



A Study on Effectiveness of Video Assisted Teaching Programme Regarding Dietary Management of Renal Calculi Patients in Selected Hospitals At Kumbakonam in Thanjavur District

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ABSTRACT

The study was conducted in Sugam Hospital and Anbu Hospital at Kumbakonam. The pre experimental design was used for this study. Permission was obtained from the medical officer of the primary health centre data collection has selected 60 subjects by non-convenience sampling technique. Oral consent was obtained. Selected hospitals were assessed for demographic variables like age, sex, religion, education, type of family, monthly income, dietary pattern, occupation of the client, type of house and semi structured knowledge questionnaires. The finding of study shows that the video assisted teaching program was effectiveness on the level of knowledge regarding dietary management of renal calculi among renal calculi patients.

“YOUR LIFESTYLE HOW YOU LIVE, EAT, EMOTE AND THINK DETERMINES YOUR HEALTH TO PREVENT DISEASE, YOU MAY HAVE TO CHANGE HOW YOU LIVE”. – Abdul Kalam

INTRODUCTION

In India urolithiasis is more common in the northern part, also called as the “stone belt”. The risk of developing nephrolithiasis in normal adults is lower in Asia (1-5%) as compared to Europe (5-9%) and the United States (13%). Except for struvite (magnesium ammonium phosphate) stones associated with UTI, stone disorders are more common in men than in women. The incident higher than persons with a family history of stone formation. This stone information occurs more often in the summer month. Thus supporting the role of dehydration in this process. **-(Lewise-2010)**

STATEMENT OF THE PROBLEM

“Effectiveness of video assisted teaching programme on the level of knowledge regarding dietary management of Renal Calculi among Renal calculi patients in a selected hospitals at Kumbakonam In Thanjavur District”.



OBJECTIVES OF THE STUDY

1. To assess the pre-test knowledge on dietary management of Renal Calculi among Renal calculi patients
2. To determine the effectiveness of video assisted teaching programme on the level of knowledge regarding dietary management of Renal Calculi among Renal calculi patients
3. To assess the pre-test knowledge regarding of dietary management in renal calculi with their demographic variables.

HYPOTHESIS

There will be a significant deference between pre-test and post test of knowledge regarding importance of dietary management of renal calculi among renal calculi patients.

ASSUMPTION

1. Video assisted teaching will increase the knowledge on the Renal calculi and its dietary management of renal calculi.
2. Knowledge provides through video assisted teaching will help in life style modification.
3. Video assisted teaching is an effective.

REVIEW OF LITERATURE

Ms. Pavithra. C (2010) a study conducted on “effects of low salt diet on idiopathic hypercalciuria in calcium – oxalate stone forme’s in Italy. A sample 210 patients was selected and divided them into 2 groups, one group (102) with control diet and another group (108) with low sodium diet, on follow up visit urine samples was collected and analyzed for excretion of calcium and oxalate salts. The result value was compared with both group, the urinary calcium and oxalate salt was normal in 61.9% of the patients on low salt diet and 34% of the patients with control diet. The study concludes that a low – salt diet can reduce calcium excretion in hypercalciuria formers.”

Ms. Sherink (2010) Varghese a study conducted on “Dash – style diet associates with reduced risk for kidney stones” in Brigham women’s hospital of United States. A sample 5645 cases were selected over of 50 years follow up and they constructed a dash score based eight food components and data was analyzed with various food components. The conclusion states that consumption of dash style diet is associated with a marked decrease in kidney stone risk.

Sai sindhu (2012) a study was conducted on “Quantification of the stone clinic effect in patients with nephrolithiasis” in United States. A 25 samples (11 female and 14 male) with recurrent nephrolithiasis were prospectively followed for one year with 3 month interval for medical evaluation, patients were is advised to increase the fluid intake and restrict intake of salt and protein. Twenty four hour two urine sample were collected and measured for excretion of urinary salts by using Tiselius index metabolic and radiological activity. The study concluded that stone clinic significantly decreased urinary super saturation for calcium oxalate and formation of new kidney stones in 80% patients during first year of follow up.

