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The illness experiences of patients after a first time myocardial infarction

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Abstract

The purpose of this study was to investigate illness experiences of patients after a first myocardial infarction (MI), focusing on life situation and the recovery process over time. Thirty patients were interviewed within the first 3 days of hospitalisation, and again 17 weeks after discharge. The interviews were tape-recorded verbatim and the transcriptions were analysed and categorised using qualitative content analysis. The main category was Uncertainty of the life situation that was combined with and articulated the superior theme in both interviews. Analyses revealed uncertainty focused on problems related to: treatment-seeking behaviour; existential threat; preventing another coronary and need for knowledge and support, which the patients considered important for their case and future life. The findings are fundamental for the health care when education and counselling are planned and challenge health care personnel to listen to MI-patients’ own experiences.

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Keywords: Myocardial infarction; Treatment-seeking behaviour; Existential threat; Need for knowledge and support; Nursing care

1. Introduction

Ischaemic heart disease (IHD) is one of the leading causes of death in the industrialised world [1] and its prevention is one of the Danish Government’s priorities for health [2]. Recommendations have been published in order to prevent aggravation of IHD, especially with great attention to counselling and rehabilitation of patients with MI [3–7]. Rehabilitation is considered to be an essential part of the care of individuals recovering from MI. The goals are “To improve functional capacity, alleviate or lessen activity-related symptoms, reduce unwarranted invalidism, and enable the cardiac patient to return to a useful and personally satisfying role in society” ([3], p. 1). The research has been concentrated on various aspects of physiological, biochemical and psychological variables. The hard objective endpoints have been commonly considered to carry the heavier weight, whereas a return to former social activities other than work, travelling and car driving has received less attention [1]. Counselling given by cardiac health personnel is supposed to motivate the patients to change life style. However, the question is whether this is the case. Do the standard instructions and guidance, as they are communicated today, stimulating the patient to change patterns of living, in order to prevent more heart problems? The instructions focus on the well-known risk factors—smoking, high-fat food and exercise, but does it cover the patient’s experiences of the causes of his MI—or are other concepts relevant for the patient as co-existent factors? Patients’ willingness to undertake secondary preventive strategies are likely to be affected by their understandings of their condition [8–10]. Although psychosocial factors are considered important as co-existent factors related to morbidity and mortality and increased risk for no adherence with recommended lifestyle changes [11], these concepts have not been described sufficiently, and such information is needed to guide nursing care for patients suffering from MI.

The patient’s view of causal attributions as a basis for information and compliance is based on individually perceived causes of MI and the meaning of the illness [12–14]. Patients and spouses may have specific beliefs about causes of the illness and what and who would increase the success of recovery. In addition to poor lifestyle habits, Patterson [15] identified strained relationships with children, and work strains were also identified as causes. McSweeney [16] found relationship between MI patients perceived causes surrounding the MI and modified health behaviours. All informants had modified some aspects of their health behaviours that corresponded with their perceived causes. No
behaviours were changed or modified that informants did not mention as important causative factors. A Norwegian study [17] showed that MI-patients’ expectations played an important role. Among those who had the most negative expectations to their future working capacity, 64.7% were not employed 6 months after discharge, while the corresponding group with the most positive expectations had only a 9.1% unemployment rate. Other studies confirm the importance of using the patients’ subjective explanations in order to obtain compliance [18–21]. Increased knowledge among health professionals about patients’ illness experiences will help to develop individual and systematic education and counseling. In this way, the patient might be included as an active co-operator [21–25].

The purpose of this study was to investigate the patient’s experiences of illness after a first MI, focusing on life situation and the recovery process over time.

2. Theoretical frame

The Perception Model, as describe by Lunde [26] in her doctoral dissertation, has been developed in order to capture the aspects of disease lying outside the scientific biomedical area. It gives a “close to reality” clinical approach to the meaning-aspects and patients’ health understanding, and our possibility to act on humanistic aspects in everyday clinical settings depends on insight and knowledge about these, too.

The primary perceptions comprise: the nature of the illness, its causes and seriousness, as well as thoughts about a possible treatment. Beyond these, there has been found four main categories of complex factors that influence the perceptions: previous experiences with illness, expectations about the treatment, other people’s opinions and psychosocial resources and strains. Patients’ perceptions may be considered a constantly progressive process during lifetime and is influenced, possibly reconsidered, by any health related experiences. There is a complex interaction between cultural opinion and the person’s individual beliefs about health and illness. The meaning that the patient attaches to the illness will have consequences for his or her reactions, comprehension and actions towards treatment and further prevention of the illness.

