



## Implementing the ADDIE Model in Developing Learning Videos Skills of Integrated Health Post Cadres

Ketut Suarayasa<sup>1</sup>, Miranti<sup>1</sup>, Elliyane Bangkele<sup>1</sup>, Sumarni<sup>1</sup>, Diah Mutiarasari<sup>2</sup>

<sup>1</sup>Department of Public Health and Community Medicine Faculty of Medicine, Tadulako University, Indonesia

\*Corresponding Author: Ketut Suarayasa  
Email: [suarayasa@yahoo.com](mailto:suarayasa@yahoo.com)



### Article Info

#### Article history:

Received 3 November 2025

Received in revised form 11

December 2025

Accepted 28 December 2025

#### Keywords:

ADDIE Model

Learning Video

Posyandu Cadre Skills

### Abstract

*Integrated Health Service Posts (Posyandu) in the era of primary care transformation provide services for all life cycle targets. They require Posyandu cadres who know and understand the 25 basic skills. The purpose of this study was to describe the development of video-based learning media on Posyandu cadre skills to improve their knowledge and skills in Palu City. The research used research and development (R&D). The study was conducted at the Mamboro Community Health Center in Palu City. The video creation process used the ADDIE (Analyze, Design, Development, Implementation, Evaluation) model, which divides the planning process into several steps and organizes each step into a logical sequence. The output from the previous step is then used as input for the next step. The research results indicate that the development of a video for teaching skills for Posyandu (Integrated Health Post) cadres can be successfully implemented through the stages of analysis, design, development, implementation, and evaluation. The validator team gave a feasibility score of 96% (Very feasible) for the media and 94.6% (Very feasible) for the material respectively. The trial results demonstrated positive perceptions from the health workers and Posyandu cadres who participated in the video trial. They noted that the video presented a realistic simulation of Posyandu activities in visual and audio form that was easy to follow. The ADDIE model is suitable for developing learning videos because each stage requires specific study and treatment, ensuring accountability for the resulting product.*

## Introduction

The Ministry of Health is currently implementing the Transformation of Primary Health Care, namely by strengthening basic health care services (Primary Health Care) by encouraging increased promotive and preventive efforts, supported by innovation and technology utilization and carried out with a strategic approach of primary health care integration, community empowerment, and multi-sectoral collaboration (Kemenkes RI, 2023; Sornpaisarn et al., 2024; Singh et al., 2024; Tomoh et al., 2024). In its implementation, the transformation of primary health care is focused on a lifecycle approach by strengthening promotive and preventive efforts, and bringing health services closer through the Posyandu network down to the Hamlet/RT/RW level (Kemenkes, 2023).

In order for promotive and preventive services for the entire community through Posyandu to run in an integrated manner according to standards, Posyandu in the era of primary service transformation provides services for all life cycle targets, starting from pregnant women, childbirth and postpartum, babies, toddlers, preschool children, school age and adolescents,

productive age and elderly (Kementerian Kesehatan RI, 2024). For this reason, it is necessary to improve the skills of Posyandu cadres as motivators, counselors, and recorders to be able to provide services for all life cycle targets through 25 basic cadre skills, including: 1) Posyandu Management Skills, having 4 types of skills; 2) Infant and Toddler Skills, having 7 types of skills; 3) Pregnant and Breastfeeding Skills, having 6 types of skills; 4) School Age and Adolescent Skills, having 3 types of skills; and 5) Productive Age and Elderly Skills, having 5 types of skills (Kemenkes, 2023; Alvian et al., 2024).

Palu City, which consists of 14 Community Health Centers (Puskesmas), has 230 Integrated Health Posts (Posyandu) spread across 8 sub-districts and 46 villages. Based on the Posyandu stratification model before the primary service transformation era, there were 12 Pratama Posyandu, 89 Madya Posyandu, 106 Purnama Posyandu, and 23 Mandiri Posyandu. Of the 230 existing Posyandus, most Posyandus have not yet conducted training on the 25 basic skills of Posyandu cadres (Dinkes Kota Palu, 2023). Therefore, it is necessary to conduct training for Posyandu cadres to know and understand the 25 basic skills of Posyandu cadres. However, with different educational backgrounds, it is not easy to improve the knowledge and skills of Posyandu cadres. Therefore, researchers designed a learning video for Posyandu cadre skills to make it easier to understand.

The process of making this video uses the ADDIE model. The ADDIE model is known for its systems approach, dividing the planning process into several steps and arranging each step into a logical sequence, then using the output of the previous step as input for the next step (Rusmayana, 2021; Gholami et al., 2022; Zhang et al., 2023). The ADDIE model has five stages: Analysis, Design, Development, Implementation, and Evaluation (Sugihartini & Yudiana, 2018).



