"A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON QUALITY OF LIFE AMONG PATIENTS COMING FOR HEMODIALYSIS IN SELECTED HOSPITALS DAHOT CITY GUJARAT "

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ABSTRACT

BACKGROUND

Quality of life is actually an approach towards life. It focuses on the whole person by interacting with his /her Physical, Psychological, Social and environmental aspects rather than focusing on illness or specific parts of the body. The goal is to achieve maximum well- being, With Quality of life people accept their responsibility for their own level of wellbeingandeverydaychoicesisusedtotakecharg eofone"sownhealth.Qualityoflife (QOL) is a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life. Here the investigator tries to correlate the effectiveness of information booklet in improving the quality of life.

OBJECTIVES

1. *To assess the quality of life among patients coming for hemodialysis*
2. *To evaluate the effectiveness of information booklet.*
3. *To find out association between sociodemographic variables and quality of life.*

METHODS

An evaluator approach was used for the study and 120 patients coming for hemodialysis were selected by Purposive sampling technique it is a type of non-probability sampling procedure. The study was conducted on those patients who were coming for hemodialysis in Hospital, of Dahot. They were provided with a self structured likert scale to give responses towards quality of life.

RESULTS

The investigator developed a scale to measure the quality of life of those patients who were coming for hemodialysis. The scale consisted of 34 items in a checklist. A score ranging from 34-68 were categorized under poor quality of life, Patients who scored 69-102werehavingaveragequalityoflifeandthosepati entswhoscoredfrom103-136were categorized under those patients who were having good quality of life.

The check list consisted of four domains such as physical, psychological, social and environmental domain. The overall quality of life of patients coming for hemodialysis was calculated by scores gained by them and it is observed that the quality of life was not as good as 90.83% of patientswerehavingpoorqualityoflifewereas9.17wer ehavingaveragequalityoflife. And none of the person was having good quality of life, which highlighted that there was a strong need to improve the quality of life of patients coming for hemodialysis.

Theassociationofoverallqualityoflifescorewithse lectedsociodemographicvariables depicts that with gender it shows insignificance at level of p>0.05, age group shows insignificance at level of p>0.05 ,Marital status shows insignificance at level of, p>0.05,typeof family shows insignificance at level of p>0.05 ,employment status shows insignificance at level of p>0.05,Monthly family income shows significance at level of p<0.05,education qualification shows insignificance at level of p>0.05,Financial support shows significance at level of p<0.05 and with the demographic variable general health chi square cannot be calculated as it was constant.

INTERPRETATIONANDCONCLUSION

The quality of life domains such as physical, psychological, social and environmental domain are studied in this study in relation to various demographic variables. It is concluded

from the study findings that there are large number of patients who were coming for hemodialysis are having poor quality of life, henceforth there is a constant need of awareness regarding how to improve the quality of life. Since most of the patients were having poor quality of life and some of them were under average the information booklet was given to each patient.

Key worlds: WHO: World Health Organization, QOL: Quality of life, HRQOL: Health related quality of life, CKD: Chronic Kidney Disease, ESRD: End Stage Kidney Disease, RRT: Renal Replacement Therapy

Introduction:

Quality of life is a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life. The quality of a person's life may be considered in terms of its richness, completeness and contentedness. A number of factors contribute to this sense of well-being including good health, a secure social and occupational environment, financial security, spirituality, self-confidence and strong, supportive relationships. These factors are interrelated with each others. For instance, a patient will of tenbeableto deal with an illness better she/he has good family support, a strong faith and the financial ability to acquire nourishing food, shelter and treatment. Health-related quality of life can be considered as that part of a person's overall quality of life that is determined primarily by their health status and which can be influenced by clinical interventions. QOL includes the measurement of patient-reported outcomes, mostly described as the physical, social, emotional and functional wellbeing of the patient. These realms of wellbeing are reported by the patient them self and are thought to be a subjective measurement of response to treatment or treatment outcomes. Hemodialysis therapy is time-intensive, expensive, and requires fluid and dietary restrictions. Long-term dialysis therapy itself often results in a loss of freedom, dependence on caregivers, disruption of marital, family, and social life, and reduced or loss of financial income. Due to these reasons, the physical, psychological, socioeconomic, and environmental aspects of life are negatively affected, leading to compromised QOL.

