

## ASSESSMENT OF AWARENESS AMONGST PREGNANT WOMEN ON THE EFFECTS OF SELF-MEDICATION ON THE FOETUS

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### Abstract

**Background:** Self-medication, as defined by the World Health Organization, refers to the use of medicinal products by consumers to treat self-recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms. **Materials and Methods:** This was a prospective study on randomly selected group of 100 pregnant women attending the department of Obstetrics and Gynecology of our institute. Data collection was done through a pre-structured questionnaire. **Result:** The average age was 23.7±3.68 years. The majority of participants were in the age group of 18-29 years. 74% of participants were taking iron and folic acid supplements, but only 38.5% were aware of the purpose of these supplements, and only 16% knew the recommended duration for taking. Additionally, only half of participants were taking these supplements regularly. **Conclusion:** Pregnant women show a lack of awareness about the impact of drugs on the health of the fetus. Over half of them regularly take medication, but a small percentage opt for self-medication during pregnancy, indicating a preference for seeking advice from a physician.

## INTRODUCTION

Self-medication, as defined by the World Health Organisation (WHO), refers to the use of medicinal products by consumers to treat self-recognized disorders or symptoms. It also includes the intermittent or continued use of medication prescribed by a physician for chronic or recurring diseases or symptoms.<sup>[1]</sup>

This practice is prevalent in both urban and rural areas of developing countries like India. Several key factors contribute to the widespread adoption of self-medication, particularly for common ailments. These factors include high consultation fees, unregulated availability of prescription drugs, illiteracy, and time constraints. Additionally, many individuals place unwavering trust in the drug recommendations provided by under-qualified store employees at local pharmacies.<sup>[2]</sup>

Numerous studies on drug utilization patterns during pregnancy have been conducted worldwide, including in India. Pregnant women are prescribed various categories of drugs depending on their specific illnesses. Mashayekhi et al. conducted a study to evaluate the awareness among pregnant women regarding the potential effects of drugs on the fetus.<sup>[3]</sup>

A study was conducted to investigate the drug use behavior in pregnant women in rural India. It was

found that self-medication during pregnancy is a common practice. Similar findings were observed in a previous study conducted in the USA, where over-the-counter medications that are not recommended during pregnancy, such as ibuprofen, were used at a surprisingly high rate. Other studies have also indicated a high consumption of over-the-counter drugs among pregnant mothers, which can have harmful effects on the fetus. Additionally, the use of over-the-counter and herbal drugs during pregnancy was found to be common. However, it was noted that not all women were supplementing with folic acid and anemic pregnant women were not prescribed iron by healthcare providers. This lack of awareness and knowledge regarding the effects of drugs on the fetus contributes to this issue. The present study assessed the awareness of drug use during pregnancy, the knowledge of pregnant women regarding the effects of drugs on the fetus, and the prevalence of self-medication among pregnant women.<sup>[4,5]</sup>

## MATERIALS AND METHODS

This study was conducted prospectively, focusing on a sample of 100 pregnant women who were randomly selected. The study was carried from August 2022 to February 2024 in the department of Obstetrics and Gynecology at Anugrah Narayan Magadh Medical College, Gaya. This study started after approval from

the institutional research and ethical committee. an informed and written consent was obtained from all the participating subjects before the commencement of study.

The inclusion criteria for this study were pregnant women who were attending the antenatal clinic at the same tertiary care hospital.

Data was gathered through the utilization of a pre-designed semi-structured questionnaire consisting of 26 inquiries. The questionnaire employed was an adapted version of a previously validated survey conducted by Nordeng et al. The questionnaire was modified before being administered to the participants. The questionnaire encompassed details regarding the demographic profile of the participants, the medications they were currently using, the symptoms that would prompt them to seek medical advice, the symptoms for which they would resort to self-medication, awareness about potential drug side effects, and their beliefs and attitudes towards medication usage in general. The data was obtained through interviews, with each participant being questioned in a language they understood, in a designated room. Prior to commencing the study, the patients provided informed voluntary written

consent, with an assurance of information confidentiality. Participation was entirely voluntary, and responses were categorized as either agree or disagree. The frequency of different variables was computed using MS Excel software.

## RESULTS

In the current research, a total of 100 participants were included. The average age of the participants was  $23.7 \pm 3.68$  years. None of the participants were younger than 18 years old. It is evident from Table 1 that more than 90% of the participants were between 18-29 years old. Only one participant was in the 40 and above age group.

