

Eduvest – Journal of Universal Studies Volume 5 Number 2, February, 2025 p- ISSN 2775-3735- e-ISSN 2775-3727

DEVELOPMENT OF LIVE ACTION AUDIOVISUAL REGARDING THE CONSUMPTION OF TAKING ANTI-DIABETIC DRUGS IN DIABETIC PATIENTS

Dzaky Abdur Rafi¹, Rahmat Sudiyat²

Politeknik Kesehatan Kemenkes Bandung, Indonesia ^{1,2}

Email: dzakyabdurrafi@gmail.com

ABSTRACT

Bandung found an increase in the number of DM patients in 2020-2022 (43,906 to 44,329) (Jabar, 2022). It often happens that many patients are saturated and not compliant with treatment, increasing the risk of complications and requiring media in overcoming DM. Based on the inspection of media needs at the Diabetes Wound Care Specialist Hospital through the Central Coordinator, the Head Nurse of the Buahbatu branch and the Head Nurse of the Baleendah branch said that the age of active patients was 40-70 years and it was still found that they were not diligent in taking medication and wanted media impressions that were taken home, reviewed and watched again. So that the media that is suitable for use is Audiovisual Live Action regarding Anti-diabetes Medication Consumption. Method: Research and Development with ADDIE development model, Place: RUMAT Bandung, Time: March 5-June 31, 2024 and Target: DM patients of RUMAT Bandung. Results: Media needs analysis requires Live Action Audiovisual, Design includes Pre-Production, Production and Post-Production, Media development is declared "Very feasible" by material and media experts, Implementation of large group tests with "Very feasible" criteria, Evaluation of Gform 65 Respondents and Youtube 439 likes and 559 views. Conclusion: Live Action Audiovisual Media is said to be very feasible with a percentage of 94%.

KEYWORDS

ADDIE, Audiovisual Live Action, Diabetes medication consumption.



How to cite:

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

Diabetes is a chronic metabolic disease characterized by elevated blood glucose levels, which can cause serious damage to the heart, blood vessels, eyes, kidneys and nerves over time (WHO, 2024). The condition requires serious attention due to its far-reaching impact on the health of various organs of the body. One critical aspect of diabetes is how persistently elevated blood glucose levels can accelerate the process of atherosclerosis, which increases the risk of cardiovascular disease.

Dzaky Abdul Rafi, et al (2025). Development of Live Action Audiovisual Regarding The Consumption of Taking Anti-Diabetic Drugs In Diabetic

Patients. Journal Eduvest. Vol 5 (2): 1696-1715

E-ISSN: 2775-3727

According to the Ministry of Health, Diabetes Mellitus (DM) is defined as a disease or chronic metabolic disorder with many causes characterized by high blood sugar levels. In addition, DM also includes disorders of carbohydrate, lipid, and protein metabolism that occur due to insufficient insulin function (Ministry of Health, 2024). This insufficiency can be caused by two main things: first, impaired or deficient insulin production by Langerhans beta cells in the pancreas; and second, lack of responsiveness of body cells to existing insulin.

By the end of 2021, the *International Diabetes Federation (IDF)* in its 10th edition Atlas confirmed that diabetes is one of the fastest growing global health emergencies of the 21st century. The IDF reports that more than half a billion people worldwide are living with diabetes, approximately 537 million in 2021. This figure is projected to increase to 643 million by 2030 and reach 783 million by 2045. This growth in the number of people with diabetes shows how serious a health problem the global community is facing.

In addition to the large number of people with diabetes, it is estimated that 541 million people worldwide will be in the prediabetes phase by 2021. The prediabetes phase is characterized by blood glucose levels that begin to rise, indicating impaired glucose tolerance. This condition is an early sign that a person is at high risk of progressing to type 2 diabetes if not treated immediately with lifestyle changes and medical interventions. Prediabetes provides an opportunity for early intervention that can prevent further progression to diabetes.

Diabetes affects not only adults, but also children and adolescents up to the age of 19, with the number of people with diabetes in this group increasing every year. By 2021, it is estimated that more than 1.2 million children and adolescents will have type 1 diabetes mellitus. This increase reflects the need for special attention to diabetes prevention and management efforts in young populations. Type 1 diabetes in children and adolescents requires careful management, including close monitoring of blood glucose levels and education on effective diabetes management.

The increasing number of people with type 1 diabetes in Indonesia requires a comprehensive management strategy, including public education on the symptoms and risks of type 1 diabetes, as well as improved access to health services needed for diagnosis and management of the disease. Counseling on the importance of monitoring blood sugar levels and proper insulin use also needs to be improved. In addition, psychological support for sufferers, especially children and adolescents, is crucial to help them live a better and more productive life with type 1 diabetes.

Based on the background above, the problem can be formulated as follows "How to Develop a *Live Action* Audiovisual Regarding the Consumption of Taking Anti-diabetic Drugs for Diabetes Patients".

This study aims to develop *Live Action* Audiovisual media on Consumption of Taking Anti-diabetic Drugs (OAD) for Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital, using the ADDIE approach (Analysis, Design, Development, Implementation, Evaluation). The ADDIE method was chosen because of its advantages in providing a systematic and structured framework in instructional media development, so that each stage of

development can be evaluated and revised to ensure an effective and efficient final product.

The use of the ADDIE approach in this study not only ensures that the media developed meets the needs of patients, but also increases the effectiveness of health education. In the analysis stage, the needs and characteristics of diabetic patients are identified in depth. The design and development stage ensures that the media is engaging and easy to understand, while implementation and evaluation help in measuring success and making necessary adjustments. This approach ensures that the *Live Action* Audiovisual media developed is able to improve patients' understanding and adherence to the consumption of anti-diabetic drugs, which in turn can contribute to improving their quality of life.

Specific Objectives: (1) Analyze the needs (Analysis) of Audiovisual *Live Action* Regarding Consumption of Taking Anti-diabetic Drugs (OAD) in Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital. (2) Designing *Live Action* Audiovisuals Regarding the Consumption of Taking Anti-diabetic Drugs (OAD) in Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital. (3) Developing *Live Action* Audiovisuals on Drinking Consumption of Anti-diabetic Drugs (OAD) in Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital. (4) Implementing Audiovisual *Live Action* on Drinking Consumption of Anti-diabetic Drugs (OAD) in Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital. (5) Evaluating Audiovisual *Live Action* on Drinking Consumption of Anti-diabetic Drugs (OAD) in Diabetes Mellitus Patients at the Bandung City Diabetes Wound Care Specialist Hospital.

