

## Summary

Thalassaemia is the most, chronic hemolytic anemia in Egypt the estimated incidence of thalassemia heterozygote's ranges between 5.6 to 9%. In recent studies over 1000 children affected with  $\beta$ -thalassemia are expected to be born out of 1.5 million live births per years in the country. This high rate of affected individuals posses a significant public health problem. Nurses play an important role in nursing care of children with  $\beta$ -thalassemia. The pediatric nurse should advise or supervise 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 mother substituted for children in the hospital. The important nursing role of the child with  $\beta$ -thalassemia includes observation of the children during blood transfusion, monitoring of vital signs, giving medication and support to the children and their parent.

### **Aim of the study:**

To assess the nurse's knowledge about children with thalassemia and assess the current nursing care given to children with thelassemia.

### **Research setting:**

This study was conducted at Benha University Hospital and Benha Specialized Children Hospital.

**Subjects:**

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

**Tools of data collection:**

Tools 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 open ended questions and close questions. It composed of three parts:

**Part (1):** Sociodemographic data of nurses (age in years, qualifications and years of experience)

**Part (2):** Nurses' Knowledge about blood (Importance of RBC, WBC and platelet blood group, donor and RH and HB normal Range in male and female.

**Part (3):** Nurses' knowledge about thalassemia (definition, types, causes, clinical manifestation, complication, treatment, investigation and incidence of thalassemia and anemia).

**II) Observation check list:-**

It was designed by the researcher and reviewed by supervisors to observe the actual nursing care given for children during blood transfusion therapy, intravenous therapy, measuring of vital signs and blood pressure.

### **Pilot study:**

A pilot study was carried out during January 2007 to February 2007, 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 about children with thalasemia.

### **Results:-**

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

- As regards nurses ages, it was found that the mean age is  $27.6 \pm 8.4$  years.
- The mean years of experience was  $3.2 \pm 2.0$  years
- In relation to nurses qualifications, it was found that, 55.0% of them had secondary nursing education, 22.5% of them had B.Sc. nursing and 1.0% of them had nursing school and specialty.
- The study reported 71.4% did not attend any training programs in care of children with thalassemia
- 98% & 87.8% of nurse had poor knowledge about blood donor and Rh factor while 83.7% of them had good knowledge about blood grouping respectively.
- The study reported 42.9% of nurses didn't know the incidence of thalassemia.

- Nurses had poor knowledge (100%) about hemoglobin level in male and female.
- Nurses had good knowledge about anemia
- Nurses had poor knowledge about thalassemia
- 52% of the nurse had poor knowledge about treatment of thalassemia.
- Nurses had good knowledge about putting dispheral for children with thalassemia and teaching mothers about dispheral.
- 66.4% of the nurse had good knowledge about signs of allergy related to blood transfusion.
- 37.8% & 48% of the nurses had good knowledge about general signs of infection and the control measures to avoid it during blood transfusion respectively.
- 87.8% & 91.8% of the nurses were competent in measuring the blood pressure and the heart rate respectively, while 75.5% & 84.7% of them were in competent in measuring the temperature and the respiratory rate respectively.
- Nurse were incompetent during blood transfusion therapy.
- The present study revealed, that there was statistical significant correlation between nurse knowledge and their performance.
- The present study revealed, that there was statistical insignificant difference between nurse knowledge and their characteristic.

- The present study revealed, that there was statistical significant difference between nurse's performance and their characteristic.

## **Conclusion**

In conclusion, the majority of nurse's had poor knowledge and incompetent practices as regards care of children with thalassemia.

## **Recommendation**

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

- 1- in service training program is an essential for continuous updating nurse's knowledge and performance about care of children with thalassemia.
- 2- Orientation programs for newly recruited nurse's who work in haematology units is recommended .
- 3- Staff nurse should be obligatory attained periodically in service and training program.
- 4- Standardized nursing procedure should be used to guided the nurse's in dealing with children suffering from blood diseases.