



Original Article

Accepting myocardial infarction diagnosis as an important challenge during the transition process: A qualitative study

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ABSTRACT

Background & Aim: Failure to accept the disease can make a person susceptible to negative emotions, maladjustment to the disease, and disruption of the bio-psychosocial balance. This study aimed to investigate factors facilitating and inhibiting acceptance of myocardial infarction in newly diagnosed patients.

Methods & Materials: In this qualitative content analysis study, participants were patients experiencing myocardial infarction for the first time, their caregivers, nurses, and specialist physicians. Data were collected between June 2023 and January 2024 through in-depth, semi-structured individual interviews with 11 participants selected through purposive sampling. Data analysis followed the three-step method proposed by Elo and Kyngäs.

Results: Several key themes were identified as influential factors in the acceptance of disease among newly diagnosed myocardial infarction patients. Facilitators of acceptance included social support, adaptation to new roles, perceived susceptibility to the disease, spirituality, and the role of healthcare providers. Conversely, barriers to acceptance encompassed symptom reduction, unexpected diagnosis of myocardial infarction, and lack of awareness. Understanding these factors is essential for developing targeted interventions to improve patient adjustment and outcomes.

Conclusion: Identifying facilitators and barriers to the acceptance of disease can enhance patient engagement and adherence to treatment plans. Understanding these factors allows healthcare providers to tailor interventions that promote positive coping strategies. Ultimately, fostering acceptance can reduce healthcare costs by minimizing complications.

Introduction

The myocardial infarction (MI) or heart attack has been documented as the topmost cause of global mortality and morbidity, leading to a large loss of life annually, e.g., one million cases in the United States (1). The death rate following this chronic condition in hospitals also varies between 7.7 and 19.2% (2). In Iran, the MI has been further reported in individuals aged over 40, in 14 out of every 100 patients (3). According to the most recent statistics, Iran is among the countries subjected to the highest occurrence rate of cardiovascular diseases (CVDs), viz., 46% of all deaths, including MI as

the primary cause of mortality that accounts for 47% (4). Thus, the prevalence rate of this serious disease is 73.3 cases per 100,000 people each year (5).

Acceptance of Disease (AoD) refers to acknowledging the reality of a disease and its associated consequences, which can greatly affect patients' physical, emotional, and social functioning (6). Accepting chronic diseases may play a crucial role in enhancing patients' self-management (7). AoD is a dynamic process that reflects an understanding of disease management requirements, the ability to cope



with limitations, and the readiness to take responsibility (8).

AoD by patients in this way makes them play a part in the activities of daily living and avoid its denial (9), but failure to devote attention to healthcare guidelines is likely to bring some adverse effects, particularly a rising trend in mortality (10). Upon accepting a disease, many negative reactions are also minimized, and a person attempts to adapt to it (11).

If patients do not accept new diseases, they do not get involved in the process of treatment. In patients without AoD, transition does not occur in a proper manner (12). Nurses can thus have interactions with patients and explore their personal values as they are experiencing a transition, and evaluate their ability and competence in practicing different skills (13).

Changes in the health of people create a process of transition; patients are more vulnerable in transition, and their health is more likely to be compromised (14). Once MI occurs, many patients face various consequences throughout the rest of their lives (15). After diagnosis, affected individuals experience changes in their living conditions, resulting in a health-illness transition (16).

Meleis' Transitions Theory guided this study, examining how individuals adapt during major life changes, developmental stages, or situational shifts through adjustments in skills, emotional responses, and behavioral patterns. (14). The theory defines transition as movement between distinct states, with nurses facilitating this process by identifying critical intervention points in patient care. Its core aim centers on providing patients with targeted strategies to navigate transitional challenges, ultimately enhancing health outcomes and quality of life (16).

During transition experiences, patients encounter some facilitators or barriers, including personal factors (such as, cultural values, beliefs, and attitudes, socioeconomic status, preparedness, and knowledge), social factors (namely, viewpoints and cultural thoughts; e.g., stigmas associated with transition experiences,

socioeconomic status, and preparedness or unpreparedness for transitions), or society-related factors (viz., resources) (16). In this line, facilitators, that is, the factors that augment the acceptance of a newly diagnosed disease, lead to a healthy transition and assist in achieving the expected outcomes in patients. The successful completion of transition can typically be established by gaining a new identity or mastery over skills and behaviors to manage the emerging situations (14).

