Unplanned pregnancy and the association with maternal health

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SUMMARY

AUTHORS' CONTRIBUTION: (A) Study Design · (B) Data Collection. (C) Statistical Analysis · (D) Data Interpretation · (E) Manuscript Preparation · (F) Literature Search · (G) Funds Collection

Background: Unplanned pregnancy has significant effects on maternal health in multiple women. Unplanned pregnancy, its complications, and negative consequences on maternal health. It has negative social, economic, and health consequences for families.

Objectives: This study aimed to investigate the Knowing the impact of unplanned pregnancy on the health of multiparous mothers in Basrah hospitals.

Methods and materials: A case-control study design was conducted on (170) multiparous women with unplanned pregnancies. The developed interview questionnaire was used to collect information related to the mother. Three hospitals in Basrah Center, Iraq, served as the study's sites in the period between the 18 of January 2024 to the 25 of January 2024.

Result: This study shows the age group (31.8%) from (26-30), most of them in Intermediate school, Housewife, live in Urban areas, with small families have less than seven previous pregnancies, and level of middle Socioeconomic status. indicated that the higher mean score was the previous pregnancy & didn't use several methods of contraception, they did not have physical pain during the unplanned pregnancy, Significant level at $P \leq 0.05$, (b=beta) Regression Coefficient unplanned pregnancy for multiparous women Regression with demographic characteristics.

Recommendations: Pregnant women with unexpected pregnancies (UP) showed higher rates of depression symptoms and participated in less healthful behaviors. Healthcare professionals should conduct early UP screenings and deliver health education initiatives to assist women in enhancing their mental and physical well-being.

Keywords: Unplanned pregnancy; Maternal health

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INTRODUCTION

Unplanned pregnancy, which is defined as an unintended, unplanned, or mistimed pregnancy at the time of conception, is acknowledged as one of the most significant public health issues. The main cause of unintended pregnancies is sexual activity without the use of contraception, either voluntarily or under duress [1].

Numerous detrimental outcomes for the health of both the mother and the child, including maternal and infant mortality, are linked to unwanted pregnancies [1].

Women who experience repeated unwanted pregnancies have significantly more negative pregnancy-related feelings. Additionally, short birth intervals, a comparatively large number of births, undernutrition, and previous unplanned pregnancy-related problems are characteristics of repeat undesired pregnancies [2].

Research on the reasons behind unintended pregnancies typically focuses on the mother's socioeconomic and demographic characteristics. Unplanned pregnancies are usually more prevalent in low-income areas, where there is a lack of social support, low socioeconomic status, young age, high parity, low maternal or paternal educational level, poverty, short birth intervals, and partner abuse Intimate, as well as gender-based violence [3].

Unplanned pregnancy can have significant impacts on maternal outcomes, including physical, emotional, and economic consequences. Studies have found that pregnancy complications such as gestational diabetes, high blood pressure, and postpartum depression. An unplanned pregnancy can also put pressure on a woman's social and economic well-being, including financial instability [4].

Important of study

Unplanned pregnancy, especially in multiparous women, can have significant consequences for maternal health [5]. The condition of having more than one child is known as multi-parity. In multiparous women, unintended pregnancies can raise the risk of maternal problems such as low birth weight, preterm delivery, and maternal morbidity [6].

METHODS

Research design

This study examined unintended pregnancy and mother health using a cross-sectional design. It's this design. Women having a history of unplanned multi-parity were considered cases, whereas women with a history of intended multi-parity were considered controls. The study was carried out in Iraq's Basrah's maternity teaching hospitals.

Research approach

A quantitative research approach, which involves gathering and evaluating numerical data, was employed in the study 170. Finding trends and averages, forecasting, and testing the causes of unintended pregnancies and maternal health outcomes in populations can all be accomplished with a quantitative research strategy. Using numerical data that is converted into statistics, the quantitative research approach is employed in this study to quantify the prevalence and underlying determinants of unplanned pregnancy in maternal health. The research subject under investigation was better understood thanks to these statistics.

Data collection and instrumentation

A standardized questionnaire form served as the study's data-gathering instrument. Arabic was used to create the questionnaire, which was subsequently translated into English. It was divided into two sections:

Part 1: Demographic information (age, educational level, economic status, residence, type of residence, profession, number of previous pregnancies).

