

Article

Effect of Over-The-Counter (OTC) Drug Use Education on Community Knowledge Level in Karampuang Village, Panakukang District, Makassar City through The Mother Active Learning Method

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Citation: Azizah, R.N.; Rahmawati; Wati, A.; Hardiyanti, P.; Iryansyah, R. Effect of over-the-counter (OTC) drug use education on community knowledge level in Karampuang village, Panakukang District, Makassar City through the Mother Active Learning Method. *J Pham Nat Sci* 2025, 2(1), 15–18. <https://doi.org/10.70392/jpns.v2i1.1518>

Academic Editor: Prof. Firzan Nainu, Ph.D

Received: July 10th, 2024

Revised: January 12th, 2025

Accepted: March 3rd, 2025

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ISSN: 3047-5457

Abstract

Mother Active Learning (MAL) is an educational model of community empowerment to be more skilled in choosing drugs so that self-medication becomes more effective, safe, and cost-effective. This study aims to analyze the effect of over-the-counter (OTC) drug education on the public knowledge level in Panakukang district through the MAL method. The research design used quasy-experimental, which is non-equivalent control group design. Sample was divided into control and treatment group consisting of 20 and 30 people. The data were analyzed descriptively by evaluating worksheets that were completed by participants. The analysis results found that the mean posttest value for the control group was 42.00 (SD=10.56), while the mean posttest value of treatment group was 84.67 (SD=10.74). Statistical tests found that there were significant differences between the mean values of both groups ($p < 0.01$). Providing education to the community through the MAL method effectively increases knowledge related to the use of OTC drugs.

Keywords: Knowledge; Over-The-Counter Medicine (OTC); Mother Active Learning

1. INTRODUCTION

Self-medication is defined as the use of drugs by patients on their own initiative or the advice of a pharmacist, not consulting a medical practitioner [1,2]. One of the benefits of self-medication can save time and money spent on consultation with health professionals. This is the reason or consideration of some people to choose self-medication. WHO has also explained that proper self-medication can help prevent and treat diseases that do not require medical consultation and provide cheaper alternatives to treat

common diseases [3]. Over-The-Counter (OTC) medicine is a drug that is safe and can be sold freely by pharmacists without a prescription from a medical practitioner [4].

Business Monitor International (BMI) in the third quarter of 2014 reported that the market share ratio between OTC and prescription drugs was 38.5% contributed by OTC drugs, while prescription drugs were 61.5% [5]. Data from the Central Bureau of Statistics Susenas also shows that more than 60% of the population do self-medication. The results of the Basic Health Research in 2013 showed that 35.2% of Indonesians keep medicines in the household, both those obtained from prescription and those bought freely, of which 27.8% are antibiotics [6].

Furthermore, Azizah and Herman (2018) [7] in concluded that the level of public knowledge about OTC drugs, as well as the role of pharmacists in providing drug information in Makassar, is still low. Based on this, in order to carry out self-authentication properly, the public needs clear, correct and reliable information, so that the determination of the type and amount of drugs needed must be based on the rationality of drug use.

The method of Mother Active Learning (MAL) or "community based interactive approach" is one of the community empowerment activities that can be used in educating the public to choose and use the right medicine in self-medication. The purpose of MAL is to establish the ability to explore sources of information and improve the habit of thinking creatively and critically so as to be able to solve problems based on the process of independent learning [8].

2. MATERIALS AND METHODS

2.1. Material

The materials to be used are drug packages and worksheets for each group.

2.2. Method

This research is a quasy-experimental study which is an unequal control group design. In this design there are two groups, the treatment group and the control group. To determine the level of knowledge, attitudes, and behavior of the treatment itself before treatment is given a pretest both in the treatment group and in the control group. Then the treatment group was given education by the MAL method [9,10]. To measure changes in knowledge, attitudes, and behavior after education, posttests were given the same questions in both groups. Then the data is collected and analyzed statistically. The population of this research is the members of the Taklim Assembly in Karampuang Village, Panakukkang District, Makassar City. The number of samples used in this study were 30 treatment groups and 20 control groups. The results of the study were analyzed descriptively. Data from the results of the study which were participants' answers to the questions on the worksheet were analyzed descriptively. Ethical approval was obtained from the Universitas Hasanuddin Ethics Committee (UNHAS) with reference number UH15020083.