Figure 1. ADDIE model process flow

In general, learning videos have the following characteristics (Putri, 2020) : 1) Material requiring visual and kinesthetic understanding can be facilitated by the use of videos; 2) Videos can be used during the training process for Posyandu cadres and when Posyandu cadres are about to carry out their duties; 3) They are relatively easy to operate, provided the cadre has an Android phone; 4) They can be saved and studied repeatedly as needed.

The purpose of this research is to describe the development of video-based learning media for Posyandu cadre skills to improve the knowledge and skills of Posyandu cadres in Palu City.

## Methods

The type of research used in this study was research and development, or R&D. The R&D method is research that produces a product or develops a product as a methodological approach (Sugiyono, 2010; Masturoh & Anggit, 2018; Suryabrata, 2014). The study was conducted at the Mamboro Community Health Center in Palu City. The subjects for the educational video

were Posyandu (Integrated Health Post) cadres within the Mamboro Community Health Center's work area.

The Posyandu cadre skills learning video was developed using the ADDIE model. The design stages in using this model are analysis, design, development, implementation, and evaluation (Rusmayana, 2021; Ningsih & Atmaja, 2019). The resulting video was then tested and validated by experts to ensure its content met Posyandu cadre service standards. Two lecturers or practitioners served as validators in this study: 1) Health Promotion (for educational media); 2) Technical (for learning video content).

Data obtained from subject matter experts and media experts were analyzed using a Likert scale to determine the level of feasibility, as follows (Anafi et al., 2021) :

Table 1. Assessment Criteria by Validator

Score	Criteria
5	Very Good
4	Good
3	Enough
2	Poor
1	Very Poor

To determine the suitability of the learning videos created, researchers used previous validation research conducted by experts as a reference for data assessment. The assessment criteria are as follows:

Table 2. Criteria for Learning Video Quality and Suitability

Percentage Level (%)	Qualification	Assessment Category
85 – 100	81 – 100	Very Eligible
75 – 84	61 – 80	Eligible
55 – 74	41 – 60	Less Eligible
< 55	< 41	Not Eligible

Source: Alvina (2023)

Researchers create an assessment form by the validator which includes : 1) Validator assessment form for media aspects; 2) Validator assessment form for material aspects.

## Result and Discussion

### Analysis Stage

The analysis stage was conducted to understand the actual conditions under which Posyandu cadres and health workers operate in the context of integrated primary health care implementation in Palu City. The transformation of primary health care has fundamentally reshaped the role of Posyandu as a community based service platform. Posyandu services are no longer limited to maternal and child health but are now expected to address health needs across the entire life cycle, including adolescents, productive age adults, and older populations. This policy shift has expanded the scope and complexity of services that cadres must deliver at the community level.

Interviews with health center leadership and program coordinators indicated that this shift in service expectations was not accompanied by proportional strengthening of training mechanisms. Cadres were required to follow updated service standards while relying largely on brief orientations and informal guidance. One cadre described this situation by stating,

*“During Posyandu activities, we are expected to handle many services at once, but we rarely receive clear demonstrations of how to carry out each procedure correctly.”*

This reflects the gap between policy driven service expansion and the availability of structured capacity building at the community level.

Field observations further showed that existing training practices relied heavily on verbal explanations and static presentation materials. While these approaches conveyed information, they were insufficient for supporting procedural understanding and skill internalization. Cadres often struggled to recall detailed service steps when implementing activities in real time. A health worker involved in supervision noted,

*“Cadres often ask the same questions again during service days because they do not have materials they can review beforehand.”*

This indicates that the challenge was not limited to comprehension during training sessions, but extended to preparation and execution during actual service delivery.

The diverse educational backgrounds of cadres further intensified this challenge. Many cadres possess strong community engagement skills but have limited exposure to formal health training environments. Under these circumstances, reliance on text based or lecture oriented training approaches tends to widen gaps in understanding rather than reduce them. Cadres expressed difficulty recalling detailed procedures once training sessions ended, especially when they lacked access to materials that could be revisited independently during service preparation or implementation.

These findings indicate that the core issue identified at the analysis stage was not a lack of commitment or willingness among cadres to improve their performance. Instead, the problem lay in the absence of accessible, standardized, and contextually relevant training resources that align with the realities of community based health service delivery. Without such resources, cadres are placed in a position where they must interpret policy guidelines independently, increasing the risk of inconsistent service practices across different Posyandu locations.

