

Assessment of Women's Knowledge about the Risks of Medication Use During Pregnancy in Al - Najaf Province

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KEYWORDS

Women's Knowledge, Risks of Medication, Pregnancy

ABSTRACT

Objective: The current study aims to assess women's knowledge about the Risks of Medication Use during Pregnancy and determine the relationship between Women's Knowledge about the Risks of Medication Use during Pregnancy and demographic characteristics.

Methodology: A descriptive design /cross sectional study was conducted using analytical utilities to accomplish the stated objectives. In the time frame of 1st November 2023 to 19th July 2024. A non-probability sampling (Purposive sample) approach was used, based on the following criteria: pregnant women in any stage of the pregnancy, including the first, second, and third trimesters (primi gravida and multigravida). A sample of 250 pregnant women was chosen from those admitted to Al-Zahraa Maternity Teaching Hospital/ Al-Furat Teaching Hospital/ AL-Hakim Teaching hospital / primary Health care centers (Maternal, child, and infant care units).

Results: the results show the level of knowledge differs significantly ($P < 0.05$) according to level of education in which women who have institute and above exhibited the highest level of knowledge ($MS = 2.05$). On the other hand, women whose husbands work in free jobs showed the highest level of knowledge ($MS = 1.97$) while those whose husbands are retired exhibited the lowest level of knowledge ($MS = 1.50$). Regarding gestational age, pregnant women within the (18-22) weeks exhibited the highest knowledge ($MS = 2.03$).

Conclusion: The study found that Women knew very little about the possible effects of some medications on fetal development, on the other hand the participants had little awareness of the safety of anticonvulsants and medications for the common cold and flu. Women had moderate levels of knowledge regarding the safety of using paracetamol (acetaminophen) for pain and fever during pregnancy.

1. Introduction

Pregnancy is a special physiological state that poses difficulties and concerns in drug intake because the pharmacokinetics of drugs and the potential risk to the fetus from drugs that cross the placenta (Banhidy et al., 2012). Because some pregnant women may have chronic medical disorders (such as asthma, epilepsy, or hypertension) that require ongoing or intermittent therapy, drug treatment cannot be completely avoided throughout pregnancy. Additionally, illnesses that require medication treatment, such as migraines, headaches, hyperacidity, nausea, and vomiting, may worsen or develop entirely during pregnancy. (Deborah et al., 2013).). Pregnant women should therefore use extreme caution when using any kind of medication, including prescribed, over-the-counter, or herbal. There has been a growing awareness of the negative effects of medicines on fetuses since the thalidomide era (Kacew, 2014; Melton, 2015).

Considering that pregnancy is a physiological state, there are specific concerns regarding potential harm to the fetus when medications are used to treat it (Puman et al., 2009). Pregnant women should follow up their pregnancy condition throughout the period of pregnancy because it is an essential aspect of life for both the mother and the fetus. During this crucial time, about half of pregnant women use over-the-counter (OTC) or prescription drugs as directed by their obstetrician; however, that number may occasionally be considerably higher. (Parboosing, 2001; Deepasree et al., 2016). Healthcare professionals play a critical role in identifying which congenital anomalies to prevent throughout this period, as approximately 2-3% of these birth defects are due to drug intake (Sharma et al., 2006). mothers during pregnancy are prepared with iron, minerals, and certain nutritional supplements (Andrad et al., 2004; Gerald et al., 2015). Birth abnormalities are frequently the outcome of prenatal drug exposure, even those available over-the-counter (OTC) medications. (Allen et al., 2011). In the first and second weeks of pregnancy, also known as the first trimester in which

conception occurs, there is a greater chance of miscarriage. During the second trimester, which lasts from weeks (13 to 28), fetal movement can be noticed. During the third trimester, which lasts from weeks 29 to 40, parental attention is essential (Yoon et al., 2001). Numerous factors, like as the drug's effectiveness, the date of pregnancy, and the stage of fetal growth influence the effects of drugs on the fetus (Gerald et al., 2015; Mitchell et al., 2000). Three to six months before to becoming pregnant, should be avoided any unnecessary drugs (Allen et al.,2011).

