44). Age was restricted to between 18 to 80. The respondents had to be fully conscious, and could be male or female.

A member of the family had to be living in the same house with the patient. Only one member of each family was taken according to the following priority list:

1. Spouse
2. Parent
3. Sibling
4. Close friend

The patients in the CCU in Abu Dhabi governmental hospitals were eligible just before discharge. Discharge could mean being transferred to any other medical ward in the same or other hospital or it could mean allowing the

patient to go home. Table 1 summarizes the population from which the sample was drawn.

TABLE 1: Number of patients discharged and/or transferred

Hospital	June	July	August	Total
Aljazeera	10	19	15	--
Central	44	65	45	--
Mafraq	43	41	53	--
Total	97	125	113	335

The population of this study consisted of 335 participants (see table 1). Ideally the larger the sample, the more representative of the population (Polit and Hungler, 1999). A minimum of 20 patients per hospital was seen as desirable to make statistical analysis possible.

Since patients are referred to all of these hospitals from all of the United Arab Emirates, a sample of patients from different emirates was presented, giving a chance to maximize the chance of generalization of the study's result to all the emirates' governmental hospitals.

This study avoided bias to some extent by expanding the period of data collection to three months. Also, using this type of sampling was considered appropriate because of the advantages of convenience and cost.

3.4 DATA COLLECTION

3.4.1 The instrument

A self-report approach was followed to collect the data. The respondents were asked to answer a formal list of questions in the form of a questionnaire.

One questionnaire was developed, which could be applied for the patient or for the family member, and consisted of two sections. The first section was demographic data such as age, sex, employment status, type of the cardiac problem (if patient), type of relation (if member of the family), and educational level.

The second section consisted of questions which addressed the patient or family's perception about different dimensions of the education:

- Content (What?)
- Timing (When?)
- Teacher (Who?)
- Targets (To whom?)
- Method (How?)
- Functions (Why?)

Also in section two, open-ended questions were included to ask respondents to list additional information that was not included in the previous part of the questions. A five-point Likert – type response scale ranging from strong agreement to strong disagreement was used (appendix 1).

Closed-ended questions are more efficient than open-ended questions because of the ease of completion within a restricted amount of time, even though closed-ended have their own drawbacks, including the neglect of important points, or to be seen to take a superficial form. Open-ended questions

provide for a richer and fuller perspective on the topic of interest (Polit & Hungler, 1999). However, a combination of open and closed-ended questions were used in this study.

A covering page of instructions was attached to facilitate reliable data collection (Appendix 1). Once developed, the instrument was translated into Arabic and then checked by two other Arabic speaking nurses (see Appendix 2).

3.4.2 Reliability and Validity

Reliability of an instrument is the degree of consistency with which it measures the attributes; it is supposed to measure (Polit and Hungler, 1999). A pilot test was conducted to test the adequacy of the questionnaire. To ensure the quality and understandability of the question, a cover page was provided to explain clearly what was requested from the respondents. Stability of the questionnaire was confirmed by test – retest reliability measured by giving the questionnaire to the same nine patients, not involved in the study sample: 5 spoke Arabic, 2 spoke English and 2 spoke Urdu. The two sessions were five weeks apart. The correlation-coefficient was 0.79 as calculated, using a Pearson-Moment Correlation Coefficient.

After completion of the questionnaire, a discussion with the nine patients followed in order to elicit their comments. Revisions were made on the questionnaire, based on the suggestions and responses of this sample's suggestions, and the analysis of the pilot test revealed that all of the respondents did not respond to any of the open ended questions. These items were therefore omitted in the final questionnaire.

Validity is the degree to which an instrument measures what is supposed to measure. The face validity of the questionnaire was established by using an expert group. Supervisors of the critical care areas, and nurses in charge in the in the CCU's of all three hospitals, Al Mafraq, Al Jazeera, and Central, were involved. The common feedback was that the majority of the cardiac patients in the UAE knew Urdu, in which it was suggested to have a version of Urdu. This led to the instrument being translated into Urdu (see Appendix 3).

TABLE 2: Content validity of instrument

Content	No. of Item	Items
1. What?	12	1-9
2. Who?	3	11
3. When?	1	8
4. Why?	1	10
5. To whom?	2	11-12
6. How?	2	13-14

Content validity was established by insuring that all six components of discharge planning was adequately addressed in the instrument. This is reflected in table 2.

3.4.3 Data collection procedure

Three hospitals were involved over a three month period. An effort was made to interview patients one day before a scheduled discharge. Asking the patients one-day before they were discharged or transferred has the following benefits:

- Response rate was high.
- It ensured that all patients and their families were reached.
- It reduced the cost of the survey, since home visits and mailing costs are eliminated.

These patients were, identified by the nurse- in-charge. They, with the family member present at the time, were approached by the researcher and the research was discussed with them. If they were eligible, they were invited to participate in completing the questionnaire to get their opinion about the discharge education. Any patient or family member who accepted was offered an envelope to enclose the completed questionnaire and the envelopes were collected on the same day. The reason for non-inclusion of patients was that they failed to meet the criteria of selection or they were too ill to complete the questionnaire.

3.5 ETHICAL CONSIDERATIONS

The researcher followed a number of procedures and precautions to ensure the protection of the participants' rights.

The proposal was approved by the research ethics committee of the University of Natal in the first instance (appendix 4).

The Hospital Ethics Committee facilitates the protection of human rights. The research proposal was submitted and approved by them, and permission was obtained (appendix 5).

The study was explained to each patient and family member who met the criteria for inclusion. In the case that they were willing to participate, it was considered as consent.

Anonymity and confidentiality were protected by keeping the questionnaire anonymous. They were provided with a copy of the questionnaire and an envelope to protect the information after completing the questionnaire. It was made clear to the respondents before data collection that their names should not be written in the envelope.

Participants had the freedom to refuse answering, stop or withdraw before submitting the questionnaire.

3.6 STATISTICAL ANALYSIS

The mean was calculated for each item. Therefore, it was used to present the weight of each need according to the respondents' perceptions.

The results were presented in tables and charts (pie and bars), to make the results clearer for analysis.

3.7 CONCLUSION

To summarize the research design: It was non – experimental in nature. It was a descriptive survey that included 335 respondents of different nationalities, who could speak read and write, Arabic, English, or Urdu. The test – retest of the pilot study found that the questionnaire had a reliability coefficient of 0.79. The survey was conducted over three months, involving patients and relatives of the Al Mafraq, Al Jazeera, and Central hospitals. The results will be described and clarified in the following chapter.

CHAPTER FOUR

RESULTS AND ANALYSIS OF DATA

4.1 INTRODUCTION

This chapter will present the process of data collection and provide a description of the analysis and results. Data were analyzed using the Excel programme. The responses of patients and family members will be discussed together throughout this chapter, except for section 4.4.

4.2 SAMPLE DESCRIPTION

By the end of the three- month period, a total of 132 questionnaires were distributed. Twenty (20) questionnaires were returned but left blank or incomplete. A total of 112 were, therefore, used in the analysis. A total of 80 of the 112 responses were from patients and 32 were from family members. The response rate was 84.8 %.

Despite the oral and written presentation to explain the steps of completing the questionnaire, some participants were under the impression that they had to choose only one of the question breakdowns, while others decided to grade all the choices.

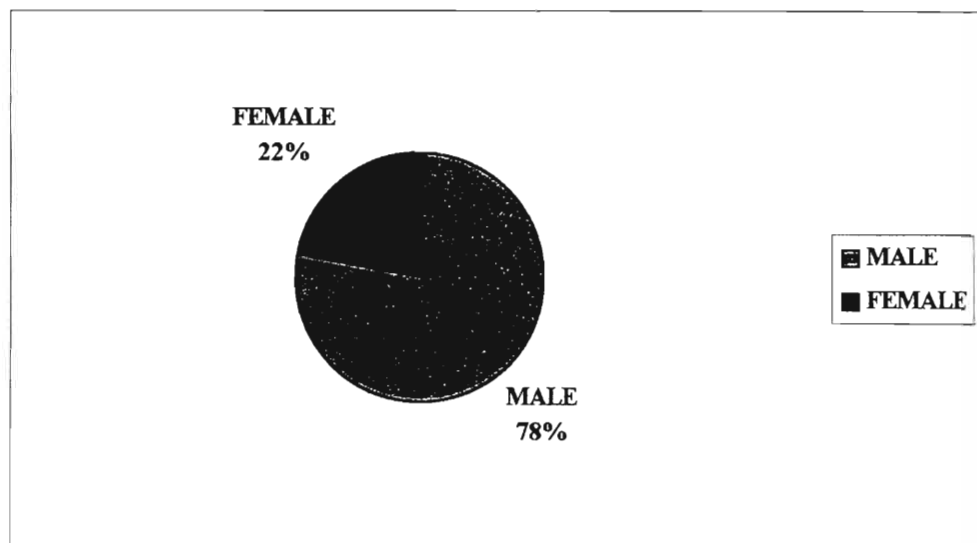
When patients and relatives were asked to complete the questionnaire, some refused immediately and the most common reason for refusal was that they were not interested or because of their level of education, which made it impossible. Women were significantly more likely to refuse to participate

compared to men and this could be attributed to the fact that they were not able to read or write any language.

