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A DESCRIPTIVE STUDY ON KNOWLEDGE AND SELF CARE PRACTICES OF PATIENTS WITH ISCHEMIC HEART DISEASE WHO ARE ATTENDING CARDIAC OPD AT PRIVATE HOSPITALS OF VADODARA

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ABSTRACT

Background of the study: Coronary artery disease is the most severe and enduring condition. Because of blood vessels supplying that are clogged, ischemic heart disease is characterized by a lack of blood flow to that area. Cardiovascular diseases are the biggest cause of death worldwide, taking the lives of 17.3 million people each year. The most common disease in the modern era is high blood pressure, sometimes known as hypertension. Systolic blood pressure, or SBP (115 mmHg), is regarded to be the ideal blood pressure level and is responsible for 49% of the burden of ischemic heart disease and 62% of cardiovascular disease globally (WHO). **Objective:** The main objective of the study is to assess the knowledge and self care practice among the ischemic heart disease (IHD) patient in selected private hospital Vadodara. **Material and method:** the data for main study collection was 164 IHD patients. Description of the tools refers to the explanation of the content of the tool. The researcher used 25 knowledge questionnaires and liker scale regarding self care practice on IHD. Descriptive and inferential statistics were used. We use non probability convenient sampling technique. **Result:** For knowledge questions, out of 164 samples 96 (58.54%) had excellent knowledge, 67 (40.86%) had good knowledge, 1 (0.60%) had average knowledge, and 0 (00%) had poor knowledge. Outcomes of self care practices were determined from 164 samples 121 (73.79%) patient were well followed, 42 (25.61%) were averagely followed, 1 (0.6%) were very well followed and 0

(00%) were poor followed. **Discussion and Conclusion:** The next conclusion addresses the analysis and interpretation of data collected from 164 patients who undertook to assess the knowledge and self- care practices of patients with IHD conditions at a selected private hospital in, vadodara.

Keywords: IHD (Ischemic heart disease), patient, knowledge, self care practice

INTRODUCTION

It is the name given to a heart condition brought on by congested heart arteries. The amount of blood and oxygen that reach the heart muscle decreases as arteries are constricted. Additionally known as coronary heart disease and coronary artery disease. Ischemic heart disease is a disorder when a section of the myocardium does not receive enough blood and oxygen. The supply and demand of oxygen for the myocardium will be out of balance. The leading cause of death worldwide, cardiovascular illnesses claim the lives of 17.3 million people annually. The most serious and persistent illness is coronary artery disease. Ischemic heart disease is characterized by a lack of blood flow to a particular region because the blood arteries that supply that region are blocked **[1]**.

An organ in our body is referred to as being ischemia when there is insufficient blood and oxygen supply because of this. Lack of blood production can lead to a variety of heart conditions. Blockages or MI can cause the heart muscle to perish. Emotional stress is one of the causes of sickness when it is not managed, along with other symptoms **[2]**.

Heart's insufficient oxygen level causes discomfort. The jaw, shoulders, back, arms, and chest all feel painful or uncomfortable. Angina can occur in patients with CHD, but it can also occur in other persons with hypertension **[3]**.

High blood pressure, often known as hypertension, is the most prevalent ailment in the modern period. Systolic blood pressure, or SBP (115 mmHg), is thought to be the optimum blood pressure level, accounting for 62% of cardiovascular illness and 49% of the burden of ischemic heart disease worldwide (WHO) **[4]**.

Because of heart failure, medication therapy has been 30% less effective in treating coronary artery illnesses, which cause many deaths in the workplace **[5]**.

Morbidity and mortality from heart disease have an effect on many other heart diseases. If there is any damage to the myocardium, which is the main cause of heart failure, clinical interventions are offered. With a quick introduction to the heart disease therapeutic premise, steam cell-based therapy

is minimal. Any heart damage may potentially be treated with a cell transplant **[6]**.

Women's particular IHD risk factors have received less attention in research than men's do. The risk factors for IHD in women can be better understood by women themselves, who will then be better able to make decisions about their health **[7]**.

