

A Study To Assess The Effectiveness of Self-Instructional Module (Sim) On Self-Care Among Chronic Renal Failure Patients Receiving Hemodialysis

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Abstract

A. Background: Excretory organs are confined to the removal of wastes, transport of waste materials, and excess or toxic substance from the body. Among all excretory organs, kidneys play a vital role in the excretion of waste products from the body. The primary aim of this study was to assess the effectiveness of the Self Instructional Module among chronic renal failure patients receiving hemodialysis at Sahara Hospital, Gomtinagar, Lucknow.

B. Methods: A quantitative, pre-experimental research design was used for this study; 60 chronic renal failure patients receiving hemodialysis were selected through the purposive sampling technique of Sahara Hospital, Gomtinagar, Lucknow. A structured knowledge questionnaire was used to assess the knowledge regarding self-care among chronic renal failure patients receiving haemodialysis.

C. Results: The knowledge score test indicates that out of 60 chronic renal failure patients, 22 (36.33%) have good knowledge, and 38 (63.33%) have average knowledge on self-care. The result revealed that the mean value of knowledge score in pre-test is 52.66%, and standard deviation (SD) is 3.702, and mean value of knowledge score in post-test is 80.00%, and standard deviation (SD) is 3.661. The Chi-square test revealed that there is a significant association between educational status, source of knowledge, duration of hemodialysis, and pre-test knowledge.

D. Conclusion: The study concluded that the self-instructional module on self-care among patients receiving haemodialysis was effective as a teaching strategy.

Keywords - Self-Care, Hemodialysis, Self-Instructional Module

I. INTRODUCTION

A waste product in any substance has no function in the human body, for example, excess carbon dioxide (CO₂) from cellular respiration; toxic nitrogen-containing molecules from the catabolism of proteins such as ammonia and urea; bilirubin from the breakdown of hemoglobin, excess water and heat

need disposal, toxic materials, and excess essential materials must be excreted from the body. Excretory organs are confined to the removal of wastes, transport of waste materials, and excess or toxic substance from the body. Among all excretory organs, kidneys play a vital role in the excretion of waste products from the body.

Worldwide statistical reports have shown that the incidence and prevalence of chronic renal disease seem to be increasing every year. Globally there are over 1.5 million dialysis patients. In India, annually, one lakh chronic renal failure patients are undergoing dialysis.^[1,2,3,4]

A pre-experimental study was conducted at KhivrajChordia Memorial Dialysis center, Chennai, on assessment of the effectiveness of structured teaching programs (STP).⁵ On self-care management of haemodialysis among patients with ESRD. The sample size was 30 using a convenient sampling technique, and information was collected using a structured questionnaire followed by STP. This study showed that the majority (65%) of them had inadequate knowledge in the pre-test, whereas in the post-test majority (83.3%) of them gained adequate knowledge.

There have been a number of studies highlighting the poor quality of patient's knowledge regarding their treatment regimen. The deficiency in knowledge appears to have two components: lack of counseling by health professionals and lack of recall by patients.^[6,7] Therefore, it is important that written information is tailored to the patient. Hence, the researcher found it imperative to develop a self-instructional module for patients which will provide a source of reinforcement under a continual reference.

II. MATERIALS AND METHODS

The study was based on Imogene M. King's Goal Attainment Theory. The research approach used was a quasi-experimental approach. Data was collected from hemodialysis patients who were undergoing hemodialysis in selected hospitals at Lucknow. The research design used was a pre-experimental one-group pre-test post-test research design. The sample



size consists of 60 chronic renal failure patients undergoing dialysis. The sampling technique used was the purposive sampling technique. Data collection was done using a semi-structured questionnaire which consisted of three parts. These included:

A. Section A: Demographic data

Socio-demographic variables comprise age, sex, religion, education, the income of the family, marital status, residence, source of knowledge regarding haemodialysis, duration of illness, duration of undergoing haemodialysis.

B. Section B: Structured knowledge questionnaire regarding self-care management of dialysis among chronic renal failure patients.

- Questionnaire related to structure and functions of the kidney
- Questionnaire related to chronic renal failure
- Questionnaire related to haemodialysis
- Questionnaire related to home care management of patients receiving haemodialysis.

C. Section C: Self-instructional module regarding self-care management of dialysis to chronic renal failure patients.

After obtaining administrative permission, the study commenced. The purpose of the study was explained to the subjects by the researcher, and the interview was conducted among those willing to participate in the study. The collected data were analyzed and organized according to the objectives of the study using descriptive and inferential statistics.

III. RESULTS

A. Findings of the level of knowledge regarding self-care of chronic renal failure patients receiving haemodialysis before administration of self-instructional module.

In the knowledge test, all the participants, i.e., chronic renal failure patients receiving haemodialysis, out of 60 subjects, 12 (20.0%) had good knowledge, 18(30.00%) have average knowledge, and 30 (50.00%) have poor knowledge before administration of self-instructional module.

B. Findings of the level of knowledge regarding self-care of chronic renal failure patient's receiving haemodialysis after administration of self-instructional module.

Out of 60 subjects, 22 (36.66%) had good knowledge, 38(63.33%) have average knowledge, and 0 (00.00%) have poor knowledge after administration of the self-instructional module.

C. Findings to determine the association between knowledge of patients and selected demographic variables.

The association between the knowledge of patients and selected demographic variables was determined by the Z test. On comparing the table values and calculated value, it was found that the tabulated t value and 60 degrees of freedom (df) for (0.05) level are 2.00 and (0.01) is 2.66, and the calculated value is 2.85. Since referring to the tabulated t value at 60 degrees of freedom for the 0.05 level of significance, the t value is less than the calculated t value; thus, the hypothesis is accepted. The findings of the present study showing that there is a significant association of educational status of the patients, duration of illness, and selected demographic variables.

IV. DISCUSSION

The knowledge score tests indicate that 36.66 % of patients had good knowledge scores, and 63.33% had average knowledge scores. After the administration of the self-instructional module on care among patients receiving haemodialysis, the result revealed that the mean value of knowledge score in pre-test is mean (52.66%) and knowledge score in post-test is mean (80.00%). The Z test reveals that there is a significant association between educational status, source of knowledge, duration of hemodialysis, and the pre-test knowledge score.

V. CONCLUSION

After the detailed analysis, this study leads to the following conclusion and information. The patients having a chronic renal failure of Sahara hospital, Gomtinagar, Lucknow, did not have 100% improvement in knowledge regarding self-care in patients receiving hemodialysis. They require further education and information because all of them need to enhance their knowledge regarding self-care in patients receiving haemodialysis. There was a significant increase in the knowledge of subjects after the administration of the self-instructional module. The mean pretest value was 52.66%, and the mean post-test value was 80.00%, which indicates a significant increase in the knowledge of patients regarding self-care. Thus, it is concluded that the effectiveness of the self-instructional module on self-care among patients receiving haemodialysis was effective as a teaching strategy. All the selected demographic variables do not show a major role in the post-test score. Hence on the basis of the above findings, it can be concluded that the written material prepared by the investigator in the form of Self Instructional Module has helped to improve the knowledge regarding self-care among patients receiving Haemodialysis.

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