From a health systems perspective, this situation has important implications. Posyandu cadres function as an extension of the formal health workforce, particularly in settings where access to professional health workers is limited. Inconsistencies in cadre performance can therefore affect not only service quality but also community trust in primary health care services. The analysis stage thus highlighted the urgent need for a training medium that could support cadres in operationalizing national service standards in a clear, practical, and sustainable manner.

The identification of video based training as a potential solution emerged directly from the needs expressed by cadres and health workers. Such a medium offers the possibility of presenting standardized procedures in a visual and repeatable format that reflects real service conditions. This aligns with the broader objective of strengthening primary health care by ensuring that community based health workers are adequately prepared to implement integrated services with confidence and consistency.

## **Design Stage**

The design stage was developed as a direct response to the conditions identified during the analysis phase, particularly the need for training resources that are closely aligned with the realities of Posyandu service delivery. At this stage, the focus shifted from identifying problems to translating service standards into a structured training format that could be meaningfully accessed by cadres. The design process was guided by the framework of the 25 basic cadre skills issued by the Ministry of Health, ensuring that the training content remained consistent with national policy and operational expectations.

Rather than organizing the material around theoretical explanations, the design emphasized practical service activities that cadres routinely perform during Posyandu sessions. Each skill area was mapped onto specific service tasks, such as preparing service equipment, interacting

with different age groups, recording service outcomes, and coordinating with health workers. This approach allowed the training content to reflect the actual flow of Posyandu activities and reduced the gap between training and practice.

In developing the learning scenarios, careful attention was given to the sequence and logic of service delivery. The scenarios were structured to mirror the order in which tasks are carried out in the field, beginning with preparation before service days and continuing through service implementation and follow up activities. This sequencing was intended to support procedural understanding and help cadres anticipate the steps required during real service situations. By presenting tasks in a coherent progression, the design aimed to reduce confusion and increase cadres' confidence in carrying out their responsibilities.

The scripting and storyboard development further reinforced this practical orientation. Scripts were written using clear and straightforward language that reflected the terminology commonly used by cadres and health workers in the field. Visual elements were planned to depict familiar Posyandu settings, including interactions between cadres and service recipients, the use of service tools, and coordination among team members (Sumbarwati et al., 2025; Wahyuni et al., 2025). This visual planning was important to ensure that the training content felt relevant and immediately applicable, rather than abstract or detached from everyday practice.

Throughout the design process, consideration was also given to the diverse educational backgrounds of Posyandu cadres. The design avoided overly technical language and prioritized clarity and repetition of key service steps. This was intended to support comprehension among cadres with varying levels of formal education while still maintaining the accuracy required for health service delivery. By balancing simplicity and precision, the design sought to create a training resource that could be effectively used across different Posyandu contexts.

Overall, the design stage positioned the learning video as a structured training tool that supports cadres in translating service guidelines into concrete actions. By grounding the content in real service workflows and emphasizing procedural clarity, the design responded directly to the needs identified during the analysis stage and laid a foundation for consistent and effective implementation in community based primary health care settings.

### **Development Stage**

The development stage marked the transition from conceptual planning to the production of a concrete training resource that could be used in real service settings. At this stage, the focus was placed on ensuring that the learning video accurately represented Posyandu service practices while remaining accessible to cadres with diverse educational and experiential backgrounds. The production process was guided by the scripts and storyboards developed earlier, which emphasized clarity of procedures, logical sequencing of tasks, and consistency with national service guidelines.

Video production was carried out in settings that closely resembled actual Posyandu environments. This decision was made to ensure that cadres could easily relate the visual content to their own service contexts. The scenes depicted common service situations, including interactions between cadres and community members, preparation of service tools, and coordination among cadres and health workers. By presenting familiar environments and routines, the video aimed to reduce the cognitive gap between training and practice and to support cadres in visualizing correct service implementation.

Attention was also given to the way information was delivered through narration and pacing. The narration was designed to be clear and straightforward, using language commonly used in community health services. Key service steps were explained at a measured pace to allow cadres sufficient time to process the information. This approach was intended to support

comprehension and retention, particularly for cadres who may not be accustomed to formal training settings or dense instructional materials.

An important aspect of the development stage was the integration of accuracy and standardization. Each procedure shown in the video was carefully aligned with the official guidelines for Posyandu services to ensure that the training content reinforced correct practices (Friska et al., 2022). This alignment is particularly important in community based health services, where cadres play a critical role in delivering standardized care despite varying local conditions. By presenting uniform procedures, the video serves as a reference point that can help reduce variation in service delivery across different Posyandu locations.