Research Benefits: (1) Adding insight and direct experience on how to overcome Consumption of Taking Anti-diabetes Drugs (OAD) by diligently taking anti-diabetes drugs (OAD) through the *Research and Development* method. (2) For the Diabetes Wound Care Specialist Hospital: As information and input to carry out improvements or innovations in the implementation of *live action* audiovisual media development regarding Consumption of Taking Anti-diabetic Drugs (OAD) in diabetic patients and as a consideration in determining the right media to overcome Consumption of Taking Anti-diabetic Drugs (OAD) by diligently taking anti-diabetic drugs (OAD). (3) It can help the Diabetes Wound Care Specialist Hospital and Diabetes Mellitus Patients in reminding taking anti-diabetic drugs so as not to get side effects if they do not take anti-diabetic drugs along with diligently taking medication and not *dropping out of* taking anti-diabetic drugs.

Theoretical Benefits: (1) For Media Development: Can be useful in the development of Audiovisual *Live Action* media on Consumption of Taking Anti-diabetic Drugs (OAD) in diabetic patients and provide additional references for other researchers who want to carry out similar research. (2) For Reading Material Development: As a development and reading material for other researchers who use Audiovisual *Live Action* media.

According to Wina Sanjaya, audio-visual media is a type of media that integrates sound elements and image elements that can be understood visually. This media includes various forms such as video recordings, presentation slides, and other sound recordings.

The purpose of using audio-visual media is to improve cognitive abilities through stimuli presented in the form of moving images and sound. This media is designed not only to convey information visually, but also to influence the attitudes and emotions of its audience, in accordance with the findings of Fitria (2018). The incorporation of dynamic sound and image elements in audio-visual media allows the audience to be more involved in the learning process or understanding of a message, because the multi-sensory experience can stimulate various aspects of perception.

According to the Ministry of Health, based on the symptoms, Diabetes Mellitus is divided into 2, namely the main symptoms and additional symptoms. Among them are as follows (Ministry of Health, 2021): (1) The main symptoms of diabetes mellitus include the intensity of frequent urination, feelings of hunger that appear quickly, and frequent thirst. These three symptoms are typical signs that are often felt by individuals suffering from this condition. Increased urination intensity is caused by high blood glucose levels, which causes the kidneys to remove excess glucose through urine. Rapid feelings of hunger and thirst occur because the body is unable to effectively utilize glucose as an energy source, despite high blood sugar levels. (2) Additional symptoms of diabetes mellitus include rapid weight loss for no apparent reason, tingling that is mainly felt in the extremities such as hands and feet, as well as itching in the pubic area in women and more frequent vaginal discharge.

RESEARCH METHOD

Research and Development (R&D) using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) is a systematic approach used to produce or improve certain products. This method not only focuses on creating new products, but also on developing and improving existing products, with the ultimate goal of testing the effectiveness of these products in a relevant context (Okpatrioka, 2023). The ADDIE model itself describes a structured development process, starting from needs analysis to evaluation of implementation results, thus providing a clear and measurable framework for researchers and practitioners to follow (Satriawan, 2024).

In the context of the research on the development of *Live Action* Audiovisuals related to the consumption of anti-diabetic drugs in patients with diabetes mellitus, the R&D approach is crucial to identify innovative solutions. Researchers can utilize this methodology to develop media that is not only informative but also able to motivate patients to maintain consistency in their medication. For example, by integrating strong visual and narrative techniques, audiovisual media can communicate the risks of non-adherence in taking anti-diabetes medication, as well as the long-term benefits of adherence to the treatment regimen.

The stages of ADDIE, such as media needs analysis, design, and media development, offer a systematic framework to ensure that every aspect of the developed media reaches the desired standard. In the process of designing the media, the involvement of experts in materials and media is essential to ensure that

the messages conveyed are precise, clear, and positively influence user behavior. Furthermore, the implementation of the media to a large group of diabetes mellitus patients will test the effectiveness of the media on a broader scale, while the evaluation provides an in-depth understanding of the extent to which the media succeeds in achieving the set objectives.

Research Framework

Analysis:

Analyze the needs of *Live Action* Audiovisual on Anti-diabetic Drug (OAD) Drinking Consumption for Diabetes Mellitus patients at the Diabetes Wound Care Specialist Hospital in Bandung.

Design:

Audiovisual *Live Action* Design on the Consumption of Antidiabetic Drugs (OAD) in Diabetes Mellitus patients at the Diabetes Wound Care Specialist Hospital in Bandung.

Development:

Development of a *Live Action* Audiovisual on Anti-diabetic Drug (OAD) Consumption in Diabetes Mellitus patients at the Diabetes Wound Care Specialist Hospital in Bandung.

Worth Not Feasible

Implementation:

Implementation of Audiovisual *Live Action* on the Consumption of Anti-diabetic Drugs (OAD) for Diabetes Mellitus patients at the Diabetes Wound Care Specialist Hospital in Bandung.

Evaluation:

Evaluate the Live Action Audiovisual on Anti-diabetic Drug (OAD) Drinking Consumption in Diabetes Mellitus patients the Diabetes Wound Care Specialist Hospital in Bandung.

Figure 1. Research Framework

The population in this study refers to the entire research subject, which in this context is Diabetes Mellitus patients who receive treatment at the Diabetes Wound Care Specialist RUMAT in Bandung, with a total of 44 people (Arikunto, 2013). The determination of the number of patients from each RUMAT unit, such as Antapani, Buah Batu, Kiaracondong, Kopo, Rancasari, and Setiabudhi, provides a more detailed picture of the distribution of patients in different areas of Bandung city, reflecting a broad but focused scope of services.

The sample in the study is a part or representation of the larger population that is the focus of the study (Arikunto, 2013). In the context of this study, the sampling technique used was a total sampling technique, in which the entire population of Diabetes Mellitus patients at the Bandung City Diabetes Wound Care Specialist Hospital was taken as a sample (Notoatmodjo, 2014). The decision to use total sampling was based on the consideration that the population was less than 100 people, making it possible to include all of them in the study without sacrificing accurate representation of the entire population.

