

# Media Effectiveness Health Promotion Video and Poster on Covid-19 Vaccination on Improving Knowledge and Attitude of Cadres in Banda Aceh City

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## Abstract

*The COVID-19 pandemic since March 2020 until now has had an impact on all aspects of people's lives. The government has made various efforts to achieve the COVID-19 vaccination target, but promotive and preventive efforts still need to be strengthened considering that many people refuse vaccination. In Indonesia, promotional efforts using video and poster media have begun to develop. Puskesmas is a health service facility that focuses on promotive efforts where the involvement of health cadres greatly influences these efforts. The purpose of the study was to determine the effectiveness of video and poster health promotion media on increasing the knowledge and attitudes of cadres about COVID-19 vaccination. Research methods: Method used Randomized Controlled Trial pretest posttest with control group design. The population is all health cadres in Banda Aceh City. Randomly selected at the cluster level. Of the 9 sub-districts, 3 sub-districts were selected as the population to be studied. Sampling by Cluster Randomized Sampling based on the sampling criteria, the determination of the sample size using OpenEpi software is 213 people. Data retrieval using a questionnaire was analyzed by Kruskal Wallis statistical test with Post hoc Mann Whitney, Wilcoxon, Spearman's Bivariate Correlation and Multivariate Multiple Linear Regression. Research result: video and poster media were effective in increasing the knowledge and attitudes of cadres ( $P=.000$ ) and there was no difference in their effectiveness ( $P=.212$  and  $P=.228$ ). The level of knowledge and attitudes of cadres increased after being given an intervention with video and poster media ( $P=.000$ ). There was no effect of the Confounding variable on the level of knowledge and attitudes of cadres (age  $P = ,122$  and  $,438$ ), (education  $P = ,089$  and  $,308$ ), (occupation  $P = ,445$  and  $,163$ ), (service period  $P = ,051$  and  $,264$ ), (vaccination training  $P=.16$  and  $,18$ ) (income  $P=.265$  and  $,412$ ). The most dominant variables influencing the level of knowledge and attitudes of cadres are video media and poster media ( $P=.000$  and  $P=.001$ ).*

## Keywords

health promotion media;  
knowledge; attitude; COVID-19  
vaccination



## I. Introduction

The COVID-19 pandemic that has been established by the WHO (World Health Organization) since March 2020 until now has had a major impact on all aspects of people's lives. The addition of cases and death rates due to COVID-19 from day to day globally moves dynamically. As an effort to prevent the spread of the COVID-19 virus, the Indonesian government vaccinates all elements of society with the aim of reducing the transmission of COVID-19, reducing morbidity and mortality and achieving group immunity (Ministry of Health, 2021).

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Based on Our World in Data as of January 5, 2022, the total dose of COVID-19 vaccination given in the world was 8.47 billion, of those who received the complete vaccine were 3.63 billion (46.6%). WHO targets that in 2021 the vaccination achievement will be 40% while in mid-2022 it will be 70%. In Indonesia, the total dose given is 258 million, the total number of complete vaccines is 107 million (39.1%). For the Province of Aceh, the vaccination target was 4,028,891 people, 32.5% of whom had received dose 1 and 17.7% of dose 2. In the city of Banda Aceh, the total target for vaccination was 190,289 people, 78.9% of those who had received dose 1 and 56.6% of dose 2 and 2.02% of dose 3 had received vaccine. From this figure, the achievement of vaccination is still not as expected.

The government has made various efforts to achieve the COVID-19 vaccination target, such as health promotion efforts, mandatory vaccination policies from the government to administrative requirements. Even though these efforts continue, many people are still refusing vaccination, so the pandemic condition is still ongoing and the increase in COVID-19 transmission in the community has not been able to be controlled properly. Several factors that are believed to be the cause of the low coverage are doubts about the halalness of vaccines, anxiety when being vaccinated, public knowledge of the benefits of vaccines that are still lacking and the circulation of hoax news/misinformation about COVID-19 vaccination. Therefore, promotive and preventive efforts need to be strengthened by the Government.

Even though the number of cases is starting to fall, the public is expected to remain vigilant against a spike in cases, especially with the potential for a new variant of Omicron to enter Indonesia. Therefore, the Puskesmas, which is the spearhead of health service delivery facilities, must focus on promotive and preventive efforts, for that health promotion is a mandatory effort at the Puskesmas. Before carrying out health promotions, it is necessary to pay attention to the media that will be used because through the media, health information will be packaged in an attractive and easily understood form by the public (Ministry of Health of the Republic of Indonesia, 2021).

Several countries in the world, such as in Bilibili, China, have started using video to communicate information about COVID-19 to the public. In Indonesia, the use of video in health promotion is starting to develop, this can be seen in several videos that can be downloaded at the Directorate General of Health Promotion of the Indonesian Ministry of Health, videos about COVID-19 vaccination are also circulating freely on social media, this shows that video media can contribute in conveying messages -health messages. Studies related to the use of video media in health promotion have also begun, Rahmah (2020) said that videos are effective in increasing knowledge of COVID-19 prevention in new students of Nusa Cendana University. Based on the research of Gursoy et al (2022) said that the packaging of health information,

However some videos are currently experiencing poor efficiency and contain misinformation. Basch et al (2020) in China reviewed the 100 most viewed and uploaded YouTube videos of January 2020 about COVID-19. More than a quarter of videos contain misleading information. The limitations of these individual videos highlight how important it is to expand the impact of appropriate and accurate pandemic information delivered by the Government and the health sector (He et al, 2022).

