

## Enhancing Nurses' Empathy Towards Young Child Patients Through Empathy Training

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### ABSTRACT

*In nursing services for early childhood hospitalized patients, nurses' empathetic attitudes cannot be implemented optimally. Empathy is a knowledge and skill that can be improved through education and training programs. Although there are many empathy training programs in nursing, there is no training programs specifically designed to increase nurses' empathy towards early childhood patients. This thesis is a research on an intervention program in the form of the "I Love and Understand You" training program which aims to increase nurses' empathy towards young children who are being treated in hospital. This research is a quantitative research with a one group difference test design before and after intervention or one group pretest post-test design. There were 18 participants in this study. Based on the Wilcoxon Signed Rank Test, the research results showed a significant increase in nurses' empathy towards early childhood before and after the intervention program was implemented ( $p$ -value  $< 0.001$ ,  $p < 0.05$ ). Based on the Friedman test, the research results also showed that nurses' empathy for early childhood remained significantly different two weeks after the intervention program was implemented ( $p$ -value  $0.001$ ,  $p < 0.05$ ). This proves that the "I Love and Understand You" training program increases nurses' empathy for young children who are being treated in hospital.*

**KEYWORDS** Empathy training, nurse empathy, early childhood patients



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### INTRODUCTION

Early childhood is a very valuable age phase and is the foundation of a person's life. What happens in this phase will determine what happens in the next phase of life. Experiences experienced by children during this period will have a long impact on their lifetime (Likhari et al., 2022). In this phase, it is expected that a child can grow and develop optimally, but data in the maternal and child health profile in 2022 shows that 29 out of 100 Early Childhood Children (AUD)

experience recurring health problems every month, of which 13.55% have to undergo hospitalization.

In addition to physical problems, psychologically undergoing hospitalization in a hospital is not a pleasant condition for both a child and the parents who accompany him. AUD's ability to understand the concept of illness is still very limited according to their stage of cognitive development. The loss of freedom, separation from loved ones, having to enter a new environment without an adaptation process, painful medical actions and therapies that must be experienced repeatedly are the causes of anxiety in AUD when they have to undergo treatment in a hospital (Pulungan & Purnomo, 2017);(Hastuti & Wijayanti, 2017). Given the above conditions, health care services are needed that are able to pay attention to the needs of children both physically and psychologically when children have to undergo hospitalization in the hospital (Peters et al., 2018);(Kustiyanti, 2023);(Jawab et al., 2018).

For children undergoing hospitalization, nurses are the medical figures with whom they interact most intensively (Kashkoli et al., 2017). Anxiety, distress and pain experienced by a patient undergoing treatment will be reduced when a nurse applies an empathetic attitude towards patients who are within the scope of their nursing (Gin Choi et al., 2013). Empathy means the ability to understand and feel the feelings of others, communicate the understanding he has and take an action that is in accordance with what they need (Dulay et al., 2018). For a nurse, empathy is a way of looking at a patient, where nurses understand the patient's physical and psychological conditions and needs when they interact directly with patients and their families or when they carry out other medical actions (Hojat, 2016).

Although empathy is very important to apply in nursing practice, a study conducted by Yi (2022) showed a decreasing trend in the application of empathy in nursing during the period 2009 to 2018. Feelings of patient dissatisfaction arise when nurses are unable to demonstrate empathy and good relationships with patients under their care (Rafferty & Minbashian, 2019). When children undergo treatment in the hospital, the age of the child is a factor that affects the parents' satisfaction with the nursing services provided by nurses in the hospital. Parents in the infant and *toddler* age groups have lower satisfaction compared to parents who have children with older age groups (Ertürk Kara et al., 2015).

Empathy consists of two main dimensions, namely the cognitive dimension and the affective dimension. Through the cognitive dimension, an empathetic nurse will be able to imagine himself as a patient who experiences the condition (Reeder et al., 1997). Meanwhile, through the affective, a nurse will be able to feel the same emotions as those felt by patients in their nursing services (de Oliveira Souza, 2020). In the medical and nursing fields, the cognitive dimension is the more dominant dimension so that empathy is not something that is obtained, empathy is something that is learned and can be improved.

