

Knowledge of Mothers about Preterm Infant Care in Mosul City/ Iraq

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ABSTRACT

Background & objectives: An infant who is born prematurely is more exposed to health complications than normal children in terms of the development of his lungs in particular, and is negatively linked to the chances of contracting diseases and death. The study aims to assess women's knowledge about preterm infant care in Mosul city.

Methodology: A descriptive study design was conducted in five government hospitals in Mosul city. The purposive sampling method was selected for the study, which consists of 221 women from preterm infant mothers in intensive care unit in Mosul hospitals. Data were collected through face-to-face interview by constructed questionnaire from the 22 of November 2023 until 20th of March / 2024. Descriptive statistics were calculated using SPSS software version 26.

Results: The results of the study showed that mothers' knowledge regarding caring for premature infants was good, except that their knowledge regarding vaccinations (1.750), preventing infections (1.33), and regarding umbilical cord care (1.40) was weak.

Conclusions & recommendations: The study found that mothers' knowledge about caring for premature infants was good, but they lacked knowledge on infection prevention, vaccinations, and umbilical cord care. The researchers recommend health education for mothers on these topics, as premature infants have higher morbidity and mortality risks.

KEYWORDS: Knowledge, Preterm, Infant.

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INTRODUCTION

An infant who is born prematurely is more exposed to health complications than normal children in terms of the development of his lungs in particular, and is negatively linked to the chances of contracting diseases and death. (Tsikouras et al., 2021)

Over one in five child deaths that occur before the age of five are now attributed to preterm delivery, making it the leading cause of child mortality. (Walani, 2020) Those who survive preterm birth may have long-term health issues, including a higher risk of disability and developmental impairments. (Johnson & Marlow, 2017) While many preterm newborns survive in high-income nations, many preterm babies in low- and middle-income nations risk dying from inadequate neonatal care.(Allawi & Ahmed, 2023)

Preterm delivery is linked to long-term physical, neurological, and socioeconomic consequences and is the primary cause of infant mortality. (Raju et al., 2017)

Preterm birth complications deaths as a fraction of total deaths among children under five Palestine 16%, Iraq 20%, Jordan 24%, Lebanon 22%, Libya 21%, and Egypt 20%. (Al-Selwi & Barkat, 2023)

Preterm birth is defined by the World Health Organization as babies born alive before the full 37 weeks of pregnancy. (Chabra, 2016)

Extremely early preterm birth occurs between 28 and 32 weeks, while extreme preterm birth occurs fewer than 28 weeks (Ville & Rozenberg, 2018). Early preterm births happen between 32 and 34 weeks of gestation, while late preterm births happen between 34 and 36 weeks. (Delnord & Zeitlin, 2019) These babies are also known as premature babies colloquially. (Manoranjitham, 2019)

A premature birth presents a mother with many obstacles, therefore understanding the mother's struggles and expertise surrounding premature babies is important. The mothers' memories of the painful times they spent in the

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hospital leave a mark on them, making them think that something bad could happen to their child. This limits the care they can provide, makes them feel insecure in their day-to-day lives, and may cause them to question their capacity to care for premature newborns. (Gomes et al., 2021) It is therefore recognized that the effects of premature birth extend beyond the hospital stay. It is crucial to stress that the family must continue to care for these NBs at home, and that moms of premature newborns require assistance to meet the difficulties of raising their children at home. (Walty & Duarte, 2017) The study aims to assess the mother's knowledge about preterm baby's care.

METHODOLOGY:

A descriptive study design was conducted in five government hospitals were selected to the study: Al-Khansaa teaching Hospital, Ibn Al-Atheer teaching Hospital, Al-

Batool teaching hospital, and Al-Salam teaching hospital Mosul General hospital. The purposive sampling method was selected for the study, which consists of 221 women from preterm infant mothers in intensive care unit of Mosul hospitals. Data were collected through face-to-face interview by constructed questionnaire from the 22 of November 2023 until 20th of March / 2024. The questionnaire consisted of seven parts includes: demographic variables (8 items), mothers' knowledge about breastfeeding (11 items), knowledge about prevention of infection (3 items), mothers' knowledge about preterm immunization (4 items), Mothers knowledge about jaundice (4 items), mothers' knowledge about thermoregulation (5 items), Mothers knowledge about care of umbilical cord (5 items), and mothers' information on respiratory problems, (3 items). Descriptive statistics were calculated using SPSS software version 26.

