University of Babylon
College of Nursing

Assessment the causes of neonatal mortality in neonatal intensive care units 2020-2021

A project submitted to the council of the College of Nursing, Babylon of University in partial fulfillment of the requirements for the degree of Bachelor Science in Nursing

Submitted by students:-

Alaa Mahdi Abd
Teeba Abdullah omran
Ali Ahmed Fadhil

Supervised by:

Assist .Lec. Ali Fadhil Obaid

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يَٰٓأَيُّهَا ٱلْإِنسَٰنُ مَا غَرَّكَ بِرَبِّكَ ٱلْكَرِيمِ ﴿٦﴾

ٱلَّذِى خَلَقَكَ فَسَوَّىٰكَ فَعَدَلَكَ ﴿٧﴾

فِىٓ أَىِّ صُورَةٍ مَّا شَآءَ رَكَّبَكَ ﴿٨﴾

سُورَةُ الانفِطَارِ

شكر وتقدير

قال رسول الله صلى الله عليه وسلم (من لم يشكر الناس لم يشكر الله عز وجل)

احمد الله تعالى حمدا كثيرا طيبا مباركا ملء السموات والأرض على ما اكرمني به من إتمام هذه الدراسة التي أرجو أن تنال رضاه

توجه بالشكر الجزيل الى جميع اساتذتي الافاضل في كلية التمريض جامعه بابل الذين بذلوا جهدا

ثم اشكر

أستاذي المشرف على الرسالة فضيلة الأستاذ المساعد علي فاضل الذي لم يدّخر جهدًا في مساعدتي ، فقد فتح لي بيته، كما هي عادته مع كل طلبة العلم، وكنت أجلس معه بالساعات الطوال أقرأ عليه ولا يجد في ذلك حرجًا، وكان يحثني على البحث، ويرغبني فيه، ويقوّي عزيمتي عليه فله من الله الأجر ومني كل تقدير حفظه الله ومتّعه بالصحة والعافية ونفع بعلومه.

I

أهداء

بسم الله الرحمن الرحيم

اللهم صل على محمد وال محمد

اهدي بحثي هذا

الى الكهف الحصين وغياث المضطر المستكين وملاذ المؤمنين الامام الصاحب الموعود

الى شهداء العراق الابرار وتخليدا لدمائهم الزكية التي سقت ارض العراق عزا وهيبة من اجل ان تحيا شرفا بعدهم

الى من قال الحق تعالى فيهما

وَقُلْ رَّبِّ ارْحَمْهُمَا كَمَا رَبَّيَانِي صَغِيرًا

إلى صاحب السيرة العطرة، والفكر المُستنير؛ فلقد كان له الفضل الأوَّل في بلوغي التعليم العالي

(والدي الحبيب)، أطال الله في عُمره.

إلى من وضعتني على طريق الحياة، وجعلتني رابط الجأش، وراعتني حتى صرت كبيرًا

(أمي الغالية)، طيَّب الله ثراها.

إلى إخوتي؛ من كان لهم بالغ الأثر في كثير من العقبات والصعاب.

إلى جميع أساتذتي الكرام؛ ممن لم يتوانوا في مد يد العون لي

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Abstract

BACK GROUND: Neonatal mortality (NM) is defined as the death of babies within the first 28 days of their lives and it's consider a key outcome indicator that used to assess and evaluate the development of maternal and neonatal health services in the community.

OBJECTIVE: To detect the neonatal mortality rates and to finding the essential causes and factors related with neonatal mortality

METHODS: A retrospective study was used to achieve the aim of the study through assessing NMR of all the admitted neonates to the NCU in hospitals of Babylon governorate, throughout the period of 2020 and 2021 years, the study done during the mid-November 2022 to end of March 2023. Data including; the number of deaths in neonatal period, cause of death, neonatal gender, gestational age, birth weight, mother`s age, mode of delivery, place of delivery, type of pregnancy, and total number of live births.

RESULTS:

The Neonatal Mortality Rate (NMR) was 40 per 1000 live birth in 2020 and 38 /1000 live birth in 2021 among all admitted neonates in Babylon hospitals, NMR was very high among neonates with RDS (46% in 2020 and 5 2% in 2021), and low-birth-weight preterm neonates (25.8% in 2020 and 10.3% in 2021).

CONCLUSION:

The NMR was high in Babylon governmental hospitals especially in the hospital at the rural area. The RDS and prematurity were the main cause of neonatal deaths.

