

## THE HEALTH PROMOTION MEDIA TO INCREASE COMMUNITY'S POSITIVE PERCEPTION ABOUT COVID- 19 VACCINATION IN KENDARI CITY

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### Abstract

**Background:** The achievement of Covid-19 vaccination in Southeast Sulawesi Province until June 15, 2021 is 15.5%, while the City of Kendari has achieved Covid-19 vaccination reached 22%. The lack of information and public perception about the Covid-19 vaccine has led to low public acceptance of the Covid-19 vaccine. Therefore, this study aims to increase the community's positive perception of the Covid-19 vaccination in Kendari City through the most effective health promotion media.

**Methods:** This quantitative study uses a quasi-experimental design with pretest-posttest nonequivalent control group design. The population is 345,107 people, 396 respondents are sampled. This study uses a sampling technique by random cluster sampling. The hypothesis test used is the Wilcoxon signed ranks test and the Kruskal Wallis H test.

**Result:** The results of the Wilcoxon test show that there is a significant difference between perceptions before and after health promotion using booklet media (Asymp. Sig. = 0.000); There is a significant difference between perceptions before and after health promotion using video media (Asymp. Sig. = 0.000); There is a significant difference between perceptions before and after health promotion through the development WhatsApp messages (Asymp. Sig. = 0.000). Based on the Kruskal Wallis H test, the mean rank of health promotion using booklets is the highest (217.59). There was no significant difference between the three media (Asymp. sig 0.156 > 0.05).

**Conclusion:** The booklet is the most effective media in health promotion to increase the positive perception of the community towards the covid-19 vaccination in the city of Kendari, but there is no significant difference between the three promotional media used.

**Key words:** Covid-19, Vaccine, Perception, Video, Booklet, WhatsApp.



## INTRODUCTION

The government has implemented efforts to overcome the Covid-19 pandemic curatively, preventively, and promotively. Countermeasures with social distancing policies and masks are carried out to avoid community transmission of Covid-19 in the community [1]. Although social/physical distancing has been carried out and is sufficient to suppress the transmission of the virus in the community [2]. However, community transmission is still the cause of the increasing number of Covid-19 cases in Indonesia [3]. In a pandemic emergency, vaccination is considered the best strategy to control infectious diseases and reduce morbidity and mortality. Vaccination is carried out to create herd immunity in the community [4]. Herd immunity provides direct benefits for those who have been immunized and indirectly for those who have not been immunized.

The Global Change Data Lab shows that the world's Covid-19 vaccination achievement as of June 17, 2021 is 21.1% [5]. In Indonesia, as of June 15, 2021, the target for COVID-19 vaccination is 40,349,049 people; the target consists of three priority groups, namely health workers, the elderly and public officials, with achievement of 28.95 % of the specified target [6]. On the same date, the achievement of the Covid-19 vaccination target in Southeast Sulawesi Province, which in general only reached 15.5% [7]. Meanwhile, the vaccination achievement in Kendari City, from the vaccination target of 60,595 people, the Covid-19 vaccination achievement only reached 35% on the same date [8].

The low level of public acceptance is caused by many who consider deepening spirituality to maintain health and deal with the disease. Other general contextual factors such as religion, perception of pharmaceutical companies, and social, cultural, and economic conditions also influence vaccine acceptance [9]. Public

perception of health and disease prevention is also an important factor. Based on previous research on the people of Southeast Sulawesi's perception of the Covid-19 vaccine conducted by Tasnim (2021), around 59% of respondents had a sufficient perception, 26.7% of respondents had a poor perception, and only 14.3% had a good perception of the Covid-19 vaccine [10].

A preliminary study was conducted on ten respondents regarding the public's perception of the Covid-19 vaccination in Kendari City, eight of whom considered the Covid-19 vaccine necessary. However, all respondents still questioned the effectiveness of the Covid-19 vaccine. All respondents also considered that information about the Covid-19 vaccine very important because there were many doubts about the Covid-19 vaccine. The limited information about the type of vaccine, the timing of the vaccine and its safety profile causes differences in the level of perception of the Covid-19 vaccine. This is supported by a survey conducted by the Indonesian Ministry of Health where around 79% of respondents wanted to get more information about the Covid-19 vaccine [9].