The research instrument used is a Validation Instrument with the data collection technique used, namely a validation sheet using a Likert scale. This research instrument is used because it has been tested by Dr. Cecep Kustandi, M.Pd and Dr. Daddy Darmawan, M.Si in his book entitled "Learning Media Development" (Dr. Cecep Kustandi & Dr. Daddy Darmawan, 2021).

The reason for using a Likert scale, is because in this study the opinions and perceptions of media experts, material experts and respondents are needed regarding the feasibility level of the *Live Action* Audiovisual made for notification of anti-diabetic drug (OAD) consumption in patients with diabetes mellitus at the RUMAT specializing in diabetic wound care in Bandung.

The research data comes from primary data. Primary data is obtained from the results of media assessment tests by media experts, material assessment tests by material experts and trials on research samples both qualitatively and quantitatively.

How to collect data with: (1) Ask the schedule (2) Training people / enumerators (3) Informed Consent (4) Showing media materials (5) Assessment Sheet.

RESULT AND DISCUSSION

Results

Analysis

The analysis stage starts from data collection through interviews conducted at the Central Coordinator, Head Nurse of Buahbatu branch and Head Nurse of Baleendah branch of the Diabetes Wound Care Specialist Hospital on February 13, 2024.

The first question asked by the researcher was "The age range of active patients of RUMAT Diabetes Wound Care Specialist in Bandung", the aim was to adjust what media is suitable for the target age. As for the results:

"...If you look at the current data (February 13, 2024), the range is from 40-70 years old." (RUMAT Center Coordinator, Personal communication, February 13, 2024).

"...Judging from RUMAT's central data, the range is from 40-70 years old" (Head Nurse Buahbatu branch, Personal communication, February 13, 2024).

"40-70 years old are active patients if the data from the RUMAT center" (Head Nurse of Baleendah branch, Personal communication, February 13, 2024).

The second question asked by the researcher was "Is the topic of my thesis related to the Consumption of Taking Anti-diabetic Drugs in Diabetic Patients relevant for the Diabetes Wound Care Specialist Hospital in Bandung?", the aim was to ascertain whether the thesis topic was appropriate for the research site. The results:

"Ohhh it is relevant, sis, because we RUMAT is also for treating diabetic wounds and there are still patients who are not diligent in taking their anti-diabetic medication so it is suitable" (RUMAT Center Coordinator, Personal communication, February 13, 2024).

"...If the discussion is related to diabetes, it is definitely relevant. Because RUMAT is for treating diabetic wounds. If it's about medication consumption, it's also relevant... Because diabetes is incurable, so there will be a sense of boredom in treatment so there are those who are not diligent in taking anti-diabetic drugs because they are bored" (Head Nurse of Buahbatu branch, Personal communication, February 13, 2024).

"Ihhh you can do it, you can do it. This is because diabetes cannot be cured..." (Baleendah branch head nurse, personal communication, February 13, 2024).

The last question asked by the researcher "What media is needed to solve the problem of not diligently taking anti-diabetic drugs at the Diabetes Wound Care Specialist Hospital in Bandung?", the purpose was to ask what specific media was needed by the research site to solve the problem. The result:

"...What doesn't exist yet is honestly video media..." (RUMAT Center Coordinator, Personal communication, February 13, 2024).

"Media is better outside of print media because there are already a lot of print media in Buahbatu. If you want a video..." (Head Nurse of Buahbatu branch, Personal communication, February 13, 2024).

"Videos, media shows that are boring and boring to watch..." (Baleendah Branch Head Nurse, Personal communication, February 13, 2024).

The results of interviews that have been carried out by researchers, obtained the results that active patients have an age range of 40-70 years with patients still found who are not diligent in taking medication and want video media that can be taken home to be reviewed and watched again.

This is in line with *Live Action* Audiovisual Media which has the ability to increase perception, the ability to increase understanding / understanding, the ability to improve memory, not boring, information is received clearly, then because *Live Action* Video has a high level of realism so that it is close to human experience so that what happens in the video is better conveyed by the audience. In addition, *Live Action* Audiovisual Video allows it to be accessed, watched and even reviewed at any time as long as it has video access (Webdew.com, 2023).

So that researchers set Audiovisual *Live Action* media to be researched and developed. The *Live Action* Audiovisual about the consumption of taking anti-diabetic drugs will be presented with a Short Film. The next step is a needs analysis for the needs of Audiovisual *Live Action* on Drinking Anti-diabetes Medication for Diabetes Patients at the Bandung City Diabetes Wound Care Specialist Hospital.

Media needs analysis was carried out with interviews conducted on March 21-23, 2024 on 8 Bandung city hospital patients from 1 Baleendah hospital patient, 1 Rancasari hospital patient, 2 Buah Batu hospital patients, 1 Antapani hospital patient, 1 Kiaracondong hospital patient, 1 Kopo hospital patient and 1 Setiabudhi hospital patient.

The first question asked by the researcher "Short Film (Audiovisual *Live Action*) about Consumption of Taking Anti-diabetic Drugs (OAD) in Diabetes Patients. What kind of movie do you want?". Some informants said:

"I want to know more about where the diabetes comes from? And how to prevent it, how to treat the wound? And what about home care?" (RA, Personal communication March 21, 2024).

"An educational movie about sick people who are beaten and then obeyed and the storyline is unique and fresh and the benefits and effects of not diligently taking anti-diabetes drugs are explained" (NF, Personal communication, March 23).

2024).

"According to my mother, the film about taking medicine is made like the FTV soap opera Azab, making the behavior of a person who is not good who finally realizes his actions" (RM, Personal communication, March 22, 2024).

The second question asked by the researcher "How long is the desired duration of the Short Film?". Some informants said:

"The movie can be made longer, about 15-30 minutes" (NI, Personal communication, March 21, 2024).

"15 minutes not more" (AR, Personal communication, March 22, 2024).

"15 minutes is ideal" (NF, Personal communication, March 23, 2024).