To ensure the quality of the training media, expert validation was conducted as part of the development stage. A health promotion expert evaluated the video in terms of its suitability as a training medium for community health education, focusing on aspects such as clarity of messages, visual presentation, and overall usability. In parallel, a Posyandu program officer assessed the content to confirm its accuracy and relevance to current service standards. The high feasibility scores obtained from both validators indicate that the video met expectations for both educational effectiveness and service correctness (Denny et al., 2017; Wahyuni et al., 2017; Bobo & Andrews, 2010; Samala et al., 2024).

Feedback from the validation process was used to refine the video before it was introduced in the field. Revisions focused on improving clarity, adjusting visual emphasis on critical service steps, and ensuring that the content accurately reflected real service conditions. This iterative process highlights that the development stage was not merely about producing a video, but about refining a training tool that could responsibly support cadre performance within the primary health care system.

Overall, the development stage resulted in a learning video that balances realism, clarity, and standardization. By grounding the content in actual service practices and validating it through expert review, the training media was prepared to function as a practical resource for strengthening cadre capacity and supporting consistent implementation of integrated primary health care services at the community level.

### **Implementation Stage**

The implementation stage represented the initial introduction of the developed training video into a real service context. This stage was designed not as a large scale intervention, but as a limited field trial intended to examine how the training media functioned when used by health workers and Posyandu cadres who are directly involved in service delivery. The implementation took place in the working area of the Mamboro Community Health Center, an area that reflects typical conditions of community based primary health care services in Palu City.

Participants in this stage were selected purposively to ensure that feedback reflected both managerial and operational perspectives. They included health center leadership, the person in charge of the Posyandu program, and active Posyandu cadres who routinely provide services to the community. This composition was important because it allowed the implementation process to capture how the training video was perceived across different levels of responsibility within the health system, from planning and supervision to frontline service delivery.

During the implementation process, the video was presented as part of a structured training session. Cadres were given the opportunity to watch the video in full and were encouraged to pay attention to how service procedures were demonstrated. The session created space for reflection, allowing cadres to compare the standardized procedures shown in the video with their existing practices. This reflective process is particularly important in community based

health services, where practices are often shaped by habit and local adaptation rather than formal standards.

The presence of health workers and program coordinators during the session also allowed for immediate clarification of procedures and alignment of understanding. Discussions that followed the video viewing focused on the relevance of the content to daily service activities, the clarity of procedural steps, and the feasibility of applying the demonstrated practices within existing Posyandu conditions. These discussions provided insight into how the training media could support cadres in adjusting their practices to align more closely with service guidelines.

Eight active Posyandu cadres participated in the trial. These cadres represent individuals who regularly interact with service recipients and who carry a significant responsibility in implementing integrated services at the community level. Their engagement during the session indicated that the video format supported focused attention and facilitated discussion about service procedures (Antonio et al., 2023; Huang et al., 2022; Ramos et al., 2022). Cadres were able to identify specific aspects of their work that could benefit from clearer standardization, particularly in relation to task sequencing and coordination during service delivery.

From an implementation perspective, this stage demonstrated that the training video could be integrated into existing training and supervision activities without requiring substantial additional resources. The video functioned as a shared reference that supported dialogue between cadres and health workers, helping to establish a common understanding of service standards. This is particularly valuable in primary health care settings, where opportunities for formal training are limited and supervision often occurs intermittently.

### **Evaluation Stage**

The evaluation stage focused on understanding how the training video was perceived and utilized by health workers and Posyandu cadres after its implementation in a real service context. This stage did not aim to measure learning outcomes in a quantitative manner, but rather to capture qualitative insights regarding the usefulness, relevance, and practicality of the video as a capacity building resource within community based primary health care services. Evaluation was conducted through in depth interviews that allowed participants to reflect on their experiences after engaging with the training media.

Health workers and cadres consistently reported that the video supported clearer understanding of service procedures, particularly those involving sequential tasks and coordination among cadres. The visual representation of Posyandu activities helped participants grasp procedural details that are often difficult to internalize through verbal explanations alone. This was especially important for cadres who are required to manage multiple service targets within a single service session, where clarity of task flow plays a critical role in maintaining service quality.

Cadres emphasized that the video helped clarify their roles during service delivery and increased their confidence in applying standardized procedures. One cadre explained,

*“When watching the video, I can see exactly what needs to be done step by step, so I feel more confident when providing services.”*

This suggests that the video functioned as a practical reference that supported readiness rather than simply delivering information.