The mean age of the sample of 112 respondents was 49 years. Looking at patients and relatives separately, the mean age of the first group (80 patients) was 51 years, and that of the second group (32 relatives) was 42 years.

The majority of both groups of respondents were male: 87 (78%) out of 112, whereas females only comprised 22% of the sample, as can be seen in figure 4.1.

Figure 4.1 **Gender Distribution of Participants**

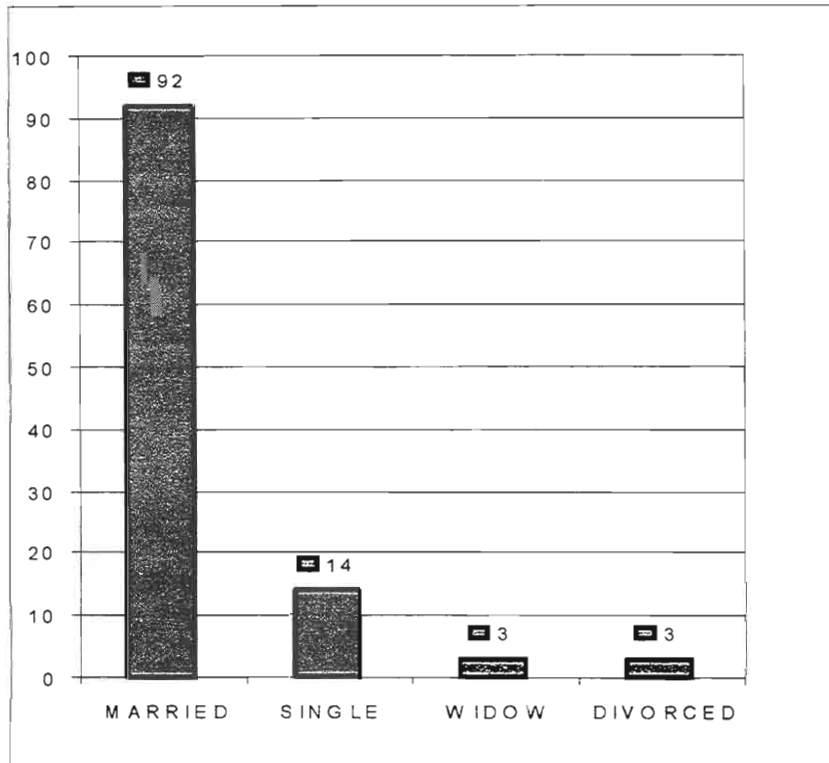


The largest number of the respondents had a college or university degree (60 or 53.6%), while 32 respondents (28.6%), were secondary school graduates, and 19 respondents (17%) below high school education.

The majority of the respondents were married (90 participants, 80%), with very few being widowed or divorced (total 6 or 5 %) (see figure 4.2).

Figure 4.2

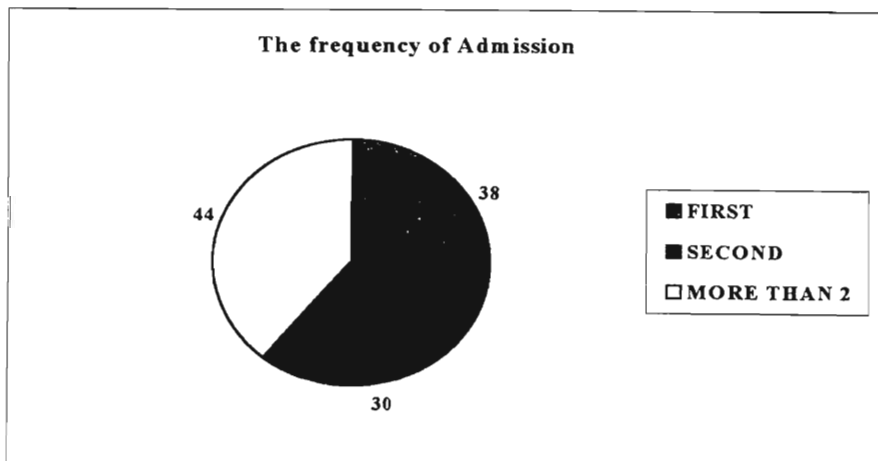
Participants' Marital Status



The number of readmissions among the respondents (either patients or patients related to the family member who responded) were 74 (66%) (see figure 4.3). with almost as many having two, (38%) and more than two (30%) admissions.

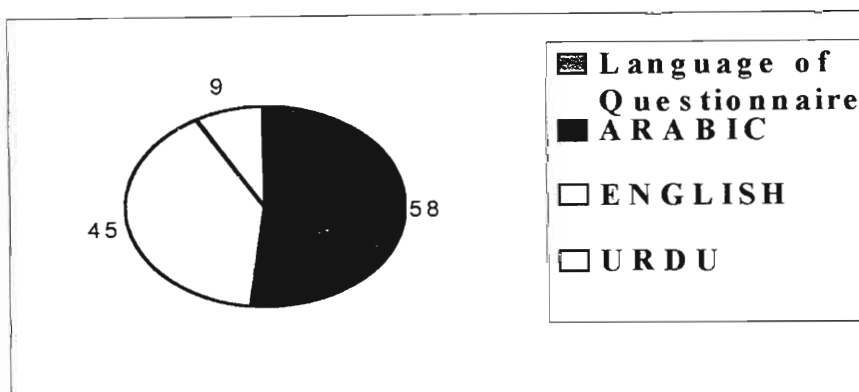
Figure 4.3

Hospitalization profile of respondents



The most common ischemic heart disease presented in the patients' sample were myocardial infarction (MI), stable and unstable angina, admission for percutaneous coronary angioplasty or coronary artery bypass grafting. Some of the patients had only ischemic heart disease, others had a combination of ischemic heart disease with diabetes mellitus or chest pain, renal failure, hypertension, valvular disease, left ventricular failure, cardiomyopathy, aortic regurgitation and chronic heart failure.

Figure 4.4 Language of respondents



The Arabic respondents made up 52% of the sample (58), while the English respondents were 45 (40%). As for the 9 Urdu respondents, they comprised 8% of the sample (see figure 4.4).

Respondents from all the Emirates were represented in the sample with different percentages. Since the three hospitals that were used for data collection are in Abu- Dhabi, the respondents living in Abu Dhabi made up 80% of the total sample, while 20% of the respondents lived in other Emirates. Although respondents from one emirate (Abu Dhabi) dominated the sample, both Arab and non- Arab countries (see figures 4.5 and 4.6) were also represented, so that a variety of cultural perceptions were presented. A large

variety of jobs including governmental, non- governmental, light and heavy, administrative and physical types, different ages and different genders were present. This variety in the sample provide the basis for the generalizability of the results.

