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Pregnant women awareness and attitude on use of patient information leaflets (PILs) in Ado Local Government, Ekiti State, Nigeria

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ABSTRACT

Patient information leaflets are valuable documents that inform and guide users, particularly pregnant women, about medication. This paper examined pregnant women's awareness and attitude toward the use of patient information leaflets. The study employed a cross-sectional survey design, using a structured questionnaire for data collection. Purposive sampling technique was used in selecting three public comprehensive health centres in the Ado Local Government Area in Ekiti state, Nigeria, for two weeks while convenience sampling technique was used in selecting the patients. Participants included 120 pregnant women who attended antenatal clinics during the antenatal meeting days. Data were collected at the antenatal clinics using a questionnaire. Ninety copies of the questionnaire were returned and found useful for the study. The results showed that most of the pregnant women were aware of the patient information leaflets enclosed in medicine packs and the extent of use was encouraging. The pregnant women had a positive attitude to the patient information leaflet. Also, the respondents had a high level of patient information leaflet use. Reading difficulty (=2.91) was one of the biggest challenges for pregnant women when going through the patient information leaflets. The study also found that pregnant women's awareness and attitudes influenced their use of patient information leaflets. Among other things, it was recommended that health information professionals collaborate with healthcare professionals and pharmaceutical companies to ensure the accuracy, readability and cultural appropriateness of patient information leaflets for pregnant women.

Keywords: Pregnant women, patient information leaflet, Ado Local Government

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Introduction

Pregnancy is a process with many interrelated physiological changes that require special care. During this time, expectant mothers faced unique challenges, including making informed decisions about their health and the well-being of their developing baby. Information is an important resource needed in all walks of life, especially in health issues (Ogunmodede et al., 2013). Patients, particularly pregnant women, need information to guide the use of their medicines safely and effectively, and to understand the potential harms and benefits of treatment. Hence, the appropriate use of medications during pregnancy is a crucial part of prenatal care (Khalaf et al., 2018).

Patel and Rajadhyaksha (2018) opined that pharmacists, as medical experts, play a vital role in dispensing drugs and mitigating against the risk of misinformation among patients, especially, pregnant women. As gatekeepers, pharmacists ensure that prescriptions are safe, effective, and medically appropriate and that patients understand their appropriate use (Brushwood, 2017). The safety of pregnant women is of concern because certain medications can potentially harm the developing fetus. Without proper medical guidance, there is a risk of misinterpreting information, incorrect self-diagnosis, or selecting medications that may be unsafe during pregnancy.

To ensure the safety of pregnant women, it is strongly advised that they consult a healthcare provider before taking any medications, even over-the-counter drugs (Atmadani et al., 2020). Healthcare professionals, including doctors and pharmacists, have the knowledge and expertise to assess the risks and benefits of medications during

pregnancy and can provide appropriate guidance. Also, healthcare professionals can provide tailored advice based on pregnant women's specific medical history, current medications, and other relevant factors.

In recent years, patient empowerment and involvement in healthcare decision-making have gained significant attention. One important tool that contributes to this process is patient information leaflets (PILs). The patient information leaflet, often referred to as the drug information leaflet, package information leaflet, patient medication leaflet, consumer medicines information, package leaflet, or package insert (Hammar et al., 2016), is described as a standard template of technical documents provided by drug manufacturers and are included in every medicine package with contents that are unbiased and evidence-based (Al-Taie, 2020). Medina-Córdoba et colleagues (2021), defined Patient information leaflets (PILs) of medicinal products as informative documents that accompany medicines and explain their components, modes of use, interactions with other medicines, and other relevant issues. PILs are a kind of instructional material that is used to educate patients and users about ailments, treatments, and lifestyle modifications. Therefore, the written information in the leaflets must be readable and comprehensible to users, particularly the information that ensures appropriate drug use (Al-Ramahi et al., 2012).

