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**ACUTE MYOCARDIAL INFARCTION
AS A LIFE SITUATION
FROM PATIENTS PERSPECTIVE**

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THESIS ABSTRACT

Acute myocardial infarction is a serious disease in which a patient can survive or die depending on his or her attitude towards life. This is because if one takes seriously doctors instructions there is a possibility of overcoming this condition. It has been seen equally occurring in both male and female. It has also been viewed as life threatening condition which needs a lot of attention to prevent, promote health and cure from the disease. Current medical and surgical treatments have reduced the mortality rate but still the prognosis of AMI patient is poor.

The aim of the research is to find out evidence based coping skills, experiences and life situation and also preventive measures for those who have not been affected by the disease. The research questions were:

1. What are the challenges faced by the patients during the AMI and also after the treatment?
2. What kind of experiences do they have during this period of having AMI?
3. How satisfied are the patients concerning the care and treatment they receive?

The research has focused on coping strategies, responsibilities as a person and also for the caring personnel's, courage and trust as the main things to positively help in healing and recovery.

The data collection was done using systematic literature review and qualitative analysis. The key words that we have used are: Myocardial Infarction, Acute stage, Life situation, Experiences, Patients, Coping, Age (adult age).

ABREVIATIONS

MI	Myocardial infarction
AMI	Acute myocardial infarction
WBC	White blood cells
ESR	Erythrocyte sedimentation rate
AST	Aspartate aminotransferase
LDH	Lactic dehydrogenase
SGOT	Serum glutamic-oxaloacetictransaminase
ECG	Electrocardiogram
MRI	Magnetic resonance
IV	Intravenous
PCI	Percutaneous coronary intervention
ATP	Adenosine triphosphate
WHO	World Health Organization.

Table of Contents

THESIS ABSTRACT	3
ABBREVIATIONS	4
1. INTRODUCTION	7
2. BACKGROUND	8
2.1 CENTRAL CONCEPTS:.....	8
<i>Myocardial Infarction:</i>	8
<i>Experience:</i>	8
<i>Life situation:</i>	8
<i>Coping:</i>	9
2.2 CAUSES OF ACUTE MYOCARDIAL INFARCTION	9
2.3 RISK FACTORS OF THE ACUTE MYOCARDIAL INFARCTION	9
2.4 CLINICAL FEATURES OF ACUTE MYOCARDIAL INFARCTION	10
2.5 DIAGNOSIS OF ACUTE MYOCARDIAL INFARCTION.....	11
2.6 TREATMENT	12
2.6.1 <i>Medical management</i>	12
2.6.2 <i>Surgical Management</i>	13
2.6.3 <i>Nursing Management</i>	13
2.8 PATIENT EDUCATION OF ACUTE MYOCARDIAL INFRACTION.....	15
2.9 COMPLICATIONS OF ACUTE MYOCARDIAL INFARCTION.....	17
3. THESIS AIM/OBJECTIVE	17
RESEARCH QUESTIONS	18
4. METHODOLOGY	18
4.1 DATA COLLECTION	18
4.2 INCLUSION CRITERIA.....	20
4.3 EXCLUSION CRITERIA	20
4.4 DATA ANALYSIS	21
FIG. 1 ANALYSIS IN AN INDUCTIVE FORMAT	24

5. PATIENT'S LIFE SITUATION AND EXPERIENCES.....	25
6. COPING WITH DISEASE	28
7. GENDER DIFFERENCES	29
8. PATIENT'S CARE SATISFACTION.....	30
9. RESULTS	31
10. VALIDITY AND ETHICAL CONSIDERATION	33
10.1 VALIDITY	33
10.2 ETHICAL CONSIDERATION.....	34
11. DISCUSSION	34
12. CONCLUSIONS AND RECOMMENDATIONS.....	35
13. REFERENCES:	37

1. INTRODUCTION

Acute myocardial infarction is a disease which affects the patient in an extremely stressful way. It is described as a threat that leads to a life crisis in one's whole life and it is also a high family stress especially for the couples (Erikson et al 2010, 3485-3493).

For the first time the Swedish physician Malmsten and pathologist J. von Duben gave the MI full clinic pathological description. In 1896 the term MI was introduced by a young French physician Rene Marie. In USA the MI term was described and accepted in 1912 and also in England after few years later. The incidence of AMI is high and it is the leading cause of death in the elderly also. According to WHO in the world 14 million people die annually (WHO 2011). In the United States only, cardiovascular disease causes 1.5 million acute myocardial infarction which result one-third death (Maddox 2011, 20-27). Acute myocardial infarction requires immediate medical seek /interventions for all age patients but the elderly people are much more at higher risk for morbidity and mortality while compared with younger. It is reported that 85% of population who die due to AMI in the United States are 65 years old. This is because of late arrival in hospital for treatment

Myocardial infarction is also known as heart attack. It is a condition of heart muscles death when one or more coronary arteries which supply oxygen-rich blood to the heart muscle become suddenly blocked (Stricker et al 2003, 526-527). Blockage results from plaques made of fats and cholesterol. The accumulation of this plaque is known as coronary artery disease. The accumulation of plaque is a process and also can produce chest pain symptom known as angina pectoris (Herman and Walsh 2011, 491-495). A myocardial infarction occurs when a plaque rupture suddenly and it causes a rapid accumulation of clotting factors at the rupture site which leads a sudden obstruction of blood flow in the coronary artery. Sudden obstruction prevents blood reaching the heart muscle. The heart muscles start to die if there is no vital supply of oxygen-rich blood. The longer the obstruction persists, the greater the amount of heart muscle dies. Myocardial

Infarction is a medical emergency. If not treated on time it may lead permanent damage of heart muscles. (Browne 2010, Maddox 2011, 6-10).

