

**"ASSESSMENT OF KNOWLEDGE REGARDING SELF CARE  
MANAGEMENT AMONG ISCHEMIC HEART DISEASE PATIENTS IN  
SELECTED HOSPITALS: A DESCRIPTIVE STUDY."**

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**ABSTRACT**

The heart is a hollow muscular organ located in the center of the thorax, where it occupies the space between the lung's mediastinum and rests on the diaphragm. It weighs approximately 300 gm the weight and size of the heart are influenced by age, gender, body weight, extent of physical exercise and conditioning, and heart disease **Aim of the Study** - Aim of the study was to assess the knowledge regarding self care management among ischemic heart disease patients. **Methodology**- This study employs a quantitative research approach and utilizes a 'Non-experimental descriptive research design' to ascertain, depict, and investigate the prevailing phenomenon and its associated details. The study's research setting comprises selected hospitals within the city, where data collection occurs. The sample for this study comprises 100 ischemic heart disease patients from the selected city hospitals, who were accessible during the data collection period. **Result**-The study reveals that mean knowledge score 8.69 with SD 3.27 and mean percentage knowledge score was 28.96% with SD 10.92. There was association of knowledge score with age, education, marital status, monthly family income, none of the other demographic variables was associated with knowledge score regarding self-care management. **Conclusion**-Study concludes that ischemic heart disease patient were having average knowledge related self care management of ischemic heart disease. **KEY WORDS** Assessment, Knowledge, Self-care, Management, Ischemic heart disease, Descriptive

**INTRODUCTION**

Heart conditions brought on by a reduction in blood flow to the heart muscle are referred to by the phrases coronary heart disease, cardiovascular disease, and hypoxic heart disease. Oxygen supply and demand must be balanced for the heart to operate normally. The muscle that makes up the heart must get enough blood from its coronary arteries to operate as a reliable pump. In coronary cardiac conditions, the coronary arteries experience atherosclerosis, which narrows or blocks them. Blood flow is decreased to the portion of the cardiac muscle supplied by a constricted or blocked coronary artery. The region may become ischaemic and damaged, and a cardiac arrest may occur if the residual blood flow is insufficient to supply the oxygen requirements of the heart. Additionally, the heart may not pump enough blood to the body's

other organs and tissues. Chronic heart failure may eventually emerge as a consequence of alterations brought on by coronary heart disease. Although there are several processes and risk factors underlying coronary cardiovascular disease and coronary heart disease, it seems that inflammation and fat deposition in the arterial wall are the main causes of coronary artery disease. Modifiable and non-modifiable risk factors are the two types of risk factors that cause coronary heart disease. A person is more likely to develop coronary heart disease if they have higher risk factors. Although risk factors affect everyone's chance of developing coronary heart disease, the significance of certain risk factors may differ by gender and ethnicity. Women of African and Mexican descent are more likely than other women to have risk factors for coronary heart disease. Asians have a lower incidence of risk factors, and risk reduction is focused on the management of modifiable risk factors.

### **NEED OF THE STUDY**

An Epidemiological study conducted on cardiovascular diseases are the leading cause of death globally. An estimated 17.9 million people died from cardiovascular diseases in 2019, representing 32% of all global deaths. Of these deaths, 85% were due to heart attack and stroke. Over three quarters of cardiovascular diseases deaths take place in low- and middle-income countries. Out of the 17 million premature deaths (under the age of 70) due to non-communicable diseases in 2019, 38% were caused by cardiovascular diseases. accordance to above cited studies, researcher finds that, estimated 17.9 million people died from cardiovascular disease in 2019, representing 32% of all global deaths. And in India reported 63% of total death due to non-communicable disease, of which 27% were attributed cardiovascular disease. Cardiovascular disease also accounts for 45% of death in the 40 -69-year age group. The people had poor knowledge about risk factor like obesity and inactivity and 68% did not follow ideal physical exercise to decrease their weight. The people had low level of knowledge regarding self-care management in ischemic heart disease patient. This study is essential to evaluate the level of knowledge related to self-care management in ischemic heart disease patients within specific hospital settings. Understanding their knowledge gaps can guide healthcare professionals in providing tailored education and support, potentially improving patients' self-care practices and overall health outcomes.

