



The Influence of Education and Leaflet Media on Community Attitudes Regarding the Storage and Disposal of Drugs in North Gading Rejo Village

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ABSTRACT

This study aims to analyze the influence of education and leaflets on community attitudes regarding drug storage and disposal in Gading Rejo Utara Village, Pringsewu. The innovation of this study lies in the use of leaflets as an educational intervention at the village level. The study used a quantitative descriptive design with a pretest-posttest approach to 111 respondents selected using a quota sampling technique. The variables studied included community attitudes regarding drug storage and disposal. Data collection was conducted through questionnaires from February–April 2025. The results showed a significant increase in community attitudes after the intervention, so that education using leaflets had positive implications for safe and appropriate drug management in households

INTRODUCTION

Management drugs at the level House stairs, especially related storage and disposal medicine, still become problem health in Indonesia. Practice storage drugs that are not in accordance can cause decline quality medication, error usage, up to risk poisoning, while disposal drugs that are not appropriate potential pollute environment and open opportunity abuse drugs (Barnett-Itzhaki et al., 2016; Rasdianah & Uno, 2022). Drugs are product general health kept at home, knowledge and attitudes public to method proper storage and disposal Still classified as low, especially in rural areas (RISKESDAS, 2013).

Attitude public is factoring important things that influence behavior health and can formed through intervention appropriate educational (Notoatmodjo, 2014). Education health with print media, such as leaflets, is assessed effective because nature simple, easy understood, can studied repeat, and reach out public in a way extensive (Kasman, Noorhidayah & Persada, 2017). However, research that specifically specific study influence education using leaflet media against attitude public in management drugs at the level village still limited, especially with pretest- posttest approach in society general.

Study This contribute in add study promotion health pharmacy with present proof empirical about effectiveness education and leaflet media in increase attitude public to storage and disposal drugs in the community rural. Focus study this located on the sample the people of North Gading Rejo Village and measurement change attitude before and after intervention education in a way structured. Therefore that, research this aim for analyze influence education and leaflet media regarding attitude public in storage and disposal medicine in North Gading Rejo Village.

THEORETICAL REVIEW

Attitude is trend individual for respond something object in a way consistent, good in a way cognitive, affective, and conative, which is furthermore influence behavior health (Notoatmodjo, 2014). In the context of management home remedies stairs, attitude public to storage and disposal drug become factor important in prevent error use, poisoning, as well impact environment consequence waste drugs (Barnett-Itzhaki et al., 2016). Research previously shows that low the right attitude caused by lack of information and education easy health understood by the community (Rasdianah & Uno, 2022).

Education health is a process of giving information that is intended increase knowledge and shaping attitude positive to behavior healthy (Induniasih & Ratna, 2020). Various studies quantitative show that structured education capable increase attitudes and behavior public in management health, including use and storage drug rational (Haerani et al., 2019). However, the effectiveness of education is greatly influenced by the methods and media used.

Leaflets are an effective printed medium. In promotion health because nature simple, practical, and can read repeat in accordance needs (Kasman, Noorhidayah, & Persada, 2017). Research previously show that use of leaflets significant increase understanding and attitude public compared to method delivery information without supporting media (Caprara & Zimbardo, 2004; Sabri & MacDonald, 2010). Although however, still there is limitations proof

empirical related effectiveness of leaflets in increase attitude public to storage and disposal drugs in the scope rural.

Based on theory change behavior and findings empirically, education supported by leaflet media is believed to be capable strengthening the internalization process information, so that push formation more attitude positive to management medicine. Research This add literature with test in a way quantitative influence education and leaflet media regarding attitude public related storage and disposal drugs at the level community village.

METHODOLOGY

Study This use design quantitative with pretest-posttest approach one group for analyze influence education and leaflet media regarding attitude public in storage and disposal medicine. Research held in North Gading Rejo Village, Regency Pringsewu, during the period February-April 2025. Population study is all over public village those who store home remedies stairs. Research sample A total of 111 respondents was selected use quota sampling technique with criteria willing become respondents and able communicate with Good.

