

DEVELOPMENT MODEL OF EDUCATION AND TRAINING FOR NURSE COMPETENCIES BASED ON SERVICE EXCELLENT AT RSUD TOTO KABILA, BONE BOLANGO REGENCY, INDONESIA

SERLY DAUD¹, ASNA ANETA², NOVIANTY DJAFRI³ and MUHAMMAD ISMAN JUSUF⁴

^{1,2,3,4}Postgraduate Program, Universitas Negeri Gorontalo.

Abstract

The purpose of this study was to describe and analyze the development model of education and training for nurse competencies based on service excellent at RSUD North Toto, Bone Bolango Regency. The method used in this research is research and development using the ADDIE model. The approaches used were qualitative approach and quantitative approach. Data was collected through observation, interviews, and questionnaires. The results of this study are that the development model of education and training for nurse competencies based on service excellent at RSUD North Toto, Bone Bolango Regency includes: (1) input, which consists of: (a) planning, (b) organization, (2) process, which includes: (a) training program, (b) training activities, (d) TTS (Teen, Twenty, Seventy) model, (e) andragogy approach, (f) participatory model, (g) contextual PBL strategy, (g) evaluation, (3) output includes increased knowledge, skills and attitudes, (4) outcome, improvement; effective communication, excellent service, patient satisfaction, public health. Various institutions and agencies can use the results of this study to improve the competence of employees in their environment.

Keywords: Model of Education and Training, Nurse Competency, Service Excellent.

INTRODUCTION

The learning and development paradigm aims to improve the performance of each employee, both as a group and as an individual. Competency development for all employees is part of the management strategy to align goals and objectives with the vision and mission of the organization.

This new paradigm provides room for the development of different competency development models. Service excellent is a training that needs to be developed to improve nursing services in hospitals. Service excellence is an effort to provide the best service for patient-oriented interests that enable nurses to provide and create optimal satisfaction.

The objectives of implementing service excellence carried out by the hospital are; (1) providing complete information according to patient needs, (2) providing quality service to patients or clients, (3) creating a sense of trust in patients in marketed goods and services, (4) providing as much detail as possible about the goods or services offered, (5) avoiding complaints, demands or claims by patients against goods, services or hospitals, (6) creating loyalty and trust in patients to repeatedly use and utilize the goods or services offered.

The implementation of service excellent in hospitals usually has several aspects. In general, the aspects of service excellent are:

1. Appearance, a supportive appearance is needed to make patients feel comfortable and safe, for example, receptionists wearing neat clothes and security guards equipped with security tools.
2. Courtesy and friendliness, nurses who serve patients must have courtesy, patience, and not be selfish when on duty, without distinguishing social status or economic level.
3. Willingness to serve, the professionalism of a nurse in serving patients must be possessed with a sense of wanting and being ready to serve patients as it should be.
4. Knowledge and expertise, in serving patients, a nurse must understand and have knowledge and expertise based on the goods and services offered.
5. Punctuality and promise, time efficiency in service is needed so that patients do not feel their time is wasted.
6. Honesty and trust should be in every service provision excellent should have aspects of honesty, both in terms of rules, financing, and in completing services with Tepar.
7. Efficiency and effectiveness are needed in providing excellent service because patients sometimes demand these things.
8. Legal certainty, usually for any result of the service provided, patients need legal certainty so that a sense of security and trust arises.
9. Openness is needed so that patients get clear information according to what they need.
10. Cost, the cost of providing service excellent must be reasonable to adjust to the purchasing power of the community.

