

Socialization of Beyond Use Date (BUD) Awareness to Enhance Therapeutic Effectiveness in Sindangratu Village, Garut Regency

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Abstract

Medicine is an important pharmaceutical preparation because it can support health and is widely used by housewives (IRT). Some people keep medicines as medicine supplies at home. In order to maintain the quality of medicines, knowledge is needed regarding the management of medicines in the household. This drug management applies to drugs purchased at pharmacies for self-medication as well as prescription drugs. With knowledge about good medication management, the community, especially housewives (IRT), can avoid the risks of irrational medication. Most people don't remember how long the medicine has been kept at home. So, people often use this medicine without looking at the expiration date. The time limit for using a drug that is not suitable for consumption before the primary packaging is opened is the definition of the expiration date. Beyond Use Date (BUD) is the time limit for drug use after the primary packaging is opened. This community service aims to provide education that can increase the community's understanding of Beyond Use Date (BUD). The method used is in the form of outreach such as lectures and questions and answers. The conclusion of service is an understanding of Beyond Use Date (BUD).

Keywords: Beyond Use Date (BUD), expired date

INTRODUCTION

Drugs are an essential pharmaceutical preparation as they play a vital role in supporting public health and are widely used by housewives. A significant portion of the community stores drugs at home as a form of self-medication supply. In order to maintain drug quality, it is necessary to have adequate knowledge of household drug management. This management applies to both over-the-counter medications purchased for self-medication and prescription drugs. By having sufficient knowledge about proper drug management, the community, particularly housewives, can avoid the risks associated with irrational drug use (Agustikawati, 2021).

The GeMa Cermat program (Gerakan Masyarakat Cerdas Menggunakan Obat / Smart Use of Medicines Movement) is one of the initiatives implemented by the government to enhance public knowledge regarding proper drug management. This initiative aims to educate the

public on the correct and rational use of medicines. One of the core components of this program is known as DAGUSIBU, which stands for how to Obtain, Use, Store, and Dispose of drugs properly (Ministry of Health, 2020).

While many households keep medications in stock, most people are often unaware of how long these medications have been stored. As a result, medications are frequently used without checking their expiration dates. The expiration date refers to the period during which a drug remains safe and effective before the primary packaging is opened. In contrast, the Beyond Use Date (BUD) refers to the period in which a drug should be used after the primary packaging has been opened (Novianti & Arang, 2021).

Public knowledge regarding drug storage remains relatively low. This is supported by a study conducted by Cokro et al., which found that 97% of respondents stored medications until they were

close to their expiration date (Cokro et al., 2021). Similarly, research by Alnahas et al. revealed that many university students continued to store and even consume drugs beyond their expiration dates (Alnahas et al., 2020). These findings indicate that a significant portion of the community still lacks proper knowledge of drug storage and management, which can be attributed to limited awareness of the impact of storage on drug quality (Cokro et al., 2021).

Moreover, the public's understanding of the Beyond Use Date (BUD) and its distinction from the Expiration Date (ED) is still minimal. Based on these findings, the authors are interested in conducting a further study on housewives' knowledge of BUD, as this understanding is crucial to prevent improper drug use in daily life. Additionally, this study is important as a foundation for improving pharmaceutical care services.

METHOD

This community service activity was conducted through an educational outreach method using visual aids in the form of a PowerPoint presentation (Listina et al., 2020). The main target of this activity was the general community, specifically in the socialization of Beyond Use Date (BUD) to improve the effectiveness of drug therapy in Sindangratu Village, Wanaraja District, Garut. The method applied was group counseling sessions. The information was not only delivered verbally but also reinforced through written materials in the form of leaflets that contained all the presented information. In addition, demonstrations were carried out to distinguish between drugs that are still safe for consumption and those that are not. This approach aimed to ensure that participants not only retained the information but could also share it with others, such as family members.

The activity was held on December 29, 2023, at the Community Sports Hall (GOR) of Sindangratu Village and was attended by 40 participants. Their educational backgrounds ranged from junior high school to bachelor's degree, with professions including housewives, laborers, entrepreneurs, and farmers living near the activity site.

The stages of implementation were as follows:

1. Preparation Stage

The preparation phase took approximately one week. It included literature reviews on BUD, identifying the lack of public knowledge on the topic, and the limited dissemination of BUD information from pharmacists to the community. Therefore, leaflets were prepared as supplementary educational materials to

help the public better understand the topic during the activity. A location survey was also conducted to ensure that the selected target audience was appropriate and relevant.

2. Implementation Stage

The community service was carried out on Friday, December 29, 2023, at the GOR Sindangratu. Upon arrival at the location, the team conducted the group counseling session, delivering the BUD material interactively with the aid of PowerPoint and leaflets.

3. Evaluation Stage

During the activity, several challenges were encountered. One of the primary obstacles was the reluctance of some community members around the venue to engage in discussions regarding BUD, possibly due to shyness or lack of confidence. A proposed solution to this issue includes creating a more comfortable environment and offering small tokens of appreciation to make the activity more engaging and encourage broader community participation in future events.

