# Relation between Maternal Mental Health and Nutritional Status of Their Children Aged 6-24 Months

### Thesis

Submitted For Partial Fulfillment of Master Degree in **Public Health** 

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In The Name Of God, Most Gracious, Most Merciful



(سورة طه: الاية ١١٤)

("and say My Lord, increase me in knowledge.")

## **Acknowledgement**

First of all I thank GOD for all His blessings and gifts. May Allah accept my work.

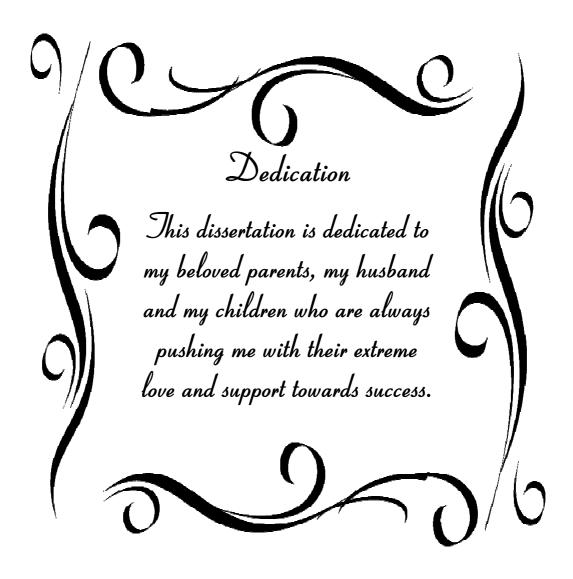
My greatest thanks go to Prof. Dr. Maissa Mohammed Shawky, Professor of Public Health, Cairo University, for her continuous encouragement and valuable supervision. Her insightful vision, dedication to excellence and diligent work motivated me to finish this study on time.

I would like to express my deepest appreciation and gratitude to Prof. Dr. Azza Ahmed El Bakry, Professor of Psychiatry, Cairo University. Without her kindness, great understanding and support this dissertation wouldn't have become a reality.

I would like to extend my gratitude to Dr. Doa'a Essawi Saleh to whom I am wildly indebted for her generous guidance and support throughout the entire process of structuring, designing, conducting and writing this dissertation. She generously shared her resources and statistical advice to help me pursue my work. I am grateful for the opportunity to work closely and be mentored by such respectable minds, with such valuable expertise.

It's worth to thank The Centre for Social and Preventive Medicine management and team who facilitated my mission of data collection. Also am so grateful for my interviewees for their time and participation.

Radwa Ibrahim Ali



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## Glossary of Abbreviations

**BCG** Bacillus Calmette-Guerin

**CDC** Centre For Disease Prevention And Control

**CEE/CIS** Central and Eastern Europe and the Commonwealth of

**Independent States** 

**CI** Confidence Interval

**CMD** Common Mental Disorders

**CSPM** Centre for Social And Preventive Medicine

**DPT** Diphtheria, Pertussis, Tetanus

**EDHS** Egyptian Demographic and Health Survey

**GBD** Global Burden Of Disease

**HBV** Hepatitis B Virus

**HIC** High Income Countries

**IFPS II** Infant Feeding Practices Study II

**LAMIC** Low And Middle Income Countries

**LBW** Low Birth Weight

MCMD Maternal Common Mental Disorders

MDGs Millenium Development Goals

mhGAP Mental health Gap Action Programme

MMR Measles, Mumps, Rubella

**OPV** Oral Polio Vaccine

**OR** Odds Ratio

**PAHO** Pan American Health Organization

**PPD** Postpartum Depression

**SRQ20** Self Reporting Questionnaire 20

**UN** United Nations

**UNFPA** United Nations Population Fund (formerly United Nations Fund

for Population Activities)

**UNICEF** United Nations International Children's Emergency Fund, or

United Nations Children's Fund is the shortened version

WHO World Health Organization

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### INTRODUCTION

Maternal and child health problems are among the leading causes of disease burden globally and in the region (Mathers, 2009).

When children's health is mentioned, their mothers cannot be neglected. The closely integrated relationship between mothers and their children make it impossible to address the health of one without considering the other. Giving much attention to this most intimate partnership of all – between mothers and their children – is the most important step in ensuring health for children, prosperity for families and strength for communities (Save the children, 2009).

