

## ASSESSMENT OF MOTHERS' KNOWLEDGE ABOUT PREMATURE INFANTS WITH CEREBRAL PALSY IN THE MATERNITY AND CHILDREN HOSPITAL IN DIWANIYAH CITY

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### ARTICLE INFO

Received: 26 March 2023

Revised: 20 July 2023

Accepted: 26 July 2023

#### Keywords:

Assessment, Mothers'  
Knowledge, Cerebral Palsy

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### ABSTRACT

**Purpose & Objectives:** Assessing mothers' knowledge about Premature infants with cerebral palsy and finding the relationship between demographic information and Premature infants with cerebral palsy.

**Subjects and Methods:** A descriptive questionnaire-based study was conducted on mothers from 20 October 2021 to 17 May 2022. Non probability (purposive) sample of 50 women's selected from maternity and Child Hospitals in Diwaniyah City. The demographic characteristics were obtained through interviews with the mothers. The statistical analysis program SPSS was used to analyze the data entered in the form of an Excel table and by using the Chi-square for statistical analysis.

**Results:** The results show that there is an association between mothers' knowledge of their demographic data at a p-value of less than (0.05). Except for item (Occupational), there is no association between the mother's knowledge with demographic data at a p-value of more than (0.05). **Conclusion:** The study showed that mothers have insufficient knowledge about premature infants with cerebral palsy with regard to factors, such as the mother's education, mother's age, and economic level related to the mother's knowledge.

**Conclusions:** There is a need for more large sample studies to generalize good results. Efforts must be adopted by the Iraqi Ministry of Health to establish educational programs.

## INTRODUCTION

Cerebral palsy is one of the most common health problems for premature babies. About 1 to 2 out of every 1,000 babies born to term will develop cerebral palsy. For babies born at less than 37 weeks gestation, the risk is twice as high, approximately 100 in 1,000 live births. (Martin & Osterman, 2018; Blinko, 2012).

A premature baby is defined as the birth of a baby before 37 weeks of gestation. Premature babies are more likely to suffer from several complications, especially cerebral palsy, which can affect children for life, in addition to some complications of respiratory distress syndrome, jaundice, infections, and seizures. These complications could lead to the child's life at an early age (Marhoon, 2021).

A preterm baby is defined as the birth of a baby before 37 weeks gestation, and it occurs in 8% to 11% of all pregnancies. These obstetric complications account for 75% to 80% of all

neonatal deaths. In addition to significant morbidity rates among infants and newborns (Marhoon & Nasser K, 2017).

Cerebral palsy constitutes a high rate of complications that threaten premature babies and ranges between 40% and 50%. Most of these cases (75-90%) are thought to be caused by problems occurring around the time of birth in the case of twins or triplets, often immediately after birth in cases of dystocia or by forceps or other assisted delivery in cases of normal delivery. birth injuries. In those born weighing between 1 kg (2.2 lb) and 1.5 kg (3.3 lb) CP occurs in 6%. [2] Of those born before 28 weeks gestation this occurs in 8% [68] [a] Genetic factors are believed to play an important role in prematurity and cerebral palsy in general. In those born between 34 and 37 weeks, the risk is 0.4% (three times normal) (Mohroon, 2021).

## METHODOLOGY

### **Ethical approval obtained from**

Maternity and Children's Hospital in Al-Diwaniyah, before contact with women. They were informed that their participation is voluntary, anonymous and confidential. Oral informed consent was obtained from all participants prior to the study. Questionnaires were collected during the period shown below (Abdul Karim & Abbas, 2016).

**Study design:** A descriptive design was carried out throughout the study to identify the knowledge of the mother with premature birth from (20 October 2021 to 17 May 2022). **Study sample:** A non-probability (purposive) sample consisting of 50 women selected from maternity and Child Hospitals in Diwaniyah City with premature birth. A descriptive questionnaire-based study was conducted on mothers from 4 in January 2022 to 9 in March 2022.

**Data Collection:** The demographic characteristics were obtained through interviews with the mothers and used adopted and developed using the Arabic version of a self-reported questionnaire format approximately (10-25) minutes were spent by mothers to complete the interview and filling out the questionnaire format with the help of investigator (AbdulKarim & Abbas., 2016).

**Data collection instrument:** The questionnaire consisted of three sections.

Section -A: questions about the demographic and personal data on mothers and these include: age, level of education, occupation, residence, and income. Section -B: questions about the Productive information of the mother and these include the number of pregnancies, number of abortions, The number of stillbirths, The number of live births, number of preterm births. This data was selected because of their possible association with preterm birth. Section -C: consisted of 12 questions on Knowledge of Premature infants with cerebral palsy. (AbdulKarim & Abbas, 2016).

### **Data analysis**

The statistical analysis program SPSS was used to analyze the data entered in the form of an Excel table and by using the Chi-square for statistical analysis and to identify the relationships between demographic information and productive information for the mother with their knowledge information.

## RESULTS AND DISCUSSION

The chapter deals with analyzing data after collecting, processing, tabulated and managing it statistically, then the scientific and logical interpretation of the results related to the objectives of the study.