Chapter One

Introduction

Introduction

The neonatal period is defined as the 1st 28 days after birth and may be further subdivided into very early (birth to <24 hr.), early (birth to <7 days), and late neonatal periods (7 days to <28 days) (Nayyef et al., 2020).

The neonatal period – is the most vulnerable time for a child's survival. Children face the highest risk of dying in their first month of life at an average global rate of 18 deaths per 1,000 live births in 2021, down by 51 per cent from 37 deaths per 1,000 live births in 1990. Globally, 2.3 million children died in the first month of life in 2021 – approximately 6,400 neonatal deaths every day (UNICEF, 2021).

Neonatal mortality (NM) is defined as the death of babies within the first 28 days of their lives according to World Health Organization (2006) and its consider a key outcome indicator that used to assess and evaluate the development of maternal and neonatal health services in the community (Jawad et al., 2017).

According to Millennium Development Goal no. 4 (reduce child mortality). A significant progress has been made globally in reducing mortality rate of under 5 children from an estimated rate of 90 deaths per 1000 live births in 1990 to 46/1000 in 2013 (World Health Organization., 2018). Particularly in Iraq, the neonate mortality rate decrease from 66/1000 in 1975 to 22/1000 live birth in 2020 according to UN Inter-agency Group for Child Mortality Estimation (IGME, 2023).

The first 2 days after birth account for over 50% neonatal deaths, while the first week of life accounts for over 75% of all neonatal deaths. Death of a neonate has always been a shocking experience, especially for the mother and of concern in clinical practice (Nyoni & Nyoni, 2020).

Globally the main causes of newborn deaths are prematurity and low birth-weight (LBW), infections, asphyxia (lack of oxygen at birth), congenital malformations and birth injury. In addition to deformities and chromosomal abnormalities, respiratory distress, bacterial sepsis and intrauterine hypoxia all of those consider the significant reasons for neonate mortality (Habib et al., 2018) (Abed & Al-Doori, 2018) (Al-Saady, 2007)

Neonatal deaths also influenced by prenatal conditions and circumstances surrounding delivery as well as a low socioeconomic status of family which is frequently associated with premature deliveries that is correlated with high rates of neonate morbidity and mortality (Samira T et al., 2012).

Maternal mortality, socioeconomic-demographic factors, the health care system, cultural practices, insufficient antenatal care, repeated caesarian deliveries and technologies are some determinants of neonatal death (Mehmoud & Al-Khudhairi, 2021) (WHO, 2007).

Objectives of the study:

- To assess the neonatal mortality during the period of 2020-2021.
- To identify the main causes of neonatal death among the neonates admitted to neonatal care units (NCUs) in all the governmental hospitals of Babylon governorate.
- To finding out the relationship between neonatal death and risk factors of neonatal deaths.

Chapter Two

Methodology

Methodology

This chapter includes, design of the study, administrative and ethical arrangement, Sample & setting of the study, study instrument and statistical analysis.

Design of the Study: A retrospective study was used to review the medical records of all the admitted neonates (No=27379) to the NCU in governmental hospitals of Babylon governorate, with an analytic component of the neonate death in 2020 and 2021 years, done during the mid-November 2022 to end of March 2023

Administrative and Ethical Arrangement-A formal permission has been issued from college of nursing/University of Babylon to conduct the study. Second approval was obtained from the health Directorate of Babylon. **Appendix (1)**

Sample & setting of the study Non-probability (purposive sampling) of (27379) neonates baby born during the period of (2020- 2021) and admitted to Babylon governmental hospitals. Data was obtained from the statistical department in health directorate of Babylon governorate as electronic health records from the programs called (Microsoft Visual FoxPro).

Study Instrument: The instrument was made for the purpose of the study **Appendix (2)** and it's composed of three parts as follows:

Part 1: Socio-demographic data of the mothers (age, and residency) and their neonates (birth weight, gender, and age at time of death). Early neonatal death (0-7 days), late neonatal death (8-28 days)

Part 2: Obstetric history includes mode of delivery, place of delivery, type of pregnancy, and gestational age.

Part 3: Causes of neonatal deaths that classify according ICD10

Statistical Analysis: Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 26, through the application of descriptive statistical data analysis including frequencies and percentages, arithmetic mean with standard deviation, mean of score (MS) with their standard deviation (SD), and inferential statistics (multiple regression).

