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## TRAINING MANAGEMENT ANALYSIS IN MEDICAL SERVICE TRAINING PROGRAM

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### Abstract

Indonesia still faces a problem with the quality of its human resource for health, despite the potential for improvement through training. According to the Ministry of Health data from 2022, only 44,391 out of 1,440,130 healthcare workers (3%) received accredited training, with many lacking a proper management process. The purpose of this study is to analyze the management of health worker training at Medstrap, organized by Company X using the Analyze, Design, Develop, Implement, Evaluate (ADDIE) Model. Researcher uses a cross-sectional design with a qualitative approach and uses in-depth interviews, observation, and document review. The result are: The analysis phase of training lacks depth, making it difficult to identify clear objectives, which are essential for developing a training roadmap. In the design phase, the absence of a clear blueprint for learning objectives and materials impacts the selection of methods and resources. Delivery and time management are big problems that can be seen from the implementation of training, which is influenced by the ability of the presenter to communicate and master the participants. Evaluation is limited by inadequate time and presenter capabilities, making it hard to measure training outcomes effectively. These issues, particularly in the analysis phase, highlight the need for improvement in the Medstrap process.

**Keywords:** *ADDIE Model; Human Resources for Health; Training Management*

### 1. Introduction

Human resources for health (HRH) is the main key to achieve health development goals because HRH contributes up to 80% (Ministry of Health RI, 2020). However, HRH in Indonesia is still a problem, both in terms of quantity and quality. The condition of HRH in Indonesia is still considered inadequate because only 12.7% of public health centers and 38.9% of hospitals report sufficient staffing, leaving 87.3% of puskesmas and 61.1% of hospitals with shortages.(Health Research and Development Agency, 2017). However, effective services require not only sufficient staff but also high-quality and well-performing HRH (Campbell et al., 2013). While, no data currently explains the level of quality of HRH nationally, an overview of the quality of HRH in Indonesia can be seen from several aspects, such as reliability, performance, and knowledge. A total of 25,7% of patients rated the reliability of the HRH as poor at the Internal Medicine Polyclinic at RSU GMIM Pancaran Kasih Manado (Pangerapan et al., 2018). Another study at the Kesambi Health Center showed that there were 54.2% of HRH with poor performance (Oktaviana and Wahyono, 2020). Only 26.9% of nurses at Meuraxa Hospital in Banda Aceh City have good knowledge of basic life support (Zahara et al., 2022). These data show that the actual quality of HRH is still lacking, both at first and second-level health facilities. The quality of HRH can be improved, one of which is through training (Al-Kaseem, 2021).

