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Prevalence of Anxiety and Depression among Mothers of Newborns Admitted to Neonatal Intensive Care Units in Gaza Strip

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Dedication

To my beloved family … my great father … my sincere mother … my wonderful brothers and sisters … I deeply appreciate that you were always there in spirit with me … gave me the support and space I needed to realize this accomplishment … and inspired me with your love and warm feelings ….

Heartfelt thanks and appreciations to all those who contributed to the completion of this thesis … without your support, this work would not come to end.

Rania Breaka

Declaration

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signature:

Rania

Acknowledgement

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Rania Breaka

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Abstract

The hospitalization of a newborn to the Neonatal Intensive Care Unit is a stressful event for the family, particularly for mothers. The purpose of this study was to identify the prevalence and level of anxiety and depression among mothers of sick neonates admitted to NICU in Gaza Strip. The researcher used descriptive, correlational, analytical cross-sectional design in this study. The sample of the study was a convenience sample and consisted of 195 mothers whose babies were admitted to NICU (90 from Al-Shifa Hospital, 75 from Al Tahreer Hospital and 30 from European Gaza Hospital). For data collection the researcher used Taylor Manifest Anxiety Scale and Aaron Beck Depression Inventory, and data collection took place from March to July 2018. Cronbache alpha for Taylor Manifest Anxiety Scale was 0.836 and for Aaron Beck Depression Inventory was 0.886. Data analysis included frequencies, means, percentage, T-test, and One way ANOVA. The results of the study showed that mean age of mothers was 28.22±5.95 years, 24.6% were primiparous, 63.6% had normal vaginal delivery, 39% had university education, 90.3% were housekeepers, and 85.1% had low income. Demographic characteristics of neonates indicated that 52.8% were males, 48.2% were preterm, 30.8% had a birth weight less than 2500 g. Concerning the cause of admission to NICU, the results indicated that the most common cause was prematurity (30.8%), followed by respiratory distress (28.2%), and 71.8% of neonates stayed in NICU for 3 – 6 days. The mothers' responses on anxiety and depression scales showed that all the mothers had anxiety and 81% had depression with variation in severity. Also, 50.8% of mothers had severe to very severe anxiety and 38.5% had severe to very severe depression. Mothers from Al Tahreer hospital had higher levels of anxiety and depression compared to mothers from EGH and Al Shifa hospital. Moreover, there were statistically no significant differences in levels of anxiety related to age but older mothers (≥35 years) had higher levels of depression. The results also indicated that there were statistically no significant differences in levels of anxiety and depression related to the number of deliveries, mode of delivery, level of education, work, and income. For neonatal factors, the results reflected statistically no significant differences in levels of anxiety and depression related to gender of neonate, the cause of admission to NICU, length of stay in NICU, while mothers of premature babies and low birth weight baby had significantly higher levels of anxiety, but there were no significant differences in levels of depression. In conclusion, the study raised the need to integrate mental health services in these hospitals in order to support these mothers and treat their psychological disturbances.

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List of Abbreviations

ANOVA	Analysis of Variance
APA	American Psychological Association
CBT	Cognitive Behavioral Therapy
CS	Cesarean section
DSM	Diagnostic and Statistical Manual of Mental Disorders
EGH	European Gaza Hospital
ELBW	Extreme Low Birth Weight
GAD	Generalized Anxiety Disorder
GDP	Gross Domestic Product
GS	Gaza Strip
Km^2	Square kilometer
LBW	Low Birth Weight
MAP-UK	Medical Aid for Palestinians – United Kingdom
MOH	Ministry of Health
MV	Mechanical Ventilation
NGOs	Non-Governmental Organization
NICU	Neonatal Intensive Care Unit
NIMH	National Institute of Mental Health
NIS	New Israeli Shekel
NMC	Nasser Medical Complex
NVD	Normal Vaginal Delivery
PCBS	Palestinian Central Bureau of Statistics
PDS	Postpartum Depression Symptoms
PPD	Postpartum Depression
PTB	Preterm Birth
SAD	Social Anxiety Disorder
SepAD	Separation Anxiety Disorder

SPSS	Statistical Package for Social Sciences
VLBW	Very Low Birth Weight
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNRWA	United Nations Relief and Works Agency for the Palestinian Refugees in the Near East
USA	United States of America
WB	West Bank
WHO	World Health Organization

Chapter One

1.1 Introduction

Parents, especially mothers, whose their newborns were admitted to the NICU had emotional disturbances due to having a sick baby, the thought of losing their baby, and failure to fulfill traditional parenting roles (Allen et al., 2004; Joseph et al., 2007). In addition, negative emotions arise when the parents see their babies in unfamiliar incubator or connected to monitor increase their emotional distress (Heidari, et al., 2012). The stress induced by admission of an infant to NICU and separation from parents could have negative impact on mental health and wellbeing of parents, and correlated with anxiety, fatigue, depression, and sleep disruption (Busse et al. 2013).

In the same issues, it was mentioned that stressful events might have a negative impact on individual's adjustment and may provoke psychological distress, including anxiety and depression (Bostock et al., 2009; Linley et al., 2008). The birth of preterm or sick baby is a stressful event associated with parental anxiety and other psychological problems (Busse et al., 2013), and that admission of a neonate to the NICU is unexpected and is stressful for their mothers (Erdem, 2010).

Despite advances in healthcare, preterm birth (PTB) and low birth weight (LBW) remain major global health problems (Hamilton et al., 2013). Globally, an estimated 15 million babies are born preterm (before 37 weeks gestation) accounting for 11% of all live births worldwide, ranging from about 9% in higher-income countries to 12% in lower-income countries. More than 60% of PTBs occur in Africa and South Asia (World Health Organization - WHO, 2018). Locally in Gaza Strip (GS), it was reported that the crude birth rate was 31.0/1000 population, and the percentage of LBW (below 2,500 g) was 6.9% and, the number of neonates admitted to Neonatal Intensive Care Units (NICU) in the