

Effect of Communication Skills Training on Nurses' and Midwives' Practices: A Randomized Controlled Trial

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ABSTRACT

Background: Communication is fundamental to quality nursing and midwifery health care practices. It is one of essential ways for improving quality of care, optimizes patients outcomes, and reduces complaints of the medical team. Therefore, nurses and midwives need to be trained to communicate efficiently and effectively.

Objectives: To investigate the effect of communication skills training on nurses' and midwives' practices.

Methods: A randomized controlled trial design was conducted from 10th June 2023 to 18th February 2024. A simple random sampling was used to select 132 midwives and nurses at Gynecology and Obstetric Teaching Hospital in Karbala City of Iraq. Valid and reliable checklist tool was used to evaluate communication skills practices for both intervention and control groups, while the questionnaire used to collect demographic data. The participants for the intervention group received a communication skills training course for 10 days, while the control group wasn't received it.

Results: Both intervention and control groups did differ significantly in nurses' and midwives' practices after the implementation of communication skills training course, while both groups did not differ significantly before the implementation of training course at $p\text{-value} < 0.05$. The analysis of variance showed high statistical differences among means at overall periods of tests for intervention group regarding participants' practices ($p\text{-value} < 0.05$).

Conclusion: Based on the findings of the present study, communication skills training can improve nurses' and midwives' practices effectively. All nurses and midwives in Gynecology and Obstetric Teaching Hospital are recommended for this training course to improve their communication skills practices.

Keywords: Communication Skills, Training, Nurses and Midwives Practices, Randomized Controlled Trial

INTRODUCTION

Communication is a core component of relationships and collaboration, which are essential aspects of professional practice. It means accessing to every patient interaction and understanding the patient's experiences, concerns, and opinions. This includes using verbal and nonverbal communication skills with active listening and feedback techniques [1]. Communication as the key of nursing care, in addition it is considering a principle for nursing. So is necessary to teach communication skills for nurses [2,3]. Midwives have an important role as a health counselor and educator for women, families and society. Communication is urgent when it is warm and empathic as midwives need to relay everything from good to terrible news. It takes a great deal of self-awareness and practice to become an effective communicator. Midwives will encounter many situations in which they will need effective communication skills to utilize them. They will also use these skills with clients' families and other colleagues [4]. Based on reviewing the previous studies that showed the effective communication has direct effect on the health recovery process quality of clients and care satisfaction [5]. Moreover, the using of it does benefit patients and healthcare providers in the job satisfaction as well as health in healthcare settings [6,7]. Peplau interpersonal relations theory identified four phases of the nurse-patient relationship: (orientation, identification, exploitation, and resolution). She describes the importance of the nurse-patient relationship as a significant, therapeutic interpersonal process [8]. When this theory applied, it indicated to decrease moral distress, increased patients' satisfaction concerning

nursing care, and patient to nurse trust [9]. Effective communication is a crucial element of interactions between nurse and patient as well as a fundamental of nursing care. When communication between nurse and patient happened is patient centered, it becomes therapeutic and permits for trust and mutual respect in the care process [10]. Increasing nursing communication can decrease medical errors and improving safe and effective practices in hospitals [11]. Communication represents is one of the eight domains of the quality of the perinatal care within framework proposed by the World Health Organization [12]. Effective communication by maternity care team can aid a woman during labor and delivery to has a positive birth experience [13]. According to researches recommended that communication skills training should be included in the midwifery and nursing educational curriculum to enhance effective communication, decrease moral distress and improve their practices [14,15]. In other side, poor communication with patients caused many obstacles such as: health problems are not solving, reduce patients satisfaction and obedience [16]. Health care providers must be as proficient in communication skills as they are in clinical skills. Skilled communication can save lives [17]. Communication training had a positive effect on patients' and health care providers' satisfaction; therefore it is suggested that they should be trained [18].

OBJECTIVES

To investigate the effect of communication skills training on nurses' and midwives' practices.

