



A Quasi-Experimental Study To Assess The Effectiveness Of Interventional Package On Knowledge Regarding Self-Care Management Among Diabetic Clients Residing In Selected Urban Areas Of District Kangra, Himachal Pradesh.

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Abstract:

Healthy life style represents the persons in the society in a useful manner but unhealthy life styles among an individual were lead to a disease. Today increasing focus on health, health promotion, wellness and self - care. The aim of the study to assess the effectiveness of interventional package on knowledge regarding self -care management among diabetic clients residing in selected urban areas of District Kangra, Himachal Pradesh.

Methodology: A Quantitative research approach and quasi-experimental “One group pre-test and post-test” research design was adopted to conduct the study. The non-provability purposive sampling technique was used to select 60 diabetic clients. A self-structured knowledge questionnaire was used to assess the knowledge regarding self-care management. Analysis of collected data was done by using descriptive and inferential statistics.

Result: The study shows that (36.7%) were in age group of 41-50 years, (61.7%) were female, (48.3%) were graduated, (48.3%) private employee, (85.0%) were Hindu, (48.3%) had 10,001- 20,000 income per month, (63.3%) were from nuclear family, (55.0%) diabetic clients were vegetarian, (95.0%) diabetic clients were non- insulin dependent, (83.3%) were having a history of diabetes mellitus, (46.7%) were having a type-2 diabetes mellitus. The mean post-test knowledge score i.e. 21.08 was higher than mean pre-test i.e. 13.20 and obtained ‘t’ value has been found statistically very highly significant i.e. 30.265 at $p < 0.001$ level of significance which shows the significant difference between mean pre-test and post-test knowledge scores regarding self-care management.

Conclusion: Interventional package was an effective strategy for the improving knowledge regarding self-care management among diabetic clients. As diabetic clients were very possessive for their health. Diabetes is a chronic disease that requires daily decision about food intake, blood glucose testing, medication and exercise. As diabetic clients showed interest in interventional package. And also people were very busy in their daily work So with the help of interventional package they can easily read and understand things whenever they want.

Key-Words: Interventional package, Self-care management, Diabetic clients, Knowledge.

INTRODUCTION

“Alone, we can do so little; together, we can do so much

– Helen Keller.

Diabetes mellitus is a group of metabolic disorders arising either due to relative or absolute deficiency of a digestive hormone called insulin or inability or resistance of body cells to use the available insulin. Diabetes mellitus is a silent disease and is now recognized as one of the fastest growing threats to public health in almost all countries of the world. Every 5th person who suffers from diabetes in the world today is an Indian. India has now been declared by WHO as the diabetes capital of world. Diabetes is now growing as an epidemic in both developed and developing countries. India leads the world today with the largest number of diabetes in any given country followed by China and USA. Every day, every 21st seconds someone is diagnosed with diabetes. Although diabetes cannot be cured, the disease can be managed by non-pharmacological and pharmacological strategies, where improvements in glycaemic control is important factor in delaying the onset and progression of diabetes-related complications.

Diabetes is now emerging is an epidemic of the 21ST century. It threatens to overwhelm the health care system in the near future. The majority of the people with diabetes in developing countries are with in productive age range of 45 to 64 years. Besides their reduced productivity, diabetes further imposes a high economic burden in the terms of health care expenditure, lost productivity diabetes further imposes a high economic burden in terms of health care expenditure, lost productivity and foregone economic growth. To curb this scourge of diabetes, public health interventions are required to prevent diabetes or delay the onset of its complications.

Diabetes present in large scale around world which causing social, financial and health system burden across the world. According to IDF, it was estimated that in 2017 there are 451 million (age 18-99 years) people with diabetes worldwide. These figures were expected to increase to 693 million) by 2045. It was estimated that almost half of all people (49.7%) living with diabetes are undiagnosed. 1 Diabetes mellitus a medical condition that occurs when the body cannot use glucose (a type of sugar) appropriately.

NEED OF THE STUDY

Diabetes is an “ice berg” disease. According to recent estimates the prevalence of diabetes mellitus in adults was around 4% worldwide. This means that over 143million persons were affected. It is projected that the disease prevalence will be 5.4% by the year of 2025 with the global diabetic population reaching 300 millions, whereas in the developing world the majority of diabetes is aged 65 years and above. By 2030 as much as 9% of the population would be diabetic.