From all aspects of service excellent, hospitals will certainly differ according to patients' needs. An example of service excellent in the healthcare industry, especially in hospitals, is to provide services that are clear, open, and have legal certainty or a scientific matter so that patients, both guardians and patients themselves, can clearly understand. Every hospital should apply service excellent to achieve various kinds of hospital visions and missions for the prosperity and welfare of employees. Improving the service excellent of nurses in hospitals is certainly done through continuous training, not only theoretical but also through assignments and mentoring by peers or their leaders. One of the training models that can be used is the 70:20:10 model. According to Jennings, et al. (2016: 14), the 70:20:10 model has been widely applied in hospitals in European and American countries, which is the basis of organizational learning strategies in increasing the number of large hospitals in recent years, including hospitals with well-known brands such as Sun Microsystems, Goldman Sachs, Nokia, Maersk, Mars, Bank of America, Coca-Cola, Microsoft, HP, Wal-Mart, Reuters, American Express, Caterpillar, and many others. Unlike in Indonesia, the application of the 70:20:10 model is more widely used in government organizations, especially in educational institutions. Training institutions that have implemented this 70:20:10 model include the State Administration Institute (LAN) RI,

which has implemented it in management training, the Tax Training Center of the Ministry of Finance RI, which has implemented it in the technical training of tax inspectors (PTP3), the BPS RI Training Center, which has implemented it in the technical training of BPS officers, and BPSDM Gorontalo Province, which has implemented it in the technical training of regional asset management.

The development of nurses' competence in healthcare institutions such as hospitals is very important because it is related to the main duties and functions of nurses as healthcare providers for the community. This is as mandated in Law Number 36 of 2009 on Health Article 1 paragraph (6) says that a nurse is any person who devotes himself to the field of health and has knowledge and/or skills through education in the field of health, which for certain types requires authority to carry out health efforts provided in the form of health services that can be carried out in health service facilities. The Ministry of Health in the development of nurses' competence conducts both service training and on-the-job training. The training that is organized includes the use of the 70:20:10 model, where in this training model the proportion of time for task implementation is greater (70%) compared to face-to-face theory (10%). Nurses receive knowledge and practice it directly in their work while being observed by the trainer. In 20%, nurses receive learning from others, such as coaching, mentoring, communities of practice, and may even use collaboration platforms.

The development of human resources for nurses at Toto Hospital Kabila, Bone Bolango Regency, Gorontalo Province, is also innovative in improving the competence of nurses. Excellent ASN competency is a critical factor in ensuring the government's ability to anticipate and respond to the strategic environment. Competency development plays a role not only in addressing today's problems but also in preparing for the future. The expected benefits of the nurses' training are increased competence in terms of knowledge, skills and attitudes of nurses to improve health services to hospital patients, both inpatients and outpatients. With maximum performance, the vision and mission of Toto Hospital Kabila will be achieved. Likewise, the achievement of the vision and mission of national health will be realized.

METHODS

The method used in this research is research and development. In the research and development method, there are several types of models. This research uses the ADDIE model with the following steps: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. This development model is more dynamic, effective, and supports the performance of the program itself. This model has five steps or stages that are easy to understand and implement to develop development products such as: textbooks, curriculum, and so on. In this study, two approaches were used together, alternating, and supporting each other, namely a qualitative approach and a quantitative approach. The subjects of this study were nurses at Toto Hospital Kabila, Bone Bolango Regency, a total of 10 people for small-scale testing and 30 nurses for large-scale testing. This research instrument takes the form of material expert and media expert validation sheets, observation sheets, and interview guidelines. The material expert validation sheet was used to determine the depth of the material presented and its

relevance to the expected competencies. The model expert validation sheet was used to determine the feasibility of the model to be used in the training. The observation sheet was used to determine the use of media in the training. The interview guide was used to find out the nurses' reactions, comments and suggestions after using this model in training.

RESULTS AND DISCUSSION

The model for the development of education and training for nurses' competencies based on service excellence at the Regional General Hospital (RSUD) Toto Kabila, Bone Bolango Regency is as follows:

