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Effectiveness of Informational Booklet on Knowledge Regarding Self Care Management among Hemodialysis Patient's At Selected Hospital in Villupuram District

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Abstract

Aim: To evaluate the effectiveness of informational booklet on knowledge regarding self-care management among haemodialysis patients. **Objectives:** (i) To assess the pre and post- test level of knowledge regarding self- care management among haemodialysis patients.(ii) To evaluate the effectiveness of information booklet on knowledge regarding self- care management among haemodialysis patient's.(iii) To associate the post-test level of knowledge regarding self-care management of haemodialysis patient's with their selected socio demographic variables. **Methodology:** A Pre - experimental one group pre-test and post -test research design was adopted for this study. 50 samples were selected by using convenient sampling technique. The pre and post test level of knowledge assessed through Self-structured questionnaires regarding self-care management among haemodialysis patient **Results:** The findings shows that Pre-test Mean score was 11.58 with a standard deviation of 2.38 and the Post-test mean score was 22.92 with a Standard deviation of 2.82, Mean difference is 11.34 with a standard error of 0.41 and t-test value was 27.65 shows highly significance. **Conclusion:** The study concluded that the informational booklet was effective in improving the knowledge of self care management among hemodialysis patient

Keywords: hemodialysis patients, self care management.

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I.INTRODUCTION

The term renal failure denotes inability of the kidneys to perform excretory function leading to retention of nitrogenous waste products from the blood. Acute and chronic renal failure are the two kinds of kidney failure. When a patient needs renal replacement therapy, the condition is called end-stage renal disease (ESRD). This activity reviews the causes. pathophysiology, presentation and diagnosis of renal failure and highlights the role of the inter professional team in its management.

Dialysis is needed when a kidneys stop working properly. Dialysis is one form of renal replacement therapy (RRT) and transplantation is the other.

Dialysis will make feel better but it does not make them feel normal or return the blood test results to normal, as we hope will happen with transplantation. Dialysis is used until transplantation is possible

Dialysis does the job that is normally carried out by the kidneys. That is, it takes away the substances that the body does not need that would otherwise build up in the blood and make someone ill. Dialysis also removes salt and water from the body if the kidneys have reduced the amount of urine they are making.

There are two types of dialysis: peritoneal dialysis and hemodialysis. Both methods have their advantages and one type may be more appropriate for than the other.

In both types, the principal is the same: a cleaning fluid (called dialysate) is used to take the impurities, salt and water away from the blood. The impurities pass from the blood into the cleaning fluid. There has to be a barrier between the blood and the cleaning fluid for this to happen. In haemodialysis, the barrier is the filter in the dialysis machine that the blood passes

through and in peritoneal dialysis, the barrier is the layer of cells that lines the abdomen and covers the intestines (the peritoneum).

Hemodialysis is a treatment to filter wastes and water from your blood, as kidneys did when they were healthy. Hemodialysis helps control blood pressure and balance important minerals, such as potassium, sodium, and calcium, in blood.

During hemodialysis, blood goes through a filter, called a dialyzer, outside body. A dialyzer is sometimes called an "artificial kidney."

II .STATEMENT OF THE PROBLEM

"A study to evaluate the effectiveness of informational booklet on knowledge regarding self care management among hemodialysis patient's at selected hospital in villupuram district"

III. OBJECTIVES

- To assess the pre and post- test level of knowledge regarding self- care management among Hemodialysis patients.
- To evaluate the effectiveness of information booklet on knowledge regarding self- care management among hemodialysis patient's.
- To associate the post-test level of knowledge regarding self-care management of hemodialysis patient's with their selected socio demographic variables.

IV.HYPOTHESIS

- H1-There is a significant difference in pre-test and post-test level of knowledge regarding self-care management among hemodialysis patients.
- H2-There is a significant association between post -test level of knowledge regarding self- care management among hemodialysis patients with their selected socio demographic variables.

V.METHODOLOGY

A Pre - experimental one group pre-test and post -test research design was adopted for this study. 50 samples were selected by using convenient sampling technique. The pre and

VI.RESULTS:

Table -1 Frequency and percentage

post test level of knowledge assessed through Self structured questionnaires regarding self care management among hemodialysis patient.

distribution of pre-test and post-test knowledge regarding self-care management among Hemodialysis patients.

