

ASSESSMENT OF KNOWLEDGE ON HEMODIALYSIS AMONG RENAL PATIENTS

ABSTRACT

Patient knowledge about hemodialysis is important for effective self-management behaviors. The aim of the present study was to assess the knowledge on hemodialysis (hemodialysis) among renal patients in selected hospitals of Bhopal. The research design selected for this study was descriptive in nature. The target population for this study was renal patients 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 renal patients regarding hemodialysis was inadequate.

Keywords: Hemodialysis, Knowledge, Renal patients

INTRODUCTION

Healthy kidneys clean blood and remove extra fluid in the form of urine. They also make substances that keep body healthy. Dialysis replaces some of these functions when kidneys no longer work. There are two different types of dialysis hemodialysis and peritoneal dialysis [1]. Dois tipos de tratamento substitutivo

During hemodialysis, an artificial kidney is utilized to eliminate waste, excess chemicals, and fluid from blood. To get blood into the replacement kidney, the doctor will need to make an access into blood vessels. This is performed by basic arm or leg surgery. An access can also be created by connecting an artery to a vein beneath the skin to form a bigger blood vessel known as a fistula [2]. (este paragrafo tem que ser refeito, melhor explicado)

Hemodialysis is normally performed three times a week for around four hours at a time in a dialysis center. People who undergo hemodialysis at home may need to do it more frequently, 4-7 times per week for shorter periods of time each session [3].

Chronic Renal Failure is an irreversible deterioration in renal function in which the body's ability to maintain metabolic, fluid, and electrolyte balance fails, leading to uremia and the need for hemodialysis to maintain the internal milieu and avoid uremia. Symptoms of renal impairment can be managed with hemodialysis, fluid restriction, diet modification, and medication in the early stages, but as renal function deteriorates, these treatments become ineffective [4].

CRF is a progressive decline of renal function in which the body is unable to maintain metabolic, fluid, and electrolyte balance, culminating in uremia. It is one of the most serious issues facing health-care organisations, and it has the potential to result in global death.

Chronic renal failure can occur at any age, and according to a 2006 report, the average age of end-stage renal disease [ESRD] prevalence is 58.8 years. Hemodialysis is a therapy option for patients with chronic renal failure. Hemodialysis gives patients a better chance of survival. Hemodialysis is a waste-filtering procedure that eliminates excess fluids and electrolytes. Hemodialysis involves removing blood from the body and filtering it through a man-made membrane known as a dialyzer, or artificial kidney, before returning the filtered blood to the body. As a result of dialysis, the kidney's ability to eliminate waste materials and bodily fluids is reduced. Dialysis patients must eat a well-balanced, healthful diet to be healthy. Dietary monitoring and nutritional assessment by a skilled dietician or doctor are essential components of dialysis patient care. The proper amount of energy, protein, water, vitamins, and minerals must be ingested by dialysis patients. Dialysis patients' kidneys are unable to handle excess fluid and other metabolic wastes. Dialysis patients frequently ingest insufficient amounts of macro and micro nutrients. The nutrient composition of the food consumed by these individuals must be properly balanced. Deficiency is frequent among dialysis patients, with over 40% suffering from varied degrees of protein energy malnutrition. It is critical for dialysis patients to receive nutritional advice so that they understand the importance of different foods, the sorts of nutrients they should include in their diet, and the items they should avoid. As a result, the current study sheds insight on how dialysis patients can enhance their knowledge and attitude about their eating patterns, resulting in improved health and management.

Problem Statement

A study to assess the knowledge on Hemodialysis among renal patients in selected hospitals at Jabalpur, (M. P.).

Objectives of the Study

1. To assess the knowledge of renal patients regarding Hemodialysis.
2. To associate their knowledge with selected demographic variables.

Hypothesis

There will be a significant association between knowledge of renal patients regarding Hemodialysis with selected demographic variables.

Operational Definition

Knowledge-Knowledge refers to the verbal responses of the renal patients regarding Hemodialysis -a medical procedure to remove fluid and waste products from the blood and to correct electrolyte imbalances.

