

Men's Experience of Difficulties during First Year Following Myocardial Infarction—Not Only Fatigue

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Abstract

Recovery from a myocardial infarction (MI) can be a very difficult process and some patients are also stricken by fatigue. The aim of the study was to describe the difficulties experienced by men with fatigue during the first year following their MI. The study was conducted using qualitative content analysis of semi-structured interviews with nine men in working age (mean age: 55 years) with verified fatigue (≥ 12 of 20 on the Multidimensional Fatigue Scale with a mean of 17) one year after their MI. During the first year after the MI the men suffering from fatigue experienced various difficulties in terms of both themselves and the care received. The analysis generated three themes with difficulties described by the interviewed men. 1) Going through involuntary change: not recognizing their body and the inability to recognize themselves. 2) Lacking individualized care: To be denied satisfactory health care treatment and to be denied respectful treatment. 3) Not being seen in the light of the social context: The MI affects the whole family and caregivers do not pay attention to the family. In order to make both the patient and relatives feel secure and cared for, it is essential that caregivers be aware of the importance of providing individualized care over time with particular attention for the patient's social context.

Keywords

Fatigue, Men, Myocardial Infarction

1. Introduction

A myocardial infarction (MI) can be an overwhelming experience for the affected individual. The medical treatment is usually taking place during a short-term period and

the person is expected to be able to return to their daily routines shortly after [1]. Nevertheless, recovery after an MI is complex for many patients and complications such as arrhythmia, fatigue and reduced physical ability may follow [2]. An MI could also cause negative emotions such as fear and insecurity that may be experienced during a longer period [3]. Furthermore, one third of the patients may experience depression and anxiety as a consequence of MI [4]. Fatigue has also been described as a bothering symptom [5]. About half of the patients reported higher levels of fatigue four months after MI compared to a healthy population [6]. In a following study within the same population two years after MI, half of the group still reported high levels of fatigue [7]. Tiredness and weakness are terms that often are used synonymously with the symptom of fatigue. Nevertheless, tiredness is experienced by all individuals [8] while fatigue indicates an experience of an overwhelming exhaustion which remains after resting and prevents any adequate amount of physical and mental functioning [9]. Living with fatigue may prevent creativity and participation in social activities, and creates an insecurity and powerlessness as it appears unforeseen without a clear reason [10]. Fatigue may also result in a limited physical and mental functioning that could reduce the self-care ability for the patient [11]. The lack of empathy from relatives for being overwhelmed with fatigue may be another concern after the MI [12].

It has been shown in earlier studies of acute MI that symptoms varied amongst gender, where fatigue has been an important prodromal symptom for women [13]. Findings suggest that women and men differ in their experience of fatigue after an MI. Men struggle with fatigue for a longer period of time due to work-related social and physical readjustment [14]. Previous research on fatigue after an MI has primarily focused on women [15] [16] [17] and limited medical research has been made concerning specific difficulties and complications among men with fatigue during the first year after the MI.

Aim

To describe difficulties that men in working age with fatigue experience during the first year following their MI.

2. Method

The study was empirical with a qualitative method, which was considered relevant based on the purpose to describe the patients' subjective experiences [18]. An inductive approach was chosen to let pattern, themes and connections develop from the data material [19].

2.1. Criteria for Selection and Respondents

Included in the study were men who have been treated for MI a year earlier at a western Swedish hospital. All informants were consecutively included in a greater study concerning tiredness (fatigue) during recovery after MI [20]. During the time period of treatment at a cardiology clinic during March 2010-February 2011, the patients were

invited and gave their consent for participation in the study. Additionally, they were informed about the possibility of being contacted to participate in an interview. The participation in the larger study suggested that the patients were answering questions concerning fatigue and completed the Multidimensional Fatigue Inventory Scale (MFI-20) a year after the MI. The subscales include five dimensions of fatigue; general fatigue, physical fatigue, reduced activity, reduced motivation and mental fatigue. Higher levels indicated a higher level of fatigue [21]. Informants who had a summed score $\geq 12/20$ on any of the subscales on the MFI-20 a year after MI were included in this study. Another inclusion criterion was that participants were required to be in working age. Non Swedish-speaking patients with other serious illnesses were excluded. The mean age was 55 years, the median age 54 years and the age range 45 - 63 years (see **Table 1**). With the informants' consent, they were contacted to make an appointment with any individual requests.

