



Assertive communication training and associate nurses' knowledge and motivation: A quasi experiment[☆]



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KEYWORDS

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Abstract

Objective: This study aimed to identify improvement in knowledge and motivation in associate nurses through assertive communication training in Southeast Sulawesi, Indonesia.

Method: The study used a quasi-experimental pre-test-post-test design with an intervention group and a control group approach.

Result: The assertive communication knowledge analysis results revealed a significant difference in the posttest 1 score ($p=0.045$). However, there was no significant difference in the posttest 2 score ($p=0.390$). The work motivation analysis revealed a significant difference in the post-test 1 score ($p=0.009$). However, there was no significant difference in the posttest 2 score ($p=0.068$). There was a significant difference in knowledge between the pretest and posttest 1 in both study groups ($p<0.05$).

Conclusion: The study's findings may serve as a reference for health organizations to cooperate with competent third parties organize assertive communication training for nurses.

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Introduction

An organization requires well-motivated nurses to provide the best service in order to achieve its objectives. A

motivated nurse is expected to be able to improve his/her service quality¹ and ensure the sustainability of nursing care.² Individuals with high motivation will perform their tasks with enthusiasm and dedication. However, oh stated that individual without work motivation would easily lose interest in their tasks and may even retire.³ Work motivation is affected by conflict among coworkers.

Ministry of Health noted that 8 out of 10 health professionals experience conflict in the workplace.⁴ A study conducted in Australia and Canada reported that the frequency of conflict among nursing coworkers was increasing. Another study conducted in Japan suggested that

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nurses who were involved in a conflict with another nurse reported a willingness to leave their job. A study in New Zealand indicated that new nurses reported a high level of interpersonal conflict within the first year after they graduated from nursing school.⁵ Conflict between nurses is a common, yet critical issue in the field of health services.

Misguided perception about conflict may lead to interminable conflict, which hinders an organization's ability to achieve its goals. Almost stated that individual, interpersonal, and organizational factors contributed to the development of conflict, unequal power, and distrust among employees, which affected their perceptions of conflict.⁵ Conflict is an issue that should be a concern since mutual rapport and understanding among nurses is essential for providing nursing care.

Each deals with conflict differently. Therefore, it is important to consider communication when interacting with others who have different ways of facing conflict. When conflict arises, an individual can respond in a variety of ways, and that determines the actions he/she takes and his/her emotional response, either consciously and not, which could result in anger.⁶ An employee who responds inappropriately in resolving conflict may lose his/her credibility in front of his/her coworkers and the organization; that person could become less motivated or could demonstrate a poor attitude while collaborating with others.⁷ The misunderstanding may also increase the level of conflict, and assertive communication is required to prevent it. Assertiveness is defined as spontaneous, honest, and direct behavior that does not humiliate or compel another, it also entails respecting another person's rights, opinions, and feelings. Assertiveness also involves open and relaxed gestures and the ability to communicate verbal and non-verbal messages.^{8,9} Assertive communication allows people to interact by expressing their needs simply and directly.

It is imperative for a nurse to perform his/her duty with the proper competencies, such as knowledge, attitude, skill, and communication.¹⁰ Moreover, a person's action is shaped by his/her knowledge. Bonis reported that an individual's knowledge is affected by his/her involvement with the environment or his/her personal experience, which is influenced by how he/she experiences it, and thus, by encountering new experiences a person's knowledge improves as well.¹¹ Learning may affect an individual's cognitive abilities because the human brain basically processes information continuously then interprets, selects, stores, and searches for new information.¹² Knowledge is based on a process or personal experience that may influence an individual's behavior. Therefore, assertive communication training may improve a person's knowledge.

Assertive communication training has been found to effectively improve skills in communicating, realizing, and expressing negative and positive feelings.¹³ Nassazi also reported that training had a positive impact on employees and an organization, and it positively affected employee performance through the development of knowledge, the acquisition of skills, competency, and ability, and the person's behavior.¹⁴ Thus, training improves knowledge, skill, and communication, which then increases a nurse's motivation to work.

