Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

TREATMENT MOTIVATION AND HOPELESSNESS AMONG ISCHEMIC HEART DISEASE PATIENTS

Farhat Yasmeen
Farhat Yasmeen, Nursing Officer Nishter Hospital Multan Pakistan
RNfarhatyasmin314@gmail.com
Sonia Bashir
SoniaBashir, Nursing officer Nishter Hospital Multan Pakistan
mirhasonia8233@gmail.com

Author Details

Keywords:
Ischemic Heart Disease, Treatment Motivation, Hopelessness, Cardiac Patients, Psychological Well-being, Medication Adherence

Received on 02 April 2026
Accepted on 04 May 2026
Published on 30 May 2026

Corresponding E-mails & Authors*:
Farhat Yasmeen
RNfarhatyasmin314@gmail.com

Abstract

Ischemic heart disease is a serious cardiovascular disease with a considerable physical, psychological and emotional burden. The aim of the current study was to evaluate the treatment motivation and hopelessness of patients with ischemic heart disease and to investigate the correlation between them. A quantitative descriptive correlational research design was used for the study. The sample comprised 150 patients with ischemic heart disease who were hospitalized in cardiology wards and out patient cardiac clinics of selected tertiary care hospitals in Lahore, Pakistan. Non-probability sampling method (convenience sampling) was used. The data collection instruments were a demographic questionnaire, a treatment motivation scale and the Beck Hopelessness Scale. The data analysis was done by descriptive and inferential statistics in SPSS 26. The results indicated that most participants had moderate levels of treatment motivation and moderate hopelessness. The top score in terms of treatment motivation was for medication adherence and the lowest was for physical activity participation. Common signs of hopelessness for participants were fear of possible future complications and emotions of helplessness. Hopefulness was found to be negatively correlated with treatment motivation with a statistically significant level ($r = -0.624$ $p = 0.001$) such that greater treatment motivation was correlated with lower levels of hopelessness. Demographic variables were also found to be associated with study variables such as length of illness, marital status, level of education, income and age. The study found that psychological health is an important factor in treatment adherence and recovery among people with ischemic heart disease. The results indicate the importance of motivational counseling, psychological support and patient-centered nursing care to lower the hopelessness level and treatment outcomes of cardiac patients.

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

INTRODUCTION

Background of the study

Worldwide, ischemic heart disease (IHD) is one of the major causes of death and disability. When the blood flow to the heart muscle is decreased as a result of narrowing or blockage of the coronary arteries(Moryś et al., 2016). This condition may lead to chest pain, heart attack, diminished physical capacity and even severe complications which affect the patients' quality of life. World Health Organization reports have stated that cardiovascular diseases are still the leading cause of deaths, particularly in developing countries where there is low awareness on health and prevention, and limited health care resources(Antman & Braunwald, 2020). The unhealthy lifestyle in Pakistan, smoking, obesity, diabetes, hypertension, stress, lack of physical activity have contributed to the rapid rise of IHD burden. The disease has physical impacts as well as significant psychological and emotional ones for patients(Patel et al., 2012).

The chronicity of the disease and the potential for subsequent cardiac events frequently leads to fear, anxiety, uncertainty and emotional upset in those with an ischemic heart disease diagnosis. Patients often end up taking medications for a long time and having to follow a diet, adjust their habits and make changes to their lifestyle and visiting the hospital on a regular basis. This ongoing need for treatment can affect the patient's commitment to treatment(Taghadosi et al., 2014). Treatment motivation is the patient's desire and desire for involvement in treatment, compliance with treatment recommendations, the taking of any medications prescribed, and the implementation of healthy lifestyle behaviors. It is believed that high treatment motivation is a key factor in increasing recovery, minimizing complications and improving quality of life among cardiac patients(Elgendy et al., 2019).

However, another key psychological factor is often seen in chronic illness, especially in patients with ischemic heart disease, which is hopelessness. Hopelessness is an unpleasant emotion that includes hopelessness, lack of confidence, lack of optimism and the belief that things will not get better in the future. Hopelessness can make the patient unmotivated to go through treatment and can cause the patient to neglect self-care and coping skills. Hopelessness may cause depression, isolation and poor survival in severe cases. Cardiac patients' psychological reactions can thus have direct implications on treatment outcomes and their overall wellbeing(Bisciglia et al., 2019). Treatment motivation and hopelessness are linked constructs that are also of significant investigation because they both have an impact on patient behaviors and recovery. Patients who are not very motivated could not follow the treatment schedule, and patients who feel hopeless may be emotionally drained and less inclined to adhere to treatment. This correlation can assist healthcare providers, particularly nurses, in designing interventions to assist patients with ischemic heart disease maintain good emotional health and good treatment behavior(Campo et al., 2015; Sirajuddin et al., 2021).

In the promotion of psychological well-being, nurses are significant providers of counselling, education, emotional support and motivation to patients. For those who are not motivated to seek treatment and have high levels of hopelessness, it is important to develop individualized treatment strategies that can be planned by healthcare providers to ensure better treatment outcomes. Even

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

though the burden of ischemic heart disease (IHD) is rapidly increasing, very little research was conducted in the local population to look into the interactive effect of treatment motivation and hopelessness among IHD patients in Pakistan. So this study is designed to determine the treatment motivation and hopelessness level of ischemic heart disease patients and to observe the relationship between two important psychological factors in the patients.

Problem Statement

IHD is a significant public health issue and is a common cause of morbidity and mortality in millions of people around the world. People with ischemic heart disease may need to take medication for the rest of their life, have to change their habits, be hospitalized again and again, and have to compromise on their lifestyles, all of which can negatively impact their mental health. Of all of these psychological issues, hopelessness and diminished motivation to treat are frequently found in cardiac patients. Such hopelessness can impact the patient's self-esteem for recovery and can foster negative attitudes and outlooks on life and treatment. Low treatment motivation can also result in poorer medication adherence and dietary and exercise changes, as well as follow-up, all leading to poorer patient outcomes. In many health care institutions, more attention is paid to the physical management of ischemic heart disease, and the psychological and emotional needs of patients are not attended to. There have been limited studies conducted at the local level to explore the association of treatment motivation and hopelessness among ischemic heart disease patients especially in Pakistan. It is crucial to grasp these factors to enhance patient treatment and recovery outcomes, as well as treatment adherence. This study aims to evaluate ischemic heart disease patients' treatment motivation and hopelessness level and to analyze the relationship between them to provide nursing and psychological services for the patients.

Research Objectives

- To evaluate the treatment motivation in patients with ischemic heart disease.
- To assess how hopeless ischemic heart disease patients are.
- To explore the linkage between treatment motivation and hopelessness among ischemic heart disease patients.
- To examine the relationship between demographic variables and treatment motives and hopelessness in ischemic heart disease patients.

Research Questions

- How motivated are patients with CHD for treatment?
- How hopeless are patients with ischemic heart disease (IHD)?
- Do ischemic heart disease patients with higher treatment motivation have less hopelessness?
- What characteristics of patients with ischemic heart disease relate to treatment motivation and hopelessness?