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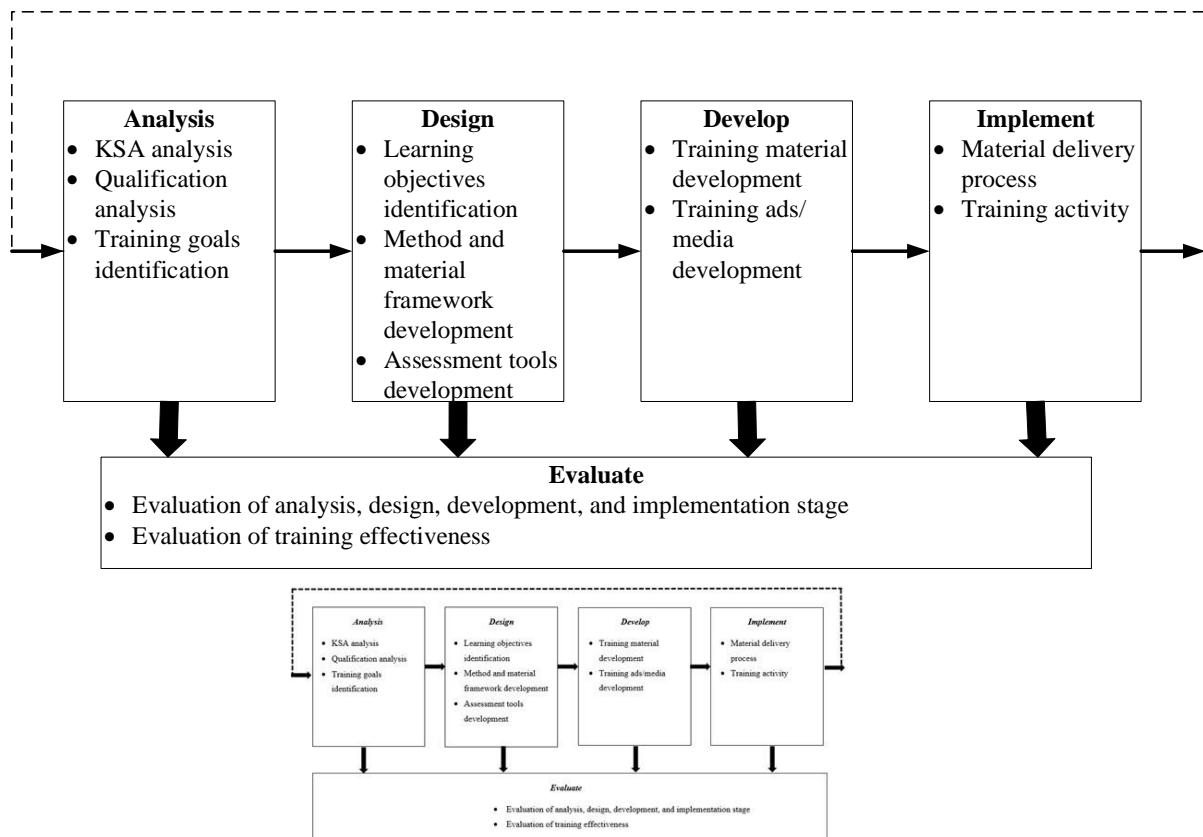
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Unfortunately, according to data from the Ministry of Health in 2022, only 44,391 healthcare workers received accredited health training out of a total of 1,440,130 healthcare workers, meaning only 3% of healthcare workers received training (Ministry of Health RI, 2023). Even though the training program for HRH is implemented, it is undeniable that the training does not have an optimal management process. Previous studies explained that training for HRH did not have adequate assessment criteria, training equipment was not complete, training media used were not as needed, participants did not involve actively, and training evaluation was something that was overlooked (Hadiyanto, 2021). Therefore, good training management is needed to create an effective training to achieve the expected goals (Suryaman et al., 2019).

There are several process frameworks for developing good training, one of those is the ADDIE Model (analysis, design, development, implementation, evaluation). The ADDIE Model aims to increase the effectiveness and efficiency of a training program by focusing on meeting the needs of the participants (Allen, 2006). The ADDIE Model has been widely used in various fields in the development of training programs, such as training in electrical engineering, cyber security, education, and others (Utama et al., 2022; Chowdhury et al., 2022; Muhammad and Akhsani, 2021). Nonetheless, in the health sector is still limited to the development of training modules and medical devices while there is still little to develop training programs (Chaudhuri and Chacko, 2022; Guevarra et al., 2021). Therefore, the researcher is interested in analyzing the training management process of the Medical Service Training Program (Medstrap) held by Company X. Researchers will also provide recommendations related to the training management process that can be used as a reference in organizing Medstrap more effective.

## **2. Method**

The research was conducted at a health service provider company located in DKI Jakarta on a training program for HRH who working at the site, namely the Medical Service Training Program (Medstrap). The research was conducted during February - March 2023. The research design used was a cross-sectional research design with a qualitative approach. Primary data in this study were obtained through in-depth interviews with 10 interviewees selected using purposive sampling, followed by a snowball sampling approach. In addition, observation of the implementation of two batches of Medstrap while secondary data was obtained through document review. Data analysis was conducted using a qualitative approach, grouping data based on research questions and then identifying similarities and differences. The analytical framework used in this study is an elaboration of several previous studies as follows.