There are several conditions that may cause a nurse's empathy to decline when carrying out their nursing duties. From the need assessment conducted at the beginning of the study through structured interviews with five nurses on duty at the hospital, it was found that high workloads, clinical problems, and the typical personality of difficult patients made it difficult for them to apply empathy

consistently (La Touche et al., 2020). These results are in accordance with research conducted by Bogiatzaki (2019) which describe the factors that cause a decrease in empathy in nursing. The results of the *need assessment* in this study also obtained the results that applying empathy to pediatric patients is more difficult than in adult patients. The age of two to six years is the most difficult age range to approach.

Based on the above conditions, it encourages the need for an effort that can increase nurses' empathy for patients, especially pediatric patients who are undergoing treatment at the hospital. Several studies have shown that empathy can be increased by training (Adamson et al., 2018); Sarmiento (2020); Maghsud, (2020)(Cho & Kim, 2024).

Based on the above considerations, the researcher conducted an intervention program in the form of empathy training called "I Love and Understand You" (ASAMU). ASAMU training is an empathy training for nurses in hospitals that aims to increase nurses' empathy for AUD patients who are undergoing hospitalization in the hospital.

ASAMU training activities are structured based on Kolb's (2015) learning method represented by a four-stage learning cycle where each trainee touches all stages of learning in this cycle. The four stages contained in the Kolb cycle are: 1) *Concrete Experience* (CE), is the process of providing activities that can directly provide real experience to participants, 2). *Reflective Observation* (RO), is the process of observing and reflecting back on what has been experienced in previous events, 3). *Abstract Conceptualization* (AC), is a process where participants are guided to conclude something about themselves or concepts relevant to the learning objectives, 4). *Active Experimentation*, is the process of trying out new behaviors that are learning targets.

The purpose of this study is to determine whether ASAMU training can increase nurse empathy for AUD patients who are undergoing hospitalization in the hospital.

## RESEARCH METHODS

The subjects in this study were determined using *purposive sampling* technique, where the researcher determines the sample based on certain considerations in a particular population (Sugiyono, 2017). This technique is one of the techniques that can be used in applied research and behavioral science. In this study, researchers collaborated with a public hospital located in North Jakarta as a sampling location. The population in this study were nurses who served in the hospital. The hospital nursing manager determines participants with characteristics according to what is needed by the researcher and is not in a state of service at the time of research implementation. In detail, the characteristics of the research subjects are: 1) had passed the probationary period, 2) had more than 6 months of service, and 3) aged 18 to 50 years.

Data collection was done by filling out questionnaires by participants at three different times, namely: (a) *pre-test* before the intervention was implemented, (b) *post-test* 1 immediately after the intervention had been implemented, and c) *post-test* 2 conducted two weeks after the intervention was completed. The

questionnaires were completed using a questionnaire form that was given to the participants.

The measuring instrument used for data collection in this study is the *Jefferson Scale of Empathy - Healthcare Providers (JSE -HP)* compiled by Hojat 2016. The JSE HP measuring instrument consists of 20 items, ten items are *favorable items* and the other ten items are *unfavorable items*. Each empathy item is rated using a seven-point Likert scale, which consists of a score of 1 (strongly disagree) to 7 (strongly agree). Participants who had more than four empathy items incorrectly passed and could not be included in the data processing. The total score in this JSE HP has a range of 20 to 140, where the higher the score achieved the higher the level of empathy possessed by the nurse. The JSE HP measuring instrument in this study has been translated into Bahasa Indonesia. Permission to use the measuring instrument for this study was obtained on February 8, 2024 Thomas Jefferson University, as the owner of the JSE HP measuring instrument.

Adaptations to some items were made by researchers to adjust the use of JSE HP as a measure of nurse empathy towards AUD pediatric patients. The *content validation test* was carried out based on *expert judgment* or *expert judgment* by two professors of the Faculty of Psychology, University of Indonesia. The readability test of the tool was conducted on five nurses to ensure that the words contained in it were easy to understand. In order to test the reliability of the measuring instrument, the researcher distributed the JSE HP questionnaire to 52 nurses via *google form*. The reliability test of JSE HP was conducted using *Cronbach Alpha*.

The *Cronbach Alpha* value based on measurements made on 52 participants shows a figure of 0.86, so it can be said that this tool is reliable and can be used in this study (Urbina, 2014). In addition to measuring reliability, researchers measured the CrIT (*corrected-item total correlation*) coefficient value of each item. A good CrIT coefficient value has a range above 0.2 (Nunnally & Bernstein, 1994). In the measurement results of 20 items of the JSE - HP measuring instrument, the *Corrected Item-T otal correlation* (CrIT) value is in the value range of 0.273 - 0.614, this indicates that all items in the JSE HP measuring instrument can be used in research.

