EFFECTIVENESS OF HEALTH PROMOTION PROGRAMME ON LEVELS OF KNOWLEDGE AND ATTITUDE REGARDING LIFE STYLE MODIFICATION AMONG PATIENTS WITH DIABETES MELLITUS AT GALAXY HOSPITAL

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ABSTRACT

Diabetes mellitus is a chronic condition but people with diabetes can lead a normal life. Life style modification can be a very effective way to keep diabetes under control. The research design used was pre-experimental, one group pre and post-test design. Non probability, purposive sampling was adopted to select 50 samples. Structured questionnaire was used to assess levels of knowledge and attitude regarding life style modification. Descriptive and inferential statistics were used for analysis and interpretation of data. Findings of the study showed that the pre-test mean value for levels of knowledge was 15.8 and post-test mean value was 32. The mean difference was 16.2. The computed 't' value ($t = 14$) was higher than table value (3.66) at $p < 0.001$ level. The chi-square values of selected demographic variables on post-test levels of knowledge show age, gender, religion, education, occupation, residential area, sources of information were significant at level $p < 0.05$. Marital status, monthly income, type of family, type of food, family history of DM, previous knowledge on DM were not significant at $p < 0.05$ level. The pre-test mean value for levels of attitude was 28 and post-test was 41. The mean difference was 13. The computed 't' value ($t = 14$) was higher than table value (3.66) at $p < 0.001$ level. The chi-square values of selected demographic variables on post-test levels of attitude were not significant at level $p < 0.05$. The study concludes that the most of the patients with diabetes mellitus have improvement in levels of knowledge and attitude after health promotion programme regarding life style modification.

Key Words: Effectiveness, Health promotion programme, Levels of knowledge and attitude, Life style modification.

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INTRODUCTION

Diabetes mellitus is a group of metabolic diseases characterised by increased level of glucose in the blood from defects in insulin secretion and insulin action or both. A prevalence of diabetes is rising all over the world due to population growth, ageing, urbanisation, increase in obesity and physical inactivity. The number of people most affected by diabetes in Asian countries is disproportionately high among young to middle-aged adults. This could have long-lasting adverse effects on a nation's health and economy, especially for developing countries. India, already the diabetic capital of the world, is heading towards a diabetic explosion. They expected 70 million people to be affected by 2019. A recent study did in Chennai and Kancheepuram shows an increase in prevalence of 40% in urban areas in six years, and 49% in rural areas in three years. This proves the general hypothesis of diabetics affecting more urbanites than rural people wrong,' says Indian diabetics research foundation president Dr. A. Ramachandran 2019. Diabetes mellitus is an increasingly important global public health problem that threatens to reach pandemic level by 2030. Some randomised trials have consistently shown, increased physical activity and weight loss are efficient approach for the control and prevention of diabetes (Global implications of Diabetics, June 2019).

NEED FOR THE STUDY

In 2019 the global prevalence of diabetes was estimated to be 9% among adults aged 18 and above years. In 2012, an estimated 1.5 million deaths were directly caused by diabetes. Diabetes will be the 7th leading cause of death in 2030. Healthy diet, regular physical activity, maintaining a normal body weight can prevent or delay the onset of diabetes.

In this contemporary world most of the people do not give more care to life style modification. In the developing and developed countries no one has time to understand their health and to give care to it. Clinical investigation found many patients with diabetic complications. This study helps to provide information to people about life style modifications and awareness of health, making them lead their remaining life satisfactorily.

STATEMENT OF THE PROBLEM

'Effectiveness of health promotion programme on levels of knowledge and attitude regarding life style modification among patients with diabetes mellitus at Galaxy Hospital'

OBJECTIVES

- To assess the pre-test levels of knowledge and attitude regarding life style modification among patients with diabetes mellitus.
- To determine the effectiveness of health promotion programme on levels of knowledge and attitude regarding life style modification among patients with diabetes mellitus.
- To determine the association between post-test levels of knowledge and attitude regarding life style modification and selected demographic variables among patients with diabetes mellitus.