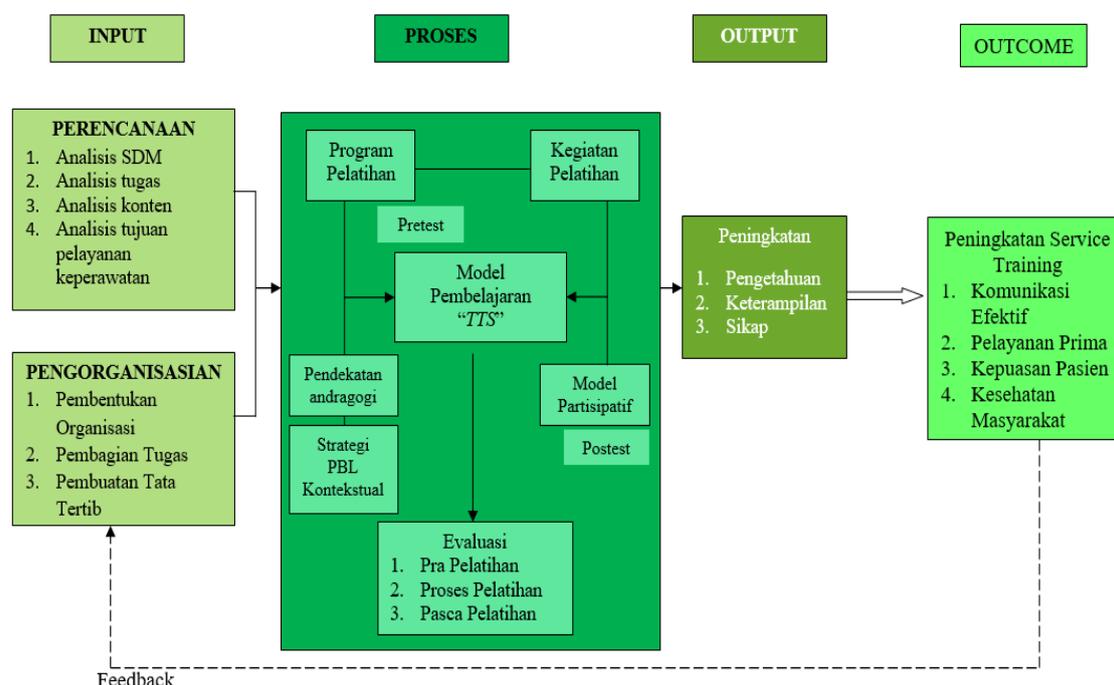


Figure 1: Development Model of Education and Training for Nurse Competence Based on Service Excellent

A. Input

The inputs for the development of the service excellent-based nurse competency education and training model are:

1. Planning

Planning was done by conducting a needs assessment through observations and interviews with the hospital director and nurses at RSUD Toto Kabila. The analysis focused on the nurses' needs for educational leadership development. The results of observations and interviews obtained data show that generally, nurses have a high willingness to carry out service excellent activities in schools.

a. Analysis of the human resources

1) Recruitment of mentors

The steps in the mentor analysis are: (1) collecting data on all mentors/training resource persons, (2) collecting data through relevant agencies, (3) contacting potential mentors to ensure their willingness to become resource persons. When contacting this mentor, the developer will socialize the training activities that will be carried out at Toto Hospital Kabila and then ask his willingness to become a mentor. The requirements for becoming a Resource Person are (1) having served as a mentor for at least one year, (2) being able to conduct training activities using interesting methods.

2) Recruiting nurses as interns

The analysis of nurses aims to identify nurses who have the same goal of participating in training to increase knowledge, skills, and attitudes towards excellent service. The parties involved in this recruitment process are researchers, the director of RSUD Toto Kabila, and nurses. The methods used to recruit nurses are: (1) Collecting data on nurses whose data can be obtained from RSUD Toto Kabila. (2) Contacting nurses to ensure their willingness to participate in the training. When contacting these nurses, the research team socialized the training activities that would be carried out and then asked for their willingness to participate in the training. If the nurse agreed, the nurse's name was recorded as a participant. The requirements to become a nurse are: (1) be on duty at Toto Hospital Kabila, (2) have a minimum rank of IIIc, (3) have enough time to complete the training optimally, (4) be committed to completing the training from start to finish.

b. Material design

The design of this material was done by conducting interviews with the Education and Training Center. The material design includes:

Table 1: Material Design

No.	Content	Sub Content	Time Allocation
1	Effective Communication	1. Concept, theory, and scope of communication	2 JP
		2. Form of communication	2 JP
		3. Effective communication by healthcare professionals	6 JP
		4. SBAR communication	6 JP
		5. Persuasive communication	4 JP
		6. Therapeutic communication	6 JP
		7. Communication in Healthcare	6 JP
2	Excellent Service	1. Definition of service excellence	2 JP
		2. Service excellence in the medical field	6 JP
		3. Nursing service excellence	8 JP
Total			48 JP

c. Selection of training methods and techniques

The training methods and techniques were chosen to increase the nurses' motivation to

enthusiastically receive the training materials provided by the mentors. The selection of training methods and techniques was based on the agreed materials. Theoretical materials used lecture and discussion training methods and techniques, while application materials used demonstration methods and techniques, both individually and in groups.

d. Infrastructure analysis

The infrastructure needed in the Training Model Development of Education and Training for Nursing Competencies Based on Service Excellent implemented through 70:20:10 Training is teaching materials, as well as assessment and response questionnaires.

e. Analysis of training goals

The expected goal of this study is to increase the competence of nurses in providing excellent service or service excellence including knowledge, skills, and attitudes.

2. Organizing

Organizing in the development of nurse competency education and training through TTS (teen, twenty, seventy) training is intended so that mentors can carry out task activities, authority, and responsibility among people to carry out a series of planned activities. Implementation of organizational activities in the development of education and training for nurse competence through TTS training is carried out:

a. Establishment of training organization structure

The purpose of creating the training organizational structure is to prepare human resources to carry out training activities, both administrative activities and training process activities. They consist of training organizers and mentors. The organizational structure of the organizer of nurse competency education and training development through TTS training. The organizational structure of TTS organizer is as follows:

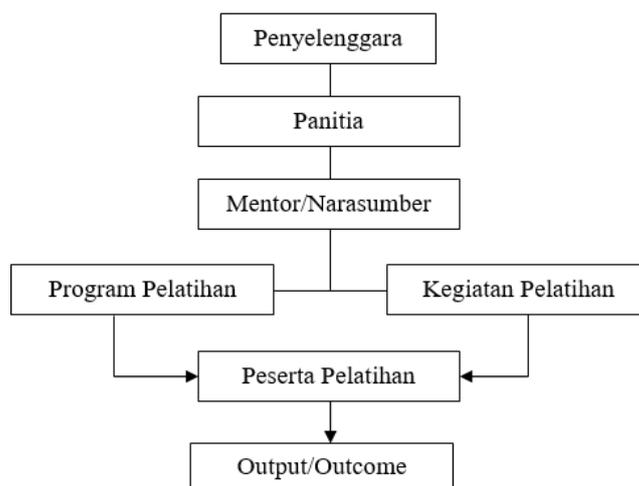


Figure 2: The Organizational Structure of the TTS Training Program

b. Distribution of the tasks

The distribution of responsibilities for conducting TTS training is as follows:

1) The organizer

- Manage correspondence, including data collection on the needs of the implementation of the training model for the development of education and training for nurse competencies based on Service Excellent
- Conduct orientation towards the training site
- Design training programs and activities for the development of the nurse competency education and training model based on Service Excellent
- Identifying mentors and nurse trainers for the development of Service Excellent-based nurse competency education and training models
- Organize the implementation of the training model for the development of education and training for nursing competence based on Service Excellent
- Monitor the implementation of the educational and training model for the development of nursing competence based on Service Excellent
- Evaluate the implementation of the nurse competency education and training development model based on Service Excellent

2) The committee

- Make proposals and take care of licenses
- Develop an activity plan
- Coordinate the progress of an apprenticeship
- Supervise activities performed during training
- Prepare training facilities and infrastructure
- Prepare administration of training activities
- Establishing the rules of training implementation
- Reporting on the implementation of activities to the organizer

3) Mentor/resource person

- Prepare training materials in the form of modules and presentation materials
- Prepare assessment
- Deliver training according to the structure established by the committee
- Provide an implementation report to the committee

4) Participants

- Follow the entire program established by the committee
- Follow all materials presented by mentors/speakers
- Follow the rules set by the committee

B. Process

Training activities in Skills Training are the culmination of all the efforts/activities carried out in the planning stage. What has been formulated in the planning is a reference in the implementation of training activities. In an effort to increase the understanding of trainees, mentors in training activities must be able to promote motivation that will lead to the formation of an understanding of the implementation of the model for the development of education and training for nursing competencies based on Service Excellent in trainees.