Adeniji (2015), studied the features and functionalities of the patient information leaflets accompanying the drug in the Nigerian market. The findings from the study revealed that patient information leaflets convey information, give instructions, and make prescriptions. Other findings revealed by the study are that the leaflets advertise, describe, and give contraindications about the drugs, through the language resources, which include lexis and structures. The patient information leaflet aims to enhance patient understanding, enable informed consent, and promote shared decision-making between patients and healthcare professionals. However, the effectiveness of patient information leaflets heavily relies on patients' awareness and attitude towards their use.

Awareness and attitude of pregnant women towards the use of patient information leaflets in Nigeria are critical issues that need to be addressed to promote safe and informed medication use during pregnancy. A lack of awareness among pregnant women about the availability and importance of patient information leaflets could hinder the ability to make informed decisions about medication use during pregnancy. The inadequate dissemination of information about the existence and use of these leaflets can contribute to gaps in knowledge and hinder their access to critical medication-related information. Attitudes towards the use of patient information leaflets among pregnant women in Nigeria are also not well understood.

Negative perceptions or mistrust of the information provided in these leaflets can impact willingness to rely on them for medication-related guidance and decision-making. Additionally, factors such as limited health literacy, language barriers, and cultural beliefs could hinder the effective utilisation of patient information leaflets among pregnant women in Nigeria. These challenges can lead to misunderstanding, misinterpretations, or misconceptions regarding medical safety, dosage, side effects, and contraindications that could injure the growing baby. There is limited research on the awareness and attitude of pregnant women towards patient information leaflets in Nigeria. This study attempts to fill the gap in knowledge. Thus, the study aimed to investigate the awareness and attitude of pregnant women regarding the use of patient information leaflets at Ado Local Government Area of Ekiti State, Nigeria.

Objectives of the Study

The general objective of the study is to examine the awareness and attitude of pregnant women on the use of patient information leaflets in Ado LGA of Ekiti State, Nigeria. Specifically, the study seeks to:

1. determine awareness of pregnant women on the use of patient information leaflets in Ado LGA in Ekiti State, Nigeria;

2. determine the attitudes of pregnant women on the use of patient information leaflets in Ado LGA in Ekiti State, Nigeria;

3. determine the extent of use of patient information leaflets among pregnant women in Ado LGA in Ekiti State, Nigeria; and

4. examine the challenges faced by pregnant women using patient information leaflets at Ado LGA, Ekiti State, Nigeria.

Hypothesis

The following null hypotheses were tested at 0.05 level of significance:

Ho1: There is no significant relationship between pregnant women's awareness and patient information leaflets use at Ado LGA of Ekiti State, Nigeria

Ho2: There is no significant relationship between pregnant women's attitudes and patient information leaflets use at Ado LGA of Ekiti State, Nigeria

Ho3: There is no multiple relations among pregnant women awareness, attitude and patient information leaflets use at Ado LGA of Ekiti State, Nigeria.

Literature review

Awareness of patient information leaflets (PILs) refers to patients' knowledge about the existence and availability of these resources. Various studies have looked at patients' awareness of patient information leaflets and their use. A study by El-Dahiyat et al. (2023) reports that all participants (96.3%) were always aware of the indication of the medications they take, the time and frequency (87.8%), and the duration of medications (84.4%). In a scoping review on the provision and need for medicine information in Asia and Africa by Nualdaisri et al. (2021), it was shown that consumers are aware of and report reading patient information leaflets (PILs). Similarly, a study by Ahmed et al. (2015) explored pregnant women's awareness and perception about medicines, and the results revealed that about two-thirds of the pregnant women checked the accompanied leaflet before taking their medications. This indicates a substantial awareness among pregnant women regarding the availability of relevant information through patient information leaflets. Improving patients' awareness of PILs is crucial to ensure they can access comprehensive and reliable information to support their healthcare decisions.

