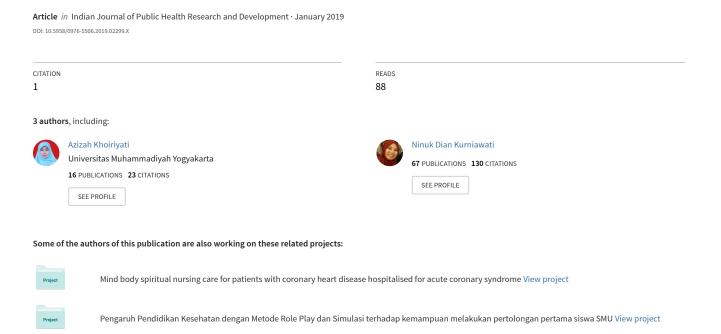
# Experiences of Recovery from Acute Coronary Syndrome: A Systematic Review



# **Experiences of Recovery from Acute Coronary Syndrome: A Systematic Review**

### A Khoiriyati<sup>1</sup>, Kusnanto<sup>2</sup>, Ninuk Dian Kurniawati<sup>2</sup>

<sup>1</sup>Doctoral Degree Programs, Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia; <sup>2</sup>Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

#### **ABSTRACT**

Understanding how patients experience recovery from acute coronary syndrome is critical for improving continuity of care. Continuity of care from hospital to home can be particularly challenging. This review aims to provide an overview of patients' experiences of recovery from ACS. Data sources used keyword search of Medline, CINAHL plus, Scopus, Science Direct and Proquest databases. The inclusion criteria were conducted with adult population, qualitative research and articles published in English language in 2008-2018. This review used Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) guidelines. The samples of 21 qualitative articles were included. Discharge planning and systematic follow-up shortly after discharge are increasingly viewed as being important. Patients need adequate instruction and information on how to integrate health information. Further research is needed to improve intervention strategy among people suffering from ACS, especially in developing countries.

Keywords: Acute coronary syndrome, experience, recovery

#### Introduction

Acute coronary syndrome (ACS), especially ST elevation myocardial infarction (STEMI) and non-ST elevation myocardial infarction (NSTEMI), can cause significant morbidity and mortality.1 The risk of recurrence of heart disease is also still high after ACS, especially in the first year.2stroke, or cardiovascular death after acute coronary syndrome. We investigated these aspects and developed tools for predicting these events according to the time of their occurrence. Methods: A retrospective study was conducted of 4858 patients who survived an acute coronary event. We analyzed the incidence and predictors of acute myocardial infarction, stroke, or cardiovascular death during the first year (n = 4858 The transition period of recovery is a complex process requiring input, timely exchange of information and coordination between various disciplines, both

## **Corresponding Author:**

Azizah Khoiriyati Doctoral Nursing Student, Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia Email: azizah.khoiriyati-2018@fkp.unair.ac.id with patients and families.<sup>3</sup> Healthcare professionals need to pay attention to patient perspectives through a carefully performed dialog formulated in a personal care plan for each patient with ACS.<sup>4</sup>there is a need to better understand patients' perceptions of their illness. Objective: To explore patients' experiences of ACS during their hospital stay. Design: A qualitative interpretative interview study was conducted among patients during their hospitalization for ACS. Setting: The study was performed in two designated coronary care units at a hospital in Sweden. Participants: Twelve participants (five women and seven men; age range, 45-72 years

Experience in adjusting and adopting lifestyle changes after ACS is influenced by subjective experience in an individual, sociocultural and environmental context. Other factors that influence the adjustment of post-ACS patients are misunderstanding, misconception and confusion about the process and management of the disease. Post-ACS patients need continuous input and support from professional health personnel during the rehabilitation and recovery process. The purpose of this review is to provide an overview of patients' experience of recovery after ACS.

#### Method

Study Design, Setting, and Sampling: The researchers searched CINAHL plus, Medline, Scopus, Science Direct and Proquest databases for studies conducted with adult population, qualitative research and articles published in English language in 2008-2018. The keywords included recovery, rehabilitation, experience, acute coronary syndrome, and myocardial infarction. This review used Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) guidelines. Studies were included if they were original articles assessing the patients' experience of recovery from ACS. The

researchers excluded reviews that did not explore patient experiences, e.g. the experiences of family, carers, nurses, and partner following the spouse's coronary attack.

#### Results

There were 252 papers found from five databases: 43 papers from Scopus, 15 from CINAHL plus, 46 from MEDLINE, Science Direct 8 papers and Proquest 140 papers. There were 189 papers which were excluded because of irrelevant studies. There were 21 papers that met the inclusion criteria after a review based on abstract and full text.