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

Conceptual Framework

This study's conceptual model elucidates the relationship between treatment motivation to hopelessness among individuals with ischemic heart disease (IHD). IHD is a chronic cardiovascular disease which necessitates chronic management through medication, lifestyle modification, adherence and diet control and regular medical follow-up. Many patients suffer psychologically from the severity of the disease, emotional instability, fear of complications and unclear recovery(Severino et al., 2020). These emotional issues can impact the patient's ability to stay engaged with treatment and adopt positive health behaviors. In this model, treatment motivation is assumed to be an independent variable, and hopelessness is the dependent variable. Treatment motivation is a patient's intrinsic desire and desire to adhere to treatment guidelines, such as taking medication, exercising, avoiding food, avoiding alcohol, visiting the hospital regularly, and quitting smoking. High treatment motivation is associated with better adaptation to challenges related to the illness, healthy behaviors, and active engagement in treatment. Motivation can also help one feel more stable and confident in recovery.

Hopelessness is defined as negative expectations about the future, feelings of despair, helplessness and lack of confidence about improving health status. In patients with ischemic heart disease, a state of hopelessness can progress from recurring chest pain, physical restrictions, financial pressures, fear of death and re-admission to a hospital. Distress over hopelessness may make it harder to adhere to treatment and have a negative impact on the patient's physical and psychological healing. The framework postulates that treatment motivation and hopelessness will be negatively related. Hopelessness is likely to be low in patients who are more motivated to treat themselves, who are optimistic and keep participating in their treatment. However, low treatment motivation can also result in greater hopelessness because of low coping skills and low expectations for treatment.

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

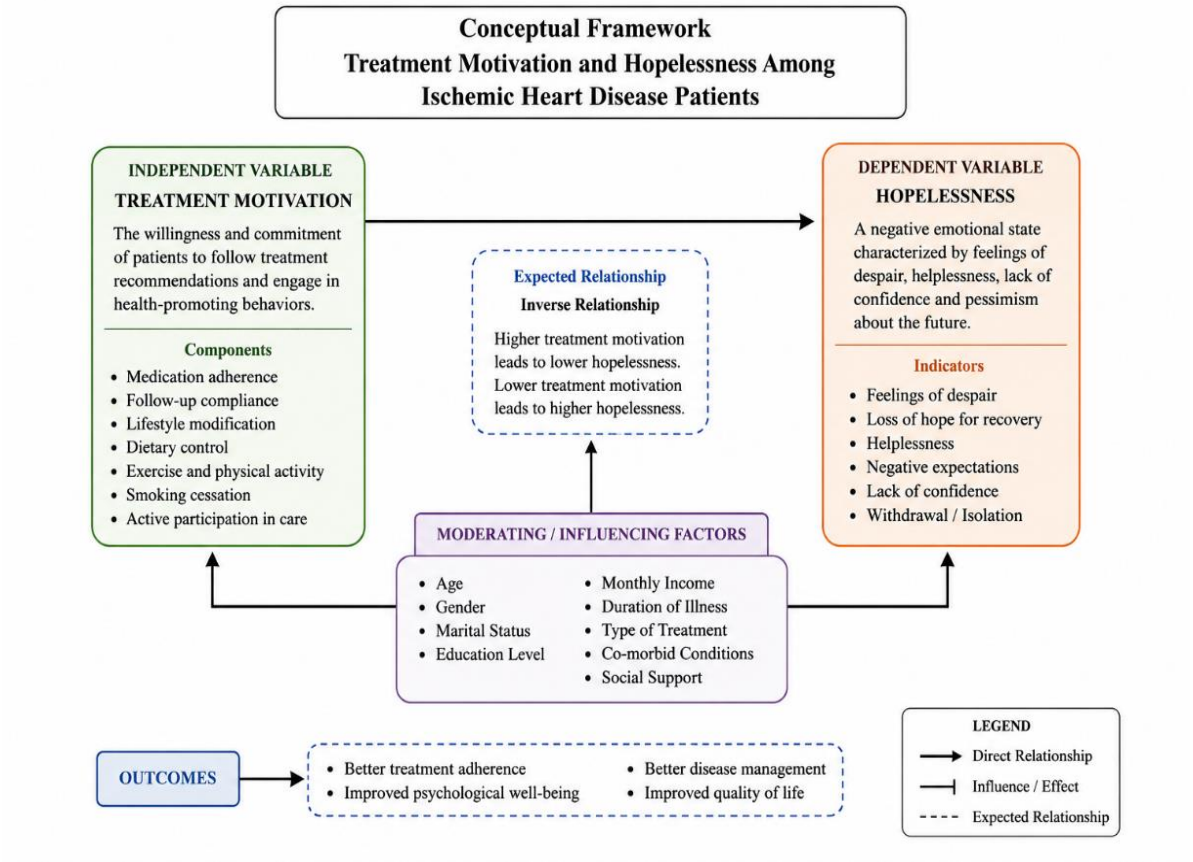

Figure 1 Conceptual framework on treatment motivation

Research Methodology

Research Design

This study was conducted using a quantitative descriptive correlational design to investigate the relationship between treatment motivation and hopelessness of patients diagnosed of ischemic heart disease(Pangilinan, 2025). The quantitative method was chosen because it enabled the researcher to gather numerical data that are measurable and to analyze the relationship between the study variables by statistical methods. The descriptive component of the design was utilized to define the level of treatment motivation and hopelessness among ischemic heart disease patients while the correlational component was used to determine the strength and direction of the relationship between the treatment motivation and hopelessness among the IHD patients. This type of design was thought to be suitable because it would allow the researcher to examine real-life psychological states without altering any factors. Also, the design offered a systematic approach to evaluation of emotional and behavioral reactions of long-term treated patients with cardiac diseases. Adoption of correlational design also facilitated the establishment of associations between demographic variables

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

and study variables and thus provided a better understanding of the psychological state of patients with ischemic heart disease.

Research Setting

This study took place in selected tertiary care hospitals of Lahore, Pakistan in the cardiology wards and cardiac OPDs. Hospitals were selected as those where they could provide services for cardiac care and were receiving a high number of patients with ischemic heart disease from urban & rural areas. The selected settings were inpatient and outpatient departments so that the treatment and recovery patients could be reached at various stages. The cardiology wards dealt with the patients admitted with chest pain, myocardial infarction, angioplasty and other ischemic heart related complications, while the outpatient clinics helped patients maintain regular follow-up visits and long-term monitoring of treatment. With the study sites being considered appropriate, they yielded a wide range of cardiac patients with different demographic and socioeconomic profiles. Furthermore, hospital administration and participation by health care providers made the data collection process easier. The hospital setting also allowed the researcher to observe patients in the process of treatment and evaluate their psychological reactions in the actual treatment environment.

Study Population

The study included adult patients (age>18 years) with ischemic heart disease and undergoing treatment at selected tertiary care hospitals in Lahore, Pakistan. The population comprised both male and female patients admitted to cardiology wards or in outpatient cardiac clinics for follow-up. Ischemic heart disease patients tend to be more motivated to remain on medication, make lifestyle changes and undergo repeated clinical evaluation, rendering them appropriate for the evaluation of medication adherence, lifestyle changes, and treatment motivation and hopelessness. The people involved in the study consisted of aging, education, occupation, and socio-economic classes. The study was restricted to patients with confirmed diagnosis of ischemic heart disease, patients were diagnosed by qualified cardiologists using clinical examination, electrocardiograms, angiography or other diagnostic procedures. The patients who were mentally stable and were able to understand the questionnaire were considered as eligible for the purpose. Because ischemic heart disease patients are more susceptible to emotional instability and decreased motivation and psychological distress due to the chronic and life threatening nature of the disease, the population was selected.