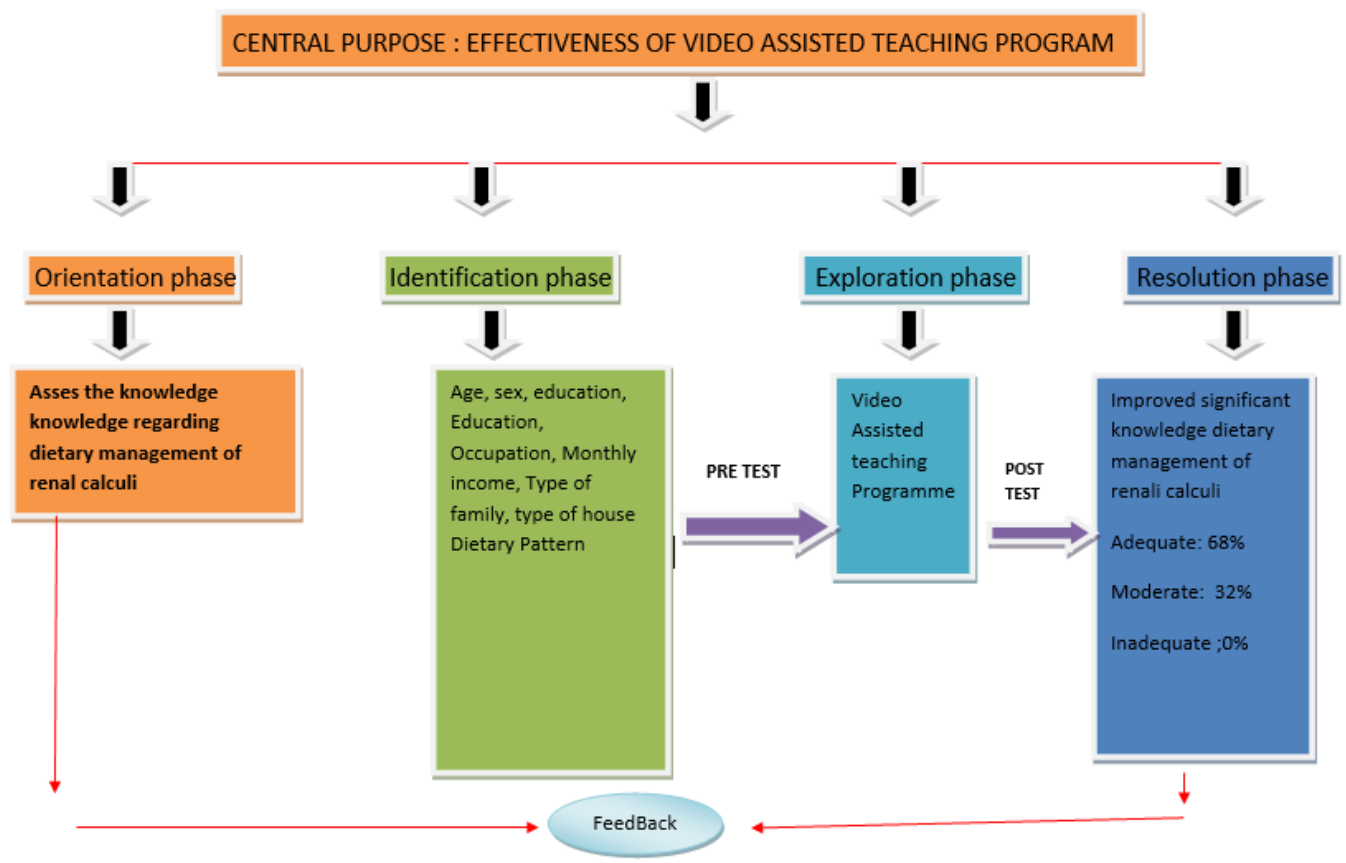
Flagg L R. USA (2012) a prospective cohort study conducted in United States on “Beverages use and risk for kidney stone in women” for 8 years follow up. A sample of 81093 women with no history of renal stones were selected and assessed for beverage use and diet intake by self administered food frequency questionnaire. A 719 cases of kidney stones were documented and found that it was highest

quintile in women with specific beverages compared to women in lowest quantile. It concluded that an increase in total fluid intake can seduce risk for kidney stones.

Raudakova and monja (2014) a study was conducted on “Dietary and behavioral risk factors for urolithiasis potential implication for prevention” in America. A 392 sample were selected and date were collected through telephone interviews. The findings suggested appropriate behavioral intervention seduces the morbidity associated with urolithiasis.

