

COPING STRATEGIES OF MYOCARDIAL INFARCTION PATIENTS IN TRANSITION TO COMMUNITY SETTING: A MIXED METHODOLOGY

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Abstract

Background and Objective: Patients recovering from MI need to manage one's transition of care from the hospital to the community setting through effective coping. Coping effectively may require significant behavioral change in emotional, physical, and social aspects.

Methods and Findings: This study utilized a mixed method design in MI patients age 40-65 years old, discharged from government hospitals in Metro Manila to describe how well the participants cope with MI after hospitalization. The participants were able to cope well in terms of their emotional, physical, and social strategies, which were found helpful after hospitalization. The theme developed from the qualitative strand includes optimism, acceptance, ability to express one's self to others, appreciative, and solitary. Hence, these coping strategies were found helpful after their hospitalization due to MI.

Conclusion: Most of the participants were optimistic, practice healthy lifestyle, able to express one's self to others, and have accepted their heart disease.

Keywords: Myocardial Infarction, Coping, Coping Strategies, Transitional Care.

Introduction

Cardiovascular disease is the leading cause of morbidity and mortality, taking an estimated 17.9 million lives each year globally (WHO, 2020). Myocardial infarction (MI), also known as heart attack is one of the most common heart diseases. A heart attack entails an individual to make some changes in his life to effectively cope with MI right after hospitalization. Survivors of MI are at increased risk of recurrent infarctions, and have an annual death rate of 5%, which is six times in people of the same age. Patients who experience acute event of hospitalization are at risk when transferred to different care settings. This is because of adjustments to their new lifestyle, which include adherence to medication, and significant support from both their loved ones, as well as the health care team. Among other consequences patients diagnosed with MI consistently advised to have follow-up care after leaving the hospital. Being unable to do so can make them more vulnerable and hinder their recovery. Patients recovering from MI have several needs, and effective interventions are required to manage the transition of care from an acute hospital setting to a community setting.

Myocardial Infarction (MI) is a life-threatening disease that influences the emotional, physical, and social aspects of a patient's life. Post- MI patients have physical limitations due to the changes of bodily functions. Failure to adjust one's behavior to the disease results in maladaptive coping, which creates dissatisfaction, uncertainty, anxiety, passivity, feelings of helplessness and depression. The researcher showed interest in the topic because of a curiosity on how MI patients adjust from hospital care to home environment care, to finally to living on their own. Furthermore, post - MI patients may also show a tendency to fall into social withdrawal. By improving their quality of life right after hospitalization, post-MI patients try to cope with and bring back one's sense of control. There are various ways of adapting to the changes that stem from hospitalization due to MI. When one copes consciously or unconsciously, effort is necessary to solve the problem and be able to recover and later restore one's optimum functioning state. Coping strategies are efforts to manage one's emotional, physical, and social behavior in response to everyday events. This study aims to

understand the coping strategies and identify related factors related to whether coping plays a crucial role in positive outcomes among post-MI patients. Safe care transition from the hospital to community setting is essential to coping with MI emotionally, physically, and socially. More importantly, utilizing coping strategies needed on care transitions could hasten one's recovery from MI.

Methods

1 Study Design

A mixed method research design approach was used in the study to address how well the participants cope after post-MI hospitalization. Quantitative data was first collected using a structured questionnaire, and then followed by qualitative data from interviews conducted with the patients, using the semi structured guide question. The data was analyzed quantitatively and qualitatively through themes. For the interpretation of the findings, the results of both methods were compared and combined. Both the quantitative and qualitative data provided better understanding of the coping strategies and how helpful they were to the participants.

2 Ethical Procedures

This study was subjected to ethical research protocols and procedures outlined in the Institutional Ethics Review Committee (IERC) of St. Paul University, Manila. Approval from the concerned hospitals were obtained, and a consent letter, indicating the benefits and risk of their participation, was given to the subjects. Lastly, informed consent was secured before conducting data gathering. Hence, the participants were not placed in a situation they have not been explicitly prepared for.