Figure 4.5 No. of Arab Respondents

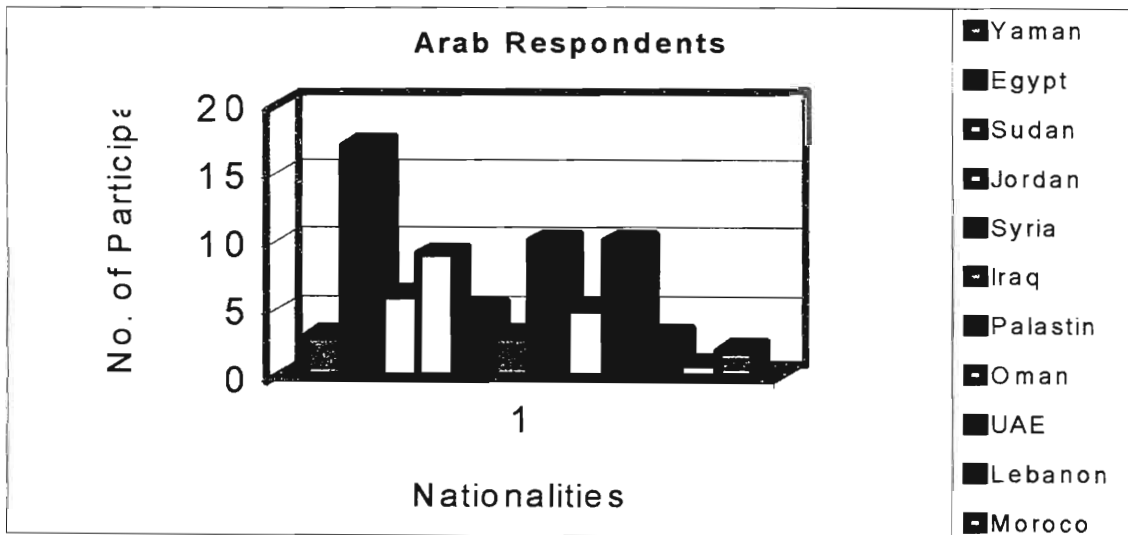
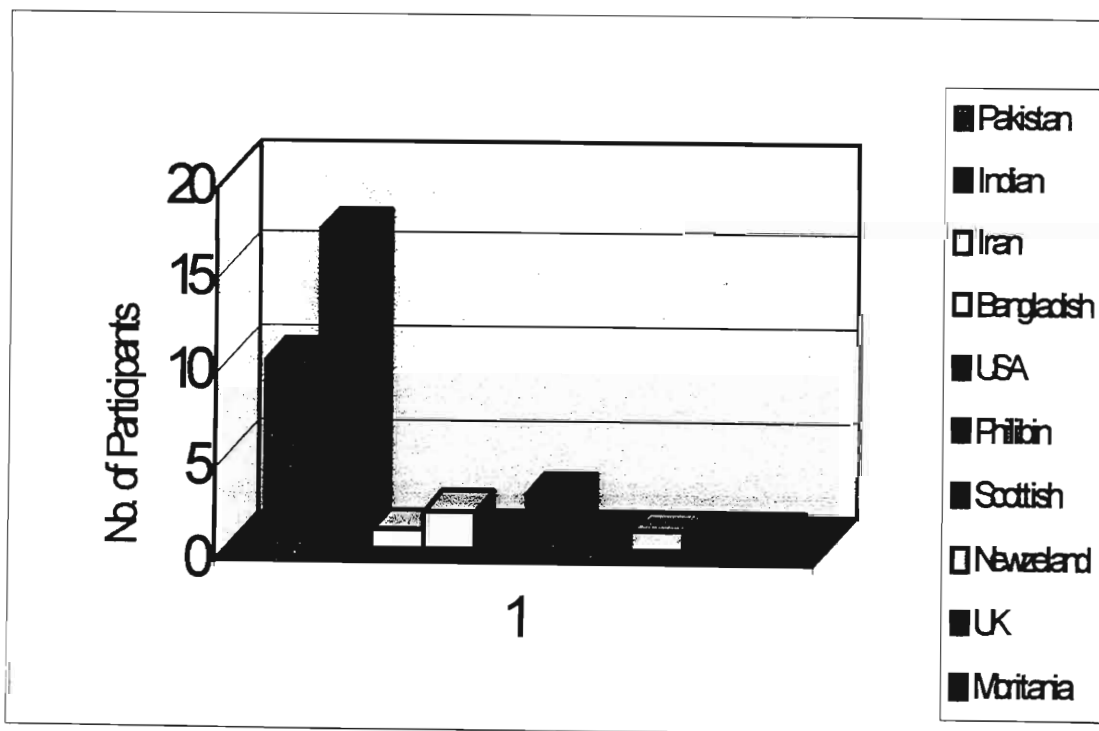


Figure 4.6 No. of participants from UAE, Arab and non-Arab countries



When comparing the demographics of patients and their relatives (see table 3), it is clear that while most patients were male, relatives were equally divided between male and female. Most patients fell into the 41-60 age group, while many relatives were also in the 40 and younger-group.

TABLE 3: Comparison of two groups as regards to demographics.

Variables	Types	Frequency of Patients	Frequency of Relatives
Educational level	University	40	21
	Secondary	24	8
	Primary or less	16	3
Gender	Male	70	17
	Female	10	15
Age	18 – 40	11	11
	41 – 60	55	18
	61 - 80	15	2

TABLE 4: Average score of items about the content of the Health Education

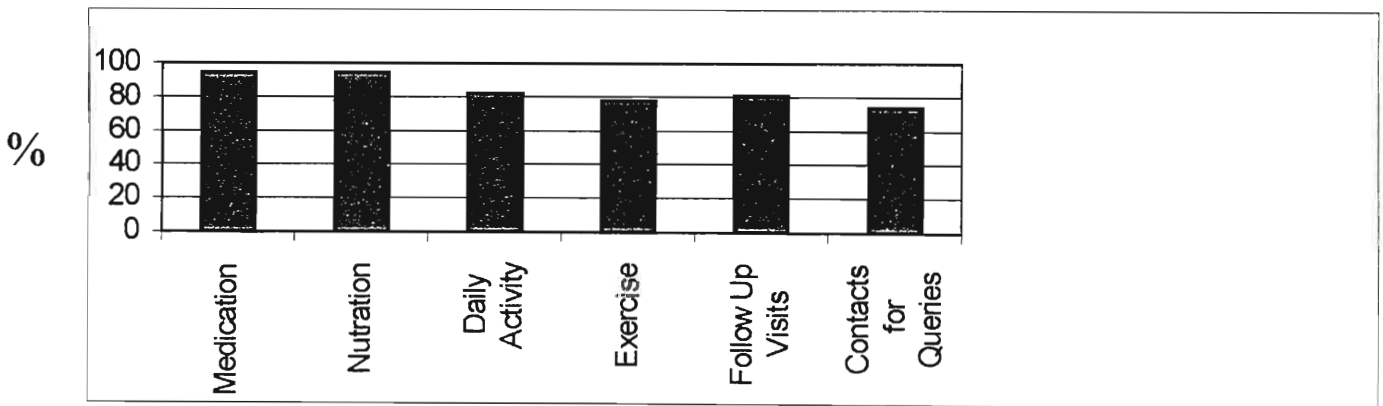
The item	Average weight
1- Importance	4.8
2- Medication	
a- Name	4.8
b- Action	4.7
c- Dose	4.8
d- Frequency	4.8
e- Side effect	4.7
3- Diet	
a- Allowed	4.8
b- Not allowed	4.7
c- Amount	4.6
4- Daily activity	
a- Self care	4.7
b- Resume work	4.4
c- Climb stairs	4.4
d- Have sex	4.3
e- Sleeping problems	4.3
5- Exercise	
a- Type	4.5
b- Frequency	4.5
c- Amount	4.5
6- Follow up	4.6
7- Contact	4.5

4.3 HEALTH EDUCATION NEEDS

The second part of the questionnaire addressed the perceptions of respondents about health education. The results are presented by the average of each item. To calculate the average value for the results of the questionnaire, a number was given to each choice as follows: strongly agreed = 5, agree = 4, not sure = 3, disagree = 2, strongly disagree = 1, not applicable = 0. The average of each item was calculated on this basis, and is reflected in table 4 (page 53) and 5. (page 55)

4.3.1 The content needed

Figure 4.7: No. of respondents who Strongly Agreed with regard to health education content



The responses about the content of health education are summarized in table 4. This shows that all items are rated at 4 or more out of 5, which means that respondents agree that all the contents listed should be included in health education.

In figure 4.7 the percentage of respondents who strongly agreed is reflected and the strong need for the first five topics is evident.

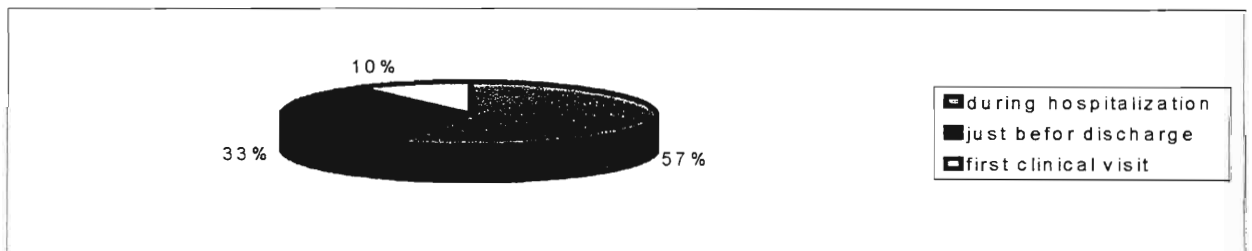
TABLE 5: Average score of items about format of health education

Item	Average weight
1- The time of health education	
a- During hospitalization	4
b- Just before discharge	2.7
c- After discharge	1.1
2- Who offers health education?	
a- Nurse	1.8
b- Doctor	3.9
c- Team	2
3- Benefits of education	
a- Help recover quickly	4.2
b- Reduces anxiety	4
c- Reduce readmission	4
d- Helps coping	4.2
4- Attendance of family member	4.4
5- Family member will help in	4
a- Understanding	3.5
b- Revising	4
c- Reminding	4
6- Preferable method of health education	
a- Face to face	2.8
b- Face to face + booklet	3.7
c- Booklet only	1.1
7- Using audiovisual	
a- Film/video	2.2
b- Picture	2
c- Brochures	2.1
d- Demonstrations	3

4.3.2 The timing of the health teaching:

Giving the health education early during hospitalization was the most appropriate time, according to 72 respondents. However, 47 strongly agreed to be educated just before discharge. while only 13 believed that they should come for education after discharge (figure 4.8). In table 5, the average scores of this item reflect the strong preference of respondents for teaching during the hospitalization (4 as compared to 2.7 and 1.1 for other options).

