Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING RISK OF MYOCARDIAL INFARCTION AND IMPORTANCE OF LIFE STYLE MODIFICATION AMONG TYPE-II DIABETES MELLITUS SUBJECTS RESIDING AT KAWARDHA, CHHATTISGARH.

Author's Name: Siji Samuel[1] Jency Sara Jose[2]

Affiliation:

1. Professor, Gracious College of Nursing, Kawardha, Kabirdham (C.G.), India.
2. Associate Professor, Gracious College of Nursing, Kawardha, Kabirdham (C.G.), India.

Corresponding Author Name & Email Id: Siji Samuel, sijisamuel@gmail.com.

ABSTRACT

The present study was aimed to assess the level of knowledge regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus. A experimental study was adopted for this study. A quantitative research approach and pre-experimental study is used in this study. In the present study population refers to Type-II DM subjects. In the present study, the target population refers to all the subjects of type-II DM. The accessible population is the 30 Type-II DM subjects residing in Kawardha, C.G. The samples of the study are DM-II subjects. The represented sample was selected by using convenient non probability sampling technique. The investigator selected 30 type-II DM subjects. Based on the objective of the study, structured multiple-choice questionnaire schedule will be appropriate method of data collection to assess the effectiveness of planned teaching programme regarding risk of myocardial infarction and importance of life style modification among type -II diabetes mellitus subjects. The result of the study was Paired "t" value were 13.65 at the level of P = 0.05 which shows highly significant means the STP was effective and it can be further implement in different population.

Keywords: Effectiveness, knowledge, Myocardium infarction, Life style modification and Diabetes Mellitus type-II.

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

INTRODUCTION

Joanna Poulton (2018) Primary prevention aimed to early diagnosis through screening programmes before the onset of disease. All people at risk should be regularly 2 screened and encouraged to pursue a healthy life style, including a healthy diet, adequate exercise and weight control. Secondary prevention can be achieved by meticulous control of diabetes with the help of diet, physical activity, drugs and life style modification process. Tertiary prevention of diabetes should be aimed at limiting physical disability and rehabilitation measures to prevent from going into end stage complication of diabetes. So home care management of diabetes has an important role in prevention of diabetes mellitus.

F Magkos (2017) The complete treatment of people with diabetes mellitus requires advocating a healthy life style which focus on increased physical activity and proper balanced diet to attain and maintain desirable body weight. Life style modifications are the corner stone of management of diabetes mellitus. Home care management includes healthy dietary measures, regular exercise, and management of stress and avoidance of tobacco. Diabetes education means empowering people with diabetes with knowledge and providing tools crucial for making them active partners in the diabetes management team.

F Magkos (2017) These include in depth information about diabetes, its complications and treatment, appropriate self-care skills, appropriate resources for self care, positive attitude and Self-monitoring skills. The compliance of people with diabetes is essential for effective management of diabetes. Education programmes are intended to help people to understand why these actions are so important and thereby increase their motivation for self management. The aim of dietary management is to achieve and maintain ideal body weight, euglycemia and desirable lipid profile, prevent or delay occurrence of complications related to diabetes and to provide optimal nutrition of diabetic subjects during pregnancy and old age. 3 Regular physical activity is an essential component of management in persons with type 2 diabetes.

RESEARCH PROBLEM

"A study to assess the effectiveness of planned teaching programme on knowledge regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus subjects residing at kawardha, Chhattisgarh."

OBJECTIVE OF THE STUDY

1. To assess the pre-test and post-test level of knowledge regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus subjects at selected community area Kawardha, (C.G.).

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

2. To assess the effectiveness of planned teaching program on knowledge regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus subjects at selected community area Kawardha, (C.G.).
3. To find out association between pre-test knowledge score regarding risk of myocardial infarction and importance of life style modification with their selected socio demographic variable.

MATERIAL AND METHOD

A quantitative research approach and pre-experimental study is used in this study. In the present study population refers to Type-II DM subjects. In the present study, the target population refers to all the subjects of type-II DM. The accessible population is the 30 Type-II DM subjects residing in Kawardha, C.G. The samples of the study are DM-II subjects. The represented sample was selected by using convenient non probability sampling technique for selecting 30 type-II DM subjects.