Level of knowledge	рі	re test	post test		
	Frequency	Percentage (%)	Frequency	Percentage (%)	
Inadequately knowledge	23	46%	0	0%	
Moderately adequate knowledge	27	54%	20	40%	
Adequate knowledge	0	0%	30	60%	

Table-1: In the pre-test 23(46%) of them had inadequately knowledge and 27(54%) of them had moderately knowledge.

In the post- test 20(40%) of them had moderately knowledge and 30(60%) of them had adequate knowledge.

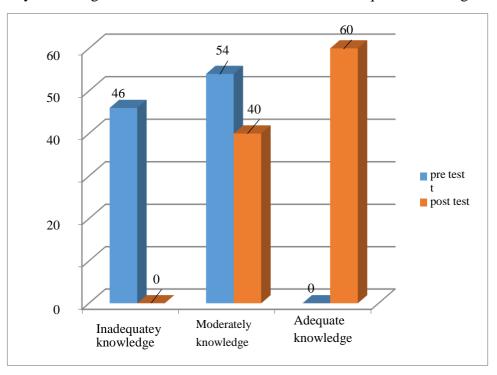


Figure:1 Shows frequency and percentage distribution of pre-test and post-test knowledge Eur. Chem. Bull. 2023,12(Special Issue 8), 1760 -1770

regarding self- care management among Hemodialysis patients.

 Table -2.
 Pre and post-test mean, standard

 deviation, mean difference, standard error, and

t value for the level of knowledge on selfcare management among Hemodialysis patient.

'Pre test'		'Post test'				
	Standard		Standard	Mean	Standard	
Mean	deviation	Mean	deviation	difference	error	T value
11.58	2.38	22.92	2.82	11.34	0.41	'27.65*S'

Table -2 shows that in the experimental grouppre-test mean, the score was 11.58 with thestandard deviation of 2.38 and thepost-testmeanscore22.92withthestandard

Table -3 Association between the post-testlevel of knowledge regarding self-care

deviation 2.82.the mean difference is 11.34 with a standard error of 0.41 .the t value is 27.65 shows the highly significance.

management of Hemodialysis patient's with their selected socio demographic variables.

		Inadequate	Moderate	Adequate	Chi	
D	emographic variables	knowledge	knowledge	knowledge	square	P value
1.Ag	e	0	20	30		
a)	<30 years	0	0	2		
b)	31-40 years	0	11	10		
c)	41-50 years	0	5	11		
d)	51-60 years	0	3	4	3.584	0.465
e)	>60 years above	0	1	3		
2.Gei	nder					
a)	Male	0	13	18		
b)	Female	0	7	12	0.127	0.991

c)	others	0	0	0		
3.Ma	rital Status					
a)	married	0	17	28		
b)	Un married	0	0	2	5.926	0.115
c)	Divorced	0	1	0		
4.Lev	vel of Education					
a)	No formal education	0	3	3		
b)	Primary	0	7	16		
c)	Secondary	0	8	7	2.349	0.503
d)	Degree	0	2	4		
5.Oc	cupational status					
a)	Un Employee	0	3	5		
b)	Private employee	0	5	6		
c)	Business	0	1	0	3.52	0.893
d)	Agriculture/farmer	0	10	19	5.52	0.895
e)	Retired	0	1	0		
6.Re	sidence					
a)	Urban	0	4	7		
b)	Semi urban	0	2	1	0.96	0.915
c)	Rural	0	14	22		
7.Fai	mily type					
a)	Nuclear family	0	13	22		
b)	Joint family	0	7	8	0.39	0.983
c)	Extended family	0	0	0		
8.Fai	mily monthly income					

a)	Below 10000	0	0	0		
b)	10001-20000	0	4	10	1.058	0.589
c)	20001-30000	0	8	10		
d)	30000 above	0	8	10		
	urce of health rmation					
a)	Friends	0	0	2		
b)	Relatives	0	11	10	2.65	
c)	Health care workers	0	0	1	3.65	0.723
d)	Family	0	9	17		
10.C	o- mobidity					
a)	Diabetes mellitus	0	2	2		
b)	Hypertension	0	9	11	0.69	0.995
c)	Both A and B	0	1	2		
d)	Neurological disorders	0	0	0		
e)	Nil	0	8	15		

Table -3 Shows that there is association between level of knowledge with the source of health information at p<0.05 and no significant association between level of knowledge and

age, gender, marital status, level of education, occupation status, residence, family type, family monthly income, source of health information, co-morbidity in the experimental group

VII .DISCUSSION

The **first objective** of the study to find the pre and post- test level of knowledge regarding self- care management among Hemodialysis patients.

