Study Protocol

PROTOCOL ON: TO EVALUATE THE EFFECTIVENESS OF NURSING PROTOCOL ON KNOWLEDGE AND PRACTICES REGARDING HEMODIALYSIS CARE AMONG PROFESSIONAL STAFF

ABSTRACT

Background: The prevalence rate of chronic kidney disease (CKD) ranges from 1 < percent to 13 percent and recently international society of nephrology reported In India, the prevalence rate of chronic kidney disease was 17 percent in 2015. The risk factors and etiological factors are different in overall India. **Objective** : 1.To assess the existing level of knowledge regarding hemodialysis care among professional staffs. 2. To assess the existing Practice regarding hemodialysis care among professional staffs. 3.To assess the effectiveness of nursing protocol on knowledge regarding hemodialysis care among professional staffs.4.To assess the effectiveness of nursing protocol on practice regarding hemodialysis care among professional staffs. 5.To find out the correlation between knowledge and practice regarding hemodialysis care among professional staffs. 6.To associate the level of knowledge and practice regarding hemodialysis with selected demographic variable. **Methodology:** It is Quasi experimental one group pre-test post-test research design will be used in this research study conducted on the professional staff in the selected hospital of Wardha. Non-probability purposive sampling technique will be used to select samples for analysis. This research study included 60 professional staff of selected hospital of Wardha district. . Professional staff must select according to requirements for inclusion and exclusion????. For this study, Professional staffs who are giving care to the hemodialysis patients. Professional staffs who are willing to participate. **Expected Results:** Outcome includes To evaluate the nursing care for hemodialysis patients. Through, improve and evaluate the knowledge and performance of hemodialysis care among professional staff before and after the education and training interventions. To assess the existing practice of hemodialysis care and the generation of new evidence.

Ethics approval was obtained from (DMIMS(DU)/IEC/DEC-2019/8689). The conclusion will be drawn from the results.

Conclusion: Conclusion will be drawn from the statistical analysis.

Keyword: nursing protocol, knowledge, practice, hemodialysis care ,professional staff

(Arranged alpha Betically)

Too long abstract

INTRODUCTION

"Nurses Are The Heart Of Hospital"

Dialysis nurses should have good knowledge and have skillful practices in hemodialysis (HD) treatment. In the dialysis unit have an important role in monitoring, promoting the treatment, and educating of patients. In the developing and developed countries, with changes in lifestyle and advances in life expectancy, chronic diseases such as end-stage renal diseases, cardiac diseases, and diabetes mellitus are increasing steadily.[1-3]

A major health problem in the world is chronic renal disease. End-stage renal disease (ESRD) is the number of patients that are irreversible and progressive kidney failure disease in developed and developing countries to increase Chronic Renal Failure (CRF). Chronic renal failure (CRF) results from total loss of kidney function. Total loss of kidney function results in chronic renal failure (CRF).[3,4]

The prevalence rate of chronic kidney disease (CKD) ranges from 1 < percent to 13 percent and recently international society of nephrology reported In India, the prevalence rate of chronic kidney disease was 17 percent in 2015. The risk factors and etiological factors are different in overall India.[5-7]

End-stage renal disease or chronic kidney disease are common health problems in India. It includes diabetes mellitus, elderly, obese people. Many people around the world suffer from End-stage renal disease (ESRD) and require long-term dialysis.[8-10]

Chronic renal failure is medically managed with fluid adjustments, correction of electrolyte imbalances, proper low protein diet, and drug .dialysis and renal replacement are the ultimate renal replacement therapy.[11,12]

Standards of nursing care that the nurse shows and learns through nursing activities include assessment, diagnosis, recognition of outcomes, planning, implementation and evaluation. The nursing method considers clinical decision-making concepts and fundamentals, clinical guidance and includes all essential nurses' practices in delivering treatment to all patients.[13,14]

Professional nursing practice standards are authoritative descriptions of the duties that are required to be performed competently by all registered nurses, regardless of their position, level of care or efficiency, beliefs and preferences, population or specialization, by which the quality of nursing practice can be measured.[15-17]

AIM OF THE STUDY

To evaluate the nursing care for hemodialysis patients. Through, improve and evaluate the knowledge and performance of hemodialysis care among professional staff before and after the education and training interventions. To assess the existing practice of hemodialysis care and the generation of new evidence.