2.2. Data Collection

Nine informants were interviewed during the time period December 2012- February 2013 in locations chosen by the informants themselves. The interviews lasted between 60 to 120 minutes. A semi structured guideline was used during the interview with the questions arranged in a logical order [18]. The interview was introduced with the question: "What are your personal experiences from the year after the MI occurred?" Continuous follow-up questions were asked during the interview based on the concerns that the informants had experienced during the year after the MI. The interviews were recorded with the informants' permission and thereafter transcribed word-for-word.

2.3. Analysis

The qualitative content analysis method was used for the analysis according to Graneheim and Lundman [22]. The method has been developed in order to manage large

Table 1. Informants' marital status, age and fatigue score.

Informants	Wife	Age	Work grad In percent	Fatigue after a year*
A	Yes	61	100	16
B	Yes	63	25	18
C	Yes	62	0	15
D	Yes	54	50	17
E	Yes	54	50	16
F	No	49	100	18
G	Yes	45	100	15
H	Yes	49	100	17
I	Yes	62	0	20

* ≥ 12 = fatigue (Multidimensional fatigue scale, MFI-20).

amounts of data and refer to a systematic review and interpretation of the written data. Additionally, it is a useful method for the analysis of a patient's experiences with health and disease [23]. The purpose of the content analysis is to detect patterns in terms of the categories and themes that are being formed. The analysis was primarily focusing on the manifest content and categories were formed with reference to the text. The deeper meaning was thereafter analyzed and the overall themes emerged [22].

The transcribed interviews were each stated as separate analyzes and read through several times in order to get an idea of the text as a whole. The content was thereafter divided into meaning units, *i.e.* words, phrases or sentences with the same significance created a separate sense unit which was thereafter numbered. The meaning units were summarized and labeled with a code. Meaning units and codes were thereafter compared and discussed between the authors. The codes from all units of the analysis were compared with reference to the similarities and differences and placed into categories and subcategories by similarities answering the questions "what?".

Interpretation occurs according to Graneheim and Lundman [22] in the analysis of both manifest and latent content. Nevertheless, the interpretation differs depending on the depth and level of abstraction. Throughout the analysis, themes emerged which connected the categories. The themes answered the questions "how?".

2.4. Ethics

The study is being reviewed and approved by the Research Ethics Committee (Dnr: 720-10). Ethical concerns have been taken into consideration by the Helsingforsdeklarationen [24]. The informants were informed, both verbally and in written consent about the aim and confidentiality of the study. They were also informed that participation was voluntary and that they were free to terminate their participation without a given reason.

3. Results

The analysis resulted in three themes which described complications the patients had experienced: *To go through involuntary change*, *the lack of individual care* and *to not be seen in the light of the social context*. Every theme is described based on two categories including subcategories supported by quotes made by the informants, **Table 2**.

3.1. To Go through Involuntary Changes

The theme describes how the informants experienced physical, mental and emotional changes during the year after MI and how this led to difficulties.

3.2. The Inability to Recognize Their Body

The category contains the informants' description of difficulties based on perceived physical changes.

To live with tiredness was described as a new type of weariness that has previously

Table 2. Themes, categories and subcategories.