REVIEW OF LITERATURE:

N.S. Sreejitha, K.S.G. Devi, M. Deepa, G.L. Narayana, M. Anil, R. Rajesh, K. George, V.N. Unni (2012) conducted a study to assess the QOL of patients on maintenance hemodialysis and those who underwent renal transplantation. Sample size was of 100 patients who underwent renal transplantation, 75 patients on maintenance hemodialysis at amrita institute of medical sciences and 100 normal people (controls). WHOQOL-BREF questionnaire was used to study the quality of life. The WHO QOL scores for the three groups (normal controls, hemodialysis patients and transplant recipients) were compared. The WHO QOL score for the transplant group is significantly higher than the patients on maintenance hemodialysis; however the scores are less than in normal people. There was statistically significant difference in scores in all 4 domains (physical, psychological, social, environmental) between hemodialysis' & transplant group (p<0.001). Similarly significant difference existed between transplant recipientsand normal controls (p<0.0001).Though they couldn't attain the QOL of normal controls. Thus the

study concluded that the patients who underwent renal transplantation have a much better quality of life than those who are on maintenance hemodialysis.

Muhammad Anees, & Muhammad Nasir Saeed Khan. (2011) conductedacross-sectionalstudytoassessthe QOL of patients on hemodialysis and compare it with caregivers of these patients. Cause of ESRD and dialysis-related Factors affecting QOL were also examined. This cross- sectional study was conducted on patient on maintenance hemodialysis for more than 3 monthsat3dialysiscentersof Lahore. Fifty healthy individuals were included as controls from among the patients' caregivers. The QOL index was measured using the World Health Organization QOL questionnaire, with higher scores corresponding to better QOL ofpatients.Eighty-ninepatients(71.2%)weremen,99(79.2%)weremarried,75 (60.0%) were older than 45 years, and 77 (61.6%) were on dialysis for more than 8 months. Patients on hemodialysis had poorer QOL as compared to their caregivers in all domains except for domain 4 (environment). There was no difference in the QOL between the threedialysiscentersofthestudy,exceptfordomain3(socialrelationship)ofthepatients at Mayo Hospital (a public hospital), which was significantly better. Non-diabeticpatients had a better QOL in domain 1 (physical health) as compared to diabetic patients. Duration of dialysis had a reverse correlation with the overall QOL. We found that QOL of hemodialysis patients was poor as compared to caregivers of the patients, especially that of diabetics. Also, duration of dialysis had

a reverse correlation With QOL.

Tomar Jaymala (2011) conducted a study to assess the effectiveness of SIM on knowledge regarding adverse effects of teenage pregnancy among adolescent's girls of school in Indore city. The sample size of this study was 6.Age group of girls was from 5- 18yrs.Thestudywas conducted in government h.s. school of tilaknagarand masihi kanya vidhyalaya.After the implementation of SIM there was a significant increase inknowledge of girls regarding the adverse effect of teenage pregnancy.

Ratnagar Sheetal (2011) conducted a study to assess the effectiveness of SIM on knowledge regarding familyplanning methods among eligible couples in selected area of Indore city. The sample size was 60 and the study was conducted in slum areas. The age group was from 20-35 yrs.There was improvement in the education among the eligible couples seen after the administration of SIM.

Eilean Rathinasamy Lazarus (2019), This study was to evaluate the effectiveness of an education and exercise intervention on the quality of life of patients with end-stage renal disease (ESRD). A randomized controlled trail was used. A random sample of 150 patients (75 in intervention and 75 in control group) with ESRD and receiving dialysis was selected to participate in the study. The laptop assisted interactive education was prepared in vernacular language (Tamil) that runs for 25 min and shown to the patients and their relatives for the study group whereas the control group had only routine care by the dialysis unit. Before dialysis pretest was conducted and the following next visit patients was given laptop assisted interactive education before

dialysis and supervised the exercise during dialysis. The data was collected using the Research and Development health-related kidney disease QOL (KDQOL) questionnaire. Majority of them belong to age group between 50 and 59 years, studied up to primary education (29,30%), doing skilled work (44,40%)and earning more than Rs.12,000 and were having no health insurance. Most of them had diabetes and hypertension (35,34%) and was undergoing hemodialysis for more than 6 months (60,57%) and with Hemoglobin level (41,38%) of 6–8.5 g/dl and was underweight (48,41%). The mean scores for the Kidney Disease and general QoL sub-scales among the intervention group (Mean 66.5) were higher and statistically significant $(p < 0.01)$ compared to the control group (Mean 55.25). QOL. The education and exercise intervention had a positive effect on the physical and mental health well-being of patients with ESRD. Therefore early education about renal disease in affected patients improves QoL and treatment outcomes in patients with ESRD on dialysis.