2. BACKGROUND

AMI is a killer disease and for that reason it is advisable to look for the required treatment immediately the symptoms have been established. The research shows that the very beginning of patients hospitalization contributes a lot in the coming future since the patients is able to cope and adjust his or her lifestyle.(Höglund,Winbland,Arnetz 2010,482-485).

2.1 CENTRAL CONCEPTS:

Myocardial Infarction:

The term "myocardial infarction" focuses on the myocardium (the heart muscle) and the changes that occur in it due to the sudden deprivation of circulating blood, hence limited oxygen supply. The main change is necrosis (death) of myocardial tissue. The incidence of AMI is high, and it is the leading cause of death in the elderly (Browne 2010, 41-42)

Experience:

The patients suffering from AMI usually experience several problems during treatment period, including mental reactions related to the illness. Most of the patients with AMI always fear about the treatment and the outcomes since this is a serious disease that may even lead to death. (Svedlundand Danielson 2004, 13, 438–446).

Life situation:

The patient's life situation includes their relation to their environment which includes; their family, work and society.

The person who is affected by AMI finds himself or herself in a new situation in life, and at a time when the patients are most vulnerable, they are challenged more than ever to change life-long patterns of living.

Patients who find themselves in a confused situation feel stress and anxiety about what they may expect. The patient would have the feeling of sense of support, limitation, feeling anxiety and powerless.

(Svedlund 2003)

Coping:

Coping is a technique that human beings use to keep away from stress and the stressing environments by tending to ignore all the stressors. Some people tend to minimize the stress by seeking support socially and also having a positive thinking despite of the situation. (Holahan, Moos, Brennan&Schutte 2005, 2-3)

2.2 CAUSES OF ACUTE MYOCARDIAL INFARCTION

Suddenly blockage of a coronary artery (only one branch or the whole), necrosis of the myocardium portion, formation of scar or fibrosis of myocardium, blockage of coronary artery or coronary occlusion due to thrombus.(Maddox, 2011).

2.3 RISK FACTORS OF THE ACUTE MYOCARDIAL INFARCTION

Since myocardial infarction is still one of the main causes of mortality in the world, some people remain blind on its risk factors because of lack of information. There are so many AMI risk factors such as tobacco use, family history, and elevated levels of cholesterol, diabetes mellitus, and hypertension.

Use of tobacco

A person risk of heart disease increases with the number of cigarettes taken and also the longer the period of smoking the greater the risk. Smoking does not only affect these smokers but it also affects the people around. The nicotine which is present in smoke affects people in such ways as: decreased oxygen to the heart, heart rate and blood pressure increase, increase blood clotting and also damages the cells that line coronary artery and other blood vessels.

Blood pressure increase/hypertension

There is a certain normal pressure of blood. The increase in blood pressure damages the arteries due to the extra force added against their walls and as a result the arteries cannot deliver oxygen to other body parts. The injured arteries have the possibilities of becoming hardened and narrowed by the deposits of fat.

2.4 CLINICAL FEATURES OF ACUTE MYOCARDIAL INFARCTION

Most of the patients are not aware of the different types of symptoms indicating the presence of AMI and this leads to delay to seek medical advice and hence worsening the situation. There are two kinds of symptoms which might be associated with cardiac problems and are easy to identify and others are not easy to identify if they are associated with AMI or other diseases (Vincent et al 2000, 388–393).

The first type of symptoms is typical which is said to be associated with cardiac problems e.g. numbness of neck may occur, chest pain and even collapsing. The other type of symptoms is atypical which might be also associated with cardiac problems but the public is rarely educated or informed about them of which patients cannot easily think can be due to AMI e.g. vomiting, sweating, shortness of breath, fever and even fainting (Horne , James, Petrie, Weinman ,Vincent et al 2000, 388–393).

The most common frequent symptom is pain which may radiate to the left arm and sometimes to the right and side of the neck. Symptoms in general are:

Chest pain: the pain is constant that comes sudden and it is severe. It is not relieved with rest or medicine (Nitrates). The duration of pain is usually more than 30 minutes and it is in the same location of angina but it is more severe than angina.

Other symptoms are:

Abdominal pain associated with nausea and vomiting, Restless, Cyanosis, Dyspnea, Weakness, Dysrhythmia, Blood pressure may be low, Pulse imperceptible and rapid, Shock(Horne, James, Petrie, Weinman,Vincent et al 2000, 388–393 and Browne 2010, 41-42).

2.5 DIAGNOSIS OF ACUTE MYOCARDIAL INFARCTION

AMI sometimes take time unrecognized since the signs appear in a funny way. Sometimes some people become reluctant to seek medical advice since they think the pain they are feeling is due to something else. Sometimes the patient might just experience chest pains which might or might not be due to AMI and even these pains might be accompanied with heartburns or gallbladder problems. In order to identify early the main cause of the above, diagnostic process is a very important exercise to be carried out as soon as possible since by delaying medical attention; patients are at much high risk of permanent heart damage and death. As soon as possible the diagnostic process should be carried out. There are several techniques that can be used for AMI diagnosis. (Horne et al 2000, 388-393). They are:

Patient history: Present and past medical history, about medicines, physical examination, Inspection: may find cyanosis, anxiety, shortness of breath,

auscultation: may find presystolic gallop and murmur sound or pericardial friction rub.