3. Design and method

3.1. Informants

After Scientific Ethical Committee approval subject to index No. 96/275, and written informed consent including information about confidentiality, the interviewee’s right to see the transcription and right to withdraw at any time, 30 out of 32 patients accepted to participate. In order to avoid allowing the interviews turning into a therapeutic situation [27], it was made clear, that it was the interviewee’s own perception of the themes that was the topic.

The patients were consecutively selected in order to identify and get a detailed and deep insight into typical aspects of the patients’ illness experiences, and after admission to the department of cardiology at Odense University Hospital, in the period from January until June 1997. Patients approached for interviews met the following inclusion criteria: verified MI, admitted within maximum 72 h from onset of symptoms, first time MI, their cardiac condition was judged to be acceptably stable in relation to the patient’s safety, the patients had the ability to complete the interview and a home address in the county. Exclusion criteria were: psychosis/dementia, not understanding Danish fluently, patients diagnosed as being in the terminal state of an external cardiac disease as for instance cancer, severe kidney disease, diabetes requiring complicated treatment, or health threatening neurological disturbance (Table 1).

3.2. Data collection

Data was collected through qualitative research with thematically semi-structured interviews [27] conducted during the patient’s second or third day in the ward, and again in the cardiac outpatient clinic 17 weeks after admission, as follow-up interviews. Each interview averaged 45 min in duration and was tape-recorded throughout. Of the 30

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Housewife</td>
<td>Pensioner</td>
<td>Employment</td>
</tr>
<tr>
<td>40–49</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50–59</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>60–69</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>70–79</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>80–89</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 1: Patient division into age, sex and occupation

The average age of the patients was 59.7 years (range 41–80 years). The average age of the eight women was 62.6, and 58.7 years, respectively for the 22 men. Twenty-six patients lived with a significant other and four lived alone.
patients participating at the first interviews, three had died by the time of the follow-up interview, and two patients did not want to participate further, not giving any reason. Two interviews were unsuccessful because of technical problems with the tape recorder.

The first interviews, referring to the pre-hospital phase and the acute phase were subject-orientated using a semi structured interview guide, developed according to main themes in the Perception Model [26]. The themes were: (1) the time shortly before admitted to hospital, (2) causes of the MI, (3) the meaning of the illness, (4) everyday life, (5) possibility for employment and (6) positive health resources. The guide has been tested in a pilot study and revised according to the information gained [28]. It was used in a flexible way, but the six main themes were mentioned in all of the conversations. Thus the interview guide gave possibilities for openness in relation to new aspects, just as it was useful in the later structuring of the interviews by analysis [27].

The follow-up interviews referring to the rehabilitation phase were conducted on the basis of individual responses to the same thematically semi-structured interview guide as used in the first interview. The main theme of the follow-up interviews was everyday-life, and began with the question: “How does your ordinary day function?”

Considerations about the validity of the study involved communicative validity [27]. Here it is the researcher’s task to provide interpretations of what is said, which may then be confirmed or not in the course of the interview. You can also go back to the interviewed person and ask: “whether it was what he meant”. Thus the meanings of the relevant aspects of the answers were followed up and further validated from the subjects themselves during the second interview. None of the patient’s expressed a wish to read the transcriptions.

3.3. Data analysis

The transcriptions were analysed qualitatively and categorised logically for identification of patterns in and between the concepts using content analyses [29,30]. First the transcriptions were re-read several times to get a first-hand impression of the content. This led to a natural overall labelling of the patients illness experiences, divided into three phases with a gradual transition between the phases: (1) the pre-hospital phase, (2) the acute phase and (3) the rehabilitation phase. The first interviews cover the pre-hospital phase and the acute phase. The follow-up interviews cover the rehabilitation phase and analysed concerning refining and development into and between the categories (Table 2).

Subsequently, the text was broken into meaningful parts related to concepts of the Perception Model. The essence of thoughts, feelings, events, and actions in the passages of data were summarised into 1509 codes and each of them was closely examined and compared for similarities and differences. In order to reduce the many codes and to label the patients’ statements at a higher abstraction level, the codes were then organised according to themes and built into subcategories at three additional levels. Furthermore these were assessed, labelled and grouped into four categories: treatment-seeking behaviour, existential threat, preventing another coronary and need for knowledge and support. In this way, a continuous process was established back and forth between “raw” data, codes and subcategories at three levels in order to constantly test the content of the categories, compared to the original data, the six main components of the interview guide, and the Perception Model. The four categories as mentioned were related to a main category named: Uncertainty of the life situation. During the whole process questions were asked such as: What is this? What is going on? What does it stand for? What else is like this? What is this distinct from? [30]. Throughout the process, the author has been guided by a senior researcher and a great part of the material has been exposed by the supervisor using independent spot checks, for the purpose of applicability and confirmability [31].

