



EVALUATE THE ATTITUDE OF PREGNANT WOMAN TOWARD MEDICATIONS IN JORDAN

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ABSTRACT

Background: Most research on drug use during pregnancy tends to focus on possible teratogenic effects. However, beliefs and awareness of the dangers of drugs can also affect drug use and fetal health. **Objective:** This study was designed to examine awareness of the risks and beliefs associated with drug use among pregnant women visited gynecological clinic in King Husain Hospital in Jordan. **Method:** A cross-sectional study was conducted in 110 pregnant women who were referred for gynecological clinic at King Husain Hospital in Jordan during January 2022 by using special questionnaire. The questionnaire contained four parts. First part focused in sociodemographic characteristics. Second part focused on risk awareness among pregnant women toward medications. Third part focused on general opinion of pregnant women about drugs. Fourth part focused on special ideas of pregnant women about taking medicine during pregnancy. The results analyzed by SPSS. **Result:** The questionnaire distributed to 110 pregnant woman. Only 100 pregnant completed the questionnaire with response rate 90%. Around half of them had three to four pregnancies (48%) or more than four pregnancies (21%). A round one third of respondents were in the first or second trimester of pregnancy. (70%) of those surveyed were not prepared to take the drug without consulting a specialist. Infant abnormalities (35%), miscarriages (37%) and fetus dead (25%) were the most common reasons why respondents refused to take medication during pregnancy without consulting a doctor. The minority of them 15% disagree with natural products are safer than drugs. The majority of them 90% reported that the disagree that All drugs are toxic to the fetus. The majority of them considered doctors and pharmacists as their major source of drug information. **Conclusion:** This study found that there is negative attitude toward medication safety in pregnant woman. Although cautious to use drug during pregnancy is important issue, they overestimated the risks of drug use and their opinion about drugs was somewhat wrong. The health ministry should open counseling clinic to provide good information to the pregnant woman to increase their knowledge toward the safety of drug and herbal products in pregnant woman.

INTRODUCTION

Pregnant women must be aware of the potential benefits and risks of drugs for optimal treatment results.^[1,2] Several reasons make it difficult to assess the true risk of drug use to the fetus during pregnancy.

Furthermore, it is estimated that the incidence of serious birth defects is low than tenth of pregnant woman which makes it difficult to determine the risk to the fetus associated with the drug.^[3-5] There is importance of drugs due to their teratogenic effect.^[6,7]

The knowledge of them about drugs is directly related to the use of over-the-counter (OTC) medications or herbal remedies.^[8]

Therefore, their drug addiction was greatly influenced by his views about drug use. In this sense, many women do not adhere to drug treatment due to the negative attitude

and even medical workers.^[9-12] This can lead to abortions.^[9] Effective counseling led many women to assuring good adherence to medications.^[13]

Although some of them are reasonably aware of high-risk drugs during pregnancy. Uncertainty about prescribing medications during this period can have serious results, such as abortion, lack of adherence and preference for herbal methods and self-medication.^[14]

So, we need to introduce good education to the patients.^[5] Most drug has teratogenic effect according to many studies.

However, the attitude of them, awareness of risks and knowledge of treatments can also affect the response to treatment and the health of the fetus. So, the level of education is very important to them.^[15] The Beliefs About Medicines Questionnaire (BMQ) was design to

asses patients knowledge, their opinion about their medications.^[16]

Drug Information Center is important sources of information for pharmacists, nurses, and doctors when counseling these patients. To reduce end of baby, we should give good information to the pregnant woman.^[18]

To our knowledge and according to the literature, no research has been conducted in Jordan to examine the beliefs and consciousness of pregnant women about drugs that can affect them.

The aim of this study was to examine pregnant women's knowledge of risks of medication during pregnancy period.

METHODS

Study Design and Setting

A cross-sectional study was conducted in gynecological clinic in King Hussin Hospital in Jordan.

The main population included 110 pregnant women who requested this clinic. A cross-sectional study was conducted in 110 pregnant women who referred for gynecological clinic at King Husain Hospital in Jordan during January 2022 by using special questionnaire.