METHODOLOGY:

The research design selected for the study was pre- experimental one group pre-test, post test design. With 120 Patients coming for hemodialysis and Self structured likert scale will be used as a tool for data collection. Data will be collected from patients coming for hemodialysis in selected hospitals. "Measurement is made of the dependent variable before the independent variable is applied. After the independent variable is applied and appropriate time has lapsed, the dependent variable is measured again. In the analysis of the data, the difference between the initial and terminal measurement represents the effect of the independent variable."

Sampling:

A sample is small portion of the population selected for observation and analysis. In the present study the sample comprises of 120 patients those ages above 20 yrs and who are

Inclusion Criteria:

➢ Both male and female patients those who are coming to hospital for hemodialysis

➢ Who can understand either English or Hindi

➢ Those who are willing to participate in the study

➢ Patient coming for hemodialysis with age 20yearsand above

➢ Those who are literate
Data Collection Procedure:

Datacollectiontoolsarethedevicesthatresearcherusedtocollectthedata.Avalidand reliable data collection instrument is considered important to yield high quality data. The study aimed to assess the effectiveness of information booklet on the QOL of patients coming for hemodialysis in selected hospitals of city. A structured knowledge questionnaire was prepared to assess the quality of life of patient coming for hemodialysis. Questionnaire is considered to be most efficient and objective method. Questionnaire is quick and generally inexpensive means of obtaining data from large number of respondent sand

questionnaire are one of the easiest research instruments to test for reliability and validity.

DATA ANALYSIS & INTERPRETATION

The collected data was tabulated, organized and analysed by using descriptive and inferential statistics. The demographic variables had been used to depict the important characteristics and main features of studied samples along with the assessments of four dimensions of Quality of life such as Physical, Psychological, Social and Environmental. Data was also presented in tabular form along with diagrammatic presentation which involves analysis and interpretation of data in terms of frequency and percentage distribution.

The present study comprises of 120 patients who are on hemodialysis in selected hospitals of Indore. Of these 120 patients, there were 97 (80.83%) males and 23 (19.17%) females.
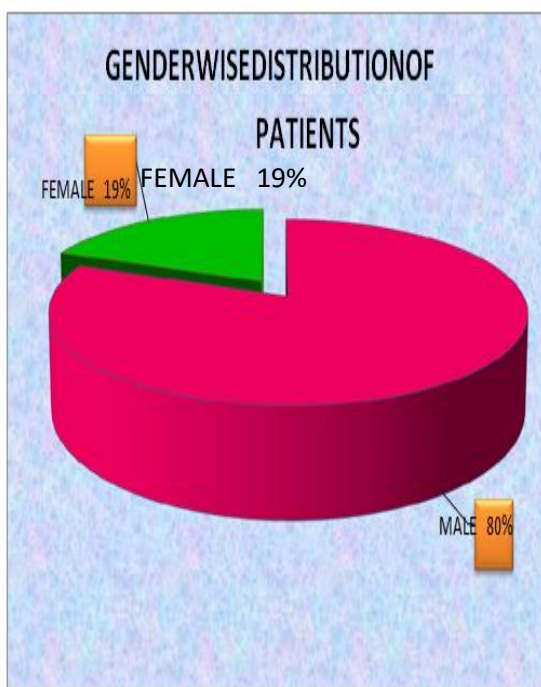
The above table shows the age wise