4. Results

Uncertainty of the life situation is the main category that connects and describes the overall theme throughout the entire material. The four Categories with subcategories are developed for the purpose of catching the multi-dimensional aspects of the patients’ experiences before, during and after hospitalisation and the following presentation of findings is centred on these categories.

4.1. Treatment-seeking behaviour

4.1.1. The pre-hospital phase

4.1.1.1. Relieving the symptoms. The patients’ symptoms were: slight pain in the chest and the arms, violent pain in the chest and the arms, difficulty in breathing and/or almost fainting, and unconsciousness.

The different aspects of the symptoms affected the way the patients tried to relieve them. As an immediate reaction, they initially adopted a “wait-and-see” attitude, or they believed the symptoms to be unimportant and expected spontaneous recovery. The patients actively tried to cope with the problem, either by lying or sitting down, walking back and forth, keeping a hand on the chest, taking a bath, drinking water or trying medical treatment. As their own attempt to relieve the pain did not suffice, the patients followed up different channels to get further help:

Then I hurried to call my good friend and neighbour and asked her to come over, because I was ill . . .

4.1.1.2. Previous experiences. They had spontaneously attributed the symptoms to something from the muscles,
Table 2  
Examples of the process of the content analysis according to Polit and Hungler [30]

<table>
<thead>
<tr>
<th>Perception Model</th>
<th>Meaningful parts</th>
<th>Codes</th>
<th>Subcategories</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertainty of the life situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The pre-hospital phase</td>
<td>“I had told my wife that I had a heavy, peculiar feeling in the lower part of the arms. But it was nothing particular”</td>
<td>A heavy peculiar feeling in the lower part of the arms was nothing particular</td>
<td>The symptoms was nothing particular</td>
<td>Relieving the symptoms</td>
<td>Treatment-seeking behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The rehabilitation phase</td>
<td>Experiences with illness</td>
<td>“Well you see, about the nerves—I do feel pain and so—so therefore, this pain is not heart pain, but something anxiety and it got stuck in the chest—round the heart region”</td>
<td>It is not heart pain, but something anxiety and it got stuck in the chest, round the heart region</td>
<td>Anxiety got stuck as pain round the heart</td>
<td>Slight pain in the chest and the arms</td>
<td>Fear of symptoms</td>
<td>Treatment-seeking behaviour</td>
</tr>
<tr>
<td>The acute phase</td>
<td>The meaning of the illness</td>
<td>“I think it was my own fault too—so I have a little feeling of guilt towards myself”</td>
<td>Think it is her own fault too, has a feeling of guilt</td>
<td>Think it is her own fault</td>
<td>The illness as a warning</td>
<td>Close by death</td>
<td>Existential threat</td>
</tr>
<tr>
<td>The acute phase</td>
<td>Causes</td>
<td>“But all the things concerning the illness of my wife, and then my own illness—I think that it to some extent has undermined my immune system”</td>
<td>Think that the illness of the wife and own illness to some extent has undermined the immune system</td>
<td>Serious illness or death of a spouse</td>
<td>Interpersonal strains</td>
<td>Psychosocial strains</td>
<td>Preventing another coronary</td>
</tr>
<tr>
<td>The rehabilitation phase</td>
<td>Expectations about treatment</td>
<td>“Now I have started bicycling. I do not cycle 25 km just like that, but I cycles a little around down on the roads—it goes fine”</td>
<td>Have started bicycling a little around on the roads. It goes fine</td>
<td>Have started to cycle a little</td>
<td>Making exercise</td>
<td>Reducing physiological strains</td>
<td>Preventing another coronary</td>
</tr>
<tr>
<td>The rehabilitation phase</td>
<td>Psychosocial resources</td>
<td>“It opened my eyes for something, both medical, what a coronary was, why you are getting it, how to prevent it and all that kind of things”</td>
<td>Opened the eyes for what a coronary was, why you are getting it and how to prevent another coronary</td>
<td>Got benefit from information evenings</td>
<td>Getting education</td>
<td>Obtaining support from professional network</td>
<td>Need for knowledge and support</td>
</tr>
</tbody>
</table>
or they had judged that the troubles might be connected with a disturbance in the upper respiratory passages or lungs, or indigestion. Troubles caused by increased blood pressure, lack of sleep or general indisposition were also mentioned as an explanation of the symptoms. Increased intensity of the symptoms and its character combined with the memories of previous experience with heart disease within the family and/or relatives prompted patients to redefine the problem and consider that the symptoms might be related to the heart. A patient expressed the consequences of this incipient realisation in the following way:

My father had told me about his heart sensations the first time he had one—it was in exactly the same way . . . .