Another important aspect highlighted during evaluation was the flexibility offered by the video format. Cadres appreciated the ability to access the video repeatedly outside formal training sessions. A health worker involved in the Posyandu program stated,

*“The video helps cadres review service steps before Posyandu days, especially when procedures change.”*

This indicates that the training media supported ongoing preparation and adaptation to updated service standards.

The evaluation findings also suggest that the video functioned as more than a learning tool. It served as a practical support mechanism that enabled cadres to prepare for service days and to review procedures when uncertainties arose. Compared to traditional counseling or lecture based training, the video was perceived as more responsive to the realities of cadre work, where learning often occurs alongside service delivery rather than in separate training environments.

From a broader health system perspective, these findings indicate that video based training media can contribute to strengthening the capacity of community based health workers by supporting consistent application of service standards. While the evaluation did not assess changes in service outcomes directly, participants' responses suggest that the video enhanced readiness and confidence in implementing integrated Posyandu services. This readiness is a critical component of effective primary health care, particularly in settings where cadres play a central role in extending the reach of formal health services.

The evaluation stage demonstrates that the developed training video is perceived as relevant, practical, and supportive of cadre capacity development. The positive responses from both health workers and cadres indicate that video based training media has the potential to complement existing training and supervision mechanisms, contributing to more consistent and reliable implementation of integrated primary health care services at the community level.

### **Strengthening Community Health Worker Capacity Through Contextualized Video Based Training in Integrated Primary Health Care**

This study contributes to the growing literature on community health worker education by demonstrating how instructional design can be mobilized to address structural gaps in capacity strengthening during primary health care reform. Over the last five years, global scholarship has consistently emphasized that community health workers are increasingly positioned as key implementers of expanded service packages, yet the systems designed to support their learning often lag behind policy ambition (Gebremeskel et al., 2025; Dhufiera, 2024; Birk et al., 2024). Schleiff et al. (2021) argue that training for community health workers must be understood as a continuous system function rather than a discrete event, particularly when roles become more complex and context dependent. Zulu and Perry (2021) further highlight that weaknesses in training and performance support mechanisms frequently translate into variability in service delivery, even when policies are well articulated. Interpreted through this lens, the present study should be seen as responding to a widely recognized implementation challenge by offering a practical mechanism to support procedural consistency at the community level.

Within Indonesia, the implementation of Integrated Primary Health Care through the Posyandu ILP framework reflects many of these global dynamics. Recent studies examining ILP readiness at the Puskesmas and community levels suggest that operational preparedness is uneven and shaped by factors such as organizational capacity, availability of learning resources, and the ability of cadres to translate guidelines into practice. Rachmaningsih and Sari (2024) show that ILP implementation depends not only on policy adoption but also on concrete preparatory conditions, including training infrastructure and resource alignment. Similarly, Siswati et al. (2025) demonstrate that cadres may be classified as ready in administrative terms while still facing substantial capacity gaps in practice. These findings deepen the relevance of the present study by underscoring that cadre training must function as an ongoing performance support system rather than as a one time orientation.

National policy frameworks reinforce this interpretation by formalizing the competencies expected of Posyandu cadres. The Ministry of Health curriculum positions cadres as essential actors responsible for delivering standardized services across the life course, signaling a shift toward professionalized expectations within community based health services (Kementerian

Kesehatan Republik Indonesia, 2023). However, empirical studies caution that standardization at the policy level does not automatically translate into standardized practice. Putri et al. (2025) demonstrate a strong relationship between cadres' knowledge of ILP concepts and their ability to implement procedural systems correctly, suggesting that structured and accessible training plays a decisive role in shaping performance. Pranawati et al. (2025) further show that cadres benefit most from training approaches that emphasize demonstration and contextualized practice rather than abstract explanations. These studies collectively support the rationale for developing a video based training resource that foregrounds procedural clarity and practical applicability.

The international health education literature provides further justification for the use of video as a training modality in this context (World Health Organization, 2023; Jensen et al., 2023; Niekrenz et al., 2024). A systematic review and meta analysis by Morgado et al. (2024) reports that video based learning generally supports comprehension and procedural understanding in health education, while also emphasizing that outcomes depend on alignment with learners' contexts and needs. In low resource and community settings, this alignment becomes particularly critical. Impito and Azevedo (2025) highlight that video based health education can be effective when designed with attention to accessibility, cultural relevance, and technological constraints. These findings reinforce the interpretation that the value of video lies not in its technological novelty but in its capacity to provide repeatable and visually grounded demonstrations that cadres can revisit as needed.