Researchers explained the main aim of the study.
Specification of the instrument and related measurement
Part A: Demographic Profile consists of 10 items.

Part B: Self-structured multiple-choice questionnaire. This section consists of 30 multiple-choice question each question is having 4 option each right answer is scoring 1 and wrong answer score 0.

RESULTS

Description of subjects according to sociodemographic variables by using frequency and percentage

Table I. It shows that majority of subjects 12 (40) were in age of 41-50 years, 8 (26.66) subjects were in age of 51-60 years, 8 (26.66) were more than 60 years and the remaining 02 (6.66) subjects were 30-40 years of age. It shows that majority of subjects 20 (66.66) were female and remaining 10 (33.33) were male. It shows that majority of subjects 20 (66.66) were illiterate, 4 (13.33) were high school , 3 (10) were both primary education and graduate and above. It shows that majority of subjects 12 (40) were laborer, 9 (30) were unemployed, 6 (20) were government employee, remaining 3 (10) were private employee and no one from business group. It shows that majority of subjects 24 (80) were Hindu, 4 (13.33) were Muslim and 2 (6.66) were Christian. It shows that majority of subjects 28 (93.33) were married and 2 (6.66) were widower. It shows that majority of subjects 16 (53.33) were nuclear family, 12 (40) were joint family and remaining 2 (6.66) were extended family. It shows that majority of subjects 22 (73.33) were 1 - 3 years, 5 (16.66) were 4 - 6 years and remaining 3 (10) were 7 - 12 years of duration. It shows that majority of subjects 17 (56.66) were vegetarian and remaining 13 (43.33) were non-vegetarian. It shows that majority of subjects 12 (40) were taking alcohol, 11 (36.66) were no bad

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

habits, 4 (13.33) were tobacco chewing/gudhakhu and remaining 3 (10) were smoking.

Table-1: Showing the frequency and percentage distribution of subjects according to socio-

Section–I: Frequency and Percentage Distribution of Subjects According to Socio-Demographic Variables.

(n = 30)

	DEMOGRAPHICAL DATE	FREQUENCY	PERCENTAGE %
1	**Age**		
A	30 -40	2	6.66%
B	41-50	12	40%
C	51-60	8	26.66%
D	More than 60	8	26.66%
2	**Gender**		
A	Male	10	33.33%
B	Female	20	66.66%
3	**Education**		
A	Illiterate	20	66.66%
B	Primary education	3	10%
C	High school	4	13.33%
D	Graduate & above	3	10%
4	**Occupation**		
A	Unemployed	9	30%
B	Laborer	12	40%
C	Government employee	6	20%
D	Private employee	3	10%
E	Business	0	0%
5	**Religion**		
A	Hindu	24	80%
B	Christian	2	**6.66%**
C	Muslim	4	13.33%
D	Any other	0	0%
6	**Marital status**		
A	Married	28	93.33%

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

B	Unmarried	0	0%
C	Widow	2	6.66%
D	Separated/divorced	0	0%
7	**Type of family**		
A	Nuclear	16	53.33%
B	Joint	12	40%
C	Extended	2	6.66%
8	**Duration of illness in those patients who are diagnosed with diabetes**		
A	1-3 years	22	73.33%
B	4-6years	5	16.66%
C	7-12 years	3	10%
D	13-years & above	0	0%
9	**Type of diet**		
A	Vegetarian	17	56.66%
B	Non-vegetarian	13	43.33%
10	**Bad Habits**		
A	Alcoholic	12	40%
B	Smoking	3	10%
C	Tobacco chewing /Gudakhu	4	13.33%
D	No bad habits	11	36.66%

Table –II: Overall analysis of pre-test and post-test knowledge score as per criteria by frequency and percentage.

