

# Experimental Study of Development Food Safety Booklet using Local Language

Ridwan Mochtar Thaha\*

Ridwan Mochtar Thaha\*

Department of Health Promotion and Behavioral Science, Hasanuddin University of Makassar, INDONESIA.

## Correspondence

Ridwan Mochtar Thaha

Department of Health Promotion and Behavioral Science, Hasanuddin University of Makassar, INDONESIA.

E-mail: ridwan\_609@yahoo.com

## History

- Submission Date: 13-08-2023;
- Review completed: 24-09-2023;
- Accepted Date: 10-10-2023.

DOI : 10.5530/pj.2023.15.206

## Article Available online

<http://www.phcogj.com/v15/i6>

## Copyright

© 2023 Phcogj.Com. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International license.

## ABSTRACT

To prevent food poisoning in Indonesia, it is necessary to have health promotion efforts in the field of food safety using appropriate media. Therefore, this study aims to develop food safety information media, namely local language booklets. For this reason, this study examines the validity and feasibility of local language food safety booklet. The research was conducted in Gorontalo Province from August to October 2022. The development of booklet is done by validating and trial. Validation was carried out using the DELPHI technique with experts in a qualitative descriptive research type. After that, a trial of the booklet was carried out with 20 Village Food Safety Cadres by distributing trial questionnaires and short interviews. Data analysis in this study used content analysis techniques. The results of the validity and feasibility of the local language food safety booklet show that the booklet is very feasible to use. Furthermore, it is hoped that further research can examine the effectiveness of using booklets to convey food safety messages to the wider community.

**Key words:** Booklet, Food Safety, Cadre.

## INTRODUCTION

It is well known that diarrheal disease agents account for more than 90% of all food poisoning-related illnesses.<sup>1</sup> In line with this, statistics data<sup>2</sup> shows that diarrhea has the highest number of cases in Indonesia, namely 4,165,789 cases. Furthermore, in 2020, it was reported that there were at least 45 cases of food poisoning in 17 provinces in Indonesia. WHO states that for every case related to food poisoning in a developing country, at least 99 other cases are not reported. This indicates that the community has not fully implemented good food safety behavior, so intervention is necessary.<sup>3</sup>

Health behavior is often related to groups of people who form a complex set of relationships that are interdependent with one another, so in health promotion, an approach with community mobilization to influence norms and behavior change can be carried out as an effort to shape public health.<sup>4</sup> Since 2017, through the Presidential Instruction of the Republic of Indonesia, Number 1 of 2017, concerning the Healthy Living Community Movement, the Indonesian Food and Drug Authority has initiated programs and activities in the field of community-based food safety called the Safe Food Village National Program. One of the strategies to achieve the program's objectives is to strengthen the capacity of human resources in the village through the formation and training of Village Food Safety Cadres. For this reason, it is necessary to conduct a deeper study related to food safety promotion media that can be used to increase cadres' capacity, knowledge, and skills in implementing food safety behavior.

In line with this, several studies have concluded that booklets can be used as a medium for food safety literacy because they can increase food safety knowledge which remains high (within one to

three months after the intervention is carried out), effective for transmitting food safety information for adults, and suitable for use in societies with heterogeneous educational profiles because it is simple, easy to understand and systematic.<sup>5-7</sup> Furthermore, booklets are widely used as media for health promotion because they have advantages such as low production costs, complete and easy-to-understand information, attractive designs that make a person more interested and less bored to read them frequently, and portability.<sup>8</sup>

As stated by WHO through the Health Promotion Glossary, health behavior is basically shaped by the social, cultural, residential, and occupational environment.<sup>9</sup> INFOSAN states that governments in low- and middle-income countries need to provide more and smarter "investments" in food security. The investment in question is establishing a system to address food safety issues, one of which is by presenting food safety cadres with good skills. In line with that, research conducted by Tiara<sup>10</sup> concluded that for people who are thick with their culture, a special approach is needed so that counseling messages can be conveyed properly, one of which is through language. The use of the local language approach makes counseling feel appropriate to attract the public's attention.