Source: Allen (2006); Chowdury et al. (2022); Patel et al. (2018); Chaudhuri and Chacko (2021)  
**Figure 1.** Framework for Implementing the ADDIE Model

### 3. Result and Discussion

#### *Analysis Phase of Medstrap*

The results of the research regarding the analysis phase at Medstrap were obtained through in-depth interviews and a review of the Company X Strategic Plan (Renstra) document for 2020 - 2024. Based on the results of in-depth interviews and document review, the needs analysis on Medstrap is based on three things: (1) targets in achieving the strategy company priorities in 2024 for HR optimization; (2) lack of employee engagement; (3) performance problems. So far, a deeper analysis of Medstrap needs has not been carried out on the condition of the knowledge, skill, and abilities (KSA) possessed by the participants. The company has not been able to analyze the gap between the qualifications of HRH and the job demands at the site. This can happen for two reasons, they are the company does not yet have reliable analysis tools and the company is still struggling in inviting HRH at the site to attend training according to the schedule expected by the company. The needs analysis conducted at Medstrap encouraged the company to capture Medstrap's goals as a training program to develop the potential of HRH, increase awareness of HRH about their identity as employees of Company X, and reduce problems related to the performance of HRH at the site. However, it is recognized that Medstrap's objectives have not met the SMART (specific, measurable, acceptable, relevant, and time-bound) aspects.

The analysis phase applied to Medstrap is in line with Allen (2006) who explains that the analysis of training needs and identification of training objectives are important in the analysis phase. Nonetheless, training needs analysis is not an easy process, requires a lot of time, and can be expensive because the data generated from this process is important data for the organization (Sulistiono and Biru, 2020). Anindita and Hidayat (2023) also capture three obstacles in analyzing training needs, including limited human resources in analyzing needs, the absence of regulations and needs assessment instruments, and the absence of exams to measure competency gaps and participant performance. Even more, the training needs analysis process must be carried out systematically to produce an effective training program

through: (1) Organizational analysis - analysis related to environment, strategy, and resources to determine where training is needed; (2) Task analysis - an analysis of the activities carried out in the workplace to determine the KSA required; (3) Individual analysis - an analysis of the KSA of the candidate to determine who needs training. If the three analyzes are carried out properly, training as a long-term investment can be realized.

This condition is certainly different from the needs analysis at Medstrap which has just been carried out based on the results of an analysis of the organizational situation. In other words, the analysis is still classified as organizational analysis only. In line with the research of Wuntu and Moge (2022), an organizational analysis is carried out on the managerial situation of the organization to determine the need for training. The needs analysis process at Medstrap is also in line with previous research which explains the process of identifying competency-related problems can produce training need statements for organizations (Turwelis and Kurniadi, 2018; Wijayanti and Damayanti, 2020). However, a deeper analysis process is still needed to come up with a decision that the training program can address these problems.

The lack of clarity regarding training needs at Medstrap has led to training objectives that do not meet the SMART aspect. The resulting training objectives have to answer specific (for whom and about what), measurable (objectives can be measured), attainable (according to the condition of the resources), realistic (in line with organizational goals), timely (achieved within a certain time) aspects. Patel et al (2018) explained that determining training objectives is one of the important sequences in the analysis phase in the ADDIE Model. The training objectives need to be clearly defined as the training objectives will form the overall roadmap for the development of the training program.

#### *Design Phase of Medstrap*

The research results regarding the design phase of Medstrap were obtained through in-depth interviews and supported by the results of a review of the Medstrap training module documents. The results of the in-depth interviews explained that the learning objectives of Medstrap have led to the training objectives determined at the analysis phase. The development of training methods takes into account the characteristics of the participants, the duration of the training, the training materials, the place, and so on. The description of training material on Medstrap is based on work or service by considering the environmental conditions, facilities, and infrastructure owned by the site. It can make the training relevant to the conditions of work and needs so that the existing training becomes more efficient and effective. The training assessment tool on Medstrap is designed based on the abilities to be achieved through training sessions. However, these things have not been able to be documented in a training blueprint that can be used as a guide in executing Medstrap. Even though there is a Medstrap module, the results of the document review show that the existing module cannot be used as a blueprint for Medstrap development.