Diabetes is a chronic illness that requires continuing medical care and patient self-management education to prevent acute complications and to reduce the risk of long-term complications. Diabetes care is complex and requires that many issues, beyond glycaemic control, be addressed. A large body of evidence exists that supports a range of interventions to improve diabetes outcomes.

A study was conducted to estimate the prevalence of diabetes and the number of all age which diabetes for year 2000 and 2030. The prevalence of diabetes for all age group worldwide was estimated to be 2.8% in 2000 and 4.4% in 2030 the total number of Clients with diabetes project to rise from 171 million in 2000 to 366 million in 2030. The Even minor trauma can lead to infection of foot ulcers and amputation is major course of morbidity, disability and cost for Clients with diabetes mellitus.

The Worldwide prevalence of diabetes mellitus has risen dramatically in the developing countries over the past two decades. Regular screening of diabetic clients is essential for early detection and care. There are limited studies on diabetes awareness and prevalence in Himachal Pradesh. Hence this prevalence and knowledge assessment study was undertaken. Such data are extremely important to plan the public health policies with specific references to implementation of National Diabetic control Program. With this background, I planned to undertaken this study with the objective to increase the awareness of the diabetic clients regarding their self-care management.

PROBLEM STATEMENT

A Quasi-Experimental study to assess the effectiveness of interventional package on knowledge regarding self - care management among diabetic clients residing in selected urban areas of District Kangra, Himachal Pradesh.

OBJECTIVES:

- 1) To assess the pre-test knowledge scores regarding self -care management among diabetic clients.
- 2) To assess the post -test knowledge scores regarding self- care management among diabetic clients.
- 3) To compare the pre-test and post-test knowledge scores regarding self -care management among diabetic clients.

4) To find out the association of post- test knowledge scores regarding self- care management among diabetic clients with their selected socio demographic variables.

HYPOTHESES:

H₁: There will be significant difference between mean pre-test and post- test knowledge scores regarding self -care management among diabetic clients.

H₀₁: There will no significant difference between mean pre-test and post- test knowledge scores regarding self -care management among diabetic clients.

H₂: There will be significant association of post-test knowledge scores regarding self- care management among diabetic clients.

H₀₂: There will be no significant association of post-test knowledge scores regarding self-care management among diabetic clients with their selected socio demographic variables.

ASSUMPTION:

The purposed study assumed that:

- The diabetic clients may have some knowledge regarding self-care management.
- Interventional package may have some impact on the level of the knowledge regarding self - care management among diabetic clients.
- Diabetic clients may give accurate information.
- Knowledge questionnaire may help the researcher to collect relevant information related to the study.

DELIMITATION

- Only 60 diabetic clients were taken
- Study was conducted in selected urban areas.

MATERIAL AND METHOD

- **Research design:** One group pre-test and post-test research design
- **Research Setting:** Selected Urban areas of district Kangra (H.P)
- **Sample Size:** Diabetic clients residing in selected urban areas of district Kangra (H.P.), 60 samples.
- **Sample Technique:** Non-Probability purposive sampling technique
- **Dependent Variable:** In this study the dependent variable is diabetic clients residing in selected urban areas of district Kangra, (Himachal Pradesh).
- **Independent Variable:** In this study independent variable is interventional package on knowledge regarding self- care management.

DESCRIPTION OF TOOL

To accomplish the objectives of the study, Self-structured knowledge questionnaire was used to assess the effectiveness of interventional package on knowledge regarding self-care management among diabetic clients. It consisted of two sections:

Part-I:

Socio demographic variables. The first part of the tool consist of some items for obtaining an information about the selected background factor such as age (in years), gender, education status, occupation, religion, monthly family income (in rupees), types of family, types of food habits, types of diabetes mellitus, family history of diabetes mellitus (if yes then mention type-1 or type-2 diabetes mellitus) , provided care to the clients with diabetes mellitus, attended any educational programme and provide interventional package regarding diabetes mellitus.