**Table (1) Study Sample Demographic Data**

Demographic Data	Rating and Intervals	Frequency	Percent
Age/years	18-28	25	50.0
	29-39	15	30.0
	40 and more	10	20.0
	Total	50	100.0
Residence	Urban	30	60.0
	Rural	20	40.0
	Total	50	100.0
Education Level	does not read	10	20.0
	Reading	8	16.0
	Primary	15	30.0
	Secondary	7	14.0
	Diploma or Bachelor's degree	10	20.0
	Total	50	100.0
Occupation	I raised a house	35	70.0
	Employee	10	20.0
	Earners	5	10.0
	Total	50	100.0
Income	Less than 300	27	54.0
	300-600	13	26.0
	600-900	3	6.0
	900 and more	7	14.0
	Total	50	100.0

**Table No. 1** shows the demographic information of the sample. In terms of age, it turns out that the age group for the sample is 18-28. Hence, 50% of the sample is expected to be the most appropriate age for childbearing. It turns out that the sample is young and this result is consistent with the study (AL-Mukhtar & Abdulghani, 2020). In terms of Residence, the table shows that the largest proportion of the sample is from the city, at 60%. While it is the educational level of the sample, it turns out that the largest percentage is from mothers who neither read nor write, and who read and write, and from primary school, which is 66%, and this percentage is very high, and this is consistent with the study (Knowledge of mothers with premature births About Antenatal corticosteroid therapy for fetal lung maturation) (Abdulkareem & Abbas, 2016).

**Table (2) Study Sample maternal productivity data**

Maternal Productivity Data	Rating and Intervals	Frequency	Percent
Pregnancy Number	Once	36	72.0
	Twice	8	16.0
	three and more	6	12.0
	Total	50	100.0
The Number of Premature Births	Once	9	18.0
	Twice	3	6.0
	three and more	2	4.0
	No found	36	72.0
	Total	50	100.0
The Number of Live births	Once	7	14.0
	Twice	11	22.0
	three and more	32	64.0
	Total	50	100.0
The Number of abortions	Once	5	10.0

	Twice	6	12.0
	three and more	5	10.0
	No found	34	68.0
	Total	50	100.0
The Number of Premature infants with cerebral palsy	Once	10	20.0
	Twice	2	4.0
	three and more	2	4.0
	No found	36	72.0
	Total	50	100.0

**Table No.2:** shows the productive information of the mother in terms of the number of pregnancies, premature births, abortions, live births, or stillbirths. It turned out that the most pregnancies in the sample were those who had pregnancies for the first time and with a percentage of 72%, While the number of premature births was in the category, there was no previous pregnancy with a percentage of 72%, and this indicates that mothers are less experienced and knowledgeable about pregnancy. While live births, the table showed that it is the most common category, there were three or more births, 64% of the sample size, while abortion with pregnancy was not, and mothers who did not complain of abortion during pregnancy, 68% of the sample size. Also, the number of Premature infants with cerebral palsy, which is the largest percentage of the sample size is 20 %, and this agrees with the research (Knowledge of Mothers with Premature Births About Antenatal Corticosteroid Therapy for Fetal Lung Maturation) (Abdulkareem & Abbas, 2016).

**Table No. 3: Overall Distribution Assessment of Knowledge among Mothers**

Level of mother' knowledge	Frequency	Percent	Mean	Std. Deviation
Low	25	50.0		
Fair	15	30.0	1.30	.464
Good	10	20.0		
Total	50	100.0		

Table 4 shows the mean of the level of mother knowledge was (1.67), and the majority of the study sample (50.0 %) had a low level of mother's knowledge.

❖ Good (mean 1.68-2), fair (mean 1.34-1.67), low (mean 1-1.33)

**Table (4) Association between the Overall Assessment of Mothers' Knowledge and Their Demographic Data**

Demographic Data	P-Value	Sig
Age/Years	.001	H.S
Residence	.001	H.S
Education Level	.001	H.S
Occupational	.057	N.S
The Number of Pregnancy	.001	H.S
The Number of Live Births	.001	H.S
The Number of abortions	.001	H.S
The Number of Premature Births	.001	H.S
The Number of Premature infants with cerebral palsy	.001	H.S
Income	.001	H.S

The results of Table (5) show that there is association between mother' knowledge with their demographic data at p value of less than (0.05). Except item (Occupational) there is no

association between mother' knowledge with demographic data at p value of more than (0.05) These results are in agreement with the study AL-Mukhtar (2020).

## CONCLUSION

The study showed that mothers have insufficient knowledge about Premature infants with cerebral palsy. Factors such as mother's education, mother's age, and economic level are related to the mother's knowledge.

## ACKNOWLEDGEMENTS

Organizing educational courses for mothers, Increasing the cultural awareness of mothers and families, establishing educational programs for pregnant women that play a key role in avoiding complications and reducing the risk of Premature infants with cerebral palsy, creating recommendations on radio and television that contribute to raising the awareness of mothers, there is a need for more large sample studies to generalize these results, as well as efforts, must be adopted by the Iraqi Ministry of Health to establish educational programs.

## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## FUNDING

None.

## ETHICAL CLEARANCE:

Consent was obtained from all the samples of the study.

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