RESEARCH ARTICLE

Effectiveness of Structured Teaching Programme (STP) on knowledge regarding renal care (Dialysis) at home among the care givers of renal failure patient

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Chronic Kidney disease defined as Gradual loss of kidney function. Dialysis functions as supplement of kidney function for normal resume of activity of daily living. According to WHO, global burden of disease 2015 showed that 1.2 million people died from Kidney failure, an increase of 32% since 2005. IN 2010, around 2.3-7.1 million people with end stage kidney disease died without access to chronic dialysis. Need for dialysis is increasing day by day as shows that 2.62 million people received worldwide in 2010 and may be double by 2030. Important risk factor of Kidney diseases are diarrhoeal disease, HIV/AIDS, low birth weight, malaria, preterm birth. In India, 29% patients died and 13% discontinued dialysis within 12 months. Kidney disease put heavy burden on patients and lead an out of pocket expenditure: 87.1% of patient spending 100% of their monthly income on dialysis in public hospitals.

Key Words: *Dialysis; Care givers; Renal failure*

Abbreviations: *STP: Structured Teaching Programme*

INTRODUCTION

Chronic Kidney disease defined as Gradual loss of kidney function. Dialysis functions as supplement of kidney function for normal resume of activity of daily living [1]. According to WHO, global burden of disease 2015 showed that 1.2 million people died from Kidney failure, an increase of 32% since 2005. IN 2010, around 2.3-7.1 million people with end stage kidney disease died without access to chronic dialysis. Need for dialysis is increasing day by day as shows that 2.62 million people received worldwide in 2010 and may be double by 2030. Important risk factor of Kidney diseases are diarrhoeal disease, HIV/AIDS, low birth weight, malaria, preterm birth. In India, 29% patients died and 13% discontinued dialysis within 12 months. Kidney disease put heavy burden on patients and lead an out of pocket expenditure: 87.1% of patient spending 100% of their monthly income on dialysis in public hospitals [2,3].

Government of India has committed an agenda with Universal Health coverage that at least one-eight station dialysis unit in each of its 688 districts, offering free haemodialysis to people living below the poverty threshold by 2022. Chronic kidney disease and poses threat to the health care system [4]. Dialysis life saving measures for renal failure patient and prolong life of patient. Patients on dialysis patient have a greater chance for increased survival time owing to the advances in treatment modalities; therefore more comprehensive information in order to understand the aspects of renal care is very important [5,6]. In order to provide combined therapeutic approach to treatment, information should be given to the patients in such a way that promotes maximum understanding and acceptance [7,8]. It creates problem as it prolongs life. So knowledge of renal care will help in giving quality life to the patients.

AIMS AND OBJECTIVES

The objective of study was to

i. Assess the pre and post-test knowledge score regarding renal care (Dialysis patient)

ii. To evaluate effectiveness of structured teaching programme on renal care (Dialysis patient) at home among care givers.

MATERIALS AND METHODS

An evaluative research approach with pre-experimental design was used for the study. The study was conducted on 60 care givers of renal failure patients at selected hospitals of Udaipur city. We excluded to those are unable to understand Hindi language. Sample was selected by non-probability convenient sampling technique. The study purpose and procedure were explained to eligible participants on recruitment to study. Informed consent has taken after their approval to include in study. Ethical clearance was taken from Institutional Ethical committee. A self-structured questionnaire was prepared for knowledge assessment of care givers regarding renal care patient and self-structured programme was prepared. Structured teaching programme was included General information on Kidney and Disease, Dialysis Procedure, Nutrition, fluid and electrolyte balance, management of minor ailments. Sample selection was done and pre-test conducted followed by post-test. Data were entered in MS Excel spread sheet and checked for consistency. Analysis was performed using SPSS version 22. Confidentiality was maintained for all collected data.

RESULTS

Total 60 care givers were included in study. Result interprets that highest percentages (61.7%) of care givers were in the age group of 26-35 years and least (3.33%) were in the age group of 36-45 years and 25% were in the age group of <25 years. Education status reveals that 13.3% had higher secondary course, 13.3% had upper Primary, 45% had primary and 3.33% graduate and post graduate education. Occupation of care givers shows that majority of 54% were unemployed, 10% were labours, 25% were agriculture and 11.7% skilled workers. Source of information, that 41.7% from Health personnel, 18.3% from multiple sources and 30% from mass media and 10% respondents gets the source of knowledge on renal care from Family members (Figure 1 and Table 1).