3. RESULT AND DISCUSSION

Analysis of the data used in this study is descriptive analysis by evaluating worksheets that were completed or filled out by each participant. Assessment of the level of knowledge of participants through tests obtained through the pretest and posttest in the control group and the treatment group. The number of control group respondents were 20 people and the treatment group were 30 people.

Table 1. Group Pretest Score

No	Group	Max	Min	Mean	SD
1	Control	60	10	41,00	11,65
2	Treatment	60	10	43,00	13,93

Table 2. Group Posttest Score

No	Group	Max	Min	Mean	SD
1	Control	60	20	42,00	10,56
2	Treatment	100	60	84,67	10,74

From the above data it can be seen that the mean pretest value for the control group was 41.00 with a standard deviation of 11.65 while for the treatment group it was 43.00 with a standard deviation of 13.93. Statistical test results showed no significant difference in the mean pretest and posttest scores of the control group ($p > 0.05$).

The results of the analysis found that the average posttest value for the control group was 42.00 with a standard deviation of 10.56, while for the treatment group the mean was 84.67 with a standard deviation of 10.74. From the results of statistical tests found that there were significant differences between the mean values between the control group and the treatment group ($p < 0.01$).

From the results of calculations and statistical tests show that the level of knowledge of the treatment group provided education through the MAL method is higher than the control group that is not given education. This means that statistically shows that the use of the MAL method can increase the knowledge of mothers of taklim assemblies in swamedication.

Self-medication practitioners have not utilized the information available on the drug packaging. In accordance with the provisions issued by the Food and Drug Supervisory Agency, the drug packaging or information sheets included in the package include the name of the active ingredient in either a single or combination form, indications, rules of use, storage methods, warnings and side effects and contraindications, the name of the manufacturer, and the Highest Retail Price of the drug.

In the activity of increasing knowledge using the MAL method the participants must first understand that information can be obtained quickly and accurately from the information sheets contained in the drug packaging. In the assessment of the participants before being given education (pretest) it was very clear that some participants did not know that in the packaging of the drug preparations contained information that had to be read and understood.

Education with the MAL method requires participants to be actively involved in finding available information by rewriting the active ingredients and their strengths in the worksheets provided, and recognizing which main ingredients and additives are. During this information-gathering activity participants found that most drugs in different dosage forms such as tablets or syrups had the same active ingredients and the same dosage or active ingredients with different dosages. Besides that most of these preparations have almost the same name, but are used for different age levels, namely children and adults because of different doses, there are also preparations that write the name of the active ingredient with a synonym name (another name) that is rarely known to the general public.

Besides, there are also some warning signs that must be read and understood and obeyed. This is certainly very different from the information displayed through the media in the form of advertisements or promotions of these preparations. Information displayed through the media mostly does not mention the name of the drug or its composition or combination which is very important information from a drug preparation. Besides that, there are still many habits of the people who buy medicines on self-medication not with the packaging. This is certainly not complete information.

4. CONCLUSION

The level of knowledge of the treatment group provided education through the MAL method is higher than the control group which not given education. Providing education to the community of Karampuang village, Panakukkang district, Makassar City through the MAL method effectively increasing knowledge related to the use of OTC drugs.

AUTHOR CONTRIBUTION: **Conceptualization**, Rizqi Nur Azizah and Rian Iryansyah; **methodology**, Rahmawati; **validation**, Rahmawati, Aulia Wati and Purnamasari Hardiyanti; **formal analysis**, Rizqi Nur Azizah; **writing—preparation of**

original draft, Rizqi Nur Azizah; **writing—reviewing and editing**, Rahmawati; **visualization**, Aulia Wati; supervision, Rian Iryansyah; **project administration**, Purnamasari Hardiyanti; obtaining funding, Rizqi Nur Azizah. All authors have read and approved the published version of the manuscript.

FUNDING: -

ACKNOWLEDGMENT: We wish to acknowledge The Resource Research & Development Institute (LP2S) of the Universitas Muslim Indonesia Makassar who has funded the research in 2017 fiscal year.

CONFLICT OF INTEREST: The author declares no conflict of interest.

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