Based on the initial survey, all Puskesmas in Banda Aceh City have carried out health promotion efforts under the supervision of the Banda Aceh City Health Office, such as counseling the community using various methods and media, ranging from health protocol campaigns in coffee shops, public places, schools, direct counseling to Posyandu and gampongs using leaflets, flipcharts, posters, banners, banners, videos and others, but

based on interviews with health promotion officers and immunization interpreters at the Puskesmas stated that the use of video media was still lacking.

The government must strive so that the public obtains correct information about COVID-19 vaccination, with the limited number of available health workers, the government and the health sector need public participation in assisting the delivery of health information by involving health cadres (Husaini and Lenie Marlinae, 2016).

Based on cadre interviews conducted by the author, during the pandemic there had not been formed cadres who focused on the field of COVID-19. The current cadres have not even received training related to COVID-19 vaccination, most of the cadres receive information from social media that is accessed independently. Cadres who are the embodiment of efforts to foster behavioral change and community participation in improving health status need to be involved in the prevention and prevention of COVID-19, for this reason cadres need to be nurtured and increased their knowledge continuously and sustainably through learning efforts (Ministry of Health, 2011).

The presence of cadres in the community who have been equipped with knowledge about COVID-19 vaccination will later be able to be the first line in delivering health promotion. Based on the initial survey, it is known that most cadres do not really understand the benefits of vaccines in preventing the spread of COVID-19 and cadres do not yet have health promotion media that can be used in the field, this can make it difficult for cadres to deliver health information to the public.

Based on the description above, the authors are interested in conducting research on "The Effectiveness of Video and Poster Health Promotion Media on COVID-19 Vaccination on Increasing Knowledge and Attitudes of Cadres in Banda Aceh City". Research related to this is still very limited, so it is necessary to know which types of health promotion media can be used.

## **II. Review of Literature**

### **2.1 Overview of Health Promotion in Banda Aceh City**

Until now, the number of COVID-19 vaccination coverage in Banda Aceh City varies in each sub-district, this may also be influenced by the varying number of population factors. Banda Aceh City is the city with the highest number of COVID-19 cases compared to other districts/cities in Aceh Province, this may be because Banda Aceh City is the center of the capital city of Aceh Province where mobility is very high, the population is denser, people come in and out. By changing, there are international airports and several ports which are believed to be import media for COVID-19 cases. The government should be more focused and prioritize the acceleration of COVID-19 prevention through vaccination in Banda Aceh City. Through the Gebyar Vaccine and Go Green Zone programs until January 7, 2022, the vaccination coverage for all categories is 72.79% (Banda Aceh City Health Office).

In the initial survey, promotive and preventive efforts have been carried out starting from health education about the COVID-19 vaccine in the community, schools, government agencies to the Elderly Vaccine Festival (GVL). Health promotion that has been going on so far is an outreach method using print media such as posters, banners, flipcharts, brochures, stickers, leaflets, billboards, while the use of video media has begun but its use is still minimal.

## **2.2 COVID-19 Vaccination**

### **a. Definition of COVID-19 vaccination**

Vaccination is the administration of biological products to humans in order to actively generate or increase a person's immunity against a disease, so that if one day they are exposed to the disease, they will not get sick or only experience mild illness and will not become a source of transmission.

### **b. Purpose and Benefits of COVID-19 vaccination**

Vaccination aims to provide specific immunity against a certain disease so that if one day you are exposed to the disease, you will not get sick or only experience mild illness. Vaccination is one of the most effective efforts to overcoming the COVID-19 pandemic which is still ongoing. Vaccination can break the chain of transmission, thus it is hoped that it can stop disease outbreaks (Mellyanawati.dr and Etha Rambung.dr, 2021).

Vaccination is a very reliable primary prevention effort to prevent disease, with the correct vaccination procedure it is hoped that optimal immunity will be obtained. The COVID-19 vaccination is carried out after the certainty of its safety and efficacy has been identified, so it is believed to be one of the efforts to reduce morbidity and mortality and encourage the formation of herd immunity. protect the community from COVID-19 in order to remain socially and economically productive. Herd immunity can only be formed if vaccination coverage is high and evenly distributed throughout the region (Ministry of Health of the Republic of Indonesia, 2021).

## **2.3 Health Promotion**

### **a. Definition of Health Promotion**

Based on KMK Number 1148/MENKES/SK/VII/2005, Health Promotion is "an effort to increase the community's capacity through learning from, by, for and with the community so that they can help themselves and develop activities that are community-based, according to local socio-cultural and supported by health-oriented public policies" (Nurmala et al, 2018).

### **b. Health Promotion Goals**

According to Notoatmojo (2012) the purpose of health promotion is to increase the ability of the community, both individuals, families and groups to be able to live healthy lives by encouraging the formation of various health efforts sourced from the community by using certain strategies. (Nurmala et al, 2018).

Health Promotion is a health education effort that is considered to be the delivery of health-related information to influence values, attitudes and motivations and change health behavior and the delivery of these messages can be through the media. (Tamsuri.A and Widati.S, 2020).