The questionnaire contained four parts. First part focused in sociodemographic characteristics which contained 5 questions. Second part focused on risk awareness among pregnant women toward medications with 5 questions. Third part focused on general opinion of pregnant women about drugs which contained 6 questions. Fourth part focused on special ideas of pregnant women about taking medicine during pregnancy with 8 questions. The results were analyzed by SPSS.

RESULTS

1-Sociodemographic Characteristics of the respondents

The response rate was 90% with 100 of them completed the questionnaire.

The majority of them were live in Amman (90%) followed by 5% live in Irbid. Most of the respondents (98%) were married with housewife job. The minority of them had bachelor degree 22%.

Around half of them had three to four pregnancies (48%) or more than four pregnancies (21%). A round one third of respondents were in the first or second trimester of pregnancy (Table 1).

Table 1: Sociodemographic characteristics of the respondents.

Variable	Frequency	%
1-Region		
Amman	90	90
Irbid	5	5
South Jordan	1	1
Others	4	4
2- Status		
Married	98	98
divorce	2	2
3. Occupations		
Student	12	12
Employee	45	45
House wife	53	53
3-Level of education		
Graduated high school	45	45
College Diploma or equivalent	22	22
Bachelor's degree	15	15
Post-graduate degree	18	18
4-Numbers of pregnancies		
1-2	31	31
3-4	48	48
More than 4	21	21
5-Duration of pregnancy		
Less than 12 week	35	35
From week 13-28	37	37
More than 28 weeks	28	28

2- Risk identification of the respondents toward medications With regard to drug teratogenicity, more than three quarter of the respondents (70%) considered all the medicines are teratogenic

In this sense, (70%) of those surveyed were not prepared to take the drug without consulting a specialist. Infant abnormalities (35%), miscarriages (37%) and fetus dead (25%) were the most common reasons why respondents

refused to take medication during pregnancy without consulting a doctor.

The majority of them (80%) did not know what drugs should be avoid during pregnancy. Only 3% of them reported that warfarin should be avoid during pregnant period. Further results are shown in table 2.

	Frequency	%
1- All drugs are teratogenic?		
Agree	70	70
Disagree	10	20
I don't know	20	10
2- I can take any drugs during pregnant period Without doctor prescription?		
Agree	25	25
Disagree	70	70
Not sure	5	5
3- why medication is harmful during pregnancy period?		
Abortion Teratogenic effect	37	37
Dyeing of mother or child	35	35
I don't know	25	25
4-The critical time to take medication?		
One week to 13 week	35	35
13 week-28 week	37	37
More than 28 week	28	28
5- The major drugs which should be avoid during pregnancy period are or have teratogenic effect are		
Paracetamol	18	18
Amoxicillin	20	20
Tetracycline	2	2
Omeprazol	15	15
Misoprostol	70	70
Warfarin	3	3
I don't know	80	80

3- General opinion of pregnant women about drugs

With regard to general opinion of the respondents about drugs, the minority of them 10 % agreed that the physician prescribe many drugs.

The minority of them 5% showed that the drugs are toxic and more than half of respondents 55% agreed wilt when doctors are too reliant on drugs.

The minority of them 15% disagreed with natural products are safer than drugs. The majority of them disagreed when doctors had more time to communicate with patients, they would prescribe more drugs.

Further result are shown in table 3.

Table 3: General opinion of pregnant women about drugs.

Statements	Agree	I do not know	Disagree
1- Physician prescribe too many drugs	10	80	10
2-More drugs are addictive.	1	55	44
3-Natural products are safer than drugs	15	55	30
4-All drugs are toxic	5	90	5
5- Doctors are too reliant on drugs	55	35	10
6- If doctors had more time to communicate with patients, they would prescribe more drugs.	15	80	5

4-Special ideas of pregnant women about taking medicine during pregnancy

The majority of them 90% disagreed that all drugs are toxic to the fetus. More than half of them agreed that drug use in pregnancy woman has saved the lives of

unborn babies. The minority of them 11% agreed that pregnant women can generally use natural products.

More than three quarter of them 80% agreed that pregnant women should not use natural products without consulting a doctor.

Table four: Special ideas of pregnant women about taking medicine during pregnancy.