distribution of these hemodialysis patients.Majority96 (80%) of the patients were in the age group of 51-65 years, followed by 9 (7.50%) each in the age groups 20-35 and 36-50 years. There were only 6 (5%) patients in the age group above 65 years of the 120 hemodialysis patients, 107 (89.17%) were married and rest 13 (10 .83%) were single. There were no patients in the separated, divorced or widowed   category.
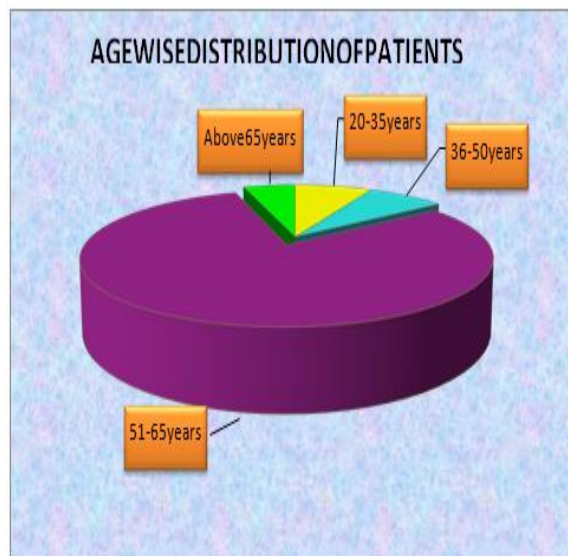
Of these 120 hemodialysis patients, majority 75 (62.50%) patients had done their under graduation, followed by 24 (20%) patients who had done their higher secondary and only 21 (17.50%) patients having done their post graduation. Thus, 120 (100%) of the patients were literate and some had got their undergraduate or postgraduate degrees.
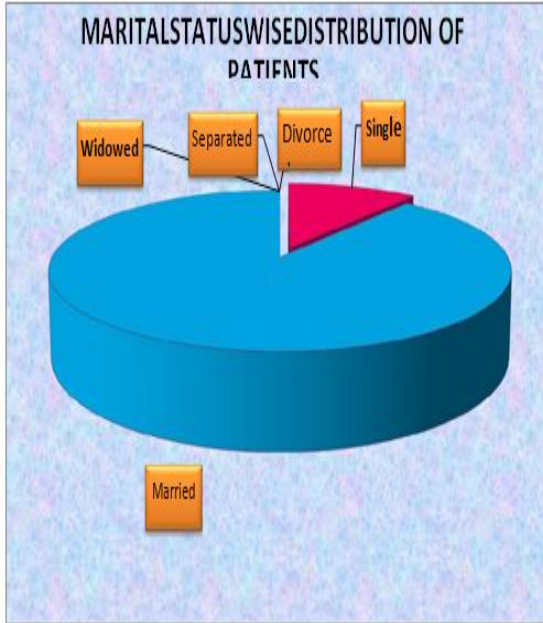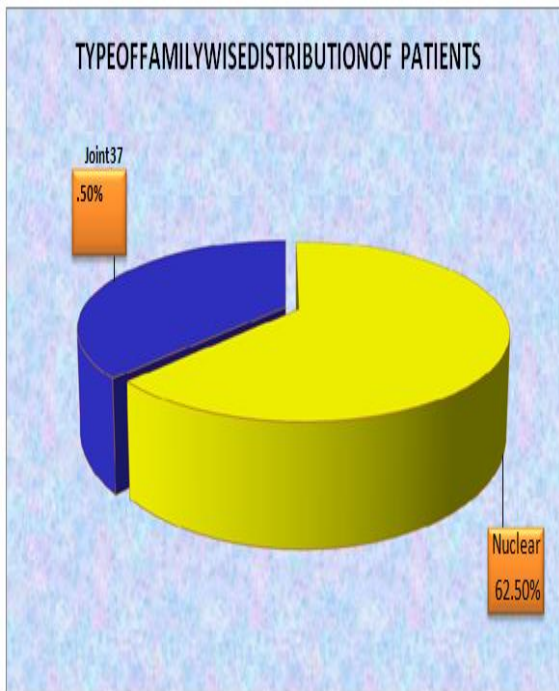
FIG VI–PIE DIAGRAM SHOWING MARITAL STATUS DISTRIBUTION OF SUBJECTS

The above table shows the employment status of these hemodialysis patients. 9 (7.50%) of the patients were out of workforlessthan1year,48(40%)patients were unable to work

and 63 (52.50%) of the patients were

working. Thus, nearly 52.50% of the patients in the study group were still working.