Part-II:

Section A.

Self - structured knowledge questionnaire. It consist of self -structured knowledge questionnaire which seeks information regarding self-care management among diabetes clients. It consist of 30 items of multiple-choice questions where total score is 30.

Section B.

- Interventional package: It consist of formulated interventional package designed to provide information regarding self-care management among diabetic clients.

SCORING PATTERN:

The self -structured knowledge questionnaire consist of 30 questions. In which right answer was documented as correct one mark and wrong were documented were as zero marks. The completed range was 0-30.

KNOWLEDGE SCORE	PERCENTAGE	RANGE
Poor knowledge	≤ 33	1-10
Average knowledge	34-66	11-20
Good knowledge	≥ 67	21-30

ETHICAL CONSIDERATION

- 1.) A written permission was obtained from principal, Netaji Subhash college of Nursing, Palampur.
- 2.) Ethical Clearance was taken from ethical clearance committee of Netaji Subhash college of nursing Palampur.
- 3.) Written permission was taken from Parishad of selected urban area Palampur i.e. Palampur (Lohna ward no.-1), Palampur (ward no. -3) and Palampur (ward no. -8), and Baijnath in district Kangra Himachal Pradesh.
- 4.) Written informed consent was taken from each study sample anonymity and confidentiality of each sample will be assured and maintained throughout of the study.

SUMMARY

The research methodology adopted for the study. It included research approach, research design, research setting, target population, sample, sampling technique and sample size, inclusion and exclusion criteria, selection and development of tool, description of tool, validity of tool, reliability of tool, pilot study and procedure of data collection, ethical consideration and plan of data analysis.

RESULTS:

SECTION-1

DESCRIPTION OF SOCIO-DEMOGRAPHIC VARIABLES OF DIABETIC CLIENTS

This section describes the frequency and percentage distribution of socio-demographic variables like age, gender, education, occupation, religion, monthly family income, types of family, types of food habits, types of diabetes mellitus, family history of diabetes mellitus.

Table 1. Frequency and percentage distribution were calculated describing the socio-demographic variables.

S. No.	Socio-demographic variables	f	%
1.	Age (in years):		
	(a) 30-40	13	21.7%
	(b) 41-50	22	36.7%
	(c) 51-60	15	25.0%
	(d) 61-70	10	16.7%

2)	Gender:		
	(a) Male	23	38.3%
	(b) Female	37	61.7%
3)	Educational status:		
	(a) Non- formal	0	0.0%
	(b) Secondary	17	28.3%
	(c) Graduation	29	48.3%
	(d) Post-Graduation and above	14	23.3%
4)	Occupation:		
	(a) Self- employed	9	15.0%
	(b) Govt. employed	14	23.3%
	(c) Private employee	29	48.3%
	(d) None	8	13.3%
5)	Religion:		
	(a) Hindu	51	85.0%
	(b) Muslim	9	15.0%
	(c) Christian	0	0.0%
	(d) Other	0	0.0%
6)	Monthly Family income (in rupees)		
	(a) <5000	2	3.3%
	(b) 5001-10,000	5	8.3%
	(c) 10,001- 20,000	29	48.3%
	(d) >20,001 and above	24	40.0%
7.	Types of family:		
	(a) Joint	19	31.7%
	(b) Nuclear	38	63.3%
	(c) Extended Family	3	5.0%

8)	Types of food habits:		
	(a) Vegetarian	33	55.0%
	(b) Non-Vegetarian	27	45.0%
9)	Types of diabetes mellitus:		
	(a) Insulin Dependent	3	5.0%
	(b) Non- Insulin Dependent	57	95.0%
10)	Family History of diabetes mellitus:		
	(a) Yes	50	83.3%
	(b) No	10	16.7%
	If yes then mention Type-1 or Type-2 Diabetes Mellitus		
	• Type-1 Diabetes mellitus	22	36.7%
	• Type-2 Diabetes mellitus	28	46.7%

