



Effect of awareness program on knowledge regarding heart failure among peoples

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Abstract

The current study has been undertaken to assess knowledge score regarding Heart Failure among Peoples by awareness program in vill-Bhouri, Indore. The research design used for study was pre- experimental in nature. The tool for study was self-structured knowledge questionnaire which consists of 2 parts-PART- I consisted questions related to Socio-demographic data; PART-II consisted of self -structured knowledge questionnaire to assess knowledge score regarding Heart Failure among Peoples. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 20.0% of Peoples were having average knowledge regarding Heart Failure whereas 80.0% had good knowledge after post-test. It was suggested that nurses must educate Peoples regarding Heart Failure.

Keywords: Effect, awareness program, knowledge & heart failure

Introduction

A functional or anatomical cardiac problem that impairs ventricular filling or blood ejection to the systemic circulation causes heart failure, a complex clinical condition. By definition, it is a failure to satisfy the underlying needs of circulation. Worldwide, heart failure continues to be a condition with a significant death and morbidity rate. It is thought to affect 26 million individuals worldwide and is a factor in rising healthcare expenses. Heart failure can be brought on by many different disorders. The treatment regimen varies to some extent depending on the cause of heart failure, although the majority of recommendations are made based only on the diagnosis of heart failure, independent of the cause.

Heart failure can significantly reduce a patient's functional capacity and raise their mortality risk. To avoid repeated hospital stays, optimise patient outcomes, and improve quality of life, it is crucial to correctly diagnose and treat the disease. Heart failure must be treated using a multimodal strategy that includes patient education, the best medical regimen to increase cardiac contractility, and the prevention or restriction of exacerbations. To improve patient care, an interprofessional team approach is necessary.

Need For Study

According to the World Health Organisation, India is responsible for one-fifth of these global deaths, particularly among the younger population. According to the findings of the Global Burden of Disease study, India has an age-standardized CVD death rate of 272 per 100,000 people, significantly higher than the global average of 235. Indians are affected by CVDs ten years earlier than people in the west.² Early age of beginning, quick progression, and high death rate are particularly concerning factors for us Indians with regard to CVD. The highest rates of coronary artery disease (CAD) are known to occur in Indians, yet the usual risk factors are unable to account for this elevated risk. The

prevalence of acute coronary syndrome and ST-elevation myocardial infarction (MI) is now highest in India. With 261,694 fatalities from hypertensive heart disease in 2013, it is a serious issue in India together with other CVDs.

Objective of the Study

1. To assess the pre-test & post-test Knowledge score regarding Heart Failure among Peoples.
2. To assess effect of awareness program on knowledge regarding Heart Failure among Peoples.
3. To find out association between pre-test knowledge score regarding Heart Failure among Peoples with their selected demographic variables.

Hypotheses

RH₀: There will be no significant difference between pre test & post-test knowledge score on Heart Failure among Peoples.

RH₁: There will be significant difference between pre test & post-test knowledge score on Heart Failure among Peoples.

RH₂: There will be significant association between pre-test score regarding Heart Failure among Peoples with their selected demographic variables.

Assumption

1. Peoples may have deficit knowledge regarding Heart Failure.
2. Awareness program will enhance knowledge of Peoples regarding Heart Failure.

Methodology

An evaluative approach was used and research design pre-experimental one group pre-test post-test research design was used for the study. The samples consisted of 80 Peoples selected by Non probability convenient sampling technique. The setting for the study was Pardesi pura, Indore. Data was

gathered with help of demographic variables & administering a self-structured knowledge questionnaire by analyst prior & after awareness program. Post-test was done after seven days of pre-test. Data were analysis using descriptive & inferential statistics.

Analysis and Interpretation
Section-I

Table 1: Frequency & percentage distribution of samples according to their demographic variables. n = 80

S. No	Demographic Variables	Frequency	Percentage
1	Age in Years		
a.	21-25	11	13.8
b.	26-30	41	51.2
c.	>30	28	35.0
2	Gender		
a.	Male	45	56.2
b.	Female	35	43.8
3	Types of family		
a.	Nuclear	29	36.3
b.	Joint	42	52.5
c.	Extended	9	11.3
4	Educational Status		
a.	Graduate and above	27	34.0
b.	Primary	26	32.5
c.	Secondary	24	30.0
d.	Higher secondary	3	3.5

Table 4: Effect of awareness program by calculating Mean, SD, Mean Difference and 't' Value of Pre-test and Post-test knowledge.

Knowledge Score of Peoples	Mean (\bar{X})	S. D. (s)	Std. Error of Mean	D. F.	t-value	Significance
Pre-test	1.10	0.30	0.05	79	-29.63	P<0.05
Post-test	2.80	0.40				

When the mean and SD of pre-test & post-test were compared & 't' test was applied. It can be clearly seen that the 't' value was -29.63 and p value was <0.05 which clearly show that awareness program was very effective in enhancing the knowledge of Peoples.

Section-III

Association of knowledge scores between test and selected demographic variables:

Table 5: Association of age of Peoples with pre-test scores:

Age (in years)	Test scores			Total
	Poor (1-10)	Average (11-20)	Good (21-30)	
21-25	8	3	0	11
26-30	36	5	0	41
>30	28	0	0	28
Total	72	8	0	80

X= 6.97 p<0.05(significant)

The association of age test scores is shown in present table 5. The probability value for Chi-Square test is 6.97 for 2 DF which indicated insignificant value (p>0.05). Hence, it is identified that there is a insignificant association between age & test scores. Moreover, it is reflected that age is influenced with current problem.