RESULTS

Table (1): Characteristics of sample according to their demographic variables.

Demographic information	Categories	No.	%
Mother s Age group	Under 20 years	46	21.32%
	20_30 Years	119	54.31%
	31_40 Years	48	21.72%
	More than 40 years	6	2.72%
Marital status	Not separate	209	93.7%
	Separate	13	6.3%
Mother occupation	Employee	32	14.1%
	House wife	191	86.1%
Residenc	Urban	125	56.66%
	Rural	96	43.3%
Educational Level	Unable read and write	17	8.11%
	Uble read and write	27	11.18%
	Primary School	79	35.32%
	Secondary School	57	26.21%
	University	40	18.61%
Number of children	First child	61	28.02%
	2-3 child	88	40.32%
	4-7 child	71	31.72%
Type of birth	Caesarean birth	135	60.61%
	Normal delivery	88	39.41%
Where to receive prenatal care	Private center	124	55.74%
	Health care center	38	17.63%
	Both centers	59	26.77%
received information about early care after discharge	Yes	55	24.41%
	No	175	75.61%

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Table (2): Study sample according to their knowledge about premature infant care.

Mothers' knowledge about breastfeeding			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
2.45	2	23152	0.000
Mother's knowledge about prevention of infection for their preterm baby			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
1.333	1.500	0.000	0.000
Mothers' knowledge about vaccination of for their preterm baby.			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
1.750	1.990	10862.5	0.000
Mothers' knowledge about jaundice			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
1.75	1	21321	0.000
Mothers' knowledge about temperature regulation for their preterm baby.			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
3	2	24262.5	0.000
Mothers' knowledge about the Umbilical cord care			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
1.400	1.500	23005	0.000
Mothers' knowledge about breathing problems			
Observed Median	Hypothetical Median	One-Sample Wilcoxon Signed Rank Test	P-value
1.67	1	19110	0.000

DISCUSSION

The study found that the majority of mothers were not separated (93.7%), that the majority of mothers were between the ages of 20 and 30 (54.3%), and that the most of them were housewives (86%), employees (14%), and that the majority of mothers were between the ages of 20 and 30 (35.4%). Additionally, the study found that the majority of mothers lived in urban areas (56.6%) but the most of mothers in rural areas (34.4%), and that the majority of mothers had only completed primary school (8.5%). According to the table, (28%) of the women gave birth to this child as their first, (40.2%) gave birth to two or more children, and (60.6%) of the women had cesarean sections to deliver their premature babies. More than half of the mothers received prenatal care in private health centers.

The results showed a substantial difference between the hypothesized median of (2) and the observed median of (2.45), suggesting that most women have high breastfeeding expertise. Previous research has stated that mother's knowledge about breastfeeding have good for all items related to breastfeeding was (54.2%). (Aldirawi et al., 2019)

The results indicated that there is a difference in the observed median value of mothers' knowledge regarding infection prevention (1.333) compared to the hypothesized median value (1.500), which indicates that most mothers lack information regarding infection prevention. This results consistent with study conducted by (Abdullah & Hassan, 2019) study mention that the most of the mothers were not aware of the infection prevention by (67.7).

The study results showed that there is a difference in the observed median value of mothers' information regarding vaccination (1.750) compared to the hypothesized median value (1.990), which indicates that most mothers lack information regarding vaccination. previous study mention that the A total of (31%) of mothers had low knowledge on infant vaccination while the overall correct rate was (15.3%). (Giannakou et al., 2021)

The results of the study showed that women's knowledge regarding Jaundice, temperature regulation was good, breathing regulation, while lack information regarding umbilical cord care. This findings consistent with previous study showed that mention that the , (67%) of participant had inadequate level of knowledge umbilical cord care and while

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33% adequate level of knowledge towards umbilical cord cares. (UWINGABIRE, 2019)

The researchers concluded that the mothers' knowledge was good regarding caring for premature infants with regard to breastfeeding, regulating the child's temperature and jaundice, and monitoring breathing problems, while it was lacking knowledge regarding infection prevention and vaccinations, in addition to caring for the newborn's umbilical cord. The researcher recommended that there should be health education directed specifically to mothers regarding the care of premature infants in all areas, especially since they have greater risk factors for morbidity and mortality as a result of preterm.

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