EDUCATIONAL NURSING

PROGRAMME FOR NURSES WORKING IN

THE PEDIATRIC DEPARTMENT OF AIN

SHAMS UNIVERSITY HOSPITAL ABOUT

DIARRHOEAL DISEASES AND REHYDRATION

## THESIS

Submitted to High Institute Of Nursing

Partial Fulfillment Of The Pequirements

For The Doctorate Degree In Nursing

## BY

IMAN 1BRAHIH ABD EL HONEIH
 ( M . Sc. Nursing 1987 )

## SUPERVISORS

ABD EL KHALIK KHATTAB

Professor And Chairman Of
Pediatric Department

Prof. Dr .

Faculty Of Medicine

Prof.Dr .

SOHEIR MEKHEMER

Professor Of Public Health

Nursing And Director Of

High Institute Of Nursing

Ain Shams University

1991





## ACKNOWLEDGMENT

عِيهُهُمُونَ اللهِ عَهُمُونِي فِيهُ اللهِ عَهُمُونِي اللهِ عَهُمُ يَا اللهِ عَهُمُ يَا اللهِ عَهُمُ اللهِ الله

In a few greatful words I would like to express my greatest thanks to all my supervisors for their continuous encouragement and valuable guidance.

I would like to express my cardial gratitude to Prof. Dr. ABD EL-KHALIK KHATTAB, Professor and Chairman of Pediatric Department, Ain Shams University, for his close supervision, valuable guidance, care, and encourage me to embark in this study.

I wish to express my profound gratitude to Prof. Dr. SOHEIR MEKHEMER, Professor of Public Health and Director of High Institute Nursing, Ain Shams University, Kind help, nteresting discussion and fruitful direction throughout the work.

I would like to express my sincerely to Prof. Dr.

ZEINAB LOTFY, Professor of Psychiatric Nursing, High

Institute of Nurshing, Ain Shams University, for her

valuable advice and cooperation.

I would like to extend my thanks to the medical and nursing staff in Pediatric Department of Ain Shams University, for their cooperation and interaction teached me a lot.

Finally I would like to express gratitude to my family for the time they gave to me and unlimited help.

## CONTENTS

<u>Pag</u>	<u>e</u>
- INTRODUCTION	1
- AIM OF THE STUDY	5
- REVIEW OF LITERATURE	7
* Magnitude of the problem	7
* Definition and types of diarrhoea 1	8
* Predisposing factors related to diarrhoea 2	1
* Aetiology of diarrhoea 2	6
* Complications of diarrhoea 3	7
* Preventive measures	- 5
* Management of diarrhoea 5	1
Rehydration5	51
Nutrition	50
Adjuvant therapy6	54
* Role of the nurse	59
* Programme planning for critical cared	79
- SUBJECTS AND METHODS	35
- RESULTS	99
- DISCUSSION 1	33
- SUMMARY AND CONCLUSION 1	54
- RECOMMENDATIONS 1	61
- REFERENCES 1	65
_ ADDFNDIY	96

INTRODUCTION
AND THE
AIM OF STUDY

## INTRODUCTION

Although no longer the scourge of babies in Europe and America, diarrhoea is still extremely common and responsible for millions of deaths annually throughout the world (International Pediatric Association, 1986).

Diarrhoeal diseases are one of the leading causes of childhood morbidity and mortality in the developing countries as well as a major contributor to malnutrition among children (W H O, 1985).

In India, at least 1.5 million children die each year from this disease. Early weaning and malnutrition create a vulnerable population of infants (Hull and Johnston, 1984).

In Egypt, it was estimated that 52% of infant deaths and 38% of deaths in the pre-school age were attributed to diarrhoeal diseases (Kamel, 1983).

The effects of diarrhoea on the nutritional status of infant was emphasized by Martorell (1980); Rossi & Lebenthal (1981) and Maurice & King (1986), especially when it is prolonged in the very young infant, the infant gradually

The profit of the second of the

enters a vicious cycle of persistent diarrhoea leading to malnutrition and at times, death.

The new trend in treating dehydration during infancy and childhood has markedly changed since the late sixties. The main changed as pointed out by *Khattab* (1987), was due to discovery of Oral Rehydration Solution (ORS).

Whaley and Wong (1985), mentioned that nursing observation and intervention are essential to the detection and therapeutic management of disturbances in fluid and electrolyte balance. There are a wide variety of circumstances in which imbalance may be percipitated, and the balance is so precarious especially in infants, that changes can take place in a very short time. Therefore an important nursing responsibility is perceptive observation for any signs of imbalance particularly in those situations and conditions where, imbalance is likely to occur such as diarrhoea.

The nurse plays an important role to save the infants life from dehydration. Because of the great importance of the nurse's role in the Rehydration Unit; she must be especially trained for this role. This could be achieved

through educational nursing programmes reinforced by practical experience which are specific to the management of diarrhoeal diseases and dehydration.

Goulet et al. (1986), emphasized that doctors and nurses in the Rehydration Unit must be well trained.

## THE NEED FOR CONTINUING EDUCATION IN NURSING :

Rapid scientific and technological advances research have greatly altered the practice of nursing, these advances require more highly skilled nursing care in a great variety of settings (Cooper and Hornback, 1973).

Continuing education programme are the dynamic of inservice education and changing constantly with the interest and growing abilities of staff and with the quality of leadership given by administrative personnel (Barness, 1985).

Abbatt and McMahan (1985), stressed the importance of continuing inservice education for nursing staff.

The purposes of continuing education as suggested by Kratz (1985), are mainly to provide training to improve the

ع غفستان القا

nurses skills, to assure high quality of care and to compensate for weakness in the initial training.

According to International Council of Nurses (1975) and American Nurses Association (1978), continuing education in nursing consists of planned, organized learning experiences beyond a basic nursing educational programme. The experiences are designed to augment the knowledge, skills and attitudes for the enhancement of nursing practice.

Thus, improving the nurses abilities to give quality health care to public (Popiel, 1977; Cooper and Signe, 1977 and O'Connor, 1980).

The Aim of Study:

The aim of this work :

- 1. To develop and implement a nursing educational programme for nurses about care of infants with diarrhoeal diseases and dehydration based on their needs.
- To assess the effect of this programme on nurses knowledge and performance.
- To identify the contributing factors in knowledge and performance.

# REVIEW OF LITERATURE

## MAGNITUDE OF THE PROBLEM

For infant mortality, the Civil Register Records a decline from 16 per thousand in 1970 to 66 per thousand in 1983. During the period of NCDDP the infant mortality rate declined to 44 per thousand in 1987, with much of the decline taking place in 1985 (El-Moughi, 1989).

According to El-Deeb (1988), the leading cause of death in infancy according to vital statistics is dirrhoea and other intestinal diseases, which are responsible for more than half of all deaths over the period 1970-1982. The second most important cause is acute respiratory infections, which account for one fifth to one quarter of all deaths (Table 1, and Figure 1-1).

According to Kreuger (1983), the deaths of infants and children under the age of five comprise approximately 45% of all mortality cases in Egypt over half of these deaths are attributed to diarrhoeal related illness. El-Mougi & El-Tohamy (1983), mentioned that in Egypt 125,000 of infants die from acute diarrhoea yearly.

والمعالية والمعالية المتعالية والمعالية والمعا

A study by *Tecke (1982)*, in El-Menoufia Governorate showed that the chief cause of infant death during the years 1970 and 1980 was diarrhoea comprising 48% of the total infant deaths. He stated that these deaths are consistent with the vital statistics figures.