Impact of Pregnant Adolescents' Knowledge about Preventive Health Behaviors during Pregnancy upon Pregnancy Outcomes in AL- Diwaniyah City

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Abstract

Objective(s): The aim of the study is to evaluate the impact of pregnant adolescents' knowledge about preventive health behaviors during pregnancy upon their pregnancy outcomes .

Methodology: A quasi-experimental design, using the evaluation approach for the determination the impact of pregnant adolescents' knowledge about preventive behaviors during pregnancy upon pregnancy outcomes in Al-Diwaniyah city from the period 17th January 2020 to 1st June 2021. Non- probability, purposive sample of (35) adolescent pregnant are selected from those who visit Al-Diwanyiah Maternity and Pediatric Teaching Hospital. Data are collected through the use of the study instruments (questionnaire) in a form of Google format and through video calls as means of data collection. Data were analyzed through the use of descriptive statistical data analysis approach and inferential statistical data analysis approach.

Results: Results of this study indicate that most of the pregnant are between (16-19) year old (57.1%), (34.3%) are primary school graduates, (71.4%) are housewives, (77.1%) are living in rural area and (80%) are earning an income of (300-600) thousands ID. The overall evaluation of pregnant adolescents' have a lack of knowledge about preventive health behaviors during pregnancy without significant relationship between pregnant adolescents' knowledge and their demographic characteristics. As well as, pregnant adolescents' knowledge about preventive behaviors during pregnancy does not impose any effect upon their pregnancy outcome.

Conclusions: The study's unique finding is that pregnant adolescents have a lack of knowledge about preventive health behaviors during pregnancy, and this knowledge does not have any effect on their pregnancy outcome.

Recommendations: Improving pregnant adolescents' health literacy is the responsibility of healthcare systems and healthcare professionals through emphasis by the Ministry of Health role through the antenatal care units to take a part and dissemination of education about the preventive health behaviors among pregnant adolescents especially primigravida, and particularly with each specific trimester.

***Key word** : Impact , Pregnant Adolescents' ,Knowledge ,Preventive Health Behaviors ,Pregnancy outcomes*

Introduction

Adolescent pregnancy it is one of the most important challenges affecting adolescent's reproductive health, not just in impoverished nations but also in wealthy countries. Every year, 13 million children are born to women under the age of 20 around the world, with more than 90% of them in developing countries [(1)].

According to a new World Health Organization (WHO) prediction, the rate of teen pregnancy will rise by 2030. Due to pregnancy and childbirth complications, mothers aged 10 to 14 years were five times more likely to die than mothers aged 20 to 24, accounting for more than 70,000 adolescent girls' deaths each year [(2)].

Unhealthy behaviors and lifestyles are two of the leading causes of death around the world. Pregnant adolescent's healthy habits have an impact on the outcome of their pregnancy [(3)].

It is estimated that every year about 16 million girls aged between 15–19 years give birth in low income countries and 70,000 die of complications during pregnancy and childbirth [(4)].

There are several health habits that women are expected to initiate, maintain, or adjust before, during, and after pregnancy. These behaviors include supplementation (e.g., folic acid, various vitamins) diet and healthy eating (e.g., fiber intake, hydration) Other habits, like smoking, will have to be abandoned [(5)].

Pregnancies in adolescence are associated with a high risk of maternal and neonatal complications. These are associated with a high number of preterm births, caesarean sections, and increased morbidity in mothers during both the antenatal and postnatal periods. Extremely low birthweight, and the need for neonatal hospitalization (NICU) admission are all common [(6)]. Thus, the current study aims to evaluate the impact of pregnant adolescents' knowledge about preventive health behaviors during pregnancy upon pregnancy outcomes.

Methodology

A quasi-experimental design, is carried out in order to achieve the objectives of the current study using the evaluation approach for the determination of pregnant adolescents' knowledge about preventive behaviors during pregnancy in Al-Diwaniyah city from the period 17th January 2020 to 1st June 2021 .Non- probability , purposive sample of (35) pregnant adolescents' has been selected for the present study. The data are collected through the utilization of a constructed questionnaire as a Google format and video calls as means of data collection (Arabic version).