## **III. Research Method**

This type of research is a quantitative research with a True Experimental research design in the form of a Randomized Controlled Trial (RCT). pretest-posttest with control group design. This design is to assess and measure changes in the level of knowledge and attitudes of health cadres about COVID-19 vaccination by using health promotion media, videos and posters. The researcher divided the research respondents into three groups, namely group A who would be given an outreach intervention using video media, group B were given an outreach intervention using poster media and group C a control who was not given an intervention.

## IV. Result and Discussion

### 4.1 Univariate Analysis Results

**Table 1.** Frequency Distribution by Age in Cadre in Banda Aceh City Region (n=213)

Variable	mean	median	SD	Minimum - Maximum
Age	39.55	40.00	9,500	21 – 63

Source: Primary Data 2022

Based on table 4.2 above, it is generally known that the average age distribution of health cadres in Banda Aceh City is 39.55 years with a median value of 40 years. The lowest age is 21 years and the highest age is 63 years. The standard deviation value of 9.5 is smaller than the mean, indicating that the age variable is homogeneous.

**Table 2.** Frequency Distribution Based on Characteristics or Confounding Variables in Cadre in Banda Aceh City Region (n=213)

Demographics/ Confounding Variable	Research Group						Total	
	Video Intervention		Intervention Poster		Control			
	(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)
<b>Education</b>								
JUNIOR HIGH SCHOOL	6	8.5	3	4.2	9	12.7	18	8.5
SENIOR HIGH SCHOOL	48	67.6	45	63.4	37	52.1	130	61.0
PT	17	23.9	23	32.4	25	35.2	65	30.5
Total	71	100	71	100	71	100	213	100
<b>Work</b>								
IRT	53	74.6	52	73.2	58	81.7	163	76.5
Working	18	25.4	19	26.8	13	18.3	50	23.5
Total	71	100	71	100	71	100	213	100
<b>Years of service</b>								
< 1 year	9	12.7	7	9.9	6	8.5	22	10.3
1 year	62	87.3	64	90.1	65	91.5	191	89.7
Total	71	100	71	100	71	100	213	100
<b>Vaccination Training</b>								
Never	49	69.0	38	53.5	26	36.6	113	53.1
Once	22	31.0	33	46.5	45	63.4	100	46.9
Total	71	100	71	100	71	100	213	100
<b>Income</b>								
< IDR 3.165 million	52	73.2	56	78.9	60	84.5	168	78.9
IDR 3.165 million	19	26.8	15	21.1	11	15.5	45	21.1

Total    71        100        71        100        71        100        213        100

Source: Primary Data 2022

Based on table 4.3 above, in general, the education level of health cadres in Banda Aceh City, sequentially from the highest to the lowest, is SMA which is 61.03%, PT is 30.5% and SMP is 8.5%. The distribution of the highest level of education in each research group was high school level, sequentially from high to low were the video intervention group, which was 67.6%, the poster intervention group was 63.4%, and the control group was 52.1%.

In general, the work of health cadres in Banda Aceh City is not working/IRT which is 76.5% and working is 23.5%. The distribution of work in each research group was unemployed/IRT, sequentially from high to low, the control group was 81.7%, the video intervention group was 74.6% and the poster intervention group was 73.2%.

In general, the working period as a health cadre in Banda Aceh City is working >1 year, namely 89.7% and working <1 year, namely 10.3%. The distribution of tenure in each research group was working >1 year, sequentially from high to low, the control group was 91.5%, the poster intervention group was 90.1% and the video intervention group was 87.3%.

In general, the COVID-19 vaccination training for health cadres in Banda Aceh City were cadres who had never attended training, namely 53.1% and those who had attended training were 46.9%. The distribution of COVID-19 vaccination training in each study group sequentially from high to low is the video intervention group that has never attended training, which is 69.0%, the control group has attended training, which is 63.4% and the poster intervention group has not. had attended training, namely 53.5%.

In general, the amount of family income of health cadres in Banda Aceh City each month is <Rp 3,165,031,- ie 78.9% and >Rp 3,165,031,- which is 21.1%. The distribution of income in each research group is <Rp 3,165,031,-, sequentially from high to low, the control group is 84.5%, the poster intervention group is 78.9% and the video intervention group is 73.2%.

**Table 3.** Frequency Distribution of Knowledge Levels and Attitudes Based on Pretest and Posttest on Cadres in Banda Aceh City Region (n=213)

Research Group/Variable	mean	median	SD	Min - Max
<b>Knowledge level</b>				
<b>Video Intervention</b>				
Pretest Knowledge	7.4930	8,0000	2.13055	1 – 10
Posttest Knowledge	9.0704	9,0000	1.34509	2 – 10
<b>Intervention Poster</b>				
Pretest Knowledge	7.9155	8,0000	1.64531	3 – 10
Posttest Knowledge	9.2535	10,0000	1.02425	6 – 10
<b>Control</b>				
Pretest Knowledge	7,1268	8,0000	2.13093	1 – 5
Posttest Knowledge	6.9577	8,0000	2,44620	0 – 10
<b>Total</b>				
Pretest Knowledge	7.5117	8,0000	1.99908	1 – 10
Posttest Knowledge	8.4272	9,0000	2.00250	0 – 10