To avoid harm to the fetus, it is generally advised avoiding using unnecessary medications during pregnancy (Louik et al.,2010; Broussard et al.,2010). Drug use may be due to a woman's frequently becoming pregnant with illnesses that require ongoing or temporary treatment (Lupattelli et al.,2014; Sawicki et al.,2011), or conditions caused by pregnancy that need to be treated with medications (Dejongel et al.,2015; Heitmann et al.,2015). Evidence suggests that pregnancy-related drug use has been linked to an increased risk of several adverse effects on both the mother and the fetus. In this regard, effective drug use control is critical to public health and needs to be the top priority for health policy makers. (Viale et al.,2015; Bjorn et al.,2015). Epidemiological studies on drugs use in pregnancy have been little in recent years (Mitchell et al.,2011; Palmsten et al.,2015; Twigg et al.,2015). For this reason, the current study was conducted to assess women's knowledge about the risks of medication use during pregnancy, and additionally to investigate the relationship between women's knowledge about the risks of medication use and demographic characteristic.

2. Methodology

Design of the Study:

A descriptive design /cross sectional study was conducted using analytical utilities to accomplish the stated objectives. In the time frame of 1st November 2023 to 19th July 2024.

The Sample of the Study:

An approach of non-probability sampling (Purposive Sample) was used, based on the following criteria. pregnant women in any stage of the pregnancy, including the first, second, and third trimesters (primi gravida and multi gravida). A sample of 250 pregnant women's was chosen from among those admitted to Al-Zahraa Maternity Teaching Hospital/ Al-Furat Teaching Hospital/ AL-Hakim Teaching hospital / primary Health care centers (Maternal, child and infant care units).

The Study Instrument and Data Collection:

Study Instrument:

The questionnaire was created by reviewing the relevant research and literature and making adjustments based on earlier findings (Yahya, 2021; Ahmad et al., 2020). A questionnaire serves as the study's instrument. following a review of relevant literature and previous research.

Part A: Demographic Data

The demographic data sheet consists of six items such as age, Level of education, Monthly income, Wife's occupational status, Husband's occupational status, and Resistance environment.

Part B: Reproductive characteristics

The second part included the following questions about women: This part consists of 3 subparts: 1st, 2nd, 3rd trimester, gestational age; and pregnancy (multiparous, or primiparous) The woman's recent medical history: Diseases affecting the musculoskeletal system, neurological system, respiratory system, different ATC structures, blood and blood-forming organs, cardiovascular system, medication allergies, reproductive hormones, systemic hormones, systemic anti-infectives, and other diseases. Medical history of the female patient: diabetes, hypertension, thyroid, asthma.

Part C: Source of information:

This section asked questions on four different knowledge sources, such as, Health work team, Family and Relative, Expertions Mas media, My job.

Part D : Assessment of Knowledge

This section contains questions about pregnant women's knowledge about medication, and this part consists of two subparts:

1. General Knowledge: (consist of five items)
2. Specific Knowledge: (consist of 12 items)

Data collection:

The samples were collected using questionnaires and interview forms for assessment of women's knowledge regarding the risks of using medications during pregnancy. The researcher completed the questionnaires by directly interviewing them and asking questions and asking them to answer freely. A modified questionnaire was used and data was collected through interviews. After getting approval from the hospital administration, the researchers interviewed each woman for about 10 to 15 minutes and 250 pregnant women completed the questionnaires. Data was collected from the participants through interviews that continued from Sunday, 3 January 2024 to, Sunday, 3 March 2024.

Statistical Analysis

Data from the study sample were entered and analyzed using Statistical Package for Social Sciences (SPSS) version 25. The analysis included two types of statistics:

1. Descriptive statistics: presented as mean, frequency and percentage. All continuous variables were tested for statistical normal distribution using bar charts and normal distribution curves.

2. Inferential statistics: Statistical tests were applied according to the distribution and type of variables. Frequencies were compared using chi-square test. Correlation was assessed using bivariate Pearson's correlation test. The correlation coefficient (r) is an index of the strength and direction of correlation. Its value ranges from 0 (perfect no correlation) to 1 (perfect correlation), with higher r values closer to 1 indicating stronger correlation, positive (no signed) r values indicating direct (positive) correlation and negative signed r indicating inverse correlation. ANOVA test was used to test the difference in the means of knowledge and attitude scores between two or more groups. Independent t-tests were used to test the mean differences in knowledge and attitude scores between the two groups. A significance level of ≤ 0.05 was considered to indicate a significant difference or correlation.

