

# Main health problems among children In East of Cairo

A Thesis submitted for partial fulfillment of Master's degree By

## Fatma Ahmed Bayomi

MBBS, Ain Shams University

Supervised by

#### Dr. Mohammed Salah Mostafa

Professor of Preventive Medicine Medical studies Department for Children Faculty of Postgraduate childhood Studies Ain shams University

### Dr. Hanan Abd-Allah El-Gamal

Professor of pediatrics Medical studies Department for Children Faculty of Postgraduate childhood Studies Ain shams University

### Dr. Abeer Elsherif

Consultant in Abassia Fever Hospital

PhD, Faculty of Postgraduate Childhood Studies,

Ain shams University

2018

First and foremost, I would like to thank Allah, whose many blessings have made me who I am



سورة البقرة الآية: ٣٢

## Dedication

I dedicate this work to my family for all the support they offered during all steps of Postgraduate studies

### ACKNOWLEDGMENT

I would like to forward my sincere appreciation to **Dr. Salah Mustafa**; Professor of Public Health, Faculty of Postgraduate Childhood Studies, Ain Shams University, for giving me the privilege of working under his supervision, and also for dedicating much of his precious time, and wide experience that guided this work to succeed.

Also, I am deeply indebted to **Dr. Hanan Al Gamal, Prof. of pediatrics**, Faculty of Postgraduate Childhood Studies, Ain Shams University, for her utmost help, kind indispensable guidance, valuable instruction and technical support.

I would like to express my deep and sincere gratitude and thanks to **Dr. Abeer El Sherif**, Consultant in Abbassia Fever Hospital, PhD Faculty of Postgraduate Childhood Studies, Ain Shams University, for her valuable help and tremendous effort she offered me during preparation of this study.

## **CONTENTS**

Items	Page
List of Abbreviations	II
List of Table	IV
List of Figures	V
Introduction	1
Aim of the Study	4
Review of Literature	6
Patients and Methods	47
Results	51
Discussion	57
Conclusion	64
Summary	66
References	70
Arabic Summary	85

### **List of Abbreviations**

CDC : Center of Disease Control and Prevention

**DHS** : Demographic and Health survey

**FGD** : Focus group discussion

**GDP** : Gross Domestic Product

**HIO** : Health Insurance Organization

IDA : Iron deficiency anemia

IQ : Intelligence Quotient

MCH : Mean cell hemoglobin

**MCHC** : Mean cell hemoglobin concentration

MCV : Mean cell volume

MI : Micronutrient Initiative

MOE : Ministry Of Education

**MOHP** : Ministry Of Health and Population

NNI : National Nutrition Institute

RDA : Recommended daily allowance

**RDW** : Red cell distribution width

SI : Serum Iron

**TIBC**: Total iron binding capacity

**UNICEF**: United Nation of Children Fund

**WHO** : World Health Organization

## **List of Tables**

Table No	Title	Page	
Tables of Results			
Table (1)	Distribution of sex among study group	52	
Table (2)	Distribution of mode of delivery among study group	52	
Table (3)	Distribution of method of feeding among study group	52	
Table (4)	Distribution of allergy among study group	53	
Table (5)	Distribution of parasite infestation among study group	53	
Table (6)	Mean and standard deviation of numerical values: age in month, order of birth, hemoglobin in g/dl	53	
Table (7)	Mean and standard deviation of numerical values: weight inkilogram, height in meter, Body Mass Index	54	
Table (8)	Mean diagnosis by grouping	54	
Table (9)	Sex in relation to diseases groups	55	
<b>Table</b> (10)	Method of delivery in relation to diseases groups	56	
<b>Table</b> (11)	Feeding method in relation to diseases groups	56	

## **List of Figures**

Figure No	Title	Page	
Review of literature			
Figure (1)	Global estimates of the prevalence of anemia in infants and children aged 6–59 months, 2011, WHO, 2015.	31	
Figure (2)	Complications of childhood obesity (Nathan & Moran, 2008)	43	

## Main health problems among children In East of Cairo

Fatma Bayomi, Salah Mostafa, Hanan El Gamal & Abeer Elsherif

Medical studies Dep. For Children, Faculty of Postgraduate Childhood Studies,

Ain Shams University.

#### **Abstract:**

**Background:** About 5.9 million children under-5 still pass awayevery year, nearly 1 million of them on their first day of life. Complications and diseases are the main cause of these deaths which have known and reasonable treatments.

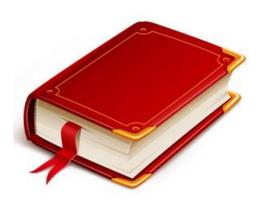
**Objective:** To survey and assess the main health problems among sample of children attending a medical center of MOHP in the East of Cairo.

**Methodology:** This study is a cross sectional one done on 150 children attending Hadaek El Kobba primary health care clinic, MOHP, chosen randomly during the period between November 2016 up to January 2017. Patients' age ranging from months up to 18 years from both sexes males and females.