The results of the interview obtained want Audiovisual *Live Action* Drinking Anti Diabetes Drugs in the form of a short duration film of about 15 minutes which contains information about more knowledge of Diabetes Mellitus in the form of an explanation of Diabetes itself, where Diabetes mellitus originated, how to prevent

it, the diet of Diabetes Mellitus patients, especially an explanation of the importance of taking Anti Diabetes Drugs.

Based on the explanation above, the researcher made a *Live Action* Audiovisual in the form of a short film with the title *Live Action* Audiovisual about Consumption of Taking Anti-diabetic Drugs with a duration of about 15 minutes. Due to the active patient data of RUMAT Bandung city has the majority of patients with a history of Type 2 Diabetes Mellitus. Diabetes Mellitus is caused by the patient's poor lifestyle. So this Short Film about the Importance of Drinking Anti Diabetes Medication Consumption will focus on type 2 Diabetes Mellitus which will explain the beginning of type 2 Diabetes Mellitus, how to prevent it, Diet and of course the Importance of Drinking Anti Diabetes Medication Consumption for Diabetes Mellitus Patients.

Design

The result of the research at this stage is that the researcher makes a *Live Action* Audiovisual media design regarding the Consumption of Taking Anti-diabetes Drugs in accordance with the results of the media needs analysis obtained during the interview. The steps for making *Live Action* Audiovisual Media about Drinking Consumption of Anti-diabetes Drugs, as follows: (1) Determining the Title, Story Concept and Characterization (2) Short Film Script/Script Making Process (3) Script Testing by Material Experts. (4) Finding the Cast (5) Preparation of *Shooting* and *Editing* Equipment (6) Determination of *Shooting Place/Location/Setting* (7) *Shooting* Implementation (8) *Editing* Process using the *Wondershare Filmora 13* Application.

At this point, the design design and *editing* process of *Live Action* Audiovisual media about Consumption of Drinking Anti Diabetes Drugs made using the *Wondershare Filmora 13* application, with steps: (1) Sensor on *Brand* or *Brand of* food and beverages (2) Transition of mixed flow transfer (3) *Medium Shot* as a means of conversation Patient and Doctor (4) Addition of sound effects and backsound music (5) Settings (6) Sound Clarity (7) Installation of *Credit Tittle* (8) Development (*Development*) (9) Material Expert Validation Results, The calculation of the results of the feasibility test of material experts on Audiovisual *Live Action* media regarding Consumption of Drinking Anti Diabetes Drugs based on material experts as follows:

a. Nurse Coordinator of RUMAT Bandung (Ns. Dwi Harianto, S.Kep., CDWC)

$$Nilai = \frac{Jawaban\ Benar}{Jawaban\ salah} \times 100\% Nilai = \frac{58}{4 \times 17} \times 100\% Nilai = \frac{58}{68} \times 100\% Nilai = 85\%$$

b. RUMAT Antapani Nurse (Ns. Andi Tri Atmaja, S.Kep)

$$Nilai = \frac{Jawaban Benar}{Jawaban salah} \times 100\%Nilai = \frac{67}{4 \times 17} \times 100\%Nilai = \frac{67}{68} \times 100\%Nilai$$
$$= 98\%$$

(10) Media Expert Validation Results

The calculation of the results of the feasibility test of media experts on *Live Action* Audiovisual media regarding Consumption of Taking Anti-diabetes Drugs based on media experts is as follows:

$$Nilai = \frac{Jawaban\ Benar}{Jawaban\ salah} \times 100\%$$

a. Health Promotion Education Laboratory Technician Hilda Khairai, S.Tr.Kes

$$Nilai = \frac{Jawaban\ Benar}{Jawaban\ salah} \times 100\% Nilai = \frac{45}{4 \times 15} \times 100\% Nilai = \frac{45}{60} \times 100\% Nilai = 75\%$$

b. Film Producer/Actor "Heksa Ramdono"

$$Nilai = \frac{Jawaban \ Benar}{Jawaban \ salah} \times 100\% Nilai = \frac{49}{4 \times 15} \times 100\% Nilai = \frac{49}{60} \times 100\% Nilai$$

$$= 81\%$$

(11) Small Group Test

The results of the small group validation test conducted on 4 respondents at RUMAT Antapani were:

$$Nilai = \frac{Jawaban \, Benar}{Jawaban \, salah} \times 100\% Nilai = \frac{84}{112} \times 100\% Nilai = 75\%$$

Discussion

Analysis

The analysis stage in the ADDIE method in this study is needed to identify problems and find the right solution to solve a problem (Safitri & Aziz, 2022), which is in line with the identification of problems through interviews with the Central Coordinator, Head Nurse of the Buahbatu branch and Head Nurse of the Baleendah branch of the Diabetes Wound Care Specialist Hospital on February 13, 2024.

There is a problem that active patients have an age range of 40-70 years with patients who are not diligent in taking medication and want media impressions that can be taken home to be reviewed and watched again. According to research conducted by (Maulina et al., 2023) Diabetes Mellitus disease often occurs in the elderly because the organs in this age group are unable to produce sufficient amounts of insulin or are ineffective in using insulin.

The results of the study also show that low medication adherence in Diabetes Mellitus patients is often caused by several factors, such as forgetfulness, non-compliance with treatment instructions given by doctors, and errors in reading or understanding information on drug labels (Sammulia F.S., Elfasyari Y., & Pratama R.M., 2020). In addition, giving patients too much medication can worsen the level

of compliance, as the complexity of the medication rules becomes increasingly difficult to follow.

The implication of these findings is the importance of a holistic approach in the management of Diabetes Mellitus in the elderly, which considers not only pharmacological treatment but also psychosocial factors and patient adherence to treatment regimens. Healthcare providers need to consider strategies that can improve patients' understanding of the importance of medication adherence, as well as provide appropriate support to address the challenges faced by elderly patients in managing their diabetes on a daily basis.

Based on the results of interviews conducted with the Central Coordinator, the Head Nurse of the Buahbatu branch and the Head Nurse of the Baleendah branch of the Diabetes Wound Care Specialist Hospital on February 13, 2024, it was also discussed the desire to make a media show that could be taken home and watched again. According to the research conducted, one of the most popular information and communication technology media is video media. Video combines audio and visual technology to create dynamic and engaging content for the audience. The presence of these audio and visual elements has the potential to improve the reception, understanding, and retention of learning messages by the audience (Yuanta, 2020). Audio-visual media has several important functions in the context of communication and learning, including clarifying the presentation of messages so as not to be too fixated on words, overcoming the limitations of space and time, and stimulating interactivity that is more active than the use of other media.