Attitude towards patient information leaflets (PILs) refers to patients' perceptions, beliefs, and preferences regarding the use of these resources. Also, Patient attitudes towards PILs can vary based on factors such as readability, comprehensibility, and relevance. Some patients may view PILs as a valuable source of information, appreciating the opportunity to learn. For instance, a study by Alkhamees et al. (2018) revealed that most patients (66% to 99%) expressed positive behaviour and favourable attitudes toward drug leaflet information in Riyadh, Saudi Arabia. A similar study by Wongtaweepkij et al. (2020) in Thailand, revealed that all respondents had overall positive attitudes towards patient information leaflets. On the other hand, some patients may exhibit a more passive attitude, considering PILs as overwhelming or confusing, leading to a reluctance to engage with them. A study carried out by Owusu et al. (2020), showed that it was evident that the majority of the respondents were likely to stop taking a particular medicine due to the information on the drug leaflet. According to the study, reasons provided by the respondents for not taking their medications were the information provided on the leaflet. It showed that the drug had more side effects compared to its benefits (15%), some of the information on the PILs was scary (40%), and the complex nature of the information on PILs (7.4%).

The use of patient information leaflets among pregnant women varies based on individual preferences and needs. While some patients may utilise the leaflets extensively, others may not refer to them. In a study by Wongtaweepkij et al.

(2020), it was shown that indication, drug name and precautions were the most frequently read information in PILs by the respondents. Also, a study carried out by Owusu et al. (2020), revealed that the majority of the respondents indicated PILs provide information on how their medicine will be taken, while only a few indicated that PILs were for a decorative effect. On the other hand, a study by Katabalo et al. (2022) revealed that the majority of the pregnant women in the study (89.8%) reported they had never read the accompanied drug information leaflets.

Despite their potential benefits, there are challenges associated with patients' ability to comprehend the information in the patient information leaflets (PILs) due to the technical language used, font size, paper size, text density, and unattractive design (Liu et al., 2018). In addition, many studies have found that some of these leaflets have incomplete information about drug safety (Al-Aqeel, 2013; Phueanpinit et al., 2016; Ramdas et al., 2013). However, Beusekom et al. (2016), focused on possibly having people with low literacy levels misinterpret drug leaflets. The study recommended that patient information leaflets should be shorter and improved in terms of organisation, legibility and readability as most of 'the participants thought images could increase the leaflet's appeal, help, ask questions, provide an overview, help understand textual information, aid recall, reassure, and even lead to increased confidence, empowerment and feeling of safety. Vaidya and Josh (2023), concluded that for ease of understanding, the content of the patient information leaflets must be provided in the user's local language, which can be understandable to lay consumers.

Methods

The study was conducted in selected comprehensive health centres in Ado-Ekiti, Ekiti state, Nigeria, adopting the descriptive cross-sectional survey research design. The study population consisted of pregnant women who attended the antenatal clinics at selected health centres during the two-week data collection period. A self-developed questionnaire was used for data collection following the review of relevant literature.

The questionnaire comprises of six sections (A-E). Section A elicited socio-demographic data of the respondents. Section B had items on the awareness level of pregnant women towards the use of patient information leaflets. The section had five items measured on a three-point scale of high, moderate and low. Section C covers the attitude of pregnant women towards the use of patient information leaflets. This part had thirteen items measured on four-point Likert scales ranging from strongly agree, agree, disagree, and strongly disagree. Section D had items on the extent of patient information leaflet use. There were five items in the section. These were presented on a 4-point Likert-type scale ranging from very low to high. Section E had items on challenges confronting pregnant women on the use of patient information leaflets, which was measured using five items on a four-point Likert scale ranging from strongly agree, agree, disagree and strongly disagree.

Ado Local Government Area has 10 public comprehensive health centres. The purposive sampling technique was used to select three of the ten health centres (Okeyinmi, Oke-Oniyo and Odo-Ado), because of functional antenatal clinics at the centres. The questionnaire was administered to 120 consenting pregnant women using a convenience sampling technique. Data were gathered from the three selected comprehensive health centres during their prenatal meetings (on Tuesdays and Thursdays) by trained research assistants who distributed and retrieved the questionnaires from the respondents. Also, the research assistants helped respondents with no formal education to complete the questionnaire by interpreting the contents of the questionnaire in local dialect. A total of 90 copies of the questionnaire were properly completed, giving a response rate of 75%. Data collected were analyzed using descriptive statistics (including frequency, percentage, mean and standard deviation) to measure respondent demographics and survey questions. Pearson's product-moment

correlation coefficient was used as an inferential statistic to test hypotheses one and two, and multiple regression was used for hypothesis three at a significance level of 0.05.