Theme	Category	Subcategory
To go through involuntary changes	The inability to recognize their body	To live with tiredness
		To have difficulties recognizing symptoms
	The inability to recognize themselves	To have difficulties adjusting lifestyles after physical changes
To lose the old self		
The lack of individual care	To be denied satisfactory health care treatment	To change emotionally
		Limitations in life caused by feeling worried and anxious
		To feel hopeless and confused based on physical changes
	To be denied respectful treatment	Insecurity due to improper physical examination.
		Lack of follow-ups and continuity.
To not be seen in the light of the social context	When the family is not seen as a whole	The lack of appropriate group counseling
		Health care does not give enough time for the patient
	The lack of support from family and friends	The lack of individual- and situation- appropriate health information
		Not to be taken seriously
		MI affects the everyday life routines for the families
	Relatives become neglected	
	The lack of support and understanding	

not been experienced and difficult to understand due to illogical perception. “*I was tired for the smallest things. I had to push myself to get things done. I was so damn lazy, I was so tired... I wasn't able to make any effort, which I'm usually able to.*” (Informant E)

Several informants experienced that the tiredness limited their ability to work. Others experienced difficulties walking in stairs and staying awake in social contexts.

To have difficulties recognizing symptoms was an insecurity caused by the gradual symptoms which increased after the MI. Stress and panic attacks may be other factors adding on to the insecurity which could be perceived as similar symptoms to the MI. Several informants experienced insecurity in the recognizing of symptoms: “*I think sometimes, when I am tired, if it could be something...I had terrible pain again... That makes you scared.*” (Informant F)

To have difficulties adjusting the lifestyle after physical changes expressed as weight gain problems after not being able to exercise as much as previous to the MI. However, exercise became a difficulty when certain barriers ascended such as tiredness, lack of motivation, previous illnesses, insecurity and fear of being lonely. “*I wanted to walk in the woods, but I was too afraid...It is always the anxiety, all the time.*” (Informant E)

The informants described difficulties in changing their diets. This could be difficulties such as resisting favorite food or having enough time for regular meals. Recom-

mended diets were perceived as confusing.

The informants also described a sense of hopelessness with the amount of effort managing their health. Additionally, smoking cessation would also create problems with restlessness and anxiety.

3.3. The Inability to Recognize Themselves

The category describes the experiences and difficulties of not being able to recognize themselves physically and emotionally.

To lose the old self was described by the informants as not being able to recognize themselves physically and emotionally. Informants were actively trying to find themselves after MI, which meant finding a new “self” or identity. Due to the intensity at the hospital, several experienced difficulties with remembering and understanding what had happened.

To change emotionally expressed feelings such as frustration, anger and grief of having suffered an MI. The relief of having survived had been replaced by a difficult and painful time the year after MI occurred. Some informants perceived themselves as more emotional after watching a TV-show about rescuing. They also experienced a feeling of uncertainty concerning their health. Other factors based on emotions were sadness and feelings of resignation, especially early after the MI.

To feel worried and anxious creates limitations and affects the everyday life for the informants. Driving became associated with anxiety while someone else described unforeseen and spontaneous panic attacks at work. “*I don’t know how fast I should get home when I’m out working.*” (Informant H)

To feel physically worse rather than better was another reason for anxiety, fear and worry.

After the MI, many of the informants felt insecure about their health and afraid that something serious would happen.

To feel a hopelessness and confusion based on physical changes was often perceived after the MI. The health condition could worsen in the form of chronic pain, high blood pressure, high blood sugar, fibrillation, panic attacks or in the form of a chronic leg wound after a bypass-surgery. A few informants expressed worry about self-mistreatment: “*What did I do wrong? Why did I get this? Did I mistreat my body?*” (Informant C)

Suffering from MI was perceived as illogical and difficult understanding the causes. Several informants described confusion about having recovered the MI, but still suffering a heart disease.

3.4. The Lack of Individual Care

3.4.1. To Be Denied Satisfactory Health Care Treatment

The category describes the informants’ concerns with MI-health care follow-ups that were unclear and poorly adjusted for the individual patients. The informants perceived the issues with follow-up examinations as being drained by energy and motivation.