### **AIM OF THE STUDY**

Aim of the study was to assess the knowledge regarding self care management among ischemic heart disease patients in selected hospitals.

### **METHODOLOGY**

In this study the quantitative research approach is used. In this study the design used is "Non-experimental descriptive research design" It is used to identify, describe and explore the existing phenomenon and its related facts. Assumption of this is Ischemic heart disease patients may have some knowledge regarding self-care management. In present study assessment of knowledge regarding self care management among ischemic heart disease patient Research setting for present study is selected hospitals of the city. In this study research variable is Knowledge regarding self care management among ischemic heart disease patients in selected hospitals. In the present study demographic variables includes Age, gender, religion, educational status, marital status, Occupation, monthly family income, family history of

ischemic heart disease, type of diet, since how long suffering from ischemic heart disease. The population in this study is all ischemic heart disease patients. In this study the target population includes the all-ischemic heart disease patients in hospitals setting. In the present study the accessible population selected for the study comprises of ischemic heart disease patients in the selected hospitals and are available at the time of data collection. In this study, sample consisted of 100 ischemic heart disease patients in selected hospitals of the city who were available at the time of data collection. In this study Non probability convenient sampling technique will be used in which a sample is choice of investigator with regard to the characteristics required under investigation. In this study 100 ischemic heart disease patients were selected as mentioned in the inclusion criteria. In this study, Reliability of the tool was determined by administering tool to 10 samples. Guttman split half method was used for questionnaire. The tool was said to be reliable if the correlation coefficient was more than 0.8. The correlation coefficient 'r' of the tool was 0.9837 Which was more than 0.87 and hence the tool was found to be reliable. Pilot study was conducted 23/11/2022 to 30/11/2022 for a period of 7 days. A sample of 10 ischemic heart disease patients was selected from the selected hospital. The collected data was coded, tabulated and analysed by using descriptive statistics and inferential statistics. Correlation test was done to find correlation between knowledge, there was positive correlation between knowledge. The pilot study was feasible in term of time, money, material and resources. Demographic data was analysed using frequency and percentages. Data on knowledge was analysed by using coefficient correlation test. Association between knowledge with selected demographic variable was analysed by using 't' and ANOVA test

## RESULT

### SECTION - I :- DISTRIBUTION OF ISCHEMIC HEART DISEASE PATIENT WITH REGARDS TO DEMOGRAPHIC VARIABLES.

The study provides a comprehensive overview of various key demographics related to ischemic heart disease patients. It reveals that the largest age group affected is 41-50 years, comprising 39% of the patients, followed by 51-60 years at 28%. Furthermore, a substantial 67% of these patients are males, while 33% are females. In terms of religion, the majority (74%) are Hindus, with smaller percentages belonging to other faiths. Educational backgrounds vary, with 35% being graduates and 13% postgraduates. Most patients (94%) are married, while employment status shows diversity, including government and private employees, self-employed individuals, the unemployed, and homemakers. Additionally, income distribution, family history, dietary preferences, and duration of the disease are outlined, providing a holistic snapshot of this patient population.

### SECTION- II :- ASSESSMENT OF LEVEL OF KNOWLEDGE REGARDING SELF CARE MANAGEMENT AMONG ISCHEMIC HEART DISEASE PATIENTS FROM SELECTED HOSPITALS.

This section deals with the assessment of level of knowledge regarding self care management among ischemic heart disease patients from selected hospital. The level of knowledge score is divided under following heading of poor, average, good, very good and excellent.

