

How to Cite:

Jasim, R. M., Alaseed, H. A., & Abdulkareem, Y. Z. (2022). Risk factors of fetal mortality and relationship with health aspect in the City of Mosul. *International Journal of Health Sciences*, 6(S1), 9806–9813. <https://doi.org/10.53730/ijhs.v6nS1.6549>

Risk factors of fetal mortality and relationship with health aspect in the City of Mosul

Rana Mohammed Jasim

College of Nursing, University of Mosul

Email: rana.nurse@uomosul.edu

Hana A. Al Saeed

College of Nursing, University of Mosul

Email: hanaalsaeed@uomosul.edu.iq

Yamama Zuhir Abdulkareem

College of Nursing, University of Mosul

Email: Yamama.zyhair@uomosul.edu.iq

Abstract---Background: Most of the research studies the causes of death related to live births, but the concept of fetal mortality is used very few and in a number of Linguistic and scientific sources, including the term “fetal death” refer to the death of an off spring A pregnancy before it is separated from its mother and another term for fetal death by miscarriage or uterine deaths. Methodology: descriptive study cross-sectional design. To reach the goal of the research, a number of important steps must be taken through which to achieve the goals. I designed a questionnaire containing 5 main axes that targeted women of reproductive age between 14-46 years and the number of participating women was (200) hospitals, health centers and specialized clinics. Results: The results showed causes of mortality and risk factors by calculating the average weighted average for each axis. Most of the reasons are health reasons with an average of (2.2), followed by economic and social reasons with an average of (2.1), and then psychological and cultural (1.9), when that the total arithmetic mean is (2), so that 73% of the participating women were exposed to fetal death, they are the age group between 35-46. Recommendations: The need to conduct more studies on fetal mortality at the level of Higher, as if it is a study at the country level The necessity of activating the fetal mortality statistics unit within health institutions Specialty, the necessity of improving the economic level of the Arab family and activating the role of psychological counseling and health education in our health institutions and mother and child care centers.

Keywords---fetal mortality, relationship, health aspect.

Introduction

Fetal death refers to the spontaneous intrauterine death of a fetus at any time during pregnancy. Fetal deaths later in pregnancy (at 20 weeks of gestation or more, or 28 weeks or more, for example) are also sometimes referred to as stillbirths [4,9]. More than 88% of all children in industrialized countries they survive through the preschool years, but in some developing countries up to 20% they die before the age of five and 80% of them are fetuses [6,11]. Environmental factors and the lifestyle of societies in developing countries as in the industrialized world have a Lots to do with their health. This study was conducted in Nineveh Governorate, northern Iraq Showed significant links between infant mortality (a marker of health status) and identified risk factors [3,2,5].

The purpose of this type of research is to focus on clarifying the risks factors that may be associated with fetal mortality in pregnant women of a specific age. The situation of the population in developing countries also suffers from difficulty in accessing primary health care in a good way during pregnancy [4,7,12].

It is proved that the health status of the population around the world is directly related to a specific thing the number of risk factors that may or may not be points Practical intervention in the field of public health [7,9]. These lifestyle variables include different cultural, social and physical environments and use appropriate health care services. Moreover, there is likely to be a correlation between different health status indicators} for example, will stand Because of high levels of morbidity Predictive of higher mortality rates [10,2]. As indicated by researchers notes that “the risk approach [identifies] individuals, Families and societies with [like] factors and Provides services to prevent or reduce the impact of the disease. [This approach] is prospective, signs Used to predict future morbidity and mortality [6,2].

Objectives and methods

The current research analyzes the causes of fetal mortality in Mosul Governorate in the light of a number of economic, social, psychological, health and health issues on the one hand and to show the extent to which the impact and effectiveness of each standard and laws vary in this important phenomenon on the other hand.

Procedure

he researches community and its sample to reach the goal of the research, a number of important steps must be taken during which the goal of the study was achieved, the research community included mothers who were able to give birth at the age of (14-48) years old who were reviewed due to worse miscarriage. This abortion was with intent or unintentionally the visit include: Al-Batool Maternity Hospital, Al-Khansa Hospital, Women's Health hospital and a number of special clinics for gynecological diseases in the city of Mosul.

Study borders: The research is limited to determining the causes of fetal deaths for the months of (April, May, and June) of 2021 in hospitals and centers in Mosul, northern Iraq.

Study sample: the number of sample (200) of women attend Mosul hospitals and clinics

Study design: descriptive study design, purposive sampling.