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METHODS

Study design and participants

A randomized controlled trial study was carried out at Gynecology and Obstetric Teaching Hospital in Karbala City, Iraq from 10th June 2023 to 18th February 2024. Participants were randomly assigned through using of a simple random sampling. Inclusion Criteria included the nurses and midwives who were had employment period ≥ 1 year. Exclusion Criteria included those who were had employment period < 1 year, who were transferred to other hospital during study period, who were not participating in post-tests or absent from the training sessions in the intervention group, and who were absent from an assessment (base line or pre-test) for both groups of study. Sample size was calculated based on Steven equation ^[19] in the following formula:

$$n = \left[\frac{N \times p(1-p)}{N-1 \times (d^2 \div z^2) + p(1-p)} \right]$$

Where: n: Sample size is 132 nurses and midwives at confidence level 95%, N: Total population (200), p: Probability (0.50), z: Confidence level at 95% = (1.96), and d: Standard Error (0.05). Simple random sampling did use in this study for choosing 132 subjects, 66 of them for each one group. 32 of them were dropout from both intervention and control groups at the actual study initiation, those dropout subjects excluded from actual sample to become 100 participants, 50 of them for each one group of study. the researchers collected the data by checklist tool and evaluated the nurses' and midwives' communication skills practices without any manipulations (communication skills training sessions did not apply) for both intervention and control

groups in pretest. After that, only intervention group subjects exposed to communication skills training course and posttest1 was done for their practices immediately. Then follow up (posttest2) after one month of posttest 1 was done for only intervention group as shown in figure 1

Data collection instruments

Data collection was performed throughout questionnaire and practices checklist instruments. Questionnaire included demographic variables which were: (age group, level of educational, workplace in hospital, years of employment). Practices checklist included 16 items. It was developed to evaluate nurses' and midwives' practices regarding communication skills. Checklist was used by the researchers for five observations (clients) for each study subject (nurse or midwife). All items are rated on a three-point Likert-type scale (implemented = 3, sometimes = 2, don't implement = 1). After construction of data collection instruments and training course, face and content validity of the study tool were assessed by group of 16 experts. They were: 9 experts from Gynaecological and Obstetric Teaching Hospital as well as 7 academic members from Baghdad University – College of Nursing and Middle Technical University–Technical Medical Institute. The tools were distributed to the assess its comprehensiveness, clarity and accuracy. These were rephrased based on the experts' opinion. Based on their recommendations; modification and additions of some items were done. A pilot study was conducted for two weeks at July 2023 on 10 nurses and midwives and those were excluded from the main study sample. The reliability of the checklist tool was assessed through a pilot study and the Cronbach's alpha was (0.98). All participants completed the questionnaire at hospital and returned it to the researcher the same day.