Part 2: It includes four branches: 1. Pregnancy details (whether the previous pregnancy was unplanned, contraceptive methods, prenatal care, miscarriage, or stillbirth).

2. Physical health and physiological (bone pain, high blood pressure, high blood sugar, anemia, preeclampsia). 3. Mental and emotional health (mood changes, changes in feelings, changes in sleep). 4. Social and economic health (its impact on social relationships, career plans, educational plans, and financial situation).

After getting each mother's verbal agreement, the data was gathered through direct interviews; additional information was gleaned from the women's records.

Statistical data analysis

The Statistical Package for Social Sciences (SPSS) version (26), was used to analyze the data from the current study.

RESULT

Demographics

170 respondents provided the data for this study. The average age of pregnant women was between 26 and 30 years old (n = 31.8%), with a mean and SD of 30.58 ± 7.102. The response rate was almost 100%. A large portion level the (29.4%), were intermediate school graduate housewives. Most women live in urban areas (63.5%), white (52.9%) have small families they live separately (Tab. 1. 2. & 3.).

Tab. 1. About physical and physiological health.

No.	Items	Means	Ass.
1	Did you feel any physical pain during the unplanned pregnancy?	2.8	H
2	Did you suffer from high blood pressure during unplanned pregnancy or after childbirth?	1.8	M
3	Did you suffer from high blood sugar levels during unplanned pregnancy or after childbirth?	1.4	M
4	Did you suffer from bone pain during unplanned pregnancy or after childbirth?	2.8	H
5	Did you suffer from anemia during the unplanned pregnancy?	2	M
6	Did you take any vitamins or nutritional supplements during the unplanned pregnancy or after childbirth?	2.7	H
7	Did you suffer from albuminuria (eclampsia) during your unplanned pregnancy?	1.3	L
8	Do you practice any physical activities or exercises during unplanned pregnancy or after childbirth?	1.3	L
	Grand mean	2	M

Ass. = Assessment, level of assessment: (0.-1.33) = Low = L, (1.34-2.67) = Moderate = M, (2.68-3.00) = High = H

Tab. 2. Mental and emotional health mean score & Social and economic health.

No.	Item	Means	Ass.
	Part: Mental and emotional health		
1	Did you experience any changes in your mood during the unplanned pregnancy or after childbirth?	2.6	M
2	Did you feel any change in emotions, such as anxiety or fear, when you learned that you were pregnant?	2.6	M
3	Has unplanned pregnancy affected your sleep patterns?	2.5	M
4	Did you see a mental health specialist during an unplanned pregnancy or after childbirth?	1	L
5	Did the unplanned pregnancy affect your relationship with your husband?	2.1	M
6	Has the unplanned pregnancy affected your relationship with your children?	1.5	M
	Grand means Physical, Physiological health and emotional health	2	M
	Part: Social and economic health		
1	Has an unplanned pregnancy affected your social relationships?	2.2	M
2	Has the unplanned pregnancy affected your educational plans?	1.2	L
3	Has the unplanned pregnancy affected your career plans?	1.5	M
4	Did the unplanned pregnancy affect your financial situation?	1.6	M
	Grand mean	1.6	M

Ass. = Assessment, level of assessment: (0.-1.33) = Low = L, (1.34-2.67) = Moderate = M, (2.68-3.00) = High = H

Tab. 3. Pearson correlation age and social and economic health.

No.	Items	P-value	Sig
1	Has an unplanned pregnancy affected your social relationships?	0.02	S
2	Has the unplanned pregnancy affected your educational plans?	1.01	N
3	Has the unplanned pregnancy affected your career plans?	0.00	S
4	Did the unplanned pregnancy affect your financial situation?	0.78	S

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
The item significance is present with (1,3 & 4) while no significance present with items (2) T-Test , t-test relation with a mean score

Tab. 4. Mean score of pregnancy details, physical and physiological health, mental and emotional health, social and economic health.

Mean of score	t-test	df	Sig	Mean Difference	95% Confidence Interval of the Difference Lower
Pregnancy details	7.544	5	0.01	2.0500	1.352
Physical and physiological health	7.751	3	0.04	1.6250	9.58
Mental and emotional health	40.211	169	0.00	3.565	3.39
Social and economic health	36.972	169	0.00	4.494	4.25

Significant level at P ≤ 0.05, (t) test the significant

Regarding from history of the Number of previous pregnancies (91.1 %) they have a history of less than 7 times they have pregnancies, concerning family income the higher percentage with a moderate level present, (55.8%) from all the samples study.