Coronary heart disease, often called ischemic heart disease, is the most common kind of cardiovascular illness. In Western and high-income countries, where it accounts for about 20% of all fatalities, it has been the leading cause of mortality for more than 50 years. Mortality and death from coronary artery disease peaked in the 1970s and have been gradually declining ever since. The likelihood that mortality and significant mortality reductions are accounted for by effective primary prevention measures like: is higher. B. Reductions in smoking rates, strict cholesterol lowering with statins, and improved hypertension control. Nonetheless, coronary artery disease is still the leading cause of mortality worldwide **[8]**.

Schemic heart disease (IHD) can be occlusive or non-occlusive. Patients with non-obstructive stable angina are typically female. Non-occlusive IHD is mostly caused by endothelial dysfunction at the microvascular level, such as that found in B. Cardiac Syndrome X and Coronary Delayed Syndrome. The presence of myocardial ischemia, even when the coronary architecture is unobstructed, is a crucial component in deciding how effective exercise therapy will be. IHD is a chronic inflammatory disease, and as it progresses, a person's capacity to function may be significantly altered. Exercise program should be a part of cardiovascular rehabilitation since it reduces the rates of cardiovascular mortality, morbidity, and readmission, psychological stress, and IHD risk factors such diabetes, hypertension, and obesity. The correct exercise therapy can improve the quality of life for IHD patients. Yet IHD patients hardly ever engage in fitness routines. This chapter covers the establishment of safe exercise programs, the importance of exercise for people with IHD, and new developments in exercise research. Additionally, exercise training significantly enhances both ischemic and non-ischemic heart failure **[9]**.

Heart failure is a complicated medical condition that manifests as the latter stage of many cardiac diseases. It contributes significantly to the etiology. America and Europe. Regardless of the presence of preexisting coronary artery disease, myocardial ischemia—which may be brought on by structural or functional alterations to the

coronary circulation—is a typical finding in heart failure. Ischemia is a self-perpetuating illness with major prognostic implications and irreversible heart function degradation. Hence, improving patient outcomes could be considerably aided by a deeper and more extensive knowledge of the biology of myocardial ischemia in heart failure. This review examines coronary participation and treatment with an emphasis on coronary artery harm brought on by non-occlusive coronary artery disease or high parietal stress. Additionally, it explains how cardiac ischemia and coronary artery disease manifest themselves in heart failure. heart failure patients' illness **[10]**.

Coronary artery disease, often called ischemic heart disease, is the most common kind of cardiovascular illness. It has been the main cause of death in Western and high-income countries for more than 50 years, accounting for about 20% of all fatalities there. Mortality and death from coronary artery disease peaked in the 1970s and have been gradually declining ever since. Effective primary prevention strategies like: B. A fall in smoking rates, vigorous statin-assisted blood cholesterol lowering, and enhanced hypertension care are most likely to blame for mortality and significant mortality reductions. Nonetheless, coronary artery disease is still the leading cause of mortality worldwide. a chest ache Ischemic heart illness is most typically reported as a tightness in the chest that spreads to the base of the neck, jaw, arm (often the left arm), or back. It is possible to experience breathing problems, lightheadedness, chills, nausea, vomiting, palpitations, and even unconsciousness. Keep in mind that, especially in women, the elderly, and those with diabetes, the discomfort from ischemic heart disease frequently lacks these traditional characteristics. breathing challenges (dyspnea). The heart weakens as a result and cannot efficiently pump blood to other parts of the body. Sweating. Nausea. Vomiting. All of these symptoms may appear simultaneously or independently. In reality, the neurological system suffers the most from the body's response to myocardial ischemia. loss of consciousness A severe arrhythmia during a heart attack that results from disrupted electrical conduction in the heart or from the heart's full inability to pump blood causes loss of consciousness (cardiac arrest) **[11, 12]**.

MATERIAL AND METHOD

Introduction:

The goal of this study was to evaluate the knowledge and self-care practices of patients with ischemic heart disease at a particular Vadodara private hospital. The

assessment of patients with ischemic heart disease's knowledge and self-care behaviors is the main emphasis of this study. It includes a description of the research approach, the research design, the variables being studied, the population, the setting, the sample size and sampling techniques, the sample, the development of the tool and procedure for data collection, the plan for data analysis, interpretation, and the study's ethical implications.