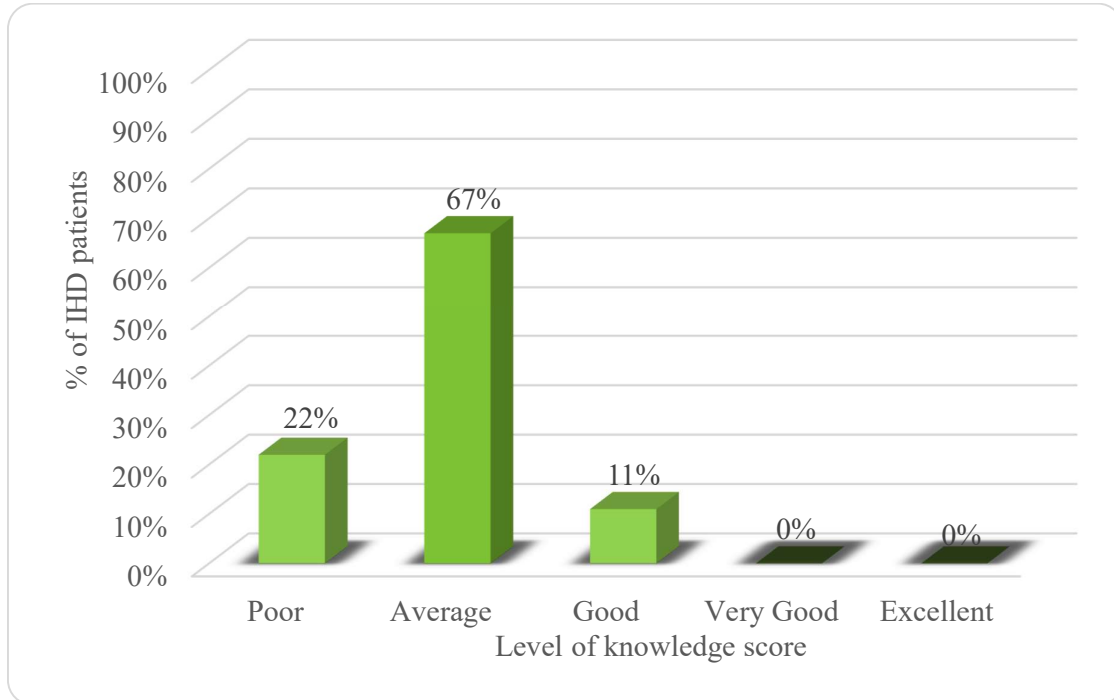
**Table -1: Table showing Assessment with level of Knowledge score**

n=

100

Level of knowledge	Score Range	Level of Knowledge Score	
		Frequency (f)	Percentage
Poor	0-20%(0-6)	22	22
Average	21-40%(7-12)	67	67
Good	41-60%(13-18)	11	11
Very Good	61-80%(19-24)	0	0
Excellent	81-100%(25-30)	0	0
Minimum score		3	
Maximum score		18	
Mean knowledge score		8.69±3.27	
Mean % Knowledge Score		28.96±10.92	

The above table shows that each 22% of ischemic heart disease patients had poor level of knowledge score, 67% had average and 11% of IHD patients had good level of knowledge score. Minimum knowledge score was 3 and maximum knowledge score was 18. Mean knowledge score in was 8.69±3.27 and mean percentage of knowledge score was 28.96±10.92



**Figure No 1 :- Bar diagram showing assessment with level of knowledge score**

**SECTION-III :-QUESTION WISE ASSESSMENT WITH LEVEL OF KNOWLEDGE SCORE**

**Table II:- Question wise assessment with level of knowledge score of ischemic heartdisease patients**

**n=100**

<b>QUESTIONS</b>	<b>CORRECT RESPONSE</b>	<b>INCORRECT RESPONSE</b>	<b>TOTAL</b>
<b>Introduction</b>			
Major function of heart is to	63(63%)	37(%)	100(100%)
Hypertension refers to	23(23%)	77(%)	100(100%)
<b>Definition</b>			
Ischemic heart disease is defined as	34(34%)	66(%)	100(100%)
<b>Etiology</b>			
Ischemic heart disease is caused due to deposition of __ in blood vessels	32(32%)	68(%)	100(100%)
<b>Risk Factors</b>			
Modifiable risk factor for ischemic heart disease is	20(20%)	80(%)	100(100%)
Non modifiable risk factor for ischemic heart disease is	18(18%)	82(%)	100(100%)
<b>Clinical Manifestations</b>			
Most common symptoms of ischemic heart disease is	55(55%)	45(%)	100(100%)
Associated symptoms of ischemic heart disease is	19(19%)	81(%)	100(100%)
<b>Diagnostic Evaluation</b>			
Best diagnosis test for ischemic heart disease is	17(17%)	83(%)	100(100%)
<b>Complication</b>			
Major complication of ischemic heart disease is	56(56%)	44(%)	100(100%)
<b>Medical Management</b>			
Medication is taken sublingually to treat chest pain is	26(26%)	74(%)	100(100%)
Side effect of aspirin is	23(23%)	77(%)	100(100%)
<b>Surgical Management</b>			