3 Participants and Sampling

In this study a non-probability purposive sampling was used. Purposive sampling was selected to identify post discharged patients' coping experiences. The participants were chosen based on pre-defined criteria: (1) Ages 40-65 years old; (2) Residing in Luzon area (3) Discharged from the hospital after one to three months; (4) Diagnosed with MI. Furthermore, the number of participants was based on the approved consent given by both hospital and patients. There was a total of 35 participants in the study. Among them, 18 (51%) participated, 16 (46%) were unable to follow up,

and 1 (3%) refused to participate. Only 5 out of 21 hospitals allowed the researcher to review their patients' medical records, regardless, the participants were enough to provide data to this research study.

4 Research Instrument

This study utilized a three-part self-made questionnaire. First was the socio-demographic profile pertaining to patients' gender, educational attainment, monthly income, and occupational status. Second, the coping strategies and its perceived effectiveness were assessed. To test the validity of the said self-made questionnaire, three instrument developers who were experts in the clinical field were asked about the psychometric properties of the instrument, before making it available for general use. The instrument was translated to Filipino language, conceptually and technically equivalent to the source language, and linguistically appropriate for the target population. Pilot testing of the content showed an alpha coefficient result of 0.84, which suggested items of relatively high internal consistency.

The third part of the questionnaire was a set of semi-structured guide questions about the coping strategies of the participants. The questions were grouped into three domains such as emotional, physical, and social. Each interview was opened with the question, "Please tell me about your coping with MI" and the interviewees were asked to freely describe their coping experiences such as emotional, physical, and social.

5 Statistical Treatment of Data

Inferential statistics was used in the study, particularly frequency and percentage distribution to describe the demographic profile of the respondents such as gender, educational attainment, monthly income, and occupational status. Statistical mean was computed to find the average responses on coping strategies and the extent on how the coping strategies were helpful.

Results

The study revealed that more than half (56%) were males and (44%) female participants. Majority (61%) have no source of income, while 6% of the participants received a monthly income of Php 15,001 to 20,000. Although more than half (61%) were unemployed, there were (3%) retirees (Figure 1).

Table 1: Emotional Coping Strategies

Emotional Coping Strategies	Use of Coping Mean	Strategy Interpretation
1. I look for something good about my health condition.	6.83	AT
2. I used positive self-talk.	6.72	AT
3. I pause and slowly do not lash out impatiently whenever I am upset.	4.89	GBT
4. I allot time to resolve the conflict with my most understanding response.	5.56	MT
5. I think of happy situation when tired or before sleep.	4.94	GBT
6. I try to calm down as I notice that my anger is increasing.	5.33	MT
7. I have a plan of what to do for the next few days.	5.28	GBT
8. I think of becoming better each day	6.28	MT
9. I let my emotions out by crying.	2.89	LT
10. I let tomorrow take care of itself.	5.06	GBT
11. I laugh about the situation.	3.78	ST
12. I blame others for what is happening to me.	1.44	NT
13. I keep trying to feel better by listening to music.	3.89	ST
14. I say to myself, "If others can, so can I."	6.56	AT
15. I feel well.	5.11	GBT
COMPOSITE MEAN	4.97	GBT

*Legend: 6.51-7.00 = All of the Time (AT), 5.51- 6.50 = Most of the Time (MT), 4.51 - 5.50 = A Good Bit of the Time (GBT), 3.51-4.50 = Some of the Time (ST), 2.51 – 3.50 A Little of a Time (LT), 1.51 – 2.50 = Hardly Any of the Time (NT).

1 Emotional Coping

Most of the participants looked for something good about their health condition which was being practiced all of the time (AT). The emotional coping strategy helpful done a little of the time (LT) was to look for something good about one's health condition. Overall, the composite mean of emotional coping strategy (4.97) was done a good bit of the time (GBT). During the interview, most

of the participants accepted their health condition. Many of them described the illness as a life situation that could cause despair unless they deliberately maintained a positive attitude to life. They looked for something good about their health condition. They responded that it helped them whenever they feel happy, courageous, and it motivated them that they can also be like others who triumph over difficult circumstances in their lives (Table 1).