Understanding factors affecting AoD is essential not only for the management of patients with myocardial infarction but also for improving healthcare practices surrounding acute cardiac events. The lack of qualitative studies in the Iranian context that address the transition experience in patients with their first myocardial infarction motivated the research team to conduct this study. Against this background, the aim of this study was to investigate factors facilitating and hindering acceptance of myocardial infarction.

Methods

Study design

This study is a part of a wider project as a PhD dissertation conducted using the directed content analysis in the light of Meleis' Transitions Theory. However, since transition theory does not propose specific concepts for facilitating and inhibiting factors, for the purpose of this article, the data were analyzed using conventional content analysis based on the Elo and Kyngäs approach (2008). This process includes open coding, creating categories, and abstraction. After open coding, the lists of categories are grouped under higher-order headings. When formulating categories, the researcher comes to a decision, through interpretation, as to which things to put in the same category. Abstraction means formulating a general description of the research topic through generating categories (17).

Participants

The study setting was an educational hospital as a heart center affiliated with Guilan University of Medical Sciences, Rasht, Iran.

Motivation to participate was ensured by thoroughly explaining the study's objectives, guaranteeing confidentiality, and emphasizing voluntary involvement. Besides, the researchers secured informed consent and created a comfortable interview environment to encourage honest sharing. The participants were selected by the purposive sampling technique with maximum variation. That is, the knowledgeable and experienced respondents in relation to the phenomenon of interest who could provide the necessary information to the researchers were selected (18). The maximum variation technique ensured that participants represented a broad range of experiences, including patients, caregivers, nurses, and cardiologists, contributing to a nuanced understanding of the transition and AoD process. As a whole, the study participants were the patients diagnosed initially with MI and their family caregivers, nurses, and cardiologists. The inclusion criteria for the patients were the ages over 18, reading and writing literacy, awareness about being affected with MI, having consent and willingness to participate in the study, MI diagnosis that confirmed by a physician, not suffering from mental illnesses and cognitive impairment, no hearing and vision problems, and the ability to speak Farsi. An interview was also conducted with two family caregivers who were willing to contribute to the study and attend the interviews. The inclusion criteria for the nurses were thus having at least one year of work experience and a Bachelor's degree. Moreover, cardiologists were recruited and interviewed for this purpose.

Data collection

Face-to-face, in-depth, semi-structured interviews were conducted to collect the data in this study. In total, 11 interviews were completed, including six interviews with the patients, two interviews with the family caregivers, two interviews with the nurses, and one interview with an attending cardiologist. Sampling was done purposefully until data saturation, which means that sampling continued until no new codes were received in the final interviews and completion of all conceptual levels (19). Saturation occurred

after conducting 9 interviews, and to ensure that no new information was added, 2 more interviews were conducted. Sampling was stopped when, as data collection continued, previously collected data was repeated and no new data was obtained, and also when no new categories or appropriate themes emerged. Using a systematic approach to coding and categorizing, and involving multiple researchers in the analysis, was considered to confirm findings and reduce bias. The interviews were conducted by the first researcher, PhD candidate in nursing with 7 years of experience working with cardiac patients, in a quiet setting as the participants wished, and each one lasted between 30 and 70 (average 37.45) min. The interviews with the patients started with a general question, viz. "Could you tell me about a transition experience in your life?". For the healthcare providers (HCPs), the interviews launched with the general question of "What are the experiences among patients with MI and their transition from health to the illness?" The interview guide is provided in Table 1. The interview questions were directly derived from Meleis' Transitions Theory, ensuring alignment with its main concepts such as awareness, engagement, and transition conditions. The questions focused on the participants' experiences of transition and were obtained after searching other studies which was conducted based on Transitions Theory. During the interview, strategies such as follow-up questions, clarification requests, paying attention to nonverbal cues, and requests for further explanation were used to gain deeper insight into the participants' initial responses. Real-time findings from early interviews influenced subsequent ones by refining questions to explore emerging themes more deeply. Ambiguities were clarified, and underexplored areas were probed further.

