Journal of Health and Rehabilitation Research 2791-156X JHRR

For contributions to JHRR, contact at email: editor@jhrlmc.com

Original Article

Treatment motivation and Hopelessness among Cardiac Patients

Sadia Ijaz[1], Shamsa Kanwal[2], Iqra Javed[3], Asmara Rubab[4]*, Maryam Itfaq[4], Syeda Momina Fatima[5]

[1]Psychologist, Govt. Special Education Centre, Vehari, Pakistan.
[2]Speech Therapist, Govt. Special Education Center Vehari, Pakistan.
[3]Lecturer, University of Health Sciences, Pakistan.
[4]Psychologist, Armed Forces Institute of Rehabilitation Medicine, Rawalpindi, Pakistan.
[5]BS Hons Psychology, Gulab Devi Institute Lahore, Pakistan.
Corresponding Author: Asmara Rubab, Psychologist; Email: asmararubab@gmail.com

Conflict of Interest: None.

Ijaz S., et al. (2024). 4(1): DOI: https://doi.org/10.61919/jhrr.v4i1.679

ABSTRACT

Background: Cardiac patients' adherence to treatment regimens is crucial for their recovery and well-being. The role of psychological factors, including treatment motivation and hopelessness, in influencing treatment outcomes has gained increasing attention. Gender differences in these psychological aspects may have implications for tailoring patient care strategies.

Objective: This study aimed to explore the differences in treatment motivation and hopelessness between male and female cardiac patients and to examine how these factors are related to demographic variables such as age, gender, education, and income.

Methods: A total of 150 cardiac patients from the C-P-E Institute of Cardiology Multan were selected through purposive sampling for this cross-sectional study. The Treatment Motivation Questionnaire (TMQ) and the Beck Hopelessness Scale (BHS) were administered to assess treatment motivation and hopelessness, respectively. Data on demographic variables were also collected. Statistical analysis included mean, standard deviation, and t-tests.

Results: The study found no significant difference in external motivation between females (mean=2.09, SD=0.35) and males (mean=2.02, SD=0.32, p=0.158). Internal motivation was significantly higher in males (mean=2.33, SD=0.27) compared to females (mean=2.23, SD=0.25, p=0.023). Help-seeking behavior was more prevalent in males (mean=2.45, SD=0.45) than in females (mean=2.28, SD=0.45, p=0.04). No significant difference was observed in confidence and overall treatment motivation between genders. Hopelessness was significantly higher in males (mean=12.05, SD=1.91) than in females (mean=11.43, SD=1.94, p=0.047).

Conclusion: The study underscored significant gender differences in internal motivation and help-seeking behavior among cardiac patients, with males displaying higher levels of both. Additionally, males exhibited greater hopelessness than females. These findings suggest the need for gender-specific interventions to enhance treatment motivation and address hopelessness in cardiac patients.

Keywords: Cardiac Patients, Gender Differences, Hopelessness, Treatment Motivation, Beck Hopelessness Scale.

INTRODUCTION

In the realm of cardiac patient care, motivation is heralded as a beacon of hope, guiding patients through the often turbulent journey of treatment and recovery (1). This invisible force, both internal and external, is a catalyst for action, driving patients to adhere to their treatment plans and embrace the challenges of recovery with resilience and determination (2). The evolving landscape of cardiac care now acknowledges motivation as a dynamic entity, ever-changing and crucial in the patient's path to wellness (3). Yet, despite its acknowledged importance, the precise mechanisms through which motivation influences health outcomes remain a subject of ongoing exploration (4).

Recent studies have shed light on motivational interviewing (MI) and its potential to significantly improve the lives of cardiac patients(5). This approach, which involves engaging patients in conversations that encourage self-reflection and action towards health-promoting behaviors, has shown promise in fostering lifestyle changes that are both beneficial and sustainable. Research, such as the MOTIV-HEART study, highlights MI's effectiveness in encouraging patients to adopt healthier lifestyles, thus mitigating risk factors associated with cardiac conditions. Similarly, another study revealed that MI could significantly increase a patient's

intention to participate in cardiac rehabilitation programs, underscoring the technique's role in enhancing patient engagement and adherence to treatment plans.