Renal patients patients undergoing treatment for chronic or acute renal failure conditions

Assumptions

1. Renal patients will have some knowledge regarding hemodialysis.
2. Demographic variables may or may not influence the knowledge of renal patients.

Methodology

This study was conducted using a descriptive research design.

Setting

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

Population

Renal patients who were attending OPD's of the hospital at the time of data collection.

Sampling

Purposive sampling was used to collect data.

Sample size

The sample size was 50.

Criteria for Sample Selection

Inclusion Criteria

- The renal patients who were willing to participate.
- The renal patients who were in the Sanjeevan Hospital and Research Center, Jabalpur at the time of data collection.

Exclusion Criteria

- The renal patients who were not willing to participate.

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, income, and area.

Part II Consisted of a self-structured questionnaire to assess the knowledge on Hemodialysis which consisted of 30 multiple choice questions.

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 collection was done for a period of one week. Before commencing the study, the

permission was obtained from the hospital administration. The investigator established rapport with the study subjects and the purpose of the interview was explained to each subject with informed consent and then the data was collected.

The demographic variables and knowledge of women were analyzed by using descriptive measures. Association between knowledge and the selected demographic variables of renal patients were analyzed by using inferential measures.

The level of significant used was 0.05%.

Data analysis and interpretation

Table I reflects the demographic variables of women such as age, education, occupation, income, area. The samples selected eventually to the respective age groups as: 25-30 years were 4%, 31-35 years were 40% and 36-40 years were 56%. With regard to education 10% were matriculated, 34% completed Inter, 50% completed graduation and 06% were un-educated. With regard to their occupation 36% were working in private sector and 64% were working in government. With regard to their income, 34% were getting between Rs. 5000/month to 10,000/month, 28% were getting Rs. 10,000/month to 15,000/month, 38% were getting above Rs. 15,000/month. With regard to area 40% were living in rural area and 60% were in urban area.

| Table 1: Distribution of samples by demographic variable N=50 | | |
|--|------------------|-------------------|
| Demographic data | Frequency | Percentage |
| Age | | |
| 25-30 years | 02 | 04 |
| 31-35 years | 20 | 40 |
| 36-40 years | 28 | 56 |
| Education | | |
| Matric | 05 | 10 |
| Inter | 17 | 34 |
| Graduate | 25 | 50 |
| Un-educated | 03 | 06 |
| Occupation | | |
| Private | 18 | 36 |
| Government | 32 | 64 |
| Income | | |
| Rs. 5000 – 10000 | 17 | 34 |

| | | |
|-----------------|----|----|
| Rs. 10000-15000 | 14 | 28 |
| Above Rs. 15000 | 19 | 38 |
| Area | | |
| Rural | 20 | 40 |
| Urban | 30 | 60 |

Distribution of women by knowledge level

The study findings revealed that there was no significant association between knowledge and selected demographic variables such as age, education, occupation, income, area. There was significant association between knowledge with age and educational status.

| Knowledge level | No. | % |
|--------------------|-----|----|
| Adequate (76-100%) | 06 | 12 |
| Moderate (51-75%) | 24 | 48 |
| Inadequate (0-5%) | 20 | 40 |

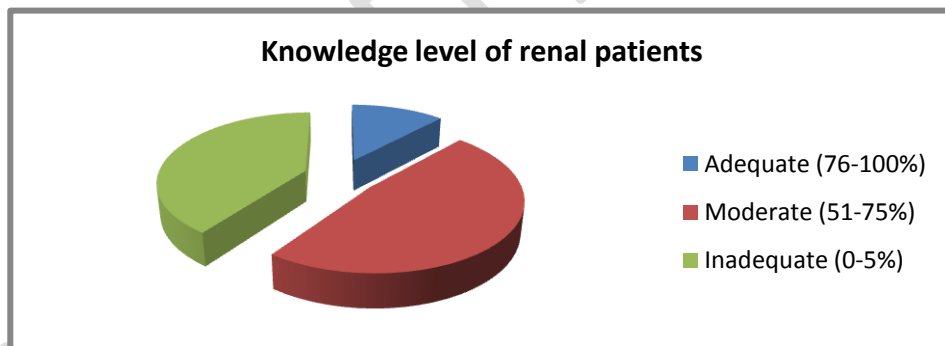


Fig. 1: Pie diagram showing distribution of renal patients by knowledge level.