The ASAMU training was conducted over two days, each day consisting of two sessions and each session took  $\pm 60 - 75$  minutes. At the end of each session the researcher provides an evaluation in relation to the material provided in the session, the participants on each statement given.

**Table. 1 Outline of the Implementation of the I Love and Understand You Training**

Session No.	Destination	Learning material	Tools and materials	Duration
1	Understand empathy.	Definition of empathy, dimensions in empathy, benefits, and barriers to implementation.	Video LCD Presentation material	60 minutes

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Kolb's Cycle

CE: Video screening (hospital environment, conditions when the patient is in hospital)

RO: Participants reflect on what they saw

AC: Provision of material by presentation, discussion

AE: Assignment: name the barriers experienced in practicing empathy, what will be done to overcome these barriers.

2	Understand <i>patient perspective taking, standing in the patient's shoes and compassionate care</i>	Empathy in nursing (Hojat, 2016)	Image LCD Presentation Material	75 minutes
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Kolb's cycle:

CE: Image analysis

RO: Analyze the character in the picture (what does the character feel/think, why do they draw the conclusions they do, what do they expect from us)

AC: delivery of material in the form of lectures / presentations

AE: Assignment: write down the *perspective taking, standing in the patient's shoes and compassionate care* attitudes that will be practiced during nursing practice.

3	Characteristics of AUD development	<ul style="list-style-type: none"><li>•Cognitive development (Piage Theory),</li><li>•Child and caregiver attachment (John Bowlby Theory)</li><li>•Classification of child temperament according to Chess and Thomas</li></ul>	Video LCD Presentation material	75 minutes
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Kolb's Cycle

CE: Video playback: AUD of various ages undergoing examination/treatment at the hospital

RO: Reflect and summarize what the children in the video felt and thought.

AC: delivery of material in the form of lectures / presentations

AE: Task: As a nurse, name three things you would do when dealing with an AUD patient.

4	Application of empathy in AUD	<i>Wrapping up</i> session 1-3 and how to communicate empathy to AUD,	<i>Role play</i> scenario LCD Presentation material Pledge card	75 minutes
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Kolb's cycle:

CE: *Role play*

RO: Reflection: what the character you are portraying is feeling, wanting

AC: From this training, what have you learned about applying empathy to AUD (discussion & *main mapping*)

AE: Pledge card: I am an empathic nurse, I will do .....

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The data was analyzed with Jamovi 2.3.28. This study conducted two tests. First by using the Wilcoxon Signed Rank test to analyze whether there was an increase in nurses' empathy scores towards AUD patients at *pretest* and *post-test 1*. Second by using Friedman Test to analyze whether there is a significant difference in nurses' empathy scores towards AUD *pretest*, *post-test 1* and *post-test 2*.

## RESULTS AND DISCUSSION

At the start of the training, there were 23 participants who met the inclusion criteria of this study. Of these 23 participants, 18 were eligible for statistical analysis, because: three participants failed the *pretest*, one participant was absent on the second day of training, and one participant was absent during *post-test 2*.

Based on age, the majority of participants (55.6%) were in the age range of 20 to 29 years, with the youngest age being 21 years and the oldest age being 52 years. In terms of marital status, there was a similarity between the number of married and unmarried participants. Participants with an undergraduate level of education were much higher (61.1%) than those with a diploma level of education. The overall general characteristics of the training participants are shown in table two.

**Table 2: General Characteristics of Trainees**

	Criteria	Total	%
Gender	Male	0	0
	Female	18	100
Age	20 - 29	10	55.6
	30 - 39	4	22.2
	40 - 49	4	22.2
	>50	0	0
Marital status	Not married	9	50
	Marry	9	50
Children	Does not have	10	55.6
	Own	8	44.4
Education	D3	7	38.9
	S1	11	61.1