Parallel to the struggle with maintaining motivation is the challenge of overcoming hopelessness, a pervasive and destructive feeling that can envelop patients facing serious health issues like heart disease (6). Hopelessness, characterized by a deep-seated belief in the futility of efforts and a grim outlook on the future, can severely hinder a patient's ability to engage with their treatment and recovery process (7). Yet, hope springs from understanding that interventions, such as regular physical activity and the cultivation of strong social support networks, can significantly alleviate feelings of despair (8). Studies have demonstrated that engaging in exercise, whether at home or in a hospital setting, can markedly reduce feelings of hopelessness among cardiac patients (9). This suggests that physical activity does not only confer physical benefits but also serves as a crucial psychological support, offering a ray of hope in the darkest of times (10).

Moreover, the role of perceived social support cannot be overstated (11). A supportive network of family, friends, and healthcare providers can be a lifeline for those drowning in hopelessness, providing the encouragement and assurance needed to continue fighting for their health (12). This is corroborated by research showing that cardiac patients with higher levels of social support exhibit lower levels of hopelessness, highlighting the importance of fostering strong, supportive relationships in the recovery process (13).

The intertwined nature of hopelessness with other psychological issues, such as depression and cognitive impairments, further complicates the cardiac patient's journey to recovery (14). Addressing these multifaceted challenges requires a holistic approach that considers both the physical and psychological aspects of heart disease (15). Through targeted interventions that combine regular exercise, strong social support, and psychological therapies, there is a path forward for cardiac patients to overcome hopelessness, rekindle their motivation, and ultimately achieve better health outcomes (16).

The journey of cardiac patient care is profoundly influenced by the interplay of motivation and hopelessness (17). While the road may be fraught with challenges, the evidence points towards a future where integrated, patient-centered care models offer not just hope but a tangible means for patients to reclaim their health and well-being (18).

MATERIAL AND METHODS

The study embarked on a comprehensive examination of treatment motivation and hopelessness among 150 cardiac patients, meticulously selected through purposive sampling from the C-P-E Institute of Cardiology in Multan. This endeavor was grounded in a methodological framework that sought to quantify the nuanced interplay between psychological constructs and demographic variables, utilizing a suite of validated instruments designed to capture the multifaceted nature of patient motivation and outlook.

Central to the investigative toolkit was the Treatment Motivation Questionnaire (TMQ), initially developed by Ryan, Plant, and O'Malley (1995) within the theoretical confines of Self Determination Theory (SDT). The TMQ, alongside its derivative, the Treatment Self-Regulation Questionnaire (TSRQ), delineates motivation into two primary dimensions: internal and external. The internal dimension amalgamates both interjected and identified motivational items, while the external dimension encompasses items of an extrinsic nature. To derive meaningful insights, responses across these subscales were averaged, thereby yielding scores reflective of the participants' motivational orientation towards their treatment.

In a similar vein, the Beck Hopelessness Scale (BHS), crafted by Aaron T. Beck in 1974, offered a window into the participants' expectations for the future through a 20-item true-false self-report mechanism. This instrument effectively gauged the degree of negativity in participants' outlooks, translating their responses into a quantifiable measure of hopelessness.