The educational background of the participants was outlined in [Table 2].

The patients' economic status was predominantly in the low income group (83%, family earning less than INR 1 Lac) and lower middle income group (17%, less than INR 3 Lacs, [Table 3]). This aligns with the expectation that mostly lower or lower middle class individuals visit state-run hospitals.

A mere 6% of the total 100 women surveyed were employed. [Table 4]

**Table 1: Age Distribution of study participants.**

S.No	Age in years	Frequency (%)
1	18-19 years	10 (10)
2	20-29 years	81 (81)
3	30-39 years	8 (8)
4	40 and above	1 (10029)

**Table 2: Educational qualification of study participants.**

S.No	Education	Frequency (%)
1	Non-Matriculate	84 (84)
2	Matriculate	12 (12)
3	Graduate	4 (4)

**Table 3: Socioeconomic status of study participants.**

S. No	Economic status (annual income in rupees)	Frequency (%)
1	<1 lakh	83 (83)
2	1-3 lac	17 (17)

**Table 4: Occupation of study participants.**

S.No	Occupation	Frequency (%)
1	Employed	6 (6)
2	House wives	95 (95)

**Table 5: Medication Preferred by study participants**

S.No	Medication Preferred	Frequency (%)
1	Allopathy	99(99)
2	Ayurvedic	1(1)
3	homeopathy	0

**Table 6: Others**

	Yes (%)	No (%)
Current medication		
Taking any form of medication	74(74)	26(26)
Awareness about purpose of medication	38(38)	62(62)
Awareness about duration of medication	16(16)	84(84)
Current medication with advice of chemist for minor problem	3(3)	97(97)
Patient taking self medication off and on	6(6)	(94)
Patient taking medication regularly	51(51)	49(49)
Knowledge about effect of drugs on the foetus during pregnancy	9(9)	91(91)
Awareness about purpose of vaccination	51(51)	49(49)

A total of 8.5% of participants were found to be engaging in self-medication, with 5.5% self-prescribing and 3% following the advice of chemists. Only 9% of the patients were aware of the potential effects of drugs on the foetus during pregnancy. It was observed that 74% of participants were taking iron and folic acid supplements, yet only 38.5% were aware of the purpose behind these supplements and a mere 16% knew the recommended duration for taking them [Table 6]. Additionally, only 51% of the participants were consistently taking these supplements.

## DISCUSSION

In the current investigation, 10% of the individuals belonged to the age group below 20 years, a data that closely aligns with the findings of Abasiubong et al, where 8.7% fell into the same age bracket.<sup>[6]</sup> However, Abasiubong et al's study revealed that 44.6% and 41.3% were in the age groups of 20-29 years and 30-39 years, respectively, totaling 85.9% in the 20-39 years age group, compared to the current study's 89.5%. Notably, the present study indicated that 81.5% were in the age group of 20-29 years, with only 8% falling into the 30-39 age group.<sup>[7]</sup> The higher percentage of individuals in the 20-29 age group could be attributed to the cultural norm in India where marriages occur at a young age, leading to social pressure to have children early in the marriage. Furthermore, 84% of cases in the present study had an educational background below the 10th standard. This educational level was lower than that observed in the study by Abasiubong et al, where a total of 73.2% had received education up to the secondary level (9.9% had no education, 19.5% had completed primary education, and 43.8% had attained secondary education).<sup>[8]</sup> As seen in previous research in various communities, sociodemographic factors such as education, occupation, and local beliefs can significantly influence patients' attitudes and beliefs towards medications.

In our research, only 8.5% of participants reported using self-medication. Abasiubong et al found that approximately 25% and 35% of pregnant women with higher education levels used analgesics and antibiotics, respectively. In contrast, only 6.9% and 12.0% of those with lower education levels used the same substances. These results indicate a significant difference in self-medication practices based on

education level. This trend was also observed in a study by Adhikari et al on pregnant women in rural India, where a high level of compliance (97.7%) was noted among socioeconomically disadvantaged individuals who preferred following medical advice over self-medication. Additionally, Gharoro and Igbafe et al found that 12.08% of participants used native herbal drugs for self-medication, a percentage similar to our study's findings.<sup>[9-10]</sup>

## CONCLUSION

Pregnant women often lack awareness about the impact of drugs on the health of the fetus. A majority of women regularly take medication, but a small percentage opt for self-medication during pregnancy. This indicates that women tend to seek advice from a physician rather than self-medicate while pregnant.

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