

## IMPROVING THE SKILLS OF CHOOSING DRUGS USING THE CBIA METHOD IN THE COMMUNITY OF MAJELIS TAKLIM NURUZHOLAM CILEMPUYANG VILLAGE

Muhibatul Lailiah<sup>1</sup>, Yuhansyah Nurfauzi<sup>2</sup>, Mika Tri Kumala Swandari<sup>3</sup>

<sup>1</sup> Muhibatul Lailiah, Bachelor of Pharmacy Study Program, Faculty of Pharmacy, Science & Technology, Al-Irsyad Cilacap University, Cilacap, Indonesia

<sup>2</sup> Yuhansyah Nurfauzi, Bachelor of Pharmacy Study Program, Faculty of Pharmacy, Science & Technology, Al-Irsyad Cilacap University, Cilacap, Indonesia

<sup>3</sup> Mika Tri Kumala Swandari, Bachelor of Pharmacy Study Program, Faculty of Pharmacy, Science & Technology, Al-Irsyad Cilacap University, Cilacap, Indonesia

Email : [muhibatullaili@gmail.com](mailto:muhibatullaili@gmail.com)

---

### ABSTRACT

*Housewives are the "key person" in the use of drugs at home (Handayani, 2018). According to the results of a survey conducted by researchers in January 2022, the percentage of the Nuruzholam Taklim congregation who practice self-medication or self-medication is 69%. The use of over-the-counter and over-the-counter medicines was limited by 63%, which kept the medicine 57% and 58.7% disposed of the medicine incorrectly. The CBIA (Community Based Interactive Approach) program can be a solution to existing problems. CBIA is one of the community empowerment activities that can be used to educate the wider community about the selection and use of drugs that are suitable for self-medication or the use of over-the-counter drugs and limited over-the-counter drugs or those included in OTC (over-the-counter) (Bela & Suryawati, 2016). This study aims to determine the knowledge and skills of using drugs and to determine the effect of applying the CBIA method to increase knowledge about drugs in the Majelis Taklim Nuruzholam. This research method is quantitative research with Quasi-Experimental Design, one-group pretest-posttest. Sampling using purposive sampling method obtained 60 respondents who have met the inclusion and exclusion criteria. Analysis of the data used is statistical test paired t-test and get a significance value (2-tailed) of  $0.000 < 0.05$ , indicating a significant difference between the pretest-posttest values. The CBIA program is effective in increasing knowledge of the Majelis Taklim Nuruzholam Community in Cilempuyang Hamlet.*

**Keywords:** CBIA, Majelis Taklim, Knowledge of Drug

---

Correspondence Author :

Muhibatul Lailiah

Bachelor of Pharmacy Study Program, Faculty of Pharmacy, Science & Technology, Al-Irsyad Cilacap University, Cilacap, Indonesia. Email: [muhibatullaili@gmail.com](mailto:muhibatullaili@gmail.com)

## 1. INTRODUCTION

Community is a group of individuals who live in a certain environment and have the same interests.<sup>3</sup> One of the communities whose members are mothers in the Cilempuyang hamlet is Mauntung Taklim Nuruzholam. This Taklim Assembly has the same habit, namely regular recitation every week. Apart from being active in the majlis taklim community, most of the women in Cilempuyang hamlet are housewives. The role of a housewife is very important to support family health.

The community-based interactive approach or Active Individual Learning Method (CBIA) is a community education method that focuses on the active (face-to-face) role of participants in seeking information and facilitating changes in attitudes and behavior.<sup>4</sup> CBIA is one of the community empowerment activities that can be used to educate the public about the selection and use of drugs that are suitable for self-medication or the use of over-the-counter drugs and limited over-the-counter drugs or those included in OTC (over-the-counter).

Education on non-prescription drugs is seen as important to ensure consumer safety. Information such as indications and contraindications needs to be conveyed creatively and innovatively.<sup>5</sup> The goal of CBIA is to investigate sources of treatment, promote creative and critical thinking habits, and enable self-learning processes to solve problems.<sup>2</sup>

According to the survey, housewives are “key person” in home use. The CBIA method has been shown to be more effective in increasing knowledge about self-medication.<sup>1</sup> According to the survey, housewives are “key person” in home use. The CBIA method has been shown to be more effective in increasing knowledge about self-medication.<sup>6</sup>

According to the results of a survey conducted by researchers in January 2022, the percentage of the Majelsi Taklim Nuruzholam practicing self-medication is 69%. The use of over-the-counter drugs and limited over-the-counter drugs was 63%, 57% stored drugs and 58.7% disposed of drugs incorrectly. This shows that the knowledge of medicine in the congregation of the Majelsi Taklim Nuruzholam is still lacking.