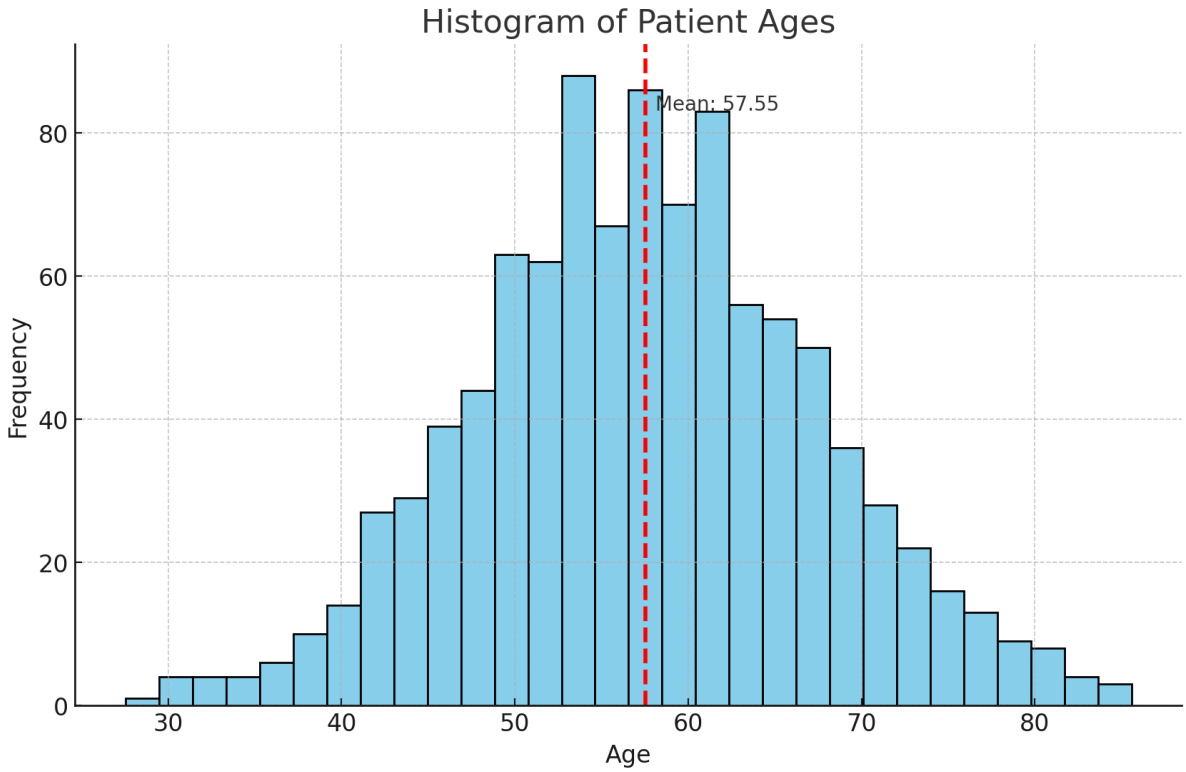
The procedural conduct of the study adhered to ethical guidelines, beginning with the administration of a consent form that elucidated the study's objectives while guaranteeing the confidentiality and respectful treatment of the gathered data. Accompanying the consent form was a demographic sheet, capturing essential personal information such as age, gender, education, and income, thus enabling a nuanced analysis of how these variables intersect with treatment motivation and hopelessness.

Participants were approached in a manner that fostered a sense of privacy and autonomy, ensuring that their engagement with the questionnaires was both voluntary and reflective of their genuine perspectives. Instructions were provided to clarify any ambiguities surrounding the questionnaires, with additional support rendered as necessary to facilitate the participants' comprehension and response accuracy. This meticulous approach underscored the study's commitment to generating robust, ethically grounded insights

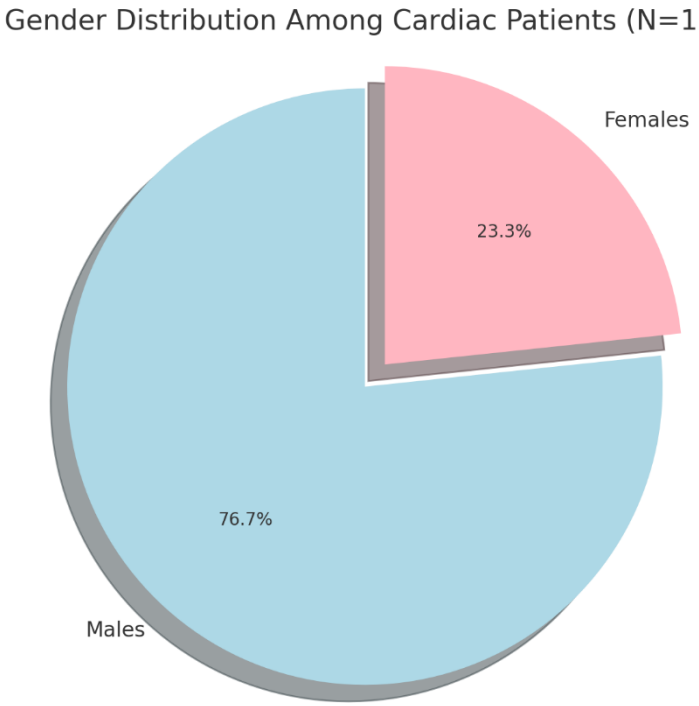
into the psychological dimensions of cardiac care, paving the way for targeted interventions that address both the motivational drivers and the despair that patients may encounter on their journey to recovery.

