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Assess the Knowledge of Family Care Givers Regarding Haemodialysis

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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Short Research Article

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ABSTRACT

Chronic kidney disease is a slow and progressive loss of kidney function over a period of several years. Eventually, a person will develop permanent kidney failure. The aim of the present study was to assess the knowledge of family care givers regarding hemodialysis of chronic renal failure patients in selected hospitals of Jabalpur. The research design selected for this study was descriptive in nature. The target population for this study was family care givers and the method of sampling was purposive sampling. The sample size was 50.A self-structured questionnaire was used to assess the knowledge and the study findings revealed that knowledge of family care givers regarding hemodialysis of chronic renal failure patients was inadequate.

Keywords: Hemodialysis; knowledge; family care givers.

1. INTRODUCTION

Chronic kidney disease (CKD) is a disorder in which kidney function gradually deteriorates over time [1]. As kidney failure progresses and the organ's function deteriorates, hazardous quantities of waste and fluid can quickly accumulate in the body. The goal of treatment is to halt or decrease the course of the disease, which is generally accomplished by addressing

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the underlying cause [2]. Patients with CKD must be cared for at home for a longer period of time before receiving a kidney transplant, and they rely on dialysis and medications to preserve their health. As a result, the investigator wanted to see if there was any improvement in competency in home care among family carers of patients with CRF [3].

Chronic kidney disease (CKD) is a global public health issue that affects 5–10% of the global population [4]. Chronic renal disease is becoming a major public health concern [5]. People with kidney illness will ultimately need a sort of renal replacement therapy, which is a costly and life-long treatment. Despite the fact that haemodialysis, peritoneal dialysis, and kidney transplantation save lives, they are prohibitively expensive for the poor. Nearly 90% of patients in India cannot afford treatment [6]. CKD is associated with decreased quality of life, increased health care expenditure and premature death. There is an urgent need for developing approaches for early identification of CKD and to take actions to prevent further advancement to end stage renal disease (ESRD) [7]. In India, nearly 1,00,000 patients develop ESRD each year [8]. Very few patients consult the nephrologists. Others may initiate treatment and likely to lost to follow up within three months. These patients may drop out because they realize that dialysis is not a cure and has to be performed over the long-term period [4]. Maximum number of patients with CRF are receiving care at home and they require support from family members and friends to manage CRF. The quality of life of caregivers of haemodialysis patients may be affected adversely and they may also experience a momentous burden. Health care professionals should provide social support and psychological interventions to improve caregiver's quality of life and in turn better patient outcome [6]. In the management of CRF patients, caregivers' needs are often unrecognized or neglected. The caregivers can experience stress, and poor quality of life and the needs of caregivers are often neglected (Tong, Peter, & Craig, 2008). The CKD patients have to be taken care at home for a longer time before kidney transplantation and they depend on intermittent dialysis and drugs to maintain optimum health. Hence the investigator intended to undertake the present study to assess the improvement in competency regarding home care among caregivers of patients with CRF.

1.1 Problem Statement

Assess the knowledge of family care givers regarding hemodialysis of chronic renal failure patients.

1.2 Objectives of the Study

- To assess the knowledge of family care givers regarding hemodialysis of chronic renal failure patients.
- To associate their knowledge with selected demographic variables.

1.3 Hypothesis

There will be a strong link between family caregivers' awareness of hemodialysis for chronic renal failure patients and certain demographic characteristics.

Knowledge of Operational Definitions: Knowledge relates to family caregivers' verbal reactions to hemodialysis for chronic renal failure patients, as measured by a standardised questionnaire.

Hemodialysis is a medical process that removes excess fluid and waste materials from the bloodstream while also correcting electrolyte imbalances.

Chronic renal failure is defined as the presence of kidney damage or an estimated glomerular filtration rate (eGFR) of less than 60 ml/min per 1.73 square metres for at least three months.

1.4 Assumptions

- Family care givers will have some knowledge regarding Hemodialysis.
- Demographic variables may or may not influence the knowledge of family care givers.

2. MATERIAL & METHOD

This study was conducted using a descriptive research design.

2.1 Setting

The research was carried out at Sanjeevan Hospital and Research Center, Jabalpur.

2.2 Population

Family care givers who were attending OPD's of the hospital at the time data collection.

2.3 Sampling

Purposive sampling was used to collect data.

2.4 Sample Size

The sample size was 50.

2.5 Criteria for Sample Selection

2.5.1 Inclusion criteria

- The family care givers who were willing to participate
- The family care givers present at the time of data collection.

2.5.2 Exclusion criteria

- The renal patients who were not willing to participate.