The World Health Organization estimates that malnutrition and mental health problems are principal sources of disability throughout the world, particularly among women and children (WHO, 2001). Worldwide, more than half of all child deaths are related to under nutrition and in some countries, rates of under nutrition approach 50%. There is a similar trend with mental health problems; among women in developing countries, average rates of depressive disorders may also approach 50%. According to different studies conducted in a number of developing countries these rates were found to be ranging from 11% as concluded from a study performed in rural India (Chandran, 2002) and up to 57% as stated in a study conducted in Pakistan (Husain, 2000).

Beside the natural stresses of motherhood created by her role in caring for the child as well as the family, mother is subjected to a series of factors like poverty, illiteracy and deprivation. Occupational fatigue, anxiety about infant care and poor physical health can reduce quality of life for women and their families. All of these interact with a woman's capacity to care for her baby (**Fisher and Rowe, 2005**).

Maternal mental health problems pose a huge human, social and economic burden to women, their infants, their families, and society and constitute a major public health challenge (WHO, 2001).

Maternal common mental disorders (CMD), characterized by significant levels of depressive, anxiety and somatic symptoms, are highly prevalent in low and middle income countries (LAMIC) (**Prince**, **2007**).

Women of childbearing age are particularly at risk for depression and many of them experience high levels of social morbidity and depressive symptoms that are often unrecognized and untreated ( CPS, 2004).

The societal burden of maternal depressive disorders extends beyond women to the next generation by increasing the risk of problems related to growth and development among infants of depressed mothers (Hammen et al., 2004 and Weissman et al., 2005). Recent studies indicate a potential aetiological role in infant undernutrition (Anoop et al., 2004, Adewuya et al., 2008, Stewart et al., 2008 and Black et al., 2009).

Many studies have revealed the potential role of confounders related to maternal mental health and child under nutrition. Some of these confounders are concerned with the mother, others are related to the child and some play a dual role. Socioeconomic level, mother's age, education,

employment and child's age, sex, birth weight and physical health are some of the studied confounders (Fein et al., 2008, Lund et al., 2010 and Lindsay et al., 2012).

There is a lack of studies on maternal mental health and child nutrition (**Rahman et al., 2004**). That is why, there is a real need to disentangle the interrelationship between these issues and how they might affect mother and infant health, to inform clear guidance on mothers mental health as well as child nutritional practices.

### Importance of the study:

Inspite of its importance as a key underlying factor for child under nutrition, maternal mental health is largely neglected in child health programs in developing countries. Even the World Health Organization's high profile Integrated Management of Childhood Illness strategy does not tackle maternal mental health (Rahman et al., 2002).

As depression and other maternal common mental disorders can be identified relatively easily, they could be important markers for a high-risk infant group. Early management of maternal mental health problems could benefit not only the mother's health but also the infant's physical health and development (**Rahman et al., 2004**).

### **Study Goal:**

The present study was designed to promote the nutritional status of children in the age group of 6-24 months through detection of maternal mental health problems.

### **Study Specific Objectives:**

- 1. To investigate the association of maternal mental health and the nutritional status of their children aged 6-24 months, using the Self Reporting Questionnaire 20 (SRQ20) as a screening tool.
- 2. To identify feeding practices of mothers for their children through nutrition counseling.
- 3. To assess other factors associated with the nutritional status of children aged 6-24 months e.g. maternal education, occupation, general health of mother and child.

### Review of Literature

### **Maternal Mental Health**

#### Mental health

Mental health is integral to the conceptualization of health as defined in the preamble of the WHO Constitution. Mental illness is a broad concept which includes many different conditions with differing aetiologies, ranging from schizophrenia to depression and substance misuse. The World Health Organization (WHO) estimates that over 450 million people worldwide (10% of the adult population) suffer from mental disorders at any one time. In 2001, mental disorders accounted for 12% of the global burden of disease (WHO, 2001).

Among psychiatric disorders, the most common are depressive and anxiety disorders, known as common mental disorders (CMD) (Patel and Kleinman, 2003), the WHO estimates that one in three people will be affected by CMD in their lifetime (WHO, 2001).

CMD is a term used to describe a range of different conditions characterized by anxiety and depression which are "commonly encountered in community settings and whose occurrence signals a breakdown in normal functioning" (Goldberg and Huxley, 1992).

Anxiety disorders include generalized anxiety disorder, obsessivecompulsive disorder, panic disorder and phobias. Mood disorders include bipolar disorders and major and minor depressive disorders. Of these, depression is rated the single most disabling disorder in the world,