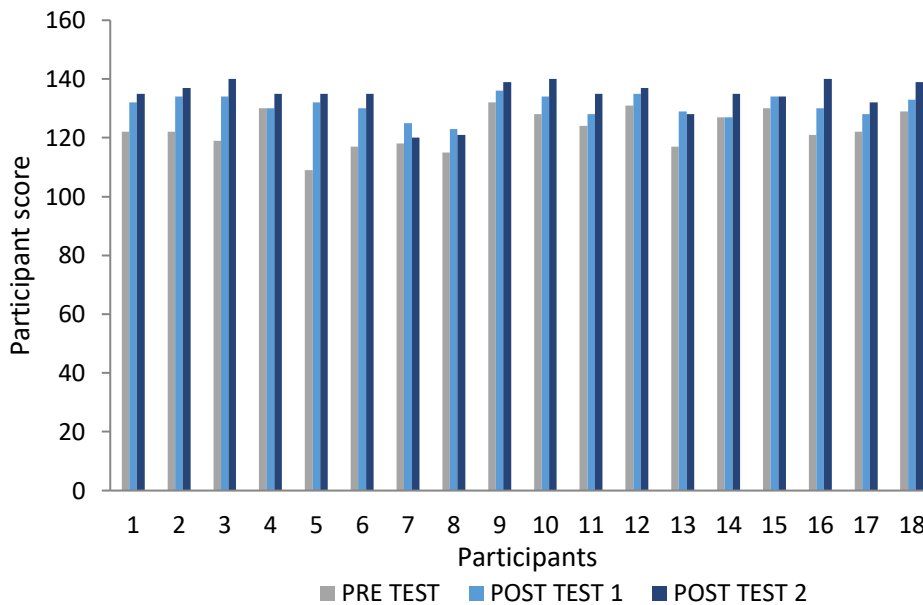
Based on unit and length of service, more than a third of the participants were from pediatric wards (33.3%). Most of the participants (55.6%) worked for less than five years, of which 4 (22.2%) worked for less than five years and 6 (30%) worked between two to five years. In terms of the intensity of interaction with pediatric

patients, more than a third (38.9%), namely 7 nurses, stated that they interacted more frequently with pediatric patients than with adult patients, of which 6 of them (85.7%) were nurses assigned to the pediatric ward and 1 person (14.3%) was assigned to the pediatric outpatient unit. A total of 8 nurses (44.4%) who stated that they rarely interacted with pediatric patients were nurses assigned to adult wards (table 3).

**Table 3. Characteristics of Participants Based on Service Unit and Duration of Work**

	Criteria	Total	%
Work Unit	Intensive Care	3	16.7
	Emergency services	1	5.6
	Pediatric and adult VIP wards	1	5.6
	Adult ward	5	27.8
	Pediatric ward	6	33.3
	Obstetrics ward	1	5.6
	Outpatient clinic	1	5.6
	Length of Service	<5 years	10
5 - 10 years		2	11.1
>10 years		6	33.3
Length of service in current unit	<5 years	12	66.7
	5 - 10 years	3	16.7
	>10 years	3	16.7
Intensity of pediatric patient interaction: adult	Less often	8	44.4
	Same	3	16.7
	More Often	7	38.9

The results of data analysis based on the average scores of *pretest*, *post-test 1* and *post-test 2* achieved by participants, showed that the majority of participants experienced an increase in empathy scores after being given the intervention. A total of 16 participants (88.9%) experienced an increase in scores from *pretest* to *post-test 1* and 2 participants (11%) had *pretest* and *post-test 1* scores that remained the same. In the comparison of empathy scores between *post-test 1* and *post-test 2*, it can be seen that most participants 14 (77.8%) experienced an increase. There were 3 (16.7%) participants who experienced a decrease in score and 1 (5.6%) participant who had the same score. Although there was a decrease, the score shown in *post test 2* was higher than the score shown in the *pretest*. A comparison of the participants' scores from the *pretest*, *post-test 1* and *post-test 2* can be seen in the graph below:



**Figure 1. Graph of Average Empathy Score on Pretest, Post-Test 1 and Post Test 2**

To find out the comparison of the average empathy score of the participants as a whole, the researcher conducted a descriptive statistical analysis of the score data obtained by the participants in the pre-test, post-test 1 and post-test 2. Descriptive data analysis in this case includes the *mean* and standard deviation. The results of descriptive statistical analysis are shown in Table 4

**Table 4. Descriptive Analysis of Comparison of Empathy Scores Before and After Intervention**

	<i>Pre - Test</i>	<i>Post - Test 1</i>	<i>Post - Test 2</i>
N	18	18	18
Mean	123	131	134
Standard Deviation	6.42	3.62	5.87

Based on the table above, it can be seen that the average score of empathy owned by participants before the intervention program (*pretest*) was 123, increased to 131 after the intervention program (*post-test 1*) and increased again 2 weeks after the intervention program was implemented (*post-test 2*) to 134. In the next stage, the Wilcoxon Signed Rank Test statistical test was conducted to analyze whether there was an increase in empathy scores from *pretest* to *post-test 1* statistically and the Friedman Test to analyze whether there was a change in empathy scores between *pretest*, *post-test 1* and *post-test 2*. The results of the statistical test of empathy scores before and after the intervention are shown in Table 5 and Table 6.