Figure 4.8: **Number of respondents who strongly agree to different times for health education**

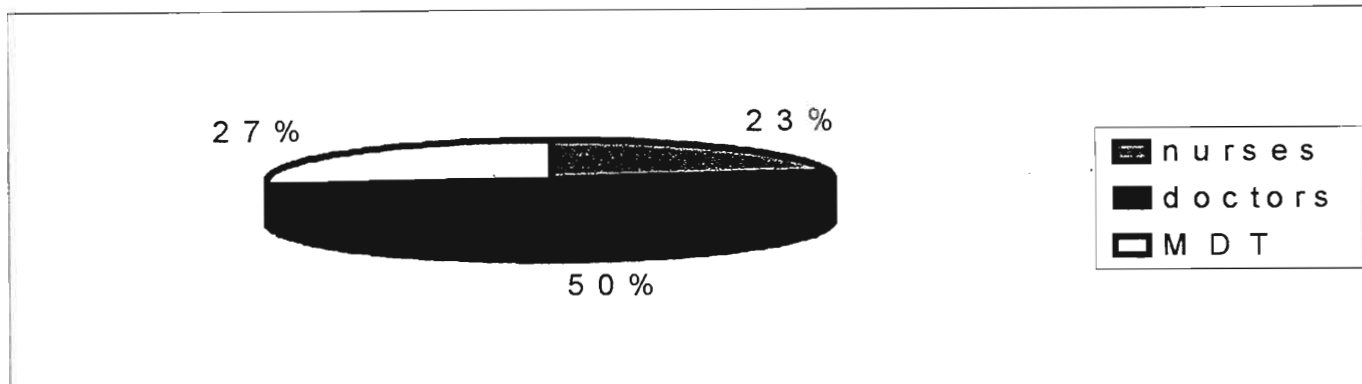


4.3.3 The health worker responsible for health education:

The majority of the sample 66 (50%) preferred their health education to come from the doctor while 30 (23%) preferred nurses and 36 (27%) opted for a multidisciplinary team approach (figure 4.9). The strong preference for having a doctor is reflected in the average of 3.9 for this option (table 5, page 55), but 1.8 or 2 for the nurses or multidisciplinary team respectively.

Figure: 4.9

Number of respondents who strongly agreed to different teachers



MDT = multidisciplinary team.

4.3.4 Function of health education:

Seventy six (76) participants strongly agreed that health education helped in speeding up the cure, 70 felt that it reduced anxiety, while 68 felt that it reduced readmission. Moreover, 75 thought that it helped the patient to cope with the disease at home. The average of all these options were above 4 (see table 5), so they are all seen as important functions of health education by respondents.

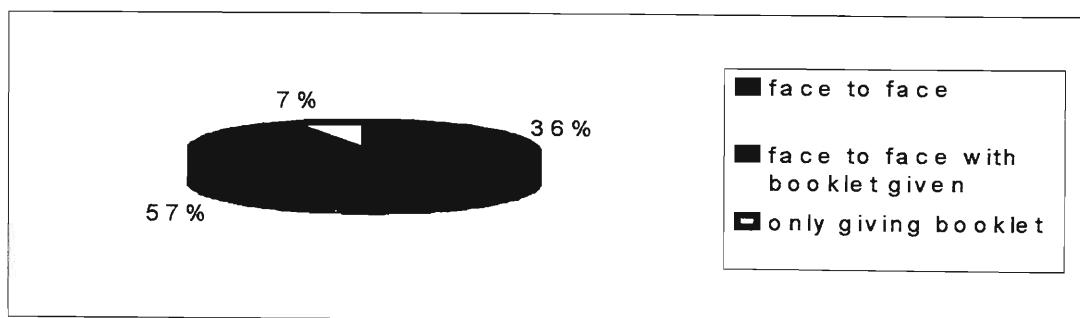
4.3.5 Target of health education

The presence of one member of the family to attend the sessions of health education was strongly supported by 72 participants (55%). According to table 5 respondents agreed with all three reasons for including a family member, with average scores of 3.5 to 4 for increasing understanding, helping with revision and reminding.

4.3.6 The method of health education:

Giving only booklets was the least preferred option with only 9 respondents supporting this. Seventy-four respondents (74) strongly supported face-to-face teaching with the distribution of written material. Face-to-face teaching by itself also had strong support (47). The choice of “all of the above” was strongly supported by 51 (figure 4.10). Using audiovisual aids was not too much appreciated by the respondents in this study. Since the average for demonstration was the highest (3), this seems to be the most preferred method of support (see table 5). However strong support for pictures came from 36 respondents, for films from 28 respondents and for demonstrations, from 27 respondents.

Figure. 4.10: **Number of respondents who strongly agreed with different methods of health education**



4.4 COMPARING THE RESPONSES

The responses of 80 patients and 32 relatives were compared and the average score for each item was calculated for all patients and for all relatives. The weighted average was calculated by the same way in point 4.3 but for the score of the patient and the score of relative separately. The results are reflected in table 6 and 7.

All items of health education about medication were around 70% strongly supported by relatives and patients, with a small variable between 70%-85%. The percentage of relatives in need for health education about diet is higher. If we go back to the demographic data (Table 5), we will find that 50% of the relatives are spouses or parents who are responsible for diet preparation.

Education about daily activities was highly chosen higher by relatives than by patients. When we rely on the educational level, the university level is 69% within the sample, which allows relatives to understand the importance of daily living activity limitations; meanwhile the educational background (university level) is only 49% within patients.

The relatives are younger in their age (average 42%) than patients (51 %) and this might reflect why patients scored exercise health education higher.

Relatives are more anxious about getting support after discharge for 75% strongly agreed on the need to contact during queries. Once again if we go back to demographic data, most of the patients work and so might find themselves alone at any point of time and may want to know how to get help or advice during an emergency 63 which is not low.

TABLE 6: Comparison between Responses of patients and relatives on content of health education.

Variables	Types	Waited average of Patient	Waited average of Relative
Importance of education	Health education is important before hospital discharge	4.8	4.8
Medication	<ul style="list-style-type: none"> • Name----- • Action----- • Dose ----- • Frequency----- • Side effect----- 	4.8 4.8 4.8 4.8 4.8	4.7 4.9 4.8 4.7 4.5
Diet	<ul style="list-style-type: none"> • Allowed----- • Not allowed----- • Amount----- 	4.8 4.6 5	4.8 4.7 4.6
Daily activity	<ul style="list-style-type: none"> • Self care----- • Resume my work----- • Climb stairs----- • Have sex----- • Sleeping problem----- 	4.7 4.4 4.5 4.5 4.5	4.6 4.3 4.3 3.9 4
Exercise	<ul style="list-style-type: none"> • Type----- • Frequency----- • Amount----- 	4.6 4.6 4.6	4.3 4.4 4.5
Follow up	Follow up schedule of visit is important.	4.6	4.7
Queries	Contact for queries if I have questions (for advice).	4.4	4.8

Both patients and relatives scored health education after discharge low (see table 7). However, the patients scored health education during hospitalization lower than the relatives, probably because they judged their conditions as not allowing them to deal with health education earlier. Relatives, however, want to know what is going on immediately, after hospitalization and during the whole the period of treatment.

During the time of hospitalization nurses were more available at any time than doctors, which allowed relatives to rank them higher than patients, but patients preferred a multidisciplinary team rather than relative (see table 7). The level of education, age and sex may play a role in bringing about those results.

The number of patients agreeing to having one member of the family attend health education was less than relatives whereas the relatives' score of health education benefits is less than patients.

Patients and relatives both together scored one method of education less than a combination of two methods

There was a strong correlation between patients and relatives (correlation coefficient was 0.867) which strongly supports the importance of health education before discharge, regardless of nationality, gender, age, level of education or marital status.

