

Article

Development of Animated Video Based on the ADDIE Model as Anticipatory Guidance for KIPI Covid-19 Vaccination at SMAN 2 Bangkalan

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A B S T R A C T

This study aimed to produce animated videos of behavior life clean and healthy (PHBS) as anticipatory guidance or guide prevention incident following post-immunization (KIPI) Covid-19 in high school students. This study used design study Research and Development with a developed concept namely the ADDIE model. The ADDIE development model includes 5 stages that are Analyze (analysis), Design (design), Develop (development), Implement (implementation), and Evaluate (assessment). The trial used is one group pre-test – post-test design with a sample of as many as 253 students. Data collection using a questionnaire with as many as 10 questions filled out by respondents before (pre-test) and after (post-test) using video animation. Research results in results obtained a significance value of $0.000 < \alpha 0.05$. This means that animated videos on clean and healthy living behaviors are very effective as a means of anticipatory guidance information or prevention of post-immunization adverse events (KIPI) for the Covid-19 vaccine.

I. INTRODUCTION

Pandemic Covid-19 is a challenge for health society, research, and community medicine. Coronaviruses are a family large virus that causes disease from symptom light to heavy. There are two types of coronavirus that can become reason diseases with raises symptoms heavy as *Middle East Respiratory Syndrome (MERS)* and *Severe Acute Respiratory Syndrome (SARS)*.¹ The origin of the coronavirus from Wuhan, China first found at the end of December year 2019.²

The covid-19 infection causes a number enough death high. According to cluster data Task Acceleration Handling of Covid-19 on November 4, 2021, the total confirmed positive for Covid-19 totaled 4,246,802 people with a number Dead of 143,500 people (3.4%). In East Java, the Covid-19 case was confirmed as many as 399,471, meanwhile dead as many as 29,703 were. The handling of the Coronavirus by WHO and the Government of Indonesia is an appeal to everyone for COVID-19 vaccination begins from 18 years old, to seniors until mothers are

pregnant to stay To do COVID-19 vaccination. Kindly national dose first reached 66.89% and the dose second achieve 45.83% data coverage vaccine on November 29, 2021. Although the vaccine and immunization programs are already national and confirmed safe and effective, will guarantee that the vaccine has no there affected side or normally called KIPi (Gen follow Post Immunization). KIPi is a condition frequently medical not wanted after vaccine.

There are 5 categories of KIPi as reaction consequence vaccine, among them disabled quality vaccine, fallacy procedure Immunization, anxiety consequence immunizations, and events coincidence.³

KIPi that appears after to do Covid-19 vaccine available from symptom light until heavy. Symptom light after the Covid-19 vaccine includes soreness around the injection area, fever lightheadedness, dizziness, regret, diarrhea, and chills. While KIPi symptoms are heavy and can threaten the soul until cause dead.⁴

Appeal for to do Covid-19 vaccination for junior high school and high school/vocational school students aims to support learning stare face. However, in practice still, there are students who are worried about the effects side that happened after immunization. Prevention and termination of chain transmission of COVID-19 in adolescents can be conducted with give proper understanding and knowledge about the effects that arise post vaccination and the benefits obtained with to do vaccination. The government gives attention specifically to the application Behavior life healthy. PHBS to be stolen measuring in achievement for increased scope health in the 2015-2030 Sustainable Development Goals (SDGs) program. One form of effort prevention that has an impact period short To use

enhancement health at three places that include, scope member family, society public, and schools is the existing PHBS in the SDGs.⁵

Effort anticipation incidents follow post-immunization the covid-19 vaccine is with the consumption of more water, warm baths, sunbathing, and exercise light to reduce pain and rest enough. Based on the background behind the application behavior life is clean and healthy based on the ADDIE model in animated video form as means gift anticipatory guidance information about incidents follow post Covid-19 immunization in adolescents.³

II. METHODS

Study this will use design study *Research and Development* with a developed concept _ namely the ADDIE model. The ADDIE development model includes 5 stages that are *Analyze* (analysis), *Design* (design), *Develop* (development), *Implement* (application), and *Evaluate* (assessment).⁶

Stage analyze

Get information problems in the field, that is with method *survey* in the field. The survey results are used to look for solutions to the problem, next generated product is to be developed ie an animated video about behavior life clean and healthy (PHBS) used as a guide in an effort prevention incidents following post Covid-19 vaccine.

Stage design

Design and develop inside video content from storyboards. Videos contain about behavior life clean and healthy (PHBS) for effort anticipation incident follow post-immunization (KIPi) for the Covid-19 vaccine including KIPi definition, KIPi causes, and methods anticipating KIPi. It also designed a validation instrument (questionnaire) for expert material, media experts, experts

language, teachers, and parents students.