The concept of media itself refers to any form of communication means that conveys information from one entity to another. The term comes from Latin which means "between", highlighting its role as an intermediary that conveys messages from the source to the receiver (Yuanta, 2020). In the context of learning, media not only conveys messages, but also carries information designed to facilitate the learning process. Video, as a form of learning media, utilizes visuality and audio power to provide a richer and more engaging learning experience for its users.

Design

The steps in making *Live Action* Audiovisual Media about the Consumption of Taking Anti-diabetes Drugs, as follows:

1. Determine Title, Story Concept and Characterization

The characters in the *Live Action* Audiovisual (Short Film) about the consumption of anti-diabetic drugs, consist of Jaki's husband / father, a man aged three heads, who lives in a gedongan house. This husband has an unhealthy / irregular lifestyle, the thing he really likes is to eat a lot in the living room while accompanied by watching his favorite show and he is very stubborn. This character is the main role in the story and is played by the researcher himself "Dzaky Abdur Rafi".

The second character, Mrs. Mutia, is an understanding wife who is devoted to her husband. Always worried about her husband who has an unhealthy lifestyle, because she knows it is not good because she has a background in the world of health as a nurse. She hopes that her husband will change. This character is played by a friend of the researcher's high school organization, "Nabilla Novia".

The third character, the doctor of the health center, is a friend of the wife, because this health center is where the wife works. It's just that this doctor is not assertive in telling the importance of taking anti-diabetes medication, because he feels bad for his friend's husband. This character was played by a friend of the researcher's department, "Fani Firman Aditya".

Finally, the Hospital Doctor is a very strict doctor who cares deeply about the patient's health. What you need to know is that he is an *endocrinologist* who can specialize in certain areas of *endocrinology*, namely: Diabetes and metabolism, endocrine doctors can determine the treatment of various types of diabetes and other metabolic conditions such as obesity. Thus, he is very caring and strict with Diabetes Mellitus patients. This character was played by the researcher's elementary school friend, "Qinthary Hawwi Al-Adawiyah".

Short Film Script Making Process

The production process of a movie involves various parties who work together intensively to produce a quality work. Collaboration between these parties is very important to ensure that the resulting movie is in accordance with the vision and initial plan before the production process begins. Before entering the production stage, there are several important stages that must be passed, starting from pre-production, production, to post-production. These stages ensure that all preparations and executions are carried out meticulously to achieve a satisfactory end result.

Early in the process, ideas for the movie are developed into major themes that will be explored in the story. According to (Alfathoni et al., 2021), the scriptwriter must decide on the theme of the story that will be the core of the movie. This theme becomes the main foundation in drafting the script or screenplay, which is the narrative framework that will be followed and guided during the production process. Choosing a strong and relevant theme is key to ensuring that the message of the movie is clearly conveyed to the audience.

Once the film theme and script are set, the production team will develop a strategy to realize the vision in the form of moving images. The pre-production stage includes location planning, cast selection, production design, and other logistical arrangements needed before the cameras start rolling. This whole process requires good coordination among the production team, including the director, producer, scriptwriter, and other creative teams, to ensure that every detail is under control and each party's contribution can be well coordinated to achieve optimal results in the film production.

2. Script Testing by Material Experts

In the process of making a Short Film (Audiovisual *Live Action*) about the Consumption of Anti-diabetic Medication (OAD) for Diabetes Patients at the Diabetes Wound Care Specialist Hospital in Bandung, the validity of information is a crucial aspect. The movie will highlight type 2 Diabetes Mellitus with a focus on aspects such as the onset of this condition, how to prevent it, the recommended diet, as well as the importance of consistency in the consumption of anti-diabetic drugs for patients.

Subject matter experts play a central role in validating any information presented in the movie. Their job is to ensure that the material selected for presentation, including any evaluation questions that may be included, is relevant, accurate, and in line with current medical standards on the management of Type 2 Diabetes Mellitus. With the validation of the material experts, this film can be a reliable and accountable source of information for its audience, especially for patients and their families who may seek a deeper understanding of this medical condition. In addition, the presence of linguists is also important in validating the use of language in this short film. They ensured that the language used in the narration, dialog, and other supplementary texts in the film conformed to correct language norms and was easily understood by audiences of diverse backgrounds. This not only ensures clarity of communication, but also keeps the message well conveyed without any misunderstanding or confusion.

Looking for a Cast

The casting process takes place at the pre-production stage, which is the beginning of the entire filmmaking process. This stage involves not only auditions, but also the process of data collection and evaluation of each potential cast member relevant to the story. Careful decision-making at this stage can result in the right cast, which will bring continuity to the story and reinforce the messages that the movie is trying to convey. Thus, casting is not just a physical search process, but also includes psychological and artistic aspects that greatly influence the success of a film production. (Muhammad, 2019).

Preparation of Shooting and Editing Equipment

This stage includes detailed planning related to the setting where the scene will be filmed, which includes designing and preparing the right location according to the needs of the story to be told. In addition, this stage also includes checking and procuring the technical equipment and props needed to support the production process. This planning does not only focus on the physical aspects of the setting and equipment, but also involves the preparation of logistics and other arrangements needed to ensure the smooth running of all stages of film production and post-production. Equipment prepared for the implementation of *shooting* are cellphones, DSLR cameras, tripods and script scripts for each cast. So that during the *shooting* there are no problems with the equipment. For *Editing* purposes, a

Laptop, Wondershare Filmora 13 Application and Googgle Drive are required. All equipment is prepared for maximum results in the shooting process.

Determination of the Shooting Place/Location/Setting Set

Because the researcher's friend, Fani Firman Aditya, has two houses in the Laswi Bandung area and one is an empty house which is only used for family gatherings and used as a playground. The researcher thought of using the house of the researcher's friend, Fani Firman Aditya. The reason is because it has various sets of places that the researcher thinks of as a director, a spacious living room that has a television, a staircase because it is two floors, a doctor's room and a patient's room found three empty rooms in the researcher's friend's house. Therefore, researchers made Fani Firman Aditya's house as a *shooting* location. It only needs decoration to make the atmosphere fulfill the director's thoughts and be successfully implemented.