Research approach:

This study employs a quantitative evaluation approach to assess the knowledge and self-care practices of patients with ischemic heart disease who are presenting to the cardiac OPD of a particular Vadodara private hospital.

Research design:

Non-experimental descriptive research design was adopted in this study. Assessing patients' knowledge about and self-care practices for people with ischemic heart disease is the main goal of the study. 164 patients who are undergoing cardiac OPD at a private hospital in Vadodara will be chosen using a straightforward non-probability handy sampling procedure.

Place of study:

The cardiac OPD of a private hospital in Vadodara is the study's location. Ischemic heart disease (IHD) patients who attend the cardiac OPD at Vadodara's private hospitals.

Source of data:

The patients with ischemic heart disease who attend the cardiac OPD at Vadodara's private hospitals would be the source. The information for this study will come from that patient.

Population:

Patients with ischemic heart disease will make up the population for this study. Only patients who are seen in the cardiac OPD at particular Vadodara private hospitals will be included in this population. The age range of the population will be from 35 years old minimum and above 65 years old maximum age in year, and all types of patients will be considered without any preference of any religion or sex.

Sample:

Sample the group of study subjects that were chosen. 164 patients who were undergoing cardiac OPD at particular Vadodara private hospitals made up the study's sample.

Sampling technique:

The process of choosing a sample from the research study's target population is referred to as sampling technique. Utilizing a non-probability convenient sampling technique, the study's sample was chosen. he

patients who are receiving cardiac outpatient care in particular Vadodara private hospitals.

Sample selection criteria:

1. Both male and female patient are include in the study.
2. Patients who are present during the time of study data collection.
3. Patients who are willing to participate.
4. Patients who were suffering from IHD.
5. Patient who are deaf and dumb.
6. Age should be above 35 years.

Ethical consideration:

Ethical clearance was obtained from the ethical committee, Sumandeep Vidyapeeth. Informal consent was obtained from the subjects before the data collection.

Description of tools.

Section I: Demographic data

This section includes demographic variables such as Age, Education level, family income, family type and family history of patient with IHD **(Table 1)**.

Section II: Structured Knowledge questionnaires

This section includes 20 question of knowledge will be use for assessing the lifestyle modification, diet, exercise and spirituality and Scoring interpretation of the data are poor, good, average, and excellent **(Table 2)**.

Section III: Likert Scale

This section includes 11 self care practice question will be use for the assessing the self care practices which patients are applying in their daily routine and Scoring interpretation of the data are poor, good, average, and excellent **(Table 3)**.

Section IV: Association between Socio-demographic variables with knowledge score **(Table 4)**.

Section V: Association between Socio-demographic variables with practice score **(Table 5)**.

Section I:

Table 1: Frequency and percentage distribution of the sample according to their demographic variables

Variables	Categories		Frequency	Percentage
Age (in year)	a)	35 - 45	40	24.39%
	b)	46 - 55	56	34.15%
	c)	56 - 65	61	37.19%
	d)	Above 65	7	4.27%
Educational level	a)	Diploma	47	29%
	b)	Graduate	75	46%
	c)	Post Graduate	25	15%
	d)	Any other, specify	17	10%
Family income	a)	Less than 20,000	63	38%
	b)	Between 21,000 – 50,000	77	47%
	c)	More than 51,000	24	15%

Family type	**a)**	**Joint**	**84**	**51%**
	b)	**Nuclear**	**80**	**49%**
Family history of patient with IHD	**a)**	**Yes**	**9**	**5%**
	b)	**No**	**155**	**95%**

Section II:

Table 2: Frequency and percentage of structured knowledge questionnaires

Sr no	Knowledge level	Frequency	Percentage
1	Poor	0	0
2	Average	1	0.60
3	Good	67	40.86
4	Excellent	96	58.54
	Total	164	100%

Section III:

Table 3: Frequency and percentage of self care practice Likert scale)