**Table 5. Wilcoxon Signed Rank Statistical Test Results**

Paired Samples T-Test			Statistic	p	Mean difference	SE difference
Pre_CS E	Post1_CS E	Wilcoxon n W	0.001	<0.001	-8.00	1.34

Based on the *Wilcoxon Signed Rank Test* results in Table 5, the *p value* is <0.001, which is lower than the significance level or  $p < 0.05$ . From these results it can be concluded that the empathy score in nurses increased significantly from before the intervention program at *pretest* to after the intervention program at *post-test 1*. This means that it is proven that the *intervention* program is able to increase nurses' empathy scores before and after participating in the ASM training intervention program.

**Table 6. Friedman Statistical Test Results**

Friedman				
	$\chi^2$	df		p
	29.3	2		0.001

Pairwise Comparisons (Durbin-Conover)

			Statistic	p
pre test	-	post test 1	7.48	<.001
pre test	-	post test 2	12.08	<.001
post test 1	-	post test 2	4.60	<.001

Based on the *Friedman Test* results in Table 6, the *p value* is 0.001, which is lower than the significance level or  $p < 0.05$ . From these results it can be concluded that there are significant differences in the empathy scores of nurses taken at 3 different time points, namely before the intervention program (*pretest*), after the intervention program (*post-test 1*), and 2 weeks after the intervention program (*post-test 2*). Further explanation was obtained in the analysis using *Pairwise Comparisons (Durbin-Conover)*. From this analysis, the following results were obtained: (1) the *p value* from the comparison of *pretest* and *post-test 1* is <0.001, which means there is a significant difference between the nurses' empathy scores before and after the ASAMU exercise intervention program; (2) the *p value* from the comparison of *pretest* and *post-test 2* also shows a value of <0.001 which means there is a significant difference between the nurses' empathy scores before the intervention program and 2 weeks after the intervention program; and (3) the *p value* of the comparison of *post-test 1* and *post-test 2* is <0.001 which means there is a significant difference between the empathy scores immediately after the

intervention program and 2 weeks after the intervention program. From the results of this analysis, it can be concluded that the ASAMU training program succeeded in increasing nurses' empathy scores up to 2 weeks after the program.

### **Discussion**

There are several factors that support the increase in empathy scores from ASAMU training in this study:

*First*, the material in the ASAMU training is based on the theory of empathy in nursing by Hojat (2016) which has been widely applied in education and health services. Where this theory emphasizes two things, namely: 1) the dominance of cognitive empathy over affective empathy in nursing services, 2) *patient perspective taking, standing on the patient's shoes* and *compassionate care* are the basic factors that form nursing empathy.

*Second*, consideration of the selection and emphasis of materials in ASAMU training is not only based on theory but also based on the *need assessment* conducted by researchers before the training is implemented. Through *need assessment*, broader information from various perspectives can be explored, so that it can help design training designs and identify things that participants need (McGoldrick & Tobey, 2016). Through *need assessment*, researchers can raise issues that are relevant to the application of empathy in the field during training. The results of the *need assessment* conducted in this study showed that the participants' understanding of empathy was still limited, there were several factors that hindered the application of empathy, and there were difficulties for nurses to understand the character of early childhood. The results of the *need assessment* encouraged researchers to put basic empathy material in the initial session of the training, as an effort to provide a foundation for understanding empathy before entering the next sessions. The discovery of nurses' difficulties in understanding the characteristics of AUD in the *need assessment* became a consideration for researchers to provide an understanding of the characteristics of AUD in a separate session.