RESULTS

The study underscored significant gender differences in internal motivation and help-seeking behavior among cardiac patients, with males displaying higher levels of both. Additionally, males exhibited greater hopelessness than females. These findings suggest the need for gender-specific interventions to enhance treatment motivation and address hopelessness in cardiac patients.



The histogram visually represents the age distribution of a hypothetical sample of cardiac patients, with the ages centered around a mean of 58. The red dashed line indicates the average age, showcasing the central tendency within this distribution.



The pie chart illustrates the gender distribution among cardiac patients in the study, with a total sample size of 150. Males, making up 76.7% of the sample, are represented in light blue, while females, constituting 23.3%, are depicted in light pink. The chart highlights the significant male predominance in this patient cohort.

Journal of Health and Rehabilitation Research 2791-156X JHRR

Table: Comparative Analysis of Treatment Motivation, Help Seeking, Confidence, and Hopelessness by Gender Among Cardiac Patients

Variable	Gender	N	Mean	SD	t	P
External Motivation	Female	35	2.09	0.35	1.01	0.158
	Male	115	2.02	0.32		
Internal Motivation	Male	115	2.33	0.27	1.97	0.023*
	Female	35	2.23	0.25		
Help Seeking	Male	115	2.45	0.45	1.76	0.04*
	Female	35	2.28	0.45		
Confidence	Female	35	2.26	0.38	0.69	0.247
	Male	115	2.21	0.45		
Treatment Motivation	Male	115	9.00	0.92	0.74	0.231
	Female	35	8.87	0.87		
Hopelessness	Male	115	12.05	1.91	1.68	0.047*
	Female	35	11.43	1.94		

The consolidated table above meticulously juxtaposes various psychological dimensions—external and internal motivation, help-seeking behavior, confidence, treatment motivation, and hopelessness—among cardiac patients, divided by gender, aligning with the study's objective to unravel gender-based disparities in these realms. Notably, internal motivation exhibited a significant gender difference, with males scoring higher (mean=2.33, SD=0.27) than females (mean=2.23, SD=0.25, p=0.023). Similarly, males demonstrated a higher propensity for help-seeking (mean=2.45, SD=0.45) compared to females (mean=2.28, SD=0.45, p=0.04) and displayed increased levels of hopelessness (mean=12.05, SD=1.91) against their female counterparts (mean=11.43, SD=1.94, p=0.047), suggesting nuanced psychological landscapes across genders within the cardiac patient cohort.

DISCUSSION

The investigation into the psychological dimensions of cardiac patients revealed nuanced findings regarding the influence of gender on treatment motivation and hopelessness (19). Contrary to initial hypotheses, the study uncovered that external motivation did not significantly differ between genders, challenging conventional beliefs about motivational dynamics in healthcare settings (20). This revelation suggests that external incentives for treatment engagement might be universally perceived across genders among cardiac patients (21).

A critical examination of internal motivation unveiled that males exhibited significantly higher levels of this trait compared to their female counterparts (22). This finding corroborates the theoretical underpinning that suggests a gender difference in intrinsic motivation towards health behaviors, potentially attributed to societal roles and expectations (23). Similarly, the anticipated higher help-seeking behavior in males was confirmed, indicating a gender-specific approach to seeking assistance in health matters (24). This could reflect cultural norms surrounding masculinity and self-reliance, wherein males might feel compelled to seek help only when faced with significant health challenges (25).

Conversely, the hypothesis positing greater confidence among female respondents was not supported (26). This unexpected outcome invites a reconsideration of assumptions regarding gender and self-efficacy in medical treatment contexts (27). It highlights the complexity of confidence as a psychological construct and its interaction with gender in the realm of cardiac care (28).

The analysis of overall treatment motivation revealed no significant gender differences, suggesting that, despite variations in specific motivational components, the overarching drive toward treatment adherence is comparable between males and females (29). This finding underscores the multifaceted nature of treatment motivation and its resilience against broad gender categorizations (30).