Sr no	Selfcare practice	Frequency	Percentage
1	Poor	0	0
2	Average	42	25.61
3	Good	121	73.79
4	Excellent	1	0.6
	Total	164	100%

Section IV:

Table 4: Association between Socio-demographic variables with knowledge score

SOCIO-DEMOGRAPHIC VARIABLE				KNOWLEDGE			
	>=16	<16	TOTAL	DF	CALCULATED VALUE	TABULATED VALUE	LEVEL OF SIGNIFICANCE
35-45	21	19	40	6	6.52	12.59	NS
46-55	33	23	56				
56-65	40	21	61				
Above 65	3	4	7				
Diploma	26	22	48	6	6.92	12.59	NS
Graduate	41	35	76				
Post Graduate	19	6	25				
Any other, Specify	9	6	15				
Less than 20,000	30	33	63	2	2.36	5.991	NS
Between 21000-51000	51	26	77				
More than 51000	14	10	24				
Joint	48	36	84	1	0.001618	3.841	NS
Nuclear	47	33	80				
Yes	5	4	9	2	0.001684175	5.991	NS
NO	90	65	155				
If Yes, When	0	0	0				

Section V:

Table 5: Association between Socio-demographic variables with practice score

SOCIO-DEMOGRAPHIC VARIABLE				PRACTICE			
	>=7	<7	TOTAL	DF	CALCULATED VALUE	TABULATED VALUE	LEVEL OF SIGNIFICANCE
35-45	27	13	40	6	9.85245	12.59	NS
46-55	44	13	57				

56-65	**47**	**13**	**60**				
Above 65	**6**	**1**	**7**				
Diploma	**29**	**19**	**48**	**6**	**2.53**	**12.59**	**NS**
Graduate	**63**	**13**	**76**				
Post Graduate	**23**	**2**	**25**				
Any other, Specify	**7**	**8**	**15**				
Less than 20,000	**39**	**24**	**63**	**2**	**3.42**	**5.991**	**NS**
Between 21000-51000	**62**	**15**	**77**				
More than 51000	**21**	**3**	**24**				
Joint	**55**	**29**	**84**	**1**	**8.58**	**3.841**	**S**
Nuclear	**67**	**13**	**80**				
Yes	**7**	**2**	**9**	**2**	**3.6**	**5.991**	**NS**
NO	115	40	155				
If Yes, When	0	0	0				

CONCLUSION

This chapter deals with conclusion with the objective of the study. A study to assess the knowledge and self care practice of patient with IHD in selected private hospital vadodara.

Major finding of the study

The findings of the study are based on the objectives:

Section: A

Socio-demographic finding

- Highest percentage 37.19% of age group 56 – 65 year, high Percentage 34.15% age group 46-55 year, medium percentage 24.39% age group 35-45 year and rest of 4.27% age group above 65 year.
- Highest percentage (46%) of graduate, average percentage (29%) of diploma, lower percentage (15%) of post graduate and rest of percentage (10%) any other, specify.
- Finding shows that family income between 21,000 to 50,000 (47%), less than 20,000 (38%), more than 51,000 (15%).
- Majority of the family's are (51%) of joint family and (49%) of nuclear family.
- Maximum (95%) of without family history and rest of (5%) with family history

Section: B

Structured knowledge questionnaire's finding

- 58.54% of excellent knowledge, 40.86% of good knowledge, 0.60% of average knowledge and 00% of poor knowledge.

Section: C

Self care practice (likert scale) finding

- 73.79% of patients are practicing in good way, 25.62% of patients are having average

practice, 0.6% of patients are following excellently and 00% of patient are poor means no one is present in this.