Study tools: A questionnaire consisting of 5 axes, each axis consisting of several questions that reflect the influencing reasons leading to the death of fetuses, and the total mean was calculated for each axis to measure the extent of the paragraph's impact.

Results

Table (1)
Characteristics of study sample n= (200)

Category		Frequency	Percentage %
1. Age	14-23	92	46%
	24-33	47	23.5%
	34-48	61	30.5%
2. address	Urban	113	56.5%
	Rural	87	43.5%
3. level of education	Nil	31	16%
	Primary	39	19%
	Secondary	81	40.5%
	Graduated	49	24.5%
4. follow up	Hospital	93	46.5%
	Special clinics	107	53.5%

Table (2)
The weighted mean of the five axes of the questionnaire

No	Axes	weighted average rate
1.	Health axes	2.5
2.	Psychological axes	2.4
3.	Social axes	2.2
4.	Cultural axes	1.8
5.	Economical axes	2.3

Table (3)

Values of the weighted mean and the arithmetic mean of the axes of the questionnaire

No	Axes	Paragraph	Degree of impact			weighted mean	Arithmetic mean
			Effect	Sever effect	Not effect		
1.	Health	1. Genetic diseases of the spouses and their impact on fetal mortality	89	61	50	2.5	2
		2. Heart, rheumatism, and kidney diseases in spouses and its impact on fetal mortality	79	108	29		
		3. Emergency cases to which the wife is exposed and their impact in fetal deaths	69	96	35		
		4. The birth of children deformed as a result of the blows Mass and its effect on fetal mortality	52	102	46		
		5. Modern technical devices used to determine the type of the health of the fetus and its impact on fetal mortality	88	78	34		
		6. Excessive use of medical drugs by the husband and wife and its impact on fetal mortality	73	87	40		
2.	Psycho-logical	1. The family's desire to prefer a certain type of sex and their impact on fetal mortality	72	83	45	2.4	
		2. Chronic mental illness inherited by the husband The wife and their families and its impact on fetal mortality	77	91	32		
		3. The need of living children at home and its effect on desire in the opposite sex and their effect on fetal mortality	80	87	33		
		4. Drinking by husband and wife and its effect on fetal mortality	72	91	37		

		5. The health and psychological effects of the spouses resulting from Reproduction and fetal mortality	66	98	36		
		6. The effect of miscarriage on the wife's physical condition and its effects Psychological fetal mortality	82	92	25		
3.	Social	1. The nature of marital affection and its impact on fetal mortality	80	96	24	2.2	
		2. Fear of the responsibility of childbearing and its aftermath and their impact on fetal mortality	55	98	47		
		3. The influence of relatives and friends on marital life in general fetal mortality in particular	85	96	16		
4.	Cultural	1. Compatibility between the educational level of the spouses and its impact on fetal mortality	58	54	88	1.8	
		2. The health culture of the spouses in their knowledge To match the blood group between them and its impact on fetal mortality	76	41	83		
		3. The spouses' knowledge of the effects accompanying the intentional miscarriage and its impact on fetal mortality	40	70	90		
5.	Economic	1. The type of the husband/wife's work outside the home in fetal deaths	55	63	82	2.3	
		2. Family income and its impact on fetal mortality	83	78	39		
		3. Adequate housing for family members and its impact on fetal mortality	42	75	83		

		4. Availability of household electrical requirements And other accessories bathroom, utilities, kitchen, and their effect in fetal deaths	44	82	74		
--	--	--	----	----	----	--	--

Discussion

Through this study, it became clear that there are many causes of fetal mortality, which we summarized in five axes, as these were the most frequent causes of death. In this case, it is our responsibility to develop educational programs to improve the social situation and psychological guidance for the pregnant mother. It is also worth noting to improve the health and societal reality in general.

The study shows that the most influential axes on abortion is the health axis, where the weighted mean is (2.5), which is higher than the calculated mean, which = 2. This was represented by the low health awareness of the spouses and the taking of drugs and medicines without a prescription, as most of the medicines have side effects on the health of pregnancy as well as genetic diseases and the birth of deformed children had a significant impact on the death of fetuses, These results are supported by a study (Peter F,et.al,2001) said "It has been shown that the health status of populations throughout the world is directly related to a certain number of risk factors that may or may not be points of practical intervention in terms of health causes".