Medical procedure to open blocked or narrowed coronary artery is	23(23%)	77(%)	100(100%)
Surgical procedure to treat ischemic heart disease	33(33%)	67(%)	100(100%)
<b>Self Monitoring</b>			
Normal blood pressure is	26(26%)	74(%)	100(100%)
Normal blood cholesterol level is	19(19%)	81(%)	100(100%)
Normal random blood glucose level is	11(11%)	89(%)	100(100%)
<b>Life style modification</b>			
Therapeutic lifestyle changes can be include	15(15%)	85(%)	100(100%)
Daily physical activity should be performed minimum for	36(36%)	64(64%)	100(100%)
Cigarette smoking which contains nicotine can cause	22(22%)	78(78%)	100(100%)
Maintain normal healthy weight to reduce the risk of	42(42%)	58(58%)	100(100%)
The most effective exercise to prevent ischemic heart disease is	42(42%)	58(58%)	100(100%)
Common effective therapy to manage stress is	23(23%)	77(77%)	100(100%)
<b>Diet</b>			
Hyperlipidaemia is refers to	16(16%)	84(84%)	100(100%)
High fat diet that increase the level of __ in blood stream	40(40%)	60(60%)	100(100%)
Most common sources of fiber is	47(47%)	53(53%)	100(100%)
Dietary sodium intake should be	21(21%)	79(79%)	100(100%)
<b>Specific Treatment</b>			
Metoprolol drug reduce	6(6%)	94(94%)	100(100%)
Atorvastatin drug help to remove	18(18%)	82(82%)	100(100%)
Responsibility of patients after being diagnosed as ischemic heart disease	43(43%)	57(57%)	100(100%)

The table above presents a comprehensive overview of the responses provided by 100 ischemic heart disease patients to a series of questions related to their condition and its management. It reveals important insights into their knowledge and understanding of heart health.

Firstly, it is evident that a majority of these patients correctly understood the major function of the heart, with 63% correctly identifying it. However, a significant 37% provided incorrect responses, highlighting potential gaps in patient education regarding the basic functions of the heart.

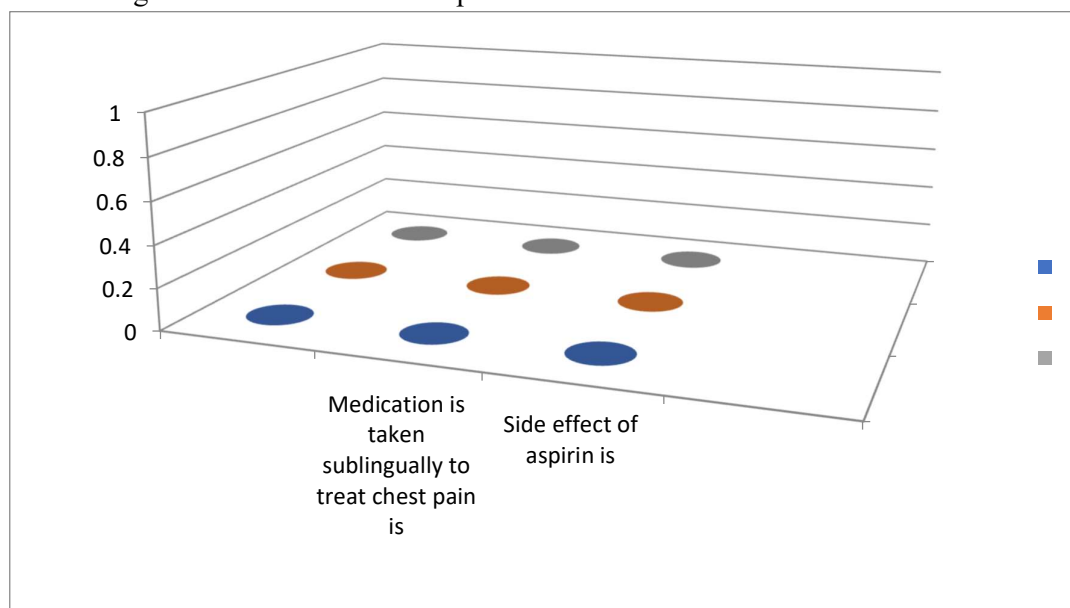
Similarly, the responses regarding hypertension showed a concerning trend. Only 23% of patients correctly identified what hypertension refers to, while a staggering 77% provided incorrect answers. This underscores the importance of better educating patients about this common comorbidity with ischemic heart disease.