Gorontalo is one of the provinces in Indonesia that consistently maintains the noble values of its local culture in everyday life. Research conducted by Mohi<sup>11</sup> found that there are three regional languages spoken in Gorontalo, namely Gorontalo, Suwawa, and Atinggola. However, the main language used by the majority of Gorontalo people is Gorontalo Language. The results of a national assessment showed that for Gorontalo Province, there was no difference in knowledge, attitudes, and food safety behavior of cadres before and after the intervention using media presentations.<sup>12</sup> This means that the

**Cite this article:** Thaha RM. Experimental Study of Development Food Safety Booklet using Local Language. *Pharmacogn J.* 2023;15(6): 1132-1135.

food safety information media used in the program is less effective in improving the attitudes and behavior of cadres. So, based on these facts, this study aims to develop a medium for conveying food safety information, namely booklets in local languages. For this reason, this study examines the validity of food safety booklets in local languages using the DELPHI technique with experts and trials of booklets on Village Food Safety Cadres to assess their feasibility.

### METHODOLOGY

This research was health promotion product development research in the form of a food safety booklet in the local language of Gorontalo. Development was carried out by validating and testing the booklet for village food safety cadres. Validation was carried out by two media experts and two material experts, respectively, while the trial was carried out on 20 village food safety cadres in Gorontalo. The sequence of booklet development is outlined in figure 1.

The type of data obtained was qualitative data and quantitative data. Qualitative data from comments and suggestions from media experts and materials obtained in Focus Group Discussions (FGD), while quantitative data were obtained from the results of questionnaires given to the validator and the results of the booklet trials to cadres. The data collection instruments used in developing the booklet were validation and trial questionnaires. The data obtained during the validation and testing processes were analyzed using content analysis techniques. Evaluation of the validation results and the results of the booklet trial was carried out according to the criteria in table 1.

### RESULT

Figure 2 below shows the local language food safety booklet that was developed in this study. In Stage I, the total material and media validation score was 86.10, with a very decent category. However, there is still input from both media experts and material experts that needs

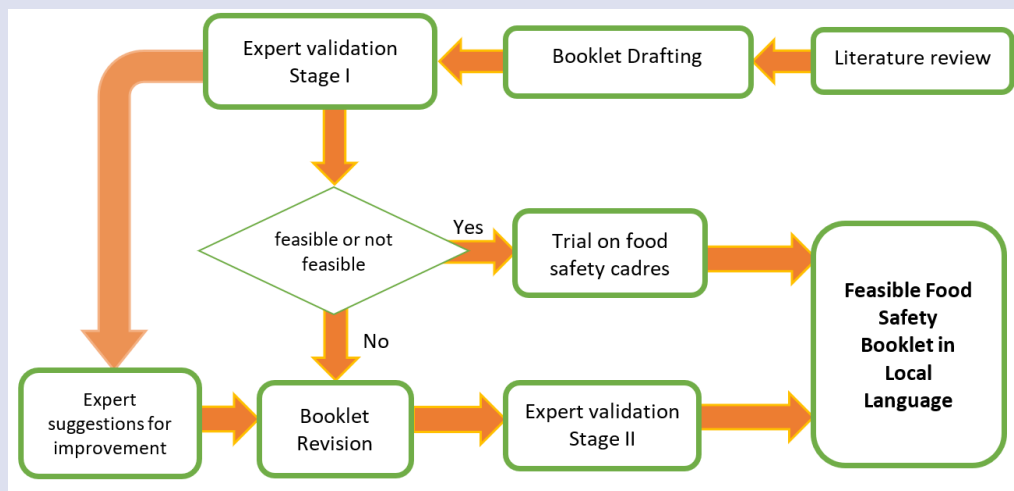


Figure 1: Sequence for developing local language food safety booklet



Figure 2: Food safety booklet in local gorontalo language

**Table 1: Criteria for the validation and trial results of the booklet.**

SCORES	FEASIBILITY CATEGORIES
33,3 – 50,0	Not feasible
50,1 – 66,4	Pretty decent
66,5 – 83,2	Decent
83,3 – 100	Very Decent