4.1.1.3. Impression of relatives’ opinion. The immediate understanding of the problem and proposals from a next of kin in order to relieve the symptoms, affected the patients’ experiences of the situation. The final decision to seek professional help was often taken by, or in concert with a next of kin:

Then my wife called the emergency doctor who send for an ambulance . . . .

4.2. Existential threat

4.2.1. The acute phase

4.2.1.1. Close to death. A previous well-being had been considered some sort of a guarantee that “illness is something that only happens to my neighbour”. Thus it might be shocking, incomprehensible and difficult to accept ones own illness. There is, however, a great span from the statements of “not being afraid” to “feeling a little nervous”, and in some statements the patients expressed grave fear and depression. The thought of one’s own transience was a concrete problem that they had to accept and deal with in the present situation:

My little brother had an coronary. But it was not that bad, he had a quick recovery. But the other two, they died at once . . . .

The illness was regarded as a warning to change habits. The consequences might lead to emotional reactions like helplessness, weakness, shame, fear and self-reproaches. The consequences might further have an influence on future physical and social actions with the objective of preventing another heart attack. Besides worries about the risk for complications, that might cause invalidity, and consequently dependency of assistance from other people and fear of “sitting in a chair” for the rest of there lives. The warning could be expressed in the following way:

I think it was my own fault too—so I have a little feeling of guilt towards myself . . . .

The family’s reactions were experienced as fear, shock, anxiety, dread and worries that on one hand evoked warm feelings of solidarity, strength and love. They wanted to be together with their next of kin to give and get comfort and support in the tough days. On the other hand, it was also mentioned that the anxiety of the family could imply over-protection that in the end might influence their future activities:

The greatest difference might be that my wife wants me to take care and take care. It might sometimes irritate me if she fusses too much over me . . . .

4.2.1.2. Coping with the threat. The feeling of being in good physical condition in the present situation fortified the hope. The spirit was founded on a positive life-orientation where the patients’ general illness experiences might assist encouragement and thus suppress the existing threat. As a further help to cope with the existing threat the patients applied individual resources as will, determination, strength, conviction, humour and their ability for solving problems.

My own strength—my personality . . . you have to believe a little in yourself too . . . .

4.2.2. The rehabilitation phase

4.2.2.1. Emotional consequences of the illness. Patients mentioned, that after they left the hospital, it had been the worst period for them when they were most in need of help and support. They were plagued by feelings of guilt and self-reproach because of their former life style. It was also pointed out that the emotional consequences of the illness had been harder for their next of kin than for themselves. They felt locked up in a sickness-role, “wrapped up in cotton” and constantly controlled which could provoke or increase emotional conflicts causing irritation and anger. The following example illustrates how the spouses’ anxiety also can influence the effect of nitro-glycerine:

She was completely hysterical, just when I touched the glass. That really made me damned angry. It did not help a lot with those pills, when there was such a hysteria about them—you feel so controlled and guarded all the time . . . .

Concentration problems, increased irritability and higher tendency to tears were mentioned as problems arising after the coronary.

I loose concentration, I don’t remember what I am reading. I have never been like this before, I don’t know why . . . .

Strength and spirit were based on a positive life-orientation and personal resources such as thinking about something else, happiness, peace of mind, feeling of well-being,
the ability of weeping, steadiness, stubbornness, will, good humour and the ability to solve problems:

But I think that the willpower is of great importance, that you are still doing the things. Among other things on my cycling tour, it was undoubtedly will and stubbornness that made me jump on that exercise bike every morning. It was damned not for pleasure.

Patients expressed increased attention to embarrassing physical and emotional events that might provoke pain and discomfort. Symptoms were described as slight pain in the chest and the arms and no pain in the chest and the arms. Problems with slight pain in the chest and the arms were considered to arise from a close connection between mind and body:

Well, you see, about the nerves—I do feel pain and so—so therefore this pain is not heart pain, but something due to anxiety and it got stuck in the chest—round the heart region . . .