According to this Tab. 4., the mean score of every item has a significant statistical link with a P-value of less than 0.05.

DISCUSSION

In this study present; more than half age (26-30) years (n =31.8%), with mean and SD=30.58 ± 7.102. These results agreed with many studies [7-9].

Regarding educational level, the table shows that the highest percentage (29.4%) were intermediate school graduates while the lowest percentage (5.8%) were illiterate. These results concurred with many studies [10-12].

Regarding occupational the table shows that the highest percentage (71.2%) of women were housewives, while the lowest percentage (28.8%) were Employment. These results are consistent with many studies [13-15].

Most women in our study live in Urban areas (63.5%), while (36.4%) of them live in Rural areas, white (52.9%) of small family they live separated, even though (47.1%) live with big families. These results concurred with some studies [16-18].

Regarding from history of the Number of previous pregnancies (91.1 %) they have a history of less than 7 times they have pregnancies, while (8.8%) they have 7 times and more. Concerning family income, a higher percentage with a moderate level present, (55.8%) from all the sample studies. While an Iran study [19], found that women with higher education (63%) and (71.2) had higher incomes.

Indicated that the higher mean score (2.8, 2.8 & 2.7) aborted women having felt any physical pain during the unplanned pregnancy, suffering from bone pain during unplanned pregnancy or after childbirth, and taking any vitamins or nutritional supplements during the unplanned pregnancy.

Regarding aborted women suffering from high blood pressure, high blood sugar levels, and anemia during unplanned pregnancy present a moderate mean (1.8, 1.4, & 2). With low scores, women suffer from albuminuria (eclampsia, and practice any physical activities present from both mean scores (1.3). In a study by Das, et al. [20], any health action or preparation before pregnancy they found (94.3%), and the women didn't take any action like (iron, or folic acid) before pregnancy and didn't take any diet supplement or change lifestyle before pregnancy. In some studies, preeclampsia was more prevalent in women with unplanned pregnancies (38.9%) [21], and poor diet or lack of exercise more developing hypertension and increased stress.

Mental and emotional health mean score & Social and economic health present indicated that the no higher mean score, change in emotions, effective sleep patterns, effect with a relationship with husband, and relationship with your children, for a mental and emotional present moderate score, while low mean present from mental health changes with a mean (1). Regarding aborted women's Social and economic health, all so no high score but, social relationships, career plans, and the effect on your financial situation all have moderate scores.

Abajobir, et al. [22] conducted a study According to certain research, unexpected pregnancies were linked to a higher risk of low birth weight and early delivery, and these births enhanced the psychological stress experienced by women during the postpartum period [23].

ETHICAL CONSIDERATIONS

Participants who were sufficiently informed about the study were asked to indicate their desire to participate by signing the consent form on the right side of the questionnaire. Expectant mothers were made aware that their involvement in the study was entirely voluntary and that they might leave at any moment without facing any repercussions. Anonymity, privacy, and confidentiality were preserved. Before beginning the study, permission was sought from the University of Basrah's College of Nursing Council. Then a facilitation mission was taken to the Basra Health Director to obtain approval to collect the sample from its health institutions during the period of pregnant women's visits to health institutions within the center of Basra Governorate.

CONCLUSION

The researcher came to the following conclusions based on the study's goals, the results discussion, and their interpretations:

The findings of this study estimated the prevalence of unplanned pregnancy. Furthermore, our findings imply that unintended pregnancies are more common among specific demographic and socioeconomic characteristics, including age, occupation, income, and education.

According to the study, unplanned pregnancies among housewives are rather common in middle-class families. These pregnancies have social and psychological ramifications and motivations, negatively impact the mother's moral, psychological, and social well-being, and result in a discernible health deviation for the mother who has multiple pregnancies. To avoid unintended pregnancies, universities, families, and stakeholders must collaborate to support reproductive health initiatives.

Unplanned pregnancies raise the risk of several illnesses and consequences, such as anemia, excessive blood sugar, and gestational hypertension.

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