Communities need to have the right knowledge regarding drugs as a community need to avoid the adverse effects of personal health and the environment.<sup>7</sup> Therefore, research is needed to apply the CBIA method to the Majelsi Taklim Nuruzholam. This research is in accordance with existing needs and can add to general knowledge about the use and management of drugs in the household.

## 2. METHOD

This research method namely quantitative research with experimental types *Quasi-Experimental Design, one-grup pretest-posttest*. The research was conducted at the Majelis Taklim Nuruzholam Cilempuyang Village in April-Mei 2022. The population in this study were 150 women from Majelis Taklim Nuruzholam. The research sample was taken using the *Purposive sampling*. In this study the sample used was a sample that met the inclusion and exclusion criteria of 60 samples.

The inclusion criteria in this study were congregation of the Majelis Taklim Nuruzholam in Cilempuyang Village, pilgrims aged 26 to 65 years, able to read and write, willing to be a respondent. While the exclusion criteria in this study were during the research the community could not participate in a series of activities from start to finish.

Univariate analysis is used to process the resulting data, namely to measure the level of knowledge pretest and posttest which is divided into three categories, good if the score is 76%-100%; enough if the score is 51%-75%; less if the score is <50%. In order to determine the influence of the CBIA method on knowledge, a statistical test was used in this studyt-test in pairs.

### 3. RESULTS AN DISCUSSION

Validity comes from the word validity which means the extent to which the accuracy of a measuring instrument in measuring a data.<sup>8</sup> The validity test was carried out on 5 questions about drug knowledge for a total of 30 respondents, the required r value was 0.361. If the value of r is greater than 0.361, then the question is valid. From the results of validity testing, all questions are valid because the value of r results is greater than the value of r table. According to<sup>9</sup> so that the distribution of measurement values is close to normal, the number of respondents to test the question naire with validity and reliability tests was at least 20 respondents, in this study using 30 respondents from the Al-Islah Mosque Taklim Assembly

Reliability is a measure that indicates the extent to which measurement results remain consistent when measurements are made twice with the same measuring instrument.<sup>8</sup> The reliability test was carried out on questions that had been declared valid in the validity test. The results of the reliability test performed show value Cronbatch's Alpha obtained 0.702. This value is greater than 0.6 so that all questions are declared reliable..

Normality tests skewness-kurtosis done on the value score data pretest And posttest. The data is said to be normally distributed if the ratio value is between -2 to +2. The results of the normality test performed showed the results of the pretest skewness ratio of 1.482 < 2 and yield kurtosis pretest ratio 0.905 < 2 then the data is said to be normally distributed. While the results posttest skewness ratio 0.650 < 2 and results posttest kurtosis ratio -1.949 < - 2 then the data is said to be normally distributed and does not require a non-parametric test.

Respondents in study were Majelis Taklim Nuruzholam members aged 26-60 yeras in Cilempuyang Village. After identifying the data, 60 respondents were obtained. The following is data on the characteristics of respondents based on gender, age, education and occupation.

Table 1 shows that all respondents are female. This is because the research conducted on the congregation of the Majelis Taklim Nuruzholam consisted of only women, so that all of the respondents were women. According to<sup>10</sup> that women do more treatment than men. In addition, according to research in Italy by<sup>11</sup> states that a person's knowledge of drug-related information is higher for women than men. Women are also more careful in choosing drugs.

The results listed in table 1 were obtained from respondents at that age who were willing, took the time to become respondents and who met the inclusion requirements. According to<sup>12</sup> age will greatly affect the ability to catch so that the knowledge obtained will be better.

**Tabel 1. Description of Respondents Characteristics**

<b>Characteristics of Respondents</b>	<b>Frequencyi (N =60)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Man	-	-
Woman	60	100
<b>Age (Years)</b>		
26-35	18	30,0
36-45	19	31,7
46-55	18	30,0
56-65	5	8,3
<b>Education</b>		
Did not finish SD/MI	4	6,7
Graduated from SD/MI	24	40,0
Graduated from SMP/MTs	24	40,0
Graduated from SMA/SMK/MA	6	10,0
Graduated from Bachelor	2	3,3
<b>Work</b>		
Teacher	1	1,7
Trader	6	10,0
Laborer	8	13,3
IRT	45	75,0

The second characteristic of the respondents, based on their education, was that most of the respondents in the Nuruzholam Taklim Assembly had graduated from SD/MI (40%) and graduated from SMP/MTs (40%). This proves that the people in the Cilempuyang Hamlet area are still not aware of the importance of education. Education can influence a person's way of thinking in making decisions and making policies where a person with higher education will have a wider knowledge. However, it should be emphasized that a person with low education does not necessarily mean that he has low knowledge.<sup>13</sup>

The characteristics of the respondents, based on the work of the respondents, were mostly respondents who did not work or were housewives, 45 respondents (75%). Work experience will provide knowledge and skills as well as learning experience at work will be able to develop the ability to make decisions which is the integration of scientific reasoning.<sup>12</sup>

The CBIA method is known to have an effect on increasing knowledge based on several previous studies, including research.<sup>1,14-17</sup> The CBIA method is said to be effective if there is an increase in the knowledge of the respondent. The following is a comparison of the average score values pretest and posttest.