*Third*, the selection of learning tools and media used in ASAMU training refers to previous empathy studies that have proven successful in increasing empathy in nurses (William, 2014; Giyanti, 2018; Hurrisa 2023). Video screenings were conducted in sessions one and three of the ASAMU training. Video playback is expected to provide participants with an experiential picture of situations and conditions that are actually experienced. In the ASAMU training, the first video screening invites participants to learn to understand the condition of the patient or the condition of the AUD who is undergoing hospitalization in the hospital. What they feel when they are in that condition, what we would feel if we were in their shoes, what we have done for them, what they feel from our behavior. The video in the third session showed the experiences of AUDs from different age groups undergoing therapy in the hospital. Through this video, participants learned about the differences that exist in each child according to the stages of age development and temperament.

Participants were invited to think and explore what children think and feel according to the ability to think at the age stage, what children want, how to approach them according to their age stage and temperament. In addition to video

playback, *role play* is also used as a form of activity method in ASAMU training. *Role play* aims to explore the feelings of the role played, so that it will affect or change a person's perception of the character being played (Kahriman, 2016; Giyanti, 2018; Ding 2020; Huang, 2022; Hurrisa 2023). The scenario of a tragic *role play* story that happened to a patient or his/her family during hospitalization is used in this training. By living and playing the role of a patient, patient's family, or a nurse, participants will better understand the feelings that arise when they are in their position and the expectations they want.

*Fourth, the use of Kolb's experiential learning cycle as a learning method.* *Experiential learning* is a learning process formed through the transformation of experience which becomes the basis for changing individual behavior systematically (Kolb, 2021). *Experiential learning* is an effective learning model for adults. ASAMU training uses Kolb's *experiential learning* cycle as an approach method in training. A combination of 4 sequential and interconnected steps of the learning cycle process is used as the learning method in this training. Video screening, image analysis, and *role play* applied as the initial stage in each session are forms of CE that encourage specific experiences in the learning process. In the second stage of the learning cycle (RO), interaction discussion is conducted guided by the researcher as the training facilitator. At this stage the facilitator will help participants to be able to reflect and draw conclusions from the experiences felt by participants from the previous stages.

The third stage (AC) in each training session is filled with material enrichment in the form of presentations. The interactive discussion between the facilitator and the trainees at the end of this stage aims to make the rounding and conclusions of the material presented come from the participants themselves. The implementation of AC in session four is *wrapping the* material from the first to the third session. In addition to interactive discussions, rounding and drawing conclusions on the material provided is done by making *main mapping* about empathy by the trainees. Implementation of CE as the final stage of the Kolb cycle, carried out by trainees by making tasks that lead to new behaviors that become learning objectives in each session. Making a pledge card as the implementation of the CE stage in the fourth session is the participants' promise to themselves to realize empathetic behavior after the intervention program.

*Fifth, positive emotions in the learning process.* Positive emotions in the learning process can help the processing of information (Storbeck & Maswood, 2016). As an effort to create positive emotions in ASAMU training, the training program is made interesting. Activities in each training session sought to actively involve participants. The training materials were delivered in easy language. Researchers provided *rewards* to participants in each activity. The positive emotions of participants in the ASAMU training can be seen from the observations made by observers during the training. In the training, the participants listened to the material presented with enthusiasm, actively discussed, shared experiences and worked on the worksheets given in each session optimally. The enthusiasm of the participants can also be seen from the punctuality of the participants' arrival and their attendance in each training session from the beginning to the end.

In terms of the average score achievement that occurred after the training, the increase in the average score of empathy from *posttest 1* to *posttest 2* obtained in this study is different from the results of research conducted by Hurrisa (2023). In her research on empathy training for nurses in *obstetric fistula* therapy clinic centers in five different districts in Ethiopia, Hurrisa (2023) showed a decrease in the average score of empathy both at one week, one month and three months post-training. Possible factors influencing the durability of the learning effect of ASAMU training within a certain period of time (two weeks) were analyzed. Based on the analysis of participant characteristics, it was found that 6 (40%) participants who had an increase in the average score from *posttest 1* to *posttest 2* came from the same work unit (special children's unit).

The similarity of the workplace environment obtained in this study is in accordance with the social learning theory put forward by Albert Banduran which states the interaction of environmental elements and cognition that affect a person's learning process (Krapfl, 2016). To obtain further evidence, the researcher conducted interviews with nurses from the unit, based on the results of the interviews, the nurses said that the application of empathy based on the training they received on pediatric patients in the care unit, had a positive impact on the children and families who accompanied them. This positive impact encourages other colleagues to apply the same behavior to the patients they care for. This phenomenon is in accordance with social learning theory, where behaviors that receive greater rewards are more likely to be imitated while behaviors that are punished tend to be avoided (Krapfl, 2016). Here, it can be seen that empathetic behavior that has a positive impact on patients and their families will encourage other team members in the unit to perform the same behavior.