This lack of information and doubts about the effectiveness and safety of the Covid-19 vaccine has led to the need to provide information through health promotion to increase positive public perceptions. In health promotion efforts, promotional media are instruments used in disseminating health information through effective communication. Submission of material in writing as a medium of health promotion is defined as a teaching aid in writing that effectively conveys health promotion by channeling knowledge to the brain through the eyes of around 75-87% [11]. In addition to delivering material in writing, Video was also chosen in this health promotion. Video helps to form perceptions easily by maximizing the reception of information through the eyes and the senses of hearing [12]. A person's

perception is influenced by individual knowledge regarding the benefits of an action on his health status, where the lower a person's knowledge, so the perception will not be good, and conversely, with good knowledge, the respondent's attitude will be better[13].

By utilizing facilities in the digital era, health promotion regarding Covid-19 vaccination is carried out by involving respondents in developing messages using WhatsApp as a form of "experiential learning". The effectiveness of health promotion by involving respondents in social media also significantly impact the delivery of health information to the target [14]. The right promotional media is expected to help convey information to increase the public's positive perception of the Covid-19 vaccination, impacting the public's acceptance of the Covid-19 vaccination to create group immunity in the community.

## METHOD

The type of research used is quantitative with approach quasi-experimental design with pretest-posttest nonequivalent control group design implemented in Kendari City. From a population of 345,107 people, a sample of 396 respondents was divided proportionally into four intervention groups, namely the group that received the intervention with booklets, videos, WhatsApp, and the control group. The sampling technique was carried out by random cluster sampling. The hypothesis test used is the Wilcoxon signed ranks test and the Kruskal Wallis H. test.

## RESULT

The table 1 before health promotion using the booklet, most respondents had a sufficient perception (59%). Table 2 shows that after health promotion was carried out using the booklet, most respondents had a good perception (63%). Table 3 explains that before carrying out health promotion using

video, most of the respondents who have a perception enough (57%)

Table 4 shows that after health promotion was carried out using video media, most respondents had good perceptions (63%). Table 5 shows that before health promotion was carried out using WhatsApp part large number of respondents who have sufficient perception (65%). Table 6 shows that after health promotion was carried out using video media, most of the respondents who had a good perception (66%). Table 7 shows that the results of the pretest of the control group respondents who were not given health promotion about Covid-19 vaccination, most of the respondents who had sufficient perception (59%). Table 8 shows that the results of the posttest assessment of the perception of the control group respondents who were not given health promotion about Covid-19 vaccination, most of the respondents who had sufficient perception (58%),

Table 9 showed as many as 97 posttest perceptions > Pretest perceptions, with Asymp values. Sig. = 0.000 < value 0.05, it is concluded that there is a significant difference between perceptions before and after health promotion using booklet media. Table-10 shows as many as 96 posttest perceptions > pretest perceptions, with the Asymp value. Sig. = 0.000 < value 0.05 concluded a significant difference between perceptions before and after health promotion using video media. Table 11 shows as many as 95 posttest perceptions > pretest perceptions, with Asymp. Sig. = 0.000 < value 0.05 concluded that there is a significant difference between perceptions before and after health promotion through the development of WhatsApp messages.

Table 12 shows as many as 89 posttest perceptions > pretest perceptions, with the Asymp value. Sig. = 0.000 < value 0.05, it was concluded that there was a significant difference between the perception of the control group's pretest and post-test. Table 13 shows that the mean rank of health promotion using booklets is the highest at

217.59, with an Asymp.sig value of 0.156 > 0.05, there is no significant difference between the three media and without the media.

**Table 1.**  
**Distribution of Respondents' Perception Levels Before Health Promotion Using Booklet Media to Increase Public's Positive Perception of Covid-19 Vaccination in Kendari City**

No.	Perception Criteria	Total (n)	Percentage (%)
1	Good Perception	17	17
2	Fair Perception	59	59
3	Poor Perception	23	23
Total		99	100

Source: Primary Data 2021

**Table 2.**  
**Distribution of Respondents' Perception Level After Health Promotion Using Booklet Media to Improve Perception Community Positive Against Covid-19 Vaccination in Kendari City**

No.	Perception After	Total (n)	Percentage (%)
1	Good Perception	65	66
2	Fair Perception	34	34
3	Poor Perception	0	0
Total		99	100

Source: Primary Data 2021

**Table 3.**  
**Respondents' Perception Level Before Health Promotion Using Video Media to Increase Positive Perceptions Community Against Covid-19 Vaccination in Kendari City**

No.	Perception Before	Total (n)	Percentage (%)
1	Good Perception	22	22
2	Fair Perception	56	57
3	Poor Perception	21	21
Total		99	100

Source: Primary Data 2021

**Table 4.**  
**Respondents' Perception Level After Health Promotion Using Video Media to Increase Positive Perceptions Community Against Covid-19 Vaccination in Kendari City**

