

Conference Paper

## Empowering a Village Community Through Training on Healthy Lifestyle and Appropriate Medicine-Related Behaviour

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### ABSTRACT

Cultural identity may indirectly determine how a person within a particular cultural context takes action to prevent and treat a condition or a disease. Knowledge is one of predisposing factors that can influence both cultural identity and health behavior. Rural communities in Indonesia have their own cultural identity that may influence the health-related behavior of the residents. The Village of Duyung is one of example of this case. The lifestyle and medicine-related behavior of the residents might be influenced by the nature of its collective or communal culture. This report aims to present the level of awareness of the principles of healthy lifestyle and appropriate medicine-related behaviour in the Village of Duyung. A community empowerment program was designed and conducted in July and August 2023. All 23 participants were women with age ranged from 26 to 47 years. The proportion of participants who were unaware of the principles of healthy lifestyles and medicine-related behavior was as high as 78.3 and 87.0%, respectively. There is a statistically significant difference in the final score of knowledge before and immediately after the training on the principles of healthy lifestyle and medicine-related behavior. The program demonstrated a significant change of the awareness and knowledge of some participants in the Village of Duyung on healthy lifestyle and the appropriateness of medicine-related behaviour. The impact on how this method of education contributes to cultural identity and consistent health-related behavior over longer time needs further study.

*Keywords: Cultural identity, healthy lifestyle, dagusibu, medicine, behaviour, training*

### Introduction

Cultural identity is an identity claimed by an individual as a member of a cultural group with shared characteristics. Cultural identity may indirectly influence health-related behaviour, including how a person within the culture acts to prevent and treat disease. This is because cultural identity can shape perspectives on the risk of disease, beliefs on behaviour considered normal, desires for self-presentation, functional meaning of the behaviour, and cultural values.

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Besides cultural identity, a tendency to perform positive or negative health-related behaviours is also influenced by factors such as demographics, personality, knowledge, self-efficacy, and skills. These predisposing factors may also correlate with cultural identity itself. Therefore, there is an interplay among cultural identity, predisposing factors, and health-related behaviours (Unger, 2011).

One example of how cultural identity may determine health-related behaviours is shown by the difference in the medical decision-making process among cultural groups. In most Western countries where individualistic culture is more common, medical decision-making is perceived as a basic personal right. Healthcare professionals inform the patient of their condition and the treatment options, and the patient finally decides which option they want to take. In contrast, in more communal cultures in many Latin American and Asian countries, including Indonesia, medical decision-making is viewed as a community or family activity. Neighbours or family members help the patient to decide the treatment option (Unger, 2011).

Although it is common that rural or village residents have shown more collectivist or communal culture than urban or city residents, the culture identities can also vary across villages in the same region in Indonesia (Husein MR, 2021). As knowledge, self-efficacy, and skills are factors related to cultural identity and health-related behaviour (Unger, 2011), here we present a report on how an empowerment program influence a knowledge to modify health-related behaviours in a collectivist culture. This program is conducted in a targeted-group with similar characteristics and needs reside in a rural community in Indonesia, namely the Village of Duyung. The Village of Duyung is located in the District of Trawas, the Regency of Mojokerto, the Province of East Java. This village covers an area of 232.5 hectares. The number of residents in this area is 1526 persons, consists of 791 men and 735 women in 2023. The Village of Duyung encompasses 20 neighbourhoods that includes 503 neighbourhood heads in total (Desa Duyung, 2003; Jupriyanto, 2023). Based on qualitative analyses that was conducted in 2022, it has been known that this village has problems with health. There has been an increase of chronic diseases such as hypertension, diabetes, and renal disorders in the village. The chronic diseases occur in relatively young (under the age of 60 years) residents. Moreover, the nearest healthcare facility such as pharmacy or primary health center (PHC; termed as pusat kesehatan masyarakat or puskesmas in Indonesia) is located as far as three km from the village. Consequently, whenever a resident gets ill, this person will first seek for self-medication, not to the pharmacy, but to the grocery stores (termed as 'toko kelontong' or 'perancangan' in Indonesia) located closer in the village. The problem is the medicines provided by the stores have often been taken out from their primary packages and put together in a new package without labels. Therefore, the user of the medicines will have difficulties in knowing the actual name or active ingredients of the medicines, the benefit of using them, and the date when the medicines are expired or no longer usable. The residents of the village obtain drug information through word of mouth from their neighbours and they use this information to buy the medicines from the stores. This may lead to the use of inappropriate medication for their illness (Jupriyanto, 2023).

