

HOUSEWIVES' KNOWLEDGE OF MEDICINE MANAGEMENT THROUGH THE DAGUSIBU PROGRAM IN NEUSU JAYA VILLAGE, BAITURRAHMAN DISTRICT

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ABSTRACT

Proper medicine management is an essential component of promoting the rational use of medicines. The DAGUSIBU program (Obtain, Use, Store, and Dispose Medicines Properly) was developed as an educational initiative to improve public knowledge of appropriate medicine management. This study aimed to analyze the level of housewives' knowledge regarding medicine management through the DAGUSIBU program in Neusu Jaya Village, Baiturrahman District. A descriptive study with a cross-sectional approach was conducted involving 66 housewives selected using an accidental sampling technique. Data were collected using a structured questionnaire and analyzed descriptively. The results showed that most respondents had a moderate level of knowledge (48.5%), followed by a good level (42.4%) and a poor level (9.1%). Knowledge regarding obtaining and using medicines was categorized as good, whereas knowledge of proper medicine storage and disposal was categorized as moderate. It can be concluded that educational interventions on proper medicine storage and disposal should be strengthened to promote rational medicine management at the household level.

Keywords: DAGUSIBU; Medicine Management; Knowledge; Housewives; Medicine Use.

INTRODUCTION

Proper medicine management at the household level is essential for promoting the rational use of medicines (Aulia et al., 2025). Inappropriate practices in obtaining, using, storing, and disposing of medicines may increase

medication errors, reduce therapeutic effectiveness, and negatively affect public health and the environment (Hanif et al., 2023). The 2023 Indonesian Health Survey (SKI) reported that 41.0% of antibiotic users obtained antibiotics without a physician's prescription, mainly from pharmacies or licensed drug stores, highlighting the need for continuous public education on appropriate medicine management (Alfiana & Ningrum, 2022; Hanif et al., 2023; Kemenkes BKPK 2023, n.d.)

One strategy to improve public knowledge is the DAGUSIBU program (Obtain, Use, Store, and Dispose of Medicines Properly), initiated by the Indonesian Pharmacists Association (IAI). The program promotes appropriate medicine acquisition from authorized pharmaceutical facilities, correct medicine use, proper storage, and safe disposal of expired or damaged medicines. Through these activities, DAGUSIBU aims to improve public awareness, encourage rational medicine use, and reduce medication errors (Alfiana & Ningrum, 2022; Hasanah et al., 2025; Sabila et al., 2025)

Previous studies have reported varying levels of public knowledge regarding the DAGUSIBU program (Tambunan et al., 2024). Knowledge is influenced by factors such as educational level, occupation, and exposure to health information (Yulianto et al., 2022). Sabila et al. (2025) found that housewives generally had limited knowledge, particularly regarding medicine storage and disposal, whereas Hasanah et al. (2025) demonstrated that DAGUSIBU education significantly improved public knowledge, emphasizing the importance of continuous educational interventions (Alfiana & Ningrum, 2022; Aulia et al., 2025; Hasanah et al., 2025; Sabila et al., 2025)

Although several studies have investigated public knowledge of the DAGUSIBU program in different regions of Indonesia, the findings remain inconsistent due to differences in social characteristics, educational background, access to health information, and educational interventions. Information regarding housewives' knowledge of medicine management through the DAGUSIBU program in Neusu Jaya Village, Baiturrahman District, is still limited. Therefore, this study aimed to analyze the level of housewives' knowledge regarding medicine management through the DAGUSIBU program in Neusu Jaya Village as a basis for developing more effective educational programs (Alfiana & Ningrum, 2022; Aulia et al., 2025; Hasanah et al., 2025; Sabila et al., 2025).

METHODS

This descriptive study employed a cross-sectional design to analyze housewives' knowledge of medicine management through the DAGUSIBU program in Neusu Jaya Village, Baiturrahman District, Banda Aceh, Indonesia. The study was conducted in June 2024. The study population consisted of 187 housewives residing in Neusu Jaya Village. Using the Slovin formula with a 10% margin of error, a sample of 66 respondents was obtained. Respondents

were selected through accidental sampling and included housewives who met the inclusion criteria and provided written informed consent

Data were collected using a structured questionnaire consisting of two sections: respondents' characteristics (age, educational level, and occupation) and 20 knowledge items covering the four components of the DAGUSIBU program: Obtaining Medicines (Dapatkan), Using Medicines (Gunakan), Storing Medicines (Simpan), and Disposing of Medicines (Buang). Prior to data collection, the questionnaire was reviewed to ensure the appropriateness of its content and language. Knowledge was assessed using a dichotomous scoring system, with 1 point for each correct answer and 0 points for each incorrect answer. Total scores were converted into percentages and classified as good (75–100%), moderate (56–74%), or poor (<56%). After editing, coding, and tabulation, the data were analyzed descriptively using univariate analysis. The findings are presented as frequencies and percentages to describe respondents' knowledge of medicine management through the DAGUSIBU program.