Intervention study in the form of education health about storage and disposal the correct medication, accompanied by distribution of leaflet media as amplifier information. Data collection is carried out use questionnaire structured for measure attitude respondents before (pretest) and after (posttest) intervention. The variables studied covering attitude public related storage and disposal medicine. Data analyzed use analysis univariate for describe characteristics respondents and distribution attitude, and analysis bivariate using SPSS statistical tests for know difference attitude before and after intervention.

RESEARCH RESULTS

Study This implemented through a number of stages, namely pretest data collection, administration education using leaflet media, and collecting posttest data. Entire respondents (n=111) followed series study in a way complete so that all data can be analyzed. Respondents in this study were members of the community who met the research inclusion criteria. The following table shows the characteristics of the respondents. Characteristic description respondents presented in Table 1.

Table 1. Socio- demographic Characteristics Respondents

Respondent Characteristics	Frequency (n=111)	Percentage (%)
Age		
17-25 Years	20	18
26-35 Years	10	9
36-45 Years	36	32.4
46-55 Years	31	27.9
56-65 Years	14	12.6
Gender		
Man	7	6.3

Woman	104	93.7
Education		
Elementary School	11	9.9
Junior High School	30	27
High School	66	59.5
Bachelor	4	3.6
Work		
Doesn't work	4	3.6
Private Housewife	78	70.3
civil servant	1	1
PNS	3	2.7
Farmer	4	3.6
Laborer	7	6.3
Students	11	9.9
Self-employed	3	2.7

Majority respondents be at the age productive namely 36-45 years by 32.4% and of various types sex Woman by 93.7%. Education level respondents dominated by education medium namely high school graduates amounting to 59.5%. Employment respondents dominated is a housewife by 70.3%. Characteristics This show that respondents own good potential in accept and understand information education provided.

The distribution of public attitudes toward drug storage and disposal before and after education using leaflets is presented in Table 2. In the pretest, 51.4% of respondents had a fair attitude and 34.2% had a poor attitude. After the intervention, there was an increase in the proportion of respondents with a good attitude to 86.5% and an increase in the proportion of respondents with a fair attitude to 13.5%, regarding the storage aspect.

Table 2. Distribution of Public Attitudes Towards Storage and Disposal of Drugs Before and After Education

	Category	Percentage (%)	
		Pretest	Posttest
Drug Storage	Good	14.4	86.5
	Enough	51.4	13.5
	Not enough	34.2	0
Drug Disposal	Good	1.8	44.1
	Enough	45	36.9
	Not enough	53.2	18.9

In this aspect disposal medicine, before given intervention percentage the biggest 53.2 % had unfavorable attitudes. However, after the intervention, there was an increase in respondents, with 44.1% having favorable attitudes.

Table 3. Wilcoxon test analysis of community attitudes regarding storage and disposal of drugs before and after the intervention was given.

Test Statistics Storage	
	After given intervention - Before given intervention
Z	-9.137 ^b
Asymp. Sig. (2-tailed)	.000

- a. Wilcoxon Signed Ranks Test
 b. Based on negative ranks.

Test Statistics Disposal	
	After given intervention - Before given intervention
Z	-9.224 ^b
Asymp. Sig. (2-tailed)	.000

- a. Wilcoxon Signed Ranks Test
 b. Based on negative ranks.

Analysis bivariate using the Wilcoxon Test for compare score attitude before and after intervention. The results of the Wilcoxon test are presented in Table 3. There are improvement average score attitude meaningful society in a way statistics after given education and leaflet media. In this aspect storage medicine, average score attitude increase in a way significant with sig value < 0.05, namely of 0.00. Similar results also apply to the aspect disposal drugs, which indicate improvement average score significant attitude statistically value sig < 0.05, namely of 0.00. The result show existence significant changes and influences between before and after given interventions, education and leaflets for aspect storage and disposal medicine in Gading Rejo Utara Village.