MAJOR FINDINGS

Section I: Frequency and percentage distribution of socio-demographic variables

- According to age group, majority of diabetic clients were in the age group of 41-50 years (36.7%), 25.0% of diabetic clients were in the age group of 51-60 years, 21.7% of diabetic clients were in the age group of 30-40 years, and 16.7% were in the age group of 61-70 years.
- According to gender, majority of diabetic clients 38.3% were male and 61.7% were female.
- According to educational status majority of (48.3%) diabetic clients were graduated, (28.3%) were secondary, (23.3%) were post-graduated.
- According to occupation majority of 48.3% diabetic clients were private employee, 23.3% were Govt. employee, 15.0% self -employed and only 13.3% were unemployed.
- According to religion majority of diabetic clients 85.0% were Hindu, 15.0% were Muslim and no one belongs to Christian and others religion.
- According to monthly family income (in rupees), majority of diabetic clients (48.3%) family monthly income was Rs 10,001- 20,000, (40.0%) family monthly income was more than Rs 20,001 and above, (8.3%) family monthly income was Rs. 5001-10,000 and (3.3%) family monthly income was less then Rs 5000.
- According to type of family majority of 63.3% were from nuclear family, 31.7% were joint family and 5.0% were from extended family.

- According to types of food habit majority of 55.0% diabetic clients were vegetarian and 45.0% were non-vegetarian.
- According to types of Diabetes Mellitus majority of 95.0% diabetic clients were non-insulin dependent and 5.0% were insulin dependent.
- According to family history of diabetes mellitus majority of 83.3% were having a history of diabetes mellitus and 16.7% were not having a history of diabetes mellitus. Type-1 or Type-2 Diabetes mellitus majority of 46.7% were having a type-2 diabetes mellitus and 36.7% were having a type-1 diabetes mellitus.

SECTION -II

ASSESS THE PRE-TEST KNOWLEDGE SCORE REGARDING SELF -CARE MANAGEMENT AMONG DIABETIC CLIENTS.

This section describes the findings related to the frequency, percentage, distribution and mean, median standard deviation, maximum, minimum and mean percentage of pre-test knowledge scores regarding self -care management among diabetic clients obtained through self-structured knowledge questionnaire. The data is represented in the form of frequency percentage distribution according to knowledge scores.

TABLE-2

Frequency and percentage distribution of pre-test knowledge scores regarding self -care management.

N=60		
<u>Level of Knowledge</u>	<u>Pre-test Knowledge score</u>	<u>Frequency (%)</u>
Poor	0-10	7 (11.7%)
Average	11-20	53 (88.3%)
Good	21-30	0 (0%)

Maximum Score=30

Minimum Score =0

Shows frequency and percentage distribution of pre-test knowledge scores regarding self-care management among diabetic clients. The majority of diabetic clients i.e.88.3% were having average knowledge, 11.7% were having poor knowledge and 0% were having good knowledge regarding self-care management among diabetic clients during their pre-test.

TABLE -3

MEAN, MEDIAN, STANDARD DEVIATION, MAXIMUM, MINIMUM SCORE AND MEAN PERCENTAGE OF PRE-TEST KNOWLEDGE SCORE

This table describe the mean, median, standard deviation, maximum, minimum and mean percentage of pre-test knowledge score through self-structured knowledge questionnaire regarding self-care management among diabetic clients.

N=60

Level of knowledge	MEAN	S.D.	Median	Maximum	Minimum	Mean%
Pre-test Knowledge Scores	13.20	1.695	13.5	15	8	44.00

Maximum=30**Minimum=0**

The data depicted in Table -3 Shows the mean, median, standard deviation, maximum, minimum and mean percentage of pre-test knowledge regarding self-care management among diabetic clients. The Knowledge of mean pre-test score was 13.20, standard deviation score was 1.695, median score was 13.5, maximum score was 15, minimum score was 8 and mean percentage score was 44.00 through the self-structured knowledge questionnaire regarding self-care management among diabetic clients.

SECTION-III

ASSESS THE POST -TEST KNOWLEDGE SCORES REGARDING SELFCARE MANAGEMENT AMONG DIABETIC CLIENTS.

This section describes the findings related to the frequency, percentage distribution and post-test knowledge scores regarding self-care management among diabetic clients obtained through self-structured knowledge questionnaire. The data is represented in in the form of frequency, percentage distribution according to the knowledge scores.