The ASAMU training was shown to significantly improve nurses' empathic understanding of AUD and showed a lasting learning effect over a period of time (two weeks). However, there are a number of caveats that could inform future research. Some of these notes are:

*First*, the small amount of sample data that can be analyzed in this study. The small number of samples in a study does not show a distribution that resembles the distribution that occurs in the population, which allows a bias to arise when applied to a population. *Second*, the rules of the scoring system used in the JSE HP measurement tool stipulate the exclusion of data that has more than four errors (20 items in total) in filling out the questionnaire. This provision will lead to two conditions, namely: 1) a reduction in the number of participants in a study. 2) participants who may have low empathy scores cannot be included in the study. This was the case in this study, where three participants (13% of the total number of participants at the beginning of the study) had to drop out because they had more than four items wrong when filling out the JSE HP measuring instrument questionnaire. *Third*, the post-training evaluation was conducted within two weeks after the intervention program was implemented. It is necessary to conduct further evaluation for a longer period of time, so that it can be seen in what duration of time the nurse's empathy score has decreased, so that the provision of empathy training or empathy education needs to be refreshed.

## CONCLUSION

Based on the results of the study above, it can be concluded that ASAMU training can increase nurses' empathy for AUD patients who are undergoing hospital treatment. The effect of the ASAMU training provided is proven to persist within two weeks after the training program is implemented. However, research with a larger sample size should be pursued in future studies. Post-intervention evaluation should be conducted over a longer period of time to determine within what timeframe nurses' knowledge of empathy has decreased after an empathy training program.

## REFERENCES

- Adamson, K., Sengsavang, S., Charise, A., Wall, S., Kinross, L., & Balkaran, M. (2018). Narrative training as a method to promote nursing empathy within a pediatric rehabilitation setting. *Journal of Pediatric Nursing, 42*, e2–e9.
- Bas-Sarmiento, P., Fernández-Gutiérrez, M., Baena-Baños, M., Correro-Bermejo, A., Soler-Martins, P. S., & de la Torre-Moyano, S. (2020). Empathy training in health sciences: A systematic review. *Nurse Education in Practice, 44*, 102739.
- Bogiatzaki, V., Frengidou, E., Savakis, E., Trigoni, M., Galanis, P., & Anagnostopoulos, F. (2019). Empathy and burnout of healthcare professionals in public hospitals of Greece. *Int J Caring Sci, 12*(2), 611–626.
- Cho, M.-K., & Kim, M. Y. (2024). Effectiveness of simulation-based interventions on empathy enhancement among nursing students: a systematic literature review and meta-analysis. *BMC Nursing, 23*(1), 319. <https://doi.org/10.1186/s12912-024-01944->
- de Oliveira Souza, D. (2020). Health of nursing professionals: workload during the COVID-19 pandemic. *Revista Brasileira de Medicina Do Trabalho, 18*(4), 464.
- Ding, X., Wang, L., Sun, J., Li, D. Y., Zheng, B. Y., He, S. W., ... & Latour, J. M. (2020). Effectiveness of empathy clinical education for children's nursing students: A quasi-experimental study. *Nurse education today, 85*, 104260. Ding et al (2020)
- Dulay, M. C. B., Domingo, J. E. A., Domingo, K. F. R., Domondon, H. O. F., Dumangon, L. G., Duran, R. A. D., & Sevilla, G. L. (2018). An Exploratory Study of Factors Influencing Student Nurses Empathy. *Journal of Nursing & Healthcare, 3*(2), 1–9.
- Ertürk Kara, G., Aydos, E. H., & Aydin, Ö. (2015). Changing Preschool Children's Attitudes into Behavior towards Selected Environmental Issues: An Action Research Study. *International Journal of Education in Mathematics, Science and Technology, 3*(1), 46–63.
- Gin Choi, Y., Kwon, J., & Kim, W. (2013). Effects of attitudes vs experience of workplace fun on employee behaviors: Focused on Generation Y in the hospitality industry. *International Journal of Contemporary Hospitality Management, 25*(3), 410–427.
- Gayanti, T., Amalia, S., & Maimunah, S. (2018). Efektivitas pelatihan empathy care untuk meningkatkan empati pada mahasiswa keperawatan. *JIP (Jurnal*