Laboratory test:

Blood and serum enzyme test: In this WBC count is done. It shows the inflammation due to myocardial necrosis, increased ESR, increased ESR rapidly, increased AST and creatinine level, increased LDH (lactic dehydrogenase), and increased SGOT level.

Urine and stool as required, ECG (electrocardiogram) ST-T wave changes with evolution Q waves, examine Troponin, echocardiography (imaging technique), magnetic resonance (MRI), (Shiraki and saito 2011, 379- 385)

MI is one of the progressive and severe disease conditions which are associated with high morbidity and mortality. We can see even though the current medical and surgical treatment has reduced the mortality rate but the prognosis is still poor for MI patients. (Whitfield et al. 2006)

The chief goal of AMI treatment is to restore the backflow of blood to the heart muscles which is done by quickly opening the blocked artery. When the artery is open it reduces the damage to heart muscles and thus reducing the pain. This kind of treatment offers the patient a feeling of relief because when the patient is in great pain there is a tendency of becoming discouraged and loses the meaning of living. If this opening of the artery (reperfusion) is done within first four to six hours of heart attack it is of great importance to the patient (Van Donbergs et al. 2005, 1469-1470).

2.6 TREATMENT

2.6.1 Medical management

Some of the medical management used in this case are as follows:

Inhalation of Oxygen ,anti arrhythmic drugs,in severe cases administer I/v Morphine sulphate and diazepam as required, I/V Heparin to prevent from thromboembolism but it is not necessary for mild case, pain relief (Nitro-glycerin for active pain),prevention and treatment of any complications that may arise, Immediate administration of aspirin and physical activities should be Limited.

The other non-surgical treatment is Angioplasty which is also known as PCI. (Browne 2010, 41-42 and National Heart, Lung and Blood Institute 2012).

2.6.2 Surgical Management

Coronary recanalization (Browne 2010, 41-42)

2.6.3 Nursing Management

Monitor vital signs, oxygentherapy, continuous monitoring of oxygensaturation, regular cardiac monitoring, maintainintravenousfluid, labinvestigation, reassure patient and family member.(Maddox, 2011)

2.7 NUTRITIONAL TREATMENT OF ACUTE MYOCARDIALINFARCTION

Once a person is suffered from the AMI, it is most important to do the nutritional management to prevent another attack that might take place in everyone. Proper nutrition is one of the main aspects of a healthy heart and healthy lifestyle. Due to the intracellular deficiencies of nutrients such as magnesium, vitamins C, E and several vitamins B might result metabolic dysfunction. These all nutrientsplays a vital role in synthesis of adenosine triphosphate (ATP) (Gaby and Alan 2010, 113-123).

Magnesium is very useful for the treatment of AMI. Magnesium promotes the vasodilatation and prevent from vasospasm. It has antiarrhythmic activity and also plays a great role in producing myocardial energy. It was reported that his intravenous administration of right amount of magnesium decrease mortality and also improves the clinical outcomes in patients with AMI. Magnesium has seen beneficial when it was used as a primary therapy in AMI treatment. Magnesium can be used as first line treatment of AMI patients who are not candidates of fibrinolytic therapy like people with uncontrolled hypertension, recent stroke and current bleeding (Gaby et al 2010, 113-123).

While considering the nutritional approach for the treatment of AMI it is important to keep on mind about non-ischemic factor. Carnitine has also a vital role in producing myocardial energy by making the way of transportation of fatty acids into mitochondria. The Myocardialcarnitine becomes doubled during ischemia and the carnitinedeficiency might exacerbate ischemia and contribute to the pathogenesis of MI. As well as most of the B vitamins also play a role in myocardial energy production and therefore it is useful in reducing myocardial risk to ischemia. B vitamins can be administered during the early stages of acute MI, which would help to improve outcomes. Vitamins E and C have antioxidant activity, which helps to might minimize free radical-induced myocardial damage (Gaby and Alan 2010, 113-123).

While talking about the nutrition, the intake of saturated fats increased the risk of MI. The products of diary that are rich in saturated fats are such as milk, cheeses etc. That should be limited (Warensjo et al 2010). Nutrition is a big part of living a healthy lifestyle. Proper nutrition increases overall heart health, as well as help with other diseases also. So, to live a healthy life it is most important to follow the healthy well-balanced nutrition.

2.8 PATIENT EDUCATION OF ACUTE MYOCARDIAL INFRACTION

In all settings, educating patient or patient teaching is considered as an essential component of nursing. Patients in all place for example in rehabilitation centres or at home and also the community at large need information that will help them to engage in self-care and encourages them to make health decisions accurately without fear. When it comes to this issue of how to provide effective patient education, to an extent it remains unclear because of the short stay in hospital, multi-tasking of nurses and also it is costly if the patient will be forced to stay longer in hospital as the time is planned for his/her education. All in all there is a need to identify the strategies to be used to educate the patient about AMI, time and costs since it cannot just be ignored. (Meischke et al 2005 and Morgan, 2005 Lutfiyya, Cumba, McCullough, Barlow and Lipsky 2008, 310-315).

One of the things that we need to consider when educating patients in all healthcare settings is how to improve one's ability to recognize and respond to the symptoms of AMI since cardiovascular disease is still one of the leading cause of deaths especially in United States. In 2009, the estimated incidence of MI was 610,000 new and 310,000 recurrent attacks and from this patient affected 37% of them died (American Heart Association 2009).