DISCUSSION

Improvement attitude public after giving education and media leaflets show that intervention-based promotion health capable influence attitude society, especially related management drugs in society. This is supporting theory that change attitude is stage important before formation behavior sustainable health (Notoadmodjo, 2010). The education provided in study This functioning as source information that improves understanding public about risk storage and disposal drugs that are not appropriate.

Based on study previously that lack of education related drugs in society often become reason main occurrence error storage and disposal medicine, which ultimately can trigger incident drug damaged, decreased effectiveness therapy, as well as risk poisoning drug in a way no intentionally (Makki et al., 2019). Leaflet media used in study This play a role as a helpful reinforcement medium public keep information that has been accepted. Leaflet has superiority Because nature practical, easy understood, and can accessibly return when only, so that effective in support change attitudes towards society with background behind diverse education (Kasman et al., 2017). This in accordance with results research by Sari et

al. (2021) which states that print media simple like an effective leaflet increase attitudes and understanding public to use rational medicine.

In this aspect storage medicine, changes attitude public after intervention show increasing awareness will importance guard stability and quality medicine. Storage appropriate medication with provision can prevent occurrence degradation material active consequence exposure temperature, light, and humidity are not (Ministry of Health of the Republic of Indonesia, 2016). Research by Ayalew et al. (2020) also shows that education pharmacy community contribute significant in increase attitude public to storage safe medicine at home.

In this aspect disposal medicine, changes attitude public show existence improvement awareness to impact environment and potential abuse medicine. Disposal drugs that are not appropriate can cause contamination environment, especially water and soil, and open opportunity abuse drugs by unauthorized parties responsible answer (Tong et al., 2011). The education provided in study This help public understand that disposal drug is part important from cycle use rational medicine (Ministry of Health of the Republic of Indonesia, 2021).

Change attitude towards disposal relative medicine lower compared to storage drug show that study This Still not enough well known in society. This is in accordance with study previously stated that awareness public related disposal drug Still low Because lack of socialization and policy educational in society (Daughton, 2016). Therefore that, is necessary education repeated and ongoing programs so that attitudes positive formed can maintained and improved.

Characteristics sociodemographics respondents participate influence success intervention education and leaflets. Respondents most is women and mothers House ladder give profit alone because group this generally play a role as manager health family, including in storage and use drug daily life (Sihotang et al., 2018). Other studies also mention that Woman tend more responsive to education health compared to man Because involvement direct in maintenance member family (WHO, 2017). In addition, the level of education majority of respondents be at the level medium on support effectiveness delivery message through leaflets.

In a way overall, results study This strengthen proof that intervention combined education with leaflet media is effective approach in increase attitude public related storage and disposal medicine. Research This confirm importance role power pharmacy in activity promotion health public as effort preventive for increase use rational and protective medicine health as well as environment.

CONCLUSIONS AND RECOMMENDATIONS

Study This conclude that education health accompanied by with the use of leaflet media provides influence positive to attitude public in storage and disposal medicine in North Gading Rejo Village. The interventions provided capable increase understanding and awareness public about importance management the right medicine in society, both from aspect safety, quality medicine, as well as protection environment.

Implications from study this is education integrated health with leaflet media made into as a promotional strategy applicable and sustainable health in

increase management drugs in the community. Pharmaceutical workers, in particular pharmacists and staff technical pharmacy, can utilize leaflet media as tool help education in activity service pharmacy and counseling health public. Study This show the need strengthening educational programs public related storage and disposal the right medicine through work the same between facility service health, institutions education health and government area. Education carried out routinely and structured expected can prevent risk abuse drugs, poisoning medicine, as well as impact pollution environment consequence disposal drugs that are not appropriate.

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