Assessment of Knowledge for Pregnant Women toward Risk of Pregnancy in Al-Amara Primary Health Care Centers at Southern of Iraq

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ABSTRACT

Objectives: This study aims to assessment of knowledge for pregnant women toward risk of pregnancy and to identify the association between level of awareness and demographic data. Quantitative design (Descriptive study) was conducted during the period 15th November 2018 at 25th March 2019 in the city of Al-Amara at Southern of Iraq. A simple random sample is used by the researcher to select (4) primary health care centers. Purposive sample of (150) pregnant women visiting health centers were selected according to special criteria. The data was collected through interview method by using constructed instrument, which consisted of (2) parts. The first part for socio-demographic characteristic and second part to risk of pregnancy which contain: nutritional; exercise; smoking; caffeine; polycystic ovary syndrome; radiation; consanguineous marriages, and non prescription drugs. The mean score and standard deviation for overall domains to risk of pregnancy were moderate level of knowledge were (1.93 ± 0.433) with the majority sample 63 (42%). Moreover, the findings of the study demonstrated that there was no significant between women's age and knowledge at ($P> 0.05$), but there were high significant between level of education, occupation, monthly income and level of knowledge at ($P< 0.01$).

Keywords: *Risks of Pregnancy, Knowledge, Pregnant Women.*

Introduction

Pregnancy is usually a tranquil time of unequaled joy and expectation in the life of women's. Particularly, all pregnant women need to health education during pregnancy period to promote healthy behaviors and prevented risk factors, which can be initiated from the woman herself, family support, community, or health care providers [1]. However, prenatal care is an effective care for health intervention to reduce risk of the pregnancy mortality and morbidity, especially in places where the general health status of women is poor. Most studies indicate that these risks are much higher among women who do not receive this care [2]. In general, the pregnant woman is at greater risk when exposed to the following conditions such as smoking, obesity, alcohol, poor exercise, polycystic ovary syndrome, exposure to radiation, non-prescription drugs and consanguineous marriage, or include the history of chronic diseases such as (diabetes mellitus, hypertension, and cardiovascular disorders). In addition, previous pregnancies, multiple pregnancy, reproductive aged women less than 18 or increase than 35 years, and intervals less than 3 years between pregnancies, and therefore mother, fetus or neonate is more susceptible to death, disability or disorders [1]. The prevalence of high-risk pregnancies was reported up to 20% worldwide. Also, 50% of perinatal deaths are being observed during high-risk pregnancies. Prevalence of high-risk pregnancy varied in different countries, for example it is reported as of 31.4% in the north India, 59.3% in Tunisia, 40.1% in Nigeria, 39.8% in Iran, 53.2% in Iraq [3]. In many developing countries, complications due to pregnancy and labor are main causes of maternal mortality. According to WHO reports

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almost every day (800) women die due to preventable risk factors associated with pregnancy (99%) of these deaths occur in developing countries [4]. Finally, improving women's health and establishing good health behavior before or during pregnancy is especially important because nearly half of pregnancies (49%) may be unintended and associated with inadequate knowledge about the risk factors that place them at constant risk [5, 6].

Methodology

A descriptive study was done during the period 15th November 2018 at 25th March 2019. Simple random sample is used by the researcher to select (4) primary health care centers PHCs at Al-Amara city. Purposive sample (150) pregnant women visiting PHCs for therapeutic or preventive reasons, these women were collected from the four centers which include (37) women from Dijla Health Center Model, (38) women from AL-Askan, (37) pregnant women from Al-Quds, and (38) women from Shaheed Al-Watan PHCs. The selection of them were according to special criteria which include (1) Pregnant women. (2) Pregnant women have from (1 to more) gravida. While the excluded criteria which including (1) Female non pregnant. (2) Female non married. Data was collect through use of contracted questionnaires by the researchers for aims of this study, which contains two parts. First part comprised of (4) items in regarded to socio-demographic characteristics, and the second part to assess of knowledge for pregnant women toward risk of pregnancy it was consisted of (40) items. It comprises of (9) section which including (the nutritional status during pregnancy; exercise for women; risk of smoking; effect of caffeine on pregnant women; polycystic ovary syndrome effect on the pregnancy; radiation exposure during pregnancy; the sections seven it concerned with consanguineous marriages; also, awareness of pregnancy about intake of non prescription drugs. Finally, the section nine it concerned with other risks during pregnancy such as hypertension, diabetes mellitus and anemia. These items were rated according to the three likert scale: I know (3); uncertain (2) and I do not known scored as (1).The measurement was scored by using grand mean of score through intervals (1-1.67) low, (1.68-2.33) moderate, and (2.34-3) high, as well as (L), (M), and (H) respectively. The data collection process was conducted by interviews technique with each woman who visits the PHCs and by using Arabic version to assess of knowledge for pregnant women toward risk of pregnancy. The data of our study was analysis by used of Statistical Package of social sciences (SPSS) version 20, by application of two statistical approaches. (1) Descriptive approach that includes Percentage, Frequency, and Mean of Score. (2) Inferential statistic that include Chi-Square test. The results were affirmed as significant at $P \leq 0.05$ and not significant at $P < 0.05$.