 \Box In the pre-test 23(46%) of them had inadequate knowledge and 27(54%) of them had moderate knowledge.

 \Box In the post- test 20(40%) of them had moderate knowledge and 30(60%) of them had adequate knowledge.

The **second objective** to evaluate the effectiveness of information booklet on knowledge regarding self- care management among Hemodialysis patients.

• Pre-Test Mean, The Score Was 11.58 With The Standard Deviation of 2.38 and The Post- Test Mean Score 22.92

• The Standard Deviation of 2.82.

• The Mean Difference Is 11.34 With A Standard Error of 0.41.

• The T Value Is 27.65 shows a high significance.

The third objective of study to find the Association between The Post-Test Level of Regarding Knowledge Self-Care Management of Hemodialysis Patient's With Their Selected Socio Demographic Variables. Association between the level of knowledge with the source of health information at p<0.05 and no significant association between level of knowledge and age, gender, marital status, level of education, occupation status, residence, family type, family monthly income, source of health information, co-morbidity.

VIII. RECOMMENDATIONS

- A similar study can be conducted as a true experimental study.
- A similar study can be conducted for a large group.
- A comparative study can be conducted.
- Informational booklet on effective teaching method can be used.

 The study can be conducted to assess the psychological status of who have undergone Hemodialysis.

IX. CONCLUSION

The finding of the study shows that there is a significant difference between pre and posttest levels of knowledge with a t value of 27.65 hence the study concluded that the informational booklet was effective in improving the knowledge regarding self care management among Hemodialysis patients.

X.REFERENCES:

BOOKS:

1..Annamma Jacob et. al (2008).., "Clinical Nursing Procedures: The Art of Nursing Practice," New Delhi Jaypee Brothers, Medical Publishers Pvt. Limited.

2.Agarval. L P. (2006). Medical Surgical Nursing. (1" edition). New Delhi: Jaypee Brothers Medical Publishers.

3.Basavanthappa BT. (2008). Medical Surgical Nursing. (15th edition). New Delh Jaypee Brothers Medical Publishers.

4.Basvanthappa, B. T. (2007). Nursing Theories. (15th edition). New Delhi: Jaypee Brothers Medical Publishers.

5.Mally Sam N Geetha (2004) A Text Book of Nutrition for Nurses. (5th edition). New Delhi: Jaypee brothers medical publishers.

6.Nancy Burns. (2000). Understanding nursing research (2nd edition). Philadelphia: W .B Saunder's company. 7.Polit. B.F & Ilungler. B. (2009). NursingResearch. (7th edition). Philadelphia:Lippincott Publications.

8.Pillai & Bagavalhi. (2003). Practical Statistics. (1st edition). New Delhi: S Chand and Sons Company.

9.Samir Malhotra (2006). All that you wanted to know about Clinical Research. (6th edition). Chandigarh : Mansa Print And Publishers Limited.

 Shafer's. (2004). Medical Surgical Nursing. (7th edition). New Delhi: B.L Publication.

Smeltzer, S. C. & Baer, B. G. (2008).
 Textbook of Medical Surgical Nursing. (10th edition). Philadelphia. Lippincott Publication.

12.Swaminathan. M. (2008). Hand Book ofFood and Nutrition. (1st edition). Bangalore:The Bangalore Printing Publication. Co.LTD.

13.Varma, B.L & Sukla, GD. (2004).Biostatistics Perspective in Health CareResearch and Practice. (5th edition). NewDelhi: CBS Publication.

14.Black, J. M and Jacobs, EM. (2006).
Medical Surgical Nursing. (5th edition).Philadelphia: W.B. Saunders
Company.