Results

Demographic information

Most respondents were within the age range of 30-39 years (Table 1). Also, the Table shows that the majority of the respondents had tertiary education and that most of the pregnant women in the study were self-employed.

Table 1: Demographic Distribution of the Respondents

	Frequency	Percentage
Age		
Less than 20 years	20	22.2
20-29 years	32	35.6
30-39 years	38	42.2
Total	90	100.0
Educational Status		
No formal education	4	4.4
Primary education	10	11.1
Secondary education	32	35.6
Tertiary education	44	48.9
Total	90	100.0
Occupational Status		
Full housewife	12	13.3
Employed	12	13.3
Self-employed	66	73.3
Total	90	100.0

Awareness level of pregnant women on the use of patient information leaflets at Ado Local Government of Ekiti State, Nigeria

The result of the level of Awareness of pregnant women on the use of patient information leaflets at Ado Local Government of Ekiti State, Nigeria, is presented in Table 2. The respondents had positive affirmations to statements such as "I know that some drugs have information leaflets enclosed in the package'' (Mean=3.73); "I am aware that patient information leaflets contain information on prescription and dosage" (Mean=3.73); "I am aware that a patient information leaflet contains contra-indications (warnings) of the drug on either the mother or unborn child" (Mean=3.73), which are greater than the average mean of 3.71. From the ratings, the results show that the pregnant women have a high level of awareness of the use of patient information leaflets.

Table 2: Awareness level of patient information leaflets among pregnant women

Statement	Low		Moderate		High		$\bar{x}$ ± S.D
	Freq.	%	Freq.	%	Freq.	%	
I know that some drugs have information leaflets enclosed in the package	6	6.7	12	13.3	72	80.0	3.73 ± 0.68
I know that patient information leaflets are written in foreign language	10	11.1	12	13.3	68	75.6	3.64 ± 0.68
I am aware that patient information leaflets contains the brand and compositions of the drugs	6	6.7	14	15.6	70	77.8	3.71 ± 0.59
I am aware that patient information contains information on prescription and dosage	6	6.7	12	13.3	72	80.0	3.73± 0.58
I am aware that patient information leaflets contains information on side effect of the drugs on the mother and foetus	6	6.7	14	15.6	70	77.8	3.71± 0.58
I am aware that a patient information leaflets contains contra-indications (warnings) of the drug on either the mother or unborn child	6	6.7	14	15.6	72	80.0	3.73 ± 0.58

Weighted Mean = 3.71

Attitude of pregnant women to PIL

The result of the attitude of pregnant women on the use of patient information leaflets at Ado Local Government of Ekiti State, Nigeria is presented in Table 3. The respondents had positive affirmations to statements such as "Reading the patient information leaflet helps me use the drug properly.'' (Mean=3.87); "It is best to read the patient information leaflet before using the medication" (Mean=3.80); "I like it when I understand the information in the patient information leaflet without the help of the health professionals" (Mean=3.84), which are greater than the average mean of 3.20. From the results, it can be inferred that the pregnant women have a good attitude towards the use of patient information leaflets in the study.