OBJECTIVES

- To assess the existing level of knowledge regarding hemodialysis care among professional staff.
- To assess the existing Practice regarding hemodialysis care among professional staff.
- To assess the effectiveness of nursing protocol on knowledge regarding hemodialysis care among professional staff.
- To assess the effectiveness of nursing protocol on practice regarding hemodialysis care among professional staff.
- To find out the correlation between knowledge and practice regarding hemodialysis care among professional staff.
- To associate the level of knowledge and practice regarding hemodialysis with selected demographic variable.

CRITERIA OF THE STUDY

Inclusion Criteria

- Professional staff who are giving care to the hemodialysis patients.
- Professional staff who are willing to participate.

Exclusion Criteria

- Those who are not directly involved in hemodialysis patient care.
- Those who are participants in similar type of study.

RESEARCH HYPOTHESIS

B **H_1.**It Is Expected that there is a significant difference between per-test and post-test knowledge and practices on hemodialysis care among professional staff**.**

RESEARCH METHODOLOGY

It is an academic based study. In this study will be used interventional research approach. Quasi experimental one group pre-test post-test research design will be used. The study will be conducted in selected hospital of Wardha district. Sampling technique will be used non probability purposive sampling technique. In this research study the accessible population will be the professional staff in selected hospital of Wardha district.

RESEARCH APPROACH

Interventional research approach

RESEARCH DESIGN

Quasi experimental one group per-test post-test research design

TARGET POPULATION

Professional staff

ACCESSIBLE POPULATION

Professional staff in selected hospital of Wardha district

SAMPLING TECHNIQUE

Non probability purposive sampling

SAMPLE SIZE

60 samples

TOOL

Knowledge questionnaire and Observation checklist

VARIABLES

INDEPENDENT VARIABLE

Planned teaching on knowledge and practice regarding care of hemodialysis

DEPENDENT VARIABLE

nursing protocol on knowledge and practice regarding hemodialysis care among professional staff.

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DATA COLLECTION PROCEDURE

ANALYSIS

Descriptive and inferential statistics

INTERPRETATION & REPORT WRITING

REPORT WRITING

Figure 2: Schematic presentation of one group pre test and post-test design

Where the figure (2)?

SAMPLE SIZE –

To calculated to according working staffs.

In consideration of 10% dropout,120 participants will be assigned

The sample consists of the unite which comprise the population. Sixty (60) professional staffs were selected using calculated formula to suit the study. Formula for calculating sample size.[16]

$$N = \frac{X^2.N.P(1-P)}{C^2(N-1)+X^2.P(1-P)}$$

Where;

X^2 is the chisqnare value for 1. df at 95% confidence interval = 1.96

N= Total professional staff = 70

P= 50% Proportion = 0.50

C^2 = Desired error of level = 0.05

$$N = \frac{3.84 \times 70 \times 0.50 \times 0.50}{(0.05^2 \times 69) + (3.84 \times 0.50 \times 0.50)}$$

= 59.64

N= 60 professional staff needed in the study

INTERVENTIONS –

On the first day of the study, first the pre-test knowledge regarding hemodialysis care among professional staff will be assessed through a structured knowledge questionnaire. Observe the per practice regarding hemodialysis care among professional staff will be assessed through the observational checklist.

After the education and training interventions will be given on the same day to the professional staff.

On the 7th day post-test the effectiveness of nursing protocol on knowledge and practices regarding hemodialysis care among professional staff.

