

CHAPTER I

INTRODUCTION

1.1 Research Background

Breastfeeding is a physiological process that every mother must prepare for to ensure family safety.¹ Physiological changes during breastfeeding can affect the concentration of drugs in the mother's blood, which is a major factor in drug transfer to breast milk.² Medications are categorized based on their safety level for breastfeeding women.³ Some medications that enter breast milk can have potential side effects on the baby. This is supported by research by Zaki and Pamabudi (2023), which shows that the use of antibiotics such as chloramphenicol and tetracycline can have toxic effects on infants.⁴ One of the reasons this happens is because breastfeeding mothers don't receive enough information about the effects and safety of medications.

The level of mothers' knowledge about drug safety is an important factor in their decision-making regarding the use of medication, whether independently or on the advice of healthcare professionals. Low levels of knowledge can lead to irrational medication use. Including traditional medicines used without consulting a healthcare professional can have a direct negative impact on breastfeeding mothers.⁵ In urban areas, it is easier to access healthcare services and information about the safe use of medications than in rural areas. This is because in urban areas, the number of healthcare facilities such as community health centers, clinics, and pharmacies is much higher and more easily accessible. This can improve

¹ Abdul Muchid, *Pedoman Pelayanan Farmasi Untuk Ibu Hamil Dan Menyusui* (2006), <https://farmalkes.kemkes.go.id/unduh/pedoman-pelayanan-farmasi-untuk-ibu-hamil-dan-menyusui/>.

² Ilham Bagus Sagitaras et al., "Profil Pengetahuan Ibu Menyusui Tentang Keamanan Penggunaan Obat Pada Swamedikasi," *Jurnal Farmasi Komunitas* 3, no. 2 (2016).

³ Yunita Suffiana, *Pemberian Obat Pada Ibu Hamil Dan Menyusui*, May 7, 2019, <https://rsudza.acehprov.go.id/tabloid/2019/05/07/pemberian-obat-pada-ibu-hamil-dan-menyusui/>.

⁴ Annisa Azizah Zaki and Wiyarni Pambudi, "Hubungan Pengetahuan Mahasiswa Fakultas Kedokteran Universitas Tarumanagara Tentang Keamanan Penggunaan Obat Pada Ibu Menyusui," *JKKT- Jurnal Kesehatan dan Kedokteran Tarumanagara* 2 (2023).

⁵ Gabriela Pereira et al., "Self-Medication Among Pregnant Women: Prevalence and Associated Factors," *Frontiers in Pharmacology* 12 (December 2021): 659503, <https://doi.org/10.3389/fphar.2021.659503>.

breastfeeding mothers' access to routine check-ups, consultations, and health education services. Conversely, in villages, these facilities are often limited and far away, leading to suboptimal service delivery.⁶

Other factors that play an important role in the drug consumption patterns of breastfeeding mothers are economic and social influences. High healthcare costs may prevent low-income individuals from accessing essential medical services. At the same time, social factors such as family support, especially from partners or parents, strongly influence breastfeeding mothers' decisions regarding medication use. Emotional and informational support from family can promote adherence to prescriptions and reduce the risk of self-medication. Conversely, when families encourage traditional therapies or over the counter drugs, mothers are more likely to follow these practices without consulting medical professionals.⁷

This research was conducted in Sambirejo Village, Mantingan District, Ngawi Regency, due to the limited availability of data on medication use among breastfeeding mothers in the area. Furthermore, the lack of adequate information received by breastfeeding mothers regarding the safe use of medications may increase the risk of side effects, including adverse impacts on child growth and development. Therefore, this study aims to assess the level of knowledge and medication use patterns among breastfeeding mothers in the village, which can serve as a foundation for educational interventions to improve maternal and child safety. The findings of this research are expected to provide an overview of the correlation between knowledge and medication use among breastfeeding mothers in Sambirejo Village, Mantingan District, Ngawi, and can be utilized by the village government or healthcare workers to inform appropriate follow-up actions.

1.2 Research Problems

The research problems in this study are as follows:

1. How are the characteristics of the respondents, namely breastfeeding mothers who use medications in Sambirejo Village, Mantingan, Ngawi?

⁶ Nunik Puspitasari, "Quality of Life During Pregnancy: A Comparative Study Between Urban and Rural Areas in Indonesia," *Jurnal Biometrika Dan Kependudukan* 12, no. 1 (2023): 1, <https://doi.org/10.20473/jbk.v12i1.2023.64-73>.

⁷ Siti Novianti, "Faktor-Faktor Perilaku Yang Mempengaruhi Konsumsi Tablet Fe Dan Kejadian Anemia Pada Ibu Hamil Di Puskesmas Karanganyar Kota Tasikmalaya," *Jurnal Kesehatan Dan Kebidanan Nusantara* 2, no. 1 (2024): 1, <https://doi.org/10.69688/jkn.v2i1.79>.

2. How is the level of knowledge of breastfeeding mothers regarding medication use in Sambirejo Village, Mantingan, Ngawi?
3. How are the patterns of medication use among breastfeeding mothers in Sambirejo Village, Mantingan, Ngawi?
4. How is the correlation between the level of knowledge and medication use behavior among breastfeeding mothers in Sambirejo Village, Mantingan, Ngawi?