Results and Discusion

The results of the data analysis were corresponding with the objectives of the study. Such a presentation was systematically organization to demonstrate the significant findings. Table 1 shows majority of sample were (16-20) years old (32.7 %), most of the sample within level of education of read and write and primary (20%), so the almost of participant is housewife (86.7%), and finally in regarding for monthly income is not enough within (38%). Table (2) demonstrates assessment of overall domains the pregnant women's knowledge concerning risk of pregnancy are moderate level of knowledge with average of mean and standard deviation were (n=150; (1.93 ± 0.433). While, this table shows there were low level of knowledge in polycystic ovary syndrome with average mean and standard deviation was (1.54 ± 0.579), but demonstrated high level of knowledge in non prescription drugs with average mean and standard deviation was (2.80 ± 0.405). Table (3) Shows majority of participants in moderate knowledge toward risk of pregnancy (n=150 with 42. %).

Table 1: Socio-demographic characteristics for study sample

No.	Variables	(N = 150)	F	%
1.	Age	16-20	49	32.7
		21-25	39	26.0
		26-30	33	22.0
		31-35	20	13.3
		≥ 36	9	6.0
		Total	150	100
2.	Level of educational	Illiterate	27	18.0
		Read and Write	30	20.0
		Primary	30	20.0
		Intermediate	22	14.7
		High School	14	9.3
		Diploma	11	7.3
		Bachelor	16	10.7
		Total	150	100

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3.	Occupational Status	Housewife	130	86.7
		Employment	15	10.0
		Unemployment	5	3.3
		Total	150	100
4.	Monthly income	Enough	51	34.0
		Rather enough	42	28.0
		Not enough	57	38.0
		Total	150	100

Table 2: Assessment of Overall Domains of knowledge for pregnant women toward risk of pregnancy

Domains of knowledge	Mean	Std. Deviation
Nutritional status	2.14	0.569
Exercise	2.08	0.596
Risk of smoking	1.73	0.569
Effect of caffeine	1.65	0.742
Polycystic Ovary Syndrome	1.54	0.579
Radiation	2.16	0.723
Consanguineous Marriages	1.67	0.587
Non prescription drugs	2.80	0.405
Other Risks	1.79	0.752
Total Domains	1.93	0.433

Table 3: Overall Assessment of Knowledge for Pregnant Women toward Risk of Pregnancy

No.	Level of Knowledge	Frequency	Percent
1.	Low	53	35.3
2.	Moderate	63	42.0
3.	High	34	22.7
	Total	150	100%

Above table shows there are association between the knowledge for pregnant women toward risk of pregnancy and their demographic characteristics (level of educational; occupational status, and monthly income) at $P \leq 0.05$. While there were no association between the knowledge of pregnant women toward risk of pregnancy and their ages at $P > 0.05$. Considered our study is one of the few investigations intended to collect particular data regard knowledge of pregnant women toward a number of risk factors. In table (1): data showed in regarding for ages of sample was (32.7%) which