IMPLICATIONS

Nursing practice

The study findings will help renal patients regarding Hemodialysis and they can utilise this knowledge for self-care at home.

Nursing education

The student nurses may be motivated to educate the renal patients regarding Hemodialysis.

CONCLUSION

The renal patient's understanding of hemodialysis was inadequate. Renal patients must be educated about hemodialysis through community-based meetings. The goal of this study

was to see how well hemodialysis patients knew about nutritional control and how they felt about it. The following conclusion was reached as a result of the discovery. During the researcher's fieldwork, it was discovered that the majority of hemodialysis patients were uninformed of their nutritional management. As a result, the dietary guide was successful in improving their dietary management knowledge and attitude.

References:

1. <https://www.kidney.org/atoz/content/hemodialysis> (dated 09-10-2021).
2. <https://www.niddk.nih.gov/health-information/kidney-disease/kidney-failure/hemodialysis> (dated 09-10-2021).
3. <http://www.meddean.luc.edu/lumen/meded/mech/cases/case24/chronicr.htm> (dated 09-10-2021).
4. Vaidya SR, Aeddula NR. Chronic Renal Failure. [Updated 2021 Jul 16]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535404>.
5. Janssen IM, Gerhardus A, Gersdorff GD, Baldamus CA, Schaller M, Barth C, et al. Preferences of patients undergoing hemodialysis results from a questionnaire based study with 10.2147 patients. Patient preference adherence. 2015; 9: 847-855.
6. Arora P. Chronic kidney disease. 2014.
7. National Kidney and Urologic Diseases Information Clearing house (NKUDIC). Kidney Diseases Statistics for the United States. 2014.
8. Himmelfarb J. Core curriculum in nephrology. Hemodialysis complications National Kidney Foundation, Inc. American Journal of Kidney Diseases. 2005; 45:1122-451131.
9. EL-Shahed A.M, Sharf SA, EL Sebaee HA, Roshdy MM. Hemoglobin level, associated comorbidities and quality of life among patients undergoing Hemodialysis at one of the University Hospitals in Cairo Governorate. World Applied Sciences Journal. 2013; 23: 29-36.
10. Medicine Net. Hemodialysis, Treatment for Kidney Failure. 2014.
11. Al-Sayyari AA, Shaheen FA. End stage chronic kidney disease in Saudi Arabia. A rapidly changing scene. Saudi medical journal. 2011; 324: 337-346.
12. Smeltzer S, Bare B, Hinkle J, Cheever K. Brunner & Suddarth's Textbook of Medical-surgical Nursing. 201; 1: 1322.

First, I would like to thank you for the invitation to review the article entitled "ASSESSMENT OF KNOWLEDGE ON HEMODIALYSIS AMONG RENAL PATIENTS".

I'll start making some corrections,

1. In the abstract in the second line the word hemodialysis is misspelled.
2. In the introduction in the third line where it startsThere are two different types of dialysis hemodialysis and peritoneal dialysis [1]. Please correct are two types of treatment.... And I think I could talk a little bit about each type of therapy.
3. The second paragraph of the Introduction is very confusing, I believe it has to better explain the types of access for hemodialysis.
4. Still in the introduction in the paragraph that says: . "It is one of the most serious issues facing health-care organizations, and it has the potential to result in global death. Chronic renal failure can occur at any age, and according to the 2006 report...", I believe there are more recent articles to add this information.
5. In the study methodology, in the end only women were chosen to participate in the questionnaires, if so why?
6. In table 2, I divide by level of knowledge, % and no?
7. I didn't find in the text where it talks in more detail about what was asked in the questionnaire and its results, it only reports the understanding of the nutritional part of the patient in the conclusion, it would be interesting more information about it.

I thank you again for the invitation, and I make myself available