Table 3: Attitude of pregnant women towards patient information leaflets use

Statement	Strongly Disagree		Disagree		Agree		Strongly Agree		
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	x̄ ± S.D
I feel good/satisfied when I go through the patient information leaflet	4	4.4	4	4.4	16	17.8	66	73.3	3.60 ±0.78
Due to my condition, I feel lazy to read through the information leaflet	12	13.3	34	37.8	34	37.8	10	11.1	2.47 ± 0.85
The patient information leaflet increases my concerns about the use of medication	-	-	-		14	15.6	76	84.4	3.84 ± 0.36
I get stressed when I read through the information leaflet	10	11.1	36	40.0	34	37.8	10	11.1	2.49± 0.84
I feel upset when I do not understand the patient information leaflet included in the drug package.	10	11.1	14	15.6	40	44.4	26	28.9	2.91± 0.94
I like it when I understand the information in the patient information leaflet without the help of the health professionals	-	-	2	2.2	10	11.1	78	86.7	3.84±0.58
As long as the drug is prescribed by a medical doctor, I don't bother to read the leaflets	6	6.7	14	15.6	50	55.6	20	22.2	2.93±0.80
I read the patient information leaflets based on healthcare professionals advice, not because I desire to	12	13.3	50	55.6	6	6.7	22	24.4	2.42± 1.1
The pharmacists should tell me what the patient information leaflet contains	4	4.4	8	8.9	14	15.6	64	71.1	3.53±0.83
The pharmacists advise me to read the patient information leaflet	12	13.3	60	66.7	8	8.9	10	11.1	2.18±0.80
I feel that information in the patient information leaflet is more useful than the information given verbally by healthcare professionals	-	-	12	13.3	6	6.7	72	80.8	3.67 ±0.70
Reading the patient information leaflet helps me use the drug properly	-	-	2	2.2	8	8.9	80	88.9	3.87 ±0.40
It is best to read the patient information leaflet before using the medication	2	2.2	2	2.2	8	8.9	78	86.7	3.80 ±0.58
Weighted Mean = 3.20									

Extent of patient information leaflet use in Ado LGA of Ekiti State, Nigeria

The result on extent of patient information leaflet use among pregnant women at Ado Local Government of Ekiti State, Nigeria is presented in Table 4. The respondents had positive affirmations to statements such as "I use the information leaflets to know the brand and composition of drugs'' (Mean=3.87); "I use the information leaflets to know the description and dosage of the drugs" (Mean=3.84); "I use patient information leaflets to know the side effect of the drugs on the mother and foetus" (Mean=3.84), which are greater than the average mean of 3.82. The results show that the pregnant women's extent of use of patient information leaflets in the study is high.

Table 4: Extent of patient information leaflet use among pregnant women

	Frequencies				
Statement	Very low	Low	Moderate	High	x̄ ± S.D
I use the information leaflets to know the brand and composition of drugs	-	2 (2.2%)	8 (8.9%)	80 (88.9%)	3.87 ±0.40
I use the information leaflets to know the description and dosage of the drugs	-	4 (4.4%)	6 (6.7%)	80 (88.9%)	3.84 ± 0.48
I use patient information leaflets to know the side effect of the drugs on the mother and foetus	-	2 (2.2%)	10 (11.1%)	78 (86.7%)	3.84 ± 0.42
Patient information leaflets provide with essential information to use the drug properly	-	6 (6.7%)	6 (6.7%)	78 (86.7%)	3.80± 0.55
Use of information leaflets guides on the drug to avoid during pregnancy	2 (2.2%)	4 (4.4%)	10 (11.1%)	74 (82.2%)	3.73± 0.66
Weighted Mean = 3.82					

Challenges confronting pregnant women in the use of patient information leaflets in Ado LGA of Ekiti State, Nigeria

Table 5 shows the challenges confronting pregnant women in the use of patient information leaflets in Ado LGA of Ekiti State, Nigeria. "Difficulty in reading because of too much of medical terms" (2.91) was shown by the mean score rating as the major challenge confronting pregnant women in the use of patient information leaflets, and followed by "Text font too small or not legible" (2.84), "Problem with language comprehension" (2.73), "Low literacy skill" (2.73), and lastly by "Information not detailed" (2.69) respectively.