3. Results and discussion

Table (4.1) Statistical distribution (frequency and percentage) of pregnant women according to their demographic data

Demographic data	Sub-groups	Frequency (N=250)	Percentage
Age / years	< 20	40	15.0
	20 - 29	128	48.1
	30 - 39	73	27.4
	≥ 40	9	3.4
Educational Level	Illiterate	28	11.2
	Read and write	33	13.2
	Primary school	39	15.6
	Secondary school	35	14.0
	Preparatory School	25	10.0
	Institute and above	90	36.0
Monthly Income	Sufficient	54	21.6
	Sufficient to some extent	124	49.6
	Insufficient	72	28.8

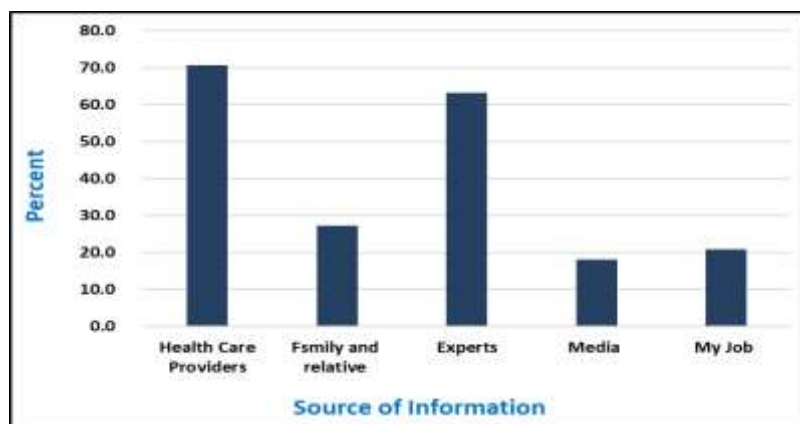
Occupational Status	Housewife	184	73.6
	Work	66	26.4
Husband's Occupational Status	Employee	87	34.8
	Free Jobs	153	61.2
	Retired	1	0.4
	Doesn't work	9	3.6
Residence	Urban	227	90.8
	Rural	23	9.2

The demographic data of the women are presented in table (4.1), this table shows that the majority of the pregnant women subgroups are: those with ages ranging between (20-29) years (48.1%); those who are housewives (73.6%), those who are graduated from institute or above (36%), those who have somewhat sufficient monthly income (49.6%); those whose their husbands work in free jobs (61.2%) and those that live in urban area (90.8%).

Table (4.2) Statistical distribution (frequency and percentage) of pregnant women according to their reproductive characteristics

Demographic data	Sub-groups	Frequency (N=250)	Percentage
Pregnancy Period	First Term	114	45.6
	Second Term	56	22.4
	Third Term	80	32.0
Gestation age/ Weeks	1-4	10	4.0
	5-8	17	6.8
	9-13	79	31.6
	14-17	18	7.2
	18-22	24	9.6
	23-27	20	8.0
	28-31	18	7.2
	32-35	20	8.0
	36-40	44	17.6
Gravida	Multigravida	178	71.2
	Primigravida	72	28.8

The reproductive characteristics of the pregnant women is presented in table (4.2), this table shows that about half of the women (45.6%) are in the first term of pregnancy; (31.6%) are within (9-13) weeks of gestational age, (71.2%) of them are multigravida



* Responses applied more than once

Figure (4.1) Percentage of pregnant women according to their source of information

The percentage of pregnant women according to their source of information is presented in figure (4.1), this table shows that (70.6%) of the pregnant women received their information from health

care providers; (27.2%) of them have their knowledge from family and relatives, (63.2%) of them have extracted information from experts, (18%) from media, while (20.8%) of them have accumulated knowledge from their jobs.