<b>Attitude</b>				
<b>Video Intervention</b>				
Pretest attitude	3.7042	4,0000	1.43820	0 – 5
Posttest attitude	4,4225	5,0000	0.92059	1 – 5
<b>Intervention Poster</b>				
Pretest attitude	3.7746	4,0000	1.09801	1 – 5
Posttest attitude	4.6479	5,0000	0.67820	2 – 5
<b>Control</b>				
Pretest attitude	3.3099	4,0000	1.63525	0 – 5
Posttest attitude	3,4225	4,0000	1.56444	0 – 5
<b>Total</b>				
Pretest attitude	3.5962	4,0000	1.41634	0 – 5
Posttest attitude	4.1643	5,0000	1.23481	0 – 5

Source: Primary Data 2022

Based on table 4.4 above, it is generally known that the distribution of the pretest knowledge score of cadres in Banda Aceh City on average is 7.51 with a median value of 8.00. The lowest value is 1 and the highest is 10. The standard deviation value of 1.9 is smaller than the mean, indicating that the pretest knowledge variable is homogeneous. Meanwhile, the posttest knowledge score of cadres in Banda Aceh City on average was 8.43 with a median value of 9.00. The lowest value is 0 and the highest is 10. The standard deviation value of 2.003 is smaller than the mean, indicating that the posttest knowledge variable is homogeneous.

The distribution of the pretest attitude scores of cadres in Banda Aceh City on average was 3.60 with a median value of 4.00. The lowest value is 0 and the highest is 5. The standard deviation value is 1.416 which is smaller than the mean, indicating that the pretest attitude variable is homogeneous. Meanwhile, the posttest attitude score of cadres in Banda Aceh City on average was 4.15 with a median value of 5.00. The lowest value is 0 and the highest is 5. The standard deviation value of 1.264 is smaller than the mean, indicating that the posttest attitude variable is homogeneous.

## 4.2 Results of Bivariate Analysis

### a. Effectiveness of Video and Poster Health Promotion Media on Knowledge Level

Because the research data on the knowledge variable was not normally distributed, the requirements for the Anova test were not met. To see the level of knowledge of cadres using video and poster health promotion media, the Kruskal Wallis test was carried out.

**Table 4.** Knowledge Level of COVID-19 Vaccination Between Research Groups (n=213)

<b>Group</b>	<b>Knowledge</b>		<b>P-Value</b>
	<b>N</b>	<b>Mean Rank</b>	
Video Intervention	71	125.01	,000
Intervention Poster	71	118.98	
Control	71	77.01	
Total	213		

Source: Primary Data 2022

Table 4 above shows that the rankings sequentially from the highest to the lowest level of knowledge are cadres who received video media intervention, namely 125.01, cadres who received poster media intervention, namely 118.98 and cadres who did not receive intervention, namely 77.01. From the analysis test, the value of  $P = .000$  was obtained. Because the  $P$  value  $\leq 0.05$ , it can be concluded that "there is at least a difference in the mean level of knowledge between the research groups". To find out the details, a post hoc Mann Whitney analysis will be carried out. From Mann Whitney's post hoc analysis, the following results were obtained:

**Table 5.** Knowledge Level of Cadres about COVID-19 Vaccination between Video Media Intervention and Poster Media (n=142)

Group Study	Knowledge		P-Value
	N	Mean Rank	
Video Intervention	71	74.19	,212
Intervention Poster	71	68.81	

Source: Primary Data 2022

From table 5 above, the highest level of knowledge is cadres who received video media intervention, namely 74.19 and the lowest was cadres who received poster media intervention, namely 68.81. From the analysis test, the value of  $P = .212$  was obtained. Because the  $P$  value  $> 0.05$ , statistically it can be concluded that the knowledge level of cadres who received video media intervention was the same as the knowledge level of cadres who received poster media intervention.

**Table 6.** Cadre Knowledge Level about COVID-19 Vaccination between Video Media Intervention and Control (n=142)

Group Study	Knowledge		P-Value
	N	Mean Rank	
Video Intervention	71	86.82	,000
Control	71	56.18	

Source: Primary Data 2022

From table 4.7 above, the highest level of knowledge is cadres who received video media intervention, namely 86.82 and the lowest is cadres who did not receive intervention, namely 56.18. From the analysis test, the value of  $P = .000$  was obtained. Because the  $P$  value  $\leq 0.05$ , statistically it can be concluded that the level of knowledge of cadres who received video media intervention



### 4.3 Discussion

#### a. Effectiveness of Health Promotion Media Videos and Posters on Knowledge Level

The results showed that video media and poster media were effective in increasing cadre knowledge about COVID-19 vaccination and there was no difference in effectiveness between the two. It can be explained that video media and poster media have their respective advantages and disadvantages. Although the level of knowledge is also influenced by the knowledge of previous cadres who have been accessed through the media and other sources, the health promotion media in this study is expected to be a tool that functions as an intermediary between the message source and the recipient of the message to display the information that the communicator wants to convey.

This is also related to the habits of cadres in Banda Aceh City where cadres often get health information from the government and the health sector through poster media so that even poster media can improve their daily knowledge, while video media some respondents are interested in this media because it can be accessed anytime and anywhere but to access video media some respondents have to be connected to the internet and for certain age groups the possibility is limited in accessing this media.

The research results are in line with the pyramid *Edgar Dale* (1964) who explained that viewing pictures or diagrams and viewing videos or films both gave 30% memory ability. This means that this theory supports the results of the study which showed that in terms of memory, the level of knowledge between cadres who received video intervention with posters was not much different.

