e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

Publish: Association of Indonesian Teachers and Lecturers
International Journal of Health Sciences (IJHS)
Journal Homepage: https://jurnal.agdosi.com/index.php/IJHS/index
Volume 4 | Number 3 | September 2026 |

The Negative Impact Of Consuming Traditional Medicine Made From Natural Herbs (Jamu) On The Knowledge Of Pregnant Women

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Abstract

Background: Traditional herbal medicines, including herbal remedies, are widely used in the community and can also be consumed by pregnant women. Limited knowledge regarding these aspects may increase the risk of inappropriate herbal use during pregnancy. Objective: This study aims to determine the impact of traditional herbal medicine consumption on pregnant women's knowledge regarding the safety and potential negative effects of herbal medicine use during pregnancy. Method: This study used a quantitative descriptive analytical design with a cross-sectional approach. This study involved 80 pregnant women selected using purposive sampling. Data were collected using a structured questionnaire that assessed knowledge about herbal medicine safety, consumption behavior, reasons for consumption, and potential risks during pregnancy. Data were analyzed using frequency distribution and cross-tabulation, with the Chi-Square test used to examine the relationship between knowledge level and herbal medicine consumption. Results: The results showed that 46 respondents (57.5%) had good knowledge and 34 respondents (42.5%) had poor knowledge. A total of 31 respondents (38.8%) reported consuming traditional herbal medicine during pregnancy. Among respondents with poor knowledge, 20 (58.8%) consumed herbal medicines, compared to 11 (23.9%) among respondents with good knowledge. Statistical analysis showed a significant association between knowledge level and herbal medicine consumption (p=0.003). Conclusion: Herbal medicine consumption during pregnancy was more common among respondents with inadequate knowledge. Improving the knowledge of pregnant women through appropriate health education and consultation with health professionals is important to minimize the inappropriate use of traditional herbal medicines during pregnancy.

Keywords : Negative Impact, Traditional Medicine, Jamu, Knowledge, Pregnant Women

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e-ISSN: 2987-0836 DOI: https://doi.org/10.59585/ijhs

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1. Introduction

Pregnancy is a physiological condition that requires special attention to the health of both mother and fetus. During pregnancy, mothers can experience various symptoms such as nausea, vomiting, fatigue, pain, sleep disturbances, and other issues. This condition leads some mothers to seek various ways to address these symptoms, including using traditional herbal remedies.

The use of traditional medicine has become a part of people's daily lives in many countries. In Indonesia, herbal medicine (jamu) is a form of traditional medicine that has been used for generations. The use of herbal medicine can be influenced by culture, family customs, previous experiences, beliefs about natural ingredients, and information from the surrounding environment.

The assumption that all natural products are safe needs to be addressed. Herbal products can contain active ingredients that have pharmacological effects and can interact with physiological conditions and other medications. For pregnant women, safety is even more important due to considerations for the mother's health and fetal development.

A systematic review of herbal medicine use during pregnancy found reports of side effects, potential herb-drug interactions, and some adverse pregnancy outcomes with certain herbal products. The study also emphasized that evidence for the safety of various herbal products is limited.

Another study in Asian countries showed that of the 33 herbal remedies used by pregnant women, some were considered safe, some required caution, some were potentially dangerous, and for some products, adequate safety information was not yet available

A more recent review in 2026 indicated that the overall evidence regarding herbal use during pregnancy is quite heterogeneous. Certain herbs have shown signs of potential risk, so caution is still needed when using products without robust safety data.

One factor that can influence the use of traditional medicine is knowledge. Pregnant women who lack knowledge about herbal safety may more easily accept the information that all natural ingredients are safe for consumption. Conversely, good knowledge can help mothers consider the type of product, ingredients, dosage, and the need for consultation with a healthcare professional.

Product quality is also a concern. Herbal products can vary in content based on the part of the plant used, processing method, and production process. Some herbal products also have the potential to contain contaminants such as heavy metals, pesticides, microorganisms, or other ingredients not listed on the label

WHO emphasizes the importance of safety, quality, and monitoring of the use of traditional medicines. Safety oversight is crucial because traditional products are widely used in many countries.

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Increasing pregnant women's knowledge about the use of traditional medicine is an important part of preventing inappropriate herbal use. Health workers need to provide easy-to-understand information about the benefits, limited evidence, potential risks, and the importance of consulting a doctor before using herbal products during pregnancy.

Based on this description, this study was conducted to determine the impact of consuming traditional medicine from natural herbs (jamu) on the knowledge of pregnant women.

2. Research Methods

This study used a quantitative method with an analytical descriptive design and a cross-sectional approach to describe pregnant women's knowledge and consumption behavior of traditional herbal medicines (jamu), as well as analyze the relationship between the two variables at one point in time. The research was conducted at a health service facility providing antenatal care from April to June 2026, including preparation, data collection, data processing, and analysis.

The population consisted of all pregnant women receiving antenatal services at the research location, with a sample of 80 pregnant women selected using purposive sampling. The inclusion criteria were pregnant women aged ≥18 years who received antenatal care at the research location, could communicate and read well, and were willing to participate, while pregnant women who did not complete the questionnaire or withdrew from the study were excluded. The independent variable was the consumption of traditional herbal medicines, while the dependent variable was pregnant women's knowledge regarding the safety and potential negative effects of herbal medicine consumption during pregnancy.