means nearly quarter of the participants were married in young age, and therefore are more at risk than others as a result of inexperience that lead to low birth weight, prenatal or infant mortality, and maternal complications. This result was agree with study was conducted by Guimaraes, et al., (2013) [7] shows approximately (30%) of participants with aged 18 and 19 years. In relative to their educational status, most of the sample in our study was able to read and write or have a primary school (20 and 20%) respectively. This result was agree with [8] who found majority of pregnancy have read and write was (22.3%) or with primary school (22.5%). In regarding to occupational status the housewife accounted for almost (86.7 %), this result concur with Esposito, et al., (2015) [9] who found that more than half of the sample was unemployed/housewife (60.9%). In concerning to monthly income nearly quarter of participants in the study (38%) does not have enough financial support which is due to the poor economic situation in the country or the majority of women are housewives with a low level of education. In regarding to assess of knowledge for pregnancy concerning risk of pregnancy in all domains as in table (2) that is shows moderate level of knowledge in all domain with low awareness about polycystic ovary syndrome which considered more risked on life of mother and their baby. This result consistent with study done Kamalanathan et al., 2013 [10] who mentioned that the polycystic ovary syndrome affects (6 to 15%) of reproductive age and associated with increased risk of hypertensive disorders, gestational diabetes mellitus, miscarriage, and preterm delivery for women globally. While domain of non prescription drugs were all pregnant women have adequate level of knowledge, this result supported by Okandeji-Barry, (2016) [11] who found the majority (80.6%) of the participants had good knowledge about non-prescription drugs and considered most harmful in the first trimester. Generally, according to the researchers' perspective the result of (table 3) was moderate level of knowledge may have been due to a low level of education as the majority have primary schools or because of the lack of experience resulting from the fact that the majority of ages located between 16-20 years who have inadequate knowledge about risk factors during pregnancy. This result was agree with Esposito et, al., (2015) [9] who found that the pregnant women has moderate knowledge (42%) in regarding to maternal risk factors such as smoking, alcohol conception, and obesity. The results of our study in table (4) showed there were no significant association ($P < 0.05$) in the

variable under study of the age, this result may be related to the small sample size and majority of the sample was young woman do not have experience during pregnancy. This result agrees with a study conducted by Jerdén, who found no significant between age and level of knowledge about risk of pregnancy (Jerdén, 2010) [12]. While in regarding to level of education, the result showed there is a significant association between educational level and their knowledge, in our opinion the majority of pregnant women are read and write and they have good knowledge about risk factors through the recent development in technology, such as watching health programs through television, You Tube or Facebook. This result agrees with a study conducted in Ethiopia by Daba et, al.,(2013) [13] who shows significant between educational level and level of knowledge. In concerning to occupation and level of knowledge, the result shows there were a significant association, these result may be related to the vast majority of pregnant women were housewives, and they have moderate knowledge about the risk factors caused by communicating with relatives or neighbors or reading health magazines. This result agrees with a study conducted by Zaki, and Albarraq (2013) [14] Finally, in concerning of monthly income in table (4) that show there are a significant association between monthly income and level of knowledge. In our point view as researchers this result may be due to from application the health visitor program in Al-Amara city that was plays an important role in education pregnant women, as well as proximity of PHCs from residential areas, which in turn offer free service with lower cost. This result supported by a study conducted by Daba et, al., (2013) [13] in Ethiopia to assess awareness for pregnancy concerning maternal nutrition and associated factors, who found that a significant association between monthly income and level of knowledge.

Table 4: Association between Knowledge for Pregnant Women toward Risk of Pregnancy and their Demographic Characteristics

Variables	Characteristics	No.	mean	S.D	d.f	F	Sig.
Age (year)	16-20	49	1.85	0.418			
	21-25	39	2.01	0.438			
	26-30	33	1.90	0.431	145	1.100	0.359
31-35		20	2.03	0.419			
	≥ 36	9	1.94	0.516			
	Total	150	1.93	0.433			
Level of educational	Illiterate	27	1.74	0.398			
	Read and Write	30	1.66	0.211			
	Primary	30	1.86	0.437			
	Intermediate	22	1.90	0.343	143	18.628	0.000
	High School	14	2.14	0.266			
	Diploma	11	2.10	0.349			
	Bachelor	16	2.64	0.076			
	Total	150	1.93	0.433			

Conclusion

The study show that quarter the sample have low knowledge, while less than half of the sample had a moderate knowledge about risks of pregnancy. In regarding to associations between level of knowledge and the socio-demographic characteristics the result shows there were no significant association between age and level of knowledge, but there were high significant between level of education, occupation, monthly income and level of knowledge toward risk of pregnancy.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Community Health Nursing Department, College of Nursing/University of Misan, Iraq and all experiments were carried out in accordance with approved guidelines.

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