ASSESSMENT OF NURSING CARE RENDER FOR CHILDREN SUFFERING FROM HAEMOLYTIC ANEMIA

Thesis

Submitted for Partial Fulfillment of Master Degree
In Nursing Science (Pediatric Nursing)

By

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بسم الله الرحمن الرحيم

{قَالُواْ سُبْحَانَكَ لاَ عِلْمَ لَنَا إِلاَّ مَا عَلَّمْتَنَا

إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ }

صدق الله العظيم

البقرة٣٢

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Contents

List of tables in review

List of tables in results

List of Figures

Abstract

The aim of this study was to assess the care given by nurses for children having haemolytic anemia through assess knowledge, and practice of nurses for children suffering from haemolytic anemia. The study was carried out in hematology oncology units belonging to two University Hospitals Suez Canal and Ain Shams. The subjects of the study composed of seventy nurses who were selected from the previously mentioned settings. Data were collected using a structured questionnaire to assess nurses' knowledge regarding haemolytic anemia and the observational checklists to assess the practice. The result revealed that there were highly statistical significant difference between nurses' knowledge and their performance. The study concluded that nearly half of nurses had unsatisfactory knowledge and that more than one third of them had incompetent performance regarding the care given for children with haemolytic anemia. The study recommended that, up grading of nurse's knowledge and performance about the care of children who are suffering from haemolytic anemia.

Key words, haemolytic anemia, nursing care.

Abbreviation

AIDS: Acquired Immuno Deficiecy Syndrome.

BMT: Bone Marrow Transplantation.

CMV: Cytomegalo Virus.

CVA: Cerebro Vascular Accident.

CXR: Chest X-Ray.

DDX: Differntial Diagnosis.

DFO: Deferoxamine(desfera).

DNA: Deoxy ribo Nucleic Acid.

DIC:Disseminated Idiopathic Coagulation.

ECG: Electro Cardio Gram.

ECo: Echo Cardiography.

ESR: Erythrocyte Sedimentation Rate.

FEP: Free Erythrocyte Protoporphyrin.

GIT:Gastro-intestinal Tract.

GVHD : Graft Versus Host Disease.

G6PD: Glucose-6phosphate Deficiency.

H. Haemophilus.

Hb: Haemoglobin.

HBA :Adult Hemoglobin.

HbA2:Another type of Hemoglobin.

Hbf: Fetal Hemoglobin.

HAV: Hepatitis A Virus.

HBV : Hepatities B Virus.

HCV: Hepatitis C Virus.

HbA: Hemoglobin Adult.

HBeA9: Hepatitis B Antigen.

Hbs : Hemoglobin (Sickle Cell).

IM: Intramuscular.

IV: Intravenous.

IVF: Intravenous Fluids.

MCT: Hematocrit.

MCH: Mean Corpus Hemoglobin.

MCV: Mean Corpus Cular Volume.

MOSF: Multiorgan System Failure.

MRI : Magnetic Resonance Imaging.

RBCs: Red Blood Cells.

RDW: Red Cell Distribution Width.

SC: Subcutanous.

SCD: Sickle Cell Disease.

SCA: Sickle Cell Anemia

TIBC: Total Iron Binding Capcity.

TSP: Thrombospondin.

QOC: Quality of Care.

VCAM-1: Vascular Cell Adhesion Molecule-1.

VOC: Vaso Occlusive Crisis.

VOD: Veno Occlusive Disease.

WHO : World Health Organization.

Introduction

Hemolysis is the premature destruction of erythrocytes, and it leads to haemolytic anemia when bone marrow activity cannot compensate for the erythrocyte loss. Clinical presentation depends on whether the onset of hemolysis is gradual or abrupt and on the severity of erythrocyte destruction. A patient with mild hemolysis may be asymptomatic. In more serious cases, the anemia can be life threatening, and patients can present with angina and cardiopulmonary decompensation ***(Hogan and white , 2005).***

Clinical presentation also reflects the underlying cause for hemolysis. For example, sickle cell anemia is associated with a painful occlusive crisis. Marked anemia may occur in patients with mild hemolysis if bone marrow erythrocyte production is transiently shut off by viral (parvovirus B19) or other infections due to uncompensated destruction of erythrocytes (aplastic haemolytic crisis). Skull and skeletal deformities can occur with a marked increase in haematopoiesis, expansion of bone in infancy, and early childhood disorders such as sickle cell anemia or thalassemia ***(Jany, 2007).***

There are many types of haemolytic anemia. Such types parents passed the gene for their children. "Acquired" means children aren't born with the condition, but develop it due to another disease, condition, or factor. (**Marlow, 2007)**

Haemolytic anemia represents approximately 5% of all anemias world wide.Morbidity is dependent on the etiology of hemolysis and the underlying disorder such as sickle cell anemia and thalassemias **(Read, 2009)**.

The incidence of thalassemia was found among turkey and Greece (20%) while in sicily (10%) and in southern haly (4%) **(Mosbah, 2007).**The World Health Organization (WHO) estimates that (7%) of the world population are carriers of the

disease. Thalassemia is the cause of more than 100,000 child-hood deaths each year **(Vogal and Mothusky, 2007)**

Thalassemia account over 72% Egyptian; about 90% of them original from Nile-Delta zone and Mediterranean coast of Egypt and Thalassemias are inherited blood disorders. "Inherited" means that they're passed on from parents to children through genes ***(Read, 2008).***Another study revealed that the B-thalassemia carriers among Egyptians were (4.2 %). It was reported that the carriers' percentage was (4.5 %) of the population and estimated birth rate with thalassemia major 800-1000 per year ***(Khalifa, 2002)*** Meanwhile B-thalassemia major affects males and females equally with no sex difference.

The primary goal of any intervention used is to decrease the child's perception of the quality and quantity of pain experienced specially in crisis. ***(Mansy et al, 2003).***Management for haemolytic anemia can be given by health team worker and qualified nurses who are responsible for caring the children having haemolytic anemia through assessment of nursing intervention, continuous supervision and treatment ***(Margrat, 2004).***

Aim of the Study

This study aimed to assess the care given by nurses for children having haemolytic anemia through: Assessment of nurses' knowledge and practice for children suffering from haemolytic anemia.