Data were collected using structured questionnaires covering knowledge of herbal medicine, including its benefits, side effects, safety, dosage, drug interactions, risks to the mother and fetus, and the importance of consulting health professionals, as well as consumption behavior, including type, frequency, reasons for use, information sources, and consultation with health workers. Data were analyzed using univariate analysis to describe respondent characteristics, knowledge, and consumption behavior, while bivariate analysis using the Chi-square test was conducted to determine the relationship between knowledge and herbal medicine consumption, with a significance level of $\alpha = 0.05$. The study also applied ethical principles, including informed consent, confidentiality, anonymity, and the right of respondents to refuse or withdraw from participation.

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3. Research Results And Discussion

a. Research result

Table 1. Characteristics Of Pregnant Women

Characteristics	n	%
Age <20 years	5	6.3
Age 20–35 years	65	81.2
Age >35 years	10	12.5
Basic education	21	26.3
Secondary education	43	53.7
Higher education	16	20.0
Primigravida	37	46.3
Multigravida	43	53.7
Total	**80**	**100**

The majority of respondents were in the 20–35 age group (65 people) (81.2%). Based on education, the majority of respondents had secondary education (43 people) (53.7%). Based on pregnancy status, 43 respondents (53.7%) were multigravida.

Table 2. Respondents' Level Of Knowledge

Level of Knowledge	n	%
Good	46	57.5
Not enough	34	42.5
Total	80	100

A total of 46 respondents (57.5%) had good knowledge of traditional herbal medicine, while 34 respondents (42.5%) had poor knowledge.

These results indicate that although most pregnant women have good knowledge, there is still a large proportion who do not have adequate understanding regarding the safety of using herbs during pregnancy.

Table 3. Consumption Of Traditional Herbal Medicines During Pregnancy

Consuming Herbal Medicine	n	%
Consuming	31	38.8
Do not consume	49	61.2
Total	80	100

A total of 31 respondents (38.8%) reported using traditional herbal medicine during pregnancy. Meanwhile, 49 respondents (61.2%) did not use herbal medicine.

The use of herbal medicines during pregnancy is not a phenomenon limited to one region. A systematic review of Asian countries found that approximately 47% of women in the reviewed studies used at least one herbal medicine during pregnancy.

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Table 4. Level Of Knowledge Based On Herbal Medicine Consumption

Level of Knowledge	Consuming Herbal Medicine	Do Not Consume	Total
Good	11 (23.9%)	35 (76.1%)	46
Not enough	20 (58.8%)	14 (41.2%)	34
Total	31	49	80

In the group with less knowledge, 20 respondents (58.8%) consumed herbal medicine. Meanwhile, in the group with good knowledge, 11 respondents (23.9%) consumed herbal medicine.

Square test showed a p value of 0.003 , so there is a significant relationship between the level of knowledge and the behavior of consuming traditional herbal medicine.

b. Discussion

The study results showed that herbal medicine consumption was more common among respondents with less knowledge. This demonstrates the importance of knowledge in helping pregnant women make informed decisions about using herbal products.

Lack of knowledge can lead mothers to assume that all herbal products are low-risk because they are derived from natural ingredients. However, some medicinal plants possess biological activity that can have specific effects on the body, and not all of them have been adequately studied in pregnancy.

A systematic review of the safety of herbal medicines during pregnancy found that some herbal products were associated with potential side effects and drug interactions, while many others lacked strong evidence of safety

Research on the safety classification of herbal products for pregnant women in Asian countries also shows that not all herbs can be categorized as safe. Some products are classified as requiring caution or potentially harmful, while others lack sufficient safety information.

Knowledge of pregnant women is crucial in preventing the use of products that have the potential to cause negative effects. Good knowledge allows mothers to consider information regarding ingredients, dosage, product quality, and potential interactions with other medications.

sources can also influence a mother's decision. Information from family or social media sometimes doesn't fully explain the risks of herbal use during pregnancy.

Healthcare professionals need to play an active role in providing accurate information. Education should not only prohibit, but also explain why certain herbal products should be avoided or consulted before use.

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The most recent evidence from 2026 indicates that research on herbal use during pregnancy remains heterogeneous. While some specific herbs have been shown to have a potential risk for pregnancy outcomes, the overall evidence does not consistently show an increased risk for all herbal products. Therefore, the appropriate approach is to exercise caution based on the type of product and its safety evidence , rather than to assume that all herbs are dangerous or all herbs are safe.

WHO also emphasized the importance of monitoring the safety and quality of traditional medicines and pharmacovigilance systems for herbal products.

Improving pregnant women's knowledge through antenatal care is one step that can be taken to prevent inappropriate use of herbal medicine. Pregnant women should be encouraged to consult a healthcare professional before using traditional medicine, especially if they are currently taking other medications or supplements.

4. Conclusion And Suggestion

a. Conclusion

Based on the research results, it can be concluded that most respondents have good knowledge about traditional herbal medicine, namely 46 respondents (57.5%) , while 34 respondents (42.5%) have poor knowledge.

A total of 31 respondents (38.8%) consumed traditional herbal medicine during pregnancy, while 49 respondents (61.2%) did not consume herbal medicine.

Respondents with less knowledge had a higher proportion of herbal medicine consumption than respondents with good knowledge. The Chi- Square test results showed $p = 0.003$, indicating a significant relationship between knowledge level and traditional herbal medicine consumption.

This condition shows the importance of increasing pregnant women's knowledge regarding the safety, potential risks, quality, and use of traditional herbal medicines during pregnancy.

b. Suggestion

Pregnant women are advised to avoid consuming herbal medicines or products carelessly during pregnancy and to consult health professionals beforehand. Health workers and health care facilities should strengthen education regarding the safety of traditional herbal medicine as part of antenatal care, while families should support safe decision-making and avoid recommending herbal products without professional advice. Further research is recommended to examine the types, dosage, frequency, information sources, and reasons for herbal medicine use among pregnant women.

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