Table (4.3) Descriptive statistics and assessment of pregnant women's knowledge about risks of drugs

MS : Mean of Scores ; SD : Standard Deviation ; Poor : MS = 1-1.33 ; Moderate : MS =1.34-1.66 ; Good : MS=1.67

No.	Items	Responses	Descriptive Statistics		MS	SD	Assessment
			n	%			
1		Incorrect	214	85.6	1.14	0.35	Poor
		Correct	36	14.4			
2		Incorrect	190	76.0	1.24	0.43	Poor
		Correct	60	24.0			
3		Incorrect	230	92.0	1.08	0.27	Poor
		Correct	20	8.0			
4		Incorrect	186	74.4	1.26	0.44	Poor
		Correct	64	25.6			
5		Incorrect	143	57.2	1.43	0.50	Moderate
		Correct	107	42.8			
6		Incorrect	141	56.4	1.44	0.50	Moderate
		Correct	109	43.6			
7		Incorrect	76	30.4	1.70	0.46	Good
		Correct	174	69.6			
8		Incorrect	118	47.2	1.53	0.50	Moderate
		Correct	132	52.8			
9		Incorrect	137	54.8	1.45	0.50	Moderate
		Correct	113	45.2			
10		Incorrect	128	51.2	1.49	0.50	Moderate
		Correct	122	48.8			
11		Incorrect	169	67.6	1.32	0.47	Poor
		Correct	81	32.4			
12		Incorrect	157	62.8	1.37	0.48	Moderate
		Correct	93	37.2			
13		Incorrect	208	83.2	1.17	0.39	Poor
		Correct	42	16.8			
14		Incorrect	217	86.8	1.13	0.34	Poor
		Correct	33	13.2			
15		Incorrect	212	84.8	1.15	0.36	Poor
		Correct	38	15.2			
16		Incorrect	159	63.6	1.36	0.48	Moderate
		Correct	91	36.4			
17		Incorrect	128	51.2	1.49	0.50	Moderate
		Correct	122	48.8			
Overall Knowledge					1.34	0.44	Moderate

Table (4.3) shows the descriptive statistics and assessment of pregnant women's knowledge about risks of drugs. The responses to knowledge questions exhibited poor knowledge about risks of drugs for the items (1,2,3,4,11,13,14, 15); moderate knowledge regarding risks of drugs for the items (5,6,8,9,10,12,16,17), while it was good for the item numbered (7). The overall knowledge of pregnant women is (moderate) with a mean of scores (1.34). This assessment is based on the statistical scoring system, in which the item is classified as (poor) if the mean of scores between (1-

1.33); it is considered (moderate) if the mean of scores between (1.34-1.66); while it is considered (good) if the mean of scores is equal and more than (1.67).

Table (4.4) : Frequency and percentage of pregnant women' subgroups according to their overall knowledge assessment about risks of drugs

	Knowledge Assessment		
	Poor	Moderate	Good
Frequency	81	164	5
Percentage	32.4	65.6	2

MS : Mean of Scores ; SD : Standard Deviation ; Poor : MS = 1-1.66 ; Moderate : MS =1.67-2.33 ; Good : MS=2.34-3

Table (4.4) is about percentage of pregnant women' subgroups according to their overall knowledge assessment about risks of drugs. It shows that about (32.4%) of the pregnant women have poor knowledge, (65.6 %) of them have moderate knowledge, while only (2 %) have good knowledge (figure 4.2).

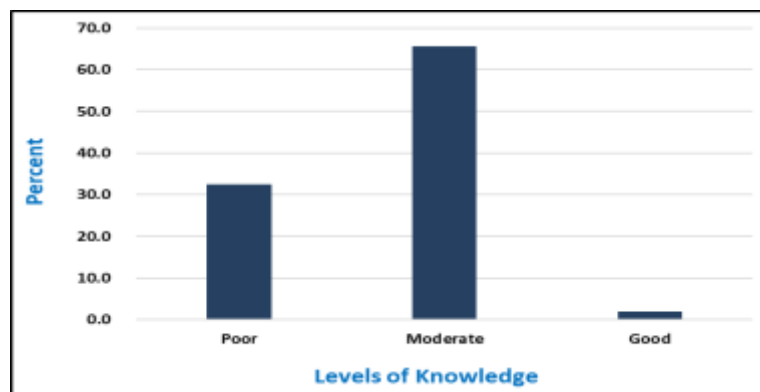


Figure (4.2) : Percentage of pregnant women' subgroups according to their knowledge assessment about risks of drugs

Table (4.5) Differences in the mean of scores of pregnant women's knowledges about risks of drugs between subgroups classified according to their demographic and reproductive data