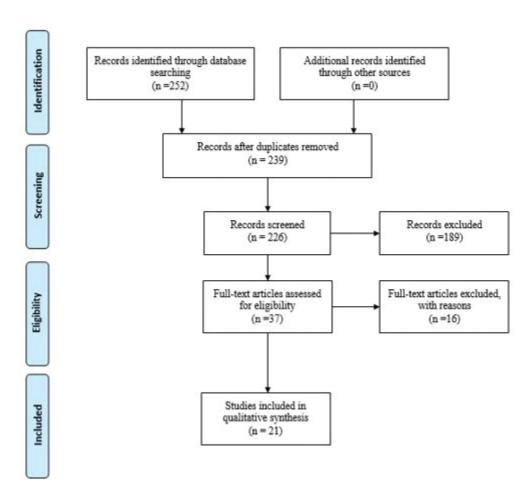


Figure 1: PRISMA flow diagram of study selection process

Twenty-one qualitative studies published during 2008-2018 were identified exploring the experience of recovery after ACS or MI. Six studies were conducted in Australia,<sup>6-11</sup> five in Sweden, <sup>4,12-15</sup> three in USA, <sup>16-18</sup> two in Norway, <sup>19,20</sup> two in Denmark, <sup>21-22</sup> one in Ireland, <sup>23</sup> and one in the United Kingdom. <sup>24</sup> These studies involved a total of 438 participants post-ACS/MI including (270

women, 168 men), and seven mentors. Sample size was ranging from eight to 130.

Data collection used a variety of interview techniques with age ranging from 40-90 years. Various qualitative designs were used, including phenomenology, grounded theory, and case study. The majority of interviews were conducted at the participant's home and in hospitals, which lasted between 20 and 120 minutes.

#### **Discussion**

Women's views of their MI were complex and diverse.<sup>20</sup> The basic psychosocial problems were: changing patterns of fear (fear of living with heart disease, fear of death and fear of recurrence),<sup>4,6-7,17, 23</sup> anxiety,<sup>4</sup> and uncertainty.<sup>23</sup>

The basic psychosocial process to resolve the conflict is living a new normal: uncertainty in seeking help (indecisiveness; self-treatment; emerging perception), rapid changing, evolving patterns (confronting mortality; avoidance; readjustment, reminiscing the past) and spiritual solace. Patients were motivated to change their lifestyle and contemplated taking their life in new directions, adopting a change of life perspective, finding a meaning in what had happened and managing consequences of MI. Individual perceptions of patients' lifestyle and support, one year after an AMI, with or without mentorship, had similarities and tendencies to variation in their perceptions, with both a positive and negative view of life. Is

The lived experience of individuals in cardiac rehabilitation who have positive outlooks on their cardiac recovery includes choosing life over death, learning to live a new self, and a life-transforming cardiac event. Choosing life over death describes an increased awareness of mortality that leads individuals to make improvement in their health a priority. Learning to live a new self was used to describe participants' experience of changing their lifestyle and the usage of facilitators to overcome barriers. All of the participants described cardiac rehabilitation as one of the important first steps toward successful cardiac recovery. Some participants described their cardiac event as a life-transforming experience, despite the negative effect of cardiac event on the participant's life. 16,23

Both men and women have recovery experiences after ACS. The women's recovery process is a multidirectional process with a desire to develop and approach a new perspective on life, including engaging in activities (behavioral dimension), appreciating social life (social dimension: how women receive and give support in their social environment) and psychological (their way of thinking, reflecting, and appreciating life), and mobilizing own resources.<sup>13</sup> The experiences of midlife women who survive MI and return home to recover included freedom/un-freedom, knowing/not knowing.<sup>17</sup> Not only the women, the men also have

awareness that life is lived forwards and understood backwards. The myocardial infarction causes limitations in their lives even five years after the MI. The women experience physical restrictions, fatigue and also other health complaints. Furthermore, the older women suffer from various co-morbidities. 12

#### **Conclusions**

Transition to recovery is a phased psychological process and where people gradually accept the details of the new situation and the changes that come with it. Further studies are strongly recommended to research to improve intervention strategy among people post-ACS, especially in developing countries.

**Ethical Clearance:** N/A

**Source of Funding:** This study received funding support from Universitas Muhammadiyah Yogyakarta. The funding source was not involved in the writing of this review or in the decision to submit the article for publication.

Conflict of Interest: None

#### REFERENCES

- Gibler WB, Racadio JM, Hirsch AL, Roat TW. Continuum of Care for Acute Coronary Syndrome: Optimizing treatment for ST-Elevation Myocardial Infarction and Non-ST Elevation Acute Coronary Syndrome. 2018;17(3):114–38.
- Abu-Assi E, López-López A, González-Salvado V, Redondo-Diéguez A, Peña-Gil C, Bouzas-Cruz N, et al. The Risk of Cardiovascular Events After an Acute Coronary Event Remains High, Especially During the First Year, Despite Revascularization. Rev Española Cardiol (English Ed [Internet]. 2016;69(1):11–8.
- 3. Weiss ME, Bobay KL, Bahr SJ, Costa L, Hughes RG, Holland DE. A model for hospital discharge preparation: From case management to care transition. J Nurs Adm. 2015;45(12):606–14.
- Fors A, Dudas K, Ekman I. Life is lived forwards and understood backwards - Experiences of being affected by acute coronary syndrome: A narrative analysis. Int J Nurs Stud [Internet]. 2014;51(3):430-7.