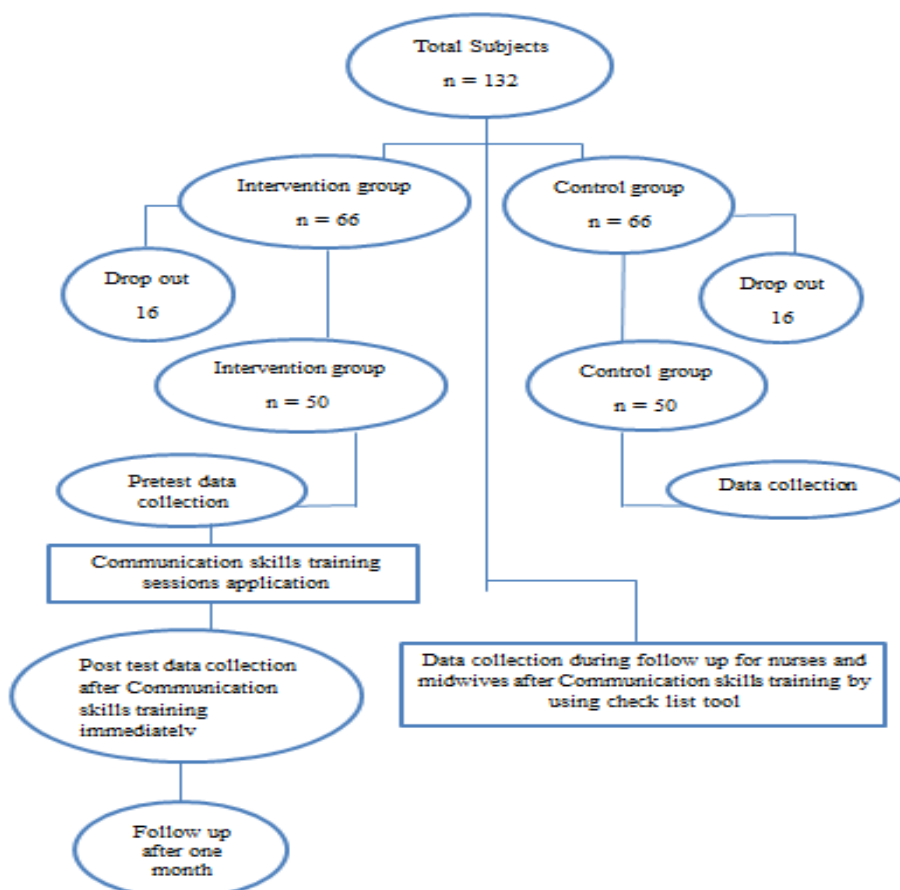


Figure (1): Consort Flowchart Diagram of The Study

Intervention

The training course sessions construction depended on reviewing of literatures. The syllabus of the training course was evaluated by experts. The intervention group was received sessions of training course for 10 consecutive days in the Gynecology and Obstetric Teaching Hospital after the formal administrative approval was obtained. While, the control group no received. Training course included: meaning and purpose of communication skills, aims of successful communication, elements and principles of communication, verbal and nonverbal communication skills and barriers. The methods of training were: Role play method (each participant of study sample plays a nurse or midwife role with another of them as client role), videos, lectures and discussions. Before the implementation of the training course, all the participants for both groups did examine pre-test in order to evaluate their practices as a baseline. intervention group exposed to post test at the end of training course immediately. Then those did expose to the follow up after one month from the end of the course.

Ethical Considerations

Before initiation the study, formal administrative approval was obtained and written consent was obtained from each nurse and midwife prior to participate in the study. objectives of the study was informed to each participant before data collection. Data was confidential and using coding system for it.

Data Analysis

The data were analyzed in the statistical package of social sciences (SPSS) version 23. Frequencies, percentages, arithmetic means, and standard deviations were calculated for descriptive statistics.

Inferential statistics were used to compare the means, an independent t-test to compare means between two groups. The paired t-test was used to compare the means before and after the training manipulation of the intervention group. Analysis of variance (ANOVA) was used to compare means among three periods for intervention group. The significance level was set at < 0.05 .

RESULTS

Both intervention and control groups were homogenous in demographic characteristics of age group, educational level, workplace in hospital, years of employment. Analysis of participants' demographic characteristics ensured equivalence in both groups and there were no statistical significant differences between both groups related to demographic variables. The highest percentages of participants for the two groups with age group (25 - 29 years old). (26%) of participants in the intervention group had nursing secondary school certification, while (28%) of them for control group had nursing diploma level. (30%) of intervention group subjects work in gynecological wards, while (22%) of control group subjects work in emergency. The highest percentages for both groups had (10 – 14) years of employment [Table1]. The paired samples t-test showed the high mean scores in posttest for intervention group and participants' practices did differ between the pretest and posttest at $p\text{-value} < 0.05$ [Table 2]. The independent samples t-test showed that the two groups did not differ significantly in their pretest at $p\text{-value} < 0.05$ [Table 3A]. While, it showed the two groups did differ significantly in their posttest time at $p\text{-value} < 0.05$ [Table 3B]. An Analysis of variance (ANOVA) was used to compare the means at three periods in the intervention group. An ANOVA indicated to the significant differences among means at three tests (pre, post1, post2) of intervention group regarding participants' communication skills