Table 2: Physical Coping Strategies

Physical Coping Strategies	Use of Coping Mean	Strategy Interpretation
1. I take a short walk everyday.	5.50	GBT
2. I eat less fatty goods.	5.17	GBT
3. I follow my appointment schedule with my physician.	6.39	MT
4. I am comfortable to travel as a passenger.	5.72	MT
5. I seek consultation with my physician whenever the need arises.	6.67	AT
6. I accept my limitations.	6.94	AT
7. I have longer hours of sleeping time.	4.33	ST
8. I take my medicines on time.	6.67	AT
9. I do the same pace of activity as if there was no heart attack at all.	4.06	ST
10. I restrict myself from doing anything too quickly.	5.61	MT
11. I go to the nearest hospital facility whenever the need arises.	6.72	AT
12. I do things one step at a time.	6.00	MT
13. I do light household chores.	6.11	MT
14. I take care of all my personal hygiene practices each day.	6.94	AT
15. COMPOSITE MEAN	5.92	MT

*Legend: 6.51-7.00 = All of the Time (AT), 5.51- 6.50 = Most of the Time (MT), 4.51 - 5.50 = A Good Bit of the Time (GBT), 3.51-4.50 = Some of the Time (ST), 2.51 – 3.50 A Little of a Time (LT), 1.51 – 2.50 = Hardly Any of the Time (NT).

2 Physical Coping Strategies

Most of the respondents accepted their limitations and took care of their daily personal hygiene practices and was done all of the time (AT). The physical coping strategy helpful to them was to do the same pace of activity as if there was no heart attack at all and was done good bit of the time

(GBT). Overall, the composite mean of physical coping strategy (5.92) showed that it was done most of the time (MT). In the interview, most of the participants emphasized the importance of being able to return to everyday life, and enjoy routines and habits such as practicing a healthy lifestyle (Table 2).

Table 3: Social Coping Strategies

Social Coping Strategies	Use of Coping Mean	Strategy Interpretation
1. I talk about my day-to-day problems with someone.	5.50	GBT
2. I go out with my family or friends for a short period of time.	5.17	GBT
3. I rely on others for all my needs.	6.39	MT
4. I stay away from my friends.	5.72	MT
5. I enjoy staying with my family.	6.67	AT
6. I discuss what I feel with someone.	6.94	AT
7. I have longer hours of sleeping time.	4.33	ST
8. I take my medicines on time.	6.67	AT
9. I do the same pace of activity as if there was no heart attack at all.	4.06	ST
10. I restrict myself from doing anything too quickly.	5.61	MT
11. I go to the nearest hospital facility whenever the need arises.	6.72	AT
12. I do things one step at a time.	6.00	MT
13. I do light household chores.	6.11	MT
14. I take care of all my personal hygiene practices each day.	6.94	AT
15. COMPOSITE MEAN	5.92	MT

*Legend: 6.51-7.00 = All of the Time (AT), 5.51- 6.50 = Most of the Time (MT), 4.51 - 5.50 = A Good Bit of the Time (GBT), 3.51-4.50 = Some of the Time (ST), 2.51 – 3.50 A Little of a Time (LT), 1.51 – 2.50 = Hardly Any of the Time (NT).

3 Social Coping Strategies

Majority of the participants used the social coping strategy of “accepting help from others in buying things they need”, done good bit of time (GBT), and “enjoying their stay with their family” was helpful most of the time (MT). Overall, the composite mean score (3.50) of social coping strategy was used little of the time (LT). During the interview, most of the respondents emphasized their appreciation for having their family and experienced the support of their loved ones especially upon discharged from the hospital. However, some working respondents would have preferred to continue having a normal social life, they still appreciate being taken care by their family. Furthermore, they also feel that changes in their life caused by having diagnosed with MI don’t interfere with their relationship with family and friends (Table 3).