TABLE- 4

Frequency and percentage distribution of post-test knowledge scores regarding self-care management among diabetic clients.

N=60

Level of Knowledge	Post-test Knowledge score	Frequency (%)
Poor	0-10	0(0%)
Average	11-20	27(45%)
Good	21-30	33 (55%)

Maximum Score=30**Minimum Score =0**

Table -4 Shows the findings related to frequency and percentage distribution of post-test knowledge scores regarding self-care management among diabetic clients. The majority of diabetic clients 55% were having good knowledge,45% were having average knowledge through self-structured knowledge questionnaire regarding self-care management among diabetic clients after their post-test.

TABLE – 5

MEAN, MEDIAN, STANDARD DEVIATION, MAXIMUM, MENIMUM SCORE AND MEAN PERCENTAGE OF POST-TEST KNOWLEDGE SCORE.

This table describes the mean, median, standard deviation, maximum, minimum and mean percentage of post-test knowledge scores through self-structured knowledge questionnaire regarding self-care management among diabetic clients.

N=60

<u>Level of knowledge</u>	<u>Mean</u>	<u>S.D.</u>	<u>Median</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Mean%</u>
Post-test						
Knowledge Scores	21.08	1.825	21	26	17	70.30

Maximum Score=30

Minimum Score =0

Table -5: Shows the mean, median, standard deviation, maximum, minimum and mean percentage of post-test knowledge scores after interventional package on knowledge regarding self - care management among diabetic clients. The Knowledge of mean post-test score was 21.08, standard deviation score was 1.825, median score was 21, maximum was 26, minimum score was 17, Range score was 9 and mean percentage score was 70.30 after interventional package on knowledge regarding self - care management among diabetic clients.

SECTION -1V

COMPARISON BETWEEN PRE-TEST AND POST-TEST KNOWLEDGE SCORES REGARDING SELF-CARE MANAGEMENT AMONG DIABETIC CLIENTS.

This section describes the significant difference between mean of pre-test and post-test knowledge scores regarding self-care management among diabetic clients. In order to find out the significant difference between knowledge scores among diabetic clients following hypothesis was tested. H1: There will be significant difference between mean pre-test and post- test knowledge regarding self -care management among diabetic clients. H01: There will be no significant difference between mean pre-test and post- test knowledge regarding self -care management among diabetic clients.

Table-6

N=60

<u>Level of knowledge</u>	<u>Mean</u>	<u>SD</u>	<u>Mean%</u>	<u>Range</u>	<u>Mean Difference</u>	<u>t value</u>	<u>pval.</u>
<u>Pre-test knowledge</u>	13.2	1.695	44.00	8-15			
<u>Post-test knowledge</u>	21.08	1.825	70.30	17-26	7.880	30.265*Sig	0.001
Maximum Score=30				Minimum Score =0			

Significant Level= 0.05

Table-6: shows the findings related to comparison between pre-test and post-test knowledge scores regarding self-care management among diabetic clients. The data depicts in table 6 shows the effectiveness of interventional package on knowledge regarding self - care management among diabetic clients. The mean post-test knowledge score (21.08) was higher than mean pre-test knowledge score (13.2) and obtained 't' value has been found statistically very highly significant (30.265) at $p < 0.001$ level of significance which shows the significant difference between mean pre-test and post-test knowledge scores regarding self-care management among diabetic clients. Hence, the research hypothesis H_1 was accepted and null hypothesis H_{01} was rejected.

SECTION -V

ASSOCIATION OF POST- TEST KNOWLEDGE SCORE REGARDING SELF- CARE MANAGEMENT AMONG DIABETIC CLIENTS WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

This section deals with the findings related to association of post- test knowledge score regarding self- care management among diabetic clients with their selected socio demographic variables. The chi-square test was used to determine the association between the knowledge scores and selected demographic variables.

- **H₂**: There will be significant association of post-test knowledge regarding self- care management among diabetic clients.
- **H₀₂**: There will be no significant association of post-test knowledge regarding self-care management among diabetic clients with their selected socio demographic variables.