Table 1. Demographic characteristics of participants for both groups

Demographic Variables	Intervention (n ^a =50)	Control (n =50)	P-Value ^d
Age Group (years)	F. ^b % ^c	F. %	
≤ 24	11 (22%)	11 (22%)	0.12
25 – 29	17 (34%)	30 (60%)	
30 – 34	6 (12%)	2 (4%)	
35 – 39	7 (14%)	2 (4%)	
40 – 44	4 (8%)	2 (4%)	
≤ 45	5 (10%)	3 (6%)	
Level of Educational			
Nursing secondary school	13 (26%)	12 (24%)	0.77
Midwifery secondary school	10 (20%)	12 (24%)	
Diploma in Nursing	11 (22%)	14 (28%)	
Diploma in Midwifery	10 (20%)	8 (16%)	
Master or Doctorate level	6 (12%)	4 (8%)	
Workplace in Hospital			
Gynecological Wards	15 (30%)	8 (16%)	0.56
Neonate Intensive Care Unit	9 (18%)	10 (20%)	
Delivery Room	9 (18%)	9 (18%)	
Surgery Room	6 (12%)	5 (10%)	
Emergency	5 (10%)	11 (22%)	
Infertility	6 (12%)	7 (14%)	
Years of Employment			
1 – 4 years	8 (16%)	7 (14%)	0.94
5 – 9 years	15 (30%)	15 (30%)	
10– 14 years	16 (32%)	17 (34%)	
15 – 19 years	6 (12%)	7 (14%)	
≤ 20 years	5 (10%)	4 (8%)	

^a Number of Sample, ^b Frequencies, ^c Percentages, ^d Probability value

Table 2. Comparing means between pretest and posttest for intervention group

No.	Items	Pretest	Posttest	t ^b	P.v ^c
		MS ^a	MS		
1.	Welcome client with respect	1.64	2.92	15.800	0.00
2.	Invite the client to speak freely and ask questions during the interview	1.66	2.82	10.038	0.00
3.	Ask open-ended questions	1.62	2.80	9.819	0.00
4.	Eye contact with the client	1.52	2.88	12.832	0.00
5.	Attention to the client	1.50	2.90	13.590	0.00
6.	Waiting for an answer from the first question and then asking another one	1.40	2.86	16.484	0.00
7.	Listening to client actively	1.02	2.78	28.847	0.00
8.	Using a voice tone that appears friendliness and interest	1.40	2.88	16.188	0.00
9.	Responding to the client with positive words	1.32	2.92	22.862	0.00
10.	Encourage client ask questions by using expressions like “yes,” and “and then what?”	1.72	3.00	10.548	0.00
11.	Respond to all inquiries and comments of the client	1.00	2.94	57.182	0.00
12.	Verify that the client has understood the information	1.00	2.78	30.079	0.00
13.	Let the client to repeat the information	1.00	2.80	31.500	0.00
14.	Encouraging the clients to back if they have questions or problems	1.00	2.82	33.161	0.00
15.	Give the client an opportunity to summarize the conversation	1.02	3.00	99.000	0.00
16.	Looks comfortable when giving counseling	1.18	3.00	26.704	0.00

^a Mean Score, ^b Paired t-test, ^c Probability value at P < 0.05**Table 3.** Differences between intervention and control groups

3A. Differences between intervention and control groups at pretests					
Samples Groups	Descriptive statistics		Independent samples test		
	N ^a	Arithmetic Mean	t ^b	df ^c	Sig. (2-tailed) ^d
Intervention Group	50	20.84	1.905	98	0.060
Control Group	50	19.22			
3B. Differences between intervention and control groups at posttest					
Intervention Group	50	46.10	48.091	59.428	0.000
Control Group	50	18.84			

^a Number of sample, ^b Independent t-test, ^c degree of freedom, ^d Significant**Table 4.** Comparing the means of three tests for intervention group (n=50)

Tests	\bar{X} ^b	SD ^c	ANOVA ^a		df ^f	M. Square ^g	F ^h	Sig. ^j
			S.O.V ^d	SS ^e				
Pretest	18.84	3.81	Between Groups	24482.893	2	12241.447		
Post-1	46.10	1.25	Within Groups	853.800	147	5.808	2107.63	0.000
Post-2	45.78	1.17	Total	25336.693	149			

^a Analysis of Variance, ^b Arithmetic Mean, ^c Standard Deviation, ^d Source of Variance, ^e Sum of Squares, ^f degree of freedom, ^g Mean Square, ^h Calculated F Value, ^j Significant

practices. Also revealed that nurses and midwives in the intervention group had significant increases in mean at posttest periods. While, the highest standard deviations at pretest [Table 4].