Nurse role in patient education is also important because there is need for a nurse to identify patients need for education, risk factors affecting the patient's case and the message to be delivered in a manner that the patient will understand. The nurse is also required to have good communication skills and should also be able to handle a lot of difficult situations. The nurse in this case should also be open and understanding to patient wishes and fears because if there is no empathy a patient cannot be brave enough to communicate with the healthcare professional. In Finland, the nurses in the outpatient clinics are educated to deal with patients suffering from cardiovascular diseases. It is also organized in a way that visits in the clinic are on regular basis and so the nurses are able to make the patients care plan and have a follow-up. When patient is met as an individual, it shows a

good principle of providing patient centered care than follow-up using phones. The patient is also in a position to give you more information about her progress when she is there in person.(Sheldon, Barrette and Ellington 2006, 213-215).

During this patient education trust is another important thing to create and maintain. This can mainly be achieved by respecting the patient and his/her views and also acting professionally, which will read to good mutual relationship. Combination of factual and storytelling ways of educating patient are very important because there is a possibility of a patient remembering more of education sessions conducted inform of storytelling than others. The story telling may be based from experience that might have happened to a certain individual or patient there before and maybe had a good effect. For example there is this patient's experience.

Lucy was making breakfast when she began feeling weak, tired and short of breath. She thought of a day when her friend Jane had felt sweaty and dizzy, with sensations in her arms and chest but Jane was so busy in helping her daughter in shopping. She did not take it seriously and so she didn't survive from the attack and died the same day. Lucy recalled Jane's husband saying that if Jane had only called the emergency unit or the ambulance and been treated within one hour of the symptoms onset she could have survived. Lucy still was confused if to call or not because she was afraid of causing disturbance in the ambulance unit. She later thought of calling her own doctor but realized that the time will be over if she thinks of calling her own doctor and she also considered that the disease kills easily if not taken care of. She called the ambulance and the worker who received the call assured her that they will be there as soon as possible. The ambulance within some few minutes arrived and begun the treatment to save her life. The worker also told Lucy that women especially may have symptoms like feeling hot, Nausea, chest pain, fast heart beat etc. Lucy is happy because lack of delay in seeking medical advice made her see another day". (Dillon, Goncalves andAlmario, 2006, 217-223).This showed that it is very important for patients to respond to the symptoms as fast as possible.

2.9 COMPLICATIONS OF ACUTE MYOCARDIAL INFARCTION

The complications such as angina pectoris, arrhythmia and the heart failure may occur and also often lead to lifelong medication treatment or surgical intervention. The other Complication of acute myocardial infarction includes:

Hypotension, arrhythmic complications, mechanical complications, left ventricular aneurysm, peripheral circulatory failure, ventricular septal rupture which is related with right ventricular infarction, pseudo-aneurysm and cardiac failure/ cardiogenic shock (Kuznets 2011)

3. THESIS AIM/OBJECTIVE

The aim of our thesis was to describe how AMI patients experience as they undergo this period of infarction before they are diagnosed, period of hospitalization and also after being discharged, and how willing they are to help others be aware of this disease. It was also meant to help nurses when planning for the patient during that period of hospitalization and also before discharging the patient. In this case the nurses will prepare the patient on what to expect when they return home and teach them how to become more independent while taking care of themselves back home. The review was also meant to encourage other patients on how to cope and manage with this disease. This is because most of the patients do not have enough knowledge about AMI, causes, symptoms and also how to prevent from having the disease at early stages.

We opted to research from patient's perspective because they are the ones who have experienced the disease and all its consequences and so our audience/readers will take it more seriously and also we are sure that we will not

get second hand information. This is because patients who have experience prefer to offer all the information that they can in order for others to benefit since others consider like if they had information before they got sick maybe they would have taken a step forward and overcome the disease.

Our review was also aimed at giving the recent information which is up to date and which is from the experience of the patient in order to let the world be aware of what is happening out there because most of the people are affected due to lack of knowledge and in this case as we consider that AMI is a great killer nowadays if not taken care of. Our review was also aimed at helping caretakers to improve the way of delivering care to AMI patients by adapting to new techniques since technology is changing day by day and this would also help the patients on how to cope with the disease after discharge from the hospital and the whole of their rehabilitation time. It was also to encourage the nurses to adapt in research in order to get evidence based information spread it to the needy as much as they can especially during the counseling sessions.

RESEARCH QUESTIONS

What are the challenges faced by the patients during the AMI treatment and also after the treatment?

What kind of experience do they have during this period of having AMI?

How satisfied are the patients concerning the care and treatment they received?

4.METHODOLOGY

4.1 Data collection

The method of research was Systematic Literature Review .The electronic search was conducted and the articles included in our research were the ones that

clearly explained about our topic ,keywords and all the inclusion criteria. The data collection was mainly focus nursing science journals and articles which we can find in internet.

Most of the information about our research was gathered from Pub med, Ebsco, and CINAHL.The materials were limited to 2000 up to date. The search results were too wide and thus the search criteria had to be narrowed by considering those articles with full text. This is because the materials with full text also helped us to get concrete information about our topic. The search was also limited only in English language. The key words used included myocardial infarction, patient, coping and experiences although sometimes we were forced to combine two or three words in order to get useful and relevant articles.