Identification of learning objectives, development of training methods and media, and development of training assessment tools are important components in the design phase of a training program (Chowdhury et al., 2022). All training plans need to be included in a design document that serves as a blueprint for designing training programs (Patel et al., 2018). The identification of learning objectives on Medstrap is in line with previous research which explains that learning objectives must describe the abilities or knowledge that will be acquired through training and/or attitudes that will be changed. Therefore, learning objectives must be determined in line with the training objectives and can be used as a standard in making training assessment tools (Guevarra et al., 2021). Developing a material framework and training methods based on KSA that must be facilitated through training. Meanwhile, the determination of the training method considers the type of learning outcomes, learning environment, transfer to training, costs, and effectiveness (Aprilia and Rani, 2020).

Nevertheless, there are some obstacles in the design of Medstrap, such as the learning objectives at Medstrap have not fully answered Medstrap's big goals, the training method was considered unable to achieve the learning objectives about increasing the KSA of HRH, less time allocation for some training materials, and the assessment instrument has not been able to assess the participants' abilities after the training and provide an overview regarding the achievement of the training objectives. Toto and Rustendi (2021) explain several inhibiting factors in a training program include: (1) Training materials that are not

in line with the participants' needs; (2) Choosing the wrong method from many choices; (3) Training assessment tool is not in line with the learning objectives.

#### *Development Phase of Medstrap*

The research results regarding the development phase of Medstrap were obtained through in-depth interviews and supported by the results of a document review of several training tools/media used on Medstrap. Based on the results of in-depth interviews, the material development process has been carried out based on the tasks that are usually carried out by HRH at the site and pays attention to the status of employees in determining the level of depth in the material. However, the development of the material has not been accompanied by a material validation process. The validation process aims to ensure that the material developed is truly in accordance with the needs of the participants. What's more, presenters still have problems in generalizing the material intended for participants with different professions and job description. After that, the presenter develops training aids/media that are deemed appropriate to the presenter's needs and make it easier for participants to understand the material. The results of the document review show that technical matters in the development of aids/media, especially in the form of power points, need to be considered by the presenters.

Obstacles related to the difficulty of developing material for several professions and the diverse work tasks of the participants can be overcome if, at the design phase, a material framework has been prepared based on the analysis result. However, the company does not have a blueprint that clearly explains the training material framework. Another obstacle is there is no material validation because the material has been prepared based on scientific references with good mastery of the material from the presenters. This is not in line with the research by Utama et al (2022) which explains that the validation process needs to be carried out to see the readiness of the training material before it is delivered to participants. At least, the validation process can be carried out through internal trials. The validation process is also carried out on the development of training aids/media. The development of learning media must be in accordance with the material to be delivered, the learning objectives to be achieved, the competence of the trainers, and convenience for participants (Asmuki et al., 2021).

Allen (2006) explains that the development phase is the phase for developing training materials and developing appropriate training tools/media. The validation process needs to be carried out to see the suitability between the training blueprints designed at the design phase and the materials developed through internal reviews, material tests, or both (Chowdhury et al., 2022). Therefore, training trials can be a way to see the readiness of the training program (Muhammad and Akhsani, 2021). The selection and development of instructional media must pay attention to several criteria, including clear and neat in formatting, suitable for the number of participants, relevant to the training topics, align with learning objectives, good quality in aspects of visual development, and others (Cahyadi, 2019).

#### *Implementation Phase of Medstrap*

The research results regarding the implementation phase of Medstrap were obtained through in-depth interviews and supported by observations during the training. Based on in-depth interviews and observations, the process of delivering material to Medstrap has been supported by excellent mastery of the material from the presenter or trainer. However, the speaker's ability to attract attention or involve participants in the training process and manage the duration of the training still needs to be improved. The speaker's ability to attract attention or involve participants affects the focus and enthusiasm of participants in participating in the training. Meanwhile, the ability of the presenter to manage the duration of the training can affect the opportunity for participants to obtain deeper material and be actively involved in the question-and-answer session. This is in contrast to the practicum session on Medstrap. Practical-sessions related to medical materials are supported by trainers who master the material very well, can attract attention or involve participants actively, and manage duration well.