Table 2 shows that prior to the administration of structured teaching

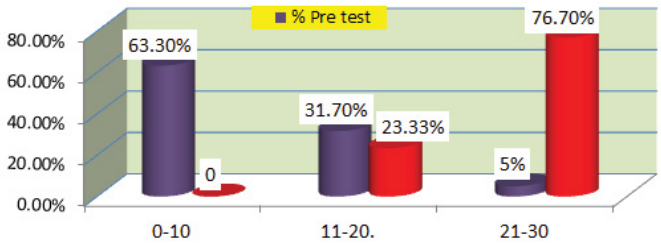

Figure 1) *Bar diagram of pre & post-test knowledge score regarding renal care (Dialysis patient).*

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TABLE 1

Frequency and percentage distribution of Baseline characteristics

Demographic Variables	Frequency	%
1. Age in years-		
a) < 25 years	15	25%
b) 26-35 years	37	61.70%
c) 36-45 years	8	13.30%
d) Above 45 years	0	0
2. Gender		
a)Male	43	70%
b)Female	18	30%
3. Religion -		
a) Hindu	50	83%
b) Christian	0	0
c) Muslim	10	17%
d) Any other Religion	0	0
4. Type of family-		
a) Nuclear	18	30%
b) Joint	42	70%
c) Extended	0	0
5. Educational qualification-		
a) Primary	23	13.30%
b) Upper primary	27	13,3%
c) Higher secondary	8	13.30%
d) Graduate	2	3.33%
6. Occupation-		
a) Unemployed	32	54%
b) Agriculture	15	25%
c) Labour	6	10%
d) Skilled worker	7	11.70%
7. Monthly family income-		
a) Below 5000	12	20%
b) 5000- 10000	36	60%
c) 10000-15000	10	16.70%
d) Above 15000	2	3.33%
8. Residence-		
a) Urban	47	78.30%
b) Rural	13	21.70%
9. Source of Knowledge-		
(a) Family members	6	10%
(b) Health personnel	25	41.70%
(c) Mass media: – T.V. Radio, Newspapers, etc.	18	30%
(d) Multiple source of information	11	18.30%

TABLE 2

Comparison of knowledge score of care givers regarding renal care (Dialysis patient) N=60

Level of score	Score range	% range	Pre-test		Post-test	
			{n}	%	{n}	{%]
Inadequate	0-9	0-33 %	38	63.3%	0	0%
Moderate adequate	10-18	34-66 %	19	31.7%	14	23.33%
Adequate	19-27	67-100%	3	5%	46	76.7%
Total	30	100%	60	100%	60	100%

programme, majority (63.3%) of the sample had inadequate knowledge (score: 0-9) regarding renal care while moderate adequate (score: 10-18) was observed in 31.7% of the sample and only 5% have adequate knowledge (score: 19-27). In the post-test there was marked improvement in the knowledge of the sample with majority (76.6%) gained adequate knowledge regarding renal care and 23.33% gained moderate adequate knowledge.

TABLE 3

Range, mean, and standard deviation of pre- and post-test knowledge scores of care giversN=60

	Obtained Range	Mean	S.D.
Pre-test	5-21	10.35	3.59
Post-test	16-27	22.86	3.47

Table 3 shows the data depicts that the mean post-test knowledge score (22.86 ± 3.47) was apparently higher than that of the mean pre-test (10.35 ± 3.59) knowledge score.

Chi-square values between demographic variables and the post-test knowledge scores of Care givers regarding renal care reveals that there was significant association between knowledge scores of post-test and age, Religion, type of family, educational qualification, and source of information ($P \leq 0.05$).

DISCUSSION

In this study, sample had inadequate knowledge (score: 0-9) regarding renal care while moderate adequate (score: - 10-18) was observed in only 31.7% of the sample and only 5% have adequate knowledge. The mean post-test knowledge score (22.86 ± 3.47) was apparently higher than that of the mean pre-test (10.35 ± 3.59) knowledge score. Mollaoglu et al. showed that among the caregivers, the post-educational mean scores (55.0 ± 7.6) of caregiver burden were observed to be lower than the pre-educational scores (43.9 ± 5.2), and the difference was found to be statistically significant [9]. These home-based educational programs were demonstrated decrease in the burden of haemodialysis caregivers.

CONCLUSION

The study findings concluded that care givers had inadequate knowledge regarding renal care before STP. After structured teaching program have great potential for accelerating the awareness regarding renal care. Government of India and Non- governmental health care Institution should provide short term teaching programs for chronic renal failure patients and their family members to counter complications of disease.

RECOMMENDATIONS

Based on the findings of the present study recommendations offered for the future study that longitudinal study can be done using post-test after one month, six months and one year to see the retention of knowledge.

LIMITATIONS OF THE STUDY

- Study sample size was limited to 60.
- Study was limited to Udaipur district, Rajasthan.

RELEVANCE OF THE STUDY

Nil.

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Nil.

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