- 5. Guo P, Harris R. The effectiveness and experience of self-management following acute coronary syndrome: A review of the literature. Int J Nurs Stud [Internet]. 2016;61:29–51.
- Gallagher R, Marshall AP, Fisher MJ, Elliott D.
  On my own: Experiences of recovery from acute coronary syndrome for women living alone. Hear Lung J Acute Crit Care. 2008;37(6):417–24.
- 7. Gallagher R, Marshall AP, Fisher MJ. Symptoms and treatment-seeking responses in women experiencing acute coronary syndrome for the first time. Hear Lung J Acute Crit Care [Internet]. 2010;39(6):477–84.
- 8. Infarction PM, Mendes B. Phenomenon of Inner Strength in Women. Heal (San Fr. 2010; 33(3):248–58.
- 9. Askham J, Kuhn L, Frederiksen K, Davidson P, Edward KL, Worrall-Carter L. The information and support needs of Faroese women hospitalised with an acute coronary syndrome. J Clin Nurs. 2010;19(9–10):1352–61.
- 10. Frohmader TJ, Lin F, Chaboyer WP. Structures, processes and outcomes of the Aussie Heart Guide Program: A nurse mentor supported, home based cardiac rehabilitation program for rural patients with acute coronary syndrome. Aust Crit Care [Internet]. 2018;31(2):93–100.
- 11. Page M, Jackman K, Snowden P. The experiences of patients undergoing percutaneous transluminal coronary angioplasty: a qualitative exploration. World Crit Care Nurs. 2008;6(4):79–88.
- 12. Sjöström-Strand A, Ivarsson B, Sjöberg T. Women's experience of a myocardial infarction: 5 years later. Scand J Caring Sci. 2011;25(3):459–66.
- 13. Wieslander I, Mårtensson J, Fridlund B, Svedberg P. Women's experiences of how their recovery process is promoted after a first myocardial infarction: Implications for cardiac rehabilitation care. Int J Qual Stud Health Well-being. 2016;11(February).
- 14. Kristofferzon ML, Löfmark R, Carlsson M. Managing consequences and finding hope Experiences of Swedish women and men 4-6 months after myocardial infarction. Scand J Caring Sci. 2008;22(3):367–75.
- 15. Junehag L, Asplund K, Svedlund M. Perceptions of illness, lifestyle and support after an acute

- myocardial infarction. Scand J Caring Sci. 2014;28(2):289–96.
- 16. Nadarajah SR, Buchholz SW, Wiegand DL, Berger A. The lived experience of individuals in cardiac rehabilitation who have a positive outlook on their cardiac recovery: A phenomenological inquiry. Eur J Cardiovasc Nurs [Internet]. 2017;16(3):230–9.
- 17. Stevens S, Thomas SP. Recovery of Midlife Women From Myocardial Infarction. Health Care Women Int [Internet]. 2012 Dec;33(12):1096–113.
- Davis LL. A Qualitative Study of Symptom Experiences of Women With Acute Coronary Syndrome. J Cardiovasc Nurs. 2017;32(5):488–95.
- Valaker I, Norekvål TM, Råholm MB, Nordrehaug JE, Rotevatn S, Fridlund B. Continuity of care after percutaneous coronary intervention: The patient's perspective across secondary and primary care settings. Eur J Cardiovasc Nurs. 2017;16(5):444–52.
- 20. Falun N, Fridlund B, Schaufel MA, Schei E, Norekvål TM. Patients' goals, resources, and barriers to future change: A qualitative study of patient reflections at hospital discharge after myocardial infarction. Eur J Cardiovasc Nurs. 2016;15(7):495–503.
- 21. Simonÿ CP, Dreyer P, Pedersen BD, Birkelund R. It is not just a Minor Thing A Phenomenological-Hermeneutic Study of Patients' Experiences when afflicted by a Minor Heart Attack and Participating in Cardiac Rehabilitation. Scand J Caring Sci. 2017;31(2):232–40.
- Pedersen M, Overgaard D, Andersen I, Baastrup M, Egerod I. Experience of exclusion: A framework analysis of socioeconomic factors affecting cardiac rehabilitation participation among patients with acute coronary syndrome. Eur J Cardiovasc Nurs [Internet]. 2017;16(8):715–23.
- 23. Smith R, Frazer K, Hall P, A H, O' Connor L. Betwixt and Between Health and Illness-Women's narratives following acute coronary syndorme. ARPN J Eng Appl Sci. 2017;12(10):3218–21.
- 24. Astin F, Atkin K, Darr A. Family support and cardiac rehabilitation: A comparative study of the experiences of South Asian and White-European patients and their carer's living in the United Kingdom. Eur J Cardiovasc Nurs. 2008;7(1):43–51.