TABLE-7

CHI SQUARE SHOWING ASSOCIATION OF POST-TEST KNOWLEDGE SCORES REGARDING SELF- CARE MANAGEMENT AMONG DIABETIC CLIENTS WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

Socio-demographic variables	Good	Average	Poor	df	χ^2	p value
1) Age (in years)						
• 30-40 years	8	5	0	3	1.287 ^{NS}	0.732
• 41-50 years	10	12	0			
• 51-60 years	9	6	0			
• 61-70 years	6	4	0			
2) Gender						
• Male	15	8	0	1	1.573 ^{NS}	0.210
• Female	18	19	0			
3) Education Status						
• Non-formal	0	0	0	2	1.203 ^{NS}	0.548
• Secondary	11	6	0			
• Graduation	14	15	0			
• Post-graduation and above	8	6	0			
4) Occupation						
• Self-employed	4	5	0	3	7.015 ^{NS}	0.071
• Govt employee	11	3	0			
• Private employee	12	17	0			
• None	6	2	0			
5) Religion						
• Hindu	27	24	0	1	0.582 ^{NS}	0.445
• Muslim	6	3	0			
• Christian	0	0	0			
• Others	0	0	0			
6) Monthly Family Income (in rupees)						
• < Rs 5000	1	1	0	3	4.033 ^{NS}	0.258
• Rs 5001-10,000	1	4	0			
• Rs 10,001-20,000	19	10	0			

• > Rs 20,001 and above	12	12	0			
7) Types of Family						
• Joint	9	10	0	2	2.903 ^{NS}	0.234
• Nuclear	21	17	0			
• Extended	3	0	0			
8) Types of food habit						
• Vegetarian	17	16	0	1	0.360 ^{NS}	0.549
• Non-vegetarian	16	11	0			
9) Types of diabetes mellitus						
• Insulin dependent	1	2	0	1	0.599 ^{NS}	0.439
• Non- insulin dependent	32	25	0			
10) Family History of diabetes mellitus						
• Yes	29	21	0	1	1.091 ^{NS}	0.296
• No	4	6	0			
If yes then mention Type-1 or Type-2 diabetes mellitus						
Type-1	12	10	0	1	0.192 ^{NS}	0.661
Type-2	17	11	0			

*= Significant

NS= Not significant

The data depicted socio-demographic in Table-7, association between post-test knowledge scores among diabetic clients with their selected socio-demographic variables regarding self-care management.

According to age (in years), the obtained chi-square value was 1.287 which is less than table value hence there is no association between post-test knowledge scores among diabetic clients and age at 0.001 and 0.05 level of significance.

According to gender, the obtained chi-square value was 1.573 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and gender at 0.001 and 0.05 level of significance.

According to education status the obtained chi- square value was 1.203 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and education at 0.001 and 0.05 level of significance.

According to occupation the obtained chi- square value was 7.015 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and occupation at 0.001 and 0.05 level of significance.

According to religion the obtained chi- square value was 0.582 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and religion at 0.001 and 0.05 level of significance.

According to Monthly Family income (in rupees) the obtained chi- square value was 4.033 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and monthly income at 0.001 and 0.05 level of significance.

According to types of family the obtained chi- square value was 2.903 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and types of family at 0.001 and 0.05 level of significance.

According to types of food habit the obtained chi- square value was 0.360 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and types of food habit at 0.001 and 0.05 level of significance.

According to types of diabetes mellitus the obtained chi- square value was 0.599 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and types of diabetes mellitus at 0.001 and 0.05 level of significance.

According to family history of diabetes mellitus the obtained chi- square value was 1.091 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and family history of diabetes mellitus at 0.001 and 0.05 level of significance.

According to if yes then mention type-1 or type-2 diabetes mellitus the obtained chi- square value was 0.192 which is less than the table value hence there is no association between post-test knowledge scores among diabetic clients and if yes then mention type-1 or type-2 diabetes mellitus at 0.001 and 0.05 level of significance.

Hence the research hypothesis H_2 was partially accepted and null hypothesis H_{02} was partially rejected.