Table 5: Challenges confronting pregnant women in the use of patient information leaflets

	Frequencies				
Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	x̄ ± S.D
Difficulty in reading because of too much of medical terms	8 (8.9%)	24 (26.7%)	26 (28.9%)	32 (35.6%)	2.91 ±1.00
Text font too small or not legible	8 (8.9%)	22 (24.4%)	36 (40.0%)	24 (26.7%)	2.84 ± 0.92
Problem with language comprehension	8 (8.9%)	28 (31.1%)	34 (37.8%)	20 (22.2%)	2.73 ± 0.91
Low literacy skill	8 (8.9%)	30 (33.3%)	30 (33.3%)	22 (24.4%)	2.73 ± 0.93
Information not detailed	8 (8.9%)	36 (40.4%)	22 (24.4%)	24 (26.7%)	2.69 ± 0.97
Weighted Mean = 2.78					

Research Hypotheses

Hypothesis 1: There is no significant relationship between pregnant women's awareness and patient information leaflet use in Ado LGA of Ekiti State, Nigeria.

Table 6 shows that there is a significant relationship between pregnant women's awareness of patient information leaflets and patient information leaflet use (r=.254, n= 90; p=0.016<0.05). Hence, pregnant women's awareness of patient information leaflets influences their use of patient information leaflet. Hence, the null hypothesis is rejected.

Hypothesis 2: There is no significant relationship between pregnant women's attitude to patient information leaflets and patient information leaflet use in Ado LGA of Ekiti State, Nigeria.

Table 7 shows that there is a significant relationship between pregnant women's attitude to patient information leaflets and patient information leaflet use (r =.396, n=90; p=0.001<0.05). Hence, pregnant women's attitude to patient information leaflets influenced their patient information use in the study. The null hypothesis is therefore rejected.

Table 6: Pearson Product Moment Correlation (PPMC) showing the relationship between pregnant women's awareness of patient information leaflets and patient information leaflet use

Variables	Mean	Std. Dev.	n	r	p-value	Remarks
Patient information leaflet use	19.0900	2.2220				
			90	.254*	.016	Sig.
Awareness of patient info. Leaflets	22.2700	3.3810				

* Correlation is significant at the 0.05 level (2-tailed).

Table 7: Pearson Product Moment Correlation (PPMC) showing the relationship between pregnant women attitudes to patient information leaflets and patient information use

Variables	Mean	Std. Dev.	n	r	p-value	Remarks
patient information leaflet use	19.0900	2.2220				
			90	.396*	.001	Sig.
Attitude to patient info. Leaflets	41.5600	4.4700				

* Correlation is significant at the 0.05 level (2-tailed).

Hypothesis three: There is no significant joint contribution of pregnant women's awareness and attitude to patient information leaflets on patient information leaflet use in Ado LGA of Ekiti State, Nigeria

Table 8 shows the joint effect of pregnant women's awareness and attitude toward patient information leaflets on patient information leaflet use. The table also shows a coefficient of multiple correlation R=.528 and a multiple R2 of .279. This means that 27.9% of the variance was accounted for by the two predictor variables when taken together. The significance of the composite contribution was tested at α=0.05. The table also shows that the analysis of variance for the regression yielded an F-ratio of 16.835 (significant at 0.05 level). This implies that the joint contribution of the independent variables to the dependent variable was significant and that other variables not included in this model may have accounted for the remaining variance.

Table 9 shows the relative contribution of the independent variables to the dependent variable, expressed as beta weights, viz: Awareness of patient information leaflet (β=.359, p<.05), and attitude to patient information leaflets (β= .475, p<.05). Hence, it could be deduced that awareness of patient information leaflet and attitude to patient information leaflets were significant i.e., they could independently and significantly predict pregnant women patient information leaflet use in the study.

Table 8: Summary of Regression analysis showing the joint effect of pregnant women's awareness and attitude to patient information leaflets on patient information leaflet use

R	R Square			Adjusted R Square	Std. Error of the Estimate	
.528	.279			.262	1.908	
			ANOVA			
Model	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Regression	122.572	2	61.286	16.835	.001	Sig.
Residual	316.717	87	3.640			
Total	439.289	89				

Table 9: Summary of regression analysis showing the relative contribution of pregnant women's awareness, and attitude to patient information leaflets on patient information leaflet use

