Effectiveness of repeated structured teaching program on knowledge regarding fluid and dietary compliance and its effect on biochemical parameters and inter-dialysis weight gain among patients undergoing hemodialysis

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Aim: The study conducted was aimed to assess the knowledge, effectiveness of structured teaching program regarding fluid and dietary compliance and find an association between the knowledge score with biochemical parameters and inter-dialysis weight gain.

Methods & Materials: The research design selected for the study was quasi experimental time series design with control group. The samples comprised of 60 patients selected by non-probability purposive sampling technique and 30 samples each were allotted to experimental and control groups receiving hemodialysis. The pre-test and three times post-test knowledge scores were assessed using self-structured knowledge questionnaires. The teaching program was administered to the experimental group only, for three times. The weight (inter-dialysis) for both the experimental and the control groups were recorded. The biochemical parameters were also extracted from patient medical records.

Results: The mean percentage and SD of pre-test score for experimental group were 66.38% and 2.132, respectively. The mean percentage and SD of pre-test score for control group were 65.13% and 2.059, respectively. Experimental group after receiving repeated structured teaching, the mean percentage and SD for post-test-1, post-test-2 and post-test-3 were (84.71%, 2.368), (94.46%, 1.398) and (97.50%, 2.027), respectively. This illustrated a significant improvement in the knowledge. There was no significant association between pre-test knowledge scores of the respondents with selected demographic variables. There was no significant association between knowledge scores, inter-dialysis weight and biochemical parameters for experimental group. The r-ANOVA done for tests of between-subjects effects predicted a significant difference between the two groups, calculated F(3,174)=87.158, P<0.001.

Conclusion: The study revealed that in spite of highly effective repeated teaching program in improving the knowledge, the compliance regarding fluid and diet were lacking. Patients receiving hemodialysis should be encouraged to adhere to the fluid and dietary restrictions.

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