2.6 Description of the Instrument

A self-structured questionnaire was used to conduct the study. The tool consisted of:

Part I: Demographic variables such as age, education, occupation, area.

Part-II: Consisted of a self-structured questionnaire to assess the knowledge of family care givers on hemodialysis of chronic renal failure patients which consisted of 30 multiple choice questions.

2.7 Scoring

Each question had four options from which the sample had to choose one correct answer. The right answer was scored as one and the wrong option was scored as zero.

The scoring was interpreted as below:

- Adequate knowledge- 76% - 100%
- Moderate knowledge- 51% - 75%
- Inadequate knowledge- 0% - 50%

The data was collected over the course of a week. The authorization of the Hospital administration was secured prior to the start of the study. The investigator developed rapport with the study respondents, explaining the goal of the interview and obtaining informed consent before collecting data.

Family care givers knowledge and demographic factors were studied using descriptive measures. Using inferential methods, the relationship between knowledge and selected demographic factors of pregnant women was investigated. The level of significant used was 0.05%.

3. RESULTS AND DISCUSSION

Table 1 shows the demographic characteristics of women, such as age, education, employment, income, and geographic location. After that, the samples were separated into the following age groups: 20-30 years old: 16 %, 31-40 years old: 24 %, and more than 41 years old: 60 %.

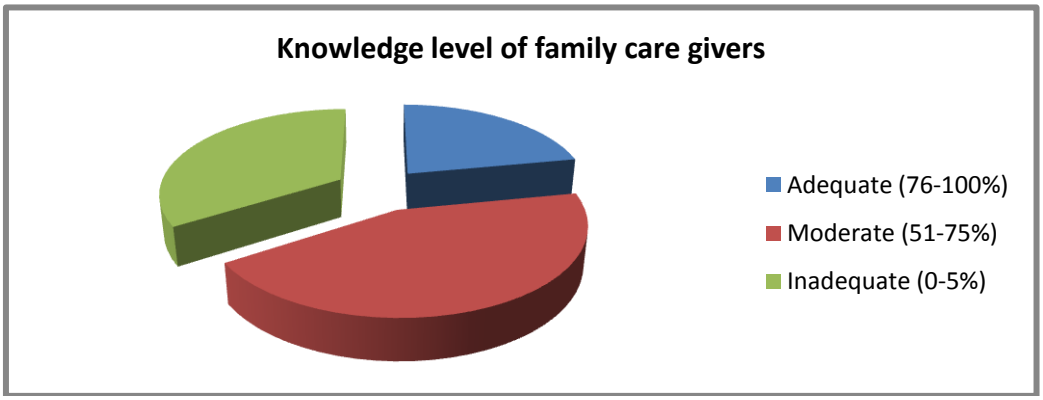

Fig. 1. Pie diagram showing distribution of family care givers by knowledge score

In terms of education, 24 % had completed 10th grade, 44 % had completed 12th grade, 20 % had completed graduate school, and 12 % had completed postgraduate school. In terms of occupation, 40 % worked in the private sector, 36 % in government, and 24% in the commercial world. They come from a rural location 84 percent of the time and an urban area 16 percent of the time.

Table 1. Distribution of samples by demographic variable N=50

Demographic data	Frequency	Percentage
Age (In Years)		
20-30 years	08	16
31-40 years	12	24
More than 41 years	30	60
Educational Qualification		
10th	12	24
12th	22	44
Graduate	10	20
Post Graduate	06	12
Illiterate	00	00
Occupational Status		
Private Sector	20	40
Government Sector	18	36
Business	12	24
Area of Living		
Rural	42	84
Urban	08	16

Table 2. Distribution of family care giversby knowledge score N=50

Knowledge level	No.	Percentage
Adequate (76-100%)	11	22
Moderate (51-75%)	22	44
Inadequate (0-5%)	17	34

3.1 Distribution of Family Care Givers by Knowledge Level

Table 2 shows that there was no significant relationship between knowledge and some demographic characteristics including age, education, occupation, or location. There was a strong link between knowledge and age and educational attainment.

4. CONCLUSION

The understanding of Hemodialysis among family caregivers was poor. Community meetings are required to educate residents about hemodialysis and the management of chronic renal failure patients. To increase awareness and practises to enhance the health and improve the quality of life of patients with CKD, caregivers must get a better grasp of home care management of CKD patients.

5. IMPLICATIONS

5.1 Nursing Practice

The study findings will help family care givers regarding Hemodialysis of chronic renal failure and they can utilise this knowledge for care at home.

5.2 Nursing Education

The student nurses may be motivated to educate the family care givers regarding chronic renal disease and hemodialysis."

CONSENT & ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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