Chapter Three

Results

Results

Table 1: NMR and Total Number of Admissions in the Hospitals and Deaths

Names of Hospitals	2020			2021		
	No. admissions	Deaths	NMR	No. admissions	Deaths	NMR
Al Maḥāwīl general Hospital	1095	59	53.8 %	1003	39	38.8 %
Al-Hashimiyah General Hospital	1599	23	14.3 %	1872	41	21.9 %
Alexandria General Hospital	442	5	11.3 %	472	8	16.9 %
Al-kifl general hospital	445	8	17.8 %	599	8	13.3 %
Al -Qasim general Hospital	856	5	5.8 %	937	9	9.6 %
Imam Ali General Hospital	**34**	**4**	**147 %**	**70**	**8**	**114 %**
Imam Sadiq Hospital	2912	156	**53.5 %**	3232	186	**57.5 %**
Al-Zahraa' Hospital for Birth	416	18	36 %	351	27	**76.9 %**
Babil Teaching Hospital for Maternity and Children	4806	275	**57.2 %**	5355	222	41.4 %
Ibn Saif children's Hospital	498	10	20 %	385	8	20.7 %
Total	**13103**	**563**	**42.9 %**	**14276**	**556**	**38.9 %**

NMR: neonate mortality rate = (No. of Death/ No. of Birth) 1000

The neonatal mortality in this table was 42.9 per 1000 live birth in 2020 and 38.9 per 1000 live birth in all hospitals. the highest percent of NMR 147 per 1000 live birth in 2020 and 114 per 1000 live birth in 2021 in Imam Ali General Hospital, 76.9 per 1000 live birth in 2021in Al-Zahraa' Hospital for Birth.

Table 2: Causes of death in neonatal period and their numbers each year

Causes of ND	2020 Freq. (%)	2021 Freq. (%)
Neonatal Sepsis	2 (0.4 %)	5 (0.9 %)
Prematurity and LBW	145 (25.8 %)	57 (10.3 %)
Birth injury	28 (5 %)	2 (0.4 %)
Birth Asphyxia	30 (5.3 %)	41 (7.4 %)
RDS	270 (48 %)	307 (55.2 %)
Congenital Pneumonia	1 (0.2 %)	9 (1.7 %)
Septicemia	58 (10.3 %)	49 (8.8 %)
Hemolytic disease of newborn	1 (0.2 %)	2 (0.4 %)
Neonatal Jaundice	5 (0.9 %)	6 (1.1 %)
Congenital anomalies	13 (2.3 %)	46 (8.3 %)
CHD	10 (1.8)	31 (5.6 %)
Meconium aspiration	0 (0 %)	1 (0.2 %)
Total No. deaths	563 (100%)	556 (100%)

ND: neonatal death; Freq. frequency, LBW: low birth weight; RDS: respiratory distress syndrome and CHD congenital heart defect

This table shows that most common causes of 563 neonatal deaths among 13103 admitted in 2020 and 556 deaths among 14276 neonates admitted in 2021 were respiratory distress syndrome (RDS) (**48%** in 2020 and **55.2%** in 2021), prematurity and LBW (25.8% in 2020 and 10.3% in 2021), Septicemia (10.3% in 2020 and 8.8% in 2021), birth asphyxia (5.3% in 2020 and 7.4% in 2021), and Congenital anomalies (10.3% in 2020 and 8.8% in 2021).

Table 3: Distribution of Neonatal Deaths According to Demographic Characteristic of Mothers and their Neonates

Variables	Interval	2020 (N=563)	P-value	2021 (N=556)	P-value
Mothers age	12 - 21	136(24.2)		143 (25.7)	
	22 - 31	**329 (58.4)**	.056	**338 (60.8)**	.407
	32 - 41	93 (16.5)		70 (12.6)	
	42+	5 (.9)		5 (.9)	
Residence	Urban	431 (76.6)	.000**	408 (73.4)	.000**
	Rural	132 (23.4)		148 (26.6)	
Neonates Gender	male	305 (54.2)	.113	308 (55.4)	.166
	female	258 (45.8)		248 (44.6)	
Age at time of death	Early neonatal death (birth to <7 days)	123 (21.8)	.000**	119 (21.4)	.000**
	late neonatal death (7 days to <28 days)	440 (78.2)		437 (78.6)	
Birth weight	ELBW (less than 1000)	75 (13.3)		74 (13.3)	
	VLBW (less than 1500)	82 (14.6)	.000**	53 (9.5)	.000**
	LBW (less than 2500)	137 (24.3)		247 (44.4)	
	Normal Birth Wt.	267 (47.4)		180 (32.4)	
	LGA	2 (.4)		2 (.4)	