FIGVII– PIEDIAGRAMSHOWINGFAMI LYWISEDISTRIBUTIONOF SUBJECTS

When the patients were asked about how there are being supported financially. Majority60 (50%) had informed that their source of financial support was their service, followed by54 (45%) patients who were supported by their families, and 3 (2.50%) each were either getting asocial aid or were being reimbursed from their employers. Thus, 114 (95%) of the patients were either on their support or were being supported by their families.
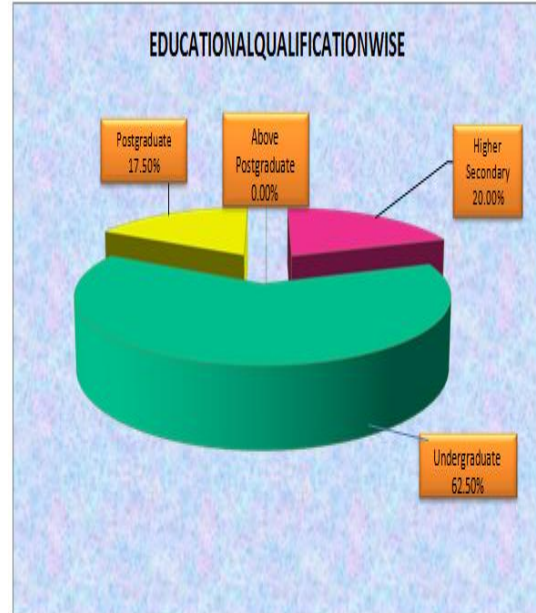

FIGVIII– PIEDIAGRAMSHOWINGEDUC ATIONALQUALIFICATION DISTRIBUTION OF SUBJECTS

Comparison between Pretest and Posttest Quality of life score

(N=120)

| S. No.	Knowledge Score	Pretest Score		Posttest Score	
		No.	%	No.	%
1.	Poor	109	90.83	12	10.00
2.	Average	11	9.17	96	80.00
3.	Good	0	0.00	12	10.00
	Total	120	100.0	120	100.0

For testing the quality of life of these patients, a predesigned questionnaire consisting of 34 knowledge questions to assess the "Quality of Life" were given to the patients. Each question was categorized in 4 sections. Physical, Psychological, Social and Environment. Each question carries a rank from 1 (Not at all) to 4 (Very much). Thus, a minimum a patient can score is 34 points and maximum 136 points.

Based upon the minimum and maximum score that can be obtained, the scores were graded as: Poor (34-68), Average(69-102) and Good (103-136).

The pretest quality of life score obtained bythese patients is: Majority 109 (90.83%) of the patients had a poor score, followed by 11 (9.17%) patients who score average. There were none who scored good.

After givingthe information booklet, again the posttest was conducted with the same set of questionnaire.

The results obtained were: 96 (80%) patients still scored average, 12 (10%) scored poor and 12 (10%) scored well. Thus, there was an improvement in the scores after administering the information booklet.

FIGUREXIII

FIGUREXIV
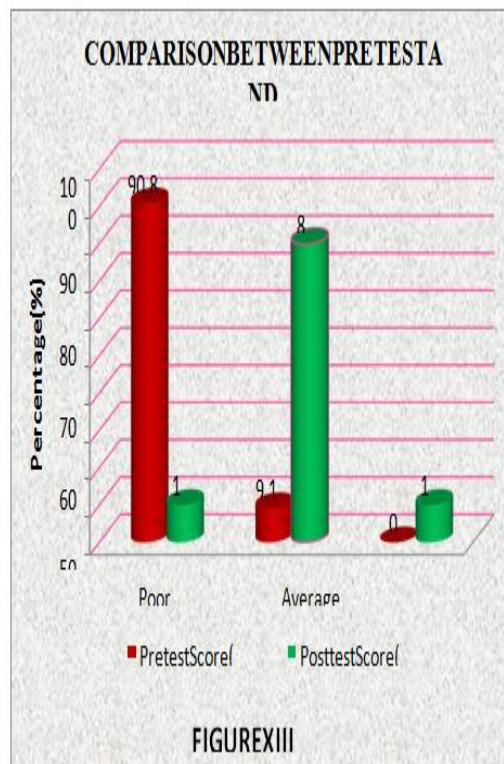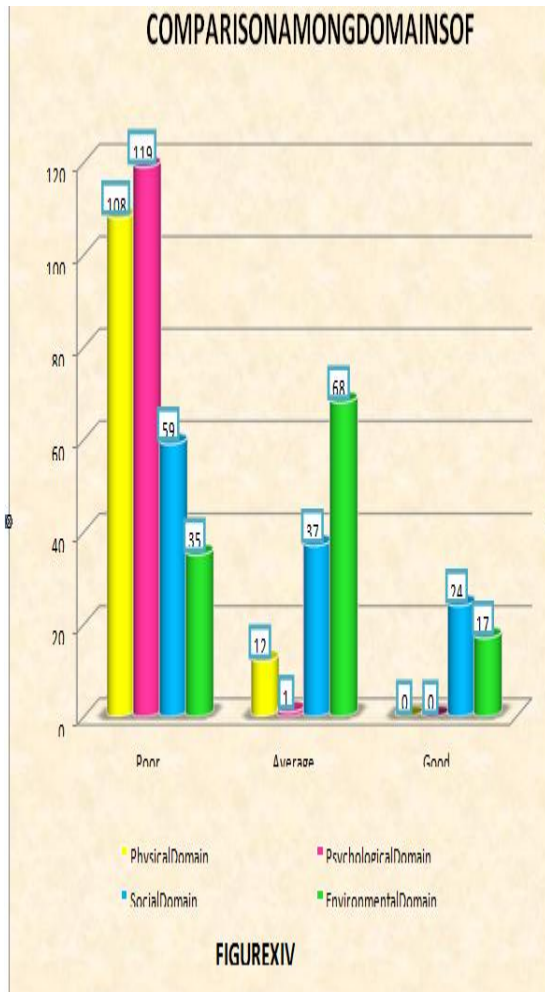
Result:

