

Exploring the Lived in Psychological Experiences of Myocardial Infarction Patients: A Phenomenological Approach

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Abstract

Background: Myocardial infarction (MI), commonly referred to as a heart attack, is a critical global health issue associated with significant physical, psychological, and economic impacts. Survivors frequently experience psychological challenges such as anxiety, depression, and PTSD, which adversely affect recovery and quality of life. Understanding their psychological experiences is essential for developing holistic care strategies.

Purpose: The primary purpose was to explore the psychological experiences of MI patients, focusing on their emotional, social, and coping mechanisms, to inform more empathetic and effective healthcare practices.

Materials and Methods: A qualitative, phenomenological design was used to investigate the psychological experiences of six MI survivors at Rajiv Gandhi Government General Hospital, Chennai. Participants were selected using purposive sampling, and data were collected through semi-structured interviews in Tamil. Interviews, lasting 20-40 minutes, focused on emotional responses and coping strategies post-MI. Ethical approval was obtained, and a pilot study validated the research methodology.

Results: Key themes identified included Emotional Turbulence, Social Dynamics, Coping Mechanisms, and Transformations in Perspective. Patients reported initial shock, ongoing fear, and social withdrawal but developed resilience and altered life priorities. Community support and proactive coping strategies significantly influenced their recovery.

Conclusion: This study highlights the profound psychological, emotional, and social impacts of MI. Integrating psychological support into MI care can improve recovery, adherence, and overall quality of life. The findings advocate for holistic, interdisciplinary care approaches to enhance outcomes for MI survivors.

Keywords: Myocardial Infarction, Psychological Resilience, Coping Mechanisms, Phenomenological Research, Patient-Centered Care

Introduction:

Myocardial infarction (MI), or heart attack, is a major global health concern due to its significant contribution to cardiovascular disease (CVD)-related mortality. According to the World Health Organization, CVDs account for 17.9 million deaths annually, representing 32% of all global deaths, with 85% attributed to heart attacks and strokes [1]. In the United States, approximately 805,000 people experience a heart attack each year, of which 605,000 are first-time incidents and 200,000 are recurrent cases [2]. The prevalence of MI demonstrates significant geographic variability, with higher incidence rates reported in high-income countries due to risk factors such as poor diet, sedentary lifestyle, smoking, and hypertension [3].

In Asia, the prevalence of MI is particularly concerning among South Asians, where the median age of first MI is 53 years, compared to 63 years in other populations [4]. Approximately 9.7% of South Asian men experience MI before the age of 40, reflecting a trend of premature coronary artery disease (CAD). India has the highest global burden of MI, with CVDs accounting for 28% of total deaths as of 2023. The age-standardized mortality rate for CVDs in India is 272 per 100,000 population, significantly higher than the global average of 235 per 100,000 [5]. The prevalence of CAD among Indian adults is 21.4% for diabetics and 11% for non-diabetics, underscoring diabetes as a significant risk factor. Additionally, one in four Indian adults over 18 years suffers from hypertension, contributing to 10.8% of all deaths in the country [6].

In Tamil Nadu, cardiovascular diseases are responsible for 36% of all deaths, ranking the state third in CVD mortality in India. The prevalence of CAD is similar to national figures, with 21.4% in diabetics and 11% in non-diabetics [7]. This high burden reflects the epidemiological transition and increased prevalence of risk factors such as diabetes, hypertension, and sedentary lifestyles.

The psychological impacts of MI are profound yet often underexplored. Approximately 20% of MI survivors develop major depressive disorder, while 25–30% report anxiety, and 12% are diagnosed with post-traumatic stress disorder (PTSD) [8]. Depression is associated with reduced treatment adherence and increased mortality risk, while anxiety often manifests as hypervigilance and fear of recurrence [9]. PTSD, characterised by flashbacks and intrusive thoughts, impairs daily functioning and worsens cardiac outcomes [10].

Given these statistics, a deeper understanding of the psychological experiences of MI patients is essential. This study adopts a phenomenological approach to explore MI patients' emotional, cognitive, and behavioural responses, aiming to provide insights that inform holistic care strategies. Such research is important for improving patient outcomes, reducing psychological distress, and fostering better recovery and rehabilitation practices.

Materials and Methods:

The study used a qualitative, phenomenological research design to explore the psychological experiences of myocardial infarction (MI) patients. Phenomenological design was selected to dig deeply into the lived experiences of MI survivors, aiming to uncover their journey's emotional, psychological, and social dimensions. The research team comprised experienced nursing professionals with expertise in qualitative

methods and cardiovascular care. Researchers acknowledged their potential biases from clinical experience and maintained reflexivity through regular peer debriefing and journaling.

