

A study to Assess the Effectiveness of Information Education Communication Package on Knowledge Regarding Renal Rehabilitation among Patients Undergoing Haemodialysis.

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Abstract—This study was conducted to determine the effectiveness of IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis in dialysis unit of Dr Kumaraswami Health Centre, Kanyakumari. The hypothesis formulated was that there was no significant relationship between the IEC package and level of knowledge regarding Renal Rehabilitation among patient undergoing Haemodialysis. The research design used in this study was pre-experimental one group pre-test post-test design. It was carried out with 30 samples those who fulfilled the inclusive criteria. The purposive sampling technique was used to select the samples. An interview schedule was conducted to the patients undergoing Haemodialysis to assess the pre-test level of knowledge regarding Renal Rehabilitation. IEC package regarding Renal Rehabilitation was given to the patients undergoing Haemodialysis for the duration of 20 to 30 minutes. The post test was conducted after one week by using the same tool. Analysis revealed that the mean knowledge score was markedly increased from 23.43 in the pre-test to 38.80 in the post test with gradual decrease in standard deviation from 6.02 in the pre-test to 5.63 in the post test. The difference between pre-test and post-test mean knowledge score regarding Renal Rehabilitation was large. The calculated student's dependent 't' test value of 14.01 was highly significant at $p < 0.001$ level. It indicates the effectiveness of IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. So, the null hypothesis was rejected and research hypothesis was accepted for this study.

Keywords— Information, Education, Communication, Renal Rehabilitation, Haemodialysis, Patients

1. Introduction

End Stage Renal Disease (ESRD) patients undergoing dialysis has many physical and emotional changes related to their disease and its treatments. They have to make many adjustments in their lives. To optimize health and improve quality of life, rehabilitation of renal patients is a necessity. Renal Rehabilitation education is the ongoing process of facilitating the knowledge, skill and the ability necessary for their independent, productive and high quality of life.

The mean age of ESRD patients requiring dialysis in most developing countries is much lower 32 to 42 years, than that in the developed world, 60 to 63 years. Among the reasons for this difference are the delay in detecting renal disease and the failure to institute controlling and preventive measures in patients with progressive renal failure, both of which result in faster deterioration of renal function and progression to ESRD. About 61% of patients with chronic renal failure present with ESRD to specialists. Late referrals lead to a faster progression of co morbid conditions, increase the cost of therapy and worsen overall patient survival.

Chronic diseases have become a major cause of global morbidity and mortality even in developing countries. The burden of CKD in India cannot be assessed accurately. The approximate prevalence of CKD is 800 per million populations and the incidence of ESRD is 150-200 per million populations. The most common cause of CKD in population-based studies is diabetic nephropathy. Nearly 18,000-20,000 patients in India get RRT.

The researcher found that many patients come for Haemodialysis in Dr. Kumaraswami Health Centre at Kanyakumari, with ESRD. These patients do not have an adequate knowledge regarding Renal Rehabilitation and developed many

imbalances in health status, inadequate overall adjustment and decision making. More specifically, learning about core principles of **Renal Rehabilitation are called “4E’s” which includes Education, Exercise, Encouragement and Employment** can help dialysis patients maintain a sense of control, a factor linked to improved adherence and life satisfaction. So, the researcher wanted to choose an IEC package method to expose the patients undergoing Haemodialysis about the aspects of Renal Rehabilitation and to encourage the behavioural lifestyle modifications.

A study was conducted to determine the effectiveness of IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis in dialysis unit of Dr. Kumaraswami Health Centre at Kanyakumari, the hypothesis formulated was that there was no significant relationship between the IEC package and level of knowledge regarding Renal Rehabilitation among patient undergoing Haemodialysis.

2. Objectives

1. To assess the pre-test level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.
2. To assess the post-test level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.
3. To determine the effectiveness of information education communication package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.
4. To associate the pre-test and post-test level of knowledge regarding Renal Rehabilitation with the selected demographic variables of patients undergoing Haemodialysis.