1. Training program

The training program is developed together with researchers, academics, practitioners, mentors, and trainees. The jointly developed training program includes the training program plan (RPP), schedule, materials/tools, media, and other necessary training facilities. (1) A Training Program Plan (RPP) is a training design for each training unit that mentors implement in training activities. (2) Learning schedule; a learning schedule is a description of activities that organize the sequence of training materials, days and hours of training implementation. (3) Tools, materials, media, and training facilities used as supporting facilities in training activities; the tools/materials, media, and facilities prepared are adapted to the needs of the learning materials. The approach used in this training program is andragogy with contextualized problem-based learning strategies. These approaches and strategies include:

a. Andragogy approach

The use of learning methods in adult education has implications for the use of learning techniques that are considered appropriate for use in fostering the behavior of learning citizens. Knowles classifies learning techniques in achieving learning objectives based on the types of learning activities, namely attitudes, knowledge, and skills.

Learning activities in adult education are still the most efficient and most acceptable learning activities and are dynamic and flexible tools in helping adults learn. Since learning activities are a dynamic and flexible tool in helping adults, the use of learning methods based on adult learning principles is required. Adult learning methods are ways of organizing participants to engage in learning activities, both theoretical and practical.

Learning methods that can be used in learning activities should (1) be problem-centered, (2) require and encourage participants to be active, (3) encourage participants to express their daily experiences, (4) encourage cooperation, both among fellow participants and between participants and tutors, and (5) be more experiential, not a transformation or absorption of material.

b. Contextualized PBL strategy

Problem-based learning (PBL) is one of the learning models that can help students improve the skills needed in the current era of globalization. This learning model presents students with a real-world problem at the beginning of learning and then solves the problem through investigation and application using a problem-solving approach.

There are several characteristics of the problem-based learning process, including 1) Problems are used as a starting point for learning. 2) The problem used is usually a real-world problem presented in a floating way. 3) The problem usually requires multiple perspectives. The solution requires students to use and derive concepts from several previously taught sciences or across sciences to other fields. 4) Problems challenge students to learn in new domains. 5) Emphasize self-directed learning. 6) Use multiple sources of knowledge, not just one source. 7) Learning is collaborative, communicative, and cooperative. Students work in groups, interact, teach each other (peer teaching), and make presentations.

2. Training activity

The sequence of activities in the training processes the model of developing education and training for nurse competencies based on Service Excellent is applied, including teen activities, twenty activities, and seventy activities, as shown below:

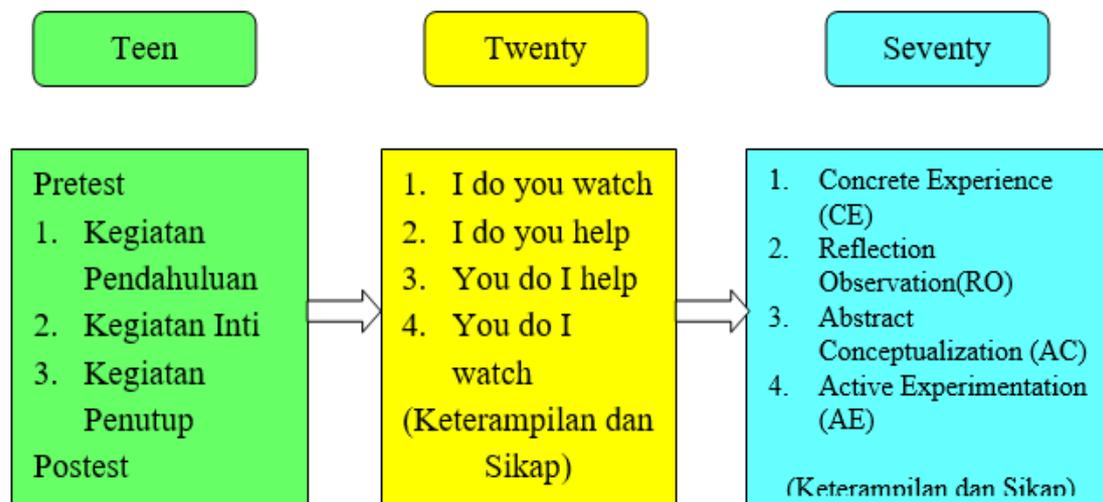


Figure 3: TTS Model of Development of Education and Training for Nurse Competence Based on Service Excellent