**Tabel 2. Comparison results of pretest posttest scores and paired t-test**

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Means</b>	<b>Sig (2-tailed / p-value)</b>
<b>Pretest</b>	60	0	65	23,50	0,000
<b>Posttest</b>	60	55	100	81,75	

The average pretest score was 23,50 while the posttest was 81,75. There is a significant difference between the average pretest and posttest scores indicating an increase in knowledge after education, this is in line with research.<sup>18</sup> While in research<sup>19</sup> the results of increasing knowledge after education using the CBIA method were almost the same in this study, namely 81.6%.

Basis for taking the test t-test pairs if the value significance (2-tailed) <0.05 hence there is a significant difference between the results pretest and posttest. Meanwhile, if the results signification (2-tailed) >0.05 then there is no significant difference between the results pretest and posttest. The results of this test are the same as the research<sup>20</sup> where is value signification (2-tailed) of 0.000, it can be said that there is a significant difference from the value score pretest and posttest. From these results it can be said that the CBIA program is effective in increasing knowledge about medicine in the Majelis Taklim Nuruzholam Congregation. In research<sup>1</sup> the CBIA method is also effective in increasing the knowledge of housewives in self-medication behavior.

**Tabel 3. Result Table Home Visit Checklist**

<b>Knowledge</b>	<b>Already Understand</b>	<b>Do not Understand</b>
Drug Classification	27	1
Information on Drug Packaging and Etiquette	27	1
How to Select and Obtain Medicines in Dosage Forms	28	-
Precautions and Dosage Warnings	27	-
How to use the drug	26	-
Drug Side Effects	28	-
Storage	27	1
Disposal of Expired/Damaged Drugs	27	1

Based on the table above, it can be seen that the data on the results of filling out the home visit checklist. Only data were obtained from 28 respondents out of a total of 60 respondents. This was because there were some respondents who were not at home when visited, some were busy with homework and some did not wish to be visited. But even so the results obtained from 28 respondents were very good because almost all respondents had understood the material presented during the education.

The CBIA program was carried out at the Majelis Taklim in Cilempuyang Village on Wednesday, March 16 2022. Researchers worked closely with Posyandu cadres in Cilempuyang Village. Where posyandu cadres are made tutors in the implementation of the CBIA program. Posyandu cadres in Cilempuyang Village consist of 7 people, all cadres can participate in the program well and are eligible to become tutors.

The 60 respondents were divided into 7 groups accompanied by a tutor for each group. After the congregation forms a group, the tutor distributes a list of questions pretest-posttest and the researcher explained how to fill out the questionnaire starting from informed consent, identity to how to fill pretest and posttest.

After pretest once done, each tutor appoints one of the group members to be the group leader. After that each group received 1 packet of medicine. Then activity I was carried out in the form of recognizing trade names, identifying names of active ingredients, identifying strengths of active ingredients, identifying main ingredients and additional combination drugs.

Before proceeding to the next stage, researchers convey information regarding drug classification, information on packaging and labels, how to select and obtain drugs, drug dosage forms, cautions and warnings, drug dosages, how to use drugs, drug side effects, storage, expired drugs / damaged and disposal of drugs in a short time.

The next stage is carrying out activity II where participants practice finding information on the packaging by examining every writing listed on the packaging. This stage is an activity to collect the necessary information as a basis for conducting self-medication, namely the name of the active ingredient, indications, rules for use, side effects and contraindications.

After that, discussions and questions and answers were held. The next step is distributing worksheets for household drug records. Researchers visited the respondent's house to fill out checklist and ensuring the information obtained when the CBIA Program was implemented. Of the 60 respondents, only 28 wished to be visited. This is because there were some respondents who were not at home when they visited, some were busy with homework and some did not wish to be visited.

#### **4. CONCLUSION**

Based on the results obtained it can be concluded :

1. Insight into knowledge about medicine in the Majelis Taklim Nuruzholam before education is still lacking. Meanwhile, for the management of drugs in the household in terms of storage and disposal of drugs, most of them are not suitable.
2. The CBIA method has an impact on increasing knowledge about drugs and can improve the management and use of drugs in households. As for value signification (2-tailed) test t-test in pairs of  $0.000 < 0.05$ , the CBIA method can be said to be effective for increasing knowledge because there is a significant difference between the scores pretest and posttest.