The implementation phase in the ADDIE Model is the implementation phase of all training designs that are ready to be delivered to participants. This phase is expected to be able to promote participants' understanding of the material presented, encourage participants to be able to achieve learning goals, and ensure that the material provided can be implemented by participants when they return to the workplace

(Chowdhury et al., 2022). The expertise of the presenters on the material delivered is also seen at this phase so that participant satisfaction with the training material can also be assessed directly (Northern Illinois University, 2019).

Constraints related to the speaker's ability can occur because the Medstrap presenter is an employee of Company X's head office who is assigned to deliver the material without any provision of technical skills in transferring the material. This allows the issue to arise that the participants consider the trainers to have equal abilities with themselves so the participants may show less attention when the presenters deliver the training. Company X has made efforts to ensure the readiness of the presenters to fill in the training sessions through pre-training briefings and post-training evaluation delivery. However, the company has not done material conditioning by providing technical and time management skills in delivering material. The ability of the speaker who is lacking in attracting attention or involving participants is certainly a significant obstacle in the implementation of the training. Effective communication skills and mastery of participants need to be owned by presenters so they can provide training and knowledge to participants with the right strategy and a lively atmosphere (Bachtiar, 2021).

This study also shows that several supporting factors are felt by the trainers when conducting the training, including: (a) organizational support in ice breaking; (b) there is attachment between the presenter and the participants; (c) the activeness of the participants in the training process which can increase the confidence of the speaker. Meanwhile, the supporting factors felt by the participants included: (a) the opportunity to get to know the company and colleagues from different site locations; (b) adequate training facilities and infrastructure; (c) training materials that participants want to learn. Seeing the supporting factors for the participants above, the company has made several efforts to ensure that participants are ready to take part in Medstrap. These efforts include: (1) ensuring that participants have basic skills related to training materials through competency certification; (2) determining targeted subjects; (3) provide an induction related to the obligation to follow Medstrap. The things above are in line with previous research which explains the two main supporting factors in training. First, organizational support in the form of attention from the management to the training participants. Second, strong internal motivation can encourage participants to take part in training which will affect the success of the training program (Cahya et al., 2022).

#### *Evaluation Phase of Medstrap*

The research results regarding the evaluation phase on Medstrap were obtained through in-depth interviews and supported by a review of training report documents. Research shows that the Medstrap evaluation process can only be carried out on training implementation by utilizing responses from participants through satisfaction surveys. Other evaluations are also carried out through pretest and post-test to find out the increase in knowledge after being given training. However, the use of the pretest and post-test is also not optimal in assessing the achievement of learning objectives in the form of increasing knowledge. Thus, it can be concluded that the Medstrap evaluation can only be carried out at level I (reaction) according to the Kirkpatrick Training Evaluation Model. Evaluation at this level is an evaluation level to assess the satisfaction of the training participants with the implementation of the training. Meanwhile, an evaluation of the entire training management process at Medstrap can only be carried out at the design and implementation phases.

The Medstrap evaluation condition above occurs due to several reasons. First, there are no reliable benchmarks and assessment tools due to limited human resources capable of making training benchmarks and assessment tools. Second, other departments' awareness of their role in providing input regarding the entire Medstrap management process is still low. This is due to the perception that Medstrap is a routine and a formality that only requires other departments to participate as training presenters. Third, the limited time for trainers to use the assessment instruments that have been developed. This is in line with previous studies which explained the inhibiting factors in the evaluation process of a program, including: (1) there is no special training for presenters in evaluating a program; (2) the unavailability of valid, reliable and objective evaluation instruments; (3) limited time to carry out the evaluation; (4) program organizers do not yet have evaluation success criteria (Febriani and Triyono, 2018).