The information received by the respondent will be a stimulus as well as health education for cadres, then the respondent will sense the stimulus so that the respondent will know. In addition, health promotion media can also help overcome many obstacles in understanding, facilitate the delivery of health materials or information and facilitate the acceptance of information by the target/community. (Notoatmojo, 2012).

The results of this study are in line with conducted by Sholehah (2019) showed that there is an effect of the behavior of primiparous mothers in lactation management before and after health education is carried out in the audio visual and poster groups. There was no difference in the effectiveness of health education on the behavior of primiparous mothers in lactation management in the audio-visual group and the poster group.

On the other hand, the results of other studies show that counseling using video media gives more effective results than counseling using poster media (Atik Farokah et al, 2022).

According to Jatmika (2019), there are several principles in the use of health promotion media, namely the more senses of the recipient of the message the information will be clearer, the media must be easily accessible to the target, the more modern the media, the more interesting it will be, further increasing understanding of an information, so that the use of media Videos in the form of moving pictures and videos that involve the senses of sight and hearing will help cadres understand about COVID-19 Vaccination.

## V. Conclusion

Research result The Effect of Health Promotion Media on COVID-19 Vaccination on Increasing Knowledge and Attitudes of Cadres in Banda Aceh City that is:

1. Video and poster media are effective in increasing the knowledge and attitudes of cadres and there is no difference in their effectiveness in increasing knowledge and attitudes of cadres about COVID-19 Vaccination in Banda Aceh City

2. The level of knowledge and attitudes of cadres increased after being given an intervention with video and poster media about COVID-19 Vaccination in Banda Aceh City
3. There is no effect of Confounding variables (age, education level, occupation, cadre years of service, training on COVID-19 Vaccination and income) on the level of knowledge and attitudes of cadres about COVID-19 vaccination in Banda Aceh City
4. The most dominant variables affect the level of knowledge and attitudes of cadres about COVID-19 vaccination in Banda Aceh City are video media and poster media.

## References

- Agustina, E. (2012) 'Hubungan antara tingkat pengetahuan tentang fluor albus (keputihan) dengan cara penanganan keputihan pada siswi SMP Gunung Jati Kembaran', *STIKES Harapan Bangsa*, 2(1), pp. 1–12.
- Aritonang, J. et al. (2020) 'Peningkatan Pemahaman Kesehatan pada Ibu hamil dalam Upaya Pencegahan COVID-19', *Jurnal SOLMA*, 9(2), pp. 261–269. doi: 10.22236/solma.v9i2.5522.
- Atik Farokah, Intan Nur Amira and Eryantika Cipta Dewi (2022) 'Efektifitas Penggunaan Media Video Dan Poster Terhadap Peningkatan Pengetahuan Masyarakat Mengenai Protokol Kesehatan Pencegahan Covid-19', *Jurnal Klinik*, 1(1).
- Baruk, A. L., Purwanintyas, R. A. and Astuti, D. (2019) 'The Effectiveness of Traditional Media (Leaflet and Poster) to Promote Health in a Community Setting in the Digital Era: A Systematic Review', *Jurnal Ners*, 14(3), pp. 76–80.
- Beaufort B. Longest, J. (2015) *Health Program Management From Development Through Evaluation*. Second Edi. United States of America: Jossey-Bass. doi: 978-1-118-83476-3.
- Dahlan, S. (2015) 'Statistik untuk kedokteran dan kesehatan-Salemba Medika.pdf'.
- Darma Wisada, P., Komang Sudarma, I. and Wayan Iliya Yuda S, A. I. (2019) 'Pengembangan Media Video Pembelajaran Berorientasi Pendidikan Karakter', *Journal of Education Technology*. Available at: <https://ejournal.undiksha.ac.id/index.php/JET/article/view/21735> (Accessed: 28 November 2021).
- Delima, P. (2018) 'Faktor risiko kejadian obesitas pada siswa Negeri 1 Jatiwangi Kabupaten Majalengka (Disertasi, Universitas Muhammadiyah Semarang)', *Jurnal Kesehatan dan Sains Terapan*, 2(6), pp. 1–19.
- Dharma, K. K. (2013) *Metodelogi Penelitian Keperawatan*. Jakarta Timur: Trans Info Media.
- Dharmawan, Y. (2019) 'Hubungan Karakteristik Terhadap Pengetahuan dan Sikap Kader Kesehatan Tentang Pentingnya Data Buku KIA', *Jurnal Public Health*, 3(3), pp. 1–18.
- Dharmawati, I. A. and I Wirata, N. (2016) 'Hubungan Tingkat Pendidikan, Umur, dan Masa Kerja dengan Tingkat Pengetahuan Kesehatan Gigi dan Mulut Pada Guru Penjaskes SD di Kecamatan Tampak Siring Gianyar', *Jurnal Poltekkes Denpasar*, 4(1), pp. 1–18.
- Dinas Kesehatan Kota Banda Aceh (2020) Surat Keputusan Nomor 440/2235/2020 tentang Indikator Kinerja Puskesmas Kota Banda Aceh.
- dr. Mellyanawati, S. D. and dr. Etha Rambung, M. S. (2021) 'Modul Ayo Vaksin', *Blorakab.Go.Id*. Available at: <https://repository.penerbiteurka.com/media/publications/349209-modul-ayo-vaksin->

22267eb0.pdf.