Sample Size

In the present study, a sample of 150 patients with ischemic heart disease (IHD) was used. This sample size was deemed adequate for the statistical results obtained, and to effectively investigate the relationship between treatment motivation and hopelessness for participants. The sample size of selected participants gave sufficient representation of the target population, and enhanced the generalizability and credibility of the findings. Data collection took place in the cardiology wards, and in the outpatient departments, from where patients were recruited. Participants were diverse in

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387 Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

terms of their demographic and socioeconomic status, to maximize variability in treatment motivation and hopelessness. A moderate number of participants were chosen due to the constraints of time and resources that would allow data collection and statistical analysis in an efficient manner. A larger sample also reduced sampling error and increased the level of accuracy in the correlation analysis of the variables. The final sample size obtained was due to the exclusion of questionnaires that were incomplete and respondents who failed to meet the study's eligibility requirements.

Sampling Technique

In this research, the participants were recruited using non-probability convenient sampling technique. This technique consisted of choosing patients with IHD that were easily accessible and consented to participate in the data collection period in the selected hospitals. Convenience sampling was judged to be appropriate because the study took place in clinical settings where access to patients was reliant on hospital schedules, patient availability and medical conditions. After gaining the consent of patient and hospital authority for access, the researcher visited patients individually in the cardiology wards and outpatient departments. Those patients meeting the inclusion criteria were briefed on the aims and methods of the study and asked to take part in the research, on a voluntary basis. The researcher was able to efficiently gather data within time and resources limits with this sampling method. Convenience sampling was appropriate for this exploratory study of psychological variables of in-patients with cardiac disease but may not be suitable for generalizing findings. The technique also allowed the researcher to include patients with varying treatment experience and clinical characteristics of ischemic heart disease.

Inclusion Criteria

Adult patients attending selected tertiary care hospitals and medically diagnosed with Ischemic heart disease by a qualified cardiologist were included in the study. Patients, who were 30 years old or older, were eligible irrespective of gender. Those who were mentally stable, conscious and could communicate in Urdu or English were included in the study. Patients were approached to participate in the study when they attended cardiac outpatient departments or when they were admitted to the cardiology ward within the period of data collection. To ensure the ethical and reliable collection of the data, only those patients who voluntarily entered the study and who had given informed consent were enrolled in the study.

Exclusion Criteria

Some patients, those who were critically ill, comatose, or had significant physical issues, were not included in this study because they could not be effectively involved in the data collection process. A person with a known psychiatric disorder, cognitive impairment or communication problem was also excluded to prevent misrepresentation and to ensure validity of the data collected. Patients with emotional instability and/or severe illness preventing them from understanding the questionnaire were not deemed suitable participants. Further, patients were excluded if they declined participation

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

in the study or withdrew consent during the study. These exclusion criteria were formulated to ensure uniformity, reliability and ethics in the research process.

Research Variables

The study variables were independent variables, dependent variables and demographic variables. Treatment motivation was chosen as the independent variable because it was a measure of patients' willingness and commitment to adhere to treatment recommendations and actively manage their disease. Hopelessness was selected as the dependent variable as it represented the emotional and psychological result that was affected by treatment-related behaviors and attitudes. Demographic variables such as age, sex, marital status, educational status, occupation, monthly income, duration of illness and comorbid diseases were taken into consideration. These variables were added to investigate their potential relationships with treatment motivation and hopelessness of ischemic heart disease patients in the chosen clinical contexts.

Research Instruments

The data were gathered by a structured questionnaire which was divided into three parts for eliciting demographic and psychological data from the respondents. The first part of the report contained the following information about the respondents: age, gender, education, occupation and the duration of illness. The second section evaluated treatment motivation through a standard treatment motivation scale, which included treatment attitude and behaviors of cardiac patients to adherence. The third section comprised the Beck Hopelessness Scale, which judged the sense of hopelessness, pessimism, and negative beliefs about the future. The questionnaires were drafted in simple language to make it easily understandable and the answers were taken correctly by the patients of ischemic heart disease during the data collection.

Validity of the Instrument

Expert evaluation and review assured the validity of research instruments. The questionnaire was sent to experts in medical education, psychology, cardiology and nursing research to evaluate the relevance, clarity and appropriateness of the items in the study instruments. Experts assessed the validity of the questionnaire in assessing treatment motivation and hopelessness among patients with ischemic heart disease. They gave their ideas on the wording, sequence and changes in the content which were carefully incorporated before the final administration of the questionnaire. This process facilitated the content validity and the accuracy of the instruments used and ensured the data obtained were representative of the psychological and behavioural reactions of the participants to the study.

Pilot Study

The feasibility, clarity and applicability of the research instruments and data collection procedures were tested on 15 patients with ischemic heart disease before the main research was done. The pilot

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

study sample was chosen based on the same criteria as the study sample, but did not form part of the main study samples. The pilot study was useful to determine issues with questionnaire wording, comprehension of items, and estimated time needed to fill out the questionnaire. Some changes were made, based on feedback from the participants and recommendations from experts, in the wording of some of the questions. The pilot study increased the quality, reliability and effectiveness of the final research process.

Data Collection Procedure

The starting of data collection was begun following the receipt of institutional review committee approval and permission from the selected hospitals. The researcher made visits to the cardiology wards and the outpatient cardiac clinics in the data collection period. The researcher identified eligible participants with the support of health care staff and then approached them one by one. The purpose and methodology of the study was clearly explained and informed consent obtained prior to participation. The questionnaires were completed in a quiet, comfortable setting with assistance given to those who had difficulty reading them. The questionnaires took about 15–20 minutes to complete. Data collection was continued for six weeks in order to obtain the required number of samples.

Ethical Considerations

The rights, dignity and privacy of the participants were carefully protected throughout the research study, adhering to ethical principles. Before data collection, ethical approvals were given by the institutional ethical approval committee. The permission of the selected hospitals was also obtained. Participants informed of the aims, rationale, methods and voluntary nature of the study before getting informed consent. Personal information of the participants was not revealed to ensure their confidentiality and anonymity. The participants were provided with information concerning their rights to refuse and/or stop participation at any time in the study without penalty or adverse consequences.

Data Analysis Procedure

The data collected were coded, entered into and analyzed by the Statistical Package for Social Sciences (SPSS) version 26(Santoso, 2020). Demographic characteristics, level of treatment motivation, and hopelessness scores were summarized using descriptive statistics: frequency, percentage, mean and standard deviation. To study the relationship between the study variables inferential statistical tests were used. The association was assessed using Pearson correlation analysis between the treatment motivation and hopelessness of patients with ischemic heart disease. Independent t-tests and one-way ANOVA were used to determine differences on the basis of demographic variables(Kim, 2017). All statistical analyses were performed and a p-value of < 0.05 was regarded as statistically significant.