Fig.1 About data collection

DATABASE:

	Total number of articles	Includedarticles	Excludedarticles
PUBMED	3661	4	3657
EBSCO CINAHL	40	13	27
SAGE	134	2	132
OTHER WEBSITES	-----	3	-----

4.2 INCLUSION CRITERIA

Articles including pain experience and management before and during myocardial infarction : This articles will be strictly concerning patients own explanation about the pain experience and not based on what the health personnel e.g. doctors or nurses explanation.

Patient experience and their views about disease: Concerning this criteria we will focus on signs and symptoms the patients face during the disease period and the challenges they undergo to cope with the disease.

Care and treatment: Here we are focusing on the Kind of care and treatment the patients get in hospital and home and also its quality.

Age limits (adult age): Here our age limit will be from 40-60 years of age. This is because men are at a high risk of getting AMI when they attain the age of 45years and women at the age of 55 years of age.

Male and female Patients: Both male and female are at a risk of having AMI in the above age limit.

English language: The main reason for deciding to take English as the language is because it's hard for us to translate articles written in other languages.

Articles from year 2000 up to date.

4.3 EXCLUSION CRITERIA

1. The study that does not have AMI as a case study: If we take articles that do not have AMI as a case study we will not get any useful information related to our topic.

2. The healthy person's views about the AMI: The main reason why we don't consider these healthy persons is because they don't have any experience, They will just explain about what they read and hear, of which will not be of importance concerning our research.
3. Patient's partner: Although these partners are always closer to these patients, we still not consider their explanation because they will just talk of what they observe while taking care of them.
4. Nurses and Doctors perspective: We will exclude their explanation since they don't have any personal experience about the diseases; they just provide care and treatment.
5. Children's age: AMI is common in adult age group and even if it happens to children maybe they don't have a clear understanding of what is happening.

4.4 DATA ANALYSIS

The content analyses in this case which can be either qualitative or quantitative were considered but in our case we used qualitative analysis method. The main aim of data analysis is to become familiar with the found data and get the core meaning of it from these research articles.(LoBiondo-Wood&Haber,2006) The AMI is a wide topic which the researchers have got a lot of materials about experience from different perspectives e.g. from healthcare professionals and from the patient's partners perspectives. So due to this we had to limit our search in different ways. First, during our material searching process, different keywords were used to enable findings of various kind of articles about our main subject like "patient and experience", "life situation" and "coping".

We got altogether 3816 articles but since some were not related to our main topic so we decided to narrow down our searches with specific criteria which was through selecting the years ranging between 2000-2012 which we were left with 25 articles. Once the number of articles reduced the more close investigation of

the articles started. All the articles we collected were based on English language from different sources. All the searched articles were read through and note were done concerning the suitable articles. Different ways of data searching were used for example scientific electronic articles, scientific books and internet websites with scientific materials like WHO.

The articles were read through and the reason we decided to remove some from our list is because they didn't give much information related to our topic even though our main topic search words suggested. Another reason was that the articles were not focusing on the patient experience. The written materials were read through again and considering our topic, inclusion and exclusion criteria and also research questions we did the final selection of the articles and we were left with the total of 23. The researchers have described MI as a critical and dangerous conditions since most of the MI patients who don't receive quality care and even education during hospitalization on how to take care of themselves after they have been discharged are in great risk.

Inductive Analysis

DESCRIPTION SUMMARY

SUB-CATEGORIES

MAIN CATEGORY

*SUPPORT, ISOLATION,
SYMPTOMS*



EXPERIENCE



*MYOCARDIAL
INFARCTION*

IMPROVING, WORSENING



LIFE SITUATION



*ATTITUDE(PATIENT AND
NURSES)*



*COPING AND COPING
STRATEGIES*



MALE AND FEMALE



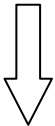
GENDER DIFFERENCE



HOW SATISFIED



CARE SATISFACTION



*SATISFIED, PARTIALLY SATISFIED,
NOT SATISFIED*

Fig. 1 Analysis in an inductive format

The above diagram of inductive analysis

Shows the different categories of what surrounds a patient suffering from myocardial infarction. In the main category it is the myocardial infarction or the disease itself. From the main category we go to the subcategories which clearly explains those factors that affect this patient positively and also negatively. Under experience, the patient can experience any kind of support either social or financial support, the patient can also experience isolation due to family members and friends weakness to accept the situation as it is. Sometimes lack of acceptance comes in because the family can take it as a burden to them.

The second subcategory is life situation. The patient's life situation can improve or worsen due to delays for treatment and also negligence by the healthcare professionals.

The third subcategory is coping and coping strategies. The coping strategy is the attitude the patient has towards the disease, the care and treatment. The patient can contribute a lot in his condition improving or worsening by his or her either positive or negative attitude.

The fourth category is gender differences which can either be male or female. The fifth and the last category is care and satisfaction. In this case the AMI patient can be fully satisfied, partially satisfied or not at all satisfied by the care given which will affect his or her condition in one way or another. All the above categories are there as long as MI exists.

5. PATIENT'S LIFE SITUATION AND EXPERIENCES

As we know AMI is one of the very traumatic experience which affects physically, psychologically and psychosocially. Many people suffering from AMI has experienced the drastic changes from being well to being seriously ill and this reminded them their own mortality. This is quite common that every patient have different affective perception about their life after they know that they are suffering from AMI. The patients having AMI reported the experience that feeling of near to death in the acute phase. In among AMI patient's depression is also common (Svedlund, Danielson and Norberg 2001, 197- 205).