The study was conducted at the Institute of Cardiology, Rajiv Gandhi Government General Hospital (RGGGH), Chennai. Participants were selected using non-probability purposive sampling, targeting individuals who met predefined inclusion criteria. These criteria ensured relevance to the study objectives, focusing on MI survivors aged 30 years and above, diagnosed at least one month prior, and willing to share their experiences. The sample size of six participants was determined based on data saturation, achieved when no new themes or insights emerged during interviews.

Ethical considerations

Ethical approval was secured from the Institutional Ethics Committee of Madras Medical College, Chennai (No. IEC-MMC/Approval/38112024). Additional written permission was obtained from the Director of the Institute of Cardiology, RGGGH. Participants were fully informed about the study's objectives, procedures, and confidentiality measures. Written informed consent was obtained from all participants, emphasizing their voluntary involvement and the right to withdraw at any time. Confidentiality was ensured by anonymizing data and securely storing records.

Data Collection Methods

Data were collected through semi-structured, one-on-one interviews conducted over four weeks. Interviews, lasting 20 to 40 minutes each, were guided by open-ended questions designed to elicit in-depth narratives developed based on a literature review and validated by experts in cardiovascular nursing. Questions explored emotional responses, psychological well-being, coping mechanisms, social changes, and shifts in life priorities post-MI. Audio recordings were made with participants' consent, ensuring accurate capture of their expressions.

Data Processing and data analysis

Audio recordings were transcribed verbatim, anonymized, and stored securely. Data integrity was verified by cross-checking transcriptions against recordings. Initial coding was performed to organize data into meaningful units, and anonymization measures were applied to ensure confidentiality. Thematic content analysis was conducted using NVivo software, following Braun and Clarke's six-phase framework. Emerging themes were identified and refined through iterative coding, with constant comparative analysis ensuring comprehensive coverage of participant narratives. Peer debriefing and member checking were employed to enhance the credibility of findings.

Trustworthiness was ensured through triangulation (using expert validation and participant confirmation of findings), a detailed audit trail documenting the research process, and prolonged engagement with participants. Data saturation was confirmed when no new insights emerged, reinforcing the depth and reliability of the findings.

Results:

Demographic characteristics

The sociodemographic data of six myocardial infarction survivors revealed a diverse group, aged 41 to 60 years, predominantly male, married, and with varying education levels. Employment ranged from daily wages to business, with incomes from nil to Rs. 2,00,000 annually. Participants resided in urban and rural

settings, with physical activity levels from sedentary to moderate. All followed a non-vegetarian diet, with some reporting a family history of MI, personal MI history, or comorbidities.

Themes and subthemes:

The findings of this study provide profound insights into the psychological experiences of myocardial infarction (MI) survivors. Through thematic content analysis of qualitative data, four overarching themes and their associated subthemes were identified, reflecting the emotional, social, and transformative journeys of the participants.

Theme 1: Emotional Turbulence

The participants described significant emotional challenges following their MI diagnosis.

Subtheme: Initial Shock

Participants frequently reported feelings of disbelief and confusion upon learning of their condition. This initial shock disrupted their emotional equilibrium, leaving them vulnerable.

"When the doctor said 'heart attack,' I was stunned. I kept thinking, 'This can't be true, not me.' It felt like everything was crashing down all at once." – Participant 3

Subtheme: Fear and Anxiety

A persistent fear of recurrence and health complications created intense anxiety. Participants described hypervigilance and stress, which profoundly impacted their mental health and quality of life.

"Every time I felt my chest tighten, I panicked. I'd think, 'Is it happening again?' It's exhausting, living in fear of your own body betraying you." – Participant 2

Subtheme: Emotional Resilience

Over time, participants demonstrated emotional resilience, gradually adapting to their circumstances and finding ways to manage their fears.

"I realized I needed to face it head-on. I told myself, 'I survived; I can handle this.' I started focusing on what I could control, not the fear." – Participant 5

Theme 2: Social Dynamics

The MI experience influenced participants' social interactions and roles within their families.

Subtheme: Social Withdrawal

Participants often withdrew from social activities due to feelings of misunderstanding and vulnerability.

"I avoided social events because I didn't want to keep explaining. I'd think, 'Will they see me differently?' It was easier to stay home and avoid those uncomfortable questions." – Participant 4

Subtheme: Community Support

Support networks, including family, friends, and peers with similar experiences, provided emotional relief and reduced isolation.