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

Results and Findings

Introduction

This chapter reports data from ischemic heart disease patients on treatment motivation and hopelessness that were analyzed and interpreted. The results were presented in the framework of the research objectives and research questions of the study. A total of 150 patients who were admitted to cardiology wards and visited the cardiology outpatient department of selected tertiary care hospitals were enrolled. The data collected was entered, coded and analyzed in SPSS 26 Software. Descriptive and inferential statistics were used to analyze the study variables and determine significant relationship between the variables. This chapter presents the demographic data of participants, treatment motivation scores, hopelessness scores, and the interaction between treatment motivation and hopelessness among IHD participants. Participant characteristics and study variables were summarized using descriptive statistics including frequency, percentage, mean and standard deviation. Associations were explored, and research hypotheses tested, using inferential statistical measures such as Pearson correlation, independent t-test and one-way ANOVA. The findings are presented systematically using tables and detailed interpretation to give a clear picture of the psychological and the behavioural reactions of the ischemic heart disease patients towards treatment and recovery.

Demographic Characteristics of Participants

This section reports demographic and clinical features of those who took part in the study. There were 150 ischemic heart disease (IHD) patients in the study. The analysis revealed that the most common age group was 51-60 years, suggesting that middle-aged and elderly age groups were more likely to have ischemic heart disease. Participants' mean age was 56.4 ± 9.2 yrs. There was a higher number of male participants than female, which is consistent with the higher incidence of ischemic heart disease in men of the selected population. The majority of the respondents were married, with a smaller percentage being single, widowed or divorced. In terms of education, there was a large percentage of secondary school education and a few primary education or no education. There were fewer who managed to go further in their education. During the analysis of the occupations, it was found that many participants worked in jobs requiring manual labor or retired, and some were not working or engaged in self-employment.

On the monthly income distribution, most of the participants were low to middle income, which may present a financial problem in maintaining long-term cardiac treatment and medications. As far as the length of time since diagnosis, the majority of participants had been diagnosed with ischemic heart disease for 1-5 years, and others had had the disease for over 5 years. This was also seen clinically, as hypertension and diabetes mellitus were the most prevalent conditions present in participants. Many also reported smoking history and complications related to obesity. When it came to treatments, most respondents were taking medications and lifestyle modification counseling, and some had received angioplasty or bypass surgery. The results suggested that IHD was present in

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

people from varying socio-economic and demographic groups and that attention be paid to demographic factors when looking at treatment motivation and hopelessness in cardiac patients.

Table 1 Distribution of Participants by Age

Age Group (Years)	Frequency	Percentage
30–40	18	12.0%
41–50	37	24.7%
51–60	56	37.3%
61–70	29	19.3%
71 and above	10	6.7%
Total	150	100%

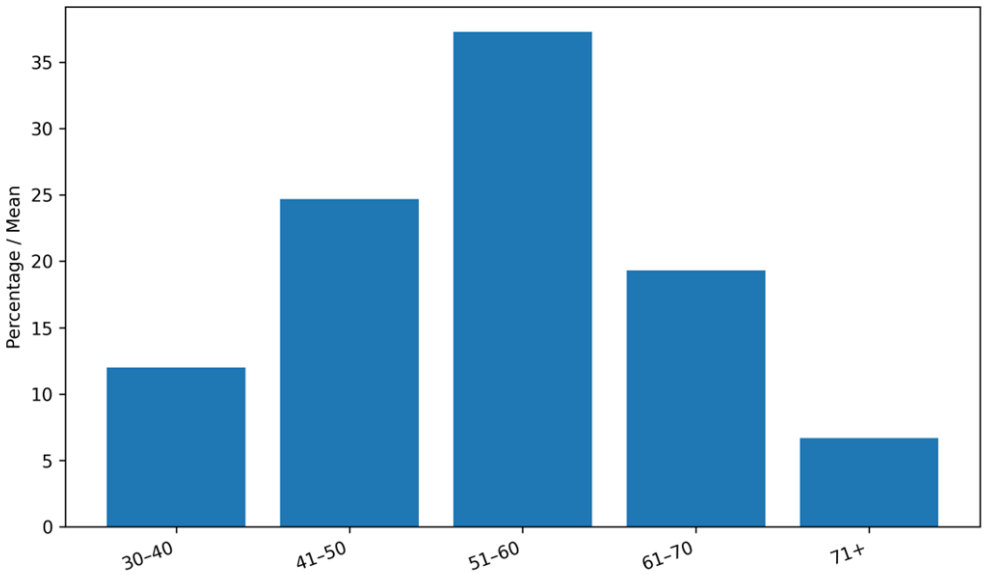

Figure 2 Bar graph of Distribution of Participants by Age

Table 2 Distribution of Participants by Gender

Gender	Frequency	Percentage
Male	96	64.0%
Female	54	36.0%
Total	150	100%

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

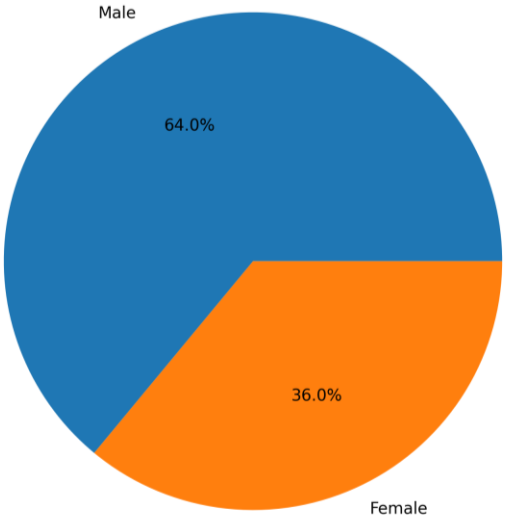

Figure 3 Pie chart of Distribution of Participants by Gender

Table 3 Distribution by Educational Level

Education Level	Frequency	Percentage
No Formal Education	21	14.0%
Primary	38	25.3%
Secondary	57	38.0%
Higher Education	34	22.7%
Total	150	100%

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

DOI: http://doi.org/10.5281/zenodo.20459254

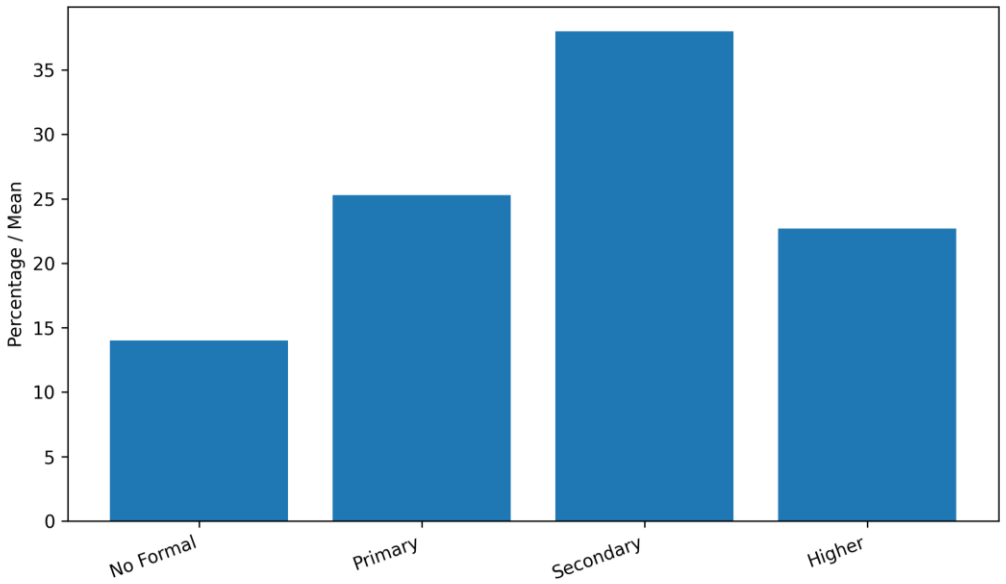

Figure 4 Bar graph of Distribution by Educational Level

Table 4 Distribution by Monthly Income

Income Level	Frequency	Percentage
Low Income	68	45.3%
Middle Income	57	38.0%
High Income	25	16.7%
Total	150	100%