DISCUSSION

The current study showed a positive effect of communication skills training course upon nurses' and midwives' practices. This training is a better intervention to improve their practices at different departments of hospital (Gynecological Wards, Neonate Intensive Care Unit, Delivery Room, Surgery Room, Emergency and Infertility). Evidence revealed that effective communication is important for the health care staff to be performed the fundamental care functions toward patients. Therefore, they should be trained on the communication skills with

patients. Without efficient communication, the holistic health system would not work [20]. The findings of this study are consistent with Karimi et al (2013) who investigated that communication skills training is a good intervention to enhance the quality of care [21]. Also another study finding proved that increasing the nurse's communication skills and elevation in quality of nursing care due to training [22]. It can improve nurses' and clinicians' of their ability to practice a communication task as self-efficacy [23]. Systematic review study for seven intervention trials proved the potential for communication skills training to improve nurses' interactions with patients. Development, implementation and evaluation of a broad range of training courses are needed [24]. The findings from this study are consistent to the findings from a similar study that showed there was a positive effect on the

midwives' communication skills [25]. Some studies recommended that communication skills training should be established as a course in nursing and midwifery practical curriculum to improve professional care and facilitate their relationships [26,27]. Furthermore, all health care providers should train and reinforce those skills in daily practices, with patients and with other health care team. Effective communication provides safer care, reduces the risk of complaints, therefore it is necessary to accomplish high quality health care [28]. In maternity hospital, nurses and midwives spend more time with patients than any other healthcare professional. Therefore, effective communication is a core skill for nursing and midwifery staff in particular.

CONCLUSION

The research demonstrated the effectiveness of a communication skills training course in nurses' and midwives' practices. Since communication is important to optimal professional performance, midwives and nurses are recommended to train and implement communication skills-based interventions as a practical. Midwives and nurses who participated in communication skills training course have shown better communicative behaviors. Therefore, this training course should be revised and incorporated into the nursing and midwifery curriculum. This will help optimize patient outcomes.

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Ethics of approval and consent to participate: Ethical considerations in this study included obtaining formal administrative approval was obtained and written consent was obtained from the participants to participate in the study.

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Potential Conflict of Interest: None