Using observations, interviews, and secondary data collection the initial survey revealed that there was an established Standard Operational Procedure (SPO) on effective communication, which was used as a reference for providing good communication with patients, their family members, or other health professionals. However, the interviews held in a district hospital in Southeast Sulawesi, revealed that the nurses experienced communication barriers, including misperceptions, about information and a lack of openness in providing suggestions for patient service. The communication issues were taken into consideration when attempting to improve the nurse's quality of service. Several nurses attended training for ethics and communication in 2017. However, the associate nurses affirmed that not all nurses attended the training that was organized by the hospital. Unequal opportunity to attend the course resulted in the perception of injustice and evoked jealousy among the nurses who had not taken the course. This may lead to a serious problem because it affects their work motivation, which is correlated with a lower quality of service.

This article aims to identify improvements in knowledge and work motivation through assertive communication training in a district hospital in Southeast Sulawesi, Indonesia. It also specifically aims to: (a) identify the participants's demographic characteristics; (b) determine the difference in knowledge and work motivation among the associate nurses prior to and following the assertive communication training in the control and intervention groups; (c) compare the assertive communication knowledge and work motivation in the associate nurses following the training between control and intervention groups; (d) determine the differences in assertive communication knowledge and work motivation among the associate nurses before and after assertive communication training between the control and intervention groups; and (e) evaluate the retention of assertive communication knowledge and work motivation among the nurses after they underwent training between the control and intervention groups.

Method

The study used a quasiexperimental with a pretest-posttest design with an intervention group and a control group approach. Study participants were associate nurses assigned to either an intervention group or a control group. This study compared assertive communication knowledge and work motivation between associate nurses who attended and did not attend the assertive communication training sessions.

The study was conducted at the General Service Unit of Konawe Hospital (the intervention group) and Kendari District Hospital (the control group) in May 2018. The participants were selected based on the following inclusion criteria: civil servant and contract nurse who had been in service for at least 2 years; associate nurse who was assigned to a ward or an intensive care unit; capable of proper communication; at least a diploma graduate; employee who was not on leave or assigned to continue the study during the data collection phase; and provided consent to participate in the study.

Table 1 Demographic characteristics and homogeneity test results for the control group and the intervention group in district hospitals in Southeast Sulawesi, May 2018 ($n = 74$).

Variable	Group	<i>n</i>	Mean	Median	SD	Min-max	95% CI	<i>p</i>
Age (years)	Intervention	37	30.22	29.00	5.33	23-45	28.44;31.99	0.265
	Control	37	29.08	29.00	3.02	24-36	28.07;30.09	
	Total	74	29.65	29.00	4.34	23-45	28.64;30.65	
Length of service (years)	Intervention	37	6.11	3.00	5.21	2-19	4.37;7.84	0.661
	Control	37	5.68	5.00	2.93	2-14	4.70;6.65	
	Total	74	5.89	5.00	4.2	2-19	4.92;6.86	
Knowledge Assertive Communication Pretest	Intervention	37	11.32	12.00	4.10	4-17	9.96;12.69	0.257
	Control	37	12.41	13.00	4.04	2-19	11.06;13.75	
	Total	74	11.86	13.00	4.08	2-19	10.92;12.81	
Work Motivation Pretest	Intervention	37	80.92	81.16	8.39	64-95	78.13;83.72	0.510
	Control	37	79.40	77.54	11.27	57-100	74.64;83.15	
	Total	74	80.16	78.99	9.89	57-100	77.87;82.45	

The sample size was calculated based on an estimation of the differences between two means, with the addition of a drop out factor in anticipating participants who might withdraw during the study. A total of 74 nurses were assigned to the intervention and control groups (37 nurses for each group). The study sample was determined using the probability sampling technique, and the sample was selected using the proportional sampling method based on the number of associate nurses in each ward. Once the required number of nurses was identified, the participants were selected using a simple random sampling technique.

The initial stage for the intervention group was to undergo a pre-test followed by the training sessions. The participants in the intervention group were provided with assertive communication training, which was divided into six 60-minute sessions. Afterward, they underwent post test 1 to evaluate the result of the training; 2 weeks later, they underwent post-test 2. The participants in the control group underwent the pretest, posttest 1, and posttest 2 without having taken the training session.