The health axis in the causes of mortality for fetuses follows the psychological axis of the mother during pregnancy, for example, pressure on the spouses to have a specific type of child, born male, as well as the psychological state of the mother due to multiple abortions and the husband's consumption of alcoholic beverages. Mental health plays an important role in this study. The weighted average was (2.4), which is more than the mean = 2. 2.(Givens, M,et.al,2008) said The mothers who had attempted suicide and psychological stress were the most mothers who had frequent miscarriages, the inability to have a child and to complete the pregnancy more than once.

They were followed in the impact by the economic status =2.3,the economic situation of the family and the material income had a significant impact on the health of the mother and the child by reviewing the private clinics in which health care and the availability of necessary materials were more than government hospitals.

Among the other influences is the social=2.2 and cultural=1.8 referral of the family surrounding the spouses, such as the cultural level and compatibility between the spouses as well as from the social aspect the family's desire to have a greater number of children and interference in the affairs of the spouses and their decisions had the greatest impact in this aspect (Kjellberg, A,et.al,2016) support this results.

Recommendations

The need to conduct more studies on fetal mortality at the level of Higher, as if it is a study at the country level The necessity of activating the fetal mortality statistics unit within health institutions Specialty, the necessity of improving the economic level of the Arab family and activating the role of psychological counseling and health education in our health institutions and mother and child care centers.

Acknowledgments

I thank the University of Mosul for the continuous support of the researchers, and the College of Nursing, University of Mosul, for facilitating the research findings, we thank the anonymous referees for their useful

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

References

1. Foggin, P., Armijo-Hussein, N., Marigaux, C., Zhu, H., & Liu, Z. (2001). Risk factors and child mortality among the Miao in Yunnan, Southwest China. *Social Science & Medicine*, 53(12), 1683-1696.
2. Givens, M. D., & Marley, M. S. D. (2008). Infectious causes of embryonic and fetal mortality. *Theriogenology*, 70(3), 270-285.
3. Kjellberg, A. T., Carlsson, P., & Bergh, C. (2016). Randomized single versus double embryo transfer: obstetric and paediatric outcome and a cost-effectiveness analysis. *Human Reproduction*, 21(1), 210-216.
4. Clinical Negligence Scheme for Trusts. (2020). *Clinical Risk Management Standards for Maternity Services*.
5. MacDorman, Marian F., and Elizabeth CW Gregory. "Fetal and perinatal mortality: United States, 2013." (2015).
6. Pruitt, S. M., Hoyert, D. L., Anderson, K. N., Martin, J., Waddell, L., Duke, C., ... & Reefhuis, J. (2020). Racial and ethnic disparities in fetal deaths—United States, 2015–2017. *Morbidity and Mortality Weekly Report*, 69(37), 1277.
7. Hessami, K., Homayoon, N., Hashemi, A., Vafaei, H., Kasraeian, M., & Asadi, N. (2020). COVID-19 and maternal, fetal and neonatal mortality: a systematic review. *The Journal of Maternal-Fetal & Neonatal Medicine*, 1-6.
8. Dongarwar, D., Taylor, J., Ajewole, V., Anene, N., Omoyele, O., Oluwatoba, A., ... & Salihu, H. M. (2020). Trends in Appendicitis among pregnant women, the risk for cardiac arrest, and maternal-fetal mortality. *World Journal of Surgery*, 44(12), 3999-4005.
9. Oh, S. S., Kim, Y. J., Jang, S. I., Park, S., Nam, C. M., & Park, E. C. (2020). Hospitalizations and mortality among patients with fetal alcohol spectrum disorders: A prospective study. *Scientific reports*, 10(1), 1-14.
10. Garcia-Rizo, C., & Bitanirwe, B. K. (2020). Implications of early life stress on fetal metabolic programming of schizophrenia: a focus on epiphenomena underlying morbidity and early mortality. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 101, 109910.

11. Wolf, H. T., Huusom, L. D., Henriksen, T. B., Hegaard, H. K., Brok, J., & Pinborg, A. (2020). Magnesium sulphate for fetal neuroprotection at imminent risk for preterm delivery: a systematic review with meta-analysis and trial sequential analysis. *BJOG: An International Journal of Obstetrics & Gynaecology*, 127(10), 1180-1188.
12. Yockey, L. J., Lucas, C., & Iwasaki, A. (2020). Contributions of maternal and fetal antiviral immunity in congenital disease. *Science*, 368(6491), 608-612.