The questionnaire is composed of two main parts as follows: Part I: Pregnant Adolescent Sociodemographic Characteristics : It is concerned with the identification of the socio demographic characteristics of the study group, which include (age , education level for adolescent pregnant, occupation for adolescent pregnant, residency, and monthly family income). Part II: Pregnant Adolescent's Knowledge about preventive Health Behaviors during pregnancy: This part consists of three domains and they are responded by answering the multiple choice questions (MCQ) with correct answer that represent of four answers (one of them is correct answer, scored 2 and the three others answers are incorrect answer, scored 1). This part is comprised of (50) item that measure pregnant adolescent's knowledge about preventive health behaviors during pregnancy. It is measured as (50-66) = poor level of knowledge, (67-83) = fair level of knowledge and (84-100) = good level of knowledge. Content validity and Pearson correlation coefficient reliability are determined through a pilot study. The data of the present study are analyzed through the use of the Statistical Package of Social Sciences (SPSS) version 20.throughdescriptive statistics (frequency, percentage, mean, mean of scores, total of scores, range and standard deviation) and statistical inferential (T-test, multiple linear regressions, person

correlation coefficient, Chi Square test and analysis of variance ANOVA). Results were determined as highly significant at (P≤0.01) significant at (P≤0.05) and non-significant at (P>0.05)

Results

Table (1): Pregnant Adolescents' Demographic Characteristics

Characteristics	Frequency	Percent
1. Pregnant Age (Years)		
13 - 15 Year	15	42.9
16 - 19 Year	20	57.1
Total	35	100.0
2. Pregnant Education		
Read and write	9	25.7
Primary	12	34.3
Intermediate	5	14.3
Secondary	3	8.6
Institute/ University	6	17.1
Total	35	100.0
3. Pregnant Occupation		
Student	9	25.7
House wife /unemployed	25	71.4
Other	1	2.9
Total	35	100.0
4. Residency		
Urban	8	22.9
Rural	27	77.1
Total	35	100.0
5. Monthly Income		
300 thousand -600 thousand	28	80.0
600 thousand and one dinar - 900 thousand	5	14.3
900 thousand and one dinar - one million and 200 thousand	2	5.7
Total	35	100.0

Results out of this table indicate that most of the pregnant are (16-19) year old (57.1%), (34.3%) of them are primary school graduates, (71.4%) of them are housewives, living in rural area (77.1%) and earning an income of (300-600) ID (80%).

Table (2): Overall Evaluation of Pregnant Adolescents' Knowledge About Preventive Health Behaviors during Pregnancy

Overall Evaluation	Poor (50-66)	Fair (67-83)	Good (84-100)
Pre-test	31 (88.57%)	4 (11.43%)	0 (0%)

Results out of this table depict that pregnant adolescents' have a fair of knowledge about preventive health behaviors during pregnancy.

Table (3): The Impact of Pregnant Adolescents' Knowledge about Preventive Behaviors during Pregnancy upon Their Pregnancy Outcome

Model		Sum of Squares	Degree of Freedom	Mean Square	F-Statistics	Significance
	Regression	**0.071**	**1**	**0.071**	**0.033**	**0.856**
	Residual	69.929	33	2.119		
	Total	70.000	34			
a. Dependent Variable: Pregnancy Outcome						
b. Predictors: (Constant), Pregnant Adolescents' Knowledge						

Results, out of this table, depict that pregnant adolescents' knowledge about preventive behaviors during pregnancy does not impose any effect upon their pregnancy outcome.