Section: D

Association between socio demographic variable with knowledge score

- **Age in years:** Association of selected demographic variable with the knowledge score the calculated value of chi (square(x2)) is 6.52 is less than tabulated value 12.59 at the 6 degree of freedom at 0.05 level of significance. Therefore class of study is not significant for knowledge among the sample.
- **Educational level:** Association of selected demographical variable with the knowledge score the calculated value of chi (square(x2) is 6.92 is less than tabulated value 12.59 at the 6 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for knowledge among the sample.
- **Family income:** Association of selected demographic variable with the knowledge score at calculated value of chi (square(x2) is 2.36 is less than tabulated value 5.991 at the 2 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for knowledge among the sample.
- **Family type:** Association of selected demographic variable with the knowledge score the calculated value of chi (square(x2) is 0.001618 is less than tabulated value 3.841 at the 1 degrees of freedom at 0.05 level of significance. Therefore class of study not is significant for knowledge among the sample.
- **Family history of patients with IHD:** Association of selected demographic variable with the knowledge score the calculated value of chi (square(x2) is 0.001684175 is less than tabulated value 5.991 at the 2 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for knowledge among the sample.

So here to test the hypothesis, chi-square test has been used data have been analyzed by the researcher manually and the outputs are depicted in the above table. The table reveals that there is significant association between knowledge score and selected demographic variables with 0.05 level of no significant except so null hypothesis accepted and alternative hypothesis is rejected.

Section: E

Association between socio demographic variable with practice score

- **Age in years:** Association of selected demographic variable with the practice score the calculated value of chi (square(x2)) is 9.852 is less than tabulated value 12.59 at the 6 degree of freedom at 0.05 level of significance. Therefore class of study is significant for practice score among the sample.
- **Educational level:** Association of selected demographical variable with the practice score the calculated value of chi (square(x2) is 2.53 is less than tabulated value 12.59 at the 6 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for practice score among the sample.
- **Family income:** Association of selected demographic variable with the practice score at calculated value of chi (square(x2) is 3.42 is less than tabulated value 5.991 at the 2 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for practice score among the sample.
- **Family type:** Association of selected demographic variable with the practice score the calculated value of chi (square(x2) is 8.58 is less than tabulated value 3.841 at the 1 degrees of freedom at 0.05 level of significance. Therefore class of study is significant for practice score among the sample.
- **Family history of patients with IHD** : Association of selected demographic variable with the practice score the calculated value of chi(square(x2) is 3.06is less than tabulated value 5.991 at the 2 degrees of freedom at 0.05 level of significance. Therefore class of study is not significant for practice score among the sample.

So here to test the hypothesis, chi-square test has been used data have been analyzed by the researcher manually and the outputs are depicted in the above table. The table reveals that there is significant association between practice score and selected demographic variables with 0.05 level of no significant except gender of the sample.

SUMMARY

The chapter deals with summary of the study and silent features.

Statement of study

"A Descriptive study on knowledge and self care practices of patients with ischemic disease who are attending cardiac OPD at private hospitals of Vadodara."

Objectives of the study:

- To assess the knowledge of patient with IHD.

- To assess the self care practice of patient with IHD.
- To find out the relationship between knowledge and self care practice of patient with IHD.
- To find out the association between knowledge and selected demographic variable.
- To find out the association between the self care practice and selected socio-demographic variable.

Hypothesis:

- **H_1**: There will be a significant association between knowledge score and selected demographic variables'
- **H_0**: There will be a no significant association between knowledge score and selected demographic variables'

Delimitation

The study is delimitation for:

1. Patient attending cardiac OPD in private hospitals, Vadodara.
2. Period of 4-6 weeks.
3. Sample size is limited to 164.

Description of tool is consists of three sections

Below mentioned are the sections of description

Section: 1

- Consist of selected demographic variables such as Age, Education level, family income, family type and family history of patient with IHD.

Section: 2

- Structured Knowledge questionnaires will be use for assessing the lifestyle modification, diet, exercise and spirituality.

Section: 3

- Likert Scale will be use for the assessing the self care practices which patients are applying in their daily routine.

Major finding of the study:

For knowledge questions, out of 164 samples 96 (58.54%) had excellent knowledge, 67 (40.86%) had good knowledge, 1 (0.60%) had average knowledge, and 0 (00%) had poor knowledge. Outcomes of self care practices were determined from 164 samples 121 (73.79%) patient were well followed, 42 (25.61%) were averagely followed, 1 (0.6%) were very well followed and 0 (00%) were poor followed.

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