Not being properly examined created insecurity. Several informants feared that

their arteries may be clogged again. Worry was associated with the absence of a specialist and proper specialist examination. One of the informants stated following request: “A thorough examination and everything is good... It can take time, as long as it is thorough.” (Informant E)

The lack of follow-ups and continuity was associated with an anxious transition between the hospital and primary care. It was unclear who was responsible for what and it took a long time before the primary care called them in: “This transition (from the hospital) to primary care has been unclear... they gave me some referral, to the primary care... but at the same time, medication and all that, they had no idea about that at the primary care which medication I’m taking... Yes, I feel a little, it’s a little unclear there actually... they don’t really have everything clear, that they actually have a responsibility.” (Informant A)

Also the monitoring at the primary care was described as deficient where the informants did not receive regular monitoring and had to initiate contact with the health care. “No no, they said at the primary care, we don’t call anyone in... You have to do it yourself... But if you’re like me, unemployed... I should get an overhaul each year like they have on the car.” (Informant C)

Several of the informants described issues based on the lack of continuity with the health care workers: “And the problem is that I... I haven’t had the same doctor one single time... So you meet different doctors every time... and they don’t care about me as a patient, they are only there for the moment.” (Informant A)

The lack of appropriate group counseling. It appeared that the majority of the informants perceived that the follow-up monitoring they received was not adjusted to their individual needs. There was an uncertainty in the target group at the cardiac rehabilitation on hospital and some felt too young compared to the majority of the participants. Although the information was rewarding, it was perceived as difficult remembering afterwards.

3.4.2. To Be Denied Respectful Treatment

The following category describes the experiences of not being treated with respect, not to be seen as individuals, and not being taken seriously.

Health care does not give enough time for the patient. Informants described the lack of time as problematic in conjunction with the medical appointments. They perceived that the staff, especially the physician, did not have enough time to answer questions and understand their concerns.

“The health care used to be better. They had time to talk to people and they had time to understand the patients. They don’t do anything today. Everything is rushed.” (Informant E)

The informants mentioned long waiting hours at the primary care and they did not want to become another burden for the health care.

The lack of individual—and situation adjusted health information.

The informants described the new information as overwhelming due to poor timing: “When I was very tired, the health care workers started to talk about smoking cessa-

tion...I know she meant well, but it was not the right time...It was not that I didn't want to know, I just didn't have the energy." (Informant D)

The informants described it as a lot of new information in a short period of time.

It also appeared that difficulties could occur while a patient and health care workers spoke different language.

To not being taken seriously was described as a problem for the majority of the informants, which worsened their health condition. This could in turn lead to self-experimenting with medication: "When you say something and they don't listen. That's what is getting most annoying when you explain, but all they say is: well, everything is going to be ok." (Informant E)

3.4.3. To Not Be Seen in the Light of the Social Contexts

The theme describes how the informants perceived the lack of attention from the health care given to the family members and other social situations.

3.4.4. When the Family Is Not Seen as a Whole

The category describes the informants' experiences with the insufficient focus on families given that the entire family was affected by their family member's MI.

MI affects the everyday life routines for the family. Several relatives became over-protective while others had a difficult time doing their job due to concerns about their heart sick husband. Relatives could easily be affected based on the patient's suicidal thoughts after the MI. A few informants described that there was no energy left to meet the grandchildren: "Yes, I think it's the kids and everything around. It is, they had a difficult time as well...I think that the experiences and everything around, everyone knows that the heart needs to function." (Informant H)

Relatives become neglected indicated that there was not enough focus on relatives and the social context around the person with MI. It was described how family members' insecurity could lead to increased stress for the informant: "Relatives become extremely affected too, when it happens... There is no focus on them." (Informant H)

3.4.5. The Lack of Support from Family and Friends

The following category describes the informants' description of the experience of lacking counseling within the social network. This created a problem for the family, who did not always receive attention from health care professionals.

The lack of support and understanding indicates how several informants expressed that they do not have a specific person to talk to about how the MI affected the lives and health: It was described sometimes as difficult to talk to family or with friends: "She is a little bit like when she is sick herself, it's nothing and the same... it will pass, it's a little bit like that. Some people are like that... But everyone is not that type of support if you keep saying that. They say: It will pass. A lot of people say that." (Informant G)

4. Result Discussion

All informants scored high on the fatigue-scale one year after the MI. However, the ti-

redness does not appear as more significant than other difficulties related to the MI. Based on the result, the discussion is presented in the following three themes; to go through involuntary changes, the lack of individual care and to not be seen in the light of social context.