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

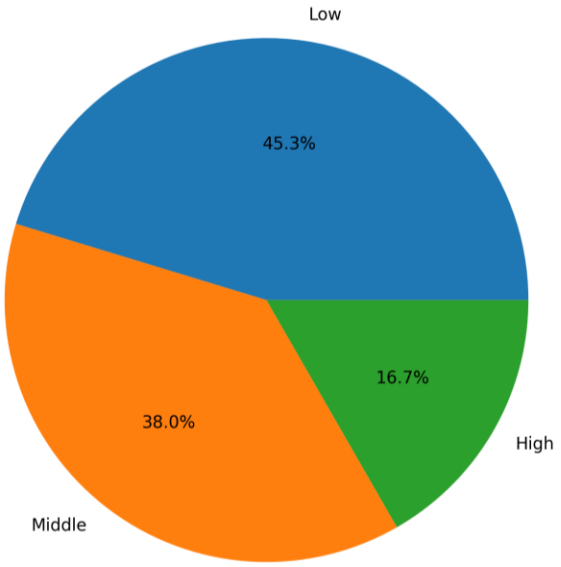

Figure 5 Pie chart of Distribution by Monthly Income

Table 5 Distribution by Comorbid Diseases

Comorbid Condition	Frequency	Percentage
Hypertension	94	62.7%
Diabetes Mellitus	71	47.3%
Obesity	36	24.0%
Smoking History	59	39.3%

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

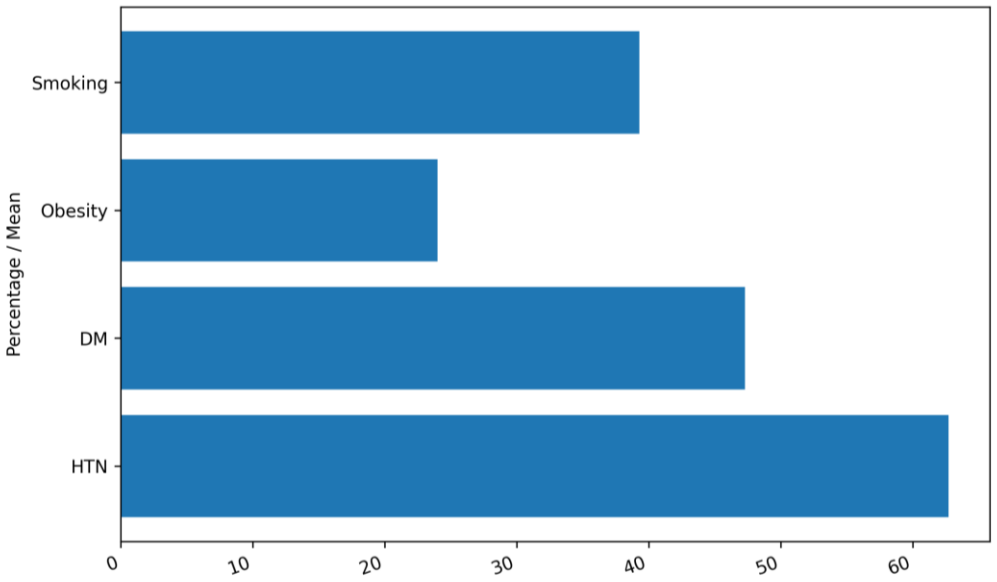

Figure 6 Distribution by Comorbid Diseases

Treatment Motivation Analysis

This section describes the results of the analysis of treatment motives of the patients suffering from ischemic heart disease (IHD) and included in the study. Treatment motivation was measured by a standardized treatment motivation scale which included the motivation of patients to take prescribed medications, attend follow-up visits, engage in healthy lifestyle habits, and take an active role in managing their disease. Findings overall indicated that most participants had moderate treatment motivation and fewer participants had high treatment motivation and a few participants had low treatment motivation for their treatment plan. The mean treatment motivation score among the patients showed that most of the patients were aware of the importance of adherence to treatment and the need to make lifestyle changes to effectively control ischemic heart disease. Participants expressed high satisfaction with their attitudes towards adherence to medicines and follow-up visits to hospital. Participants were also aware of dietary guidelines, smoking cessation and physical activity as key parts of cardiac recovery and maintaining long-term health.

Table 6 Levels of Treatment Motivation

Motivation Level	Frequency	Percentage
Low	24	16.0%
Moderate	89	59.3%
High	37	24.7%
Total	150	100%

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

Although the results were positive, some of the participants expressed a reduction in motivation to participate in treatment because of fear of complications, financial costs, emotional stress and length of illness. Treatment motivation was relatively low in patients with lower education level and with disease duration. Likewise, those who had suffered more than one hospital admission or had significant physical restrictions were more likely to say they were less enthusiastic about treatment adherence and lifestyle changes. The results of further analysis showed that age, education level, income level and length of illness were demographic factors related to the motivation of treatment of ischemic heart disease patients. Higher scores were reported for motivation of the younger and more-educated participants, and of the elderly participants with fewer comorbid conditions. These results indicated that psychological, social and economic factors were important factors influencing the attitudes and behaviors of heart patients regarding treatment.

Table 7 Item-wise Analysis of Treatment Motivation

Item	Mean	SD
Medication Adherence	4.12	0.76
Follow-up Compliance	3.98	0.81
Dietary Adherence	3.71	0.93
Physical Activity Participation	3.44	1.02
Smoking Cessation Motivation	3.88	0.89

Analysis of Hopelessness

This section describes the analysis of hopelessness among the ischemic heart disease patients that were part of the study. Hopelessness was evaluated by the Beck Hopelessness Scale that assessed negative expectations, emotional despair, and uncertainty about the future. It was found that most participants had moderate hopelessness and a smaller group had severe hopelessness. Some mild levels of hopelessness were reported by a small number of participants. Overall, the mean hopelessness score showed psychological distress was prevalent in patients with ischemic heart disease. A number of participants voiced concerns about the potential for cardiac issues, physical disability, further hospitalization, and health status worsening in the future. Some of the patients presented a sense of emotional helplessness and uncertainty about the recovery process, especially those who had suffered for a longer period and with other comorbidities like diabetes mellitus and hypertension. Those patients with repeated cardiac experiences or invasive cardiac procedures (such as angioplasty and bypass surgery) had relatively higher hopelessness scores than other patients.