The authors first inspected the questionnaires completed by the participants, and then performed coding. They then analyzed the data using computer software with SPSS. The study complied with research ethics and informed consent (a form describing the participants' willingness to participate in the study) was provided to comply with those ethical guidelines. The study was conducted after obtaining ethical clearance, which was issued by the Faculty of Nursing of Universitas Indonesia. The research ethics included beneficence, respect for human dignity, and justice. The assertive communication knowledge questionnaire consisted of 20 multiple choice items; that survey was developed by Yulastri.¹⁵ The work motivation questionnaire consisted of 23 items; that survey was developed by the authors of this article. This study applied univariate and bivariate analysis. In univariate analysis, frequency distribution was measured for the categorical data and mean, median, standard deviation (SD), the minimum and maximum value and confidence interval (CI) 95% were calculated for the numerical data. In bivariate analysis, a chi-squared test was applied for the categorical data and a pooled t-test was applied for the numerical data.

Results

The demographic characteristics of the associate nurses were classified into two groups, a numerical data group and a categorical data group, as described in [Table 1](#).

The homogeneity test revealed homogeneity or no distinct characteristic among the associate nurses in the intervention and control groups for the variables of age, length of service, pretest assertive communication knowledge, and pretest work motivation.

The data presented in [Table 2](#) suggest that there was no significant difference in the characteristics of sex, education, and marital status between the intervention and control groups (homogeneity).

The data presented in [Table 3](#) indicate that there was a significant improvement in assertive communication knowledge in the intervention group between the pretest and posttest 1 as well as between the pretest and posttest 2 ($p < 0.05$). The data also shows that there was no significant improvement in assertive communication knowledge in the intervention group between posttest 1 and posttest 2 ($p > 0.05$). It was also found that there was a significant improvement in assertive communication knowledge in the control group between the pretest and posttest 1 as well as between the pretest and posttest 2 ($p < 0.05$). It can be inferred that there was no significant improvement in assertive communication knowledge in the control group between posttest 1 and posttest 2 ($p > 0.05$).

The data presented in [Table 4](#) suggest a statistically significant difference in the posttest 1 score for assertive communication knowledge among the associate nurses in the intervention group in comparison to the nurses in the control group ($p < 0.05$). However, there was a decline in assertive communication knowledge in the participants in both groups 2 weeks after completion of the six assertive communication training sessions. The results indicate that the difference in assertive communication knowledge was as high as 2.22 (11.1%) between the pretest and posttest 1 among the participants in both study groups. It can be inferred that there was a significant change in the assertive communication knowledge of the nurses in the intervention group in comparison to the nurses in

Table 2 Demographic characteristics and homogeneity test result for the control group and the intervention group in district hospitals in Southeast Sulawesi, May 2018 ($n = 74$).

Variable	Group	Intervention ($n = 37$)		Control ($n = 37$)		Total ($n = 74$)	%	p
		Σ	%	Σ	%			
Sex	Man	7	18.9	9	24.3	16	21.6	0.778
	Woman	30	81.1	28	75.7	58	78.4	
Education	D3	30	81.1	26	70.3	56	75.7	0.416
	S1/Ners	7	18.9	11	29.7	18	23.4	
Marital Status	Single	14	37.8	14	37.8	28	37.8	1.000
	Married	23	62.2	23	62.2	46	62.2	

Table 3 Differences in assertive communication knowledge among the associate nurses before and after assertive communication training in district hospitals in Southeast Sulawesi, May 2018 ($n = 74$).

No	Knowledge Group	n	Mean	%	Median	SD	MD (95%CI)	t	df	p
1	<i>Intervention</i>									
a	Pretest	37	11.32	56.6	12.00	4.10	3.92 (2.66;5.18)	6.30	36	0.000*
	Posttest 1	37	15.24	76.2	16.00	1.91				
b	Pretest	37	11.32	56.6	12.00	4.10	3.35 (1.96;4.74)	4.89	36	0.000*
	Posttest 2	37	14.68	73.4	16.00	3.02				
c	Posttest 1	37	15.24	76.2	16.00	1.91	0.57 (0.18;1.32)	1.53	36	0.135
	Posttest 2	37	14.68	73.4	16.00	3.02				
2	<i>Control</i>									
a	Pretest	37	12.41	62.5	13.00	4.04	1.70 (0.59;2.81)	3.11	36	0.004*
	Posttest 1	37	14.11	70.55	15.00	2.8				
b	Pretest	37	12.41	62.5	13.00	4.04	1.6 (0.14;3.05)	2.22	36	0.033*
	Posttest 2	37	14.00	70	15.00	3.67				
c	Posttest 1	37	14.11	70.55	15.00	2.8	0.11 (0.76;0.98)	0.25	36	0.802
	Posttest 2	37	14.00	70	15.00	3.67				

* Statistically significant at $\alpha = 0.05$.**Table 4** Comparison of the posttest result and the differences in assertive communication knowledge among the associate nurses between the intervention and control groups in district hospitals in Southeast Sulawesi, May 2018 ($n = 74$).