DISCUSSION

This activity, attended by 40 participants, yielded positive results in terms of increasing public knowledge regarding Beyond Use Date (BUD). Prior to the presentation of the BUD material, it was found that 85% of participants reported storing medications at home. Furthermore, 87.5% of the attendees had never previously heard of BUD, and 85% stated that they had never received any information regarding BUD from healthcare personnel. These findings highlight a significant knowledge gap within the community related to proper drug storage and the concept of BUD.

Table 1. Percentage of Pre-Test Responses on BUD Knowledge

No	Question	Percentage
1.	Q1: Do you still keep leftover medications at home?	85%
2.	Q2: Have you ever heard of Beyond Use Date (BUD)?	87,5%
3.	Q3: Have you ever received BUD information from a healthcare professional?	85%

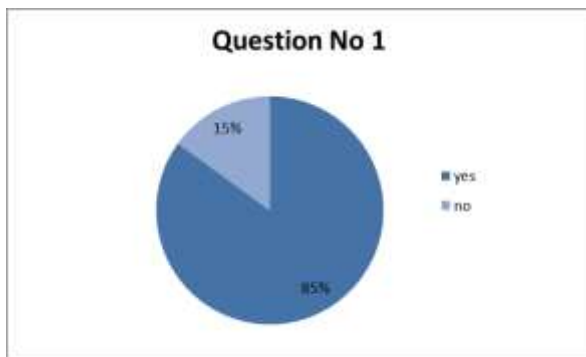


Figure 1. Percentage of Respondents Who Store Leftover Medications at Home

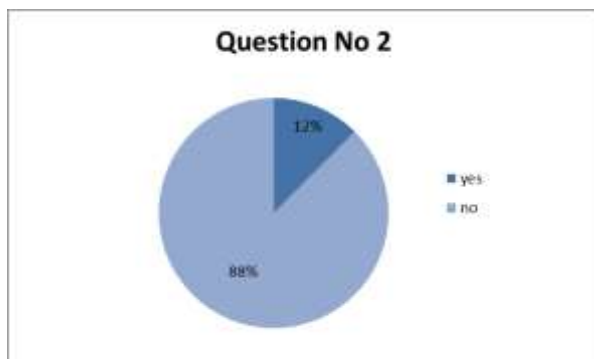


Figure 2. Level of Knowledge About BUD

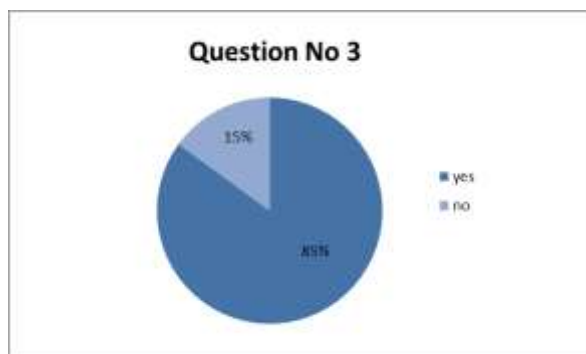


Figure 3. Percentage of Respondents Who Have Received BUD Information from Healthcare Workers

After the counseling session and presentation on BUD material, there was a noticeable improvement in the community's understanding of Beyond Use Date (BUD). Post-education assessment showed that 65% of participants were able to correctly answer questions related to BUD, while approximately 32.5% provided less accurate responses. This indicates a positive shift in knowledge, although continued education efforts are still needed to reach full comprehension among all participants. The leaflet distributed to the community can be

seen in Figure 5, while the documentation of the activity is presented in Figure 6.

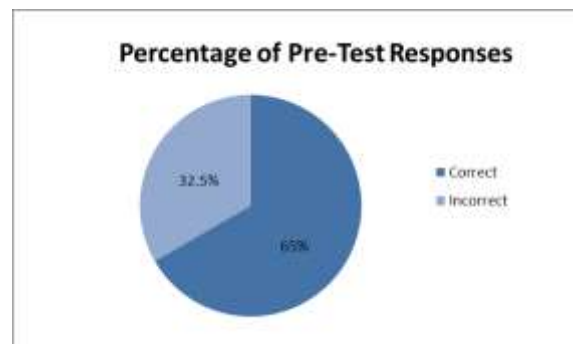


Figure 4. Post-Test Results on BUD Knowledge



Figure 5. BUD Educational Leaflet





Figure 6. Activity Documentation

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CONCLUSION

This activity was conducted on December 29, 2023, at the Community Sports Hall (GOR) of Sindangratu Village and was attended by 40 participants with educational backgrounds ranging from junior high school to undergraduate level. Their occupations included housewives, laborers, entrepreneurs, and farmers. The use of supporting tools such as PowerPoint presentations and informational leaflets played a crucial role in enhancing, accelerating, and standardizing the participants' understanding of Beyond Use Date (BUD). Through this activity, it is expected that medication errors can be minimized, and no patients will consume drugs beyond their BUD in the future.

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