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

Table 8 Levels of Hopelessness

Hopelessness Level	Frequency	Percentage
Mild	31	20.7%
Moderate	82	54.7%
Severe	37	24.6%
Total	150	100%

Older respondents and those with lower levels of education and income had higher levels of hopelessness. Emotional stress due to financial implications of long term treatment and medications was also a source of stress for participants. In addition, patients who were socially isolated and those who lacked family support were more likely to have negative expectations about their future health status. The results indicated that IHD not only disrupted the physical function but also the emotional and psychological function. Feeling hopeless among cardiac patients can have a negative impact on recovery, adherence to treatment and quality of life. Thus, it is important to include psychological assessments and emotional support as part of the comprehensive evaluation of the cardiac care of ischemic heart disease.

Table 9 Item-wise Analysis of Hopelessness

Item	Mean	SD
Fear of Future Complications	3.92	0.88
Negative Expectations	3.75	0.94
Loss of Hope Regarding Recovery	3.61	0.91
Emotional Helplessness	3.8	0.86
Lack of Confidence in Treatment	3.42	1.01

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

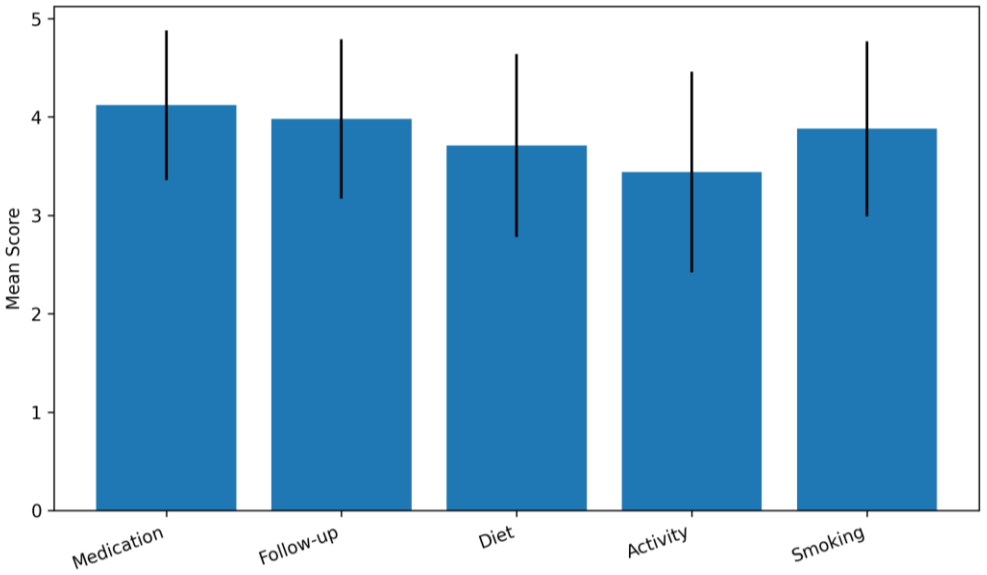

Figure 7 Item-wise Analysis of Hopelessness

Relationship Between Treatment Motivation and Hopelessness

This section shows the relationship between the treatment motivation and hopelessness among the ischemic heart disease patients. Pearson correlation analysis was carried out to test for the direction and strength of the association between the two variables. Results indicated a significant negative correlation between participants' hopelessness and their treatment motivation. This suggests that the more motivated patients were to seek treatment, the less hopeless they were, and the less motivated, the more emotional distress and pessimistic attitudes toward recovery. Those who were very committed to taking medications, changing their diet, exercising, and attending regular follow-up visits were more positive about their future health. Patients in these groups had higher levels of coping and higher treatment efficacy. However, those who were less motivated to take treatment were more likely to feel helpless, worried about complications, uncertain about recovery, and less interested in self-care activities. A significant number of these also reported emotional fatigue because of the chronic nature of the disease management and multiple hospitalizations.

The correlation results showed that the role of treatment motivation in reducing hopelessness among ischemic heart disease patients was crucial in psychological aspects. Active involvement in treatment was associated with positive attitudes and emotional stability among patients, even though the illness is chronic. The correlation between the variables also demonstrated the significant role of psychological counseling, motivation and patient education in the process of cardiac care. The result of the statistical significance of the correlation confirmed the research hypothesis that there is a significant correlation between treatment motivation and hopelessness in patients with ischemic heart disease. The results highlighted the importance of identifying patients with low motivation,

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

and offered interventions for emotional well-being and adherence to treatment, particularly for nurses.

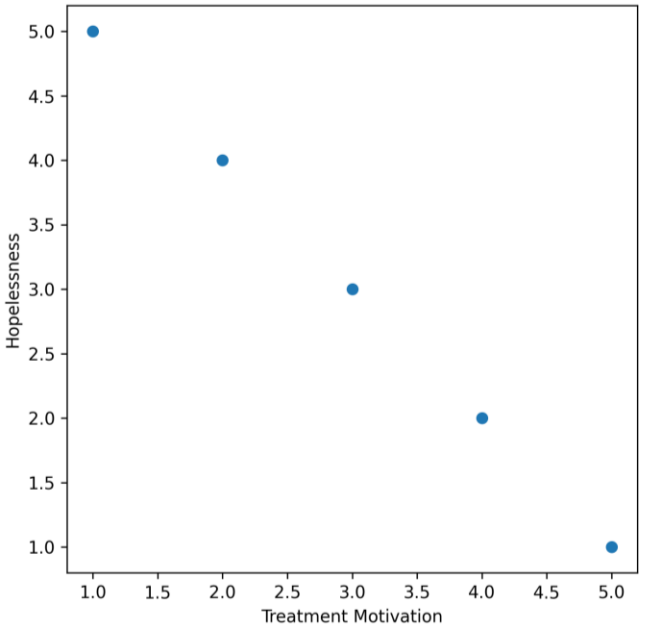

Figure 8 Dot graph showing relationship Between Treatment Motivation and Hopelessness

Association of Demographic Variables with Study Variables

This section shows the relationship between the study variables (treatment motivation and hopelessness in ischemic heart disease patients) with demographic variables. Differences between the treatment motivation and hopelessness across demographic categories were analyzed using inferential statistical tests (independent t-test, one-way ANOVA). The results showed that some of the demographic variables were statistically significant with the study variables. Treatment motivation and hopelessness were significantly related to age. Treatment motivation and hopelessness were higher in younger participants than in older participants. Un-motivation towards treatment and emotional distress were observed in elderly participants with longer illness duration and high number of comorbidities. The study variables were also related to educational status. The results indicated that higher-educated participants had more knowledge about disease management, as well as higher treatment adherence and lower hopelessness scores than less educated participants. Another important factor affecting the psychological responses among participants was the monthly income. Financial stress associated with medications, hospital visits and "life-long" cardiac care expenses were associated with increased levels of hopelessness and decreased treatment motivation for patients in lower income groups. Emotional well-being was also influenced by marital status and

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

family support, with family support and marital status being relatively lower in participants with a supportive family environment.