4.1. To Go through Involuntary Changes

Difficulties of not recognizing oneself as a person or recognizing the body means an involuntary change which the informants describe as difficult. Physical and emotional changes are also described by Kristofferzon *et al.* [12] as common problems in men and women after the MI.

According to Sigurgeirsdottir and Halldorsdottir [25], any difficulty in the rehabilitation for chronic and acute illness means managing existential changes as well as adjusting to a new self. Therefore, a need to understand the source of the suffering usually occurs, as well as a need to learn how to adjust to the new self. Thus, knowledge about the patients' experiences is important to address in order for the nurse to be supportive.

The informants are describing the time period after the MI as difficult and tiring. Some expressed how they felt angry and frustrated about having suffered an MI. Furthermore, many of the informants experienced anxiety and concerns for their health. Several of the informants are describing it as confusing to have recovered from the MI but still having a heart disease. They also express difficulties in recognizing symptoms such as anxiety, tiredness and chest pain. To experience symptoms like vague chest pain may create fear, anxiety, stress and could weaken the physical and mental strength [26]. Kristofferzon *et al.* [12] describes how patients are trying to balance between difficulties and resources in order to adjust to the life after the MI. The nurse may be able to make the patient feel safe and secure by a supportive method. Thus, the nurse is required to support the patient and help interpreting different symptoms. It is also important to be sensitive to any feelings of frustration, anger and grief as well as to reassure these feelings as common after an MI.

Living with tiredness is described as one of the difficulties after an MI. The informants are describing a new type of tiredness that is difficult to fully understand and creates limitations in life due to reduced energy levels, difficulties staying awake and the feeling of never feel fully rested. The tiredness also resulted in loss of concentration and inability to take initiatives. According to Alsen *et al.* [10], many patients experience a tiredness and weakness that limit the daily life through reduced motivation, initiative- and concentration abilities. Fatigue may appear for unknown reasons, which creates an insecurity that could result in a lack of creativity in patients with MI. It is significant that the nurse early can identify tiredness to prevent deterioration and prevent exhaustion and fatigue. Brink *et al.* [11] suggests that patients after MI, could benefit from the support that strengthen their self-care ability and provides strategies to the patient in order to improve their sleep quality and relaxation. Another consequence described by the informants was the effects of tiredness and how it limits their working capacity. The ability to work can be a validation of being healthy and valuable for the society [12]. The consequences of an MI are costly and sometimes prolonged for the individual. So-

ciety is also losing a valuable human resource when it is most productive. Thus, MI is a cost to the individual, his family, the nation and the future [27]. Based on previous research, fatigue emerges as a significant difficulty after an MI. It turns out, however, during the data collection that the informants have a difficulty understanding the difference between tiredness and fatigue as it occurs both before and after the MI. Several of the informants interpret the tiredness as something caused by the changing of seasons *i.e.* “autumn fatigue”, or social circumstances such as family related issues.

It is important that the district nurse pay attention to complications related to tiredness with patients suffered an MI.

4.2. The Lack of Individual Care

The informants describe difficulties in the form of insecurity and uncertainty on the basis that they lack access to specialized care in primary care. Many of the informants prefer additional examinations. After an MI, it is important to receive full support from people who have the skills to contribute to the rehabilitation [28]. According to a study of 610 of Sweden’s 939 primary care centers, 93 percent provide diabetes nurses, 78 percent asthma- and nurses in (Chronic Obstructive Pulmonary Disease) COPD but only 18 percent offer regular monitoring after an MI [29]. The district nurse’s knowledge of cardio-vascular related symptoms may be important in order to communicate with the patient about his condition and answer any questions. Also, this knowledge is important in order for the nurse to provide reassurance and assist the patient if signs of deterioration should arise.