This is one of the life threatening situations. To accept the situation and reality as a part of one's life is easier to the patients who had already experienced the serious illness in their life but the one who suffered for the first time is very difficult to accept the situation. The most common symptoms all patients of AMI has faced are chest pain, weakness, chill, nausea, palpitation, shortness of breath, numbness, dizziness, headache, indigestion, faintness, sweating, bowel pressure, back pain. The breathing problem and the severe chest pain are the most frightening experiences mostly seen in the AMI patients (Norberget al 2001, 197-205 and Browne 2010, 41-2).

In comparison between man and women, the research found women used to wait longer before they seek for treatment. It seems that women experience high levels of depression and anxiety and also have the strong feeling of guilt about disease. Billing in 1980 has reported that in women the anxiety tended to be decrease as age increased. And also as the age is high, it is shown that the social stress is less in both man and women. Acute myocardial infarction influences the quality of life of patients and their family and a major life crisis. Family relationships, especially the relation between partners are mostly affected by such a crisis (Danielson et al 2001, 197-205 and Svedlund et al 2004, 438-446).

In a daily life, after an acute myocardial infarction the reaction of emotional adaptation to the illness and rehabilitation knowing that the core of life of the heart is not functioning well is the most threatening experience for those who are affected. This illness and its symptoms increase the feeling of anxiety. And the patient who is experiencing illness feels isolated from others in the society and separated from the family members. The AMI patients and their family member usually experience several problems during period of the patient's recovery including psychological reactions which is related to the illness, family problems for example disturbance of the balance in the daily life and lack of support of family member to the patient. The people experiencing AMI are faced with two psychological problems; that is coping with the immediate traumatic situation and deal with a long-term threat to their health and sense of well-being. The patients with AMI who are distressed during the hospital stay are at great risk of developing adverse psychological and quality of life outcomes (Svedlund and Danielson 2004, 438-446).

The AMI is the life threatening situation that causes fear and anxiety when one's control over the life is lost. The patients they have feeling of their own mortality experienced. In the acute stage the patients are vulnerable and need of support. Therefore, support is very important for patients suffering from AMI. For the AMI patient, the condition caused by AMI such as anxiety, loneliness, fear, depression inferiority and insecurity that may lead the feeling of vulnerability. In women fatigue was an important symptom that they were notice sleeping more than usual. Because of this women found themselves that their weakness and fatigue were different than usual and also they noticed themselves sitting or lying down all the time due to this weak feeling. In some research it was explain that women breathe differently during their AMI. Women they have difficulty to take a deep breath while they were having AMI (Zuzelo 2002, 126-136 and Svedlund et al 2004, 438-446).

The women describe that there was no enough moving air into the lungs and there was difficulty to fill the lungs with air deeply. The symptom experience included the sensation of "a ton of bricks were falling in chest or somebody lying, sitting on the chest. When the women were having AMI, women noticed change in the body

temperature. Some patients also knew that they were sweating, felt clammy, or had a cold feeling. Some women they didn't like to eat. They had a significant loss of appetite. Some common symptoms appeared in both men and women, they had feelings of gaseous like a "gas bubble " and "excessive burping" and they felt like to vomit because of this condition during AMI. Women were aware that they were not fully alert at all times during their AMI symptoms. The AMI patients did not understand what was going on around them (Zuzelo 2002, 126-136).

In additional, men noticed changes in the way of breath. They felt that the airway was blocked and they become distressed. The men also felt pain in either one or both arms. The pain was "sharp" or "tingling" and their arms hurt. Men experienced gastrointestinal disturbances where they felt stomach upset and were uncomfortable with significant indigestion too. Men felt lightheaded and dizzy during their AMI. These two feelings were often experienced simultaneously. Some men had a feeling that they were going to lose their consciousness due to AMI and they also explain about the experienced of loss of bowel control and a seizure during the time of AMI. Several men also had restless or interrupted sleep because of the disease condition. They can't sleep well (Zuzelo 2002, 126-136).

In many qualitative researches it has described that the AMI patient's health and quality of life rate is in lower level than the average population. And also shown that women experience health and comfort lower degree in the comparison of men. Everything changes in the patient's life due to the sudden experience of AMI where life and death becomes a one's part of everyday life; no one knows when what will happen.

6. COPING WITH DISEASE

Coping means dealing with a situation that present a threat to personal integrity so that the feelings of anxiety fear and grief may be resolved. As we can say that the word coping consists two central concepts, they are approach and avoidance. In this case we are talking about how patient is able to cope with this situation of acute myocardial infarction. The patients with AMI attempts to cope and control are accompanied by the factors that interferes or affect positively or negatively. Active coping is an important factor that leads individuals to successfully cope with stressful situations. Active coping means being in a position to solve problem by seeking information, seeking social support, changing environments, planning activities etc. According to the researchers coping is termed as a personality trait which forces him or her to react in different ways across different types of stressful situations. There components of coping with situations i.e. cognitive and physiological (Kristofferson et al 2003, 360-374).

Cognitive component is based on mental process of how the individual appraises the situation. The level of appraisal is determined by the level of stress. In this case MI patients are able to cope with the disease differently. In Physiological component the body has its own way of coping with situations. Having exercises and eating healthy keeps the body fit and makes the patient energetic thus giving a hope of living unlike someone who is always in bed. AMI patients are able to cope with their situations especially if nurses, doctors, family members and community are willing to support them financially, socially by giving some new ideas of coping etc. This way they feel accepted and also give them courage to seek the information deeply.