Regarding the standard deviation, which gives the distribution of the responses around the average, it was not a useful calculation in this data. The result of the average of this sample shows that all of them were about 4 and above with a possible total of 5. It is not possible to have a large SD. It was therefore not calculated.

TABLE 7: Comparison between patients and relatives on the format of health education.

Variable	Types	Waited average of Patient	Waited average of Relative
Timing of getting the information	• Early during hospitalization.	3.9	4.3
	• Just before---discharge	3.5	2.9
	• In the first---visit to the clinic after discharge	2.3	2.3
Who will give health education	Education for health needs should be given by		
	• Nurse-----	2.9	3.1
	• Doctor-----	4.1	3.7
	• Multidisciplinary team	2.4	4.2
Function of health education	• help me: recover quickly	4.4	4.2
	• reduce anxiety	4.2	4.2
	• reduce re-admission	4	4.2
	• help me cope with the disease at home	4.4	4.4
Attendance of one family member		4.2	4.7
One of the family members will help	• Understanding	4	4.4
	• revision	3.8	4
	• reminder.	4	4.2
The method of health education	• Face to face.	2.7	3.3
	• Face to face with handout given.	4	4.3
	• Handout only is enough.	2.3	2.1
Audiovisual used	• Films/video	2.3	2.9
	• Pictures	2.8	2.8
	• Brochures	2.8	2.9
	• Demonstrations	3.5	3.8

4.5 CONCLUSION

The results of the study indicated that cardiac patients and their relatives believed in the importance and benefit of health education. They are very interested in knowing about medication, diet, daily activities, allowed effort in exercise, follow up and the means of setting necessary help when needed. Most respondents preferred getting health education upon admission with the attendance of at least one of their family members. They also preferred getting information from doctors and in a face – to- face communicative situation, followed by receiving printed information.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

A survey was conducted to ascertain the perception of patients and their families regarding the content and format of health education they needed and preferred.

This chapter will present the discussion of the results, and make recommendations for future research.

5.2 DISCUSSION

This study attempted to explore the perceptions of the patients with MI and their families about health education needs upon discharge. The study used reliable and valid measures that were tested in a pilot study before hand. The total number of respondents was 112, of which 80 were patients and 32 relatives. The study results generally agreed with Moynihan (1984), in that health education is important in respect to all aspects of content. The finding of Hinds, Streater and Mood (1995), Dodge (1972) and Brandt, Griffiths & Leek (as cited in Mills, 1999) that cardiac patients needed specific information about their condition, is supported by this study. For example, the respondents who lived in villas clearly did not need information about climbing stairs, since they could remain on one floor. Some respondents thought the attendance of a family member would show that he/she was dependent, hence they preferred not to choose this alternative.

Respondents varied in grading the importance of different topics such as exercise depending on the lifestyle, age and culture. Older respondents ranked education about sexual activities on a lower level than others. Sixty percent (60%) of the respondents ranked to have it and that was supported by Steinke (2000) where approximately 71% of the participants believed that sexual education was important.

The group of respondents in the study at hand ranked all content areas high, which could possibly mean that cardiac patients are quite eager to gain any kind of information by anyone at any time.

Having 57% of the participants strongly agree with the health education during hospitalization is supported by Moynihan (1984), Luker et al (1996) and Summerton (1998). However, 10% of the participants believed that health education should be given upon the first visit to the clinic after discharge and this in turn is supported by Scalzi, (1980) and Gerard & Peterson, (1984), who recommended that health education shouldn't be given in the acute phase. However, in Lowenstein's study, (1994) 76.9% supported starting health education early during hospitalization.

Nurses were the least chosen professionals to give health education. The preferable choice was for doctors (50%). This is similar to the Areth & Mamon (1985) study where the results showed that nurses were not appreciated or preferred in this task. In Lowenstein's study (1994), where he explored the nurses perception about the role of the nurses in the discharge plan, only 56% of nurses agreed that the registered nurse was responsible for the discharge plan, but 63% agreed that social workers were primarily responsible. Some nurses may have agreed with both if they felt that the responsibility was shared.

The function of health education was pinpointed by the study results of Naylor et al (1999), Clay (1996), Lowenstein & Hoff (1994), Wilkinson (1995), Scalzi (1980), and Hind, Streater & Mood (1995), and was validated this study. This is clear as more than 60% of the respondents strongly agree with each choice, namely to help cure, reduce anxiety, reduce readmission and help to cope with the disease at home.

The importance of the presence of one of the family members in the health education session was highlighted when 64% of the participants strongly agreed. Sixty three percent (63%) strongly agreed that it helped understanding, whereas 48% only strongly agreed that it helped revision but 56% strongly agreed that it helped in remembering the information (Thompson and Richmond 1990). Despite listing a different set of functions for family members when attending health education, Summerton (1998) and Thompson and Richmond (1990) still agreed with its importance.

As Mills & Sullivan (1999) mention, there is no definite method of providing information that would suit everyone. Respondents varied in scoring different methods of education offered in the questionnaire. Mills & Sullivan (1999), and the Department of Health (as cited in Summerton, 1998), recommended verbal and written methods for health education, and the results correlated with 74 of the respondents who strongly agreed with the face-to-face communication with booklet, while 9 only agreed with having a booklet alone. Moreover 47 of the respondents agreed with having face-to-face communication only.

To summarize, the profile of preference of patients and their relatives in the United Arab Emirates is as follows:

The health education needs of patients were generally higher than that of the family, except with regard to post-discharge contact with the health service. However, the whole group was convinced that it is important. The clients would like teaching to start as soon as they are admitted, and to consist of face to face teaching, backed up by written material and demonstrations. They would like the demonstrations to be given by doctors, supported by other health professionals, and to include a family member since this would improve retention of information. They believed that such teaching would improve their recovery and quality of life, and would also prevent relapse.

5.3 PROPOSED DISCHARGE PLAN.

Based on the needs identified, a comprehensive discharge plan was developed.

It consists of three components:

- A health education policy (appendix 6, page 96). This includes guidelines and principles for the nursing staff on the content that should be included, as well as the format suitable for a discharge plan of cardiac patient.
- Discharge education standards (appendix 7, page 98). This is composed of mainly the sequence of steps that should be followed from the time of patient admission to the time of discharge from the hospital, in order to ensure that throughout the hospital stay period there is education gain.
- Health education material (appendix 8, page 100). The suggested materials are to be prepared as a resource pool. The nurse should choose that which is appropriate for each patient and his family member. This facilitates the nurse's role in alerting the patient to his/her responsibility toward his/her own health improvement and maintenance.

These documents were based on existing documents in literature, but were adapted to fit the needs assessment done in this study.

5.4 RECOMMENDATIONS

Several clinical implications arise from the findings of this study. The results reflect the importance of health education upon discharge that should accommodate an important area of nursing interventions for health education. It is a health professional's duty and a patient's right to be educated before being discharged. The participants' responses proved that they believed health education had a positive effect on the patients' recovery performance at home and in all his/her life activities.

5.4.1 Implications for service

Based on the results of this study, the following ideas are to be highlighted:

- 1 Health education policy guides could be initiated and modified according to the administration and situation of each facility (see appendix 6). Health education should start according to the patients and his family's educational needs, their readiness, education plan, education tool, their preferred teaching style (visual or auditory), and barriers to learning (pain, physical limitation or communication). So, an educational program should be designed to incorporate these points.
- 2 Teaching opportunities for relatives are to start early during the hospitalization period.
- 3 A discharge plan should be developed by the members of the health team, physicians, nurses, pharmacist, dietitian and social workers (see appendix 7).

- 4 The content of the health education should be decided upon according to each patient's needs.

The main items include: patient's health problem, prognosis, modification of risk factors, lifestyle adjustment, possible complication, treatment and medication, diet, activities of daily living, emergency situation management, and follow-up schedule.
- 5 Material to be developed and used for clients with all the main diagnostic categories (see appendix eight).
- 6 Pre-discharge health education check list should be used (see appendix seven).

5.4.2 Implications for further research

Once a health education policy is issued and followed, the effect of its implication for client satisfaction and client outcomes should be researched. Further research can also focus on the method of teaching by using the new technology. Cross-sectional studies could be conducted to compare the private and government hospitals or the responses of different nationalities.

5.5 LIMITATIONS

The following limitations affected data collection:

- Most of the Pakistani patients didn't know how to read or write Urdu. They only spoke their language. The problem was repeated in a lesser degree with the Arabic language. Therefore, respondents from this group were not assessed adequately since most of them refused to participate.
- The government hospitals of the other Emirates were not used, which could

have increased the sample.

