NURSING CARE GIVING TO CHILDREN UNDERGOING A PYLOROMYOTOMY

Thesis

Submitted for Partial Fulfillment of the

Requirements of the Master Degree

In

Nursing Science

(Pediatric Nursing)

By

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Ain Shams University

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Fatma Mefreh Atia

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LIST OF ABBREVIATIONS

Abbreviation	Word
AAFP	American Academy of Family Physicians.
AAP	American Academy of Pediatrics.
APSA	American Pediatric Surgical Association.
Co_2	Carbon Dioxide.
DNA	Deoxyribonucleic Acid.
GIT	Gastrointestinal Tract.
HPS	Hypertrophic Pyloric Stenosis.
IHPS	Infantile hypertrophic pyloric stenosis.
IV	Intravenous.
nNOS	Neuronal Nitric Oxide Synthase.
NOS	Nitric Oxide Synthase.
NPO	Nothing by mouth.
PCM	Parietal Cell Mass.
PACU	Peri-anaesthesia care unit.
K+	Potassium.
PS	Pyloric Stenosis.
Na+	Sodium.
UGI	Upper gastrointestinal.
UPS	Upper pyloric stenosis.

ABSTRACT

The aim of the study was to assess nurses' knowledge and skills in dealing with children undergoing a pyloromyotomy (pre/postoperative care). The study was carried out in Pediatric Surgical Units at Mansoura University Hospital and Ain Shams University Children Hospitals. **The subjects** of the study were all available nurses (50) working at the previously mentioned settings, Children (15) and Al-Demardash Hospitals (11) affiliated to Ain Shams University Hospitals and Mansoura Children Hospital (24) affiliated to Mansoura University Hospitals, regardless their age qualification and years of experience. **Methods:** Data were collected by using an interview questionnaire format to assess knowledge and observation checklists to assess the actual skills toward nursing intervention for children undergoing a pyloromyotomy. **The results** of the study revealed that more than half of nurses were scored average at the same time more than half were incompetent regarding to actual skills. It can be **concluded** for this study that more than half nurses in need to improve their knowledge as well as the practice as it is not reach the ideal standard. The study **recommended** that in-service training and continuous educational program are needed to improve nurses' knowledge and practice toward care for children undergoing a pyloromyotomy.

Keyword: Infantile hypertrophic pyloric stenosis; Ramstedt pyloromyotomy, management

INTRODUCTION

Pyloric stenosis (PS) is one of the most common surgical conditions of early infancy. It is hypertrophy disorder of the circular muscle of the pylorus in which the pylorus greatly enlarged and hyperplasic and causes progressive narrowing of the canal between the stomach and duodenum. It is treated by longitudinal myotomy of the pylorus ***(Ziegler, 2003; Luxner, 2005; Peter, 2006)***.

Pyloric stenosis also known as infantile hypertrophic pyloric stenosis (IHPS), it is the most common cause of gastric outlet obstruction in infancy. IHPS occurs secondary to hypertrophy and hyperplasia of the muscular layers of the pylorus, causing a organic gastric outlet obstruction (***Dowshen & Katz, 2007)***. This problem typically occurs in infants between 2 and 8 weeks of age and it affects 1 out of every 500 to 1,000 live births ***(Cincinnati Children's Hospital Medical Center, 2009)***.

The prevalence of infantile hypertrophic pyloric stenosis ranges from 1.5 to 4.0 in 1000 live births among whites but is less prevalent in Africans, Americans and Asians. Reports have suggested that the incidence is increasing ***(O'Neil et al., 2005)***.

Preoperatively, the nurse should assessed pattern of vomiting development of projectile vomiting, maintain nothing by mouth (NPO) status and nasogastric tube connected to suction , position with head slightly elevated to decompresses stomach for 24 to 36 hour in preparation for surgery, assess skin for decreased turgor, elasticity, loss of subcutaneous tissue, sunken eyeballs, urinary output (0.5-1 ml/hour), maintain intravenous (IV) fluids and electrolytes for nutritional support (specially fluid and rate), monitor of vital signs, weight daily at same time on same scale, and teach parents about diagnostic tests and procedure done and reason for them ***(Marlow & Redding, 2001; Luxner, 2005; Williams & Wilkins, 2005).***

Longitudinal incision through the serosa and sphincter muscles at the pyolorus in order to relax a stenotic or closed-by-spasm sphincter. It called also Fredet–Ramstedt operation ***(Aldridge et al., 2007).***