Beyond knowledge acquisition, digital training tools have been shown to influence confidence and perceived professionalism among community health workers. Greuel et al. (2023) report that the use of smart devices and digital media supports not only learning but also credibility and motivation, enabling community health workers to communicate health messages more effectively. This dimension is particularly relevant in the context of Posyandu ILP, where cadres must explain expanded service packages to communities that may still associate Posyandu with earlier maternal and child health functions (Mursyidah, 2024; Santi & Hidayati, 2025). At the same time, digital health scholarship cautions that training innovations must be embedded within supportive systems to avoid reinforcing inequities or becoming isolated interventions. The World Health Organization (2021) emphasizes that digital health initiatives require integration with organizational, human, and financial resources, while Koehle et al. (2022) stress that usability and trust are central to digital health equity. These perspectives suggest that the training video developed in this study should be viewed as one component of a broader capacity strengthening ecosystem.

Recent evaluations of training programs for community health workers further illuminate how training impact is often expressed. Carboni et al. (2024) show that training effectiveness is closely linked to design quality, contextual alignment, and mechanisms that support consistent implementation, rather than immediate health outcomes. Crawford et al. (2025) similarly report that training programs often yield their most immediate benefits in terms of readiness and role clarity, particularly in complex service environments. Evidence from maternal and child health and mental health contexts reinforces this interpretation. Lee et al. (2025) demonstrate that community health worker training can translate into meaningful improvements in service engagement when it is contextually tailored, while Ramirez Ruiz et al. (2025) emphasize that expanding roles require training approaches that support both technical and psychosocial competencies. Together, these studies support a cautious but meaningful reading of the present findings as indicators of strengthened preparedness and procedural confidence.

Overall, this study illustrates how a rigorously designed and validated video based training resource can contribute to strengthening cadre capacity within integrated primary health care reform. Its contribution does not lie in claiming effectiveness in isolation, but in showing how instructional design can be aligned with policy frameworks, service standards, and frontline

realities. By grounding training development in contextual needs and situating it within a broader health workforce education discourse, this study adds to the evidence that sustainable capacity strengthening in community health services requires approaches that are both pedagogically sound and systemically integrated.

## Conclusion

In developing media for learning skills for Posyandu cadres, the ADDIE model is an appropriate model because each stage requires special study and treatment, so that the resulting product in the form of a Posyandu cadre skills learning video can be accounted for. The Posyandu cadre skills learning video is considered capable of providing concrete examples of each skill component that must be mastered and carried out by Posyandu cadres.

Suggestion: If implemented among Posyandu cadres, there must be monitoring of Posyandu cadres to ensure they continue learning (through videos) and practice the learning in Posyandu services. Further research is needed to assess the effectiveness of video-based learning media for Posyandu cadre skills in improving Posyandu cadre knowledge and skills.

## Acknowledgment

The researcher would like to express her gratitude to the leadership of Tadulako University, the leadership of the Institute for Research and Community Service (LPPM), and the leadership of the Faculty of Medicine of Tadulako University for providing the researcher with the opportunity to conduct a trial of developing a video for learning the skills of integrated health post (Posyandu) cadres. The researcher would like to express her gratitude to the leadership of the Palu City Health Office, the Head of the Mamboro Community Health Center, and the Posyandu cadres for granting permission for the research location and assisting in the research and trial of this learning media. The researcher would like to express her gratitude to all parties who have assisted in the research process so that it can run as expected.

## References

- Alvian, G. N., Purnawan, I., Awaludin, S., Kartikasari, A., & Hidayat, A. I. (2024). *Buku panduan keterampilan dasar Kader Posyandu*. 1–119. <https://repository.ump.ac.id/9261/>
- Anafi, K., Wiryokusumo, I., & Leksono, I. P. (2021). Pengembangan Media Pembelajaran Model Addie Menggunakan Software Unity 3D. *Jurnal Education and Development*, 9(4), 433–438.
- Antonio, M. G., Williamson, A., Kameswaran, V., Beals, A., Ankrah, E., Goulet, S., ... & Veinot, T. C. (2023). Targeting patients' cognitive load for telehealth video visits through student-delivered helping sessions at a United States federally qualified health center: equity-focused, mixed methods pilot intervention study. *Journal of Medical Internet Research*, 25, e42586. <https://doi.org/10.2196/42586>
- Birk, H. O., Vrangbæk, K., Rudkjøbing, A., Krasnik, A., Eriksen, A., Richardson, E., & Jervelund, S. S. (2024). Denmark: Health System Review. *Health systems in Transition*, 26(1), i-152.
- Bobo, L., & Andrews, A. (2010). Using video feedback to measure self-efficacy. *Journal of Instructional Pedagogies*, 3.
- Denny, M. C., Vahidy, F., Vu, K. Y., Sharrief, A. Z., & Savitz, S. I. (2017). Video-based educational intervention associated with improved stroke literacy, self-efficacy, and patient satisfaction. *PloS one*, 12(3), e0171952.
- Dhufera, H. T. (2024). *Identifying indigent households for subsidy and exemption of community health insurance premium in Ethiopia: Considerations of technical*

*approaches and implementation challenges*. Harvard University.