- Only one data collection method used for the study.
- In some cases, the patient was able to complete the questionnaire while their relative was not; in other cases, the patient was not able to complete the questionnaire while the relative was. In either case, the reason for not completing the questionnaire included ineligibility, or refusal to participate.

5.6 CONCLUSION

Patients and their families always need knowledge upon discharge. This increases their confidence in dealing with the disease at home, reduces readmission and patient's anxiety. The best source of this information is defining the educational needs upon admission and involves patients and their families in health education towards discharge and recovery.

Although clients see nurses as playing a minor role in this process, much of the information they want is with the nurses. Patient's should however be convinced of the role of nurses through excellence in discharge teaching.

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APPENDICES

SUGGESTED POLICY , CHECK LIST AND MATERIAL FOR DISCHARGE PLANNING

TO BE MODIFIED ACCORDING TO EACH FACILITY'S POLICY

Appendix 1 English letter and questionnaire

Dear parent or family member,

I am a nurse educator who is currently doing research about the health education needs of patients and their families.

The objective of this study is to establish a health education program about Ischemic Heart disease upon discharge from the hospital. I would like to use the information to help patients to resume a normal life in a short period with a minimum of complications.

I am therefore asking you to give your perceptions about the context of health education, when to start education, source of education, and your opinion about the attendance of family members and the most effective methods of Health Education. This study has been approved and endorsed by Ministry of Health. This questionnaire will be completely confidential. Your name will not appear anywhere.

Your cooperation and understanding of the importance of this study is highly appreciated for this reason your response is very valuable it will enable us to develop good health education programme.

If you have any further questions, please contact me.

Sincerely

Mrs. S Rizkallah

Tel: 6223762

SURVEY OF HEALTH EDUCATION NEEDS

INTRODUCTION:

- For Section One demographic data, please tick the box which is next to the appropriate condition for you
 - For Section Two, please choose and tick one of the five responses tabulated in the vertical columns
- *You could have more than one choice to be ticked in the same box. In this case you should tick your opinion for each point with star.

Example:

Box No. 8: Education about discharge should start

- Early
- Just before discharge
- After discharge

For each one you have to tick your opinion.

Section One
DEMOGRAPHIC DATA

1- Hospital Name: _____

2- I am a Patient yes No

3- I am a relative of the patient: yes No

If yes, please tick your relationship

Spouse		Cousin	
Parent		Aunt/Uncle	
Brother/sister		Friend	

• Gender: Male Female

• Emirate originating from: _____

• Nationality: _____

• Age: _____

• Occupation: _____

• Level of education: _____

None Primary level Secondary College/ University .

• Marital Status: Married Single Divorced Widowed

• Patient's Health problem: _____

• Date of admission: _____

• Date of discharge: _____

• The time of admission: First Second , More than two

Section two

Questionnaire: Tick one box for each question

or question part.

	Question	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree
CONTENT OF HEALTH EDUCATION						
1	Health education is important before hospital discharge					
2	Is important to know about medication *Its Name----- *Its Action----- *Its Dosage ----- *Its Frequency----- *Its Side effects----	-----	-----	-----	-----	-----
3	*Is important to know about diet before discharge *What is allowed----- *What is not allowed----- *Recommended amounts-	-----	-----	-----	-----	-----
4	*Is important to be educated about daily activity *self care----- *resuming my work *Climbing stairs *Resuming sexual relations *Sleeping difficulties	-----	-----			
5	Education about exercise is important *Type----- *Frequency----- *Amount-----					
6	A follow- up schedule of visits is important.	-----	-----	-----	-----	-----
7	It is important to have a contact person for queries.					

WHEN TO START EDUCATION

8	Information for discharge should be started *early during hospitalization. *Just before discharge. *In the first visit to the clinic after discharge.	-----	-----	-----	-----	-----
---	--	-------	-------	-------	-------	-------

THE HEALTH WORKER RESPONSIBLE FOR HEALTH EDUCATION

9	Education for health needs should be given by *Nurse----- *Doctor----- *Multidisciplinary team	-----	-----	-----	-----	-----
---	---	-------	-------	-------	-------	-------

FUNCTION OF HEALTH EDUCATION

10	Going home early with enough education will help me: • recover quickly • Reduce Anxiety • reduce re-admission • help me cope with the disease at home	-----	-----	-----	-----	-----
----	---	-------	-------	-------	-------	-------

TARGETS OF HEALTH EDUCATION

11.	Attendance of one member of the family during health education is important.	-----	-----	-----	-----	-----
12.	Family member attendance will help *understanding *revision *To remind the patient.	-----	-----	-----	-----	-----

THE METHOD OF HEALTH EDUCATION

13.	The preferred method of health education *Face to face. *Face to face with pamphlet given. *Pamphlet only is enough.	-----	-----	-----	-----	-----
-----	---	-------	-------	-------	-------	-------

14.	The following Audiovisuals should be used *films/video *pictures *brochures *demonstrations					
-----	---	--	--	--	--	--

استبيان عن التوعية الصحية

تحية طيبة وبعد،،

أود أن أقدم لكم نفسي حيث أنني مدرسة بمعهد التمريض، وأقوم حالياً بعمل بحث عن التوعية الصحية اللازمة لمرضى الأزمات القلبية عند خروجهم من المستشفى.

إنني أتطلع إلى استخدام المعلومات اللازمة التي من شأنها أن تساعد المرضى في أن يعودوا لممارسة حياتهم بطريقة طبيعية وبدون مضاعفات وذلك في فترة زمنية قصيرة.. لهذا أتمنى منكم أن تقومون بإبداء رأيكم عن مضمون التوعية الصحية بدقة كاملة.

وأود أن أشير إلى ان وزارة الصحة في دولة الإمارات قد وافقت على إجراء هذه الدراسة.

وجدير بي أن أشير إلى أن استطلاع الرأي في هذا (الاستبيان) سيكون موضع سرية تامة.. علماً بأنه من غير الضروري الإشارة إلى أسمائكم أو جنسيتكم أو هويتكم.

وإنني على ثقة تامة بأن إجاباتكم الدقيقة على هذا الاستبيان ستكون قيمة جداً لتكوين خطة متكاملة للتوعية الصحية.

إن تعاونكم وتفهمكم لهذه الدراسة (الاستبيان) سيكون موضع تقدير وامتثاني.

س. رزق الله

مسح لمتطلبات التوعية الصحية

مقدمة:

- فيما يتعلق بالقسم الأول من هذا الاستبيان والمتعلق بالبيانات الشخصية، يرجى وضع علامة (✓) مقابل الحالة المناسبة لكم.
- فيما يتعلق بالقسم الثاني، الجزء (أ) من سؤال (1-14) يرجى وضع علامة (✓) أمام إحدى الإجابات الخمسة الموجودة في العمود الرأسي.

ملاحظة:

في حال وجود أكثر من اختيار في نفس المربع يرجى وضع علامة (✓) عند الاختيار المناسب لكل منهم.

مثال السؤال رقم 8:

يجب أن تبدأ التوعية الصحية:

- مبكراً
- قبل الخروج مباشرة
- بعد الخروج

يجب أن توضح رأيك في كل نقطة منهم على حده.

القسم الأول البيانات الشخصية

• اسم المستشفى :

• مريض من أقارب المريض صديق
• الإمارة القادم منها:

• الجنس : ذكر أنثى

• السن :

• الجنسية :

• نوع العمل :

• مستوى التعليم : غير متعلم تعليم متوسط جامعي

• الحالة الاجتماعية: متزوج أعزب مطلق أرمل

• تكرار دخول المستشفى: الأول الثاني الثالث

• التشخيص المرضي المتسبب في دخول المستشفى:

• تاريخ دخول المستشفى: / / 20م.