Of these 120 patients, there were 97 (80.83%) males and 23 (19.17%) females. Regarding age majority 96 (80%) of the patients were in the age group of 51-65 years, followed by 9 (7.50%) each in the age groups 20-35 and 36-50 years. There were only 6 (5%) patients in the age group above 65 years. Of the 120 hemodialysis patients, 107 (89.17%) were married and rest 13 (10 .83%) were single. There were no patients in the separated, divorced or widowed category. Regarding type of family .There were 75 (62.50%) patients belonging to the nuclear family and 45 (37.50%) patients were from joint families.

Regarding educational status majority 75 (62.50%) patients had done their under graduation, followed by 24 (20%) patients who had done their higher secondary and only 21 (17.50%) patients having done their post graduation. Thus, maximum 96 (80%) of the patients were literate and had got their undergraduate or postgraduate degrees. Employment status of these hemodialysis patients. 9 (7.50%) of the patients were out of work for less than 1 year, 48 (40%) patients were unable to work and 63 (52.50%) of the patients were working. Thus, nearly 52.50% of the patients in the study group were still working. The study reveals that the monthly family income is (30%) of the patients had a monthly family income in the range of Rs. 10001 to 20000. 72 (60%) of the patients had a family income in the range of Rs. 20001 – 40000 and only 12 (10%)of thepatients had afamilyincome above Rs. 40001. Thus, all the participants belonged to middle and upper middle family income group.

When the patients were asked about how there are being supported financially. Majority 60 (50%) had informed that their source of financial support was their service, followed by 54 (45%) patients who were supported by their families, and 3 (2.50%) each were either getting a social aid or were being reimbursed from their employers. Thus, 114 (95%) of the patients were either on their support or werebeing supported by their families General health, all the patients 120 (100%) informed that they nee d assistance for doing their activities. Thus, all the patients were dependent in one way or the otheron the families for carrying out their activities. There was no significant association found in the quality of life and selected demographic variable.

Conclusion:

The conclusions drawn from the study were:

1. Information Booklet was found to be effective in increasing quality of life of patients coming for hemodialysis. The pre-test quality of life score obtained by these patients is: Majority 109 (90.83%) of the patients had a poor score, followed by 11 (9.17%) patients who score average. There were none who scored good. After giving the information booklet, again the post-test was conducted with the same set of questionnaire. The results obtained were: 96 (80%) patients still scored average, 12 (10%) scored poorand12(10%)scored good. Thus, there was an improvement in the scores after administering the information booklet.

The mean and standard deviation of the pre-test and post-test quality of life scores were compared using the students""test. The,, t" value calculated was -26.618ataDF of 119. The p value obtained was p=0.000. Thus, we can conclude that there was a highly significant improvement in the quality of life score after administering the information booklet for improvement of Quality of Life in the hemodialysis patients.

Recommendations:

On the basis of the study the following recommendation are offered for further research:

- The study can be replicated on a large sample of people coming for hemodialysis selected fromvarious other Government and private hospitals; there byfinding can be generalized to a larger population.

- Asimilarstudymaybe conducted using apre-test, post-test, controlgroupdesign.

- A similar study can be carried out by using other teaching strategies i.e. self instructional module, compute-assisted instruction and video film on improving the quality of life of patients coming for hemodialysis.

- A study could be conducted in which effect of counselling on patients coming for hemodialysis

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