Allen (2006) explains that the evaluation phase is a continuous process starting from the analysis phase and continuing throughout the cycle of the ADDIE Model phases to see how far the training can meet the needs of the participants and achieve the training objectives. In summary, there are two evaluation types of the ADDIE Model. Evaluation of the process, from analysis to implementation, to see the obstacles experienced at each phase and what improvements need to be made. Evaluation of the effectiveness of the training to see the achievement of the training objectives (Chowdhury and Gkioulos, 2018). Evaluation of training effectiveness can use the Kirkpatrick training evaluation model which classifies evaluation into four levels, namely reaction (level 1), learning (level 2), behavior (level 3), and results (level 4). The higher the level of evaluation, the more the organization can see the achievement of training objectives for the organization (Jones et al., 2018).

The results of the research and discussion show the connectivity of ADDIE Model training management process. However, researcher found that there was a broken relationship at the Medstrap implementation phase. Researchers found that there were supporting factors and obstacles that were very prominent in influencing the process of delivering material and implementing activities. First, the ability of the presenters in terms of material mastery, efforts to involve participants during the training process, and time management are considered to influence the course. Second, high participant motivation will influence the participants' initiative to be actively involved during the training and benefit from the training.

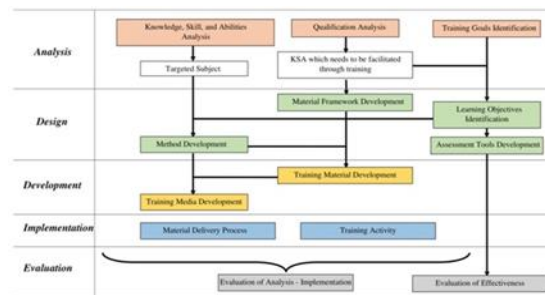


Figure 2. Connectivity at Each Phase of the ADDIE Model on Medstrap by Company X

The conditions above show the need for conditioning of the speakers ability to transfer training and the conditioning of the participants readiness and motivation. This is align with other concepts which include participant conditioning in the Stages of Instructional Design and speakers conditioning in the Strategic Model of Training (Noe, 2019; Bohlander and Snell, 2013). The process of conditioning participants and presenters can be included in the design phase of the Medstrap management process as explained by Allen (2006) that the design phase is a process in which all training resources are designed to support the smooth running of the training.

#### 4. Conclusion and Suggestion

Research conducted on the training management process at Medstrap using the ADDIE Model resulted in the following conclusions. The analysis phase is still limited to analyzing organizational needs and cannot be carried out with person analysis and task analysis. This causes the identification of the objectives of Medstrap not fulfilling the SMART aspect. The design phase consists of identifying learning objectives, developing material frameworks, training methods, and training assessment tools. However, the training design has not been outlined as a blueprint that can be used as a guideline for the training management process at Medstrap. The development phase consists of the process of developing materials and training aids/media based on the needs of the participants and presenters. This process has not been accompanied by a validation process to ensure the quality of the materials and training aids/media. The implementation phase applied to Medstrap has not been fully supported by the abilities of the presenters, especially involving participants and managing training time. The evaluation phase applied to Medstrap has not been able to evaluate the entire training management process and evaluation regarding the effectiveness of training can only be carried out at level 1 (reaction).

The researcher proposes suggestions for each phase of training management on Medstrap. At the analysis phase, the company can make a task and person analysis by utilizing the SOW and the recruitment result. The training objectives must also be documented and fulfill the SMART aspect. At the design phase, all training plans must be documented as a training blueprint by adjusting the SOP in company. At the development phase, a validation process needs to be carried out on materials and training aids/media. At the implementation phase, the company needs to ensure the readiness of the speakers by making an instructor manual and sharing knowledge with the speakers. At the evaluation phase, companies can optimize routine evaluation meetings, create KPIs for HRH at the site as evaluation benchmarks, and use self-assessments as evaluations of behavior levels. Researchers also hope that future research can expand the use of the ADDIE Model in analyzing the training management process for HRH in various health facilities, examine more deeply the application of the participant and speaker conditioning processes, and provide more applicable suggestions for organizations so that they can provide greater benefits in improving the quality of training.

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