Demographic data	Sub-groups	Mean	SD	F	P value
Age / years	< 20	1.97	0.21	1.26	0.288 (NS)
	20 - 29	1.95	0.20		
	30 - 39	1.91	0.27		
	≥ 40	2.05	0.30		
Educational Level	Illiterate	1.95	0.20	3.23	0.008 (HS)
	Read and write	1.84	0.27		
	Primary school	1.94	0.22		
	Secondary school	1.95	0.28		
	Preparatory School	1.97	0.19		
	Institute and above	2.05	0.20		
Monthly Income	Sufficient	1.97	0.23	0.97	0.37 (NS)
	Sufficient to some extent	1.93	0.24		
	Insufficient	1.96	0.20		
Occupational Status	Housewife	1.95	0.23	0.07	0.94 (NS)
	Work	1.95	0.22		
Husband's	Employee	1.91	0.21	3.18	0.025

Occupational Status	Free Jobs	1.97	0.23		(S)
	Retired	1.50	.		
	Doesn't work	1.85	0.20		
Residence	Urban	1.94	0.22	1.44	0.14 (NS)
	Rural	2.02	0.29		
Pregnancy Period	First Term	1.95	0.20	0.24	0.78 (NS)
	Second Term	1.97	0.28		
	Third Term	1.94	0.24		
Gestational age/ Weeks	1-4	1.92	0.12	1.20	0.29 (HS)
	5-8	1.90	0.23		
	9-13	1.96	0.20		
	14-17	1.85	0.23		
	18-22	2.03	0.28		
	23-27	1.96	0.26		
	28-31	1.99	0.21		
	32-35	1.95	0.29		
	36-40	1.91	0.22		
Gravida	Multigravida	1.94	0.24	0.77	0.43 (NS)
	Primigravida	1.96	0.20		

SD: Standard deviation, NS: Non-significant at p value <0.05; HS: High significant at p value <0.01

Regarding table (4.5), it explains differences in the mean of scores of pregnant women's knowledge about risks of drugs between subgroups classified according to their demographic and reproductive data.

According to this table, the level of knowledge differs significantly ($P < 0.05$) according to level of education in which women who have institute and above exhibited the highest level of knowledge ($MS = 2.05$). On the other hand, women whose husbands work in free jobs showed the highest level of knowledge ($MS = 1.97$) while those whose husbands are retired exhibited the lowest level of knowledge ($MS = 1.50$).

Regarding gestational age, pregnant women within the (18-22) weeks exhibited the highest knowledge ($MS = 2.03$).

Discussion

In Iraq, there is still a lack of information about pregnant women's incorrect medicine use, which

could cause serious problems for both the mother and the fetus. Therefore, the research was aimed to assess women's knowledge about the risks of medication use during pregnancy. According to the distribution of socio-demographic variables, 48.1% of pregnant women were between the ages of 20 and 29. This agree with (Thikra Ab. Kadhim Ab et al.2022) that found most of the women 46% was within the age group (20-24) years. AlSaeed & Elmaghraby (2021) revealed that approximately 31.77% of the pregnant women were between the ages of 26 and 35.

According to the study's findings, women who have graduated from institutes and above make up 36% of the population overall. This means that approximately 64.53 % of pregnant women have a bachelor's degree. This aligns with the research outcomes of (Thikra Ab. Kadhim Ab et al.2022). According to a survey conducted in Ethiopia, 39.3% of female graduates from higher education institutions (Kassaw & Wabe, 2012). However, Zaki & Albarraq (2014) revealed that a majority of the included women had completed their undergraduate education. About half (49.9%) of the female group studied by Alani et al. (2020) had a college degree. According to Undera et al. (2021), 46.9% of the female sample had completed their university education. In the current survey, the percentage of women with a bachelor's degree or above is lower than it was in the previously stated studies. This agree with Ali, Rabe'a Mohsen & Sarab Nassr Fadhil, (2014) that found that the greater number of women illustrated low levels of education, such as illiterate, read and write, primary, and intermediate schools and they are accounted for (63.3%) of the total sample. This could be explained by the inadequate educational system in Iraq as well as the early marriage that prevents women from completing their education.