- Fitri and Wiji (2019) Efektifitas media poster sebagai implementasi keluarga sadar gizi (kadarzi). Jakarta: IPB Press.
- Fretty, H., Misnaniarti and Flora, R. (2020) 'Hubungan Lama Bekerja Menjadi Kader, Sikap dan Pengetahuan dengan Kinerja Kader Posyandu di Kota Palembang', *Jurnal 'Aisyiyah Medika*, 5(2), pp. 1–15.
- Funk, L. M. et al. (2021) Protocol and short-term results for a feasibility randomized controlled trial of a video intervention for Veterans with obesity: The TOTAL (Teaching Obesity Treatment Options to Adult Learners) pilot study, *Contemporary Clinical Trials Communications*. Elsevier Inc. doi: 10.1016/j.conctc.2021.100816.
- Gayatri, D. (2014) 'Mendesain Instrumen Pengukuran Sikap', *Jurnal Keperawatan Indonesia*, 8(2), pp. 76–80. doi: 10.7454/jki.v8i2.151.
- Gursoy, D. et al. (2022) Effectiveness of message framing in changing COVID-19 vaccination intentions: Moderating role of travel desire, *Tourism Management*. Elsevier Ltd. doi: 10.1016/j.tourman.2021.104468.
- Hammour, K. A. et al. (2021) 'Journal of the American Pharmacists Association Factors affecting the public 's knowledge about COVID-19 vaccines and the influence of knowledge on their decision to get vaccinated', *Journal of the American Pharmacists Association*, pp. 1–8. doi: 10.1016/j.japh.2021.06.021.
- Harsismanto J et al (2019) Pengaruh Pendidikan Kesehatan Media Video Dan Poster Terhadap Pengetahuan Dan Sikap Anak Dalam Pencegahan Penyakit Diare. Available at: <https://journal.ipm2kpe.or.id/index.php/JKA/article/view/747/424>.
- Hoare, K. J. and Decker, E. (2016) 'The role of a sexual health promotion leaflet for 15-18 year olds in catalysing conversations: A constructivist grounded theory', *Collegian Journal*, 23(1), pp. 3–11.
- Imran and Hasnah (2017) 'Pengaruh penyuluhan kesehatan melalui media video terhadap peningkatan pengetahuan remaja putri tentang dampak abortus provokatus Kriminialis di Kelas X SMAN 2 Gowa', *Jurnal JF FKIK UINAM*, 2(1), pp. 61–67.
- Jatmika, S. E. D. et al. (2019) *Buku Ajar Pengembangan Media Promosi Kesehatan*. Available at: <http://eprints.uad.ac.id/15793/1/Buku> (Accessed: 9 March 2021).
- Kementerian kesehatan RI (2019) *Peraturan Menteri Kesehatan Nomor 8 Tahun 2019 tentang Pemberdayaan Masyarakat Bidang Kesehatan*. Jakarta, Indonesia. Available at: <https://promkes.kemkes.go.id/permenkes-no8-th-2019-tentang-pemberdayaan-masyarakat-bidang-kesehatan>.
- Kementerian Kesehatan RI (2011) *Pedoman Umum Pengelolaan Posyandu*. Jakarta. Available at: <https://promkes.kemkes.go.id/>.
- Kementerian Kesehatan RI, 2021 (2021) *Petunjuk Teknis Pelayanan Puskesmas Pada Masa Pandemi COVID-19 Serial Kedua*. kedua. Jakarta: Kementerian Kesehatan RI.
- Khairani Miftahul, Sutisna, S. S. (2019) Studi Meta-Analisis Pengaruh Video Pembelajaran Terhadap Hasil Belajar Peserta Didik dalam Jurnal Biolokus Vol: 2 No.1 Januari – Juni 2019, *Jurnal Biolokus*. Available at: <https://media.neliti.com/media/publications/292801-studi-meta-analisis-pengaruh-video-pembe-7bf17271.pdf> (Accessed: 28 November 2021).
- Koning, D. et al. (2019) 'Does observing hand actions in animations and static graphics differentially affect learning of hand-manipulative tasks?', *Computers & Education*, 1(21), pp. 23–34.
- Kumari, A. et al. (2021) 'Knowledge, barriers and facilitators regarding COVID-19 vaccine and vaccination programme among the general population: A cross-sectional survey from one thousand two hundred and forty-nine participants and vaccination