## **SUGGESTION**

### **For Further Researchers**

It is hoped that this research will serve as a reference for conducting further research on CBIA education programs by developing the topics needed for children, adolescents, adults and the elderly and using a combination of SGD (Small Group Discussions) or FGDs (Forum Group Discussion).

## **THANK YOU NOTE**

Thanks to Mr. apt. Yuhansyah Nurfauzi, M.Si and Mrs. apt. Mika Tri Kumala Swandari, M.Sc who has provided guidance and direction from the beginning to the completion of this thesis.

## **BIBLIOGRAPHY**

1. Handayani R. Increasing the Knowledge of Housewives in Self-medication Behavior for the Management of Fever Using the Active Mother Learning Method. *Borneo J Pharm* [Internet]. 2018;Vol 1 No 1. Available from: <http://journal.umpalangkaraya.ac.id/index.php/bjop/article/view/240>
2. Bela AM, Suryawati S. CBIA Intervention to Increase Knowledge, Attitudes, and Behavior on Rational Use of Antibiotics in Toddler Family Development Members CBIA Intervention to Enhance Community Development of Knowledge, Attitudes, and Behavior of Antibiotic's Rational Use. *J Kedokt Brawijaya* [Internet]. 2016;29(2):165–9. Available from: <http://jkb.ub.ac.id/1358>
3. Iriantara Y. *Public Relations Strategic Management*. Jakarta: Ghalia; 2004. 22 p.
4. Lathifah MA, Susanti S, Ilham M, Wibowo A. Comparison of CBIA and FGD Methods in Increasing Caregiver Knowledge and Accuracy in Fever Self-medication Efforts in Children *Pharm Sci Res*. 2015;2(2):89–100.
5. Nurfauzi Y, Wahyono D, Rahmawati F, Munif N. Innovative education approaches by geriatric pharmacists and their training needs: A systematic review. 2020;19(July):1525–33.
6. Harahap NA, Khairunnisa, Tanuwijaya J. Level of Patient Knowledge and Rationality of Self-medication at Three Pharmacies in Panyabungan City. *J Science Farm and Clinic*. 2017;3(May):186–92.
7. Octavia DR, Susanti I, Mahaputra Kusuma Negara SB. Improving Public Knowledge About Rational Use and Management of Drugs Through Dagusibu Counseling. *GEMASSIKA J Servant to the Community*. 2020;4(1):23.
8. Hastono. *Health Data Analysis*. Jakarta: Faculty of Public Health, University of Indonesia; 2013.
9. Notoatmodjo S. *Health Research Methodology*. Jakarta: Rineka Cipta; 2012.
10. Cho. The Factor Contributing to Expenditures on Over-the Counter Drugs in South Korea. *Public Heal Seoul Natl Univ*. 2013;05:147–51.
11. A., Calamusa, A., Di Marzio, R., Cristofani, P., Arrighetti, V., Santaniello, S., Alfani, & Carducci A. “Factors that Influence Italian Consumers Understanding of over-the-counter Medicines and Risk Perception”, *Patient Education and Counseling*, Vol. 87(3), 395-401, 2012., 2012;87(3):395–401.

12. Notoatmodjo S. Health Promotion Theory and Applications. Jakarta: Rineka Cipta; 2010.
13. Anis. Learning IPS Using Models. J Indonesian Educator. 2017;3:15–24.
14. Olfah. The Influence of Giving the Community Based Interactive Approach (CBIA) Method on the Knowledge of Housewives as a Self-medication Effort. Repost Univ Ngudi Waluyo. 2020;
15. Azhari AN. The Effectiveness of the CBIA Method., Almas Nuzulia Azhari, Faculty of Pharmacy UMP 2016. 2016;
16. Tuanhope N. Peningkatan Pengetahuan Masyarakat Dalam Memilih Obat Bebas dan Bebas Terbatas Di RT 005 Kelurahan Oetete Belajar Insan Aktif (CBIA). 2018;
17. Mafruhah OR, Nugraheni DA, Safitri SR. Knowledge Level of Common Cold Drugs in the Village the Influences of Education CBIA (Mother Active Learning Method) on. J Management and Farm Services. 2016;6(1):69–74.
18. Nova Yanti. Effect of CBIA Modification Education Method for People with Diabetes Mellitus About Foot Care at Andalas Padang Health Center. TOWER of Science. MENARA Ilmu. 2019;XIII(9):86–97.