	Statement	Agree	Uncertain	Disagree
1	All drugs are toxic to the fetus.	5	5	90
2	If I was not pregnant, I think it would be better if the fetus did not take the drug during pregnancy.	55	30	15
3	Drug use in pregnancy woman has saved the lives of unborn babies.	55	35	10
4	Better for the fetus with medication and better than an non treated patients.	51	30	19
5	physician prescribe too many pregnancy medications	15	80	5
6	Pregnant women can generally use natural products.	11	55	33
7	Pregnant patients are advised to use natural products	5	45	50
8	Pregnant women should not use natural products without consulting a doctor.	80	15	5

DISCUSSION

This is one of the first studies that conducted in Jordan to examine the pregnant knowledge toward the safety of drug use during pregnancy period.

Understanding the dangers and beliefs associated with drug use will be critical for pregnant women to make care-seeking decisions and improve adherence to treatment.

In this study we found that third of the pregnant patients in this study reported abortion and teratogenicity as the major reasons for not taking the drug during pregnancy. This consistent with another study which found that the knowledge and educational beliefs of pregnant women about the harmful effects of drugs are important, misconceptions can lead to unnecessary abortion.^[5]

The knowledge of the respondent toward this subject affect good adherence and the healthy fetus.^[10,12,16] Third of them considered the first trimester to be a critical time to take medication, while around one quarter of them consider the third trimester is critical. This consistence with another study that reported women appear to be aware that medications can be harmful at any time during three trimesters and has more teratogenicity during the first trimester.^[21,22]

The general consensus among the participants in this study was that most pregnant women disagree that the drugs were more harmful than helpful.

The majority of them disagree that all drug are toxic to the fetus. This similar to another study that conducted in Saudi Arabia that believed drugs are not the cause of birth defects.^[15]

Despite the widespread belief that drugs are better than their harmful effects, the vast majority of women showed that drugs affected fetus during pregnancy. The majority of them reported in the pregnancy survey that the drugs were harmful to the fetus. This made them very careful and reluctant to take any medication without doctor counseling.

This is consistent with a study of Saudi Arabia, which found that half of pregnant showed that drug use is harmful to the fetus.^[15] This mainly affected pregnant woman who were unsure about drugs and who often worried about the risks of medication use during this period.^[5,11] The majority of them considered doctors and pharmacists as their major source of information on drug-related problems.

This finding is consistent with a study in the UK and Norway, which used doctors and pharmacies as the major source of information of medicines for these population.^[24,25]

The minority of these woman in this study were agree the use of natural remedies during pregnancy (11%). These results are inconsistency with another studies which conducted in Britain, Norway, and Italy.^[14,26,27]

But a study in Saudi Arabia found that 79% of women oppose the use of natural remedies.^[15]

Possible reasons for not using herbal medications are side effects and conflicting opinions about natural medications, as their safety is not well understood.^[28]

Furthermore, only 15% of pregnant women in the current study said so, who believed that natural remedies were safer than drugs.

This is perfectly acceptable, as the safety of all natural remedies, including herbal ones, is not well understood and should be avoided during pregnancy.^[17,29]

Less than one third of them are treated with over-the-counter pain relievers, such as acetaminophen when they are not feeling well.

This is consistent with another study which conducted by Kebede et al. at the Ethiopian capital, Addis Ababa.^[17] Social and demographic factors, such as education and occupation, can have a significant impact on risk awareness and patients' attitudes towards drugs.^[16]

In this study, general perceptions of the respondents about the words "doctors trust drugs too much" and "all drugs are toxic" are consistent with another study that conducted in UK.^[24]

In general, pregnant women should be careful with this study and make informed decisions about the use of natural remedies and treatments during pregnancy.

CONCLUSION

In this study, pregnant women refused to take the drug during pregnancy.

Although cautious to use drug during pregnancy is important issue, they overestimated the risks of drug use and their opinion about drugs was somewhat wrong.

The respondents had been trust in physician for advice about drug use.

Healthcare providers can influence the dissemination of relevant information about medicines, which also influences the beliefs of pregnant women.

Doctors, pharmacists and other health professionals should be properly advised to change the conservative views and exaggerated beliefs of women about the dangers of drugs. A good education strategies that take into account traditional and cultural beliefs are another benefit of promoting appropriate drug use while addressing safety of drugs.

The health ministry should open counseling clinic to provide good information to the pregnant woman to increase their knowledge toward the safety of drug and herbal products in pregnant woman.

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