"Talking to others who've been through this made a huge difference. They get it. I'd share my fears, and they'd say, 'You're not alone,' which gave me so much strength." – Participant 5

Subtheme: Altered Roles

Participants faced role reversals within their families, often feeling burdensome as they transitioned from caregivers to being cared for.

"I used to be the one everyone relied on. Now I'm the one needing help. I think, 'How did this happen?' It's a tough adjustment, feeling like a burden." – Participant 1

Theme 3: Coping Mechanisms

Participants adopted various strategies to cope with their MI experience.

Subtheme: Psychological Strategies

Cognitive and emotional strategies, such as therapy and mindfulness, helped participants regain control over their mental health.

"I started therapy and learned to be present. I tell myself, 'Focus on now, not the what-ifs.' It's helped me calm my mind and handle my fears better." – Participant 2

Subtheme: Physical Adjustments

Engaging in light physical activities, such as walking and yoga, offered participants both physical and psychological benefits.

"I began with short walks, telling myself, 'One step at a time.' It's not just exercise; it's therapy for my mind too, helping me feel normal again, day by day." – Participant 4

Subtheme: Seeking Information

Participants sought knowledge about their condition, which empowered them and reduced their anxiety.

"I researched everything, from symptoms to treatments. I thought, 'The more I know, the less I'll fear.' Knowledge made me feel equipped like I could handle what's next." – Participant 3

Theme 4: Transformations in Perspective

MI survivors underwent significant changes in their perspectives on life and health.

Subtheme: Health Awareness

Experiencing MI heightened participants' health consciousness, prompting them to adopt healthier lifestyles.

"I watch my diet like a hawk now. I think, 'I have to protect myself.' It's a constant reminder that my health is in my hands daily." – Participant 5

Subtheme: Reevaluation of Priorities

Participants reevaluated their priorities, prioritising relationships and well-being over material success.

"I realized, 'Money and work can wait.' I focus on family and spending time with loved ones. It's about moments, not things. This heart attack changed how I see everything." – Participant 3

Discussion:

The present study provides a nuanced understanding of the psychological experiences of myocardial infarction (MI) patients by identifying key themes—Emotional Turbulence, Social Dynamics, Coping Mechanisms, and Transformations in Perspective. These findings contribute to the growing body of qualitative research emphasizing the multidimensional impact of MI on patients' lives.

The study highlights a trajectory from emotional instability to resilience, echoing findings from Sepehrian et al. (2020) and Sancassiani et al. (2021) [11,12]. Both studies underscore the emotional shock and subsequent anxiety associated with MI, which aligns with the present findings of patients initially experiencing disbelief and fear but gradually developing emotional resilience. The addition of these insights strengthens the argument for incorporating early psychological interventions to support MI survivors.

This study's significant themes were social dynamics, particularly social withdrawal and community support. These findings complement the work of Yu et al. (2023), who emphasised the dual nature of social isolation and communal healing. This research reinforces the importance of fostering community networks to mitigate the negative impact of social withdrawal on recovery [13].

Coping mechanisms, such as psychological strategies, physical adjustments, and information-seeking, were integral to the participants' recovery. These findings align with those of Solano-Ruiz et al. (2021),

who documented the efficacy of cognitive behavioural therapy and tailored physical activities in reducing stress and promoting recovery post-MI [14]. The current study expands upon these findings by linking coping strategies with psychological empowerment, highlighting their role in mitigating fear and uncertainty.

Transformations in perspective, particularly increased health awareness and reevaluation of priorities, align with Ferry et al. (2020), who identified lifestyle changes and a shift in values as critical outcomes of the MI experience [15]. The study underscores how MI catalyses profound behavioural and attitudinal changes, reinforcing the importance of holistic, patient-centred care models.

These findings contribute uniquely to scholarship by emphasising the interplay between psychological, social, and behavioural factors in the recovery process. They offer valuable insights for healthcare providers, emphasizing the need for tailored psychosocial interventions to enhance MI patients' overall quality of life.

Limitations

The small sample size (n=6) limits the generalizability of findings to a broader population. Cultural and contextual factors inherent to the study setting may also influence transferability to other geographic or clinical settings. The reliance on self-reported data introduces the possibility of recall bias, potentially affecting the accuracy of the narratives.

Conclusion:

Myocardial infarction profoundly impacts patients' psychological, social, and behavioural dimensions, as evidenced by this study. The multifaceted recovery journey highlights key themes such as emotional turbulence, social dynamics, coping mechanisms, and transformative perspectives. Findings underscore the need for holistic, patient-centred care strategies that address emotional and social needs, empowering MI survivors for better recovery and long-term well-being.

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