When it comes to defining ischemic heart disease, 34% of patients responded correctly, indicating a moderate level of awareness. However, 66% provided incorrect definitions, suggesting room for improvement in patient knowledge in this critical area.

Understanding risk factors is crucial for prevention. Unfortunately, a mere 20% of patients correctly identified modifiable risk factors, and only 18% identified non-modifiable ones. These findings emphasize the need for enhanced patient education on risk factor management. Additionally, the table illustrates that patient knowledge is relatively better regarding symptoms and complications of ischemic heart disease, with 55% correctly identifying the most common symptoms and 56% identifying major complications.

However, when it comes to specific medical interventions and medications, patients' knowledge appears to be lacking. Only 26% correctly identified the medication taken sublingually for chest pain, and just 23% knew the side effects of aspirin.

In conclusion, while some aspects of patient knowledge regarding ischemic heart disease are encouraging, there are clear deficiencies in their understanding of key concepts, risk factors, and medications. These findings underscore the need for comprehensive patient education programs to empower individuals in managing their heart health effectively. Such programs should focus on bridging knowledge gaps and promoting a better understanding of the disease and its management to enhance overall patient outcomes.



**Fig no 2 :- Question wise assessment with level of knowledge score of ischemic heart disease patients**

The above graph shows Majority of the patients was responded correctly 26 percentage for “Medication is taken sublingually to treat chest pain is” and incorrect was 74 percentage out of 100 ischemic heart disease patients

## DISCUSSION

A descriptive approach was adopted in this study, employing a non-purposive sampling technique to assess consumers' expertise in recognizing and preventing coronary heart disease among those attending the outpatient center at Dames' Hospital in Faridkot. The research took place within the outpatient department of medicine at Dasmesh Hospital in Faridkot, and data collection involved the use of a standardized knowledge questionnaire and structured interviews, supported by statistical analysis. The findings revealed that a significant portion of the patients possessed a moderate level of knowledge, suggesting that individuals visiting the outpatient medicine department might have limited awareness of coronary artery disease.

In terms of research strategy and methodology, a descriptive research strategy was chosen to align with the study's objectives, and a non-experimental approach was employed. The study was conducted at Dasmesh Hospital's operating room in Faridkot, Punjab. The target demographic for this study included individuals attending the medicine OPD at Dasmesh Hospital in Faridkot, Punjab.

Among the 50 participants, 17 (34%) fell within the 50–59 age range, 25 (50%) were male, 47 (94%) were married, 45 (90%) were non-smokers, and 39 (78%) had no family history of coronary artery disease. Additionally, 22 (44%) participants had completed middle school education. In terms of knowledge about preventive measures and risk factors for coronary artery disease, 23 patients (46%) displayed average knowledge, 16 patients (32%) exhibited good knowledge, 7 patients (14%) demonstrated poor knowledge, and only 4 patients (8%) showcased exceptional knowledge. The study's findings indicated that individuals with coronary artery disease or ischemic heart disease possessed, on average, a moderate level of awareness regarding heart disease prevention. Furthermore, the research demonstrated that the majority of patients had an average level of knowledge concerning self-care management of ischemic heart disease, with an average proportion of 67%. Poor knowledge was observed in 22% of patients, while excellent knowledge was found in 11% of them.

## CONCLUSION

In conclusion, this study sheds light on the knowledge levels concerning self-care management among ischemic heart disease (IHD) patients. The heart, a vital organ, undergoes variations in size and weight influenced by factors like age, gender, physical activity, and health conditions, making self-care management essential. Employing a quantitative research approach and a non-experimental descriptive design, the study examined IHD patients' knowledge within selected city hospitals. In summary, this study highlights the importance of enhancing IHD patients' knowledge regarding self-care management. While the overall knowledge level was average, specific demographic factors can help identify individuals who might benefit most from educational interventions. Strengthening patient education and self-care programs is essential to improve the management and quality of life for those living with ischemic heart disease.

**Conflict of Interest:** The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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