- Dinkes Kota Palu, 2023. (2023). PROFIL DINAS KESEHATAN KOTA PALU. *Journal of Chemical Information and Modeling*.
- Friska, D., Kekalih, A., Runtu, F., Rahmawati, A., Ibrahim, N. A. A., Anugrapaksi, E., ... & Ayuningtyas, R. (2022). Health cadres empowerment program through smartphone application-based educational videos to promote child growth and development. *Frontiers in Public Health*, 10, 887288. <https://doi.org/10.3389/fpubh.2022.887288>
- Gebremeskel, A. T., Udenigwe, O., Etowa, J., & Yaya, S. (2025). Transforming multi-stakeholder engagement towards coproduction of optimized maternal, newborn, and child health and a resilient community health system in rural Ethiopia: A qualitative study. *Plos one*, 20(8), e0330159. <https://doi.org/10.1371/journal.pone.0330159>
- Gholami, V., Khaleghi, M. R., Pirasteh, S., & Booij, M. J. (2022). Comparison of self-organizing map, artificial neural network, and co-active neuro-fuzzy inference system methods in simulating groundwater quality: geospatial artificial intelligence. *Water Resources Management*, 36(2), 451-469. <https://doi.org/10.1007/s11269-021-02969-2>
- Huang, B., Jong, M. S. Y., & Chai, C. S. (2022). The design and implementation of a video-facilitated transdisciplinary STEM curriculum in the context of COVID-19 pandemic. *Educational Technology & Society*, 25(1), 108-123.
- Jensen, L. X., Buhl, A., Hussain, S., Karan, A., Konradsen, F., & Bearman, M. (2023). Digital education for health professionals in India: a scoping review of the research. *BMC Medical Education*, 23(1), 561. <https://doi.org/10.1186/s12909-023-04552-2>
- Kemendes RI. (2023). Situasi Kesehatan di Indonesia. *Kementerian Kesehatan RI*.
- Kemendes. (2023). *Kurikulum Pelatihan Keterampilan Dasar Bagi Kader Posyandu*. 1–66.
- Kementerian Kesehatan RI. (2017). Ayo ke POSYANDU. In *Ayo ke POSYANDU*.
- Masturoh, I., & Anggit, N. (2018). Metodologi Penelitian Kesehatan (KEMENKES RI). In *Bahan Ajar Rekam Medis dan Informasi Kesehatan*.
- Mursyidah, L. (2024). The Role of Posyandu Cadres in Reducing Stunting in the Community. *Indonesian Journal of Cultural and Community Development*, 15(3), 10-21070.
- Naila Muna, K., & Wardhana, S. (2022). Pengembangan Media Pembelajaran Video Animasi dengan Model ADDIE pada Pembelajaran Bahasa Indonesia Materi Perkenalan Diri dan Keluarga untuk Kelas 1 SD. *EduStream: Jurnal Pendidikan Dasar*, 5(2), 175–183. <https://doi.org/10.26740/eds.v5n2.p175-183>
- Niekrenz, L., & Spreckelsen, C. (2024). How to design effective educational videos for teaching evidence-based medicine to undergraduate learners—systematic review with complementing qualitative research to develop a practicable guide. *Medical education online*, 29(1), 2339569. <https://doi.org/10.1080/10872981.2024.2339569>
- Ningsih, M. U., & Atmaja, H. K. (2019). Metode Video Edukasi Efektif Meningkatkan Keterampilan Mahasiswa Melakukan Bantuan Hidup Dasar (BHD). *Jurnal Keperawatan Terpadu (Integrated Nursing Journal)*, 1(1), 8. <https://doi.org/10.32807/jkt.v1i1.17>
- Putri, G. Y. (2020). Implementasi Model Pembelajaran ADDIE Pada Aplikasi Game Truth or Dare Untuk meningkatkan Pengetahuan dan Keterampilan Bermusik Siswa SMA.