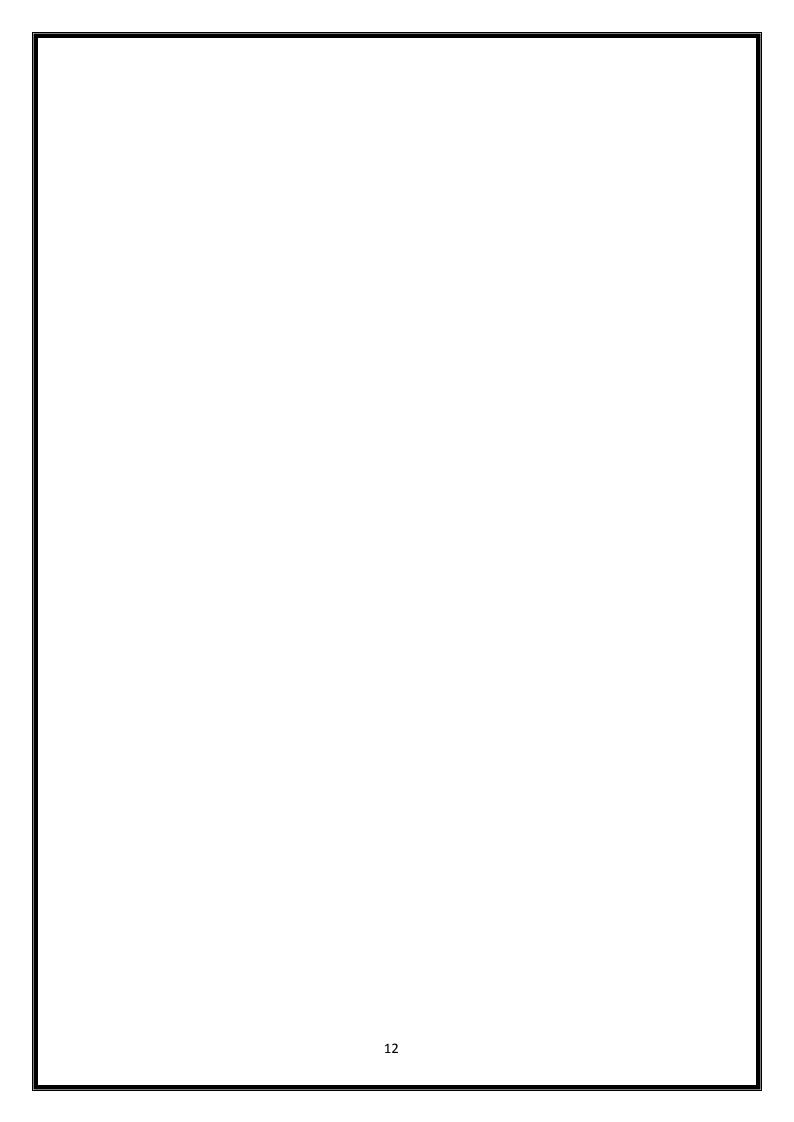
Results: Parasite infestation among study group: showed that Entamoeba Histolytica was the most predominant parasitic infestation among my group with percentage of 45%, Oxyuris was the second predominant while Giardia Lamblia was the least with percentage 15 %. Upper respiratory tract infections were the most prevalent diseases representing 28.7%, and then nutrition diseases 27.3%, combined 23.3%, GIT 14.7% and skin diseases were 6% the least prevalent among the group of children in the present study.

**Conclusion:**Respiratory tract infection and parasitic infestations are the most common health problems among children attending medical center of MOHP in East Cairo.

**Keywords:** Health problems- Morbidity- Mortality- Children- Respiratory tract infection- parasitic infestations.



# INTRODUCTION



### **Introduction:**

About 12 million children below 5 years pass away every year; most of these children live in developing countries. More than 50% of these mortality are accredited to diarrhea, malaria, acute respiratory illness, or measles all these conditions that are avoidable or curable (**Rice et al.**, 2000).

Health problems in Egypt have been prioritized several times. The Ministry Of Health and Population (MOHP) organized a workshop to update the list of research priorities including:

- Development of the health system for health promotion, and provision of quality services, particularly of Primary Health Care (PHC) and Family Practice.
- Development of human resources for health, through equitable distribution, continuing education, and economics of their employment.
- Empowering the district health system approach (MOHP, 2000).

Malnutrition is associated with about 50% of all deaths among children. Infectious diseases still the most significantreason of mortality and morbidity among children globallyparticularly in developing countries (Rice et al., 2000).

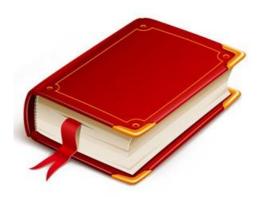
About 5.9 million children under-5 still pass away every year, nearly 1 million of them on their first day of life. Complications and diseases are the main cause of these deaths which have known and reasonable treatments(USAID, 2016).

## **Definition of study concepts:**

**Childhood diseases:**refers to disease that is contracted or becomes symptomatic before the age of 18 years old. Many of these diseases can also be contracted by adults.

**ICD 10:** is the standard diagnostic tool for epidemiology, health management and clinical purposes. This includes the analysis of the general health situation of population groups. It is used to monitor the incidence and prevalence of diseases and other health problems, proving a picture of the general health situation of countries and populations.

**BMI:** body mass index the body mass divided by the square of the body height, and is universally expressed in units of kg/m<sup>2</sup>, resulting from mass in kilograms and height in meters.



# AIM OF THE STUDY