**Correlation is significant at the P-value 0.01 level (1-tailed). ELBW= extreme low birth weight, VLBW= very low birth weight, LBW= low birth weight, LGA= large for gestational age,

This table shows that the neonatal deaths were high in mothers age between 22-31 years, significantly high in urban than rural neonates (ratio 3:1), almost equal in both gender, greatly high in late neonatal period than early neonatal period (ratio 3:1), and significantly high in neonates born under the normal birth weight in both 2020 and 2021.

Table 4: Distribution Neonate Death According to the Obstetric History

Variables	Interval	2020 (N=563)	P-value	2021 (N=556)	P-value
Gestational Age	Preterm Less Than 37wk	503 (89.3)*	.000**	470(84.5)	.000**
	Full-Term 38-42wk	60(10.7)		86 (15.5)	
Mode of delivery	Normal Delivery	535(95.0)	.000**	526(94.6)	.000**
	CS	28(5.0)		30 (5.4)	
Place of delivery	Home	513(91.1)	.000**	512(92.1)	.000**
	Hospital	50(8.9)		44(7.9)	
Type of pregnancy	Single	398(70.7)	.000**	387(69.6)	.000**
	Twins	165(29.3)		161(30.4)	

**Correlation is significant at the 0.01 level (1-tailed). CS Cesarean section

The above table indicates that the obstetrical history was significantly associated with increase neonatal deaths. The findings show that the majority (>75%) of NMR occur when the neonate born before 37 week of gestational age, delivered normally, in home than hospital, and in single birth than twins in both 2020 and 2021.

Chapter Four

Discussion

Discussion

The current study reviewed the neonatal mortality retrospectively throughout 2020-2021 and identify the essential causes of neonatal death among the admitted neonates (N=27379) to neonatal care units (NCUs) in all the governmental hospitals of Babylon governorate/Iraq.

The neonatal mortality rate was 42.9 per 1000 live birth in 2020 and 38.9 per 1000 live birth among all admitted neonates in NCU in the Babylon governmental hospitals as Table (1) shown. This result was above the value for NMR in Iraq, in 2020 was (21.4) and in 2021 was (20.7) according to (IGME, 2023) (O'Neill, 2023) and approximately same as NMR in al Ramadi province in the first period between 2003-2007 and less in the second period from 2008-2013 (Hunnosh et al., 2017). In comparison with another hospitals in different Iraqi governorate: the current rates were approximately higher than the NMR in Misan Hospital for Child and Maternity (Aljawadi & Ali, 2023) and Al-Sadder Teaching Hospital (E. A. A.-M. Ali, 2016), Fatema AL Zahraa Hospital in Baghdad (Habib et al., 2018). And nearly same as NMR in Al- Kadhymia Teaching Hospital (Al-Saady, 2007) and neonatal deaths at Fallujah General Hospital (Samira T et al., 2012). As well as slightly less than the numbers of early neonatal deaths (54%) in maternity hospital in Duhok (Abdulmalek & Yusif, 2018).

The table (2) disclosed that RDS was the essential cause of neonates' mortality, which caused half of total death in both 2020, 2021. This result go in line with Aljawadi & Ali, (2023) study finding that revealed the RDS was the primary cause of NM in both 2018/2019 years forming about 65% of total deaths. Also compatible with another studies conducted in Al- Kadhymia Teaching Hospital (Al-Saady, 2007), Al Zahraa Hospital in

Baghdad (Habib et al., 2018) and NICU of Imam Reza Hospital in Kermanshah, Iran (Babaei et al., 2018), which exhibited that most common cause of neonatal deaths was respiratory distress syndrome.