Shooting Implementation

One of the early stages in the production process is the set up phase, where all logistical and personnel preparations are made in accordance with the predetermined production schedule. This includes setting up locations, equipment, and other technical arrangements to suit the shooting and recording needs of the day.

Rehearsal is also an important step in the production stage. The director and his team brief the entire crew and actors on the details of the production process. This includes explaining the set-up, story direction, and ensuring a clear understanding for all involved before shooting begins.

Next, the setting up shots phase is a stage where the director works with the camera crew to determine the right position for the actors and the camera according to the scenario and storyboard that has been prepared previously. This is important to ensure that every scene filmed matches the creative vision that has been planned.

After the take has taken place, the checking the tape stage is carried out. Here, the director and his team review the results of the shoot. If necessary, the shooting process can be repeated several times to ensure that the results obtained meet the desired quality standards before proceeding to the next stage of the film production.

At the stage of the *setting up* phase, researchers carried out on March 22, 2024 by ensuring that the crew, actors and logistics were included in the whatsapp group and given notification of the film production schedule on March 24-25, 2024. It should be noted that researchers in forming this short film do not have more budget so that the crew and logistics are carried out by the researcher Dzaky Abdur Rafi and the researcher's friend, Fani Firman Aditya.

At the rehearsal stage, the director, namely the researcher himself, gave an explanation of the production process on March 22, 2024 in general to the actors and logistics in the Whatsapp group and more specifically explained on the day to each actor and crew.

The third phase of *setting up shots the* position/role of actors and the script was informed on March 22, 2024 and more specifically told the position of actors and cameras by the producer, namely the researcher and by the cameramen, namely Fani Firman Aditya during the production process on March 24-25, 2024 the same thing was also carried out when given a re-shoot on April 1-2, 2024.

Finally, the *shooting* process is carried out and each *take* scene is reviewed again by the researcher himself as a director. *Take* repeatedly until the director is satisfied with the results. After the director is satisfied with the results, then enter the *editing* process to make a Short Film.

Editing Process using Wondershare Filmora 13 Application

The film *editing* process involves four parties involved, namely the researcher, screenwriter, director, and editor. Since the four parties are the researchers themselves or the tasks of the researchers themselves, the researchers themselves do it (Fakhrurozi & Adrian, 2021).

The editing process in the Short Film (Audiovisual *Live Action*) about Antidiabetic Drug (OAD) Consumption in Diabetes Patients uses the Wondershare Filmora 13 application. Wondershare Filmora Video Editor is an application designed to facilitate the video editing process in a simple way while still offering strong quality (Anggraeni et al., 2021). Known for its simplicity, this app is an option for those who want to learn video editing quickly. Its main advantage lies in the ability to edit videos efficiently with an uncomplicated interface, making it suitable for users who are just starting out or who need quick edits without sacrificing quality.

Despite its simplicity, *Wondershare Filmora* does not skimp on functionality. It provides the features needed to produce quality videos, such as color settings, transition effects, and the addition of music and sound. Users can easily customize their videos using the various effects provided without the need to have deep technical skills in video editing.

Development

Development in the ADDIE Model contains product design realization activities (Cahyadi, 2019) in this case a Short Film (Audiovisual *Live Action*) about Drinking Consumption of Anti Diabetes Drugs (OAD). This stage is carried out validation of material experts, media experts, and small groups. Material and media expert validation is a process of activities used to assess whether the product design is more rational and effective for use as educational media (N. K. Putri et al., 2021).

Precisely in this development stage, a validation assessment of the product or *Live Action* Audiovisual media regarding Consumption of Taking Anti-diabetes Drugs aims to identify the feasibility of the media including the media feasibility assessment test by material experts and media experts and improve the media according to suggestions and input.

Then the media expert assessment was assessed by Film Producer/Actor Heksa Ramdono and Health Promotion Education Laboratory Pranata Hilda Khairani, S.Tr.Kes, the aspects assessed by media experts were media aspects. Assessment by material and media experts is very important in measuring the quality of videos that will be shown to diabetic patients at the Bandung Wound Care Specialist Hospital.

The results of the assessment from media and material experts were used as input and suggestions for revising the short film (Audiovisual *Live Action*) on Consumption of Taking Anti Diabetes Drugs (OAD) that had been developed so as to produce a feasible final product. The feasibility of Short Film (Audiovisual *Live Action*) media regarding Consumption of Taking Anti Diabetes Drugs (OAD) in Diabetes Patients after being validated by material experts obtained 91.5% into the "Very Feasible" category and the results of the media validity test obtained 78% into the "Feasible" category. Meanwhile, the response from users to the Short Film (Audiovisual *Live Action*) regarding the Consumption of Taking Anti-diabetes Drugs (OAD) in Diabetes Patients obtained overall results that stated "feasible" or "Valid" by obtaining a percentage of 75%.

Implementation

The fourth stage is to implement the developed product to consumers or research subjects and then apply it to real conditions. This stage is also to implement the design of materials that have been developed (Rusmulyani, 2020). The application in this stage is to show the media that has been revised at the previous stage to diabetes mellitus patients at the Bandung City Diabetes Wound Care Specialist Hospital. The material on diabetes mellitus, the benefits of diligent consumption of anti-diabetic drugs (OAD) and the effects that occur if not diligent consumption of anti-diabetic drugs (OAD) that have been developed are in accordance with the revision stage.

This media screening was carried out to identify the feasibility of the Short Film (Audiovisual *Live Action*) media regarding the Consumption of Taking Anti-diabetic Drugs (OAD) in Diabetes Patients developed and identify the target's opinion about the importance of Consumption of Taking Anti-diabetic Drugs in diabetics. Media screening includes media aspects and material aspects.

Then implementation was carried out by testing large-scale products regarding media and materials on 40 respondents at the Bandung Diabetes Wound Care Specialist Hospital. 40 respondents in the large group test were the sum of the Antapani Hospital Unit 10 patients, Buah batu 5 patients, Kiaracondong 7 patients, Kopo 6 patients, Rancasari 2 patients and Setiabudhi 10 patients. The result of the media screening of the Short Film (Audiovisual *Live Action*) on the Consumption of Taking Anti-diabetic Drugs (OAD) in Diabetes Patients to 40 targets was a score of 94% which was included in the "Very valid" and "Very feasible" categories.