القسم الثاني

م	السؤال	أوافق تماماً	أوافق	غير متأكد	لا أوافق	لا مطلقاً
محتويات التوعية الصحية						
١	التوعية الصحية مهمة قبل الخروج من المستشفى					
٢	أهمية المعرفة بالأدوية الاسم التأثير الجرعة عدد الجرعات الآثار الجانبية					
٣	أهمية معرفة النظام الغذائي قبل الخروج من المستشفى المسموح به من الغذاء غير المسموح به من الغذاء كمية الغذاء					
٤	أهمية التعرف على الأنشطة اليومية المسموح بها العناية الشخصية استئناف العمل صعود الدرج ممارسة الجنس مشاكل النوم					
٥	أهمية التعلم على الأنشطة الرياضية النوع عدد المرات المدة المسموح بها					
٦	أهمية التعرف على جدول الزيارات والمتابعة					
٧	معرفة طرق الاتصال للاستعلام في حالة وجود أسئلة (للنصيحة)					
م	السؤال	أوافق تماماً	أوافق	غير متأكد	لا أوافق	لا مطلقاً
متى تبدأ التوعية الصحية						
٨	المعلومات الخاصة بالخروج يجب أن تبدأ: مبكراً أي أثناء فترة الإقامة بالمستشفى قبل الخروج مباشرة مع أول زيارة للعيادة بعد الخروج من المستشفى					
المسؤول عن التوعية الصحية						
٩	التوعية الصحية يجب أن تعطى بواسطة الممرضة الطبيب فريق متعدد الوظائف					
فوائد التوعية الصحية						
١٠	العودة إلى المنزل بمعلومات صحية كافية: تساعد على سرعة الشفاء تقليل القلق النفسي تقليل احتمالات الدخول للمستشفى مرة أخرى تساعد على التأقلم مع المرض في المنزل					

الأشخاص المستهدفون من التوعية الصحية						
				وجود احد أفراد الأسرة خلال التوعية الصحية من الأمور الهامة	١١	
				وجود أحد أفراد العائلة سيساعد على فهم التوعية الصحية	١٢	
				المراجعة		
				التذكير		
وسائل التوعية الصحية						
				افضل الوسائل للتوعية الصحية	١٣	
				وجها لوجه		
				وجها لوجه مع إعطاء نشرة صحية نشرة صحية فقط		
لا أوافق مطلقاً	لا أوافق	غير متأكد	أوافق	أوافق تماماً	السؤال	م
				الوسائل الصوتية والمرئية التي يجب استخدامها	١٤	
				الصور		
				الأفلام		
				التمثيل التوضيحي كل ما سبق		

ضمیمہ

محترم والدین / افرادِ خانہ!

السلام علیکم ورحمۃ اللہ وبرکاتہ :-

سب سے پہلے تو میں اپنا تعارف کروا دوں۔ میں نرسوں کے ایک مدرسے میں اُن کی تعلیم پر مامور ہوں۔ اور مریضوں اور اُن کے لواحقین کی طبی تعلیم اور ضروریات سے متعلق ایک تحقیقی کام کر رہی ہوں۔ اس تحقیق کا مقصد ہسپتالوں سے فارغ ہونے والے مریضوں کیلئے طبی تعلیم کا ایک ایسا نظام (پروگرام) وضع کرنا ہے جس کی مدد سے ایسے مریض کسی بڑی پیچیدگی میں مبتلا ہوئے بغیر جلد از جلد اپنی روزمرہ کی زندگی عام طریقے پر گزارنے کے لائق ہو سکیں۔

اس بات کے پیش نظر آپ سے درخواست ہے کہ آپ طبی صحت کے نظام کے حوالے سے اپنی معلومات، تجربہ اور ادراک کو استعمال کرتے ہوئے ہماری اس بھلائی کے کام میں مدد کریں۔ آپ کے خیال کے مطابق اس کام کو:

• کب شروع کرنا چاہئے؟

• اس نظام کا کیا منبع یا مرکز ہونا چاہئے؟

• مریض کے افرادِ خانہ کی نظام میں شمولیت اور کردار۔

• اور سب سے اہم بات کہ کون سا طریقہ کار سب سے مؤثر ثابت ہو سکتا ہے؟

تحقیق کا یہ کام وزارتِ صحت کی باقاعدہ رضامندی اور اجازت سے شروع کیا گیا ہے۔ یہ سوال نامہ خفیہ ہے۔ جہنی آپ دیکھیں گے کہ اس پورے سوال نامے میں آپ کا نام کہیں بھی دریافت نہیں کیا گیا ہے۔ آپ کے قیمتی جوابات اس نظام کی ترتیب اور تدوین کے سلسلے میں نہایت اہم ہیں۔ ہم آپ کے تعاون اور موضوع کی اہمیت کو بخیرگی سے سمجھنے کو نہایت قدر کی نگاہ سے دیکھتے ہیں۔

سلسلے میں آپ کی ذہن میں کوئی اشکال یا ابہام ہو تو برائے کرم مجھ سے ضرور رابطہ قائم کریں۔

مخلص

مسز ایس۔ رزق اللہ

طبی تعلیم کی ضروریات کے لئے رائے شماری

تعارف :-

جوابات کے انتخاب کا طریقہ :

حصہ اول میں سے صرف اُس خانے میں (x) کا نشان لگائیں جو آپ سے متعلق ہو۔

حصہ دوم کے جزء الف میں سوال نمبر اسے لے کر سوال نمبر ۱۴ تک کے جوابات ایک جدول کی صورت میں دیے گئے ہیں۔ اگر کسی ایک خانے میں صرف ایک سوال پوچھا گیا ہے تو آپ پورے خانے کا ایک جواب (x) منتخب کریں گے۔

اور اگر کسی خانے میں ایک سے زیادہ ضمنی سوالات دریافت کیے گئے ہیں۔ اور آپ ایک سے زیادہ جوابات دینا چاہتے ہیں تو ان جوابات کے سامنے ☆ کا نشان لکھ دیں۔

مثال : خانہ نمبر ۸ : ہسپتال سے فارغ ہونے کے متعلق تعلیم کب سے شروع ہونی چاہئے؟

ہسپتال سے فارغ ہونے سے پہلے۔

ہسپتال سے فارغ ہوتے وقت۔

ہسپتال سے فارغ ہونے کے بعد۔

اس میں آپ کو تینوں جوابات (پہلے، فوراً، بعد) کے متعلق اپنی رائے کا اظہار کرنا ہے۔

حصہ اول

شخصی معلومات

ہسپتال کا نام: _____

- میں خود مریض ہوں
- میرا ہسپتال میں آنا: پہلی مرتبہ دوسری مرتبہ کئی مرتبہ
- میرا مریض سے تعلق:

رشتہ حیات	والد	والدہ	بھائی	بہن	چاچا	ماموں	خالہ	پھوپھو	کزن	دوست	دیگر

میں ایک مرد عورت ہوں۔

میں _____ امارت سے آیا / آئی ہوں۔

میری عمر _____ سال ہے۔ میری نیشنلیٹی: _____

میرے کام کی نوعیت: _____

- میرا تعلیمی معیار: ان پڑھ پرائمری میٹرک کالج جامعہ
- ازدواجی حیثیت: کنوارہ شادی شدہ مطلقہ رنڈوا

مریض کی طبی مشکلات: _____

_____ ہسپتال میں داخل ہونے کی تاریخ: _____

_____ ہسپتال سے فارغ ہونے کی تاریخ: _____

حصہ دوم

پر جوش مخالف	مخالف	غیر یقینی	حامی	پر جوش حامی	سوال	نمبر شمار
					ہسپتال سے فارغ ہونے سے قبل طبی تعلیم ایک اہم چیز ہے۔	۱
					کیا دوائیوں کے متعلق جاننا ضروری ہے؟ ☆ دواء کا نام۔ ☆ دواء کی تاثیر۔ ☆ دواء کی مقدار۔ ☆ ضمنی اثرات۔	۲
					ہسپتال سے فارغ ہونے سے قبل غذاء کے شیڈول کا جاننا ضروری ہے؟ ☆ کون سی غذاء کی تاکید کی گئی ہے۔ ☆ کون سی غذاء سے پرہیز بتائی گئی ہے۔ ☆ غذاء کی کتنی مقدار بتائی گئی ہے۔	۳
					کیا روزمرہ کے درج ذیل معمولات سے آگاہی اہم مسئلہ ہے؟ ☆ اپنا خیال رکھنا۔ ☆ ڈیوٹی سرانجام دینا۔ ☆ سیٹریاں چڑھنا۔ ☆ مباشرت کرنا۔ ☆ ننید کے مسائل۔	۴
					ورزش کا علم ہونا۔ ☆ ورزش کی قسم۔ ☆ ورزش کی تعداد۔ ☆ ورزش کا دورانیہ۔	۵
					ڈاکٹر سے دوبارہ ملنے کے شیڈول کا علم رکھنا ضروری ہے۔	۶
					کیا غیر واضح باتوں کو جاننے کیلئے سوالات (مشورہ) پوچھنا چاہئے؟	۷