Eur. Chem. Bull. 2023,12(Special Issue 8), 1760 -1770

15.Burns, N & Grove, SK. (2006).Understanding Nursing Research. (2th edition).Philadelphia: W.B. Saunders Company.

16.Carrill, A.Lutz. (2008).NutritiOn and Diet Therapy .' Evidence Based Application. (4th edition). Delhi: Jaypee Brothers, Medical Publication.

17.Cotran, Kumar, Robins. Palhologic basis of disease. (5th edition).W.B. sounders company Philadelphia.

18.Davidson. (2002). Principles and Practice of Medicine. (19th edition). New York: Churchill Liyingstone Publishers.

19.Darshan .Sohi.A.(2009). A Text Book Of Nutrition. (2nd edition). Jalandhar : S.Vikas & Co. Publishers.

20.Gupta. (2005). Statistical Methods. (32nd edition). New Delhi: Sultan Chand & Sons Education Publishers.

21.Golwalla. (2008). Medicine for Students.(16'h edition). Bombay: India Printing house.

22.Helen. J .S. & Dona, R. (2006). Qualitative Research in Nursing. (4th edition) New York: Lippincott Williams and Wilkins.

23.Holloway N.M. (1999). Medical Surgical Nursing Care Planning. (3rd edition).Pennsylvania: Spring house publishers. 24.Ignastsvicius, D.D. & Linda, W. (2004).Text Book of Medical Surgical Nursing. (4th edition) Philadelphia: W.B. Saunders Company.

25.Janice M Morse. (2004). Nursing Research the Application Quantitative Approaches. (2nd edition). United Kingdom: Nelson Thomas Publications.

26.John W Best and James V Khan. (2003). Research in Education. (17th edition). New Delhi: Asoka Publications.

27.Kothari, CR. (2007). ResearchMethodology -Methods and Techniques. (3rd edition). New Delhi: National Publishers Pvt Ltd.

28..Lewis, SM. et.al. (2006). MedicalSurgical Nursing. (7th edition).London:Mosby Publications.

29.Luckmann, J. (2008). Manual of NursingCare. (1st edition) Philadelphia:LWWPublications.

30.Martha. et.a1. (2003). Nursing TheoryUtilization and Application. (2nd edition). Chicago: Lippincott Publishers.

31.P Mahanaj B.K. (2007). Methoa's in Biostatistics. (6th edition). Newdelhi: Jaypee Brothers.

Eur. Chem. Bull. 2023,12(Special Issue 8), 1760 -1770

32.Merlin EP (2007). Nursing Theories and Nursing Practice. (1st edition) New Delhi: Jaypee Publication.

33.Black M. Joyce(2006).. Jane Hokanson Hawks et.al.."Medical Surgical Nursing Clinical Management for Positive Outcomes, 7th edition, New Delhi, Elsevier India private ltd,Volume-I.

34.Burns Nancy and Susan K.Grove(2013)... "The Practice Nursing Research Conduct Critique and Utilization", 1st edition, Philadelphia, W.B. Saunders Company. 1993.

35.Edwards R.W. Christopher and Bouchier A.D. Ian ."Davidson's Principles and Practice of Medicine", Hongkong. 16th edition,Longman group,(2001).

36. Munro B.H(2007)., "Statistical Methodsfor Health Care Research", 3rd edition,Philadelphia, Lippincott company.

37. Kusum Samant(2000)., "Medical Surgical Nursing", India (2nd edition), , Vora medical publications.

38. Linda S. Williams. et.al(1999).."Understanding Medical Surgical Nursing",Philadelphia 1st edition, F.A. Davis Company .

39. Paulette D. Rollant and Deborah. E.Ennis(2006).. "Medical Surgical Nursing",U.S.A,

1st edition, Mosby publications, 2006.

40.Park K., "Text book of Preventive and Social Medicine", Jabalpur 18th edition , Bandarsidan bhanot publisher, 2005.

41.Sr. Nancy M.S.J(2016)., Principles & Practice of Nursing, Nursing ArtsProcedures,8th edition N.R. Publishing House, Indore.

42.Luckman et.al.,. "Medical Surgical Nursing", 5th edition, Philadelphia, W.B. Saunders 1994.

43. Neelam Makhija(2005). "Introduction to Nursing Research" New Delhi, 1st edition, New Delhi, A.P. Jain and co publications.