a. Teen activity

This activity is conducted face-to-face and involves direct interaction between mentors and trainees in the learning process. In this activity, trainees and mentors discuss the training material and the basis for completing assignments. Teen Activities are conducted through the stages of Introductory Activities, Core Activities, and Closing Activities.

The opening activities include: starting the training on time according to the training schedule, praying together, checking the attendance of the trainees, and promoting familiarity to condition the trainees so that they are ready to do the training activities (the form of the activities can be in the form of introducing the mentors and the trainees themselves to promote familiarity between them, asking how they are, giving praise for their willingness to learn), appreciating by relating daily experiences to the material to be learned and communicating the objectives of the training.

These activities include: mentors delivering teaching materials sequentially and systematically using andragogy and participatory approaches, mentors soliciting feedback from trainees, mentors monitoring trainees' learning progress, mentors observing and assisting trainees (individually or in groups) in problem-solving, working on tasks or demonstrations, mentors motivate trainees to be attentive and participate in the training, mentors motivate trainees to be attentive and participate in the training; mentors provide motivation such as telling trainees about the advantages and various facilities obtained if they can implement the model of developing education and training for nurse competencies based on Service Excellent; mentors reinforce training results by giving praise to participating trainees; and mentors ask trainees about things that are not clear.

Closing activities, in the form of mentors conducting evaluations, conducting a review of the training materials learned, communicating conclusions, closing the training with thanks, apologies, and gratitude to Allah SWT, collecting materials and evaluation results in a special file for further use, storing and tidying up the media/tools used, leaving the place clean and organized.

b. Twenty activity

Activity twenty is carried out by giving students direct practice in carrying out work related to the material learned in face-to-face meetings (teen). In this activity, observations of trainees are made in order to determine and analyze the skills of the participants in implementing the learning outcomes of the face-to-face meetings.

Four stages of mentoring need to be known and applied:

1) *I do you watch*

The activities carried out by the mentors are:

- Mentor provides examples of work planning
- Mentor provides examples of effective job execution
- Mentor provides examples of job execution responsibilities
- Mentor provides examples of job completion
- Mentor provides examples of evaluating work

The activities that were carried out by the participants are as follows:

- Participants follow examples of work planning
- Participants observe examples of effective work execution
- Participants follow examples of responsibility for work execution
- Participants follow examples of work completion
- Participants follow examples of evaluating work

2) *I do you help*

The activities carried out by the mentors are:

- Mentor teaches participants to assist in work
- Mentor asks participants to practice hands-on work

The activities that were carried out by the participants are as follows:

- Participants assisting mentors
- Participants practicing hands-on work

3) *You do I help*

The third of the 4 stages of mentoring is to allow the mentee to begin to perform and take action. Here, the role of the mentor is to continue to guide so that the person we are mentoring stays on track.

4) *You do I watch*

This last stage is the stage where you feel confident in the competence and ability of the person being mentored. At this stage, the mentor can let go and simply observe and mentor other aspiring leaders. The principle is not whether you can or cannot, but whether you want to live life to the fullest. The steps for implementing mentoring are as follows:

- Introduction to coworkers/work environment
- Giving responsibility
- Sharpening Critical Thinking
- Deepening according to the discipline

c. *Seventy activity*

Seventy activities are activities in which participants are mentored by parties who are competent in their fields, such as family doctors/general practitioners, practicing physicians, hospital directors, and other parties. Mentoring is carried out personally in the implementation of nursing tasks and health service activities for patients.

In addition, mentoring is also carried out to participants in groups to assess the ability of participants to carry out cooperation and collaboration in carrying out tasks. The steps of seventy activities are as follows:

1) Mentor activities

- Concrete Experience (CE)

Mentors allow participants to fully immerse themselves in new experiences.