Table 10 Association of Demographic Variables with Treatment Motivation

Variable	Test	p-value	Interpretation
Age	ANOVA	0.012	Significant
Education Level	ANOVA	0.004	Significant
Income	ANOVA	0.021	Significant
Gender	t-test	0.087	Not Significant

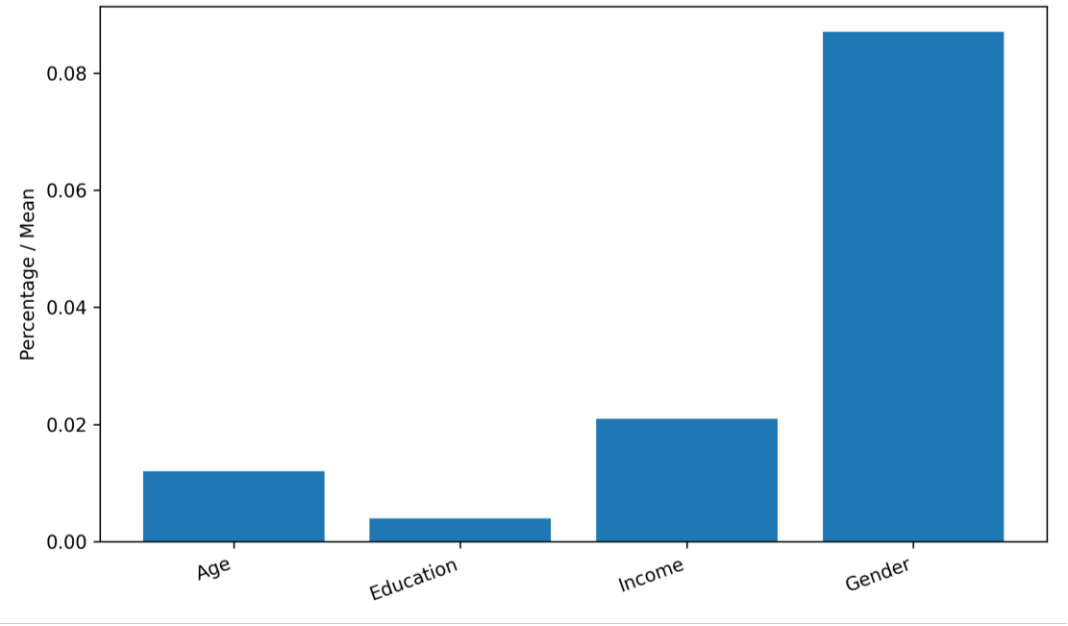

Figure 9 Demographic vs Treatment motivation p-values

Table 11 Association of Demographic Variables with Hopelessness

Variable	Test	p-value	Interpretation
Age	ANOVA	0.008	Significant
Duration of Illness	ANOVA	0.002	Significant
Income	ANOVA	0.015	Significant
Marital Status	ANOVA	0.041	Significant

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

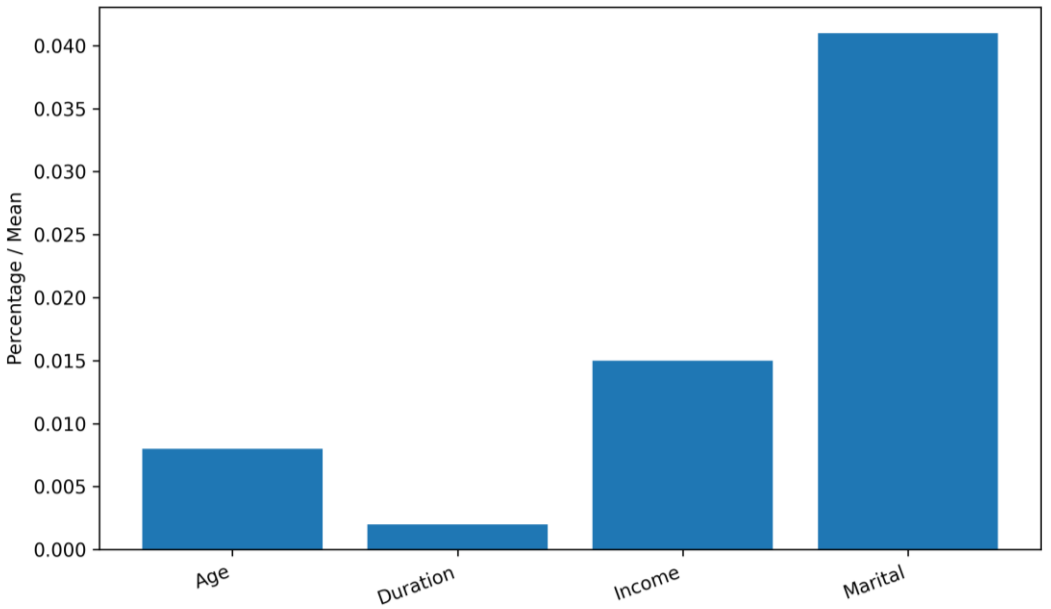

Figure 10 Demographic vs Hopelessness p-values

Discussions

The present study explored the treatment motivation and hopelessness among the patients diagnosed with ischemic heart disease admitted at selected tertiary care hospitals. Demographic characteristics showed that most of the respondents (56 patients, 37.3%) were within the age range of 51-60 years with mean age of 56.4 ± 9.2 years. These results suggest that the prevalence of ischemic heart disease was higher in the middle-aged and older age groups, which is also in line with the findings from epidemiological studies of cardiovascular diseases, reporting increased risk of coronary artery disease after age 50 because of hypertension, diabetes mellitus, obesity and physical inactivity(Kones & Rumana, 2014). The male participants accounted for 64.0% (n=96) of the total sample while the female participants accounted for 36.0% (n=54) of the total sample, which is in line with previous studies that found a higher prevalence of ischemic heart disease in males than in females due to lifestyle and smoking habits, and occupational stress(Boden et al., 2023).

The results of the educational and socio-economic status indicated that 38.0% (n=57) of the participants had secondary level education and 45.3% (n=68) were in the low income group category. The results indicate that lack of awareness and financial constraints can be a negative effect on long-term disease management. The most prevalent comorbid condition reported was hypertension (n=94, 62.7%) followed by diabetes mellitus (n=71, 47.3%). The same results were obtained by Roth et al. (2021) who found that diabetes and hypertension were among the main causes of poor cardiovascular outcomes and psychological stress for cardiac patients.

A treatment motivation analysis showed that most of the participants (59.3%, n=89) had moderate levels of treatment motivation, while only 24.7% (n=37) had high levels of treatment motivation.

Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Yasmeen & Bashir - 2026

DOI: http://doi.org/10.5281/zenodo.20459254

Around 16.0% (n=24) had low treatment motivation. The mean scores demonstrated that the highest motivational score was given to medication adherence (Mean = 4.12 ± 0.76), while follow-up compliance was given a score of (Mean = 3.98 ± 0.81). In contrast, there was relatively low motivation in terms of participation in physical activity (Mean = 3.44 ± 1.02). These results suggest that patients were more likely to comply with medication than to make long-term lifestyle changes, such as starting an exercise program and focusing on diet. Lee et al. (2021) also indicated that fatigue, fear of exerting self, and emotional stress are some of the challenges cardiac patients face when trying to implement behavioral changes. Elderly people and low-income groups also indicate lower treatment motivation, which further implies that elderly people and low-income groups are less active in treatment plans.