The current research shows that about half of the women (45.6%) are in the first term of pregnancy; (31.6%) are within (9-13) weeks of gestational age, this result is on contrary with Jihad Salma Kadhum, & Noor Musa Kadham they demonstrated that highest percentage represented was (68.7%) women in their second trimester (4-6) months. The study also show that (71.2%) of the pregnant women are multigravida. This agree with, Khidhir, Renas Mohamed, et al. (2024), that found most of the women are in their multigravida and this result is on contrary with study finding conducted by Nasir and her colleague, that found most of participants were primigravida

The results of the present study show that (80%) of the pregnant women have no past history of chronic disease. This agree with Mathew Shaila, & Kafia Hashim Karim (2013) that shows that (95%) majority of the mothers did not have any medical disorder during pregnancy.

Also, the current research found that 70.6 % of pregnant women acquired information from their health care provider. Among them, 27.2% obtain their knowledge from family members or relatives, 63.2 % from experts, 18% from the media, and 20.8% from jobs. The Information sources tend to play a crucial role in defining one's degree of knowledge as well as forming ideas and perceptions concerning drugs and their risks throughout pregnancy. The present findings are congruent with those of Kirubarajan et al. (2021), who found that the most favored source of information was from health care providers. A previous survey found that around 56% of pregnant women reported being educated about pregnancy hazards by a physician, but fewer reported being informed by a pharmacist (Kassaw & Wabe, 2012).

According to Zaki and Albarraq (2014), gynecologists provided the majority of medication during pregnancy (58.1%), followed by general practitioners 13% and pharmacists 11%. According to Alani et al. (2020), participants learned about drug use during pregnancy primarily from their physician 35.6%, pharmacist 31.3% or gynecologist 25.5%. The study's findings show that women adhere to Iraq's pregnancy care system.

According to the literature, pharmacists, nurses, and other health professionals play a vital role in teaching pregnant women about the risks of medicines to both the fetus and the pregnant woman. A Saudi Arabian study found that pregnant women learn more about drugs from drug brochures than from medical practitioners (Zaki & Albarraq, 2014). According to Undela et al. (2021), women used the internet 9.72%, family members 6.87%, nurses 6.40%, and the least mentioned pharmacist 5.21%

to obtain information.

The current study's findings showed that around half of the women 45.6% in their first trimester. 31.6 percent are Between 9–13 weeks of gestational age. Approximately 71.2% of these women are multiparous. This may serve as an indicator of knowledge and experience that has accumulated. Similar findings were made by Undela et al. (2021), who showed that 45.02% of the women in their study were in the latter stages of pregnancy. This is consistent with research by Zaki & Albarraq (2014) and AlSaeed & Elmaghraby (2021), who found that approximately 83.5% of pregnant women had multiple pregnancies and approximately 84.2% of pregnant women found they were having more pregnancies. According to Alani et al. (2020), over 67.3% of pregnant women gave birth to more than one child. Undela et al. (2021), on the other hand, revealed that the majority 50.24% were primigravidae.

In response to questions about knowledge, it was found that most people thought it was safe to take over-the-counter medications without seeing a doctor or pharmacist, and that there was little knowledge regarding non-prescription medications that may be taken at any stage of pregnancy. In a study published in 2020, Atmadani et al. examined the risks of using over-the-counter medications during pregnant, as well as the prevalence of self-medication and the factors that may be linked to it among pregnant patients receiving medical care in Malang, Indonesia. We found that pregnant women might obtain the right care if specific knowledge was given to them. Similar findings were reached in an Ethiopian study that looked into pregnant women's self-medication and the safety of the medications they used. Similar findings were obtained from a study carried out in Ethiopia to investigate the safety profile of medications used by pregnant women in a tertiary teaching hospital. Also in study a study published in 2013, Mathew Shaila, & Kafia Hashim Karim found that (99%) majority of the mothers have not taken medicine without permission and (82%) majority of the mothers had not taken medicine during pregnancy.

The study revealed that 27.0% of the women reported using at least one type of conventional medication for self-medication, with analgesics accounting for the majority of the use—92.3% (Ahmed et al., 2020). Another study carried out in Indonesia revealed a lower percentage: only 11.7% of pregnant women reported using self-medication at least once (Atmadani et al., 2020). However, our study's self-medication rate was lower than that reported in Tanzania, 46.24% (Marwa et al., 2018). In another study, a large percentage of participants used paracetamol as an over-the-counter painkiller before 79% and during pregnancy 83.9%. The same results were drawn from a prior study that examined OTC drugs use in Saudi Arabia's general population, finding that 73.4% of respondents utilized paracetamol (AlSaeed & Elmaghraby, 2021). The results of the current investigation showed a moderate level of knowledge that the safest medication for treating pain and fever throughout pregnancy is paracetamol. According to a prior study, most pregnant women were unaware of the possibility of using NSAIDs until a later stage of pregnancy. According to Kassaw and Wabe (2012), the majority of pregnant women believed that acetaminophen, also known as paracetamol, was the safest NSAID to use during pregnancy. According to a another survey, only 28.3% of women (n = 115) believe that using analgesics in third trimester of pregnancy was harmful (AlSaeed & Elmaghraby, 2021). In the study by Kassaw & Wabe (2012), women reported that acetaminophen was the safest drug to take while pregnancy 70.5%. Additionally, (37.50%) of the patients stated acetaminophen was the best way to reduce pain.