Prematurity and LBW considered the second main cause of NM (25.8% in 2020 and 10.3% in 2021) in the present study; similar result was reported by Habib et al., (2018) which, shown that neonatal deaths were very high among low-birth-weight preterm neonates admitted to the NCU of Fatima Al Zahraa Hospital in Baghdad During 2017, and also the study conducted by Obaid & Al Azzawi, (2011) displayed that NMR in very low birth weight neonates increased from 15% in 2003 to 33.6% in 2009 in Diyala Province-Iraq. Furthermore Samira T et al., (2012) point out that the prematurity combined with respiratory insufficiency remain the major cause of neonatal deaths in Fallujah General Hospital. And Al-Awqati et al., (2015) revealed that the low birth weight and very preterm neonates were highly associated with fatal septicemia. Therefore, prevention of preterm labor is a key element in decreasing neonates' mortality.

There were a numerous risk factors significantly associated with high rates of neonates' mortality at P value 0.01 as shown in table (3 and 4) such as gestational age, mode and place of delivery, and type of pregnancy as factors related to obstetric history as well as birth weight, age at time of deaths and residency. Increase the prevalence of NM related this risk factors might be associated to conflicts in Iraq A number of published articles demonstrated the consequence of conflicts on neonatal mortality (Bash & AL-Kaseer, 2018) (Jawad et al., 2017) (Lindskog, 2016) (van den Berg et al., 2015) (O'hare & Southall, 2007) (Macassa et al., 2003) (M. M. Ali & Shah, 2000). The study conducted in NICU of Imam Raza hospital that showed several factors associated with increase of neonatal deaths such as mother's age, neonate's age (during first week), neonates born with low birth weight, and neonates with low gestational age. (Babaei et al., 2018) which is

consistent with current study. Another studies, conducted by Nayyef et al., (2020) in Babylon Teaching hospital for maternity and children, Abdulmalek & Yusif, (2018) in maternity hospital at Duhok province, Hunnosh et al., (2017) in Al-Ramadi province between 2003-2013, Faisal Laftah, (2015) in NCU of Babylon Maternity and Children Hospital, Samira T et al., (2012) in Fallujah General Hospital; had been concluded same outcomes.

Chapter Five

Conclusion &

Recommendations

CONCLUSION:

The neonatal mortality rate was 42.9 per 1000 live birth in 2020 and 38.9 per 1000 live birth among all admitted neonates in NCU in the Babylon governmental hospitals and this was a higher rates in comparing with national Iraqi NMR ,due to numerous risk factors; such as gestational age, mode and place of delivery, and type of pregnancy as factors related to obstetric history as well as birth weight, age at time of deaths and residency were significantly associated with high rates of neonates' mortality.

Regarding the leading case of neonatal deaths. It was found that there were many causes for neonatal mortality mainly including: RDS, extremely low birth weight, congenital anomalies, birth asphyxia, and neonatal sepsis. Essential

Recommendations:

- Encourage Antenatal care to deliver interventions to improve maternal nutrition, promote behavior change to reduce harmful exposures and risk of infections, screen for and treat risk factors.
- Training health professionals how to taking care of high risk neonates and this can significantly reduce neonates' morbidity and mortality.
- A special effort must be made to direct women identified as high risk to the hospitals able to care for them, in facilities with rapid access to comprehensive emergency obstetric and neonatal care capabilities.
- Prevention and early diagnosis and intervention of the causes of death
- Use Better antiseptic measures in governmental hospitals to reduce sepsis as significantly a major cause of death,

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Appendices

Ministry of Higher Education
and Scientific Research

University of Babylon
College of Nursing

وزارة التعليم العالي والبحث العلمي

جمهورية العراق

جامعة بابل
كلية التمريض
شعبة الشؤون العلمية

العدد : ٤-٩٦
التاريخ : ١٦/ ١١ / ٢٠٢٢

Ref. No. :
Date   /   /

(استثمار الطاقة النظيفة طريقاً نحو الأبنية المستدامة)

الى / دائرة صحة بابل

م/ تسهيل مهمة

تحية طيبة ..

يطيب لنا حسن التواصل معكم ونرجو تفضلكم بالموافقة عن تسهيل مهمة طلبة كليتنا المدرجة اسمائهم ادناه لغرض جمع عينات خاص بالموسوم (Assessment the causes of neonatal mortality in neonatal intensive care units 2020-2021)

(تقييم اسباب وفاة حديثي الولادة في وحدات العناية المركزة لحديثي الولادة)
١- طيبة عبد الأكبر عمران
٢- علاء حمدي
٣- علي احمد فاضل

شاكرين تعاونكم معنا ... مع الاحترام ...