As supporting the patient's with coping, the interfering factors found pertained by patients themselves to their conditions. The patients with AMI reports the

experienced of fears, denial of situation, control losing sense, powerlessness and depression. Because of this bad experience of the acute stage the patients feel seriously ill and dependent to others due to which feeling of guilt and feeling of letting down arises in the patients. Between life and death patients with AMI feel thin line that can be break anytime. The patient wish was expressed that sometime it is easier to understand, recognize and accept own bad feelings if they would have known about the unusual bad feelings were caused by MI .The patients try to come out from the disease condition mentally and continue to live normal life and they show their denial of the situation. Some patients also said that to accept the situation is easy when they get more knowledge, information about the AMI. It is found that the elements that provide support to the patients to cope with the disease during hospitalization were firstly the patients themselves and to their condition as well as their interaction with the environment (Salminen-Tuomaala et al 2012).

7. GENDER DIFFERENCES

AMI affects both gender male and female even though some reported that there are some differences in symptoms where as other described that there is number of differences in AMI patients overall symptoms and experience of atypical symptoms according to Bunde and Martin, 2006. It is said that women are less likely to have heart disease which is the leading cause of death than men in the United States found by Rosmalen, Neeleman, Gans, and de Jonge in 2007. Women who are below 60 years of age have less chance of having cardiac disease than men. It has shown that women who are AMI suffer has greater mortality, morbidity and poor quality of life than men according to the American Heart Association 2007 and Anand et al 2005 (Shin, Martin and Howren 2009, 553- 568).

In many articles (studies) explain that in women atypical AMI symptoms have resulted due to the late seeking of treatment, misdiagnosing the disease and under-treatment (Chen, Woods and Puntillo 2005, Devon 2008 and Kristofferson et al 2003). Mostly the symptoms like back pain, fatigue, jaw pain, neck pain, palpitation and dyspnea has been reported by the women whereas, chest pain and discomfort has been reported by most of the men (Zuzelo, 2002). Some studies has shown that there is no any gender differences in AMI symptom chest pain but in other hand it has reported that among the

Some studies has shown that women has more worse rate that men because of age, diabetes, treatment, etc. even though in first AMI male are the risk factor (Martin et al 2009, 553-568). Once the menopause occurs all the major heart diseases are risk factors in women and also cigarette smoking increases risk of heart disease in both women and men. Some research describe that symptoms in women differ from men in the psychological processes that they use to make decisions about care seeking when they experiencing AMI (Zuzelo 2002, 126-136).

8. PATIENT'S CARE SATISFACTION

The patient's satisfaction is evaluated depending on the care he/she had received from the health care providers. According to the research the care givers such as doctors, nurses communication skills plays a great role to identify the patient's satisfaction range and also the patients expectation towards the treatment has been taken into consideration while providing care because the patient's expectations differ from those care providers have. The research has given the clear point that there is no much knowledge about what influence their satisfaction during and after treatment of patients who have experienced AMI.

In research it has shown that some patients has reported that they had communication and discussion about health education problems during hospitalization which is directly related with their health condition and back to work after treatment. As it is said that AMI is the life threatening condition which need proper medical care as soon as possible the symptoms have been identified. Failure to meet patient's information needs during treatment and after discharge can leads to dis-satisfaction which may cause mistrust towards the health care providers and the systems (Plomondon, magid, Masoudi, Jones, Barry, Havranek, Peterson, Krumholz, Spertus, Rumsfeld 2008, 1-5).

9. RESULTS

After our data searching and analysis we came up with the result which describe about coping with acute MI, patient's life situation and experiences, gender differences and about care satisfaction according to the patients perspective. The patients having AMI have faced different kind of situation in their life arising during hospitalization and after they went home. In many studies it has described that the patients suffered from AMI got difficulties to accept the reality and adjust in the current environment. It is also found that in some articles the women are more sensitive towards the disease. The reason is because they take long time to seek for proper treatment due to fear of the unknown results. (Bogget al.2000)

The patient having AMI feels like he/she is isolated from others in the society and separated from the family members. The people experiencing AMI are faced with psychological problems such as coping with the immediate traumatic situation and dealing with a long-term threat to their health and sense of well-being. The studies had also described about different coping strategies from different patients, for example some patients are overcome by the stress and depression while others are able to balance their moods. The balancing of moods enables the patients to take the condition in a positive way and avoid feeling of worthlessness and live a

meaningful life. The AMI patients attempt to cope and controls are accompanied by the factors that interfere or affect them positively or negatively. Those patients who take care of their nutrition, physical exercises and those who have received enough information about the disease during their hospital stay have better coping ability than others. (Dempsey et al.1995,Lacharity 1997,Hepard &Meagher Stewart 1998,Sutherland and Jensen 2000,Svedlund &Axelsson 2000,Svedlund et al. 2001, 367-368)

Other studies have explained that male and female both suffered equally from the disease AMI regardless of their coping abilities. Women who are below 60 years of age have less chance of having cardiac disease than men.

The below figure clearly explain the common symptoms of AMI.