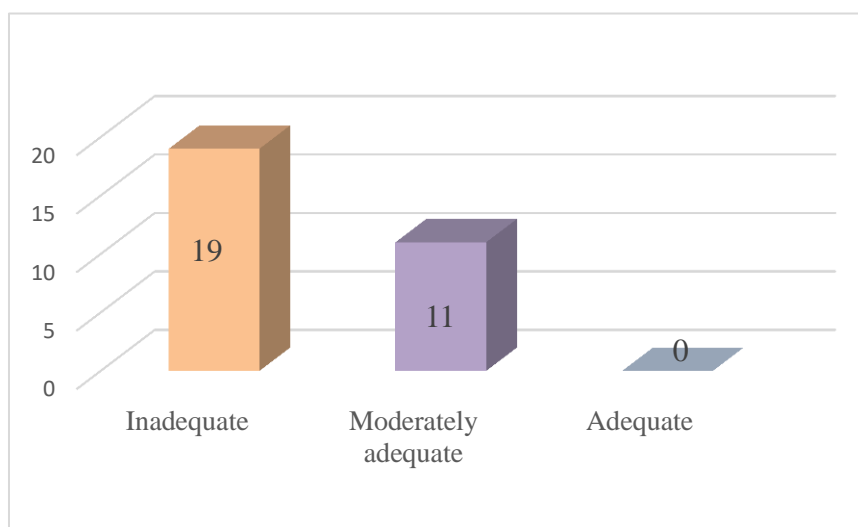
3. Hypothesis

There is no significant relationship between the IEC package and level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.

The research design used in this study was pre-experimental one group pre-test post-test design. study was carried out with 30 samples of patients undergoing haemodialysis from Dr. Kumaraswami Health Centre at Kanyakumari, those who fulfilled the inclusive criteria. The purposive sampling technique was used to select the samples. The researcher introduced

himself to the patients and purpose of the study was explained to ensure better co-operation during data collection. Every day three to five patients undergoing Haemodialysis were assessed on knowledge regarding Renal Rehabilitation. The tool was explained in detail to the patients. An interview schedule was conducted to the patients to assess the pre-test level of knowledge regarding Renal Rehabilitation and time taken for each patient was 30 minutes. Then IEC package was given to the patients undergoing Haemodialysis with the duration of 20-30minutes regarding Renal Rehabilitation. After a week the post-test level of knowledge was assessed by using the same tool.

The data obtained were analysed using both descriptive and inferential statistics. Frequency and percentage distribution was used to determine the demographic variables and level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. Mean and standard deviation was used to determine the knowledge of patient regarding Renal Rehabilitation among patients undergoing Haemodialysis. Student dependent ‘t’ test was used to assess the effectiveness of IEC package on knowledge regarding Renal Rehabilitation. Chi square test was used to analyze the association between the pre test and post level of knowledge with selected demographic variables



Above diagram represents the frequency and percentage distribution of pre-test level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. In pre-test level of knowledge, 19(63.3%) patients had inadequate knowledge, 11(36.7%) patients had moderately adequate knowledge and none of the patients had adequate knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.

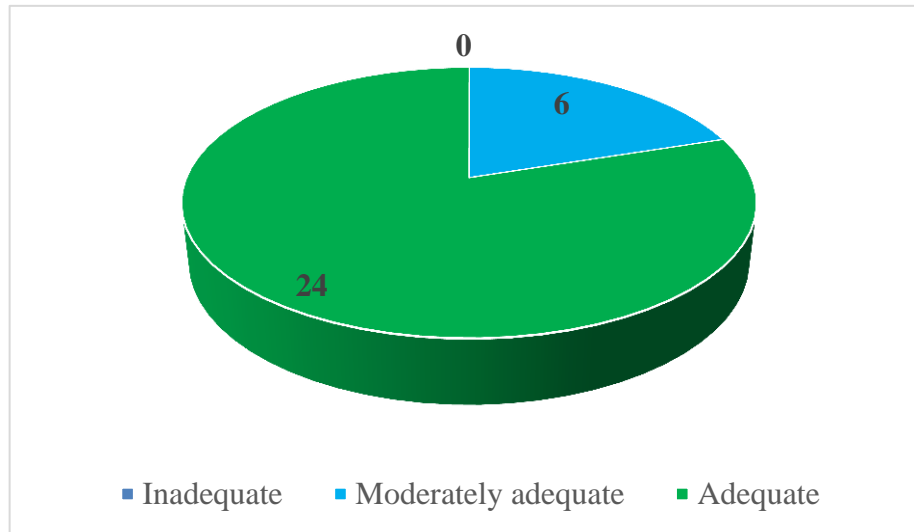


Diagram shows the frequency and percentage distribution of post test level of knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. In post test level of knowledge, the majority of the patients 24(80%) had adequate knowledge, 6(20%) patients had moderately adequate knowledge and no one had inadequate knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.