Evaluation

The final stage of the ADDIE model is evaluation. Evaluation is to assess the quality of the product and the learning process, both before and after implementation. The main procedures in this step are selecting evaluation tools, determining evaluation tools and carrying out evaluations (Permana, 2022).

Therefore, based on the evaluation carried out on 40 targets in the large group test, it can be concluded that there are no suggestions and input from users to revise the *Live Action* Audiovisual product on Drinking Consumption of Anti-diabetes Drugs because it is in accordance with the needs and desires of the target.

And based on the evaluation carried out to the general public through Youtube social media on May 30, 2024-June 5, 2024. Short Film Media (Audiovisual *Live Action*) on Consumption of Taking Anti-diabetes Drugs (OAD) has been watched 559 times with 439 likes and 49 Comments. It can be said as an assessment of the media Short Film (Audiovisual *Live Action*) about Consumption of Taking Anti Diabetes Drugs (OAD) to the general public that this media is "Very feasible" to use.

Also based on the evaluation conducted to the general public through Gform on May 30, 2024-June 5, 2024. It was responded by 47 respondents on May 30, 2024 and increased on June 5, 2024 to 65 respondents. Found input to be more varied in the video so that the audience is not bored, More redesigned place settings to really get into the story, Doctor's explanation when explaining DM can be visualized for better understanding and given additional information for diabetes does not only occur in adults and adolescents but among children who will be able to provide global education that consumption of anti-diabetic drugs can be consumed by children with the age range that the doctor has advised. The rest received good and positive comments and the average rating was 4 (very feasible).

CONCLUSION

Live action audiovisual media for taking anti-diabetic medication in patients with diabetes mellitus is needed, according to research and analysis. This 15-minute short film presents complete information about diabetes, from its origin, prevention, diet, and the importance of taking medication regularly. Determining the story idea, creating and testing the script by experts, casting the cast, and using Wondershare Filmora 13 were all part of the creation process. According to the evaluation, this media is highly feasible to use as the large group trial showed a positive response and user support on the online platform with no revision feedback. According to this study, this media can be used as an educational tool in healthcare institutions and help increase patient awareness as well as patient compliance in diabtes treatment.

REFERENCES

- Alfathoni, M. A. M., Syahputra, B., & Roy, J. (2021). Penulisan Naskah Dalam Pembuatan Film Pendek Fiksi "Haroroan." *PROPORSI: Jurnal Desain, Multimedia Dan Industri Kreatif*, 7(1), 52–64. https://doi.org/10.22303/proporsi.7.1.2021.52-64
- Andrew, A. (2024). *Audiovisual: Pengertian, Ciri, Fungsi, Manfaat dan Tujuan*. Gramedia Blog. https://www.gramedia.com/literasi/audiovisual/#google_vignette
- Arikunto. (2017). Pengembangan Instrumen Penelitian dan Penilaian Program. Pustaka Pelajar.
- Cahyadi, R. A. H. (2019). Pengembangan Bahan Ajar Berbasis Addie Model. *Halaqa: Islamic Education Journal*, 3(1), 35–42. https://doi.org/10.21070/halaqa.v3i1.2124
- DIABETES INDONESIA. (2024). *Kebijkan Publik*. DIABETES INDONESIA. https://diabetes-indonesia.net/kebijakan-publik/
- Dinas Kesehatan Kota Bandung. (2020). Profile Kesehatan Kota Bandung Tahun 2020. *Angewandte Chemie International Edition*, 6(11), 951–952., 5–24.
- dr. Cahyo Edukes. (2022). *Efek Minum Obat Diabetes Setiap Hari*. https://youtu.be/P3dn-15rCIk?si=5uALHKiJzvFL5T3r
- Dr. Cecep Kustandi, M. P., & Dr. Daddy Darmawan, M. S. (2021). *Pengembangan Media Pembelajaran* (Edisi Pert). KENCANA.
- dr. Fadhli Rizal Makarim. (2021). *Alasan Pentingnya Patuh Konsumsi Obat Diabetes*. Halodoc.
- dr. Sungadi Santoso. (2020a). *4 Cara Mengatasi Diabetes*. https://youtu.be/fL581YBsCk0?si=mCaq9AjRkXCI_mNX
- dr. Sungadi Santoso. (2020b). *Penyebab dan Jenis Penyakit Diabetes Melitus*. https://youtu.be/BlO24liTpQ0?si=H9J06j6tS4QvK-Ps
- Fakhrurozi, J., & Adrian, Q. J. (2021). Kajian Dan Praktik Ekranisasi Cerpen Perempuan di Rumah Panggung ke Film Pendek Angkon. *Deiksis: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 8(1), 31. https://doi.org/10.33603/dj.v8i1.4417
- Ghifari, M., Salsabila, E., & Aziz, T. A. (2022). Pengembangan Video Pembelajaran Bentuk Aljabar Dengan Pendekatan Metaphorical Thinking. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 11(2), 1160. https://doi.org/10.24127/ajpm.v11i2.4973
- Hanum, A. N. L. (2021). Strategi promosi perpustakaan: Film animasi sebagai media edukasi bagi pemustaka. *Informatio: Journal of Library and Information Science*, *1*(2), 121. https://doi.org/10.24198/inf.v1i2.31077
- Harinanda, S. A., & Junaidi, A. (2021). Representasi Feminisme Pada Film Disney Live-Action Mulan. *Koneksi*, 5(2), 269. https://doi.org/10.24912/kn.v5i2.10299