No	Perception After	Total (n)	Percentage (%)
1	Good Perception	62	63
2	Fair Perception	34	34
3	Less Perception	3	3
Total		99	100

Source: Primary Data 2021

**Table 5.**  
**Respondents Perception Level Before Health Promotion Using Media WhatsApp to Increase Positive Perceptions Community Against Covid-19 Vaccination in Kendari City**

No.	Prior Perception	Total (n)	Percentage (%)
1	Good Perception	15	15
2	Fair Perception	64	65
3	Poor Perception	20	20
Total		99	100

Source: Primary Data 2021

**Table 6.**  
**Respondents' Perception Level After Health Promotion Using WhatsApp to Increase Public's Positive Perception of Covid-19 Vaccination in Kendari City**

No	Perception After	Total (n)	Percentage (%)
1	Good Perception	65	66
2	Fair Perception	33	33
3	Poor Perception	1	1
Total		99	100

Source: Primary Data 2021

**Table 7.**  
**Distribution of Pretest Results Perception Level of Respondents Who Are Not Given Health Promotion to Increase Public's Positive Perception of Covid-19 Vaccination in Kendari City**

No.	Perception Before	Total (n)	Percentage (%)
1	Good Perception	21	21
2	Fair Perception	58	59
3	Poor Perception	20	20
Total		99	100

Source: Primary Data 2021

**Table 8.**  
**Distribution of Posttest Results of Respondents' Perceptions Not Given Health Promotion to Improve Perceptions Community Positive Against Covid-19 Vaccination in Kendari City**

No .	Perception After	Total (n)	Percentage (%)
1	Good Perception	57	58
2	Enough Perception	36	36
3	Less Perception	6	6
Total		99	100

Source: Primary Data 2021

**Table 9.**  
**The effectiveness of booklet media in health promotion to influence positive public perception of Covid vaccination -19 in Kendari City**

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Perception after - Perception before being given health promotion using Booklet media	Negative Ranks	0	.00	.00	-8553	.000
	Positive Ranks	97	49.00	4753.00		
	Ties	2				
Total		99				

Source: Wilcoxon Signed Ranks Test Results, 2021

**Table 10. The effectiveness of video media in health promotion to influence the public's positive perception of Covid-19 vaccination in Kendari City**

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Perception after - Perception before being promoted using video media	Negative Ranks	1	4.00	4.00	-8,539	.000
	Positive Ranks	96	49.47	4749.00		
	Ties	2				
Total		99				

Source: Wilcoxon Signed Ranks Test Results, 2021

**Table 11.**

**The effectiveness of developing messages *WhatsApp* in health promotion to influence the public's positive perception of Covid-19 vaccination in Kendari City.**

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Perception after - Perception before being given health promotion was given promotion using message development <i>WhatsApp</i>	<i>Negative Ranks</i>	4	15.00	60.00	-8.432	.000
	<i>Positive Ranks</i>	9	51.47	4890.00		
	<i>Ties</i>	0				
Total		9				
		9				

Source: Wilcoxon Signed Ranks Test Results, 2021

**Table 12.**

**Changes in Public Perception of Covid-19 Vaccinations That Are Not Given Health Promotion (Control)**

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Perception after - Perception before (Control)	<i>Negative Ranks</i>	8	44.63	357.00	-7,270	.000
	<i>Positive Ranks</i>	8	49.39	4396.00		
	<i>Ties</i>	2				
Total		9				
		9				

Source: Wilcoxon Signed Ranks Test Results, 2021

**Table 13. The**

**most effective health promotion media in influencing positive public perceptions of Covid-19 vaccination in Kendari City**

	Treatment	N	Mean Rank	Kruskal -Wallis H	df	Asymp . Sig.
Health Promotion to Increase Public's Positive Perception of Covid-19 Vaccination in Kendari City	Media Booklet	99	217.59	5,231	3	0.156
	Video media	99	200.81			
	Media <i>WhatsApp</i>	99	194.61			
	Control	99	180.99			
Total		396				

Source: Kruskal Wallis H Test Results, 2021

## DISCUSSION

### 1. Effectiveness of Media Booklets in Health Promotion To Influence Positive Public Perceptions of Covid-19 Vaccination in Kendari City.

The booklet is one of the traditional media still used in various forms of promotion, especially health promotion. Based on the results of data analysis using the Wilcoxon signed ranks test, it is known that as many as 97 respondents from 99 respondents from 11 districts in Kendari City experienced a change in perception in a positive direction. The use of booklets in this study is not difficult because most of the respondents have a good level of education and good reading skills to understand the booklet's contents. In addition, the advantages of booklets are that they can be read while relaxing and can easily find the desired topic [2].