**Table 2: Booklet validation results.**

EXPERTS	STAGE 1		STAGE 2	
	SCORES	REMARKS	SCORES	REMARKS
MEDIA EXPERT 1	88,90	<ul style="list-style-type: none"> <li>The content conveys the message concisely and easily understood by respondents</li> <li>Photos, preferably of better quality</li> <li>The layout should support the message</li> <li>Trying to support the image does not interfere with the main message</li> </ul>	88,90	<ul style="list-style-type: none"> <li>Already appropriate</li> </ul>
MEDIA EXPERT 2	88,90	<ul style="list-style-type: none"> <li>Images adapted to media expert input 1</li> <li>The use of labels on images is removed</li> </ul>	88,90	<ul style="list-style-type: none"> <li>Pictures and labels are appropriate</li> </ul>
MATERIAL EXPERT 1	94,40	<ul style="list-style-type: none"> <li>The material has been conveyed well</li> </ul>	94,40	
MATERIAL EXPERT 2	77,80	<ul style="list-style-type: none"> <li>It is necessary to pay attention to the aspect of local language equivalents of Indonesian</li> <li>There are still many messages and meanings conveyed that are not clear</li> <li>It is necessary to add captions according to the pictures in local languages</li> <li>Translation techniques need to be improved and further discussions with experts</li> </ul>	94,40	<ul style="list-style-type: none"> <li>The local language and the suitability of the pictures are appropriate</li> </ul>
<b>TOTAL SCORES</b>	<b>86,10</b>		<b>91,65</b>	

**Table 3: Booklet trial.**

NO	QUESTIONS	SCORES
1	I read the entire booklet	90
2	The information presented in the booklet was very useful to me	100
3	The language is easy to understand	100
4	The appearance of the pictures and the color of the booklet is attractive	100
5	This booklet made me aware of the importance of food safety	100
6	This booklet encourages me to adopt food safety practices every day	100

to be followed up to get better booklet validation results. Media Expert 1 scored 88.90 with input regarding design and images with improved quality to support the message conveyed. Furthermore, Media Expert 2 gives a score of 88.90 with input regarding the use of appropriate images and does not display product labels. Whereas Material Expert 2 gave a score of 99.40 and accepted that the contents of the booklet material were in accordance with the messages to be conveyed.

Whereas Material Expert 2 gave a score of 77.80 and provided input from the aspect of using the local language, where some of the use of the Gorontalo language in the booklet was still not in accordance with the Gorontalo regional grammar, so improvements were made. For this reason, the booklet was revised to adjust to the use of regional languages and to adjust the pictures according to the input of experts. After that, the Material Expert 2 returned to assessing it so that a total average score was obtained in the Phase II assessment of 91.65 in the Very Eligible category. The results of the booklet validation are shown in table 2.

The response assessment of the booklet trial was carried out on 20 respondents after the booklet validation was carried out. The following is an excerpt from an interview regarding the food safety booklet: "If the booklet uses Gorontalo language like this, we, the coastal community, will understand better how to keep food safe", Mrs. RK Pohuwato Timur. "This can be brought home, so if you forget, you just have to

open it," Mrs. HT Pohuwato Timur. The results of the booklet trial are shown in table 3.

Table 3 shows the respondents' very good responses regarding the food safety booklet in the local language, both in terms of appearance, language and the benefits of the booklet. The trial results show that food safety booklets in local language are very feasible to use.

## DISCUSSION

One of the communication models that is often used in health communication is SMCR (Source, Message, Channel, and Receiver). The SMCR model sees communication taking place based on the source of information's skills, attitudes, knowledge, and cultural background. Meanwhile, for the received message to be received, it must pay attention to the contents of the message, the elements presented (can be in the form of images or other content), message packaging, message structure, and unique codes where the message communicated can be in the form of images or symbols. Messages are transferred through channels involving hearing, sight, touch, smell, and/or taste. Then the recipient of the message will interpret it based on their skills, attitudes, knowledge, and socio-cultural background.<sup>13</sup>

Health promotion media is a means or effort to display the message or information that the communicator wants to convey so that the recipient of the message can increase their knowledge which is then

expected to change behavior to be more positive in the health sector. The use of health promotion media based on local wisdom can help convey health messages so that the public more easily accepts them. For this reason, it is necessary to develop health promotion media to obtain empirical data that can be used as the basis for making health promotion media so that they can be used in learning. Product research and development serves to validate and develop health promotion media products.<sup>8</sup> In this case, the health promotion media developed is in the form of a local language food safety booklet.