- International design school. (2021). *Mengenal Genre Film: Anime, Animasi dan Live Action*. International Design School. https://idseducation.com/perbedaan-anime-animasi-dan-live-action/
- International Diabetes Federation. (2024). *IDF Congress*. International Diabetes Federation. https://idf.org/events/idf-congress/
- Jabar, Di. K. (2022). *Open Data Jabar Diabetes Melitus*. Open Data Jabar. https://opendata.jabarprov.go.id/id/dataset/jumlah-penderita-diabetes-melitus-berdasarkan-kabupatenkota-di-jawa-barat
- Kemenkes. (2021). *Mengenal Gejala Diabetes Melitus*. Upk.Kemkes.Go.Id. https://upk.kemkes.go.id/new/mengenal-gejala-diabetes-melitus
- Kemenkes. (2022). *Diabetes Melitus Tipe* 2. Ayosehat.Kemkes.Go.Id. https://ayosehat.kemkes.go.id/topik-penyakit/diabetes--penyakit-ginjal/diabetes-melitus-tipe-2#:~:text=melitus tipe 2.-,Komplikasi,terutama pada kaki dan tangan.
- Kemenkes. (2023). Mengenal Obat Diabetes. Yankes. Kemkes. Go. Id.
- Kustandi, C., & Darmawan, D. (2022). *Pengembangan Media Pembelajaran* (I. Fahmi (ed.); 1st ed.). Kencana.
- Maulina, N., Sawitri, H., Zakiyya, N., & Syifa, S. (2023). Diabetes Melitus Tipe 2 dan Hipertensi sebagai Faktor Risiko PJK pada Lansia. *Jurnal Ilmiah Manusia Dan Kesehatan*, 6(1), 29–36. https://doi.org/10.31850/makes.v6i1.1894
- Muhammad, F. (2019). Laporan Praktik Kerja Lapang Penyiaran PERAN TIM CASTING DALAM PRODUKSI FILM "AKAD" DI E MOTION Entertainment. *Ilmu Sosial Dan Budaya Universitas Pakuan*, 49.
- Oliver, A. (2024). *Enumerator: Arti, Tanggungjawab dan Skill yang dibutuhkan*. Glints.Com. https://glints.com/id/lowongan/enumeratoradalah/#:~:text=Intinya%2C enumerator adalah mereka yang,mereka bisa dibilang cukup penting.
- P2PTM Kemenkes RI. (2019a). *Apa yang dapat dilakukan untuk mencegah Diabetes?* P2ptm.Kemkes.Go.Id. https://p2ptm.kemkes.go.id/infographic-p2ptm/penyakit-diabetes-melitus/page/4/apa-yang-dapat-dilakukan-untuk-mencegah-diabetes
- P2PTM Kemenkes RI. (2019b). Faktor Risiko Penyakit Diabetes Melitus (DM)-Faktor Risiko yang Bisa Diubah. https://p2ptm.kemkes.go.id/infographic-p2ptm/penyakit-diabetes-melitus/faktor-risiko-penyakit-diabetes-melitus-dm-faktor-risiko-yang-bisa-diubah
- Parlindungan, D. P., Mahardika, G. P., & Yulinar, D. (2020). Efektivitas Media Pembelajaran Berbasis Video Pembelajaran dalam Pembelajaran Jarak Jauh (PJJ) di SD Islam An-Nuriyah. *Prosiding Seminar Nasional Penelitian LPPM UMJ*, 1–8. http://jurnal.umj.ac.id/index.php/semnaslit
- Permana, N. S. (2022). Mendesain Hybrid Learning Dengan Model Pengembangan Addie Untuk Pelajaran Pendidikan Agama. *JPAK: Jurnal Pendidikan Agama Katolik*, 22(1), 105–115. https://doi.org/10.34150/jpak.v22i1.381

- Rahayu, S. (2022). Profile Video Construction As A Means of Institutional Existence: Ambon Religious Education and Training Center. *12 Waiheru*, 8(2), 165–175. https://doi.org/10.47655/12waiheru.v8i2.22
- Rahma, L. I., & Utami, L. R. (2021). Analisis Makna Desain Font Judul Film dalam Poster sebagai Media Promosi. *Visual Heritage: Jurnal Kreasi Seni Dan Budaya*, 4(1), 64–69. https://doi.org/10.30998/vh.v4i1.1072
- Rusmulyani, K. (2020). Study Pengembangan Pendidikan dan Pelatihan bagi Aparatur Sipil Negara Berbasis Implementasi Model Addie. *SAP (Susunan Artikel Pendidikan)*, 5(2). https://doi.org/10.30998/sap.v5i2.6957
- Safitri, M., & Aziz, M. R. (2022). ADDIE, sebuah model untuk pengembangan multimedia learning. *Jurnal Pendidikan Dasar*, *3*(2), 50–58. http://jurnal.umpwr.ac.id/index.php/jpd/article/view/2237
- Sakroni. (2015). *Penulisan Naskah Media*. Universitas Sebelas Maret. https://sakroni.staff.uns.ac.id/
- Sanjaya, I. P. A., Mudra, I. W., & Dwiyani, N. K. (2023). Penerapan Alur Tak Terhingga Dalam Film Pendek Fiksi Untiteled. *Calaccitra: Jurnal Film Dan Televisi*, 3(1), 95–101. https://jurnal2.isi-dps.ac.id/index.php/calaccitra/article/view/2258
- Silviana Putri, C., Mina Sherly, P., & Qurratul'aini, Y. (2023). Manajemen Pra Produksi Film Fiksi Pendek Lies. *Jurnal Audiens*, 4(2), 312–319. https://doi.org/10.18196/jas.v4i2.35
- Syaiid, R., Despriliani, R., & Prayitno, E. (2021). Film *Live Action* dengan Sentuhan 3 Dimensi. *Qualia: Jurnal Ilmiah Edukasi Seni Rupa Dan Budaya Visual*, *1*(2), 1–13.
- Tristan, Z. (2024). Keefektifan Media Video Pembelajaran Untuk Pembelajaran Mata Kuliah Jurusan Pendidikan Teknik Bangunan Pasca Covid-19. *Adiba: Journal of Education*, 4(2), 259–262. https://adisampublisher.org/index.php/adiba/article/view/688
- Webdew.com. (2023). Video Aksi langsung vs Animasi: Mana yang lebih baik untuk pemasaran video? *Webdew.Com.* https://www.webdew.com/blog/live-action-vs-animated-videos
- Yuanta, F. (2020). Pengembangan Media Video Pembelajaran Ilmu Pengetahuan Sosial pada Siswa Sekolah Dasar. *Trapsila: Jurnal Pendidikan Dasar*, *1*(02), 91. https://doi.org/10.30742/tpd.v1i02.816