No.	Group	n	Assertive communication knowledge					
			Mean \pm SD	%	MD (95%CI)	t	df	p
<i>Comparison of post-test</i>								
1	Posttest 1 KI	37	15.24 (\pm 1.91)	76.2	1.14 (0.03;2.24)	2.040	72	0.045*
	KK	37	14.1 (\pm 2.8)	70.55				
2	Posttest 2 KI	37	14.68 (\pm 3.02)	73.4	0.68 (0.88;2.23)	0.865	72	0.390
	KK	37	14.00 (\pm 3.67)	70				
<i>Difference between the intervention group and the control group</i>								
3	Pretest-Posttest 1 KI	37	3.92	19.6	2.22 (0.564;3.87)	2.67	72	0.009*
	KK	37	1.70	8.5				
4	Pretest-Posttest 2 KI	37	3.35	16.75	1.76 (0.224;3.74)	1.77	72	0.081
	KK	37	1.6	8				
5	Posttest 1-Posttest 2 KI	37	0.57	2.85	0.46 (0.669;1.59)	0.81	72	0.420
	KK	37	0.11	0.55				

* Statistically significant at $\alpha = 0.05$.

the control group ($p < 0.05$). Moreover, the difference in assertive communication knowledge between the pretest and posttest 2 was as high as 1.76 (8.8%). Based on the results of the analysis, it can be concluded that there

was no significant change in the assertive communication knowledge for the nurses in both study groups ($p > 0.05$). Furthermore, the difference in assertive communication knowledge between posttest 1 and posttest 2 was as high

Table 5 Differences in work motivation among the associate nurses before and after assertive communication training in district hospitals in Southeast Sulawesi, May 2018 ($n=74$).

No.	Group	<i>n</i>	Work motivation				
			Mean \pm SD	MD (95%CI)	<i>t</i>	df	<i>p</i>
1	<i>Intervention</i>						
a	Pretest	37	80.92 (± 8.39)	4.02 (1.55;6.49)	3.3	36	0.002*
	Posttest 1	37	84.94 (± 8.62)				
b	Pretest	37	80.92 (± 8.39)	2.92 (0.85;4.99)	2.86	36	0.007*
	Posttest 2	37	83.84 (± 8.6)				
c	Posttest 1	37	84.94 (± 8.62)	1.09 (2.14;4.34)	0.69	36	0.496
	Posttest 2	37	83.84 (± 8.6)				
2	<i>Control</i>						
a	Pretest	37	79.40 (± 11.27)	0.14 (3.61;3.88)	0.07	36	0.941
	Posttest 1	37	79.26 (± 9.65)				
b	Pretest	37	79.40 (± 11.27)	0.59 (2.63;3.81)	0.37	36	0.713
	Posttest 2	37	79.98 (± 9.33)				
c	Posttest 1	37	79.26 (± 9.65)	0.73 (0.69;2.14)	1.04	36	0.307
	Posttest 2	37	79.98 (± 9.33)				

* Statistically significant at $\alpha=0.05$.**Table 6** Comparison of posttest and the differences in work motivation among the associate nurses between the intervention and control groups in district hospitals in Southeast Sulawesi, May 2018 ($n=74$).

No.	Group	<i>n</i>	Work motivation				
			Mean \pm SD	MD (95%CI)	<i>t</i>	df	<i>p</i>
<i>Comparison of posttests</i>							
1	Posttest 1 KI	37	84.94 (± 8.62)	5.68 (1.44;9.92)	2.67	72	0.009*
	KK	37	79.26 (± 9.65)				
2	Posttest 2 KI	37	83.84 (± 8.6)	3.86 (0.30;8.02)	1.85	72	0.068
	KK	37	79.98 (± 9.33)				
<i>Difference between the intervention group and the control group</i>							
3	Pretest–posttest 1 KI	37	4.02	4.15 (0.27;8.57)	1.88	62.33	0.065
	KK	37	0.14				
4	Pretest–posttest 2 KI	37	2.92	2.33 (1.44;6.10)	1.23	61.47	0.222
	KK	37	0.59				
5	Posttest 1–posttest 2 KI	37	1.09	1.82 (1.68;5.32)	1.04	49.32	0.301
	KK	37	0.73				

* Statistically significant at $\alpha=0.05$.

as 0.46 (2.3%) among the participants in both groups. Thus, it can be concluded that, based on the scores from both posttests, there was no significant change in the assertive communication knowledge of the nurses in the intervention group and the control group ($p>0.05$).