- Ramos, J. L., Cattaneo, A. A., de Jong, F. P., & Espadeiro, R. G. (2022). Pedagogical models for the facilitation of teacher professional development via video-supported collaborative learning. A review of the state of the art. *Journal of Research on Technology in Education*, 54(5), 695-718. <https://doi.org/10.1080/15391523.2021.1911720>
- Rusmayana, T. (2021). *Model Pembelajaran ADDIE*. CV WIDINA MEDIA UTAMA
- Samala, A. D., Howard, N. J., Criollo-C, S., Budiman, R. D. A., Hakiki, M., & Hidayah, Y. (2024). What Does an IMoART Application Look Like? IMoART--An Interactive Mobile Augmented Reality Application for Support Learning Experiences in Computer Hardware. *International Journal of Interactive Mobile Technologies*, 18(13). <https://doi.org/10.3991/ijim.v18i13.47565>
- Santi, D. R., & Hidayati, S. (2025). Cadre Empowerment in Diversification of Locally Sourced Complementary Feeding: Community Based Research Through Smart Integrated Service Post (Posyandu). *Engagement: Jurnal Pengabdian Kepada Masyarakat*, 9(1), 257-275. <https://doi.org/10.29062/engagement.v9i1.1898>
- Setiawan, A., & Christiani, Y. (2018). Integrated Health Post for Child Health (Posyandu) As A Community-Based Program in Indonesia: An Exploratory Study. *Jurnal Keperawatan Indonesia*. <https://doi.org/10.7454/jki.v21i3.600>
- Singh, S., Miller, E., & Closser, S. (2024). Nurturing transformative local structures of multisectoral collaboration for primary health care: qualitative insights from select states in India. *BMC health services research*, 24(1), 634. <https://doi.org/10.1186/s12913-024-11002-2>
- Sornpaisarn, B., Chunharas, S., Sornpaisarn, S., Saonuam, P., Nipun, R. F., Butryee, C., ... & Rehm, J. (2024). Enhancing multi-sectoral collaborations for the prevention and control of NCDs in Thailand with a new approach. *Health Research Policy and Systems*, 22(1), 169. <https://doi.org/10.1186/s12961-024-01262-z>
- Sugihartini, N., & Yudiana, K. (2018). Addie Sebagai Model Pengembangan Media Instruksional Edukatif Mata Kuliah Kurikulum Dan Pengajaran. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 15(2), 277–286. <https://doi.org/10.23887/jptk-undiksha.v15i2.14892>
- Sugiyono, *Journal of Experimental Psychology: General* (2010).
- Sumbarwati, N., Sastrawan, S., & Sismulyanto, S. (2025). Analysis of the Family Posyandu Program Implementation in East Lombok, Indonesia. *Journal of Health Science and Prevention*, 9(1), 54-62. <https://doi.org/10.29080/jhsp.v9i1.1351>
- Suryabrata. (2014). *Metodologi Penelitian*. In *PT. Raja Grafindo Persada*.
- Tomoh, B. O., Soyege, O. S., Nwokedi, C. N., Mustapha, A. Y., Mbata, A. O., Balogun, O. D., & Iguma, D. R. (2024). Innovative Programs for Community Health: A Model for Addressing Healthcare Needs Through Collaborative Relationships. *Community health*, 42, 17. <https://doi.org/10.54660/IJMRGE.2024.5.6.1267-1273>
- Wahyuni, M., Hidayat, A., Zulhendri, Z., & Gistituati, N. (2021). Video tutorials on education statistics course assisted with screencastify: Validity and feasibility. *Journal of education technology*, 5(1), 86-93. <https://doi.org/10.23887/jet.v5i1.33630>
- Wahyuni, S., Redjeki, E. S., Avrilianda, D., & Raharjo, K. M. (2025). Re-brand Posyandu Through Thematic Public Display to Accelerate Stunting Prevention at Posyandu Teratai 1. *Jambura Early Childhood Education Journal*, 7(1), 165-181.

- World Health Organization. (2023). *Digitalized health workforce education: an elicitation of research gaps and selection of case studies*. World Health Organization.
- Yoto, M., Afif, M., Antika, C. S., Ridwanah, A. A., Qoyyimah, M., Rahmah, F., Kesehatan, D., Jawa, P., Masyarakat, F. K., Airlangga, U., & Timur, J. (2024). *Implementasi Posyandu pada Era Transformasi Layanan Primer di Kabupaten Kediri 1*. 6(1), 279–284. <https://doi.org/10.36312/jml.v6i1.3975>
- Zhang, X., Chau, T. K., Chow, Y. H., Fernando, T., & Iu, H. H. C. (2023). A novel sequence to sequence data modelling based CNN-LSTM algorithm for three years ahead monthly peak load forecasting. *IEEE Transactions on Power Systems*, 39(1), 1932-1947. <https://doi.org/10.1109/TPWRS.2023.3271325>