CONCEPTUAL FRAMEWORK

- To identify the problem.
- To identify the Surrounding area.
- Assess the knowledge regarding dietary management of renal calculi .



RESEARCH METHODOLOGY

The investigator has chosen the pre experimental to find the effect of video teaching program on the level of knowledge regarding dietary management of renal calculi among renal calculi patients. In this design there is one group pre-test and post-test. The subject in this group are not selected by randomization and both are not pre-tested. The investigator has chosen the pre experimental group design to find the effectiveness.

GROUP	INTERVENTION	POST ASSESSMENT LEVEL
Pretest 01	X	Post test 02



Keyword

- 01 : Pre-test group
X : Video assisted teaching programme
02 : Post-test group

RESEARCH VARIABLE UNDER STUDY

In the present study, the independent variable is Video assisted teaching programme. In the present study, the dependent variable is knowledge of dietary management of renal calculi. In the present study, the extraneous variables such as age, sex, mode transport, education of Father, education of mother and family income etc., Accessible population of the study comprised of renal calculi patient who are studying in selected hospital in Kumbakonam.

SAMPLE SIZE

The sample size for the study is 60 renal calculi patients.

SAMPLING TECHNIQUE

Non probability convenient sampling technique was used to access the effectiveness of video assisted teaching programme on the level of knowledge regarding dietary management of renal calculi among renal calculi patients.

PILOT STUDY

The pilot study is a trial run for main study. There find tools were used for pilot study to test feasibility and practicability. The formal permission was obtained from the Medical Officer and panchayat head person. The oral consent was obtained confidentiality of the response was assured. from the panchayat headperson pre-test received questionnaires to get answer before administer video teaching program. Post-test received questionnaires to get answer after administer video teaching program. The investigator conduct the study from 20.4.19 to 27.4.19. Six rural housewives who fulfilled inclusion criteria were selected and assigned to the pre and post group. There were no practical difficulties made by investigator and tools were considered to be reliable and appropriate. Hence the same procedure was decided to be followed in main study.

RELIABILITY OF THE TOOL

The reliability of the tool was determine by using inter related reliabilities technique. The reliability was done by using spearman's rank correlation method. The reliability score was ± 0.75 which showed a positive correlation $+0.75$. Hence the tool was considered reliable for preceding the main study.

DATA ANALYSIS AND INTERPRETATION

Table 1 : Frequency and percentage of demographic variables

S.No.	Demographic variable	Selected Hospitals	
		No. of Respondents	Percentage
1.	Age		
	A. 20 to 30 years	22	37%
	B. 31 to 40 years	20	33%



	C. 41 to 50 years D. 51 years and above	13 5	22% 8%
2.	Sex A. Male B. Female	34 26	57% 43%
3.	Religion A. Hindu B. Muslim C. Christian D. Others	25 5 30 0	42% 8% 50% 0%
4.	Education A. Primary School B. Middle School C. Higher Secondary School D. Above Higher School	5 10 26 21	8% 17% 43% 35%
5.	Type of Family A. Nuclear Family B. Joint Family C. Extended Family	25 5 30	42% 8% 50%
6.	Monthly Income A. 2000 to 5000 B. 5001 to 10000 C. 10001 to 15000 D. Above 15000	25 5 25 5	42% 8% 42% 8%
7.	Dietary Pattern A. Vegetarian B. Non Vegetarian	5 55	8% 92%
8.	Occupation of the client A. Daily Coolie B. Private Sector C. Government Sector D. Agriculture	23 17 7 18	38% 28% 12% 22%
9.	Type of house A. Kutcha house B. Semi Pucca house C. Pucca house	22 20 18	37% 33% 30%

The above table reveals that the distribution of respondents, with respect to their groups were not equally matched. Out of 60 samples 22 (37%) of the respondents belongs to age group between 20 to 30 years. 20 (30%) of the responds belongs to age group between 31 to 40 years and finally 13 (22%) of the respondents belongs to the age group between 41 to 50 years. 5 (8%) of the responds belongs to age group between 51 years and above.