The data presented in Table 5 described the work motivation among the participants in the intervention group with a score ranging from 0% to 100%. The analysis revealed that there was a significant improvement in work motivation among the participants in the intervention group between the pretest and posttest 1 and between the pretest and posttest 2 ($p<0.05$). However, the results also revealed no significant improvement in work motivation among the participants in the intervention group between posttest 1 and posttest 2 ($p>0.05$). Furthermore, the score for the work motivation among the nurses in the control group also

ranges from 0% to 100%. Based on these results, it can be concluded that there was no significant improvement in work motivation among the participants in the control group between the pretest and posttest 1, the pretest and posttest 2, and between posttest 1 and posttest 2 ($p>0.05$).

The data presented in Table 6 indicates a significant improvement in the posttest 1 work motivation among associate nurses in the intervention group in comparison to the control group ($p<0.05$). Furthermore, there was no significant difference in the posttest 2 work motivation among the associate nurses in the intervention group in comparison to the control group ($p>0.05$). The results also suggest a difference in work motivation as high as 4.15% between the pretest and posttest 1 among the participants in both groups. It can be inferred that there was no significant change among the nurses in both the intervention

and control groups ($p > 0.05$). Furthermore, the difference in work motivation was high as 2.33% between the pretest and posttest 2 among the participants in both groups. The statistical analysis results also suggest that there was no significant change in work motivation among the nurses in both groups ($p > 0.05$). Moreover, the difference in work motivation between posttest 1 and posttest 2 was only as high as 1.82% among the participants in both groups. Therefore, it can be concluded that there was no significant change in the work motivation of the nurses in both the intervention and control groups ($p > 0.05$).

Discussion

Improvement in knowledge among nurses in the intervention group was supported by their comprehension of assertive communication that was provided in the training sessions. This finding concurs with the results reported in studies conducted by Warland, McKellar and Diaz and Yulastris et al., which found that attending training programs effectively improved the participants' assertiveness skills.^{9,15} Nassazi also confirmed that training had a positive impact on employees and organizations, and it positively affected performance through the development of knowledge, the acquisition of skills, competency, and ability, and changes in behavior.¹⁴

A nurse is required to possess sufficient knowledge to face any changes and act appropriately in order to prevent conflict. Therefore, the assertive communication training aimed to ensure that the employees were able to transfer what had been taught in the six sessions and apply it at work. Transfer of training refers to the process of applying the knowledge, skill, and competence acquired from training to a person's job.¹⁶

The transfer of training process is often complicated which may affect individual knowledge, skill, and competence. The working milieu may influence the transfer of training process.¹⁷ In the present study, the working environment contributed to the decline in knowledge among participants 2 weeks after they completed the six training sessions. Working environments factors, such as the lack of medical equipment and medications and inadequate human resources may lead to distress which hinders the transfer of acquired knowledge and learning.¹⁸

Improvement in assertive communication knowledge among associate nurses in the control group was associated with their desire to inquire about assertive communication. Technological advancement also facilitates independent learning for everyone. A previous study revealed that knowledge could be gained through formal means or independent and active inquiry.¹⁹ Every nurse has a different amount of knowledge depending on his/her educational background, which is firmly correlated with development in nursing science, and this may affect his/her critical thinking ability when performing his/her duties.²⁰

Due to the training program, the nurses in the intervention group had a greater level of knowledge than the nurses in the control group. This finding coincided with Yulastris et al.'s results from a study on three different groups, that study revealed that training was the most effective method for improving assertiveness skills.¹⁵ Learning acquired from

training has been found to effectively improve knowledge, attitudes, skills, and confidence levels.²¹ Training is imperative for developing a professional identity; it helps an incorporate knowledge and establishes a relationship with his/her job and career.²² Training allows the development of a supportive working environment which eventually leads to higher motivation and improved employee performance.²³ Training has a positive effect on improving knowledge, skill, and communication which enhances a nurse's motivation to work.