Data analysis

Elo and Kyngäs (2008) propose three stages in qualitative data analysis: preparation, organization, and reporting. The preparation stage began with the selection of the unit of analysis (17). In this study, the unit of analysis

was the transcribed interview texts, and both explicit and implicit content were analyzed. During the organization stage, the researcher sought to establish logical connections between the data and the study's purpose. The research questions and objectives guided the analysis throughout this process. Open coding was performed on the data, categories were developed, and the data were systematically sorted. In the final stage, reporting, the findings were defined and presented as categories or themes.

Rigor

After analyzing the data, the author shared the summary with 5 participants and got feedback from them. None of the authors had an assumption. The first author conducted all interviews and initial data analysis, leveraging clinical expertise to build rapport and ensure rich data collection while adhering to the study's theoretical framework. The second and third authors, who were experienced qualitative researchers, ensured consistency with established methods and reduced subjective influences during the coding and categorization process. The corresponding author oversaw the

research design and synthesis of findings, the alignment of the study objectives with its theoretical foundations, and the maintenance of a critical perspective throughout the study and the way data were coded and categories formed, and conducted peer review to confirm the consistency of findings with transfer theory and reflect the main concepts of the theory. Other authors contributed to reviewing codes and validating the final analysis, ensuring that diverse perspectives were included in the interpretation. An assessment was also made of whether the categories supported by the participants' narratives. All interviews were recorded upon receiving permission from the participants, and immediately transcribed verbatim. The interviews were replayed for times by the first researcher and matched with the transcriptions. Upon the completion of each interview, analysis and coding were done, and the subsequent interviews were then revised and adjusted according to their results. The MAXQDA (ver. 10) software was also used for data analysis. After managing 11 interviews and developing main categories as well as achieving no new codes, the researchers reached saturation, and the sampling ended.

Table 1. Interview guide based on transition theory

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|---|
| <ul style="list-style-type: none">• How did you initially react when you were diagnosed with your disease??• Can you identify any specific support that has positively impacted your acceptance?• What factors or experiences have helped you come to terms with your disease?• Can you share any personal experiences or moments that significantly contributed to your acceptance of the disease?• Can you describe any negative experiences or interactions that hindered your acceptance?• Have there been moments of denial or resistance regarding your disease? |
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Ethical considerations

This study was approved by the Ethics Committee of Guilan University of Medical Sciences, Rasht, Iran, with the code no. IR.GUMS.REC.1402.009. After submitting the permits to the officials in the study setting, the participants were also selected. Before their inclusion, the researchers explained the main objectives as well as the information confidentiality and voluntary participation policy. Informed consent was also obtained from all participants. The study ensured participant anonymity and confidentiality

through informed consent, data anonymization, secure data handling, and confidential reporting. Participants were fully informed about their right to withdraw at any time and the confidentiality of their responses, fostering a sense of security. Participation was also voluntary and without any coercion, and interviews were conducted in the participants' preferred environment. Participants were allowed to skip questions or stop the interview if they felt uncomfortable discussing a particular topic.

Results

In total, 11 interviews were conducted. The mean age of the participants was 41.37 years, and 54.54 % of them were male. The main characteristics of the participants are presented in Table 2.

To increase richness, an effort was made to select participants with maximum variation and a wide range of experiences and

perspectives. By analyzing the data, several categories emerged that explained the factors that facilitated or hindered patients' AoD. The transition conditions meant the situations that could affect the transition path and facilitate or hinder the realization of a successful transition. This study accordingly examined the facilitators and barriers to MI acceptance or denial from the perspective of the patients.

Table 2. Demographic characteristics of participants

Participants	Number of participants	Age (Average)	Gender		Marital status		Level of education				
			Male	Female	Married	Single	Under diploma	Diploma	Post-graduate to bachelor's degree	Master's degree	Physician
Patients	6	52.16	4	2	6	-	1	4	1	-	-
Caregivers	2	37.5	-	2	2	-	-	1	1	-	-
Nurses	2	30.5	-	2	1	1	-	-	1	1	-
Doctor	1	45	1	-	1	-	-	-	-	-	1

1. AoD facilitators

This main category, with five subcategories, involved the factors that could result in accepting MI as a recently diagnosed health condition among the patients.