According to AlSaeed & Elmaghraby's (2021) findings, women believe paracetamol to be the safest and most efficient analgesic medication for relieving pain throughout pregnancy n = 330; 81.3% and n = 316; 77.8%. In regard to uncertainty, (34.5%) of women stated that NSAID use over an extended period of time may have negative impacts on the developing fetus. Additionally, they revealed that pregnant women's knowledge regarding NSAIDs is poor. They do not know how to identify them and are unaware of their risk (Hassoun-Barhamji et al., 2015). The results of this study showed that there is a lack of knowledge about how certain medication use can impact fetal development. Same findings were found in a Saudi study, which revealed that most

participants did not think that medicines were the reason for neonatal birth abnormalities (Zaki & Albarraq, 2014). Women's says about drug safety showed a lack of knowledge regarding the safety of anticonvulsants and over-the-counter cold and flu medications. Similarly, Undela et al. (2021) discovered that 90.05% of pregnant women were unaware that certain medicines could be harmful to them throughout their pregnancy. On the other hand, approximately 60% of participants could clearly list a number of medications that should be avoided while pregnant. When the FDA's risk drug categories were compared to the medications that pregnant women stated, 23 of 32 hits were in agreement (Zaki & Albarraq, 2014).

Women's comments about drug safety showed a lack of knowledge regarding the safety of anticonvulsants and over-the-counter cold and flu medications. Similarly, Undela et al. (2021) discovered that 90.05 % of pregnant women were unaware that certain medicines could be harmful to them during their pregnancy. On the other hand, only roughly 60% of participants women could specifically list a number of medications that should be avoided when pregnant. When the FDA's risk drug categories were compared to the medications that pregnant women specified, 23 out of 32 hits were in agreement (Zaki & Albarraq, 2014).

In regard to general knowledge, the findings discovered by looking at the outcomes, approximately 32.4% of pregnant women have insufficient knowledge, 65.6% have moderate knowledge, and only a 2% have good knowledge. These findings are consistent with those of AlSaeed & Elmaghraby (2021), who showed that 61.82% of respondents had adequate knowledge. Pregnant women in Kuala Lumpur had varying degrees of knowledge, awareness, and beliefs about drug usage. Alani et al. (2020) showed that 52.8% of the women examined had low knowledge levels. Most studies revealed patient miscommunication regarding prescribed drugs in pregnancy, according to a prior meta-analysis research (Kirubarajan et al., 2021). According to Kamuhabwa & Jalal (2011), the majority of compounders were not well-informed on the risks associated with drug use during pregnancy.

Many factors contribute to the low knowledge of general information and the risks associated with drugs during pregnancy. One of these is that approximately 61% of the women who participated had less education, meaning they only completed secondary school or less. Additionally, the majority of these women are young housewives who lack knowledge about drugs and the risks associated with using them during pregnancy

4. Conclusion and future scope

- The majority of the pregnant women in the study group were between the ages of 20 and 29.
- A large number of the women were multigravida, meaning they had had numerous pregnancies, and about half were in the first trimester of pregnancy.
- A number of the women had pre-existing health problems, including thyroid disorders, diabetes, asthma, and hypertension.
- The study found that pregnant women had very little knowledge of the dangers of taking over-the-counter and prescription medications; many of them thought it was okay to use common medications and these without a doctor's prescription.
- Women knew very little about the possible effects of some medications on fetal development
- Participants had little awareness of the safety of anticonvulsants and medications for the common cold and flu.
- Women had moderate levels of knowledge regarding the safety of using paracetamol (acetaminophen) for pain and fever during pregnancy.

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