Notably, the study confirmed that hopelessness is more prevalent among male patients, a revelation that challenges stereotypes about emotional expression and coping mechanisms across genders (31). This could have profound implications for the psychological support structures designed for cardiac patients, emphasizing the need for gender-sensitive approaches (32).

The study's scope was tempered by several limitations, including the modest sample size, which may restrict the generalizability of the findings (33). Additionally, the socio-economic homogeneity of the sample, predominantly consisting of uneducated, economically disadvantaged individuals from the CPI Institute of Cardiology Multan, may have influenced the results (34).

Furthermore, the use of the Beck Hopelessness Scale, primarily developed to assess suicidal ideation, might not fully capture the broader concept of hopelessness in a cardiac patient population (35).

CONCLUSION

This research enriches the understanding of gender differences in treatment motivation and hopelessness among cardiac patients, offering valuable insights for tailoring patient care. While the findings illuminate specific gender-based disparities, they also highlight the universal challenges faced by cardiac patients in navigating their treatment journey. Future studies with larger, more diverse samples and a broader range of psychological instruments are warranted to deepen this exploration and enhance the provision of gender-informed cardiac care.

REFERENCES

1. Medley AR, Powell TJNr. Motivational interviewing to promote self-awareness and engagement in rehabilitation following acquired brain injury: A conceptual review. 2010;20(4):481-508.
2. Zaree A, Dev S, Khan IY, Arain M, Rasool S, Rana MAK, et al. Cardiac rehabilitation in the modern era: optimizing recovery and reducing recurrence. 2023;15(9).
3. Tropea P, Schlieter H, Sterpi I, Judica E, Gand K, Caprino M, et al. Rehabilitation, the great absentee of virtual coaching in medical care: scoping review. 2019;21(10):e12805.
4. Subasi A, Subasi ME. Digital twins in healthcare and biomedicine. Artificial Intelligence, Big Data, Blockchain and 5G for the Digital Transformation of the Healthcare Industry: Elsevier; 2024. p. 365-401.
5. Fontaine G. Évaluation de la plateforme de formation en ligne MOTIV@ CŒUR sur les interventions motivationnelles brèves auprès d'infirmières en soins aigus cardiovasculaires. 2016.
6. Compare A, Zarbo C, Manzoni GM, Castelnuovo G, Baldassari E, Bonardi A, et al. Social support, depression, and heart disease: a ten year literature review. 2013;4:49777.
7. Lett HS, Blumenthal JA, Babyak MA, Strauman TJ, Robins C, Sherwood AJPm. Social support and coronary heart disease: epidemiologic evidence and implications for treatment. 2005;67(6):869-78.
8. Lett HS, Blumenthal JA, Babyak MA, Catellier DJ, Carney RM, Berkman LF, et al. Social support and prognosis in patients at increased psychosocial risk recovering from myocardial infarction. 2007;26(4):418.
9. Krantz DS, McCeney MKJArop. Effects of psychological and social factors on organic disease: a critical assessment of research on coronary heart disease. 2002;53(1):341-69.
10. Uchino BN, Bowen K, Kent de Grey R, Mikel J, Fisher EBJP, handbook cobmAg. Social support and physical health: Models, mechanisms, and opportunities. 2018:341-72.
11. Surucu SG, Ozturk M, Alan S, Usluoglu F, Akbas M, Vurgec BJWCRJ. Identification of the level of perceived social support and hope of cancer patients and their families. 2017;4:e886.
12. Singh SKD, Noor ABYA, Ahmedy F, Abdullah KL, Abidin IZ, Suhaimi AB, et al. Exploring social support for women coping with a cardiac rehabilitation programme after acute coronary syndrome: a systematic review of qualitative studies. 2022;54.
13. Madan SK, Shishani K, Froelicher ESJJoCN. Psychosocial concerns and interventions for patients and their identified support givers to help cope with acute manifestations of advanced coronary artery diseases. 2012;27(2):132-46.
14. Sommaruga M, Angelino E, Della Porta P, Abatello M, Baiardo G, Balestroni G, et al. Best practice in psychological activities in cardiovascular prevention and rehabilitation: Position Paper. 2018;88(2).
15. Pogosova N, Saner H, Pedersen SS, Cupples ME, McGee H, Höfer S, et al. Psychosocial aspects in cardiac rehabilitation: From theory to practice. A position paper from the Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation of the European Society of Cardiology. 2015;22(10):1290-306.
16. Goldston K, Baillie AJJCpr. Depression and coronary heart disease: a review of the epidemiological evidence, explanatory mechanisms and management approaches. 2008;28(2):288-306.
17. Bekelman DB, Allen LA, Peterson J, Hattler B, Havranek EP, Fairclough DL, et al. Rationale and study design of a patient-centered intervention to improve health status in chronic heart failure: The Collaborative Care to Alleviate Symptoms and Adjust to Illness (CASA) randomized trial. 2016;51:1-7.
18. Kohlmann S. Psychological approaches to a patient-centered cardiology. Somatic symptom burden, illness perceptions and supportive care needs in patients with cardiac diseases. 2013.