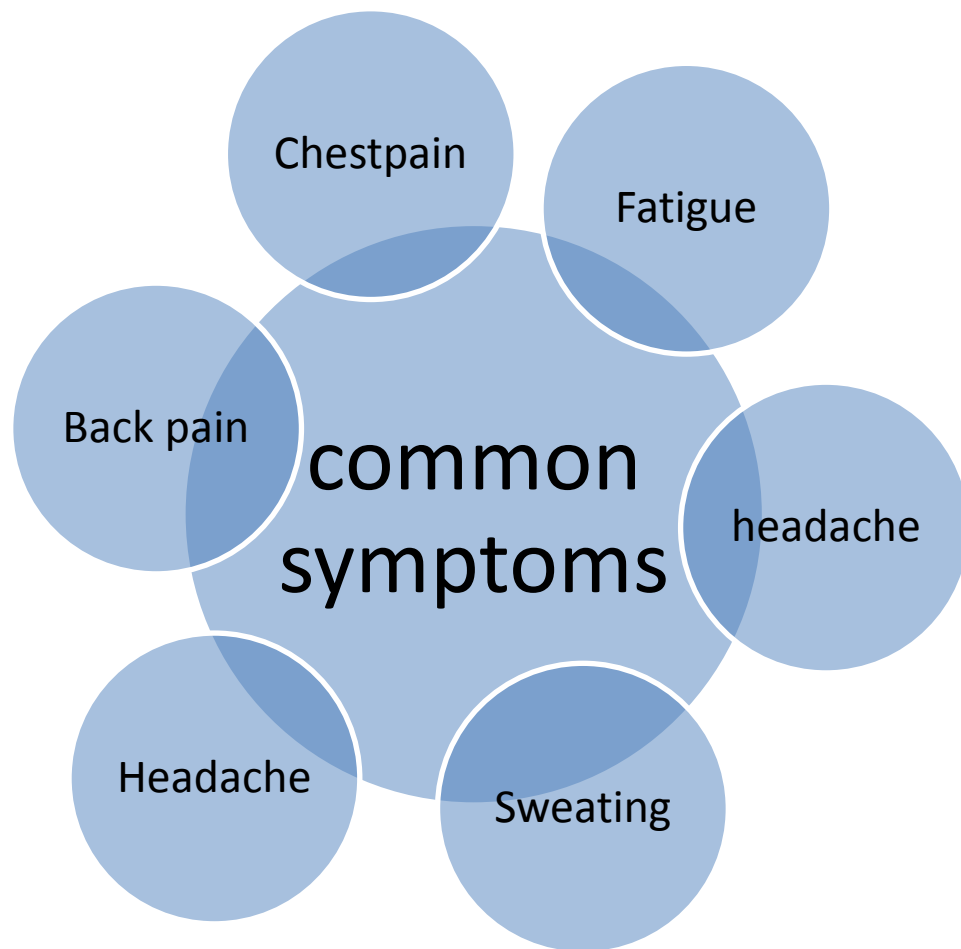


Fig.1 Result of patient experiencing common symptoms.

10.VALIDITY AND ETHICAL CONSIDERATION

10.1 Validity

Validity is the important tool use in the process of research. The concept of validity is used to measure the fact or accuracy of the study (Burns and Grove 2005, 214-383). The search performance was made through the use of health related database, in this case scientific articles. The valid databases that we used were

EBSCO, CINAHL and PUBMED to get scientific articles that answered our research questions based on our topic and within our inclusion criteria.

During our search we ensured that we didn't include our feelings, personal idea and opinions. Those articles were taken from the reliable sources and all the selected articles were based on cardiac disease known as myocardial infarction.

10.2 Ethical Consideration

For the avoidance of plagiarism, all the scientific articles used in our thesis, we have included all the references including the author names, year and the pages. Although it was a research all the information we collected have been written using our own words. Through the presence of references we ensured that the information that we collected is reliable and from the trustworthy sources, therefore providing the nurses and future viewers with evidence based knowledge which will help them to improve their skills, provide the best care and alleviate the suffering since according to Horner and minifie, as a responsible researcher avoids copying other researchers work he/uses his thinking capacity and also teaches Requires scientific practices and methods and also works in line with the rights of the participants or other researchers or in other words respect their work.(Horner and minifie 2011b,303-305).

11. DISCUSSION

From the research conducted it has clearly shown that the AMI is one of the leading causes of death. The AMI is common all over the world in order to overcome it we have to take good care of our health by ensuring healthy diet, exercises and seek medical advice on time when the symptoms have been seen for the first time.

Health education plays a great role to maintain the normal health of a person and also improve their ability to perform one's daily activities. From the research some of the patients are able to cope with the disease through sharing their acute condition with other patients and partners.

Based on the results of our study, it seems that one way of supporting the patients coping is by providing required information about the disease and the symptoms which have been experienced earlier. The counseling, emotional and cognitive support are highly needed to improve the patients situation to a better one. Earlier studies have also shown that it is important to provide enough information to meet individual mental needs.

In this study there is some limitation which is worth to note. The findings are limited to a certain context and according to the time period in which the study was done. In this case the limitation was made by using data conducted within 12 years i.e. from 2000 to 2012. The individual should know that AMI is a life threatening disease therefore one should be quick to get proper treatment on time.

12. CONCLUSIONS AND RECOMMENDATIONS

The AMI is one of the treatable cardiac disease depending on how the individual will act immediately when the symptoms arises. The health personals should keep in mind about the patient's condition and always be concerned about support, counseling and their coping ability. Keeping the patients informed about the disease preventive measures should be taken into consideration always. The study has shown that the ability of overcoming the disease differs between young patients and elderly. Even though, the prognosis of AMI in elderly is poor, it is important to be concerned about prevention.

From the whole study we have conducted we highly recommend that the findings in this research can be used in nursing practice at health care sectors to provide appropriate treatment and also used in health care education.

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