Summary

The renal failure children are at risk of several problems and complication due to renal failure and hemodialysis.

The aim of the present study was to assess the needs of children under going hemodialysis therapy and asses factors that affect the daily living activities of those children under regular hemodialysis.

The present study was carried out at two Hospital; Hemodialysis pediatric units of Benha University Hospital and Teaching Hospital in Benha City in Kaluobia Governorate.

This study included one group of 80 patients on regular hemodialysis. Their age ranged from 4 to 16 years.

**Data was collected through:**

* A questionnaire format was constructed to cover the following items:
  1. Characteristics of children as regards age, sex and education.
  2. Family history of renal failure.
  3. Children knowledge about renal faire as regards concept of renal failure, problems of hemodialysis as general problems before, immediately and after 4 hours from dialysis.
  4. Physical, social and psychological needs of children undergoing hemodialysis therapy.

The actual work of the current study started by an initial pilot study that was applied randomly on 10 children to test feasibility, clarity and objectivity of the tools and accordingly some changes were done in the tools to suitable for the subjects. Data collected through a period of 3 months where the time need to fill each questionnaire sheet ranged from 20-30 minutes.
The main findings of this study can be summarized as the following:-

- The children's ranged between 4-16 years old. and more than half of the sample (61.25%) of the sample were female and 38.75% were male.
- Regarding the education, 63.75% of the sample were illiterate.
- Regarding the number of dialysis week. It was found that all children (100.0%) was under regular dialysis three timed week. Regarding the disease associated with dialysis it was found that the highest percentage (63.75%) of children had heart disease followed by hepatitis (30%), while the lowest percentage (6.25%) of them had hypertension.
- The present study revealed that more than half of the sample (61.25%) undergoing hemodialysis had correct knowledge about concept of renal failure. While 52.5%, 47.5% of them don't know causes and complication of renal failure.
- It was found that 80.0% of the children undergoing hemodialysis therapy through fistula. While (20.0%) of them through catheter.
- It was noticed that 32.5% of children don't care their fistula site.
- As regard changes of children before dialysis that represented that (47.5%) was fatigue, while about (20.07) didn't have any changes.
- It was found that (63.75%) of children was active after dialysis.
- The study also reflect that about (15.0%) of children suffer from tired during daily living activities mean while about (66.2%) of children didn't face any problems.
- The study showed that 42.5% of children suffer from signs of depression, and also it was found 47.5% of children tired, 11.3% of them were anxious.
The present study revealed that the children spent their time in watching T.V were 32.5%, while 15.0% and 28.7% of them made house work and studying their subject respectively.

The children faced problems during dealing with family members showed that 11.3% of them were continuous shouting with their family.

About 43.8% of the children don't know how to solve their problems, while 23.75 of them solve the problems facing them by them selves.

The study showed that 60.0% of children visit their friends and relatives, while 40.0% of them faced problems when visit their relative.

Also growth retardation is a major complication of children under going regular hemodialysis and was found about 72.5% of them had growth retardation

About 12.7% of the children exposure to bleeding, while 11.2% of children expose to infection through the dialysis units.

The study showed about 16.3% of children was eat all type of food without any restriction.

The present study revealed that 63.7% of children didn't going to school because the time of dialysis.

It was found that 82.5% of children are suffering from difficulties in learning, while 12.5% of them had lack of concentration and also about 5.0% had lack of recall.

Regarding hobbies, 45.0% of children had hobbies such as watching T.V, playing football, and drawing, while about 55.0% of them didn't have hobbies.
In conclusion:

It can be concluded from the present study that all children need knowledge about renal failure and hemodialysis. Accordingly, they need to be adapted with the disease physically, socially and psychologically.

In Recommendations:

In the light of findings of the current study the following recommendations are suggested.

1- Emphasize the importance of early intervention program for children under haemodialysis and their parents.

2- Plan and develop sessions for parent of children with chronic renal failure to reach them how to meet their needs.

3- Nurses should have a role as a health care providers to be able to deal with and teach children and their parents about daily living activities of children with chronic renal failure.

4- Further studies should be conducted to improve the children's knowledge and practice and their parents for proper dealing with the disease and its side effects of dialysis.