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig. p
	B	Std. Error	Beta Contribution		
(Constant)	4.028	2.605		1.546	.126
Awareness of patient info. Leaflets	.236	.061	.359	3.846	.000
Attitude to patient info. Leaflets	.236	.046	.475	5.087	.000

Discussion

In this study, pregnant women were aware of patient information leaflets. This finding is consistent with studies by Bhosale (2016), who found that women were more knowledgeable and aware of drug information leaflets than men. A study by Singh et al. (2016), also showed that 98% of the patients were aware of the package inserts for medicines. Aljoher et al. (2018), stated that 58% of the responding women always looked at the medication leaflet before taking a medication, which means they are aware of the patient information leaflets enclosed in medicine packs.

The Majority of pregnant women in the study reported that they had a positive attitude towards using patient information leaflets. The finding of this study conforms with that of Alkhamees et al. (2018), that most participants (68.1%) reported feeling positive when reading the drug leaflets before taking a drug. This finding also supports the claim of Rajasundaram et al. (2006), who found that the overall impression regarding the patients' attitude towards written information being given to them was overwhelmingly positive.

The study reported a high extent of use of patient information leaflets by the study's respondents. This result negates the finding by Katabalo et al. (2022), who confirmed that the majority of the pregnant women in their study (89.8%) have never read the drug information leaflet. However, a study carried out by Al Jeraisy et al. (2023), in which most of the participants reported that PILs always/usually add to their knowledge of

medicines (70.6%) and that reading PILs positively impacted their medication adherence (64.9%) by utilising the patient information leaflets.

One of the major challenges confronting pregnant women in using patient information leaflets in Ado LGA is the difficulty in reading, because of the several medical terms they contain. Another challenge encountered by pregnant women is the small font size of the patient information leaflets and their non-legibility. The findings of this study agreed with the statement of Singh et al. (2016) that the majority of the physicians felt that the language written in the package insert is quite technical, making it difficult for a layman to understand.

In addition, findings of this study also revealed that pregnant women's awareness and attitude influenced their patient information leaflet usage. The implication is that when awareness and attitudes influence the use of patient information leaflets among pregnant women, they can improve understanding, support informed decision-making, increase safety, enhance health literacy, and improve communication between pregnant women and healthcare providers.

Conclusion

The study discussed extensively patient information leaflets, and in the light of the findings obtained in this study, the following conclusions were reached. Pregnant women in ado local government area of Ekiti state, Nigeria are aware of patient information leaflets enclosed in medicines packages. The attitude of pregnant women in Ado LGA of Ekiti state, Nigeria towards patient information leaflet use is positive. Judging from the study, awareness and attitude of pregnant women in the local government area influenced the use of patient information leaflets. It is noteworthy that pregnant women's awareness and attitudes towards patient information leaflets in drug packs are critical to drug safety, access to reliable information, health literacy, self-advocacy, side-effect detection, and collaboration with healthcare providers. Medical librarians can support these goals by promoting awareness, providing educational resources, and disseminating accurate and easy-to-understand information about medications during pregnancy.

Limitations of this Study

Due to time constraints, the research lasted two weeks and was conducted in Ado Local Government Area, Ekiti State, Nigeria. At the time the study was conducted, efforts to determine the total number of registered pregnant women from each of the three health centres proved unsuccessful. However, questionnaires were given to pregnant women who attended prenatal meetings at the three health centres during the two weeks the study was conducted.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Health care professionals, particularly health information professionals, should raise the level of awareness of patient information leaflets among pregnant women by proactively engaging them in discussions about the importance of patient information leaflets during their weekly prenatal meetings, emphasising their role in ensuring medication safety during pregnancy.

2. To ensure the accuracy, readability, and cultural appropriateness of patient information leaflets for pregnant women, health information specialists should collaborate with healthcare providers and pharmaceutical businesses.

3. Pharmaceutical companies should prioritise clarity and conciseness in drug information leaflets, including indications, contraindications, possible side effects and dosages, in their patient information leaflets, especially targeting pregnant women. In addition, the leaflet can be provided with fascinating colours and illustrations to encourage pregnant women to read them.

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