(n = 30)

CATEGORY	KNOWLEDGE SCORE						
	Pre test				Post test		
	Range	f	Percentage	Mean	f	Percentage	Mean
Poor knowledge	**0 -10**	**14**	**46.66**	**6.28**	**0**	**0**	**0**
Average knowledge	**11-20**	**16**	**53.33**	**7.18**	**12**	**40**	**7.90**
Good knowledge	**21-30**	**0**	**0**	**0**	**18**	**60**	**11.86**

Table - II shows Overall analysis of pre-test and post-test knowledge score as per criteria by frequency and percentage.

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

In pre-test data majority of subjects in pre-test 16 (53.33) have average knowledge and remaining 14 (46.66) subjects have poor knowledge. In post-test majority of subjects 18 (60) of subjects have average knowledge and remaining 12 (40) have good knowledge.

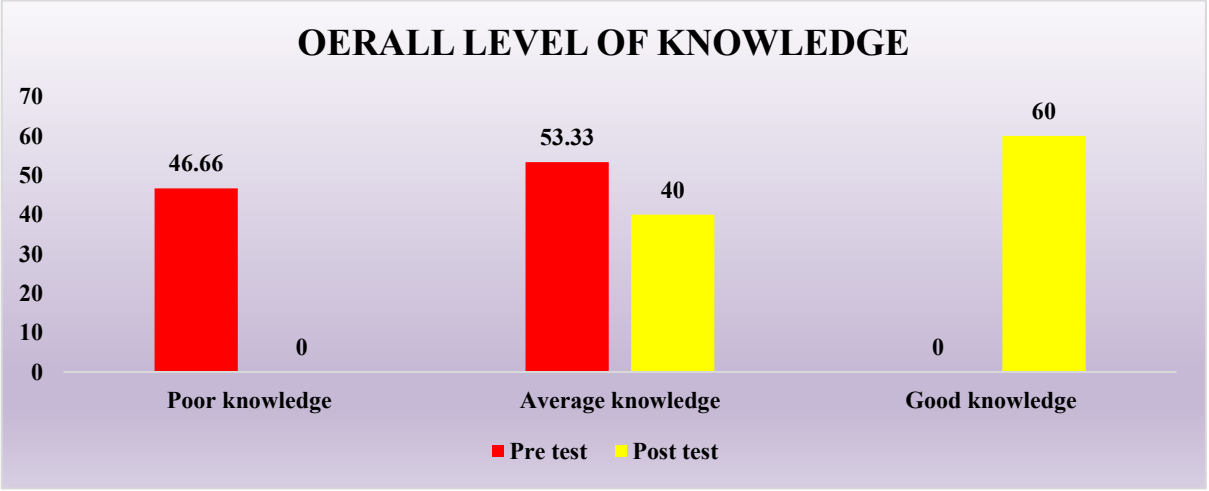

Fig -1: Bar diagram showing overall analysis of pre- test and post –test knowledge score.

Table -III: Area wise pre-test and post test score by using Mean, Mean percent, SD And CV.

(N = 30)

Area	Pre-test knowledge score				Post-test knowledge score			
	Mean	Mean percent	SD	CV	Mean	Mean percent	SD	CV
Question related to general information of myocardial infarction.	3.53	70.6	0.99	28.04	3.96	79.2	0.94	23.73
Questions related to warning signs of myocardial infarction in diabetes subjects.	1.1	55	0.7	63.63	1.23	61.5	0.71	57.72
Questions related to life style modification for prevention of myocardial infarction in subjects	5.06	46	1.89	36.62	7.06	64.18	1.43	20.25
Question related to exercise & meditation.	2.97	33	1.44	48.48	5.56	61.77	1.45	26.07
Question related to subjects' knowledge regarding habits	0.8	26.66	0.79	98.75	1.93	64.33	0.77	39.89
Total	**13.46**	**44.86**	**3.03**	**22.51**	**19.76**	**65.86**	**3.40**	**67.18**

Table – III in pre-test data were Question related to general information of myocardial infarction mean was 3.53, mean percent 70.60 and SD 0.99, Questions related to warning signs of myocardial infarction in diabetes subjects mean was 1.1, mean percent 55, SD 0.7. Questions related to life style modification for prevention of mi in diabetes mean was 5.06, mean percent 46 and SD was 1.89, Question related to exercise & meditation mean

was 2.97, mean percent 33, SD 1.44 and Question related to subjects knowledge regarding habits was 0.8, mean 26.66 and SD was 0.79. In post-test data were Question related to general information of