SUMMARY OF THE CHAPTER

This chapter deals with the analysis and interpretation of data collected to assess the knowledge regarding self-care management among diabetic clients. Descriptive and inferential statistics were used to analyse the data. The analysed data was interpreted and presented in the form of tables and bar graph.

The interventional package was found effective to improve knowledge regarding self - care management among diabetic clients.

DISCUSSION

The purpose of the study was to assess the effectiveness of interventional package on knowledge regarding self - care management among diabetic clients residing in selected urban areas of District Kangra, Himachal Pradesh. This chapter relates the findings of the present study in accordance with the studies done earlier.

Analysis of the study indicated the significant effect of interventional package on knowledge regarding self-care management among diabetic clients.

The present study shows interventional package is effective in improving the knowledge scores among diabetic clients i.e. from mean pre-test knowledge scores (13.20) to post -test mean knowledge scores (21.08). The findings were consistent with the findings of 't' value obtained was (30.265) at $p < 0.001$ level of significance which is very highly significant. The post-test score was high as compare to pre-test score, Which shows the effectiveness of interventional package. Hence, the research hypothesis H_1 was accepted and null hypothesis H_{01} was rejected.

In this study there was no significant association of post-test knowledge scores with their selected socio-demographic variables. i.e. (age, gender, occupation, education status, family history of diabetes mellitus, previous knowledge, if yes then source of knowledge previously attend any educational programme, provide care to the clients.) According to all the socio-demographic variables, the obtained chi-square value was less than the table value so there is no association between post-test knowledge scores among diabetic clients at 0.001 and 0.05 level of significance. Hence, research hypothesis H_2 was rejected and null hypothesis H_{02} was accepted.

Similar findings had been found by **Jalal M. S. (2016)** findings shows that the mean score was poor practice in pre-test and it was reduced to 22% and 27% in post- test respectively. This study concluded that interventional package was effective in imparting knowledge regarding self-care management among diabetic clients.

MAJOR FINDINGS

Section I: Frequency and percentage distribution of socio-demographic variables:

- ✚ According to age group, majority of diabetic clients were in the age group of 41-50 years (36.7%), 25.0% of diabetic clients were in the age group of 51-60 years, 21.7% of diabetic clients were in the age group of 30-40 years, and 16.7% were in the age group of 61-70 years.
- ✚ According to gender, majority of diabetic clients 38.3% were male and 61.7% were female.
- ✚ According to educational status majority of (48.3%) diabetic clients were graduated, (28.3%) were secondary, (23.3%) were post-graduated.

- ✚ According to occupation majority of 48.3% diabetic clients were private employee, 23.3% were Govt. employee, 15.0% self-employed and only 13.3% were unemployed.
- ✚ According to religion majority of diabetic clients 85.0% were Hindu, 15.0% were Muslim and no one belongs to Christian and others religion.
- ✚ According to monthly family income (in rupees), majority of diabetic clients (48.3%) family monthly income was Rs 10,001- 20,000, (40.0%) family monthly income was more than Rs 20,001 and above, (8.3%) family monthly income was Rs. 5001-10,000 and (3.3%) family monthly income was less than Rs 5000.
- ✚ According to type of family majority of 63.3% were from nuclear family, 31.7% were joint family and 5.0% were from extended family.
- ✚ According to types of food habit majority of 55.0% diabetic clients were vegetarian and 45.0% were non-vegetarian.
- ✚ According to types of Diabetes Mellitus majority of 95.0% diabetic clients were non- insulin dependent and 5.0% were insulin dependent.
- ✚ According to family history of diabetes mellitus majority of 83.3% were having a history of diabetes mellitus and 16.7% were not having a history of diabetes mellitus. Type-1 or Type-2 Diabetes mellitus majority of 46.7% were having a type-2 diabetes mellitus and 36.7% were having a type-1 diabetes mellitus.

Section II: Findings related to the pre-test knowledge score:

- ✚ The majority of diabetic clients i.e. 88.3% were having average knowledge, 11.7% were having poor knowledge and 0% were having good knowledge regarding self-care management among diabetic clients.

Section III: Findings related to the post-test knowledge scores:

- ✚ The majority of diabetic clients i.e. The majority of diabetic clients 55% were having good knowledge, 45% were having average knowledge through self-structured knowledge questionnaire regarding self-care management among diabetic clients.