Section-II

Table 2: Frequency and percentage distribution of Pre-test scores of studied subjects:

Category and test Score	Frequency (N=80)	Frequency Percentage (%)
Poor (1-10)	72	90.0
Average (11-20)	8	10.0
Good (21-30)	0	0.0
Total	80	100.0

The present table 2 concerned with the existing knowledge regarding Heart Failure among Peoples were shown by pre-test score and it is observed that most of the Peoples 72 (90.0%) were poor (01-10) knowledge & some Peoples have 8 (10.0%) were from average category.

Table 3: Frequency and percentage distribution of Post test scores of studied subjects:

Category and post-test Score	Frequency (N=80)	Frequency Percentage (%)
Poor (01-10)	0	0.0
Average (11-20)	16	20.0
Good (21-30)	64	80.0
Total	80	100%

The present table 3 concerned with the existing knowledge regarding Heart Failure among Peoples was shown by post test score and it is observed that most of the Peoples 64 (80.0%) were GOOD (21-30) knowledge & other Peoples have 16 (20.0%) category which are AVERAGE (11-20) posttest knowledge score in present study.

Table 6: Association of gender with pre-test scores:

Gender	Test scores			Total
	Poor (1-10)	Average (11-20)	Good (21-30)	
Male	41	4	0	45
Female	31	4	0	35
Total	72	8	0	80

X= 0.14 p>0.05 (Insignificant)

The association of gender & test scores is shown in present table 6 The probability value for Chi-Square test is 0.14 for 1 degrees of freedom which indicated a insignificant value (p>0.05). Hence, it is identified that there is a insignificant association between gender & test scores.

Table 7: Association of types of family with pre-test scores:

Types of family	Test scores			Total
	Poor (1-10)	Average (11-20)	Good (21-30)	
Nuclear	27	2	0	29
Joint	41	1	0	42
Extended	4	5	0	9
Total	72	8	0	80

X= 23.77 p<0.05 (significant)

The association of types of family & test scores is shown in present table 7 The probability value for Chi-Square test is 23.77 for 2 degrees of freedom which indicated a

insignificant value ($p>0.05$). Hence, it is identified that there is a significant association between types of family & test scores.

Table 8: Association of educational status with pre-test scores:

Educational Status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Graduate	27	0	0	27
Primary	21	5	0	26
Secondary	22	2	0	24
Higher sec.	2	1	0	3
Total	72	8	0	80

$\chi^2 = 7.35$ $p > 0.05$ (insignificant)

The association of educational status & test scores is shown in present table 8. The probability value for Chi-Square test is 7.35 for 3 degrees of freedom which indicated educational & test scores. Moreover, it is reflected that educational is not influenced with present problem.

Results

The result of this study indicates that there was a significant increase in post-test knowledge scores compared to pre-test scores of Heart Failure. The mean percentage knowledge score was observed 1.10 ± 0.30 in pre-test & after implementation of awareness program post-test mean percentage was observed with 2.80 ± 0.40 .

Conclusion

Thus, after the analysis and interpretation of data we can conclude that the hypothesis RH1 that, there will be significance difference between pre-test knowledge score with post-test knowledge score at ($P < 0.05$) is being accepted.

Furthermore, awareness program related to Heart Failure among Peoples may consider as an effective tool when there is a need in bridging & modifying knowledge.

Limitations

- This was limited to Pardesipura, Indore.
- This was limited to 80 Peoples.

Reference

1. WHO. World Health Organization; Geneva: Global Health Estimates 2015: Deaths by Cause, Age, Sex, by Country and by Region, 2016, 2000–2015. [Google Scholar]
2. Prabhakaran D, Jeemon P, Roy A. Cardiovascular diseases in India. *Circulation*,2016;133:1605-1620. [PubMed] [Google Scholar]
3. Ruhil R. India has reached on the descending limb of tobacco epidemic. *Indian J Community Med*,2018;43:153–156. [PMC free article] [PubMed] [Google Scholar]
4. International Diabetes Federation. 8th ed. International Diabetes Federation; Brussels, Belgium, 2017. IDF Diabetes Atlas.<http://www.diabetesatlas.org/across-the-globe.html> [Google Scholar]
5. Kearney PM, Whelton M, Reynolds K. Global burden of hypertension: analysis of worldwide data. *Lancet*,2005;365:217-223. [PubMed] [Google Scholar]
6. Pradeepa R, Anjana RM, Joshi SR. Prevalence of generalized & abdominal obesity in urban & rural

India- the ICMR - INDIAB Study (Phase-I) [ICMR-INDIAB3] *Indian J Med Res*,2015;142:139-150. [PMC free article] [PubMed] [Google Scholar]

7. Joshi Shashank R, Anjana Ranjit Mohan, Deepa Mohan. Prevalence of dyslipidaemia in urban and rural India: the ICMR–INDIAB study. *PLoS One*,2014;9:e96808. [PMC free article] [PubMed] [Google Scholar]
8. Anjana RM, Pradeepa R, Das AK. ICMR–INDIAB Collaborative Study Group Physical activity and inactivity patterns in India – results from the ICMR-INDIAB study (Phase-1) [ICMR-INDIAB-5] *Int J Behav Nutr Phys Act*,2014;11:26. [PMC free article] [PubMed] [Google Scholar]