- Reflection Observation (RO)

Mentors assist and guide participants in making observations and reflecting or thinking about the experience from different perspectives.

- Abstract Conceptualization (AC)

The mentor explains to the participant how to create concepts that integrate observations into a theory.

- Active Experimentation (AE)

Mentors guide participants in using theory to solve problems and make decisions based on experience.

2) Participants activities

- Concrete Experience (CE)

Trainees are fully immersed in the new experience.

- Reflection Observation (RO)

The trainee observes and reflects or thinks about the experience from different angles.

- Abstract Conceptualization (AC)

The learner creates concepts that integrate his/her observations into a theory.

- Active Experimentation (AE)

The student uses the theory to solve problems and make decisions.

The participatory approach means that participants are directly or indirectly involved in the delivery of the training, such as being involved in the process of discussion, discovery, and problem-solving, also participating in decision-making related to learning and training materials.

3. Evaluation

The evaluation was conducted throughout the training process. At the beginning of the training, a pretest was administered to determine the initial competence of the trainees. During the training process, observations were made of the participants' activities in the training, both observations of skills and attitudes. At the end of the training, a post-test was conducted to

determine the improvement of the participants' competencies after participating in all training and learning activities.

C. Output

The results of the evaluation of the training implementation were focused on the development of knowledge, skills, and attitudes. In the knowledge aspect, an understanding of the overall material presented was developed. In the skills aspect, the trainees developed their skills at all stages of the education and training model for nursing competencies based on service excellent, which consists of knowledge, attitudes, and skills.

D. Outcome

The implementation of an excellence-based nurse competency education and training development model is expected to enhance excellence in service to the community, namely:

1. Effective communication

Effective communication applied by nurses in implementing excellent service is:

a. *Situation*, including:

- 1) Identification of the unit, patient, cause status of clinical status.
- 2) Diagnostic status, brief statuses such as when it was started, the purpose of transfer and clinical indication or purpose of the diagnostic test, mention the patient's name, age, date of admission, date of treatment and medical diagnosis, explain the patient's health problems or complaints, explained by questions such as: what the patient's current situation and condition is.

b. *Background*, including:

- 1) Date of admission, vital signs, allergies, pain status, medications (doses), antibiotics, IV fluids, laboratory results, diet, and other clinical information including the type of monitoring required.
- 2) Identify health care provider (attending physician/nurse practitioner) and preliminary medical diagnosis, allergy history, medications, and IV fluids used.

c. *Assessment*, including:

- 1) Prioritize the problem focus, pain characteristics, prevention of health care worker safety, ability to manage the disease, skin prevention, and monitoring gastrointestinal bleeding.
- 2) Fully explain the results of the current patient assessment, such as mental status, emotional status, skin condition and oxygen saturation, vital signs and consciousness, and explain supporting examinations and laboratory results.
- 3) Identify any problems related to the patient's treatment, explain the supporting clinical information, and mention the status of the patient's continued or discontinued treatment.

d. *Recommendation*, including:

- 1) Immediate patient assessment, updated orders, modified orders, staff and patient safety precautions, patient transfers, intravenous medications, pain monitoring, and interventions.
- 2) Recommendations include nursing actions that were and were not completed, actions that were stopped, continued, or modified, suggestions to the physician for direct patient review, and questions to the physician about the next steps.

2. Excellent service

Excellent service developed by nurses in carrying out health services is as follows:

a. Effective communication

Nurses communicate with patients throughout the course of their work. Therefore, nurses need to be able to communicate effectively so that patients can receive the information provided by nurses appropriately. In addition to communicating with patients, paramedics also communicate with each other. Good communication among paramedics not only improves the services patients receive but also protects patients from potential dangers due to miscommunication.

b. Active listening

Active listening means that listening is not to respond but to understand and comprehend. Thus, when the nurse listens to the patient's complaints about his illness, the nurse will be able to understand that what is being complained about is the actual condition so that the response given by the nurse feels right and appropriate for the patient because the expressions that appear both verbally and non-verbally from the nurse are in accordance with the patient's complaints and conditions.

c. Empathy

Empathy is the ability and willingness to understand, comprehend, and feel what the patient is feeling, thinking, and wanting. Empathy requires nurses to understand the patient's world, mind, or internal frame of reference. Empathy requires the nurse to enter the flow of the patient's thoughts and feelings without being carried away by the patient.