OUTCOME MEASURES

Primary outcomes assessment of existing knowledge and practices regarding hemodialysis care among professional staff.

Secondary outcomes assessment of post- test knowledge and practices regarding hemodialysis care among professional staff.

The effectiveness of nursing protocol on knowledge and practices regarding hemodialysis care among professional staff.

Correlation between knowledge and practices regarding hemodialysis care among professional staff.

Association of knowledge and practices regarding hemodialysis with selected demographic variable.

DATA MANAGEMENT AND MONITORING - The demographic data (like age, education, place of work, total year experience.), in this pre-test to assess the exiting level of awareness. Than given the intervention of nursing protocol on knowledge and practices regarding hemodialysis care after 7 the day to taken the post test.

STRUCTURED QUESTIONNAIRE

It consists of three sections

Section A. Consist of demographic data such as age, qualification, place of work, total year of experience.

Section B. Consists of 20 questions on hemodialysis care knowledge questionnaire.

The researcher should mention some statements of knowledge questionnaire.

Section C. Consists of 24 steps on the Observation checklist.

The researcher should mention some statements of practices observational checklist.

The scoring system for each tool should putted under it.

Scoring

- The correct answer was given 1 score.
- The wrong answer was given a 0 score

- Knowledge was categorized from poor knowledge to excellent knowledge based on the scores
- Practice was categorized from poor practice to excellent practice (knowledge) based on the scores

Table No-1 : Scoring method to assess the knowledge regarding the care of hemodialysis

Sr.no.	Level of knowledge score	Score range
1.	Poor	0-5
2.	Average	6-10
3.	Good	11-15
4.	Excellent	16-20

Table No-2: Scoring method to assess the practice regarding the care of hemodialysis

Sr.no.	Level of practice (knowledge) score	Score range
1.	Poor	0-6
2.	Average	7-12
3.	Good	13-18
4.	Excellent	19-24

STATISTICAL ANALYSIS - Statistical analyses will be performed using SPSS software version 23.

ETHICS AND DISSEMINATION- This study is approved by the Institutional Ethics Committee of DMIMS (DMIMS(DU)/IEC/DEC-2019/8689). All participants will asked to read and sign the informed consent. The study results will be disseminated to study participants and published in peer-reviewed publications.

EXPECTED OUTCOMES/RESULTS:

This study is planned to improve effectiveness of nursing protocol on knowledge and practices regarding hemodialysis care among professional staff.

DISCUSSION :

A quasi-experimental study was conducted in Egypt. The convenience samples of forty one nurses were all woman and had prior experience caring for patients on hemodialysis. 68.3 percent of nurses were unaware of hemodialysis nursing care quality, according to the report. More than half of nurses (61.0 percent - 56.1 percent) had not attended a workshop in the previous five years and had not attended educational lectures. In comparison to the pre-test time, an equal proportion of nurses achieved very good or excellent overall total knowledge and efficiency in the post-test and follow-up times, as well as an improvement in total mean scores for findings related to overall infection control results.[17]

A quasi-experimental study was conducted in Egypt. 90.6 percent of the nurses had adequate levels of expertise. In addition to the overall pre score, the nurses' practice scores improved significantly in the areas of general precautions, hand washing procedure, procedure of wearing gloves, wearing masks, procedure of catheter insertion, skin preparation procedure, taking care of patients' instruments, dealing with sharp items, dealing with blood, body secretions, and fluids, and ensuring a clean environment and healthy injection practices. Several aspects of the nurses' work, such as laboratory-style covering coats, complete isolation, and catheter treatment, saw major changes. The practice score level was satisfactory in 68.7 percent of the nurses, while it was insufficient in 31.3 percent. Older nurses and those with a bachelor's degree in nursing had slightly higher awareness scores and levels of progress after completing the education program.[18]

CONCLUSION: Conclusion will be drawn from the statistical analysis.

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