To Not Be Seen in the Light of the Social Context

Since the MI affects everyone in the family, the informants often express that there is too little focus on the relatives. Many of the informants describe how the relatives suffer, and that they need a lot of information and support to reduce their anxiety and worry. They also describe that family members often seek information on their own and easily become overprotective based on the lack of information provided to them by health care providers. A study on family members of MI patients revealed that families are experiencing the MI as a stressful and shocking experience which also leads to need for more information [30]. An MI can sometimes bring a couple closer to one another. However, it can also lead to more conflicts, betrayals, arguments and disagreements. For example, information about the patient’s capacity and limitations could make their spouse overprotective. Providing helpful information to relatives can also help them to process the event and feel included in the rehabilitation [30]. In order to understand the patient’s situation from an overall perspective, the district nurse should gain knowledge about their social networks. Because families also need information and support, furthermore it is appropriate to encourage the patient to bring their relatives to follow-up visits it support the families so they feel more secure would also benefit the patient.

5. Method Discussion

Qualitative content analysis offers the opportunity to examine other perspectives of in-

dividuals which otherwise would have been hidden to the uninitiated. Furthermore, it gives the men a chance to look back on the current event and put an experience into words [31]. Starting from an inductive approach involves analyzing the material to detect patterns, themes and relationships without having an underlying theory [19]. Since the purpose of the study was to describe the informants' experiences of difficulties during the first year after MI in patients with fatigue, semi-structured interviews were an appropriate approach for data collection [32]. For the convenience of the reader, the demographic data has been included in the method to assess the relevance of the results [32]. The interviews started with an open-ended question to avoid controlling the informants. Leading questions were avoided. After each interview there was a discussion on how it could be further improved.

Content analysis is considered to be a relevant method to analyze the subjective experiences of health and disease without the use of predefined categories or theories [23]. Furthermore, it is a method that allows large amounts of data to systematically be organized [32], which is important since the transcribed interviews generated large amounts of material.

The credibility of research results depends on how well the categories and themes reflect the content. In other words, no irrelevant information has been included, and no relevant information has been omitted [22]. In order to strengthen credibility, the data collection and analysis have been conducted jointly by the authors who discussed any parts that may be unclear. The content has been carefully divided into meaning units that are not too large in order to avoid multiple meanings in the same meaning unit, or too small, to avoid excessively fragmented results [22]. The credibility is about how true the result is and how well the results are described according to the purpose which is quotes from the informants are used to prove the validity. Discussions during the analysis have been conducted to validate that code and categories were consistent with the content of the study with a reliable interpretation [22].

Since the study only includes men, the result cannot show any discrepancy between women's and men's experiences and cannot be transferred to women, which is a weakness.

For example, according to [33], women have a higher degree of depression symptoms than men one year after MI.

6. Conclusions

The result explains the various difficulties that men with fatigue experienced during the first year after the MI. This information is important for the nurse in order to be able to offer appropriate support. It is essential to be responsive to different emotions and to support the patient by assuring these emotions as common after an MI. Furthermore, the nurse must support the patient by explaining and help interpret the symptoms. Fatigue can be difficult for patients to recognize, which makes it even more important to pay attention and address the issues related to fatigue in patients with MI.

It is important for the patient to feel safe and certain that their health is monitored

and controlled. It is also essential to make the effort and meet each patient individually and communicate with the patient in a trusting, yet professional manner. District nurses should also strive for availability and continuity in the follow-up, for example through a contact person who will be able to provide support and answer any questions.

It is crucial that the nurse sees the patient in the social context. As both patient and their families experience difficulties after MI, it is advantageous to also support the relatives. For example, the patient is encouraged to bring family members to follow-up visits. This would also benefit the patient as the family becomes a resource for the patient.

Because fatigue after an MI can limit the ability to work, it also benefits the society financially that the nurse at an early stage can support these patients so that they can return to work.

7. Future Research

The results of the study are based on men in working age experiences with fatigue. It would be interesting to conduct a comparative study of patients who suffered an MI but not affected by fatigue. Since the participants consisted solely of males, it would also be useful to compare the experiences of women. There is also a need to identify ways in which nurses can provide support based on the difficulties described in this study.

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