The effectiveness of booklets can be seen from the analysis results using the Wilcoxon test, and it is known that the Asymp. Sig. (2-tailed) of 0.000 where the value is less than 0.05, so it can be concluded that there is a significant difference between perceptions before and after respondents receive health promotion using booklet media. The results of this study are in line with the research conducted by Chhetri, et al. (2021) stated that the provision of informative booklets increased the knowledge and understanding of respondents [15]. Informative booklets foster positive perceptions of respondents [16].

### 2. The effectiveness of videos in health promotion to influence the positive perception of the community towards the Covid-19 vaccination in Kendari City.

Based on the results of the Wilcoxon test, it is known that as many as 96 respondents experienced a change in perception in a positive direction, 2

respondents did not experience a change in perception and 1 respondent experienced a change in perception in a negative direction from 99 respondents from 11 sub-districts in Kendari City after being given health promotion using videos. Based on the test results, it is known the value Asymp. Sig. (2-tailed) of 0.000 where the value is less than 0.05, it can be concluded that there is a significant difference between perceptions before and after respondents received health promotion using video media. This is in line with the research results conducted by Prawesti, et al. (2018), which states that video has a significant effect on increasing health knowledge [17]. Through video, hearing and vision get the maximum stimulus. 75% to 85% of the most channelled to the brain is the eye and 13% to 25% through the other senses [18]. However, some of the disadvantages of using video are that it cannot achieve all learning objectives and must be packaged as creatively as possible to arouse the audience's interest without compromising the content.

### 3. The effectiveness of involving the development of messages WhatsApp in health promotion to influence the public's positive perception of the Covid-19 vaccination in Kendari City.

WhatsApp is a type of media sharing (media sharing) is the most popular social media that allows interacting with each other. All posts (publications) are real-time, allowing members to share information about what is going on [19].

The development of messages through WhatsApp by respondents in this study applies Cone dale's theory. The learning experience in the form of enactive mode in which respondents are not only spectators or readers but also participate in designing promotional messages asking for Covid-19 vaccination through WhatsApp. Dale described the importance of hands-on experience for effective communication and



learning in Direct Purposeful Experiences [20].

Based on the results of the Wilcoxon test, it is known that 95 respondents experienced a change in perception in a positive direction, four respondents experienced a change in perception in a negative direction after being given health promotion using WhatsApp. Based on the test results, the value is known as Asymp. Sig. (2-tailed) of 0.000 where the value is less than 0.05, it can be concluded that there is a significant difference between perceptions before and after respondents received health promotions to increase positive public perceptions of Covid-19 vaccination in Kendari City using WhatsApp.

The effectiveness of experimental learning is also supported by Davis & Summers (2015) were, from the results of their research, it is stated that experiential learning significantly improves learning outcomes [21]. Activities Experiential learning encourages critical reflection on ways to apply the knowledge gained by participants [7]. The implications of Dale's Cone of Experience, according to Green, et al. (2020) in health promotion, showed positive perception posttest results and increased youth knowledge [22].

#### **4. The most effective health promotion media in influencing the public's positive perception of the Covid-19 vaccination in Kendari City.**

Based on the analysis results using the Kruskal Wallis H test, it shows that health promotion media using booklets has more influence on changes in positive perceptions about covid-19 vaccination when compared to health promotion using video and the development of messages WhatsApp. This is evidenced by the mean value of health promotion media using booklets with the highest score of 217.59. The booklet information in this study uses sentences that are easily understood by respondents. It will be easier for respondents

to capture the material presented and to read and focus on the information presented. This finding contradicts the finding of Selvia&Amru (2020). Health promotion using video media is more effective in increasing attitudes and behaviour knowledge than booklet media [23].

Based on the Asymp. sig value of  $0.156 > 0.05$  from the results of the Kruskal Wallis H test, it can be concluded that there is no significant difference between the three health promotion media used and the same with no promotional media.

Dale emphasizes that the cone of experience is not designed to attribute eligibility to a certain level, such as the top (reading) being better than the bottom (experience learning) or vice versa [8]. In addition, differences that exist within individuals such as feelings, experiences, thinking skills, frames of reference and other aspects that exist in individual communities will play a role in these perceptions [9].

## **CONCLUSION**

Using booklets, videos, and WhatsApp, health promotion effectively increases positive public perceptions about the Covid-19 vaccination in Kendari City. Booklet media is the most effective media in influencing the positive perception of the community towards the Covid-19 vaccination in Kendari City. However, there is no significant difference between the three promotional media used.

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