Booklets are book-shaped media used to convey food safety messages. In addition to affordable production costs, attractive designs, displaying complete information, easy to understand, and easy to carry anywhere, booklets are also known to have the advantage of being able to be read repeatedly.<sup>8</sup> The results showed that based on the validation of the booklet by experts, the local language food safety booklet media was very feasible to use. Likewise, the response to the booklet trial conducted on respondents showed that the booklet was very feasible to use. Furthermore, the short interviews' results showed the cadres' enthusiasm in using the booklet because it used the local language and also because the booklet could be read at any time. In addition, the use of the local language in the food safety booklet media was highly appreciated by the cadres and considered suitable for use by Gorontalo people who live in coastal areas.

In line with the results of this study, Tiara<sup>10</sup> concluded that for people who are thick with their culture, a special approach is needed to attract attention to health education messages, one of the important forms of culture is their language. Furthermore, using booklets as a medium for food safety education is believed to make it easier to convey food safety messages to parents.<sup>6,14</sup> In addition, research shows that booklets are suitable for people with heterogeneous educational level profiles, because they are simple, easy to understand and systematic.<sup>7</sup>

## CONCLUSION

This study argues that food safety booklets in the local Gorontalo language are very appropriate to be used as a medium for conveying food safety information. The use of the local language was of interest to the cadres because it was considered to make it easier to understand the contents of the booklet and the booklet was also of interest because it could be accessed more frequently. It is hoped that further research can examine the effectiveness of using booklets to convey food safety messages to the broader community. Besides that, the development of food safety promotional media using local languages also needs to be done by developing media other than booklets to increase the variety of media according to the needs and interests of the community.

## AKNOWLEDGEMENTS

This study was research funded by the Indonesian Foods and Drugs Agency which is supported by Hasanuddin University of Makassar.

## REFERENCES

1. Devleesschauwer B, Haagsma JA, Mangen MJ. Springer International Publishing AG. 2018;107-22.
2. Central Bureau of Statistics Indonesia. Statistic of Indonesia 2019. Jakarta: Central Bureau of Statistics Indonesia; 2019.
3. Foods and Drugs Agency of Indonesia. Annual Report Year 2020. Jakarta: Indonesian Food and Drugs Authority; 2020.
4. World Health Organization. Health Promotion Glossary of Terms 2021. Geneva: World Health Organization; 2021.
5. Mosby TT, Romero ALH, Linares ALM. Testing Efficacy of Teaching Food Safety and Identifying Variables that Affect Learning in a Low-Literacy Population. *J Cancer Educ*. 2015;30(1):100-7.
6. Oliveira L, Poinhos R, Afonso C. Information Sources on Healthy Eating Among Community Living Older Adults. *Int Quart Commun Health Educ*. 2021;41(2):153-8.
7. Dewi IS, Hastuti US, Lestari U. Local wisdom and laboratory experiment-based extension booklet development for wadi makers of elementary-educated and dropout society in central Kalimantan. *J Pendidikan IPA Indonesia*. 2020;9(4):611-9.
8. Jatmika SED, Maulana M, Kuntoro. Health Promotion Media Development. Yogyakarta: K-Media; 2019.
9. World Health Organization. Health Promotion Glossary of Terms 2021. Geneva: World Health Organization 2021. <https://www.who.int/publications/item/9789240038349>
10. Tiara DR. Language and Place Setting as an Approach in Outreach Videos About the Covid-19 Virus. *Bahasa Dan Latar Tempat Sebagai Pendekatan Dalam Video Penyuluhan Tentang Virus Covid-19*. *J Character Educ Soc*. 2020;3(3):718-26.
11. Mohi S. The Existence of Local Culture of Gorontalo as a National Identity in Globalization and Modernism Dimensions. *Transformasi : J Kepemimpinan Pendidikan Islam*. 2021;5(2021):57-75.
12. Foods and Drugs Agency of Indonesia. Report on the results of the data analysis of the gap assessment and monitoring-evaluation of food security in the village. Jakarta: Foods and Drugs Agency; 2019.
13. Notoatmodjo S. Health Promotion: Theory and Application. Jakarta: Rhineka Cipta; 2018.
14. Wohlgenant KC, Godwin SL, Cates SC. Working with Individuals Who Provide Nursing Care to Educate Older Adults about Foodborne Illness Prevention: The Food Safety Because You Care! Intervention. *J Biomed Educ*. 2015;2015:1-5.

**Cite this article:** Thaha RM. Experimental Study of Development Food Safety Booklet using Local Language. *Pharmacogn J*. 2023;15(6): 1132-1135.