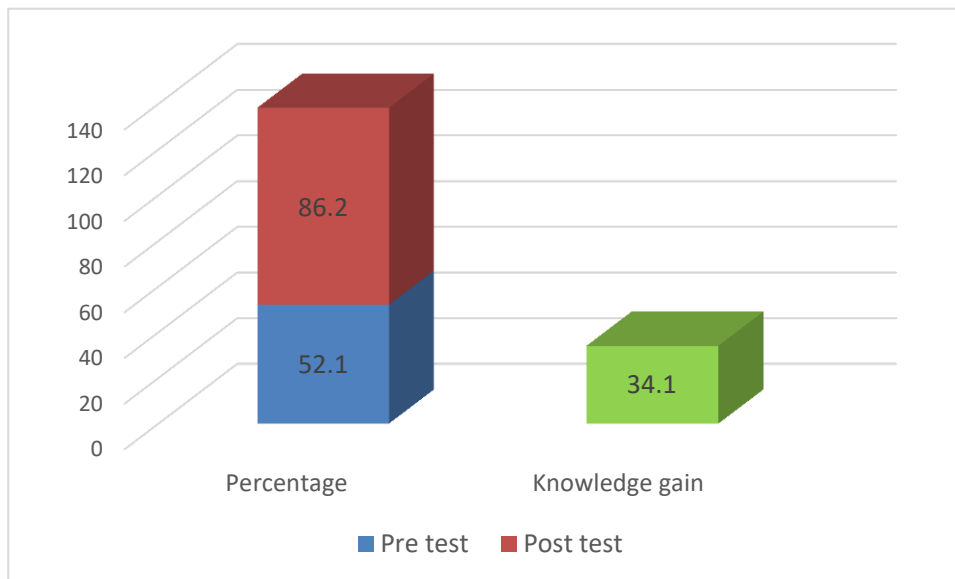


Diagram represents the effectiveness of the IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. After administration of IEC package regarding Renal Rehabilitation the level of knowledge was markedly increased from 52.1% in pre-test to 86.2% in post-test. The percentage of knowledge gain was 34.1%. Which indicates the effectiveness of IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis.

Analysis revealed that the mean knowledge score was markedly increased from 23.43 in the pre-test to 38.80 in the post test with gradual decrease in standard deviation from 6.02 in the pre-test to 5.63 in the post test. The difference between pre-test and post-test mean knowledge score regarding Renal Rehabilitation was large. The calculated student's dependent 't' test value

of 14.01 was highly significant at $p < 0.001$ level. It indicates the effectiveness of IEC package on knowledge regarding Renal Rehabilitation among patients undergoing Haemodialysis. So, the null hypothesis was rejected and research hypothesis was accepted for this study.

The present study assessed the effectiveness IEC package on knowledge regarding Renal Rehabilitation. The study findings revealed that there was a significant improvement in the level of knowledge after providing IEC package regarding Renal Rehabilitation. Based on the statistical findings, it is evident that provision of such kind of IEC package motivates the ESRD patients and helps them to acquire knowledge regarding Renal Rehabilitation. Therefore, IEC package was very important to meet the needs of the patients undergoing Haemodialysis for their wellbeing.

4. Nursing Implications

The findings of the study have implications in various areas of nursing service, nursing education, nursing administration and nursing research.

Nursing practice

Rehabilitation of dialysis patients was an original goal of the Nursing care. In End stage renal disease (ESRD) program, there was a growing recognition that the key to the continued wellness of these patients' lies in helping them realize their optimum level of functioning. Benefits associated with successful rehabilitation include a better quality of life, reduced health care costs, and fewer demands for support from care providers.

Success of a rehabilitation program depends to a large extent on the efforts of a team composed of health care professionals such as nurses, physicians, pharmacists and dietitians, social service providers such as social workers and vocational counsellors and most important the patients themselves.

Nursing education

The nurse education must aim to enable student nurses gain skill required to be able to practice the psychosocial principles in setup where highly technological interventions are carried out early education about renal disease, its treatments and the potential to live long and productively can aid in overall adjustment and decision making for people on dialysis. More specifically, learning about topics including kidney failure, treatment choices, medications and the renal diet can help dialysis patients maintain a sense of control, a factor linked to improved adherence and life satisfaction.

Encouragement, especially from families and dialysis staff, can increase patients' autonomy, control and participation in treatment. Patients who are encouraged to learn about their treatment have better outcomes and improved quality of life. Such patients may take more responsibility for things they can control, including exercise, remaining actively engaged in life and sticking to the renal meal plan. The support patients received from their families and dialysis staff was a major factor in promoting employment.

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