HYPOTHESES

- H1-** There is a significant difference in pre- and post-test levels of knowledge regarding lifestyle modification among patients with diabetes mellitus.
- H2-** There is a significant difference in pre- and post-test levels of attitude regarding lifestyle modification among patients with diabetes mellitus.
- H3-** There is a significant association between post-test levels of knowledge regarding lifestyle modification and selected demographic variables among patients with diabetes mellitus.
- H4-** There is a significant association between post-test levels of attitude regarding lifestyle modification and selected demographic variables among patients with diabetes mellitus.

RESEARCH METHODOLOGY

Research approach: Quantitative approach.

Research design: Pre-experimental, one group pre-test post-test design

Setting of the study: Conducted in Galaxy Hospital at Tirunelveli in Tamil Nadu.

Population: Patients with Diabetes mellitus in Galaxy Hospital at Tirunelveli.

Sample and Sampling Technique —

Sample and sample size: 50 patients with Diabetes mellitus in Galaxy Hospital at Tirunelveli.

Sampling Technique: Non probability purposive sampling technique

Description of the Tool —

In this study the instrument consists of 3 sections: —

Section – A: Deals with demographic variables, such as age, gender, religion, marital status, educational status, occupation, monthly income, type of family, type of work, residential area, dietary pattern, habit, any family history of diabetes mellitus, previous knowledge on diabetes mellitus and sources of information.

Section – B: It consists of structured interview schedule to assess knowledge regarding life style modifications among patients with diabetes mellitus. It has 25 multiple choice questions. Each question has 4 options out of which one is the correct answer. For each correct response a score of 1' (one) and for wrong response 0' (zero) score are given. The total score is 25.

Section – C: It consists of five point Likert scale to assess the attitude regarding life style modifications among patients with diabetes mellitus. Total score was 25.

FINDINGS

The effectiveness of health promotion programme on life style modification was assessed by comparing Pre- and Post-tests scores.

Table - 1: Effectiveness of health promotion programme on levels of knowledge regarding life style modification among patients with Diabetes mellitus

Level of Knowledge	Mean	Standard Deviation	Mean Difference	Paired 'T' Test
Pre-test	15.8	7.34	16.2	14
Post-test	32.0	3.31		

Table - 1 showed that the pre-test mean value for levels of knowledge was 15.8 and post-test mean value was 32. The mean difference was 16.2. The computed 't' value ('t' = 14) was higher than table value (3.66) at $p < 0.001$ level

Table - 2: Effectiveness of health promotion programme on levels of attitude regarding life style modification among patients with Diabetes mellitus

Level of Attitude	Mean	Standard Deviation	Mean Difference	Paired 'T' Test
Pre-test	28	5.5	13	14
Post-test	41	3.5		

Table - 2 showed that the pre-test mean value for levels of attitude was 28 and in post-test mean value was 41. The mean difference was 13. The computed 't' value ('t' = 14) was higher than table value (3.66) at $p < 0.001$ level. The chi-square values of selected demographic variables on post-test levels of attitude was not significant at level $p < 0.05$. The chi-square values of selected demographic variables on post-test levels of knowledge showed age, gender, religion, education, occupation, residential area, sources of information were significant at level $p < 0.05$. Marital status, monthly income, type of family, type of food, family history of DM, previous knowledge on DM were not significant at $p < 0.05$ level.

CONCLUSION

The majority of the patients undergoing health promotion programme showed improvement in levels of knowledge regarding life style modification. Based on the study findings, there was significant increase observed in the levels of knowledge among patients with diabetes. The majority of the patients undergoing health promotion programme showed improvement in levels of attitude regarding life style modification. Based on the study findings, there was significant increase observed in the levels of attitude among patients with diabetes. The findings of the study were found consistent with the review of literature supports. The findings may be generalised in respect of the patients with diabetes mellitus.

RECOMMENDATIONS

On the basis of the study that had been conducted, following suggestions are given for future studies —

1. A similar study can be replicated on a subject with different demographic characteristics in different settings.
2. A comparative study can be done on rural and urban patients.
3. A similar study can be conducted with large sample size.
4. A study can be conducted to evaluate the life style intervention programme on patients with diabetes mellitus complications such as diabetic nephropathy, neuropathy, and retinopathy
5. Counselling programme based on diabetic's life style modification can be developed.
6. A study can be conducted to evaluate foot ulcer and its prevention in patients with diabetes mellitus.

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