3. Patient satisfaction

In simple terms, customer satisfaction is a situation in which the needs, wants, and expectations of the customer are met by the products consumed. The patient will be satisfied if the service he receives at least meets or exceeds his expectations. On the other hand, dissatisfaction occurs when the results do not meet the patient's expectations.

4. Public health

Health is something that is highly desired by all living beings on this earth. Because a sick body condition will make a person unproductive and can get the risk of death. The public health in

question is; (1) Physical health. It means the condition in which a person's body is in a healthy and fit state. (2) Social health. A condition in which a person is able to establish a good relationship with the people around them (3) Mental Health. Mental health includes many conditions, including feeling happy and content, being able to adjust to daily life, and being able to accept the strengths and weaknesses of oneself and the friends around him.

CONCLUSION

The Service Excellent Based Nurse Competency Education and Training Development Model at Toto Hospital Kabila, Bone Bolango Regency was developed through TTS (Teen, Twenty, Seventy) including; (1) Input, which consists of; (a) planning, (b) organization, (2) process, including; (a) training program, (b) training activities, (d) TTS (Teen, Twenty, Seventy) model, (e) andragogy approach, (f) participatory model, (g) contextual PBL strategy, (g) evaluation, (3) output includes increased knowledge, skills and attitudes, (4) outcome, improvement; effective communication, excellent service, patient satisfaction, public health.

References

- 1) Clardy, A. (2005). *Andragogy: Adult Learning And Education At Its Best?* <https://files.eric.ed.gov/fulltext/ED492132.pdf>
- 2) Gillespie, J. N. (2010). *Nursing: A Healing Ministry*. <https://digitalcommons.liberty.edu/honors/206/>
- 3) Gillies, R. M. (2015). *Collaborative learning: developments in research and practice*. 1–350. <https://espace.library.uq.edu.au/view/UQ:379781>
- 4) Good, P. A. (2018). *Evaluating the impact of innovative teaching strategies to improve nursing students' perceptions of competence and confidence in providing spiritual and emotional care*. <https://firescholars.seu.edu/cgi/viewcontent.cgi?article=1016&context=coe>
- 5) Jennings Wesley G., Michael Rocque, Bryanna Hahn Fox, Alex R. Piquero, and David P. Farrington 2016. *Can they recover? An assessment of adult adjustment problems among males in the abstainer, recovery, life-course persistent, and adolescence-limited pathways followed up to age 56 in the Cambridge Study in Delinquent Development* University of South Florida; Bates College; University of Texas at Dallas; and University of Cambridge
- 6) Kobayashi, R. M., & Leite, M. M. J. (2010). Developing professional competences of nurses in service. *Revista Brasileira De Enfermagem*, 63(2), 243–249. <https://doi.org/10.1590/S0034-71672010000200012>
- 7) McNally, J. M. (1976). Self-Directed Learning, A Guide for Learners and Teachers. *Journal of Continuing Education in Nursing*, 7(3), 60. <https://doi.org/10.3928/0022-0124-19760501-17>
- 8) Smith, S. A. (2012). Nurse Competence: A Concept Analysis. *International Journal of Nursing Knowledge*, 23(3), 172–182. <https://doi.org/10.1111/J.2047-3095.2012.01225.X>
- 9) Whitcombe, S. W. (2013). Developing skills of problem-based learning: what about specialist knowledge. *International Journal of Continuing Engineering Education and Life-Long Learning*, 5(2), 41. <https://www.voced.edu.au/content/ngv%3A57217>
- 10) Yusof, K., Hassan, S. A. H., & Tasir, Z. (2007). *A problem-based learning (PBL) model for engineering & technical courses*. <http://eprints.utm.my/id/eprint/13701/>