4.3. Preventing another coronary

The category compromises spontaneous expressions from patients who reflected on circumstances that they found might be the reasons, but also circumstances that they found had not been a contributory factor. However, the overriding causal explanations comprise three subcategories: (1) psychosocial strains, (2) physiological strains and (3) heredity and environment.

4.3.1. The acute phase

4.3.1.1. Psychosocial strains. Focus on the patients’ personal experiences and comprises: interpersonal strains, interior personal strains and over-exertion. Interpersonal strains are related to traumatic accidents or violent events in the immediate family that might cause shock, serious illness or death of a spouse, strained family relations, bad financial conditions, mentally stressing working conditions and driving a car. A patient expressed it in this way:

But all the things concerning the illness of my wife, and then my own illness—I think that it, to some extent, has undermined my immune system . . .

Interior personal strains are related to the personality structure and holds an altruistic life orientation, to be active and outgoing, being a perfectionist, introvert, to require more from yourself than you can fulfil, fear, anxiety, not being in harmony, and nervousness:

I have been so busy helping the others, that I have spared no time for my self. I could very well imagine, it could be something like that.

Over-exertion is connected with physical strains related to work, game playing or hobbies prior to the coronary.

But at the time when I had the coronary, it did not come to my mind that I could have an coronary because I was playing with the children . . .

4.3.1.2. Physiological strains. Comprise components of general knowledge about risk factors, based on information given by nurses or doctors, or information from folders, media, literature, etc. The patients combined medical points of view with their own common sense opinion of inappropriate habits, or other medical disorders that might be harmful to health:

That irregular lifestyle is not good for diabetes. I am convinced, that there is a connection to what happened now . . .

4.3.1.3. Heredity and environment. Comprises individual characteristics which cannot be influenced, such as family predisposition and age. The subcategory also comprises outward circumstances in the surroundings such as air pollution:

There must be some causal connection—whatever it might be—perhaps it is the water or the air . . .

4.3.2. The rehabilitation phase

4.3.2.1. Reducing psychosocial strains. The patients who had stated psychosocial strains as factors contributing to their heart problems, in the acute phase, had eliminated one or more of these elements over time. Because of tiredness they had an increased need for rest:

I can take care of my family, but it is harder than it was before, and I am very tired . . .

4.3.2.2. Reducing physiological strains. The patients’ had made an effort to eliminate one or more factors that might be related to secondary prevention:

Now I have started cycling. I do not cycle 25 kilometres just like that, but I cycle a little around down on the roads—it goes fine . . .

Changes in diet, smoking habits, loss of weight, reduced alcohol consumption and decreasing hypertension were not always assessed in a successful way, partly because interviewees attributed their MI to psychosocial strains or genetic factors:

One night my dad died from a heart attack. Now one knows that it depends on inheritance . . .

4.4. Need for knowledge and support

4.4.1. Support from the lay network

It was primarily spouses who were considered the most important resource. But also children, daughters and
sons-in-law, friends, neighbours and fellow-patients were judged as important for their recovery. In the rehabilitation phase, the lay network offered the most important support when patients needed intimate dialogue and confidence due to emotional reactions. They had received practical help by cleaning, gardening, repairs, shopping and transportation, and were no longer expected to look after the grandchildren as often as before. Furthermore, the lay network was important for encouragement and support:

My husband is my best friend. We talk about everything and helps each another . . .

4.4.2. Support from the professional network

Interviewees formulated specific questions, mostly about what they could do themselves, if chest pains returned in the future, and in that connection also the application of nitroglycerine, its effect, and adverse effects. Education-needs also included the rest of their medicine, its effect, adverse effects if any, and how long the treatment was expected to last, and in addition, the patients also wished to hear about alternative treatment named as fish oils. Finally, support from a dietician and personal possibilities to make an effort to prevent future MI, were also some of the patients’ expectations of the counselling:

But the most important of all is to get information about what you have to do, in order to avoid another coronary . . .

For those who had participated in three cardiac information evenings, the most important benefit was, that they received an answer to the question “why I got MI”. They were also given possibilities to prevent another event. Further, it was emphasised as positive, that the relatives were asked to participate:

It opened my eyes for something, both medical, what a coronary was, why you are getting it, how to prevent it and all that kind of things . . .

The reason for not having participated in physical rehabilitation was lack of information about the offer, although they felt that they needed help to exercise. Another reason was increased expenses due to transportation, postponement because of a by-pass operation, going back to work, or no need for rehabilitation:

I didn’t want to rush to the hospital by bus three times a week, and then back again, and spend so much time on that, I didn’t feel like it . . .