1.1. Social support

The support received by patients from those around could be a positively effective factor in AoD. Some patients did not consider it possible to overcome the disease without family support. As an example, a male patient talked about the impact of social support as follows:

"I think it actually depends on my partner, that is, whether she accepts my health condition." (Participant no. 2)

As well, a female patient said that:

"All families first feel offended and do not like to accept the disease. They know well about the patient's health condition, but they do not communicate it. I am in no doubt that they will do anything to support me. They do it for sure." (Participant no. 1)

According to a cardiologist:

"Many companions make an effort to give good reasons for their patients to stay in the hospital and stick to the treatment regimen.

Indeed, this is effective in accepting the disease." (Participant no. 7)

1.2. Adaptation to new roles

One other factor that could push patients to accept a disease was the need to adapt to new roles. Some patients felt forced to accept the created conditions due to their family responsibilities. The identity of being a mother or a worker and other roles of the participants required AoD and participation in recovery. Because of having such roles and the need to return to previous roles, the patients accepted the new disease and participated in the treatments. In this context, a male patient asserted that:

"I try to accept the reality and I convince myself that I have to live with such conditions. I need to adapt and cope with the disease, so I want to gain more awareness." (Participant no. 5)

Moreover, a female patient assumed that:

"These days, when I cannot do something, I linger and accept the situation. I have agreed to continue my life in the same way, just for the love of my child. If I did not have a

child, I would not do many things. My child is two years old, and I am now responsible for taking care of him.” (Participant no. 1)

1.3. Probability of contracting a certain disease

Many patients were expected to undergo a certain disease, and they were also looking ahead in some way. There were some factors, such as old age, unhealthy lifestyle, and a family history of the disease, that could facilitate AoD. To give an example, a male patient with a family history of the disease asserted that:

“As there was a family history of the disease, it was something normal, and I was waiting for it.” (Participant no. 3)

Experiencing an unhealthy lifestyle, a patient also affirmed that:

“Given much stress and the unhealthy food we have, as well as many other problems, I did not use to adhere to a series of rules, and I made many mistakes as well, so I accepted that I have heart disease.” (Participant no. 4)

1.4. Spirituality

Spirituality, along with religious beliefs and acceptance of one’s fate, could facilitate AoD in the patients. In the Iranian cultural context, one of the factors facilitating acceptance can be religion and spirituality. Religious beliefs in Iranian culture make them flexible in accepting the created conditions. In this regard, a patient said that:

“I have a strong belief. I quiet down through my belief, and I leave things up to fate. All human beings were created by God, and they are moving forward upon His knowledge. If someone is cured, that is really great, but not too bad. It is fate.” (Participant no. 4)

A male patient correspondingly stated that:

“Our life is above all spiritual. This helps us a lot. It is soothing. It is not worth it if you have wealth but no peace of mind. You should always take a turn for the better.” (Participant no. 2)

1.5. Health care providers

Some participants considered the treatment and support measures practiced by health care providers as a factor facilitating AoD. They stated that despite the repetition of some interventions or the sensitivity of health care providers in some situations, they had come to believe that there was a serious problem. In this regard, the cardiologist answered that:

“Treatment measures, as initiated by healthcare providers, can definitely help patients accept many changes and diseases. Once treatments are started and the patients are hospitalized in critical care units to receive more treatment, they accept that there is a serious problem.” (Participant no. 7)

A nurse also believed that:

“Physicians and residents used to come and explain the acute conditions. The physicians talked straight about the problem as well as the diagnosis and treatment; otherwise, there would be no time to do so, so patients accepted.” (Participant no. 6)

In this line, a male patient asserted that:

“The disease was not very serious for me until I talked with my physician. I accepted it, but not completely. Now, I almost believe it.” (Participant no. 4)

According to the definition of transition conditions in the theory, factors such as social support, adaptation to new roles can be both personal and social. Also, spirituality and the possibility of contracting a disease were personal factors in patients that facilitated the transition experience. Having a health care team was also effective as a source of support in the patients' transition experience.

2. AoD barriers

This main category contained some barriers to MI acceptance among the patients, with much emphasis on three subcategories.

2.1. Disease symptom reduction

As stated by some patients, MI acceptance decreased following the reduction of

the disease symptoms and the pain reduction. In this context, a nurse said that:

“It sometimes turns out that some young patients are candidates for open-heart surgery. At this stage, they believe that they feel fine because their pain has subsided to some extent.” (Participant no. 8)

He also added that:

“Patients who take medications regularly and feel better think that they are very well and do not accept that their health problem is really serious.”