- programme among the general population', *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 15(3), pp. 987–992. doi: 10.1016/j.dsx.2021.04.015.
- Laili, N. F. and Probosiwi, N. (2021) 'Analisis faktor-faktor yang mempengaruhi Pengetahuan Pasien Hipertensi Di Rumah Sakit X Di Kabupaten Malang', *Jurnal Inovasi farmasi Indonesia (JAFI)*, 3(1), pp. 1–10.
- Lin, L. and Li, M. (2018) 'Optimizing Learning From Animation: Examining the Impact of biofeedback', *Learning and Instruction*, 5(2), pp. 32–40.
- Majelis Ulama Indonesia (2021) 'Produk Vaksin Covid-19 Dari Sinovac life sciences Co.LTD. China dan PT. BIO Farma (Persero)', *Komisi Fatwa Majelis Ulama Indonesia*, (Januari), pp. 1–8. Available at: <http://www.mui.or.id>.
- Martin, J. (2010) *Key Concepts in Human resource management, human resource management (10th Edition)*. 10th edn. Los Angeles: SAGE Publications.
- Mrl, A. et al. (2019) *Buku Ajar Promosi Kesehatan*. Available at: <http://repository.uki.ac.id/2759/1/BUKUMODULPROMOSIKESEHATAN.pdf> (Accessed: 15 November 2021).
- Munfarida, S. (2019) 'Faktor Yang Berhubungan Dengan Tingkat Pengetahuan dan Keterampilan Kader Posyandu', *Jurnal Ilmiah Media*, 2(4), pp. 1–19.
- Notoatmodjo, S. (2018) *Metodelogi Penelitian Kesehatan*. Jakarta: Rineka Cipta.
- Nurmala, I. et al. (2018) *Promosi Kesehatan. pertama*. Surabaya: Airlangga University Press. Available at: [https://litbangkespangandaran.litbang.kemkes.go.id/perpustakaan/index.php?p=show\\_detail&id=3830](https://litbangkespangandaran.litbang.kemkes.go.id/perpustakaan/index.php?p=show_detail&id=3830).
- Nurtanti, S. and Husna, P. H. (2022) 'Analisis Tingkat Pengetahuan dan Ansietas Tentang Vaksinasi Covid-19 pada Kader Kesehatan', *Jurnal Ilmu Keperawatan Jiwa*, 5(1), pp. 191–198.
- Nurwita, A. (2020) 'Pengaruh Pelatihan Terhadap Pengetahuan Kader Tentang Alat Kontrasepsi', *Jurnal Kesehatan Kartika*, 15(2), pp. 10–14.
- Pakpahan.M et al (2021) *Promosi Kesehatan & Prilaku Kesehatan*, Jakarta: EGC. Edited by Ronal Watrianthos. Penerbit Yayasan Kita Menulis.
- Peraturan Menteri Kesehatan Nomor 18 Tahun (2021) *Tentang Pelaksanaan Vaksinasi dalam Rangka Penanggulangan Pandemi Corona Virus Disease 2019 (COVID-19)*. Available at: <https://peraturan.bpk.go.id/Home/Details/171447/permenkes-no-18-tahun-2021> (Accessed: 10 November 2021).
- Pieter, H. et al. (2022) *PENGARUH VIDEO SEBAGAI ALAT SOSIALISASI VAKSIN COVID-19 TERHADAP PENINGKATAN PENGETAHUAN VAKSINASI COVID-19*. Available at: <http://ejurnal.undana.ac.id/index.php/CMJ/article/view/6800/3645>.
- Pinto, P. A., Antunes, M. J. L. and Almeida, A. M. P. (2021) 'Public health on instagram: An analysis of health promotion strategies of Portugal and Brazil', *Procedia Computer Science*, 181(2020), pp. 231–238. doi: 10.1016/j.procs.2021.01.142.
- Puri, N. et al. (2020) 'Social media and vaccine hesitancy: new updates for the era of COVID-19 and globalized infectious diseases', *Journal , Human Vaccines & Immunotherapeutics*, 16(11), pp. 2586–2593.
- Rahmah, D. N., Setiono, K. W. and Telussa, A. S. (2021) *Efektivitas Media Video Terhadap Peningkatan Pengetahuan Pencegahan Covid-19 Pada Mahasiswa Baru Universitas Nusa Cendana*, *Cendana Medical Journal*. Available at: <https://ejurnal.undana.ac.id/index.php/CMJ/article/view/4935> (Accessed: 27 November 2021).
- Rahman, W., Setyowati, D. L. and Ifroh, R. H. (2019) *Effect of Health Education of Safety*

Riding Using Audiovisual Media on Knowledge, Attitudes and Subjective Norms of Junior High School Student in Samarinda Indonesia. *Public Health of Indonesia* Volume 5 Issue 3, Public Health of Indonesia. Available at: <https://stikbar.org/ycabpublisher/index.php/PHI/index> (Accessed: 14 November 2021).