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REFERENCES

1. Sibiya MN. Effective Communication in Nursing [Internet]. Nursing. InTech, 2018. Available from: <http://dx.doi.org/10.5772/intechopen.74995>
2. World Health Organization (WHO). Global strategic directions for strengthening nursing and midwifery 2016-2020 [Internet]. 2016. Geneva: WHO [cited 2023 Aug 25]. Available from: <https://www.who.int/publications/i/item/9789241510455>
3. Namdar H, Rahmani A, Ebrahimi H. The effect of a skill-training model on nursing students' skills in communicating with mental patients. *IJME* 2009;8(2):323-32.
4. Terri R, MEd, RCC. Effective communication. comprehensive midwifery: the role of the midwife in health care practice, education, and research [Internet]. Press books, 2017 [cited 2023 Aug 22]. Available from: <https://ecampusontario.pressbooks.pub/cmroleofmidwifery/chapter/effective-communication/>
5. Taghizadeh R, Shakhaei S, Sadagheyani H, et al. The effect of teaching communication skills to nursing students on the quality of care for patients. *AJP* 2018; 12(4):1252-5.
6. Norgaard B, Kofoed P, Kyvik K, et al. Communication skills training for health care professionals improves the adult orthopedic patient's experience of quality of care. *Scand J Caring Sci* 2012;26(4):698-704.
7. Tabiee S, Vagharseyyedin S, Izadpanah A, et al. The relationship of communication skills with job satisfaction among hospital nursing staff. *Mod Care J* 2018;15(3):e81590.
8. Alligood MR. Nursing theorist and their work. 8 th ed. USA: Elsevier, 2013.
9. Cheraghi F, Khatiban M, Brzou R, et al. Application of peplus' theory of interpersonal relations in nursing practice / A systematic review study. *SJNMP* 2017;3(2):1-11.
10. Kawame A, Petruca PM. A literature – based study of patient – centered care and communication in nurse – patient interactions: barrier, facilitators, and the way forward. *BMC Nurs* 2021;3(20):158.
11. Hassan Isyaku. Avoiding medication errors through effective communication in healthcare environment. *MHE* 2018;7(1):113-26.
12. Tunçalp O, Pena-Rosas J, Lawrie T, et al. WHO recommendations on antenatal care for a positive pregnancy experience—going beyond survival. *BJOG* 2017;124(6):860–2.
13. Nunes V, Gholitabar M, Sims J, et al. Intrapartum care of healthy women and their babies: summary of updated nice guidance. *BMJ* 2014;349:g6886.
14. Rezaei-Abhari F, Khorshidi S, Pourasghar M, et al. Effect of workshop training on midwives' communication skills and maternal satisfaction in maternity block. *JN Midwifery Sci* 2019;6(4):157- 63.
15. Dehghani A, Sobhanian M, Jahromi M. The effect of communication skills training on nurses' moral distress: a randomized controlled trial. *Electron J Gen Med* 2022; 19(6):em404.
16. Vermeir P, Vandijck D, Degroote S, et al. Communication in health care: A narrative review of the literature and practical communications. *Int J Clin Pract* 2015;69(11):1257-67.
17. American Association of Critical-Care Nurses (AACN). Skilled communication [Internet]. USA: 2024. AACN [cited 2023 Sep 15]. Available from: unication
18. Baghianimoghadam M, Esfandiari R, Nazari M. Comparison of the effect of written or speech communication skills training of health staff on clients' satisfaction of shiraz health centers. *TB* 2012;11(1):32-40.
19. Thompson SK. Sampling. 3rd ed. USA: John Wiley & Sons, 2012.
20. Alnaser FA. Effective communication and its role on patient's health. *J Clin Case Rep* 2016;6(2):70.
21. Moonaghi H, Taheri N, Behnam H, et al. The effect of communication skills training on the quality of nursing care of patients. *EBCJ* 2013;2(4):37-46.
22. Khodadadi E, Ebrahimi H, Moghaddasian S, et al. The effect of communication skills training on quality of care, self-efficacy, job satisfaction and communication skills rate of nurses in hospitals of Tabriz, Iran. *J Caring Sci* 2013;2(1):27–37.
23. Ammentorp J, Sabroe S, Kofoed P, et al. The effect of training in communication skills on medical doctors' and nurses' self-efficacy / A randomized controlled trial. *Patient Educ Couns* 2007;66(3):270-7.
24. Kerr D, Ostaszkievicz J, Dunning T, et al. The effectiveness of training interventions on nurses' communication skills: A systematic review. *Nurse Educ Today* 2020;89:104405.
25. Golshahi S, Kheiri S, Rabiei M, et al. Study on the effect of virtual communication skills education with a cognitive behavioral approach on communication skills of midwifery personnel in healthcare centers. *JMDC* 2022;11(4):157-63.

26. Abo-Elyzeed S, Elnehrawy S, Mahmoud M. Effect of educational program on nursing school students' communication skills used with hospitalized patients. *EJHC* 2020;11(4): 173-89.
27. Khadivzadeh T, Katebi M, Sepehri Shamlou Z, et al. Assessment of midwives' communication skills at the maternity wards of teaching hospitals in Mashhad in 2014. *JMRH* 2015;3(3):394-400.
28. Travaline J, Ruchinskas R, Alonzo G. Physician-patient communication: why and how. *J Am Osteopath Assoc* 2005;105(1):13-8.