The hopelessness findings revealed that 24.6% (n=37) of participants had moderate hopelessness and 54.7% (n=82) had severe hopelessness. Hopelessness on fear of future complications was the highest (Mean = 3.92 ± 0.88) followed by emotional helplessness (Mean = 3.80 ± 0.86). These results suggest that a large number of patients still had psychological distress about future cardiac events, disability and death. According to (Pivato et al., 2022) , pessimistic beliefs and emotional instability are common outcomes of chronic cardiac illness involving a fear of recovery. Those who had been ill for a longer period and had been hospitalized multiple times also showed much higher levels of hopelessness, providing further evidence that the progression of chronic diseases has a negative impact on mental health.

One of the significant results of the study was the negative correlation between treatment motivation and hopelessness which is statistically significant ($r = -0.624$, $p = 0.001$). This outcome suggests that positive treatment motivation is significantly related with lower hopelessness in ischemic heart disease patients. Those who took medications, came to follow-up visits regularly, and were actively practicing self-care behaviors showed more emotional stability and optimism. In contrast, low-motivation patients had higher levels of treatment-participation despair, uncertainty and withdrawal. The same results have been observed by (Carmin et al., 2024), who found that a high level of patient engagement in cardiac rehabilitation programs was associated with a significant decrease in psychological distress and hopelessness. The association analysis also identified significant associations between demographic variables and study outcomes. Treatment motivation was significantly associated with age ($p = 0.012$), education level ($p = 0.004$) and monthly income ($p = 0.021$), and hopelessness was significantly associated with age ($p = 0.008$), duration of illness ($p = 0.002$) and marital status ($p = 0.041$). These findings highlight the role that social, economic and clinical factors have on psychological well-being in patients with ischemic heart disease. Individualized counseling, patient education and emotional support interventions should also be incorporated into cardiac care programs to enhance adherence and psychological outcomes.

Conclusion

The purpose of this study was to evaluate the level of treatment motivation and hopelessness of people with ischemic heart disease (IHD), and to explore the relationship between these

Pakistan Journal of Medical & Cardiological Review
https://pakjmcr.com/index.php/1/about
Online ISSN 3007-2387
Print ISSN 3007-2379

DOI: http://doi.org/10.5281/zenodo.20459254

psychological factors. Results showed that most patients exhibited moderate levels of treatment motivation and hopelessness, highlighting how much ischemic heart disease impacts upon the patient's behavior and emotions. The majority were positive about the intention to adhere to their medication and follow-up, though this was not the case with regard to physical activity adherence and long term lifestyle changes. Results indicate that while patients understand why treatment is necessary, they face ongoing physical and emotional difficulties with adherence to treatment. Additionally, the study found that a large proportion of the participants had fear of future cardiac problems, helplessness, and uncertainty about recovery. Hopelessness and treatment motivation were higher in patients with longer duration of illness, less education and limited financial resources. A significant negative correlation was also found between treatment motivation and hopelessness, suggesting that the higher the motivation for treatment, the more hopeful participants were to recover from the condition and the less emotional distress they experienced. Demographic factors, such as age, educational level, monthly income, marital status and duration of illness were significantly associated with the study variables, which in itself demonstrates the impact of socio-economic and clinical factors on psychological wellbeing of IHD patients. The results highlight the need to incorporate psychological evaluation, motivational counseling, and patient education with emotional support into the standard treatment of cardiac patients. Those who provide nursing and health services should pay attention to patient-centered interventions to increase treatment compliance and decrease hopelessness, thereby improving the overall recovery state and quality of life of ischemic heart disease patients.

REFERENCES

Antman, E. M., & Braunwald, E. (2020). Managing stable ischemic heart disease. *New England Journal of Medicine*, *382*(15), 1468-1470.

Bisciglia, A., Pasceri, V., Irini, D., Varveri, A., & Speciale, G. (2019). Risk factors for ischemic heart disease. *Reviews on recent clinical trials*, *14*(2), 86-94.

Boden, W. E., Marzilli, M., Crea, F., Mancini, G. J., Weintraub, W. S., Taqueti, V. R., Pepine, C. J., Escaned, J., Al-Lamee, R., & Gowdak, L. H. W. (2023). Evolving management paradigm for stable ischemic heart disease patients: JACC review topic of the week. *Journal of the American College of Cardiology*, *81*(5), 505-514.

Campo, G., Pavasini, R., Malagù, M., Mascetti, S., Biscaglia, S., Ceconi, C., Papi, A., & Contoli, M. (2015). Chronic obstructive pulmonary disease and ischemic heart disease comorbidity: overview of mechanisms and clinical management. *Cardiovascular drugs and therapy*, *29*(2), 147-157.

Carmin, C. N., Ownby, R. L., Fontanella, C., Steelesmith, D., & Binkley, P. F. (2024). Impact of mental health treatment on outcomes in patients with heart failure and ischemic heart disease. *Journal of the American Heart Association*, *13*(7), e031117.

Pakistan Journal of Medical & Cardiological Review
https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387
Print ISSN 3007-2379

Yasmeen & Bashir - 2026
DOI: http://doi.org/10.5281/zenodo.20459254

Elgendy, I. Y., Mahtta, D., & Pepine, C. J. (2019). Medical therapy for heart failure caused by ischemic heart disease. *Circulation research*, *124*(11), 1520-1535.

Kim, T. K. (2017). Understanding one-way ANOVA using conceptual figures. *Korean journal of anesthesiology*, *70*(1), 22.

Kones, R., & Rumana, U. (2014). Stable ischemic heart disease. *Cardiology Clinics*, *32*(3), 333-351.

Moryś, J. M., Bellwon, J., Höfer, S., Rynkiewicz, A., & Gruchała, M. (2016). Quality of life in patients with coronary heart disease after myocardial infarction and with ischemic heart failure. *Archives of medical science*, *12*(2), 326-333.

Pangilinan, A. M. (2025). Challenges and Commitment to Teaching: A Quantitative Descriptive-Correlational Study of Filipino Teachers in Select Coastal Villages. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, *4*(2), 1684-1692.

Patel, A. R., Donaldson, G. C., Mackay, A. J., Wedzicha, J. A., & Hurst, J. R. (2012). The impact of ischemic heart disease on symptoms, health status, and exacerbations in patients with COPD. *Chest*, *141*(4), 851-857.

Pivato, C. A., Chandiramani, R., Petrovic, M., Nicolas, J., Spirito, A., Cao, D., & Mehran, R. (2022). Depression and ischemic heart disease. *International Journal of Cardiology*, *364*, 9-15.

Santoso, S. (2020). *Panduan lengkap SPSS 26*. Elex Media Komputindo.

Severino, P., D'Amato, A., Pucci, M., Infusino, F., Birtolo, L. I., Mariani, M. V., Lavalle, C., Maestrini, V., Mancone, M., & Fedele, F. (2020). Ischemic heart disease and heart failure: role of coronary ion channels. *International journal of molecular sciences*, *21*(9), 3167.

Sirajuddin, A., Mirmomen, S. M., Kligerman, S. J., Groves, D. W., Burke, A. P., Kureshi, F., White, C. S., & Arai, A. E. (2021). Ischemic heart disease: noninvasive imaging techniques and findings. *Radiographics*, *41*(4), 990-1021.

Taghadosi, M., Arani, Z. A., & Gilasi, H. R. (2014). Quality of life in patients with ischemic heart disease. *Journal of Nursing and Midwifery Sciences*, *1*(1), 19-26. e141417.