1.3 Research Objectives

The objectives of this study are as follows:

1. To identify the characteristics of respondents, namely breastfeeding mothers who use medications in Sambirejo Village, Mantingan District, Ngawi Regency.
2. To assess the level of knowledge of breastfeeding mothers regarding medication use in Sambirejo Village, Mantingan District, Ngawi Regency.
3. To examine the patterns of medication use among breastfeeding mothers in Sambirejo Village, Mantingan District, Ngawi Regency.
4. To analyze the correlation between the level of knowledge and medication use behavior among breastfeeding mothers in Sambirejo Village, Mantingan District, Ngawi Regency.

1.4 Research Benefits

1. Theoretical Benefits

The results of this study are expected to add to the body of knowledge and can be used as a reference for further research, particularly regarding the correlation between knowledge and medication use by breastfeeding women.

2. Practical Benefits

The results of this research are expected to serve as a basis for village governments or health workers, particularly in Sambirejo Village, to provide accurate information to the community about medications and encourage more active participation in counselling regarding the safe use of drugs.

1.5 Authenticity of The Research

Research on medication use in breastfeeding mothers has been conducted by several researchers, as shown in Table 1 below.

Table 1 Authenticity of The Research

Research Title	Research Methodology	Variable	Results	Differences in Research
Medication use Profile in Pregnant and Breastfeeding Mothers in the Surabaya Region ⁸	Quantitative descriptive (survey)	Medication use Profile in Pregnant and Breastfeeding Mothers in the Surabaya Region	Pregnant women obtain medication and supplements through healthcare professionals (100%). Breastfeeding mothers obtain medication and supplements through self-medication (84.5%) and through healthcare professionals (15.5%). The medication and supplements obtained through self-medication are already correctly indicated and dosed (100%). Pregnant respondents had no constraints in using medication (0%), but still had concerns about using it (67.6%). Breastfeeding respondents still had constraints when using medication (5.26%) and were worried about using it (14.3%).	The correlation between knowledge and medication use in breastfeeding mothers in Sambirejo Village
Knowledge Profile of Breastfeeding Mothers Regarding the Safety of Medication use ⁹	Cross-sectional survey	Knowledge Profile of Breastfeeding Mothers Regarding the Safety of Medication use	The survey results showed that 72 respondents (65%) had poor knowledge, 36 respondents (33%) had moderate knowledge, and only 2 respondents (2%) demonstrated good knowledge. Statistical analysis revealed no significant correlation between the highest level of formal education and the level of knowledge regarding the safety of self-medication during breastfeeding. These findings indicate that the overall knowledge of mothers about the safety of self-medication while breastfeeding remains	The correlation between knowledge and medication use in breastfeeding mothers in Sambirejo Village

⁸ Aminatush Ummah et al., "Profil Penggunaan Obat Pada Ibu Hamil dan Menyusui di Wilayah Surabaya," *Jurnal Farmasi Komunitas* 5, no. 1 (2018).

⁹ Ilham Bagus Sagitaras et al., *Profil Pengetahuan Ibu Menyusui Tentang Keamanan Penggunaan Obat Pada Swamedikasi*, 3, no. 2 (2016).

Research Title	Research Methodology	Variable	Results	Differences in Research
			inadequate. Therefore, it is strongly recommended that pharmacists and healthcare professionals provide targeted education and health promotion programs to improve awareness and ensure safer self-medication practices among breastfeeding mothers.	
Prevalence, safety evidence, and determinants of medicine use during breastfeeding ¹⁰	Systematic review/meta-analysis of recent studies	Prevalence, safety evidence, and determinants of medication use during breastfeeding	In the past six months, 232 women (78.9%) reported using medications, of whom 170 (64.4%) obtained them without a prescription. Medication use was more common among women with younger infants (adjusted prevalence ratio [aPR] = 1.4; 95% CI: 1.1–1.6), higher educational attainment (aPR = 1.3; 95% CI: 1.1–1.4), and the absence of chronic diseases (aPR = 1.1; 95% CI: 1.1–1.3). The most commonly used antibiotic was metronidazole, reported by 137 participants (46.6%), with a relatively high relative infant dose (RID) ranging from 11% to 24%. This was followed by amoxicillin and ampicillin/cloxacillin, used by 112 participants (38.1%). Paracetamol was the most frequently consumed medication overall (74.5%). In terms of safety classification, 61.0% of medications were considered compatible with breastfeeding, 35.4% were possibly compatible, and 2.6% were potentially harmful. Medications requiring careful use included furosemide, cyproheptadine, phenylpropanolamine, metronidazole, acetaminophen with caffeine, and griseofulvin, due to risks such as significant infant exposure, lactation suppression, or insufficient safety data.	The correlation between knowledge and medication use in breastfeeding mothers in Sambirejo Village

¹⁰ Ritah Nakijoba et al., “Prevalence, Safety Evidence, and Determinants of Medicine Use during Breastfeeding among Women in Kampala, Uganda,” *BMC Women’s Health* 25 (August 2025): 387, <https://doi.org/10.1186/s12905-025-03939-1>.

Research Title	Research Methodology	Variable	Results	Differences in Research
			Conversely, several commonly used medications, including dihydroartemisinin/piperaquine phosphate, artemether/lumefantrine, cefixime, pyrazinamide, and ethambutol, were generally considered acceptable during breastfeeding, although formal lactation safety studies remain limited.	