پر جوتس مخالف	مخالف	عیر یقینی	حامی	پر جوس حامی	سوال	ر. شمار
					ہسپتال سے فارغ ہونے سے متعلق معلومات کا آغاز ☆ ہسپتال میں داخل ہوتے ہی شروع ہو جانا چاہئے۔ ☆ ہسپتال سے فارغ ہوتے وقت ہونا چاہئے۔ ☆ ہسپتال سے پہلی مرتبہ فارغ ہونے کے بعد ہونا چاہئے۔	۸
					طبی صحت کی تعلیم دینے کیلئے سب سے مناسب شخص ☆ نرس ☆ ڈاکٹر ☆ ایک کمیٹی جس میں یہ دونوں اور کچھ دوسرے اشخاص بھی شامل ہوں۔	۹
					ہسپتال سے مناسب طبی تعلیم حاصل کر کے گھر لوٹنا ☆ جلد صحت یاب ہونے میں معاون ہے۔ ☆ نفسیاتی اور دماغی دباؤ کو کم کرتا ہے۔ ☆ ہسپتال میں دوبارہ داخل ہونے کی ضرورت کو کم کرتا ہے۔ ☆ گھر پر مرض سے چھٹکارہ حاصل کرنے میں سہولت مہیا کرتا ہے۔	۱۰
					طبی تعلیم حاصل کرتے وقت گھر کے کسی ایک فرد کی موجودگی اہم ہے۔	۱۱
					طبی تعلیم حاصل کرتے وقت گھر کے کسی ایک فرد کی موجودگی : ☆ سمجھنے میں مدد کرتی ہے۔ ☆ دہرانے میں مدد کرتی ہے۔ ☆ یاد رکھنے میں مدد کرتی ہے۔	۱۲
					طبی تعلیم حاصل کرنے کا بہترین طریقہ : ☆ آمنے سامنے بیٹھ کر۔ ☆ روبرو بیٹھ کر اور ساتھ ساتھ کتاب کو پڑھ کر۔ ☆ صرف کتاب کو پڑھ لینا ہی کافی ہے۔	۱۳
					طبی تعلیم کے دوران درج ذیل آلات بھی استعمال ہونے چاہئے۔ ☆ فلمیں / ویڈیو ☆ تصاویر ☆ تعارفی کتابچے (بروشر) ☆ عملی مظاہرے	۱۴

RESEARCH ETHICS COMMITTEEStudent: S RIZKALLAHResearch Title: PATIENT AND FAMILY EDUCATION UPON
DISCHARGE AFTER MYOCARDIAL INFARCTION.

A. The proposal meets the professional code of ethics of the Researcher:

 YES NO

B. The proposal also meets the following ethical requirements:

	YES	NO
1. Provision has been made to obtain informed consent of the participants.	X	
2. Potential psychological and physical risks have been considered and minimised.	X	
3. Provision has been made to avoid undue intrusion with regard to participants and community.	✓	
4. Rights of participants will be safe-guarded in relation to:		
4.1 Measures for the protection of anonymity and the maintenance of confidentiality.	X	
4.2 Access to research information and findings.	X	
4.3 Termination of involvement without compromise.	X	
4.4 Misleading promises regarding benefits of the research.	X	

Signature of Student: _____ Date: _____

Signature of Supervisor: ARlllys Date: 2/7/2001Signature of Head of School: ARlllys Date: 2/7/2001Signature of Chairperson of the Committee: [Signature] Date: 3.7.2001
(Professor S P Henzi)

Appendix 5:

INSTITUTIONAL permission

Title of Person: _____

From: Mrs. Sawsan Rizkalla
Partial fulfillment of Master Degree in
Critical Care Nursing.
Institutes of Nursing,
Abu Dhabi.

I am requesting your kind permission for allowing me to conduct my data collection on MI patients and one member of their family to explore their perception about educational needs upon discharge.

Risks to subjects are minimized and are reasonable in relation to anticipated benefits. Selection of subjects is equitable, and the privacy of the subjects and confidentiality of the data are adequately protected. Approval is given.

Your cooperation is highly appreciated.

Date: _____

Name of Members Present: Signature of Members Present:

Appendix 6:

Health Education Policy (Fogoros, 2002: Arizona Department of Health Service, 1995).

Introduction:

A knowledgeable person can deal with problems in a confident and flexible manner. Cardiac patients need information to deal with their chronic problem at home and to reduce the possibility of readmission.

Target group:

Ischemic heart disease patients and one appropriate family member.

Responsible service staff:

Nurses, doctors, multidisciplinary committee according to the hospital general policy.

Purpose:

Provide appropriate information on different aspects of the disease according to each patient's individual needs.

Policy procedure:

- Case manager or primary nurse is responsible for assuring that time frames for the completion of goals and objectives are included in the individual service / treatment plan which forms the basis for the development of the discharge plan. The discharge plan is developed in the presence of the patient and one family member.
- Establishment of a rapport with the patient and his family members is achieved by introducing yourself as a primary nurse.

- Physical and psychological assessment done upon admission.
- Agreement with the patient and one of his family members upon the appropriate time to start the health education session.
- Discuss with them the educational needs derived from the health assessment.
- Establish and promote independent learning by managing their own health.
- Ask the patient what would you like to learn while in the hospital.” Who cares about your health more than you do?”
- Develop a file of educational content which includes items from the following list according to the patient’s needs:
 - Medication (name, action, dose, frequency, side effects).
 - Diet (allowed, not allowed, amount).
 - Daily living activity (self care, climbing stairs-----).
 - Exercise (frequency, duration and types).
 - Follow- up visits.
 - How to manage the emergency situation (severe chest pain----)
 - Develop a preferred education format for the patient.

Appendix 7:

Discharge teaching standards

(Fogoros, 2001 and Fogoros, 2002)

Standard	Hospital best practice in discharge planning
On admission	<ul style="list-style-type: none">• Conduct patient assessment and prepare detailed history, including current and expected problem.• Review assessment (where applicable).• Contact the appropriate professionals for full background.• Estimate the date of discharge and commence plans accordingly.
During the admission	<ul style="list-style-type: none">• Ensure constant multidisciplinary assessment of patient's condition.• Discuss discharge plans with the patient and carers (if applicable).
48 hours before discharge	<ul style="list-style-type: none">• Alert all relevant multidisciplinary team members of the discharge date.• Complete discharge checklist.• Complete relevant documentation, i.e. nursing reports. Ensure drugs to take away were explained to patient and his carer.• Arrange transport.

<p>One day before discharge</p>	<ul style="list-style-type: none">• Provide written information of drugs name and dose, treatment, outpatient department appointments, etc. and explain them to the patient.• Reinforce lifestyle restrictions (where applicable).• Reinforce how the patient may feel after discharge, and who to contact, i.e. GP, nurse, social services.• Remind the patient and the carer of the arrangements that have been made for them in the hospital (appointment).• Check that all necessary documentation has been completed and is both accurate and legible.
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HEALTH EDUCATION MATERIAL USED FOR CLIENTS WITH ANY KIND/TYPE OF ISCHEMIC HEART DISEASE

(Crittenton, 2001 and Fogoros, 2002).

What: Promoting the patient's own health, enabling the patient to be as knowledgeable as possible about his own health condition, taking good care of himself. (What may happen after the acute phase of a heart attack?)

Content to discuss

- Typical symptoms of the IHD type
- Chest discomfort/pain, possibly radiating to the arm, neck, or jaw
- Shortness of breath, sweating
- Gastrointestinal complaints (nausea)
- Expectations about symptoms which may come on gradually or may be intermittent
- A heart attack is not necessarily accompanied by sudden crushing chest pain and unconsciousness. You must go to the emergency room within one hour.
- Knowledge allows you to become an active participant rather than a passive one
- Action steps to take when experiencing symptoms.

How:

- One-on-one instruction is always important.
- Keep messages simple and consistent
- Repeat message in a variety of settings.
- Elicit counseling skills of doctors, nurses and other health care providers.
- Use supplementary means of delivering educational messages about symptoms and action steps to reinforce.
- Have written materials prepared about the cardiac disorder
- Encourage patients to have a plan and to review/rehearse it periodically.

- Patient's symptoms may or may not resemble prior symptoms.
- Patients should make the most of their encounters with their doctor. Keep careful records
 - Prepared material about lifestyle modification (give up smoking).
 - Identify medication, daily activities allowed, diet (nutrition), maintain ideal body weight, cutting down on saturated fats, exercise.

Make sure that patients are aware of the following:

- How can we prevent another heart attack in the near future?
- How can we prevent or reduce complications (heart failure, the long-term risk of repeated heart attacks, the risk of sudden death)?
- With the sudden onset of chest pain,

When And Where (To Educate):

- Upon admission in the In-patient setting and at discharge

Who: High risk – patients with any diagnosis of IHD.

Social aspects:

- Family members/significant others should be included in all sessions and counseling and have a good understanding of the nature of IHD symptoms and the importance of calling EMS quickly.
- Family members/significant others have an important role in preventing patient denial and in facilitating the call to access EMS.
- Know the location of the hospital with 24-hour emergency department service closest to the patient's home or work.