Discussion

The distribution of the sociodemographic characteristics as shown in(Table -1) revealed that the highest percentage (57.1%) percent of the study sample were within age 16-19 years old that age represent a between middle and late adolescence and consider a common age for marriage according to our culture in Al-Diwanyiah city. According to the United Nations Children's Emergency Fund, there is an increase in the rates of early marriage in Iraq; one in every five women in high school, or 21%, is married [7]. Regarding the participants' educational level, the study revealed that the majority of them are either primary school graduates or can only read and write, indicating that early marriage is considered a reason for leaving school early. This finding is consistent with a study conducted in Basra City [8], as well as a study conducted in Baghdad Cit [9] on teenage pregnant with significantly lower levels of education.

Regarding the occupation of the participants the study revealed that the highest percentage (71.4%) of

them is housewives. This finding occurs due to low education of the participants leading to minimize their employment possibilities. This findings is supported with a study that reported that teenage mothers more likely to be housewives maybe related to the low education degree which not helping if they want to have a job or an employment [10]. Regarding the residential area of the participants the study revealed that the highest percentage (77.1%) of them are living in rural area , which reflects the social and cultural factors in our country towards early marriage among rural population which may have adverse effects on maternal outcome. What is common to every region, however, is that girls who are poor, live in rural or remote areas and who are illiterate or have little education are more likely to become pregnant than their wealthier, urban, educated counterparts [11]. Regarding the monthly family income of the participants the study revealed that the majority of the study sample (80%) is within considering to insufficient monthly family income as monthly earning (300-600) thousand ID. Most of teenage mothers are not in a good socio economic condition so transition to motherhood becomes problematic for them [12]. Analysis of data related the pregnant adolescents' knowledge about preventive health behaviors during pregnancy reveals that, the majority of them have poor level of knowledge (Table 2). Pregnant adolescents typically have the fewest resources because they have not had the time to obtain the necessary education or experience to be self-sufficient, or even to best identify their own outside supports [13].

A lack of knowledge among pregnant adolescents can have a negative impact on their lives as well as the lives of their unborn children [14]. Limited knowledge about high-risk pregnancies and the dangers will also increase the incidence of high-risk pregnancy [15].

Concerning the impact of pregnant adolescents' knowledge about preventive health behaviors during pregnancy on their pregnancy outcomes; no effect has been imposed on their pregnancy outcomes (Table 3). This result occurs due to the lack of pregnant adolescents' knowledge about preventive health behaviors during pregnancy important information that can help pregnant to prevent complications during pregnancy.

The age and maturity level of pregnant women may impact their susceptibility to education and their ability to identify danger signs associated with their pregnancy [16].

Maternal education is an important factor for safe delivery which proved that women with no education had 2.7 times the risk of maternal mortality than women with more than 12 years of education [17]. Lack of knowledge of leads to multiple undesirable health outcomes, such as unintentional or unplanned pregnancy in a marriage, and unsafe abortion among unmarried adolescences [18].

Cultural factors rather than economic factors seem to be related to early age at marriage and adolescent childbearing, which are associated with poor birth outcomes [19] .

Pregnancy outcomes rank among the most pressing reproductive health problems in the world. Factors influencing pregnancy outcomes may include poor nutrition of the woman, child spacing, maternal age, inadequate prenatal care, lifestyle behaviors , such as; smoking, alcohol consumption, drug abuse, overweight, obesity and poverty.

Conclusions

The study's unique conclusion was that pregnant adolescents lacked knowledge about preventive health behaviors during pregnancy, and although the results of this study showed no effect of the knowledge factor on pregnancy outcome in adolescent girls, the knowledge factor may have an indirect role because it is related to many other factors that may influence the outcome of adolescent pregnancy, such as level of education, poverty, and behavior of unhealthy lifestyle.

Recommendations:

1- Improving pregnant adolescents' health literacy is the responsibility of healthcare systems and healthcare professionals through emphasis by the Ministry of Health role in through the antenatal care units to take a part and dissemination of education about the preventive health behaviors among pregnant adolescents especially primigravida, and particularly with each specific trimester.

2- Improving pregnant adolescents' knowledge regarding preventive health behaviors during pregnancy through education programs, booklet, educating sessions, mass media, and articles….etc.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq

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