- Rahmawati, A. (2019) 'Faktor yang Berhubungan dengan Pengetahuan Orang Tua tentang Stunting pada Balita', *Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery)*, 6(3), pp. 389–395.
- Ramli, R. (2020) 'Correlation of Mothers' Knowledge and Employment Status with Exclusive Breastfeeding in Sidotopo', *Jurnal PROMKES*, 8(1), p. 36. doi: 10.20473/jpk.v8.i1.2020.36-46.
- Riandi, A. N., Rahayu, W. P. and Nurjanah, S. (2020) 'Hubungan Antara Tingkat Pendidikan dan Pendapatan Karyawan dengan Pengetahuan dan Sikap Keamanan Pangannya pada Tempat Makan di DKI Jakarta', *Jurnal Ilmu Pertanian Indonesia*, 26(1), pp. 50–59. doi: 10.18343/jipi.26.1.50.
- Saengow, V. E. et al. (2018) 'Epilepsy video animation: Impact on knowledge and drug adherence in pediatric epilepsy patients and caregivers', *Clinical Neurology and Neurosurgery*, 172(9), pp. 59–61.
- Salsabila, D. A. et al. (2022) 'Pengaruh video sebagai alat sosialisasi vaksin Covid-19 Terhadap peningkatan Pengetahuan Baksinasi Covid-19 Mahasiswa Universitas Nusa Cendana', *Cendana Medical Journal*, 1(23), pp. 8–16.
- Saputra (2017) 'Pengaruh pemberian edukasi gizi melalui media video dan leaflet terhadap perubahan konsumsi buah dan sayur pada siswa SMP Al Chasanah tahun 2016', *Jurnal Kesehatan Aeromedika*, 3(2), pp. 1–19.
- Sazani (2016) 'Efektivitas media nutrizan diet untuk meningkatkan pengetahuan tentang diet yang sehat pada remaja putri SKM jurusan kecantikan di Kota Tegal.', *Journal of Health Eduacation*, 1(2), pp. 8–12.
- Setiawati, I. (2022) 'Perbandingan Efektivitas Penyuluhan Menggunakan Media Poster Dengan Media Flipchart Terhadap Pengetahuan Anak Tentang Karies Gigi di SD Negeri 1 Supat', *Jurnal Kesehatan Gigi Poltekkes Palembang*, 2(6), pp. 1–18.
- Sheikh, A. et al. (2017) 'A social norms approach to changing school children's perceptions of tobacco usage', *Health Education Journal*, 2(2), pp. 1–18.
- Shofiana, F. I., Widari, D. and Sumarmi, S. (2018) 'Pengaruh Usia, Pendidikan, dan Pengetahuan Terhadap Konsumsi Tablet Tambah Darah pada Ibu Hamil di Puskesmas Maron, Kabupaten Probolinggo', *Amerta Nutrition*, 2(4), p. 356. doi: 10.20473/amnt.v2i4.2018.356-363.
- Simarmata (2020) *Elemen-Elemen Multimedia untuk Pembelajaran*. Jakarta: Salemba Empat.
- Smith, L. E. et al. (2022) 'Side-effect expectations from COVID-19 vaccination: Findings from a nationally representative cross-sectional survey (CoVAccS – wave 2)', *Journal of Psychosomatic Research*, 152(November 2021). doi: 10.1016/j.jpsychores.2021.110679.
- Sofingi, I. (2018) 'Pengaruh pelatihan terhadap pengetahuantentang gizi buruk dan inter-profesional collaboration', *jurnal gizi Indonesia*, 11(1), pp. 61–71.
- Suarningsih, Suyasa and Rismawan, M. (2017) 'Pengaruh pendididkan kesehatan menggunakan media leaflet terhadap pengetahuan orang tua', *Jurnal Pengaruh Pendididkan Kesehatan*, 1(1), pp. 8–16.
- Suhertusi, B., Desmiwanti and Nurjasmi, E. (2015) *Pengaruh Media Promosi Kesehatan tentang ASI Eksklusif terhadap Peningkatan Pengetahuan Ibu di Wilayah Kerja*

- Puskesmas Lubuk Begalung Padang Tahun 2014, *Jurnal Kesehatan Andalas*. doi: 10.25077/jka.v4i1.177.
- Susilowati. D 2016 (no date) *Bahan Ajar Cetak: Modul Promosi Kesehatan*. Kementerian Kesehatan RI. Available at: <http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2017/08/Promkes-Komprehensif.pdf> (Accessed: 7 March 2021).
- Tamsuri A dan Widati S (2020) Factors influencing patient attention toward audiovisual-health education media in the waiting room of a public health center. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7445667/> (Accessed: 13 November 2021).
- Tasic, D., Mladenovska, D. and Tasic, L. (2005) Utility of Media on Health Promotion and Selfmedication *Php33, Value in Health*. International Society for Pharmacoeconomics and Outcomes Research (ISPOR). doi: 10.1016/s1098-3015(10)62744-1.
- Wardani, N. I., Sarwani, D. and Masfiah, S. (2016) ‘Faktor-faktor yang Berhubungan dengan Tingkat pengetahuan Kader Kesehatan Tentang Thalasemia di Kecamatan Sumbang Kabupaten Banyumas’, *Jurnal Kesehatan Masyarakat*, 6(3), pp. 194–206.
- Widiastuti (2017) ‘Faktor-faktor yang berhubungan dengan partisipasi kader dalam kegiatan posyandu di Kelurahan Gubug Kecamatan Gubug Kabupaten Grobogan’, *Jurnal Pendidikan Kesehatan*, 3(2), pp. 13–28.
- Widuri, Y. W., Margono and Retnaningsih, Y. (2021) ‘The Effectiveness Of Video And E-Booklet Media In Health Education On ImprovingThe Knowledge Of Pregnant Women About The Pregnancy Danger Signs At Jetis 1 Public Health Center Of Bantul Regency’, *Jurnal Ilmu Kesehatan Interest*, 10(1), pp. 18–27.
- Wulansih, R. (2021) ‘Hubungan Umur, Pendidikan dan Pekerjaan dengan Tingkat Pengetahuan Kader Nasyiatul Aisyiyah tentang Stunting Di Kabupaten Boyolali’, *Jurnal Kesehatan Masyarakat*, 23(2), pp. 1–15.
- Zakirman and Hidayati (2017) ‘Praktikalitas Media Video’, *Jurnal Al Biruni*, 6(1), pp. 85–93.
- Zhu, Y. et al. (2017) ‘A randomized controlled trial to evaluate the impact of a geo-specific poster compared to a general poster for effecting change in perceived threat and intention to avoid drowning “hotspots” among children of migrant workers: evidence from Ningbo, China’, *BMC Public Health*, 1(7), pp. 1–9.