Stage develop

Develop designs made in stages before. At this stage, this selection of software is used for development. Software used is *Coreldraw software*, *adobe photoshop software*, *shot software*, and recording voice *dubbed*. At stages, this validity test by experts material, media experts, experts language, teachers, and parents students.

Stage implement

Test try products that are already valid in scale big.⁶ At this stage, this design research used *one group pre-test – post-test design*. The measuring tool used for data collection is a questionnaire with as many as 10 questions filled out by respondents before (*pre-test*) and after (*post-test*)

using video animation. Sample in the study as many as 253 high school students.

Stage evaluate

Analyze the results research. Results data validation percentage then interpreted and classified as valid. Questionnaire results in the *pretest* and *posttest* were analyzed using paired *sample t-tests* with the SPSS program.

For test appropriateness product to be developed so validity test is carried out product ie with giving scores using a scale Likert to remove doubtful answers.⁷

The research location is at SMAN 2 Bangkalan, Madura. Study this has to get permission Commission ethics STIKes Health Research Ngudia Husada Madura
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III. RESULT

Based on the results of the validation by the material experts regarding animated videos including explanations of the material presented, a percentage score (83.33%) with high criteria was obtained. Validation by media experts who assessed the appearance of the video, the accuracy of the music video accompaniment, sound quality, image quality, and text in the video reached a percentage value (87.5%) with high criteria. Validation by linguists by assessing the use of the language used in the video and getting a percentage score (of 81.25%). Validation by the teacher by assessing the contents of the video message and getting a percentage score (83.3%) and validating parents assessing the delivery of education on the application of clean and healthy living behaviors as an effort to prevent KIPi after Covid-19 vaccination and getting a percentage score (91.6%) with very high criteria.

1.1. Table 3. Summary of Validation Results

Validators	Percent age	validity	Inform ation
Material expert	83.3%	Tall	Proper to use
Media expert	87.5%	Tall	Proper to use
Linguist	81.25%	Tall	Proper to use
Teacher	83.3%	Tall	Proper to use
Parent	91.6%	Very high	Very worth using

Source: Primary Data, 2022

The table above shows an average percentage score of 85.39%, this means that the animated video on the application of clean and healthy living behavior as anticipatory guidance for post-immunization adverse events (KIPi) the Covid-19 vaccine that was developed has high validity and is suitable for use without revision.

Table 4. Summary of Small Scale Questionnaire Result

Student	Percentage	validity	Information
1	100%	Very high	Proper use to
2	87.5%	Tall	Proper use to
3	85%	Tall	Proper use to
4	100%	Very high	Proper use to
5	100%	Very high	Very worth using
6	97.5%	Very high	Very worth using
7	100%	Very high	Very worth using
8	85%	Tall	Proper use to
9	87.5%	Tall	Proper use to
10	100%	Very high	Very worth using
11	97.5%	Very high	Very worth using
12	85%	Tall	Proper use to

13	95%	Very high	Very worth using
14	90%	Very high	Very worth using
15	100%	Very high	Very worth using
Average	94%	Very high	Very worth using

Source: Primary Data, 2022

Based on table 5, the average result for the percentage of small-scale testing is 94%. This shows that the animated video of clean and healthy living behavior (PHBS) as anticipatory guidance on post-immunization adverse events (KIPI) for the Covid-19 vaccine in students which has been developed has very high validity and is very appropriate to be used as an information medium without any revisions. The results of individual *Camtasia studio*-based interactive learning video product trials with an average score of 92.61% and an average score of 90.02% for video product trials on a small scale is in a very feasible category so no revision is needed.⁸

1.2. Table 5. Paired Sample T-Test Result

	Paired Differences							
	mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 PreTest - PostTest	-3.786	3.751	.236	-4.251	-3.320	-16.019	251	.000

Source: Primary Data, 2022

Based on table 5, the results obtained a significance value of $0.000 < \alpha 0.05$. This shows that animated clean and healthy living behavior (PHBS) videos are effective as a means of anticipatory guidance information or prevention of post-immunization adverse events (KIPI) for fothe Covid-19 vaccine. Video counseling on clean and healthy living behaviors is effective in increasing public knowledge about tackling diarrhea.⁶ The application of clean and healthy living behavior is a behavior that can prevent the transmission of Covid-19 disease.¹

IV. CONCLUSION

The media has been developed and has very high validity and is very feasible to use, this is interpreted if animated video behavior life clean and healthy Based on the ADDIE model, the results obtained a significance value of $0.000 < 0.05$, which indicates that the animated video of

clean and healthy living behavior (PHBS) is effective as a means of information on anticipatory guidance or prevention of post-immunization follow-up events (KIPI) for the Covid-19 vaccine. The use of media as a learning tool is highly recommended, especially media that uses animated videos, videos have a higher effectiveness

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