5. Discussion and conclusion

Due to the fact that the interviewer has an extensive knowledge of the study field, it is possible that interviewer bias may have been present. However, the interviewer tried to overcome this by maintaining a neutral stance without attempting to shine with her own perceptions during data collection. Throughout the whole interview the interviewer was empathic, listening to verbal as well as non-verbal emotional messages, regarding how far to go when a topic was too emotional to pursue [27].

Even though, this study only deals with illness experiences of a small sample of MI-patients, the willingness and extent of data is considerable. Accordingly, the thorough interviews about their personal experiences, can give an overall information about experiences of symptoms, fear and hope, uncertainty and need for knowledge and support. Moreover, the findings must be evaluated and discussed in a search for central common features of others experiencing illness similar to MI.

In the category about symptom experiences, the patients actions might reduce or increase delay times to be admitted to the hospital. Dracup and Moser [32] found those patients who consult their spouse about calling for treatment, to be more delayed, than patients who ask for advice from other family members or other non-professionals to whom they were not emotionally related. This is not in line with the statements in this study. The relatives suggested that the symptoms indicated a coronary and acute assistance was necessary. It was further pointed out, that the spouses took the final decision about seeking help from professionals. Differences in the spouses’ level of knowledge of MI-symptoms in other countries might be an explanation. Another explanation might be the differences in the possibilities for admittance to the hospital, and rules for payment of professional treatment [33]. Further studies focusing on the importance of the context at the time for hospitalisation, will contribute to this topic.

In the category about existential threat, the patients described how they endeavoured to control the threat by means of spirit and reciprocal support from their relatives. The literature only gives a few and ambiguous answers to the question, which role or function hope has for patients’ ability to cope with their illness [34,35]. However, a positive life orientation is found to be an important psychological asset for coping with life stresses, and immediate recovery from MI [36].

As to the impact of the threat on the patients’ experiences of their individual possibilities to prevent another MI, it was related to the illness as warning. Lupton [37] points out that there is a moral risk that health campaigns about general risk factors might be misunderstood and lead to ineffective intervention or having a contrary effect to what was expected. The efforts to convince of the validity of the matter imply the risk, that the counselling might be misleading and at the same time the risk exists, to provoke emotions of increased responsibility, anxiety, bad conscience and feelings of guilt.

On one hand, the patients expressed problems with the family’s fear, on the other hand, they told that resource persons in their social network were a vital support for their physical and emotional wellbeing. It is shown, that spouses’
emotional reactions towards the patient’s MI, are predominant and that they also need information, counselling and support [22]. Further, family over-protectiveness has a negative impact on the mental wellbeing of MI-patients, where the consequences can be increased depression, anxiety and tendencies of being kept in a sick role [38,39]. In contrast to this, Riegel and Dracup [18] found, that over-protected patients reported less emotional distress, higher self-esteem, and less emotional reliance on others, when compared with subjects who described themselves as receiving inadequate support. Whereas some patients experience positive changes in the family, creating feelings of increased nearness, improved communications among family members, focus on the present moment and positive expectations to the future [40]. Differences in reaction patterns within the families, as stated earlier are thus in line with findings in this study.

In the category preventing another coronary is the patients’ causality related to individually initiatives to reduce the risk of relapse or progression of the illness. According to Wiles [23] lay beliefs contain an element of both official epidemiology and “lay epidemiology”, based on personal experience and observations of illness in the family and wider community. Although this study in principal discloses coincidence between the patients’ and the staff’s opinions of the main goals for cardiac rehabilitation, there exists obviously a difference in the priority of these goals. MI-patients are found to have various learning needs at different phases of the illness, where the ability to understand the information varies from one phase to the other [41–43]. Differences in women’s and men’s learning needs and a number of socio-demographic factors are important [44,45]. In the present study, it was not possible to demonstrate any differences in age, gender, occupation and education level which might influence the patients’ learning needs.

5.2. Practice implications

What seems to be needed is a concerted effort to develop an integrated lay and professional support network, adopting a more appropriate and positive health/illness perspective for the patient and family, rather than focusing on disease. Intervention studies that focus on the process, as well as the outcome, are necessary to better understand how family nursing interventions work. Interventions such as education and providing family support, should be compared with other types of nursing interventions including family assessment techniques. Due to the nursing, being more aware of the important connection between family functioning, the course and treatment of an illness, research on this relationship will gain prominence and in turn more effective and comprehensive family-care will be given.

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References
