Life Style Modification for Patients with Ischemic Heart Disease

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Abstract:

With a view to assess the effectiveness of lifestyle modification in patients with ischemic heart disease, a quasi-experimental study with quantitative approach was undertaken on 60 patients of ischemic heart disease. Purposive sampling technique was used in selecting the patients. The results showed that educating the patients about cessation of smoking, taking proper diet, anxiety reduction and counselling helped in preventing the progression of ischaemic heart disease.

Chronic non-communicable disease is assuming increasing proportions among the adult population in not only developing, but also developed countries. Increased industrialization and urbanisation that leads to change in the lifestyle and behavioural patterns of people are the major reasons for the increase in chronic diseases. Ischemic heart disease (IHD) is one of the pervasive chronic diseases affecting mainly the elderly population. The term cardiovascular disease refers to a number of condition that damage the heart or the arteries that carry blood to and from the heart. If the coronary artery becomes diseased or blocked, an ischemic heart disease occurs. The main objective of lifestyle modification is to return the patient to an optimal level of physiological, psychological and vocational functioning as well as to attempt to prevent IHD progression.

Objectives

The study sought to assess the effectiveness of a Structured Instructional Module on knowledge of life style modification regarding IHD; and the association between post-test knowledge scores of IHD patients regarding life style modification and selected demographic variables.

Hypotheses

HO_1 - There will be no significant difference between pre- and post-test knowledge scores of IHD patients regarding lifestyle modification.

HO_2 - There will be no significant association between the post-test knowledge scores of patients with IHD and their selected demographic variables.

Methodology

A quasi-experimental with pre- and post-test without control group design and quantitative approach was selected to carry out the study. The study population comprised of all IHD patients attending the cardiology OPD. The sample size for the study was 60 IHD patients.

Purposive sampling technique was used for selecting the sample of the study. The tools used for the study were : (i) Closed ended questionnaire to assess the knowledge regarding lifestyle modification of patients with IHD. Part A was for assessing demographic variables, and Part B was for lifestyle modification of IHD patients; and (ii) Self Instructional Module regarding lifestyle modification of IHD patients .

Results

The frequency and percentage distribution of demographic variables of ischemic heart disease revealed the following facts.

- 65 percent of IHD patients were in the age group of 41-50 years;
- 53.3 percent of the IHD patients were male where as 46.7% were females;
- 50 percent had secondary education;
- 43.3 percent were self employed or worked in private sector employees;
- 45 percent were in the monthly income group of Rs.7001-9000 where as 41.7 percent were in the monthly income group of Rs. 5001-7000.
- 68.3 percent patients belonged to nuclear families, whereas 31.7 percent of them were from joint families;
- 40 percent of patients had been diagnosed with IHD 1-3 years ago, 23.3 percent had been diagnosed 4-6 years ago and 36.7 percent had been diagnosed 7-9 years ago.

The overall pre-test mean score was 32.2 percent (11.28 ± 4.97) whereas, in post-test the mean score was 68.3 percent (23.9 ± 3.13) revealing the effective-

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ness of SIM regarding knowledge on life style modifications of the patients with IHD.

Paired 't' test was used to assess the significant difference between pre and post-test knowledge score regarding life style modification of patient with IHD. The findings shows there is a significant statistical difference between pre- and post-test at the level of $p<0.05$.

Chi square test was used to find out the association between post test knowledge scores and demographic variables of the patient with ischemic heart disease. No significant association was found between pre- and post-test knowledge scores of the patients with IHD when compared to age, gender, educational status, occupation, family monthly income, type of family and the duration of the disease.

Discussion

The discussion is based on the data procured from the study "assess the effectiveness of Self Instructional Module regarding lifestyle modification in patients with ischemic heart disease.

The pre-test mean score was 11.28 ± 4.97 which is 32.24 percent whereas, in post test the mean score was 23.9 ± 3.13 which is 68.29 percent revealing the effectiveness of Self Instructional Module regarding life style modifications of the IHD patients. This is supported by the study findings of Sholle OP (2006) who reported that the knowledge of patients with IHD is promoted significantly by education.

Since there was a highly significant difference between the area wise score values of pre-test, post-test and the overall score, hence, the null hypothesis ($H0_1$) was rejected and statistical hypothesis was accepted ($p<0.05$) indicating the effectiveness of the self instructional module. This is supported by the study conducted by Sedjo RL (2005), who assessed the knowledge of patients with ischemic heart disease regarding lifestyle modification. This study indicated that patients from experimental group had more knowledge of lifestyle modification than the patients of control group ($p<0.05$).

No significant association was found between post test knowledge scores of the patients with IHD when compared to age, gender, educational status, occupation, monthly family income, type of family and the duration of the disease. It is contradictory to the study conducted by Beresford SA (2004) who observed in her study that significant association was found between the knowledge scores when compared to the demographic data.

Conclusion

Educating the patients regarding cessation of smoking, proper diet, offering stress management techniques, techniques to reduce anxiety and counselling about job opportunities regards to IHD help the patients to adjust or changes the patient lifestyle thus preventing the progression of ischemic heart disease.

Implications

Nursing Service : The content of the self instructional module (SIM) will help the nursing professionals working in hospitals and community for reinforcing their knowledge on life style modification of ischemic heart disease. The findings will help the nursing personnel to estimate the effectiveness of self instructional module. The self instructional module can be used to educate the ischemic heart disease patient regarding life style modification.

Nursing Education: The nursing educators can prepare the nursing students to educate the patient on lifestyle modification of ischemic heart disease. Nurse educator should educate the nursing personnel and peripheral level health workers to improve the patient knowledge regarding lifestyle modification of Ischemic heart disease.

Nursing Research: The finding of the study can be utilised for conducting research using large sample. Further research on assessing the patients knowledge on practice towards the self instructional module.

Recommendations

- A large scale study can be done for replication to standardise the SIM on lifestyle modification of ischemic heart disease.
- Similar study can be conducted with an experimental research approach having a control group and randomisation.
- A video assisted teaching module can be prepared and tested for its effectiveness.
- A comparative study can be carried out to generalise the finding.

References

1. Barnett JW. "Ischemic Heart Disease Patients", *Nursing Journal of India* 2008; 160: 15-17
2. Beresford SA. "Effects of exercises training on left ventricular mass in patients with CAD", *American Heart Journal* 2004; 101: 701-05
3. Froelicher V. "Cardiac Rehabilitation Services with emphasis on patients following MI", *Journal of Intensive Care Nursing* 2000; 10: 79
4. Karen M Burke. Medical Surgical Nursing, Special edition series, Pearson Custom Publishing, Boston, 2002, pp 1081-82
5. Sedjo RL. Diet on MI. American College of Cardiology 2005; 4: 80: 1501-02.
6. Sholle OP. Cardiac Rehabilitation Program. *American Medical Journal* 2006; 64: 45-54