Section IV: Findings related to the comparison between the pre-test and post-test knowledge scores regarding self-care management among diabetic clients:

- ✚ The data depicts that in pre-test, diabetic clients with poor knowledge have frequency score of 7 and percentage of 11.7% where as in post-test the frequency was 0 and percentage was also 0%. Among average knowledge of diabetic clients, the frequency was 53 and percentage was 88.3% in pre-test, whereas in post-test frequency 27 and percentage was 45%. Among good knowledge of diabetic clients, the frequency was 0 and percentage 0%, whereas in post-test frequency was 33 and percentage was 55%.

Section V: Findings related to the association of post-test knowledge score regarding self-care management among diabetic clients with their selected socio-demographic variables.

✚ It was observed that there was no significant association of post-test knowledge scores with their selected socio-demographic variables i.e. age (in years), gender, education status, occupation, religion, monthly family income (in rupees), types of family, types of food habits, types of diabetes mellitus, family history of diabetes mellitus (if yes then mention type-1 or type-2 diabetes mellitus).

According to all socio-demographic variables, the obtained chi-square value was less than the table value so there is no association between post-test knowledge scores among diabetic clients at 0.001 and 0.05 level of significance.

Hence, research hypothesis H_2 was rejected and null hypothesis H_{02} was accepted.

DATA COLLECTION PROCESS

✚ Data was collected through demographic data sheet for assessment of demographic variables such as age, gender, education status, occupation, religion, monthly family income (in rupees), types of family, types of food habits, types of diabetes mellitus, family history of diabetes mellitus (if yes then mention type-1 or type-2 diabetes mellitus).

Self-structured questionnaire was used to assess the knowledge regarding self-care management among diabetic client residing in selected urban area Distt. Kangra Himachal Pradesh.

CONCLUSION

The result from this study reveals the implication of interventional package on knowledge regarding self-care management among diabetic clients was adequate. As diabetic clients were easily attracted and shows interest towards interventional package. Chi square value had no significant association between knowledge score regarding self-care management among diabetic clients with their selected socio demographic variables had no effect on knowledge on interventional package regarding self-care management among diabetes mellitus.

We hypothesized that providing educational programme with the use of interventional package may improve the knowledge regarding self-care management among diabetic clients. This hypothesis was supported by the findings of the current study as score of knowledge improved significantly after interventional package.

Hence it was concluded that the use of interventional package is an effective strategy for improving the knowledge regarding self-care management among diabetic clients.

SUMMARY

This chapter includes summary, major findings of the study, conclusion, limitations, implications and recommendations of the study.

REFERENCES

- 1) R. Mehmooda 2019 “Effectiveness of structure teaching programme on self-care of patients with diabetes mellitus” Available site <https://www.communitynursing.net> 1-1-22 (communitynursing.net)
- 2) K. Maina William .2010 “Knowledge attitude and practices related to diabetes among community members in four provinces in Kenya: a cross- sectional study” available from <http://www.ncbi.nlm.nih.gov/pmc/articles/3172632>
- 3) Doddamani K.2022 “ Effectiveness of Interventional Package on Diabetes Distress and Quality of Life among Diabetic Patients” (ijshr.com) _Vol.7_Issue.1_Jan2022/IJSHR06. DOI: <https://doi.org/10.52403/ijshr.20220106> available from <https://www.ijshr.com/>
- 4) Duvuuri V. 2002 Jan: “Diabetes mellitus”19(1);79-107 DOI: 10.1016/S0891-8422(03)00082-X Diabetes mellitus - PubMed (nih.gov) 118067 available from <https://europepmc.org/article/MED/11806167>
- 5) M.D. 2002 “Diabetes mellitus 3001189devis.pdf (repository-tnmgrmu.ac.in)
- 6) J. S. Missiriya November 2016 “Knowledge and Practice of Self Care Management on Diabetes Mellitus among Urban People” (researchgate.net) available from https://www.researchgate.net/publication/311352264_
- 7) Seshiah D. “Overview of Diabetes Burden” Available from <https://www.nhp.gov.in>