Another nurse additionally maintained that:

“There is something else, as soon as the patients take their own medications, their pain sinks. I mean, they think they are getting better and never believe that they once had a time a heart attack.” (Participant no. 6)

2.2. Not expecting to have a myocardial infarction

The younger age, compliance with a healthy diet, good lifestyle, regular exercise, and no symptoms of the disease could make it more difficult for some patients to accept the MI. Many patients believed that many heart diseases occur in old people with various problems. According to a male patient's statements:

“The only thing I did not think about was that I would go through a heart attack at this age because I never drink, have no substance abuse, or even smoke.” (Participant no. 2)

Besides, a female patient aged 33 asserted that:

“It was absolutely unacceptable to me to have heart disease at this age. I feel it was too early for me, that is, I feel this way. Now, I am living in this situation with these things. I have the disease, but why me?” (Participant no. 1)

The cardiologist also answered that:

“Most patients with no symptoms have an initial denial and say no, it is not possible, and I am fine.” (Participant no. 7)

Moreover, a 43-year-old woman believed that:

“I could not imagine that I had this serious health problem. I used to go cycling every day.” (Participant no. 8)

2.3. Lack of awareness

Lack of awareness regarding heart diseases and their associated symptoms was a barrier, making it difficult for the patients to accept the MI. Many patients were evading the diagnosis and considering other factors for the new problem or following stroke symptoms. In this respect, the cardiologist assumed that:

“Some patients believe that their symptoms have been due to going to a food ceremony, spraying poisons, having a trip, or being drained.”

He also argued that:

“One account is that the patients have a biased notion of a heart attack, and most of the time it seems to be a stroke. My father had a stroke and was paralyzed, but insisted that he could move his hands.”

In this case, a patient said that:

“No one can understand that there is pain in their arms and hands. It was late at night when I felt sick and guessed it was due to milk poisoning. At first, I could not even accept that I had a heart attack.” (Participant no. 2)

By analyzing the data obtained from interviews with patients, factors that prevented participants from accepting the disease were identified, and factors such as decreased awareness of the disease, decreased symptoms, and lack of expectation of contracting the disease were personal factors that prevented the intended transition experience.

Discussion

This study aimed to investigate the facilitating and inhibiting factors of MI acceptance in newly diagnosed patients. Accepting a newly diagnosed disease was vital during this transition, so they could actively participate in its successful fulfillment. Our findings showed that various factors change AoD, among which receiving support from their loved ones, health care providers, and spirituality are facilitating factors, and trying to adapt to the disease, their new role, and accept the disease. Meanwhile, factors such as age, which are a deterrent to accepting MI in young people, can act as a facilitating factor in older people. Lack of awareness of the disease and

reduced symptoms can also be factors that make it difficult to accept having a heart attack.

Social support, mainly that provided by family members and favorite people around, was thus reported as one of the top factors facilitating AoD by the patients. The participants argued that the path ahead was smooth as they had enough support from their family to experience a transition and accept the disease. Cipora et al., investigating the patients diagnosed with breast cancer, had also obtained very similar results, wherein AoD had been higher in married patients and those with consensual relationships (20). The results of the study conducted by Azimian et al. were consistent with the results of the present study, in which nurses considered the level of support received through the availability of support systems, physician support, peer support, authority support, and family support to be effective and influential in coping with the transition (21). The results of the mentioned studies highlight the importance of supporting patients with new problems. It seems that the process of transitioning from illness and achieving health is facilitated by receiving social support, and better outcomes can be expected.

The study results further revealed that the patients adapted to the new condition and some different roles after being diagnosed with MI, for some reason, such as having a family and children, and conflicts with various responsibilities. In Richardson et al., it was correspondingly concluded that AoD was associated with a higher capacity to adapt to the existing conditions, which was consistent with the results of the present study (22). Moreover, Smolen et al. in their study on the patients who underwent cancer treatments showed that the patients who practiced a series of strategies to cope with the disease and adapted once facing problems experienced more AoD (23). Adaptation to existing conditions can happen for different reasons. It seems that patients have no choice but to accept the disease and move through it, and must resume their previous responsibilities.