أ.د. نهاد محمد قاسم
معاون العميد للشؤون العلمية والدراسات العليا
٢٠٢٢/١١/١٦

نسخة منه الى //
- مكتب السيد العميد المحترم للتفضل بالاطلاع مع الاحترام
- شعبة الشؤون العلمية مع الاوليات
- الصادر

"نسخة ١١/١٦"

E-mail:nursing@uobabylon.edu.iq

STARS

وطني 07711632208
النقال 009647711632208

|		وزارة الصحة
Ministry Of Health		دائرة صحة محافظة بابــل
Babylon Health Directorat		المديـــر العــــام
Email :		مركز التدريب والتنمية البشرية
babiltrainning@gmail.com		وحدة إدارة البحوث
لأول عراق اخضر مستدام ...حافظ معا لترشيد استهلاك		العدد : ١٣٤
الطاقة الكهربائية والمحافظة على البيئة من التلوث		التاريخ : ١٦ / ١١ / ٢٠٢٢

إلى / مستشفى بابل التعليمي للنسائية والاطفال
قسم التخطيط / شعبة الاحصاء

م/ تسهيــــل مهمــــة

تحية طيبة ...

أشارة إلى كتاب جامعة بابل / كلية التمريض / شعبه الشؤون العلميه ذي العدد ٤٠٩٦ فـــي ٢٠٢٢/١١/١٦

تسهيل مهمة الطلبة المدرجة اسمائهم ادناه من الجامعة انفا لإجراء بحث التخرج الموسوم والخاص بالتخرج بعنوان (تقييم اسباب وفاة حديثي الولادة في وحدات العناية المركزة لحديثي الولادة ٢٠٢٠ - ٢٠٢١)

للتفضل بالاطلاع وتسهيل مهمة الموما إليهم وحسب الضوابط والإمكانيات على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية....

... مع الاحترام .

الأسماء :
١- طيبة عبد الاله عمران
٢- علاء مهدي
٣- علي احمد فاضل
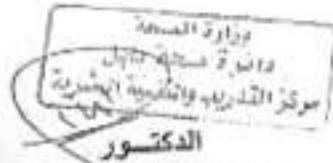
الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
٢٠٢٢ / /

نسخة منه إلى :
❖ مركز التدريب والتنمية البشرية / وحدة إدارة البحوث .... مع الأوليات .

Questionnaire

Assessment the causes of neonatal mortality in neonatal intensive care units 2020-2021

Part I: **demographic characteristics of the mothers (Maternal**

Risk factors:

1.1. Mother age: _____   Year.

1.2. Residence: _____

1. Urban _____

2. Rural ████

Part II: obstetric history

Birth Plurality: _____

Type of pregnancy   Single _____   twins or triple _____

Mode of delivery: _____

1. Normal vaginal delivery (N .V. D)

2. Caesarean section (C.S) _____

2.3. Place of delivery: _____

Part III: **characteristics of the Neonatal**

3.1. Birth weight: g. ☐

3.2. Gender: ☐

1. Male ☐

2. Female ☐

3.3. Age at time of death (days): ☐

3.4. Gestational age at birth: week ☐

Part IV: Causes of Neonatal deaths:

1. Respiratory distress syndrome (RDS) ☐

2. Birth asphyxia �☐

3. Congenital malformation ☐

4. Septicemia ☐

5. prematurity and low birth weight ☐

6. Congenital pneumonia ☐

7.Intraventricular hemorrhage ☐

8. neonatal jaundice with complication ☐

9. Congenital hydrocephaly ☐

تقييم أسباب وفيات حديثي الولادة في وحدات العناية المركزة لحديثي الولادة2021 – 2020

الجزء الاول :الخصائص الديموغرافية والاجتماعية للأمهات(عوامل الخطورة للام- :)

1.1عمر الام [ ]سنة.

1.2 . السكن- :

ا .ريف [ ]

ب .حضر [ ]

الجزء الثاني - :تاريخ القبالة

1.2 . نوع الولادة- :

أ .ولادة طبيعية [ ]

ب .ولادة قيصرية [ ]

2.2

نتائج الحمل- :

أ .تعدد الولادات(التوأم او الثلاثي)

ب .ولادة منفردة [ ]

3.2 . مكان الولادة- :

أ .مستشفى حكومي [ ]

الجزء الثالث ـ :الخصائص الديموغرافية لحديثي الولادة(عوامل الخطورة للوليد-

3.1 . **الوزن عند الولادة** ⬚ غرام.