Considering age of patients responds. 34 (57%) of the respondents belongs to male, 26 (43%) of the responds belongs to female. Regarding to type of religion 25 (42%) of the respondents to belongs Hindu, 5 (8%), of the respondents to belongs Muslim, 30 (50%) of the respondents to belongs Christians, 0(0%) of the respondents to belongs others. With respect to the education of respondents, 5 (8%) of the respondents were from primary schools, 10 (17%) of the respondents were from middle Schools and 26(43%) of the respondents from belongs were from Higher secondary schools, 21 (35%) of the responds were from above Higher School.

Considering the family background of respondents 25(42%) of the respondents belongs to nuclear family, 5(8%) of the respondents belongs to extended family and finally 30 (50%) of the respondents belongs to Joint family. With respect to the families monthly income of the respondents, 13(22%) of the respondents were earning more than 5000 rupees, 26 (43%) of the respondents were earning more than 10000 rupees and finally 21 (35%) of the respondents were earning more than 15000 rupees. Considering the dietary pattern of the respondents in the above study the maximum number of respondent 55 (92%) belongs to non-veg and minimum number of respondents 5 (8%) belongs to veg.

Table 2 : Frequency and percentage distribution of pre - test and post - test of satisfactory level.

Testing Level	Inadequate		Moderate		Adequate	
	No.	%	No.	%	No.	%
Pretest	5	8	51	85	4	7
Post test	0	0	19	32	41	68

Frequency and percentage distribution of pre and post test.

The table 2 shows that there was a percentage distribution of adequate, Inadequate and moderate level of knowledge on pre and post test score. The above table represent the frequency and percentage distribution of pre - test and post - test level of satisfactory level.

In pre -test majority 51 (85%) are in moderate level 5 (8%) are inadequate level and 4 (7%) are in adequate level.

In post - test majority 41 (68%) are inadequate and 19(32%) are in moderate level.

Table 3 : Paired t-test between pre and post test.

S.No.	Variables	Maximum score	Pre test		Post test		't' value
			Mean	SD	Mean	SD	
1	Level of knowledge	60	56	13.7	80.7	12.3	11.38

Effectiveness of video assisted teaching programme on the level of knowledge regarding dietary management of Renal calculi.

The table 4.3 shows that there was a significant difference ($P < 0.05$) between pre and post test score the mean pre - test score was 56 (± 13.76), where as in post - test score was 80.72 (± 12.39) respectively.

The 't' value shows that video assisted teaching programme was effective on the level of knowledge regarding dietary management of renal calculi among renal calculi patients in selected hospitals at Kumbakonam

MAJOR FINDINGS

The above table reveals that the distribution of respondents, with respect to their groups were not equally matched. Out of 60 samples 22 (37%) of the respondents belongs to age group between 20 to 30 years. 20 (30%) of the responds belongs to age group between 31 to 40 years and finally 13 (22%) of the respondents belongs to the age group between 41 to 50 years. 5 (8%) of the responds belongs to age group between 51 years and above.

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Regarding the type of occupational studies respondents in the above study, 23 (38%) of the respondents to daily coolie, 17 (28%) the respondents to private sector, 7 (12%) of the respondents to Government sector, 13 (22%) of the respondents to the Agriculture.

Regarding the type of house in above study 10 (17%) of the respondents were living in pucca house, 24 (40%) of the respondents were living in kutch house, 26 (43%) of the respondents were living in semi pucca house.

There was a significant difference ($P < 0.05$) between pre and post test score. The mean pre - test score was 56 (± 13.7), whereas in post - test group was 80.72 (± 12.39) respectively.

The 't' value shows that video assisted teaching programme was effective on knowledge regarding dietary management of renal calculi among renal calculi patients in selected hospitals in Kumbakonam.

RECOMMENDATIONS

- A similar study can be conducted on a large to generalize findings.
- A similar study can be replicate in different settings.
- A Comparative study can be conducted between in hospitals.
- A study can done to assess the practice regarding dietary management of renal calculi.

CONCLUSION

This study to evaluate the effectiveness of video assisted teaching programme to increase the dietary management of renal calculi among renal calculi patients. The finding of the study showed the video assisted teaching programme was effective in increasing knowledge regarding dietary management of



renal calculi among renal calculi patients. There as association in such demographic variables except made of dietary management of renal calculi. Finally the study was shows video assisted teaching programme was effective.

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