Among the facilitators to MI acceptance were the probability of contracting a certain disease, including old age, unhealthy lifestyle,

and a family history of the disease. Uchmanowicz et al., examining the patients diagnosed with chronic obstructive pulmonary disease (COPD), similarly indicated that comorbidities could increase AoD (24). In the present study, some patients also reported paying no attention to the advice for taking medications and following a healthy diet. Somewhere else, the patients living with coronary artery disease (CAD) had aimed to quit their medication regimen following AoD (25), which was in agreement with the present study. It seems that the presence of other health-related problems or the patient's lack of attention to health prepares the patient for the next unfortunate events, and in case of illness, the patient looks for the causes of failure, which can be an incorrect lifestyle or heredity, or other problems. Most patients, after being diagnosed with the disease, sought the causes of their illness, and by examining the past and considering their role in contracting the disease, they found factors such as not paying attention to previous medical advice, having other diseases, older age, and an inappropriate lifestyle to be influential in contracting the current disease.

Spirituality was also one of the facilitators for the patients to accept MI as a recently diagnosed condition. The reviewed studies were accordingly consistent. Here, spirituality could help patients prepare for various conditions, such as mental diseases, chronic syndromes, kidney failure, diabetes mellitus (DM), lung and infectious diseases, and many others (26). Furthermore, the present study supported the findings in Atsira et al., in which a significant positive relationship was observed between spirituality and AoD in patients with bipolar diagnosis (27). Kolpa et al. similarly established that religious beliefs and spirituality in patients with cancer were significantly and positively correlated with AoD rate (28). By relying on God and His power as the creator, as well as fate, the patients have a better AoD. It seems that some participants thought that the current situation had to happen because it was destined for them from the beginning. Transition theory encompasses spirituality in many aspects, and looking at this

dimension in this particular theory may help to understand spirituality as a critical dimension in transitions and processes, as well as an influential dimension in individual growth.

Moreover, treatment measures and health care providers were the facilitators of AoD in patients with MI. The results of our study were inconsistent with those of Yang et al., because in this study, which was based on Meleis' theory, interruptions in professional guidance from health care providers were among the factors inhibiting nutritional management in elderly people with coronary artery disease (29). In another study about the experiences of MI in Norwegian patients, they had acknowledged trust and belief in health care providers, so the treatment and recovery processes could be easier for the patients, thanks to their presence (30). Somewhere else, the positive effect of treatment measures and health care providers on fear acceptance had been correspondingly reported in line with the present study. It seems that when patients are faced with the fact that some people are doing vital actions for them, they will understand the importance of the problem more. It can be interpreted that by being involved in the treatment process and observing objective measures such as repeated ECGs, repeated tests, and the urgency of performing therapeutic measures, patients became increasingly aware of the occurrence of the disease and believed in it.

In this study, some patients did not expect a disease due to their younger age, so it was difficult and impossible for them to accept MI as they had adhered to a proper diet, exercised, and experienced favorable living conditions. The results in Łuczyk et al. were accordingly in favor of those in the present study, in which there was a significant negative relationship between patients' age and AoD. Thus, the patients at a younger age had lower AoD than those undergoing surgery after breast neoplasms (31). Pluta et al., reflecting on AoD rate in the patients diagnosed with rheumatoid arthritis (RA), suggested that older age was associated with a drop in AoD (32), which was in conflict with the results of the present study. It seemed that the difference in the type of diseases in both studies was one main reason for this

discrepancy. It seems that the difference in the type of disease in the studies could be one of the reasons for this asymmetry. Considering that it is often said in the public mind that a disease such as stroke occurs in older people, accepting the disease in young people is an issue that often faces challenges.

Some patients also thought that the health problem was trivial due to the disease symptom reduction and the improvement in physical conditions, so the MI acceptance in these patients dwindled. As well, Kurpas et al. reported that the asymptomatic nature of chronic respiratory diseases caused a decrease in their acceptance, so there was eventually discontinued treatment as well as no follow-up and diagnostic tests. The primary complications were accordingly one of the consequences, which was consistent with the present study (33). As stated in Bårdsgjerde et al., the patients with the initial experience of MI found it difficult to believe in pain due to this condition. Considering that the pain was not severe, they did not complain due to having no verbal communication or information in the acute phase (30). Participants often expected the severity of cardiac attack symptoms to be much greater, and sometimes some patients expected to experience stroke-like symptoms. The inability to differentiate symptoms of the disease from stroke, the expectation of more severe symptoms, a decrease in symptoms with the initiation of treatment, and the gradual improvement of cardiac symptoms were barriers to acceptance for patients and hindered the successful transition process.