3.2 . **الجنس**

أ .ذكر ⬚   ب .أنثى ⬚

3.3 . **عمر الطفل عند الوفاة (بالأيام)** ⬚

3.4 . **مدة الحمل عند الولادة(بالأسابيع)** ⬚

الجزء الرابع :أسباب وفيات حديثي الولادة

1.متلازمة عسر التنفس ⬚

2. الاختناق الولادي ⬚

3.التشوهات الخلقية ⬚

4. تسمم الدم ⬚

5. نزف الدماغ الداخلي ⬚

6. ذات الرئة الخلقية ⬚

7 . اليرقان الولادي ومضاعفاته ⬚

8. استسقاء الدماغ الخلقي ⬚

9. خداج وقله الوزن ⬚

الملخص:

المقدمة :يتم تعريف وفيات الأطفال حديثي الولادة على أنها وفاة الأطفال خلال أول 28 يومًا من حياتهم ، وهي تعتبر أحد مؤشرات الرئيسية التي تستخدم لتقييم تطور مستوى خدمات صحة الأم والوليد في المجتمع.

الأهداف :التعرف على معدلات وفيات حديثي الولادة ومعرفة الأسباب والعوامل الأساسية المتعلقة بوفيات الأطفال حديثي الولادة الراقدين في وحدات رعاية الأطفال حديثي الولادة في جميع مستشفيات محافظة بابل / العراق. .

المنهجية :تم استخدام دراسة استرجاعية لمراجعة السجلات الطبية لجميع حديثي الولادة (رقم = 27379) الراقدين بوحدات رعاية حديثي الولادة في مستشفيات محافظة بابل ، طوال فترة 2020 و 2021 ، وقد أجريت الدراسة من منتصف تشرين الثاني (نوفمبر) 2022 إلى نهاية آذار 2023. تم الحصول على البيانات من قسم الإحصاء في دائرة صحة محافظة بابل إلكترونياً من البرامج المسماة (Microsoft Visual FoxPro) وتضمنت عدد الوفيات في فترة حديثي الولادة ، سبب الوفاة ، جنس المولود ، عمر الحمل ، وزن الولادة ، عمر الأم ، طريقة الولادة ، مكان الولادة ، نوع الحمل ، والعدد الإجمالي للمواليد الأحياء.

النتائج :بلغ معدل وفيات الأطفال حديثي الولادة 42.9 لكل 1000 ولادة حية في عام 2020 و 38.9 / 1000 ولادة حية في عام 2021 من بين جميع الأطفال حديثي الولادة الذين تم قبولهم في مستشفيات بابل الحكومية ، وكان نسبة الوفاة مرتفعًا جدًا بين حديثي الولادة المصابين بمتلازمة الضائقة التنفسية (48٪ في عام 2020 و 55.2٪ في عام 2021) ، وايضا حديثي الولادة منخفضي الوزن عند الولادة (25.8٪ في 2020 و 10.3٪ في 2021). وقد وجد ارتبط بين عمر الحمل

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وطريقة ومكان الولادة ونوع الحمل بالإضافة إلى وزن الولادة والعمر وقت الوفاة ومكان الإقامة بشكل كبير بمعدلات عالية لوفيات الأطفال حديثي الولادة.

الخلاصة :كان معدل وفيات الأطفال حديثي الولادة مرتفعا في مستشفيات بابل الحكومية وخاصة في مستشفيات المناطق الريفيه. كانت متلازمة الضائقة التنفسية والخداج السبب الرئيسي لوفيات الأطفال حديثي الولادة. علاوة على ذلك ، ارتبطت بيانات تاريخ الأم وخصائص حديثي الولادة بزيادة معدل وفيات الأطفال حديثي الولادة في الخداج ، وانخفاض الوزن عند الولادة ، والولادة الطبيعية ، والولادة في المنزل أكثر من المستشفى ، والولادة الوحيدة من التوائم في كل من 2020 و 2021.

جامعة بابل

كلية التمريض

تقييم أسباب وفيات حديثي الولادة في وحدات العناية المركزة لحديثي الولادة 2021 – 2020

مشروع تخرج مقدم لكلية التمريض جامعة بابل ضمن متطلبات الحصول على درجة البكالوريوس في التمريض

إعداد الطلبة:

طيبة عبد الاله عمران

علاء مهدي عبد

علي احمد فاضل

إشراف:

م.م. علي فاضل عبيد