44.Nabendu pal and Sahadeb Sarkar(2007)., "Statistics concepts and applications", New Delhi ,2nd edition, Prentice – Hall of India private ltd.

45.Prabhakara G.N(2006.). Biostatistics, 1st edition, New Delhi, Jaypee Brothers Medical publishers (P) Ltd.,

46. Sharma RK(2009). "Text book of Nutrition for B.Sc., Nursing", Hyderabad, 1st edition, Frontline Publications,.

47. Stephen R. Bloom(2001), "Toohey's Medicine", New York 15th edition, Churchill living stone,

Eur. Chem. Bull. 2023,12(Special Issue 8), 1760 -1770

48. Sundar Rao.(1999) .S.S., "An introduction to biostatistics", New Delhi3rd edition, Vora medical publications.

49. Fawcet and Jacqueline(2003)., "The Relationship of Theory and Research", 3rd edition, Philadelphia, F.A. Davis company,

50.Gurumani N. , "An introduction to Biostatics" New Delhi, 2ndedition, MJP publishers(P) Ltd,

51.Wilma J. Phipps(2000), et.al. "Shafer's Medical Surgical Nursing", New Delhi 7th edition, BI Publications Pvt. Ltd,

JOURNELS:

1)Hallegraff, et al. An effective stretching regimen to prevent nocturnal leg cramps. Journal of Physiotherapy 2012; 59(4): (accessed doi: 10.1061/S1836-9553).

2)Holley, et al. . Muscle cramps in dialysis patients. CANNT Journal 2012; 25(3)

3) Johansen KL... Exercise in the end-stage renal disease population. Journal of American Society of Nephrology. 2008; 18(6).

4)López CM, Burrowes JD, Gizis F, et al. Dietary adherence in Hispanic patients receiving hemodialysis. J Ren Nutr. 2007;17(2):138–47.

5)Macías YF, Glasauer P. Guidelines for 1769 assessing nutrition-related knowledge, attitudes and practices manual [Internet]. 2014

6)Magnard et al. Effects of a six – month intradialytic physical activity program and adequate nutritional support on protein energy wasting, physical functioning and quality of life in chronic haemodialysis patients. British Medical Journal, 2013. (accessed 14.259-261.doi:10.1186/1471-2369-14-259

7)Tiveny A. Fluid compliance among patients having hemodialysis, can educational programme make difference, JOAN,2018 Nov ;6(2) 360-64.

8)Verseput C, Piccoli GB. Eating like a rainbow: the development of a visual aid for nutritional treatment of CKD patients. A South African project. Nutrients. 2017;9(5):435.

9)Abali,C., Adejumo,O., Chukwuonve,I., Ogah,S.O., Okwuonu,C.G. Awareness level of kidney functions and diseases among adults in a Nigerian population. Journal of American Science, 25,158-163.2013.

10)Ameh OI, Cilliers L, Okpechi IG. A practical approach to the nutritional management of chronic kidney disease patients in Cape Town, South Africa. BMC 11)Beto JA, Schury KA, Bansal VK. Strategies to promote adherence to nutritional advice in patients with chronic kidney disease: anarrative review and commentary. Int J Nephrol Renovasc Dis. 2016;9:21–33

12)Botha A. Assessing risk of malnutrition in adult patients on hemodialysis in Port Elizabeth. University; 2016.

13)Brenner. Exercise performance by hemodialysis patients. Journal of Basic And Clinical Renal Science 37.84-96.2009.

14)Canzanello et al. Hemodialysis associated muscle cramps. British Journal of Medicine 2006.

15) Durose CL, Holdsworth M, Watson V, et al. Knowledge of dietary restrictions and the medical consequences of noncompliance by patients on hemodialysis are not predictive of dietary compliance. J Am Diet Assoc. 2004 Jan [cited 2019 Oct 4];104(1):35–41.

16) Eknoyan G, Levin NW. K/DOQI(TM) clinical practice guidelines for nutrition in chronic renal failure. Am J Kidney Dis. 2000;35(6- SUPPL2)

Eur. Chem. Bull. 2023,12(Special Issue 8), 1760 -1770

Nephrol. 2016;17(1):1-8.