The qualitative findings on the coping strategies and how helpful they were to the participants were

presented as themes based on the participants’ responses. The emotional coping strategies included optimism, acceptance, and expression of negative feelings. Physical coping included awareness of one’s limitations, engaging in self-care, and healthy lifestyle practices. Social coping included the time spent with loved ones, where there is appreciation, and solitude. Overall, in the conducted interview the participants conveyed their coping strategies in emotional, physical, and social domains as optimism, acceptance, and expressing oneself to the others.

Discussion

The following coping strategies experienced by the participants were grouped as emotional, physical, and social. It was found that acceptance of MI was the key to awareness of physical limitations and better lifestyle practices. Therefore, clinicians should continue to recommend regular physical activity, while highlighting that short-term intense physical activity may carry a risk of triggering MI.

Emotional coping strategy was described as optimistic. The participants were ready to face the challenges caused by MI in their lives. These were faced by the participants with courage and positive feelings which motivated them to look forward to obtaining a better health condition. The participants were able to handle the emotional struggles they experienced. They expressed negative feelings and frustrations, despite limited resources. After MI, knowing that the heart is not functioning well is a threatening experience. This illness and its symptoms increase the feeling of anxiety. The MI patients and their family members usually experience several problems during period of the patient's recovery, including psychological reactions relating to the illness. These problems may result to disturbance in daily life and affect the support of family member to the patient.

The results of the conducted interview showed that the participants mingle with others. The time spent with family members and loved ones were valued by the participants, though there were times where personal space was regarded important. The participants were eager to share stories, felt better to be trusted, and were motivated to get better. The amount and quality of experienced social support also contributed to emotional health, and a higher socio-economic status on the prevention of emotional distress at both short- and long-term follow up after cardiac disease (Blikman,1 Jacobsen, Eide,2,3 and Meland, 2014). While most of the participants enjoyed the company of other people, some participants prefer to be solitary. On the other hand, people who had negative affectivity and social inhibition often suffered from pessimism, low social support, and generally poor health level (Annagur , Demir, Avci, Uygur, 2017). Similar to the study of Delmar, Jakobsen, Forup, and Pedersen (2012) regarding the existential significance of social support patients' experience after MI, it showed that the patients tried to keep their worries to themselves and they avoided talking to their close family about everyday existential life phenomena, such as anxiety, loneliness and the balance between security and insecurity. Post-MI patients could also show a tendency towards impaired social functioning (Mierzynska et al. 2010). The participants were eager to share stories, felt better to be trusted, and were motivated to get better. While most of the participants enjoyed the company of other people, some participants prefer to be solitary. Coping would be threatened, if the patient denied the seriousness of the situation, or if there were serious problems in the interaction with family members. Patients who found themselves in a confused situation felt stress and anxiety about what they may expect. The patient would have felt limited,

anxious, and have a lack of support.

Achieving harmony after MI involves a balance between feelings safe and secure to satisfy the needs of their close family. This places the cardiac nurse as a catalyst for existential communication between the patient and the close family member.

Although optimism is the key to effective coping, in uncontrollable situations some of the participants have used strategies considered ineffective, such as blaming others for what have happened to them.

Conclusion

The participants were able to cope well as to emotional, physical, and social coping strategies. Most of the participants were optimistic, were able to express one's self to others, and were able to accept their heart disease. Furthermore, these coping strategies were found helpful after their hospitalization due to MI.

As the participants continue to live with MI, understanding how they cope can provide positive health outcomes on their transition from hospitalization to community setting. It is suggested that post-MI patients must balance their limitations with their ability to cope to achieve faster recovery. The coping strategies described in this study may allow the nurse to encourage support from members of the family on how to care for post-MI patients.

Conflicts of Interest

The author declares there are no significant competing financial, professional, or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

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