EFFECTIVENESS OF VIDEO ASSISTED TEACHING (VAT) PROGRAM ON KNOWLEDGE, REGARDING FOOT CARE AMONG URBAN PATIENTS & RURAL PATIENTS DIAGNOSED WITH DIABETES MELLITUS TYPE-2 IN SELECTED HOSPITAL IN GWALIOR (M.P)

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ABSTRACT:

Introduction: India has a high prevalence of diabetes mellitus and the numbers are increasing at an alarming rate. In India alone, diabetes is expected to increase from 40.6 million in 2006 to 79.4 million by 2030. Diabetic foot complications are more in the patients with diabetes. These can be prevented by regular health checkup and foot examination.

A study was conducted to assess the effectiveness of video assisted teaching (VAT) programme on knowledge regarding foot care among urban patients & rural patients diagnosed with diabetes mellitus type 2 in selected hospital in Gwalior (M.P)

Methodology: Research design: one group Pre experimental research design with comparative study. Total 300 diabetic patients were selected from urban and rural (150 each) by non-probability convenient sampling technique. The tools used were 1. Demographic variables 2. Structured knowledge questionnaire the descriptive and inferential statistics were used to analyze the data.

Result: mean post test knowledge scores regarding foot care among urban and rural patients diagnosed with diabetes mellitus type-2 Significantly higher than their mean pretest knowledge score The study concludes that the video assisted teaching program was effective in enhancing the knowledge, of diabetes mellitus patients regarding foot care.

Key word: Comparative, Effectiveness, Video Assisted teaching {VAT} Knowledge, , Foot care , Rural patient Urban patient , Diabetes Mellitus Type- 2

Introduction: Diabetes is a metabolic, chronic disease caused by deficiency of insulin production from pancreas or insufficient utilization of insulin in the cells. Due to this there is hyperglycemia, it is one of effect of diabetes which may lead to serious damage to the, kidneys and nerves. Around the world 400 million people living with diabetes 1

The diabetic foot ulceration prevalence in the population with diabetes is around 4–10%. This condition more often occur in patients of older age group. About 5% of all diabetic patients with a history of foot ulceration was estimated, whereas in developing this complication the lifetime risk of patients with diabetes is 15%2

According to several studies, most of the diabetes people don't get guideline-recommended foot care and regular foot examinations. In, 33 % people suffering

with diabetes hardly received information regarding foot care.

In another study carried out, 87 % patients confirmed that their feet were not inspected, and 66 % showed no interest in further acquaintance of diabetes foot care3.

Statement- Effectiveness of video assisted teaching (VAT) program on knowledge, regarding foot care among urban patients & rural patients diagnosed with diabetes mellitus type-2 in selected hospital in Gwalior (M.P)

Objectives- To assess the pretest and post test knowledge score regarding foot care among urban and rural patients diagnosed with diabetes mellitus type-2 in selected hospital.2 To administer the video assisted teaching (VAT) programme on knowledge, regarding foot care among urban patients & rural patients

diagnosed with diabetes mellitus type 2 in selected hospital.³ To compare posttest knowledge regarding foot care among urban and rural patients diagnosed with diabetes mellitus type -2 in selected hospitals.⁴ To find out the association between post test mean knowledge score regarding foot care among urban and rural patient diagnosed with diabetes mellitus -2 in selected hospitals with their selected socio demographic variables.

Methodology- Quantitative, comparative evaluative approach used and Pre experimental research design with one group pre test and post test was adopted for the study. The main study was conducted at Diabetic centre Gwalior. The population comprised patient who diagnosed with diabetes mellitus type- 2 .The samples were patient diagnosed with diabetes mellitus type 2 visiting the outpatient at selected hospital of Gwalior. Non probability convenient sampling technique was used. the sample size were 150each from rural and urban setting The tools used for data collection were: Socio Demographic profile, Structured knowledge questionnaire used for data collection.

Hypothesis:

- H1: There will be significant difference between the pretest and post test knowledge, score regarding foot care among urban patient & rural patient diagnosed with diabetes type -2 in selected hospitals.
- H2: There will be significant comparison between the pre test and post test knowledge score regarding foot care among urban and rural patient diagnosed with diabetes mellitus type-2 in selected hospital.
- H3: There will be a significant association between post test mean knowledge score regarding foot care among urban & rural patient diagnosed with diabetes mellitus type-2 in selected hospital with their selected socio demographic variables.

Inclusion Criteria

1. Patients diagnosed with Diabetes mellitus Type- 2 willing to participate.
2. Patients diagnosed with Diabetes Mellitus Type- 2 present at the time of data collection.
3. Patients who were able to read and write and converse in Hindi.

Exclusion Criteria

- Diabetes mellitus type-2 patients who are seriously ill.
- Diabetes mellitus type-2 patients who are comatose with diabetic keto acidosis.
- The patients who will not able to give consent and those cannot give consent or communicate will be excluded from the study.

Section II: Finding related to Pretest knowledge score regarding foot care among urban and rural patients.

Table.1. Description of pre test levels of knowledge score regarding foot care among Urban and rural Patients.