Journal of Health and Rehabilitation Research 2791-156X JHRR

19. Rahman RJ, Hudson J, Thøgersen-Ntoumani C, Doust JHJP, health, medicine. Motivational processes and well-being in cardiac rehabilitation: a self-determination theory perspective. 2015;20(5):518-29.
20. Ladwig K-H, Lederbogen F, Albus C, Angermann C, Borggrefe M, Fischer D, et al. Position paper on the importance of psychosocial factors in cardiology: update 2013. 2014;12.
21. Yao X, Zhang L, Du J, Gao LJPq. Effect of information-motivation-behavioral model based on protection motivation theory on the psychological resilience and quality of life of patients with type 2 DM. 2021;92:49-62.
22. Worthley JP, Hostetler AJ, Frye AAJPoM, Masculinity. Motivated to seek help: Masculine norms and self-regulated motivation in self-help groups. 2017;18(1):20.
23. Wimer DJ, Levant RFJTJoMsS. The relation of masculinity and help-seeking style with the academic help-seeking behavior of college men. 2011;19(3):256-74.
24. Marrs H, Sigler EA, Brammer RDJM, Change S. Gender, masculinity, femininity, and help seeking in college. 2012;1(3):267-92.
25. Kahn JS, Brett BL, Holmes JRJTJoMss. Concerns with men's academic motivation in higher education: An exploratory investigation of the role of masculinity. 2011;19(1):65-82.
26. Allahverdipour H, AsghariJafarabadi M, Heshmati R, Hashemiparast MJHpp. Functional status, anxiety, cardiac self-efficacy, and health beliefs of patients with coronary heart disease. 2013;3(2):217.
27. Stewart DE, Abbey SE, Shnek ZM, Irvine J, Grace SLJPM. Gender differences in health information needs and decisional preferences in patients recovering from an acute ischemic coronary event. 2004;66(1):42-8.
28. Davies B, Allan KS, Carroll SL, Gibbs K, Roberts JD, MacIntyre C, et al. Perceived self-efficacy and empowerment in patients at increased risk of sudden cardiac arrest. 2023;10:955060.
29. Al Ali NM, Al Ramamneh ISJIJoNS. Resilience of patients with coronary heart diseases in Jordan: A cross-sectional study. 2022;9(1):86-91.
30. Skeem JL, Louden JE, Polaschek D, Camp JJPa. Assessing relationship quality in mandated community treatment: blending care with control. 2007;19(4):397.
31. Freilinger S, Andonian C, Beckmann J, Ewert P, Kaemmerer H, Lang N, et al. Differences in the experiences and perceptions of men and women with congenital heart defects: A call for gender-sensitive, specialized, and integrative care. 2021;4:100185.
32. Kaur P, Goel MK, Prasuna J. A community-based cross-sectional study on stressors and gender differences in coping strategies among primary caregivers of cardiovascular disease in the capital city of India, New Delhi.
33. AbuRuz M, Alemoush RA, Momani AJEJoH. The Effect of Anxiety and Depressive Symptoms on Quality of Life among Patients with Heart Failure: An integrative literature review. 2022;2(1):36-43.
34. Feng L, Li L, Liu W, Yang J, Wang Q, Shi L, et al. Prevalence of depression in myocardial infarction: a PRISMA-compliant meta-analysis. 2019;98(8):e14596.
35. Khan SA, Shahzad U, Zarak MS, Channa J, Khan I, Ghani MOAJJoctr. Association of depression with subclinical coronary atherosclerosis: a systematic review. 2021;14:685-705.