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

myocardial infarction mean was 3.96, mean percent 79.20 and SD 0.94, Questions related to warning signs of myocardial infarction in diabetes subjects mean was 1.23, mean percent 61.50, SD 0.71. Questions related to life style modification for prevention of mi in diabetes mean was 7.06, mean percent 61.77 and SD was 1.43, Question related to exercise & meditation mean was 5.56, mean percent 61.77, SD 1.45 and Question related to subjects knowledge regarding habits was 1.93, mean percent 64.33 and SD was 0.77.

Table – IV: "t" test analysis for effectiveness of planned teaching program

(N = 30)

	Mean	**SD.**	**df.**	**Paired t-test**	**P. Value**	**Table value**	**Inference**
Pre-test	**13.46**	**3.03**	**29**	**13.65**	**0.05**	**2.045**	Highly Significance
Post-test	**19.76**	**3.40**					

Table. IV- paired "t" value were 13.65 at the level of P = 0.05 which shows highly significant.

Table. V- Chi square analysis for association of pre-test knowledge score with selected socio-demographic variables.

S. No	**Socio-Demographic Variables**	**Knowledge score**		**Level of Significance**
		Chi-Square	**'P' Value**	
1.	**Age in years**	0.20	7.81	Not Significant
2.	**Gender**	0.26	3.84	Not Significant
3.	**Education**	3.41	7.81	Not Significant
4.	**Occupation**	3.66	7.81	Not Significant
5.	**Religion**	2.54	5.99	Not Significant
6.	**Marital Status**	0.009	3.84	Not Significant
7.	**Type of family**	0.11	5.99	Not Significant
8.	**Duration of illness in those subjects who are diagnosed with diabetes.**	**12.46**	**5.99**	**Significant**
9.	**Type of diet**	0.46	3.84	Not Significant
10.	**Bad habits**	3.23	7.81	Not Significant

Table –V Table depict that, duration of illness in those subjects who are diagnosed with diabetes were significant

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR

association with level of knowledge.

DISCUSSION

This chapter presents the analysis and interpretation of data collected to analyze the effectiveness of structured teaching programme in improving knowledge risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus subjects.

Descriptive and inferential statistics were used for the data analysis. The finding of the analysis indicates effectiveness of structured teaching programme in improving knowledge risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus subjects

CONCLUSION

On the basis of the findings of the present study, the following conclusion was drawn:

H_1- There significant increase in post-test knowledge score regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus Subjects.

The pre-test data mean was 13.46, mean percent 44.86, SD 3.03 and CV percent was 22.51. in post test data mean was 19.76, mean percent was 65.86, SD was 3.40 and CV was 21.

Hence, (H1): There significant increase in post-test knowledge score regarding risk of myocardial infarction and importance of life style modification among Type-II Diabetes Mellitus Subjects.

H_2- There significant association between pre-test knowledge score of Type-II diabetes mellitus subjects regarding risk of myocardial infarction and importance of life style modification with their selected socio demographic variables.

The calculated value of chi square for Duration of illness in those subjects who are diagnosed with diabetes is 12.46, df 2 and critical value at P=0.05 (5.99) were significant which shows there is significant association and its affect the level of knowledge.

REFERENCES

1. Aggarwal M, Aggarwal B, Rao J. Integrative Medicine for Cardiovascular Disease and Prevention. Med Clin North Am. 2017 Sep;101(5):895-923.
2. https://www.ncbi.nlm.nih.gov/books/NBK585052/
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2359621/
4. https://journals.sagepub.com/doi/10.1177/1559827608314095
5. https://dmsjournal.biomedcentral.com/articles/10.1186/s13098-023-01018-9
6. https://www.sciencedirect.com/science/article/pii/S0735109718346126

DOI Link :: https://doi-ds.org/doilink/07.2025-17675875/UIJIR