N=300

Sr. No	Pre test levels of knowledge	Urban		Rural	
		F	%	F	%
1	Inadequate Knowledge	88	58.67	107	71.33
2	Moderately Adequate knowledge	44	29.33	32	21.33
3	Adequate knowledge	18	12.00	11	7.33

Table 1. Describes the pre test levels of knowledge of urban and rural patients on diabetic foot care. In the pre test among urban patients, 88(58.67%) inadequate knowledge, 44(29.33%) were had moderately adequate knowledge, and 18(12%) had adequate knowledge. In rural, 107(71.33%) were had inadequate knowledge, 32(21.335) had moderately adequate knowledge and 11(7.33%) had adequate knowledge.

Table 2. Description of post test levels of knowledge regarding foot care among Urban and rural Patients.

Sr No	Knowledge	Max	Urban Patients					Paired t test
			Range	Mean	Median	SD	Mean%	
1	Pre test	40	15-33	17.23	18	4.33	43.075	23.34, Df=14 9, p<0.05, S*
2	Post test	40	19-38	28.93	29	3.11	79.82	
3	Difference	40	7-15	11.7	11	2.87	36.74	

Table 2 Describes the post test levels of knowledge regarding diabetic foot care. Among urban, 121(80.67%) were had adequate knowledge, 29(19.33%) had moderately adequate knowledge and none of the respondents were had adequate knowledge. In rural, 101(67.33%) were had adequate knowledge, 41(27.33%) had moderately adequate knowledge, and 8(5.33%) had inadequate knowledge.

Section III: Findings related to effectiveness of video assisted teaching program in terms of comparison of pre test and post test knowledge scores in the urban and rural group.

Table. 3 Comparison between pre test and post test knowledge score of urban

Sr. No	Post test levels of knowledge	Urban		Rural	
		F	%	F	%
1	Inadequate Knowledge	0	0.00	8	5.33
2	Moderately Adequate knowledge	29	19.33	41	27.33
3	Adequate knowledge	121	80.67	101	67.33

patients. N=150

The table 3 describes the effectiveness of VAT on diabetic foot care among the urban patients, the mean percentage difference was 36.74% with mean and SD of 11±2.87. The paired t test value was 23.34, df=149 this suggested the effectiveness of VAT increasing the knowledge regarding foot care among Urban Patient.

Table. 4. Comparison between pre test and post test knowledge score of rural patients.

Sr No	Knowledge	Max	Rural Patients					Paired t test
			Range	Mean	Median	SD	Mean%	
1	Pre test	40	12-30	14.39	14	5.12	35.975	28.34, Df=14 9, p<0.05, S*
2	Post test	40	18-32	23.45	24	3.56	69.62	
3	Difference	40	8-14	9.06	11	2.87	33.645	

Table 4 describes the effectiveness of VAT on knowledge regarding diabetic foot care, the mean percentage difference was 33.64% with mean and SD of 9.06±2.87. The paired t test value was 28.34, df=149 this suggested the effectiveness of VAT increasing the knowledge regarding foot care among rural Patients.

Section IV: Findings related to Comparison between pre tests and post test knowledge scores in the urban and rural group.

Table 5. Comparison between the pre test levels of knowledge between the rural and urban patients regarding foot care. N=300

s.N	Knowledge	Max	Pre test					Unpaired t test
			Range	Mean	Median	SD	Mean%	
1	Urban	40	15-33	17.23	18	4.33	43.075	13.11, df=2 98, p<0.05, S*
2	Rural	40	12-30	14.39	14	5.12	35.975	
3	Difference	40	3-8	2.84	3	1.34	7.1	

The unpaired t test was used to assess the comparison between the urban and rural diabetic patients.

Table 5 describes the pre test levels of knowledge between the urban and rural areas. The mean difference was 7.1% with

mean and SD of 2.8 ± 1.34 . The unpaired t test value was 13.11, shown significant difference between pre tests and post test knowledge scores in the urban and rural group

Table 6. Comparison between the post test levels of knowledge between the rural and urban patients regarding foot care.

N=300

S r N o	Know ledge	M a x	Post test					Unp aired t test
			Ra ng e	M ea n	Med ian	S D	Me an %	
1	Urban	40	19-38	28.93	29	3.11	79.82	13.21 , df=2 98, P<0.05, S*
2	Rural	40	18-32	23.45	24	3.56	69.62	
3	Difference	40	4-8	5.48	7	1.98	10.2	

With regard to post test levels of knowledge between the urban and rural, the mean percentage knowledge difference was 10.2 with mean and SD of 5.48 ± 1.98 . The unpaired t test value was 13.21, shows significance difference regarding the post test levels of knowledge between the rural and urban patients regarding foot care.

Section: Data describing the association between pre-interventional scores of subjects with selected demographic variables in urban and rural group.

The demographic variables such as source of information ($\chi^2=11.05$, $df=3$, $P<0.05$, S*) and history of diabetic foot ulcer ($\chi^2=8.03$, $df=1$, $p<0.05$, S*) has significant association with post test levels of knowledge among urban patients and other demographic variables did not shown significant association. Implications of the study The findings of the study can be used in the following areas of nursing profession.

Nursing Practice, Nursing Education, Nursing Administration, Nursing Research

Recommendations

- ❖ A similar study can be replicated on a large sample to generalize the findings.
- ❖ An evaluative study conducted with control and experimental group for effective comparison and educational intervention.
- ❖ Among type- 1 and type- 2 DM clients' knowledge comparison can be made.

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