

A study to assess the effectiveness of structured teaching programme regarding knowledge on dietary management of renal calculi among patients with renal calculi in Rmmch, Annamalai University

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Abstract

Objective: A study to assess the effectiveness of structured teaching programme regarding knowledge on dietary management of renal calculi among patients with renal calculi in Rajah Muthiah Medical College and Hospital, Annamalai University.

Method: One group pretest and posttest pre experimental design was used. 30 patients with renal calculi were selected using convenient sampling technique in Rajah Muthiah Medical College and Hospital, Annamalai University. The demographic data and clinical data were collected. Pretest was conducted using structured interview schedule. After seven days posttest was conducted using the same questionnaire.

Result: The study revealed that 12(40%) had moderately adequate knowledge and patient 18(60%) had inadequate knowledge regarding dietary management before the structured teaching programme. After structured teaching programme 7(23%) had adequate knowledge and 12(40%) had moderately adequate knowledge and 11(37%) had inadequate knowledge. Thus the study showed that there was an increase in knowledge regarding dietary management of renal calculi because of STP. It was found to be statistically significant at $P > 0.001$. The data analysis showed that there was a significant association between pre test knowledge and demographic variables such as age, education, family history and previous knowledge of the patients with renal calculi. There was no significant association in gender and religion of the patients with renal calculi.

Conclusion: This implies that STP had improved the knowledge on Dietary management among patients with renal calculi. Such teaching programme can be carried out in the hospital and community to improve the knowledge of patients, and thereby reduce the recurrence of renal calculi among patient with first episode of renal calculi.

Keywords: dietary management, structured teaching programme

1. Introduction

Kidney stones are hard, solid particles that form in the urinary tract [1]. In many cases, the stones are very small and can pass out of the body without any problems [2]. However, if a stone (even a small one) blocks the flow of urine, excruciating pain may result, and prompt medical treatment may be needed [3]. Education on dietary guidelines and nutritional protocol can reduce or eliminate the potential for the development of kidney stone [4]. The investigator felt the need for proper education regarding preventing the recurrence of Renal calculi after treatment. Evidenced based research article, suggest that structured teaching programme are useful resource for providing information to the client which will impact the knowledge on prevention aspect [5-6].

Method

One group pretest and posttest pre experimental design was used [7]. 30 patients with renal calculi were selected using convenient sampling technique in Rajah Muthiah Medical College and Hospital, Annamalai University. The demographic data and clinical data were collected [8]. Pretest was conducted using structured interview schedule. After

that flash cards teaching was conducted for 30 minutes. The STP (flash cards) consisted of definition, Risk factors, sites of calculi, dietary and medical management of Renal calculi [9, 10]. After two weeks posttest was conducted using the same questionnaire. Descriptive and inferential statistics were used for analyzing the data [11]. The findings of the study are discussed as follows.

Result

The study revealed that 12(40%) subjects had moderately adequate knowledge and 18(60%) subjects had inadequate knowledge regarding dietary management before the structured teaching programme. After structured teaching programme 7(23%) subjects has adequate knowledge and 12(40%) subjects had moderately adequate knowledge and 11(37%) subjects had inadequate knowledge. Table 1: shows that posttest subjects score mean/standard deviation value was higher (29.300/7.489). Then pretest subjects score mean/standard deviation (24.267/7.134). Thus the study showed that there was an increase in knowledge regarding dietary management of Renal calculi because of STP it was found to be statistically significant at $P > 0.001$.

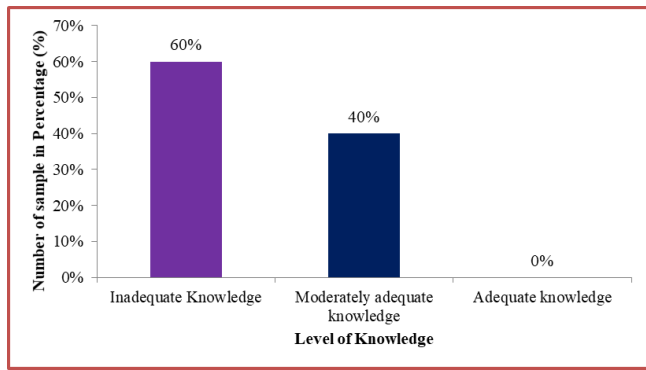


Fig 1: Distribution of knowledge regarding dietary management among patients with renal calculi in pretest.

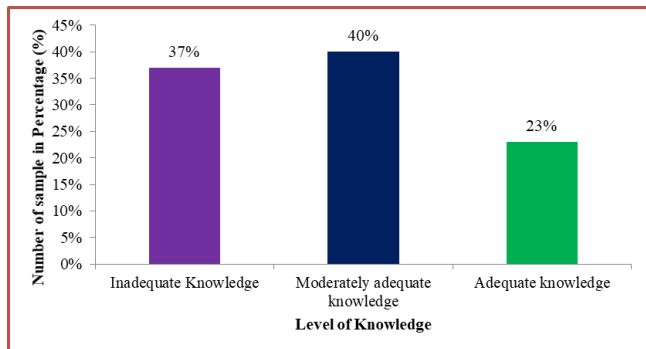


Fig 2: Distribution of knowledge regarding dietary management among patients with renal calculi in posttest.

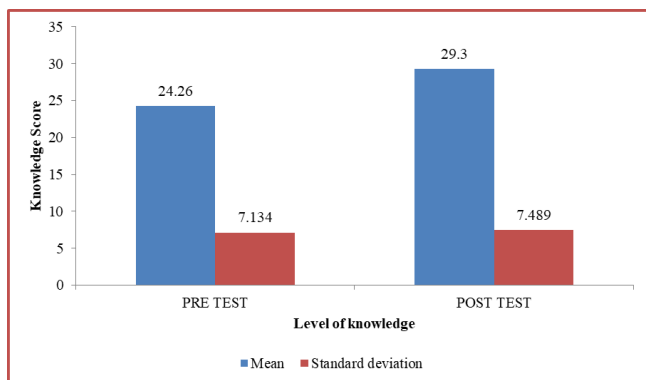


Fig 3: Comparison of mean and standard deviation of knowledge score of the patients regarding dietary management of renal calculi between pre test and post test.

Table 1: Comparison of mean and stand deviation of knowledge score of the patients regarding dietary management of renal calculi between pretest and posttest

Knowledge	Mean	Standard Deviation	Paired 't'	'p' Value
Pre test	24.267	7.134	11.850	0.001
Post test	29.300	7.489		

Conclusion

This implies that STP had improved the knowledge on Dietary management among patients with renal calculi. Such teaching programme can be carried out in the hospital and community to improve the knowledge of patients, and thereby reduce the recurrence of renal calculi among patient with first episode of renal calculi [12].

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