

Summary

Nephrotic syndrome is the most, chronic kidney disease in Egypt. The estimated incidence of nephrotic syndrome ranges between 2-7 cases in children per 100,000 children per year. Childhood nephrotic syndrome can occur at any age but is most common between the ages of 1.5 and 5 years. It seems to affect boys more often than girls. This high rate of affected individuals poses a significant public health problem. Nurses play an important role in nursing care of children with nephrotic syndrome. The pediatric nurse should advise or supervise or teach as well as to give expert nursing care. She should be able to give the most care for children during the period of hospitalization and act as a mother substituted for children in the hospital. The important nursing role of the child with nephrotic syndrome includes observation of the child and his family during hospitalization, monitoring of vital signs, giving medications, making balance sheet between fluid intake and fluid output, urine analysis daily and observe urine (colour, amount) teaching of child and his family treatment program and support to the children and their parent.

Aim of the study:

To assess nurses' knowledge and skills about nephrotic syndrome of children.

Research setting:

This study was conducted at Benha University Hospital and Benha Teaching Hospital.

Subjects:

The subject consisted of all nurses' working at the previously mentioned and settings (total 100 nurses).

Tools of data collection:

Tool of data collection included the following:

I) Interviewing questionnaire:

It was designed by the researcher after reviewing related literature. It was written in an Arabic language in the form of opened questions and close questions. It composed of seven parts:

Part (1): Socio-economic data will cover demographic data of nurses (name, age, place of work, education, occupation, system of work and years of experience).

Part (2): Knowledge of nurses about urinary system and importance of kidney.

Part (3): Knowledge of nurses about nephrotic syndrome in children (definition, causes, clinical manifestation, types, nutrition and complication).

Part (4): Children's need according to degree of nephrotic syndrome.

Part (5): Problems related to nephrotic syndrome such as (growth

retardation, learning problem, attending school, medication and infection).

Part (6): Factors affecting daily living activities such as attendance of school, nutrition, dealing with other, low self esteem and engaging in sports.

Part (7): Knowledge of nurse about program of treatment (in/out patient care).

II- Observation checklist:

It includes the following items: history taking, urine analysis for albumin, vital signs and blood pressure, measurement for weight and height. Assess to degree of oedema and making balance chart .

Pilot study:

A pilot study was carried out during January 2008 to February 2008 to test the applicability of the tools, it was applied randomly on 10 nurses. The result of the data obtained from the pilot study helped in modification of the tools items were then corrected and necessary changes were then introduced as revealed from pilot study such as adding question about source of nurses information and children with nephrotic syndrome.

Results:

Regarding the results of the current study. The main findings of the study can be summarized as the following:

- As regard nurses ages, it was found that the mean age is $29.8 \pm$
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8.9 years.

- The mean year of experience was 5.8 ± 1.4 years.
 - In relation to nurses qualifications, it was found that, 50% of them had secondary nursing education, 33% of them had B.Sc. nursing and 4.0% of them had nursing school and specialty.
 - The study reported 66% of them did not attend any training programs in care of children with nephrotic syndrome while 34% of nurses have training course.
 - 64% & 60% of nurses didn't know the structure of urinary system and importance of urinary system while 26% of them their knowledge about importance of kidney was excretion of salt only.
 - 26% & 24% of nurses didn't know symptoms of nephrotic syndrome and causes of nephrotic syndrome while 71% of them had incompleting knowledge about definition of nephrotic syndrome.
 - 73% of nurses didn't know types of nephrotic syndrome.
 - 60% of nurses had knowledge about complication of nephrotic syndrome, it was acute renal failure. While 27% of them didn't know complication of nephrotic syndrome and showed 9% and 4% of nurses their knowledge about complication of nephrotic syndrome were infection and thrombosis.
 - 41% of nurses did not know patient's needs.
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- It was found that 59% of nurses said that the nephrotic syndrome need diet regimen and 23% of them had good knowledge about patient diet content.
 - The study reported 33% of nurses didn't know nephrotic syndrome children's problems. While 24% of them their knowledge about children's problem were difficult of treatment.
 - It was noticed that 69% of nurses had incomplete knowledge about patient treatment system.
 - The present study revealed that more them half 57% of nurses answered about prognosis was incomplete cure.
 - 65% of nurses had incomplete knowledge about advices to nephrotic syndrome children.
 - It was found that 50% of nurses had recommendation to patient and 36% and 34% of them recommended follow up and follow of treatment while 20 % and 10% of nurses recommended prevent infection, monthly analysis and follow up of doctor.
 - 70% & 73% of nurses had incomplete knowledge about nursing observation (vital events and monthly analysis).
 - It was noticed that 73%, 59% of nurses had incomplete knowledge about healthy system during treatment period in hospital and home. While 65% & 40% of them had completed
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knowledge about healthy system of activity and play and causes of incomplete activity and play to nephrotic syndrome children.

- 57% of nurses had difficulties in teaching of treatment system and 26.3% of them their difficulties were obstacles of treatment program.
 - 98% of nurses had uncorrected knowledge about definition of relapse and 53% of them had met relapsed patient further more 60% of nurses hadn't complete knowledge about causes of relapse.
 - 90% of nurses were competent in measuring the blood pressure and the heart rate respectively, while 90% & 80% of them incompetent in measuring the temperature and the respiratory rate respectively.
 - Nurses were incompetent during measuring daily weight, degree oedema assessment, urine analysis and regarding daily intake and output chart.
 - The present study revealed that there was statistical highly significant difference between nurse knowledge and their skills.
 - The present study revealed, that there was statistical insignificant difference between nurse knowledge and their characteristic.
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- The present study revealed that there was statistical insignificant between nurses' skills and their characteristic.

Conclusion

In conclusion, the majority of nurses had poor knowledge and incompetent practices skills as regards care of children with nephrotic syndrome. There is no any kind of educational program about disease and training courses to nursing staff.

A limited preventive role and lack of knowledge for the nurses toward nephrotic syndrome definition, causes, signs and symptoms, types, complications, treatment program and problems as we found the majority of nurses required to training about skills and practice of nephrotic syndrome patients and nurses didn't participate in health education, training course, seminars, educational health programs and workshops about disease may be meet in the pediatric department.

Therefore, every effort should be made to improve the quality of nursing knowledge and skills during hospitalization of patient and after discharge from hospital. This could be achieved by increasing awareness of nurses by standards of nursing skills during working with patient in hospital and during follow up.

Recommendations

In the light of findings of the current study the following recommendation are suggested:

- 1- Services training program is a essential for continuous updating nurses' knowledge and skills about care of children with nephrotic syndrome.
 - 2- Orientation programs for newly recruited nurses' who work in pediatric units is recommended.
 - 3- Staff nurse should be obligatory attained periodically in service and training program.
 - 4- Standardized nursing procedure should be used to guide the nurses' in dealing with children suffering from kidney diseases.
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