According to the health-related problems explained, a training program is designed to increase the knowledge of the Village of Duyung residents on how to conduct a healthy lifestyle and to appropriately obtain, use, store, and discard medicines. This report aims to present the level of awareness of the principles of a healthy lifestyle and appropriate medicine-related behaviour and to measure the change in percentages of the knowledge on both issues.

## Material and Methods

A community empowerment program was designed with an aim to empowering the residents of the Village of Duyung to understand and to apply the principles of healthy lifestyle and the appropriate medicine-related behaviour in everyday life. The target of the program was women involved in the program of family welfare empowerment (Pemberdayaan Kesejahteraan Keluarga, PKK). The programme consisted of two training activities: 1) training on the principles of healthy

life style (Perilaku Hidup Bersih Sehat, PHBS) and 2) training on the appropriate medicine-related behaviour (Dagusibu). In both trainings, the trainers used a mixture of language, national and local language (Java language) were spoken alternately.

### ***The structure of training on 'PHBS'***

At first, to gather the level of awareness of PHBS, a questionnaire was administered to the participants. The present knowledge of PHBS was also assessed using a set of pre-test questions. The educational material of PHBS consisted of 10 indicators of clean and healthy behaviours (Appendix 1). One pharmacist then delivered the material using an interactive talk. After the talk, another pharmacist gave a training on how to make an antiseptic soap as a product that can be used to start practicing one of PHBS steps. To assess participants' knowledge on PHBS after the training, we also administered a post-test containing the same questions with the pre-test.

### ***Training on the appropriate medicine-related behaviour (Dagusibu)***

Dagusibu', in Indonesia, stands for 'Dapatkan, Gunakan, Simpan, dan Buang obat dengan benar' or a principle on how to appropriately obtain, use, store, and discard medicines. This term was coined by Indonesian Pharmacist Association as one of the educational materials recommended to be delivered to Indonesian community in order to support the Family Movement of Drug Awareness (Pengurus Pusat Ikatan Apoteker Indonesia, 2014).

### ***The structure of training on 'Dagusibu'***

At first, to gather the level of awareness of Dagusibu, a questionnaire was administered to the participants. The present knowledge on Dagusibu was also assessed using a set of pre-test questions. One pharmacist then delivered the material using an interactive talk. During the talks, participants were given medicine boxes labelled with timing to use medicines (morning, afternoon, evening) to promote a better understanding on how to use and to store medicines. After the talks, opportunities were open for participants to ask questions or to discuss relevant issues.

## **Results and Discussion**

The training activities were conducted in July and August 2023. The total of residents participated in each activity was 23 persons. All participants were women. The median of participants' age was 32 years, ranging from 26 to 47 years. The proportion of participants who were unaware of the principles of healthy lifestyles (PHBS) was as high as 78.3%. Although 21.7% of participants were already aware of this term, none of them was actually practicing the principles in their day-to-day life. The proportion of participants who did not know about Dagusibu was even higher, i.e., 87.0%. This finding was comparable to other studies on Dagusibu in other villages in Indonesia. More than 50% of village residents did not aware of this concept. The result can be an input for better promotion of appropriate medicine-related behaviour, especially in rural areas in Indonesia.

There is a statistically significant difference in the final score of knowledge before and immediately after the training on the principles of healthy lifestyle (median 6.00 vs 7.00,  $p = 0.004$ ). The median percentage change of knowledge score between pre- and post-training on the principles of healthy lifestyle was 16.67% (range: -28.57% to 50.00%). This indicated that at least 50% of all participants experienced  $\geq 16.67\%$  increase in the knowledge score on this issue after training. Other studies also reported an increase in knowledge; however, the significances of the changes were not always reported. Thus, our report adds information on how this method of education can significantly contribute to a difference in knowledge before and after the delivery.

There is a statistically significant difference in the final score of knowledge of the participants before and immediately after training on the appropriate medicine-related behavior (median 7.00 vs 8.00, *respectively*,  $p = 0.009$ ). The median percentage change of knowledge score between *pre*- and *post*-training on the principles of appropriate medicine-related behavior was 0.00% (range: -

12.50% to 60.00%), an indication that 50% of the participants did not experience any changes in the score of knowledge after training on this issue.

### Conclusion

The program demonstrated a significant change in the awareness and knowledge of some participants in the Village of Duyung on healthy lifestyles and the appropriateness of medicine-related behaviours. How this method of education contributes to cultural identity and consistent health-related behaviour over a longer time needs to be further observed.

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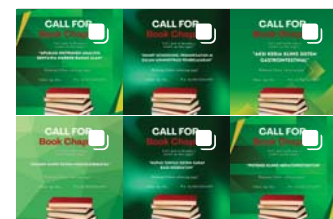
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