- Intervensi Psikologi), 10(1), 43-56.
- Hastuti, P., & Wijayanti, I. T. (2017). Pengaruh pemenuhan nutrisi dan tingkat kecemasan terhadap pengeluaran asi desa sumber rembang. *Jurnal Ilmiah Maternal*, 2(2).
- Hojat, M. (2016). *Empathy in health professions education and patient care*.
- Huang, S. M., Fang, S. C., Lee, S. Y., Yu, P. J., Chen, C. J., & Lin, Y. S. (2023). Effects of video-recorded role-play and guided reflection on nursing student empathy, caring behavior and competence: A two-group pretest-posttest study. *Nurse Education in Practice*, 67, 103560
- Jawab, F., Frichi, Y., & Boutahari, S. (2018). Hospital logistics activities. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 3228–3237.
- Jeffrey, D. (2016). Empathy, sympathy and compassion in healthcare: Is there a problem? Is there a difference? Does it matter?. *Journal of the Royal Society of Medicine*, 109(12), 446-452
- Kashkoli, S. A., Zarei, E., Daneshkohan, A., & Khodakarim, S. (2017). Hospital responsiveness and its effect on overall patient satisfaction: a cross-sectional study in Iran. *International Journal of Health Care Quality Assurance*, 30(8), 728–736. <https://doi.org/10.1108/ijhcqa-07-2016-0098>
- Kustiyanti, S. A. (2023). Smart Hospital: Konsep, Implementasi, dan Tantangan. *Transformasi Rumah Sakit Indonesia Menuju Era Masyarakat 5.0*, 161.
- Kahrman, I., Nural, N., Arslan, U., Topbas, M., Can, G., & Kasim, S. (2016). The effect of empathy training on the empathic skills of nurses. *Iranian Red Crescent Medical Journal*, 18(6).
- Kruszecka-Krówka, A., Cepuch, G., Gniadek, A., Smoleń, E., Piskorz-Ogórek, K., & Micek, A. (2021). Selected predictors of parental satisfaction with child nursing care in paediatric wards in Poland—Cross-sectional study. *PloS one*, 16(11), e0260504.
- La Touche, R., Fernández Pérez, J. J., Proy Acosta, A., González Campodónico, L., Martínez García, S., Adraos Juárez, D., Serrano García, B., Angulo-Díaz-Parreño, S., Cuenca-Martínez, F., Suso-Martí, L., & Paris-Aleman, A. (2020). Is aerobic exercise helpful in patients with migraine? A systematic review and meta-analysis. *Scandinavian Journal of Medicine and Science in Sports*, 30(6), 965–982. <https://doi.org/10.1111/sms.13625>
- Likhar, A., Baghel, P., & Patil, M. (2022). Early childhood development and social determinants. *Cureus*, 14(9).
- Mirzaei Maghsud, A., Abazari, F., Miri, S., & Sadat Nematollahi, M. (2020). The effectiveness of empathy training on the empathy skills of nurses working in intensive care units. *Journal of Research in Nursing*, 25(8), 722–731.
- Peters, A., Otter, J., Moldovan, A., Parneix, P., Voss, A., & Pittet, D. (2018). *Keeping hospitals clean and safe without breaking the bank*. Springer. <https://doi.org/10.1186/s13756-018-0420-3>
- Pulungan, Z. S. A., & Purnomo, E. (2017). Hospitalisasi mempengaruhi tingkat kecemasan anak toddler. *Jurnal Kesehatan Manarang*, 3(2).
- Rafferty, A. E., & Minbashian, A. (2019). Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-

- supportive behaviors. *Human Relations*, 72(10), 1623–1650.
- Reeder, S. J., Martin, L. L., & Koniak-Griffin, D. (1997). Maternity nursing: Family, newborn, and women's health care. (*No Title*).
- Terezam, R., Reis-Queiroz, J., and Hoga, L. (2017). The importance of empathy in health and nursing care. *Rev. Bras. Enferm.* 70, 669–670. doi: 10.1590/0034-7167-2016-0032
- Yang, C.-P. P., Hargreaves, W. A., and Bostrom, A. (2014). Association of empathy of nursing staff with reduction of seclusion and restraint in psychiatric inpatient care. *Psychiatr. Serv.* 65, 251–254. doi: 10.1176/appi.ps.201200531