In this study, one of the barriers to AoD by the patients was a lack of awareness, that is, the patients did not have enough knowledge and information about their disease, so the health condition was diagnosed later. In this regard, Ockleford et al. demonstrated findings in line with the present study, wherein the patients with DM did not consider this health condition seriously, but one that simply required lifestyle modifications and did not damage them. For this reason, lack of awareness about DM was mentioned as a barrier to AoD (34). In the qualitative study by Al Arab et al. in Lebanon, regarding the morbid obesity acceptance, a

significant relationship had been further observed between lack of awareness regarding the disease and lower acceptance of morbid obesity as a chronic disease, in harmony with the present study results (35). Informing patients by a specialist at the beginning of the treatment process of the problem and how the treatment or non-treatment of the disease affects the person, prepares them to accept the conditions.

Diversity among participants also plays a crucial role in understanding these facilitators of MI acceptance. For instance, insights from cardiologists and nurses provide a medical and therapeutic perspective on how comorbidities and lifestyle factors influence acceptance, while patients and caregivers share personal experiences of adapting to these conditions. This broad range of perspectives enriches the findings, highlighting how varying levels of awareness and attitudes toward health contribute to acceptance. The acknowledgment of factors such as family history, unhealthy habits, and previous comorbidities as facilitators reflects the diverse viewpoints gathered, illustrating how different roles within the healthcare and support system perceive and address AoD. By capturing these nuanced perspectives, the study ensures a more comprehensive understanding of the complex interplay between personal and external influences on the process of accepting MI.

Study limitations

Among the limitations in this qualitative study was the researcher's bias, which could not be avoided despite reflexivity. Moreover, this study was conducted in an educational hospital as a heart center in Rasht, Iran, so the findings might not be generalizable to other settings, even if in-depth interviews were carried out.

Conclusion

Patient participation in the recovery process is not possible without acceptance of the disease. Many people face challenges in the transition from health to disease, which are influenced by various factors. Identifying such factors is essential in providing care to people experiencing the transition. Also, recognizing the factors influencing AoD is essential for

developing effective patient care strategies. Taking steps to strengthen facilitators and reduce barriers can help predict and improve care outcomes and lead to greater patient participation in the recovery process. Integrating educational aspects of AoD into nursing practice enhances the quality of care provided, promotes better patient outcomes, fosters stronger nurse-patient relationships, and supports the overall well-being of both patients and healthcare providers. To effectively implement care strategies, it is essential to consider the interplay of sex and age in health outcomes and preferences. Tailoring approaches based on these factors can enhance patient engagement, satisfaction, and overall health outcomes. This requires ongoing training for healthcare providers in cultural competence and an understanding of the specific needs of different demographic groups.

Application for nursing practice

Considering the importance of caring for patients during transition and the exposure of nurses to various types of transition, the findings of the present study can be useful in the nursing practice environment. One of the most important measures in the process of transitioning from health to disease is helping to accept the disease, so it is important to identify the facilitating and inhibiting factors of nurses in reaching this goal. It is suggested to conduct a quantitative study on patients with the same problem and to measure the AoD. It is also possible to change the level of acceptance of the disease in patients by conducting and implementing an intervention study. Conducting intervention studies by developing interventions with an emphasis on increasing facilitating factors and reducing inhibiting factors can increase AoD in patients and improve desired outcomes. Longitudinal studies are also suggested to examine AoD over time. In interviews with participants, it seemed that those who had been diagnosed with the disease for longer were more accepting. The theory is adaptable for future studies by applying it to diverse populations, integrating digital health tools, and exploring transitions in various contexts like mental

health or aging. Hypotheses for testing include the influence of social support, spirituality, and healthcare communication on AoD, as well as the role of health literacy and lifestyle factors. Future research could involve quantitative measures, intervention studies, and societal-level approaches to enhance transitions and validate the framework further.

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Conflict of interest

The authors declare no conflict of interest.

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