RESULTS AND DISCUSSION

Table 1. Knowledge Level of Housewives on Medication Management through the DAGUSIBU Program in Gampong Neusu Jaya, Baiturrahman District

No.	Knowledge Level	Frequency (n)	Percentage (%)
1.	Good	28	42,4
2.	Moderate	32	48,5
3	Poor	6	9,1
4	Total	66	100

Source: Primary Data (2024).

The findings on the knowledge level of housewives regarding medicine management through the DAGUSIBU Program in Neusu Jaya Village, Baiturrahman District, are presented in Table 1. Table 1 shows that most respondents had a moderate level of knowledge (48.5%), followed by good (42.4%) and poor (9.1%) knowledge. These findings indicate that respondents generally understood the basic principles of medicine management; however, several aspects still require improvement through continuous educational interventions. Similar findings have been reported by Sabila et al. (2025), Tambunan et al. (2024), and Amarullah et al. (2025), who found that public knowledge of the DAGUSIBU program was generally at a moderate level, although further improvement is still required (Amarullah et al., 2025; Anggina Tambunan, Sylvi Adiana, 2024)

Knowledge is an important determinant of rational medicine management. Individuals with better knowledge are more likely to obtain, use, store, and dispose of medicines appropriately, thereby maintaining medicine

quality, safety, and therapeutic effectiveness. These findings support previous studies showing that educational level, occupation, and access to health information influence knowledge of medicine management, which is positively associated with appropriate household medicine management and rational medicine use (Alfiana & Ningrum, 2022; Aulia et al., 2025; Truly Anggraini, 2024)

Although the DAGUSIBU program has contributed to improving public knowledge, respondents with poor knowledge were still identified. Therefore, continuous educational interventions involving pharmacists, primary healthcare centers, and local government are required to strengthen public understanding and encourage appropriate medicine management practices. This finding is consistent with previous studies reporting that repeated educational and counseling programs significantly improve public knowledge regarding the DAGUSIBU program (Febriani et al. 2024; Hasanah et al. 2025; Oktresia and Gemantari 2024). To further identify strengths and gaps in respondents' knowledge, each component of the DAGUSIBU program was analyzed separately, as presented in Table 2.

Table 2. Knowledge Level of Housewives Based on the Components of the DAGUSIBU Program

DAGUSIBU Component	Question Numbers	Correct Responses (%)	Category
Obtaining Medicines (DA)	1–4	100	Good
Using Medicines (GU)	5–11	85	Good
Storing Medicines (SI)	12–17	66	Moderate
Disposing of Medicines (BU)	18–20	66	Moderate

Source: Primary Data (2024).

As shown in Table 2, respondents' knowledge varied across the four components of the DAGUSIBU program. The Obtaining Medicines (DA) component achieved the highest percentage of correct responses (100%) and was categorized as good, indicating that all respondents understood the importance of obtaining medicines from authorized pharmaceutical facilities and prescription-only medicines through a physician's prescription. This finding is consistent with previous studies reporting good public knowledge regarding appropriate medicine acquisition and the importance of obtaining medicines from legal sources (Amarullah et al., 2025; Truly Anggraini, 2024).

The Using Medicines (GU) component also demonstrated a good level of knowledge, with 85% correct responses. Most respondents understood the

appropriate use of medicines, including dosage, administration schedule, and compliance with healthcare professionals' instructions. These findings support previous studies showing that better knowledge contributes to rational medicine use (Alfiana & Ningrum, 2022; Anggina Tambunan, Sylvi Adiana, 2024; Aulia et al., 2025). In contrast, the Storing Medicines (SI) component was categorized as moderate, with 66% correct responses. This finding suggests that some respondents had limited knowledge regarding appropriate storage conditions, including temperature, humidity, and protection from direct sunlight. Similar findings have been reported by Tambunan et al. (2024) and Hanif et al. (2023), indicating that medicine storage remains one of the weakest components of the DAGUSIBU program (Anggina Tambunan, Sylvi Adiana, 2024; Hanif et al., 2023).

Similarly, the Disposing of Medicines (BU) component was categorized as moderate, with 66% correct responses. Respondents' knowledge regarding the proper disposal of expired or damaged medicines was still limited, particularly the importance of rendering medicines unusable before disposal to prevent misuse and environmental contamination. Previous studies have likewise demonstrated that educational interventions significantly improve public knowledge regarding appropriate medicine disposal (Febriani et al., 2024; Hasanah et al., 2025; Oktresia & Gemantari, 2024). Overall, respondents demonstrated good knowledge regarding obtaining and using medicines, whereas knowledge of medicine storage and disposal remained moderate. These findings highlight the need for continuous educational programs, particularly on medicine storage and disposal, to promote comprehensive and rational medicine management at the household level

CONCLUSION

This study found that the knowledge level of housewives regarding medication management through the DAGUSIBU Program in Gampong Neusu Jaya, Baiturrahman District, was generally at a moderate level. Respondents demonstrated good knowledge of obtaining and using medicines appropriately; however, their knowledge of proper medication storage and disposal still requires improvement. Therefore, more intensive and sustainable educational programs led by pharmacists and healthcare facilities, particularly focusing on medication storage and disposal, are needed to promote the implementation of rational medication management at the household level.

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