The present study's finding of a decline in assertive communication knowledge 2 weeks after the training was supported by Laksono, Titin, and Suharsono's study, which reported the decline in the scores for posttest 2 that was held 2 weeks after the training.²⁴ The decline possibly resulted from higher test difficulty and the time span between the pretest the completion and the training sessions. In that study, the scores for posttest 2 (2 weeks after the training) and post test 3 (4 weeks after the training) revealed no difference in the retention of knowledge among the participants, possibly because the topics taught the training were independently relearned by the participants.²⁴ This finding suggested that individuals with a high motivation to learn would have longer retention of knowledge.

In the present study, improvement in work motivation in the intervention group participants was sustained by improvement in their knowledge. A study conducted by Sanders revealed that nurses with a higher educational background would be more assertive because they developed their assertive communication skills due to greater knowledge or more responsibility.²⁵ Zahara et al. reported that diploma or undergraduate nurses were more likely deliver a good performance because they had the sense of purpose, expectations, and knowledge needed to perform at the highest level.²⁶ Individuals with a higher educational background are expected to possess a better mindset due to the knowledge they have acquired. Saefulloh et al. and Susiha et al. reported a significant improvement in work motivation following training.^{27,28} The training resulted in higher work motivation.

In the present study, the decline in motivation was possibly due to the lack of planning by the organization's board for paying attention to the nurses' working environment, this might have hindered the nurses' ability to apply the assertive communication knowledge they acquired during the training sessions. Huber affirmed that it is substantial to manage an organization and combine nursing resources by planning and implementing management process in order to achieve the organization's nursing care and service objectives.²⁹ Proper planning would make an organization more focused. A study by Ramadhani and Jasmita indicated that 73% of associate nurses had lower work motivation that decreased their performance; this was possibly due to the nurses' perceptions that they lacked a supportive working environment. In contrast, 84% of nurses with high work motivation had a better performance due to interprofessional collaboration, which was facilitated by a supportive environment.³⁰ Providing a supportive working environment is essential for reinforcing an employee's motivation to improve his/her performance.

Maintaining work motivation requires full support from the hospital. In the present study, the improvement in

work motivation indicated that the training was effective. Rustiana stated that training helps individuals achieve effectiveness in their current or future work through action, competence, knowledge, and attitude.³¹ It is necessary to identify an individual's need in an organization in order to affirm their work commitment. Das and Baruah reported that, in today's highly competitive environment, employee feedback is crucial for an organization, and more knowledge acquired by employees, may help an organization meet its global challenges.³²

In the present study, the decrease in work motivation in the control group participants was probably due to their lack of understanding about assertive communication. Vilma and Egle's study suggested that there was a decline in work motivation among nurses who were not provided with the opportunity to attend a course that could improve their skills.³³ Furthermore, an employee who never participates in any training, seminar, or workshop would experience difficulty in improving his/her performance.³⁴

Improved work motivation made the associate nurses aware of the need to provide better nursing care. A well-motivated nurse is expected to be able to improve his/her service quality.¹ From an organizational perspective, motivated employees are crucial for continuity of service.² Makta et al. reported that nurses with an open and friendly way of communicating with other health professionals were more willing to state their opinions which led to better performance.³⁵ A health organization requires nurses with work motivation to provide the best service to achieve its objectives.

A health organization should consider the nurses' needs and attempt to address those needs to encourage its employees to be more motivated at work. A leader will be unable to motivate his/her employees without considering their needs first; hence, it is important to understand that motivation plays a pivotal role in an employee's work performance.³⁶ A leader should cooperate with the organization and its staff to promote collaboration and teamwork.³⁷ The relationship between a leader and the organizations' staff is fundamental for reinforcing work motivation.

This study found that assertive communication knowledge significantly improved between the pretest and posttest 1 as well as between the pretest and posttest 2 in both the intervention group and the control group. There was a significant improvement in work motivation between the pretest and posttest 1 as well as between pre-test and post test 2 in the intervention group. The study's findings may serve as a reference for health organizations to cooperate with competent third parties to organize assertive communication training for nurses who have not yet attended such this type of training in order to improve their work motivation; the results can also be used to encourage organizations to provide facilities for training continuity. This study recommends that future studies measure the retention of knowledge acquired from assertive communication training using a cohort design or provide intervention for individuals using Randomized Controlled Trial (RCT) design or for groups using a cluster RCT design.

Conflict of interests

The authors declare no conflict of interest.

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