Original Research Article

Outcome of communicative competence in a 2-day communication skills training for nursing and midwifery students - a randomized controlled trial

ABSTRACT

Aims: To compare the outcome of empathy of a 2-day communication skills training (CST) in an intervention and a control group of nursing and midwifery students in a randomized controlled trial.
Study design:A pre-test post-test design study in a randomized control trial was used.
Place and Duration of Study: Tamale Nursing and Midwifery College, Ghana.Baseline data was collected at the end of August 2014. Six-month follow-up took place in early March 2015.
Methodology:
In all 230 participants were eligible. They weremade up of nursing (n = 181) and midwifery (n = 49) students from Tamale Nurses and Midwives College in Tamale, Ghana. A sample of 210 (nursing 104 = and midwifery = 106) were randomized into an intervention and a control group.Both groups had a 2-day CST each at different times. Both groups had a baseline test (T1) at the same time. The intervention group had a CST, followed by post-test (T2) on day 3. The control group had post-test (T2) on day 4 just before their CST. The outcome was communicative competence measured with communicative competence questionnaire. Both groups had a follow-up test (T3) at the same time, six months after the CST. All data were analysed using SPSS.
Results: The results showed there was no statistically significant difference in the scores of communicative competence between the intervention and the control group [$F(1, 171) = 1.53$, $P = .218$].
Conclusion: In this study there was no evidence that communicative competence can be enhance following a 2-day communication skills training.

Keywords:*communication competence, communication, skills, nurses, midwives*

1. INTRODUCTION

The use of an effective communication in health delivery underpins the practice and delivery of quality health `. It is important that nurses and midwives are able to communicate effectively with patients such that they can provide the needed services that are well understood[2]. Research has it that there is a need for effective communication by nurses and midwives in health delivery[3]. Researchers have demonstrated how effective communication leads to better health consequences[4, 5] and it is also critical to health delivery[6].

The field of medicine has always been achieved through an effective communication with patients throughout history [7]. The skill of communication is said to be innate but can also be acquired through experience[8]. Therefore, training in effective communication has been given prominence in all health professions[9–12].

Ineffective communication, on the other hand, may result in an increased frequency of medical errors, stress, tasks difficulties, delays inpain control, and may reduce quality of patient care [10]. It is for these reasons, effective communication has been part of nursing and midwifery training[11].

Effective communication skills enable nurses and midwives to get to know their patient and, ultimately, to diagnose and to meet patients' need for healthcare. Many experienced nurses and midwives identify the quality of their interpersonal relationships as a significant portion of determining their helper effectiveness [12].Studies have shown practical communication is better than the use of discussion [13, 14].Some researchers have indicated that simulations [15–17] and role-play [18–21] are effective instructional methods for developing communication skills including opening and closing

consultations, conducting the consultation in a logical manner, improving body language, using language at the level of understanding of the patient, and using clear verbal and written communication. A number of studies have used objective structured clinical exams (OSCE) where a marking scheme is used to evaluate different components of communication whilst ensuring a more standardised assessment for all students [22–25].

Human communication is a complex process that involves the exchange of ideas, thoughts and feelings, and people communicate continuously through verbal and nonverbal means [26]. It is important that nurses appreciate the importance of effective communication in nursing practice, especially in relation to its purpose and function in their interaction with patients. Communicative componence is an important element in the way nurses and midwives are able to pass on information to patients.

Effective communication in nursing and midwifery practice involves the ability to understand patients' experiences of health and diseases and to convey meaningful information to patients that promotes their well-being. It also provides patients the opportunity to participate in their care to the extent that they wish. This means that nursing communication in healthcare is focused mostly on the patient's well-being.Patients' needs therefore must drive midwifery and nursing communication [26].

This study sought to compare the outcome of communicative competence of a 2-day communication skills training (CST) in an intervention and a control group of nursing and midwifery students in a randomized controlled trial (RCT).

2. METHODOLOGY

2.1 Design and Sample

This study was pre-test post-test design in a randomized controlled trial (RCT) to compare the outcomes of a 2-day CST programme on two groups of second year students. In all 230 participants were eligible.They weremade up of nursing (n = 181) and midwifery (n = 49) students from Tamale Nurses and Midwives College in Tamale, Ghana. A sample of 210 (nursing 104 = and midwifery = 106) were randomized into an intervention and a control group.

2.1.1 Power

The sample size of the participants was based upon a power analysis. Relationship have been shown between training interventions and improved communication skills, measured with Roter Interaction Analysis System (RIAS), with an effect size between medium and high [27]. Fixing the effect size medium (d = 0.25), using a two-tail significance test (P = 0.05), a sample size of 197 will result in an acceptable power coefficient of 0.95 [28].

2.1.2 Inclusion and exclusion criteria

Nursing and midwifery students in their second year of studies at the Tamale Nurses and Midwifery College (TNMC), Tamale-Ghana were eligible to take part in this intervention study (Table 1).

Table 1: Inclusion and exclusion criteria

Inclusion criteria
• Nursing and midwifery students in their second year at TNMC.
• Nursing and midwifery students whose ages were above 18 years
• Nursing and midwifery students in TNMC who would be available for follow-up data collection after 6 months.
Exclusion criteria
• Nursing and midwifery students who were not studying at TNMC.
• Nursing and midwifery students whose ages were below 18 years
• Nursing and midwifery students in TNMC who would not be available for follow-up data collection after 6 months.

2.1.3 Ethical approval and informed consent

Ghana Health Service in Tamale, Tamale Teaching Hospital, granted ethical approval for this study. Written informed consent was obtained from each student before her or his participation. Participants were informed that they could decline to participate or can withdraw at any time without detriment to their studies in the college.

2.2 Outcome measure

Communicative competence questionnaire [29] which was used had the domains of general competence, empathy affiliation/support, behavioral flexibility, and social relaxation.Wiemann[29] created the communicative competence questionnaire to measure communicative competence.Subjects use the communicative competence questionnaire to assess another person's communicative competence by responding to 36 items using Likert questionnaire that ranges from strongly agree (5) to strongly disagree (1).

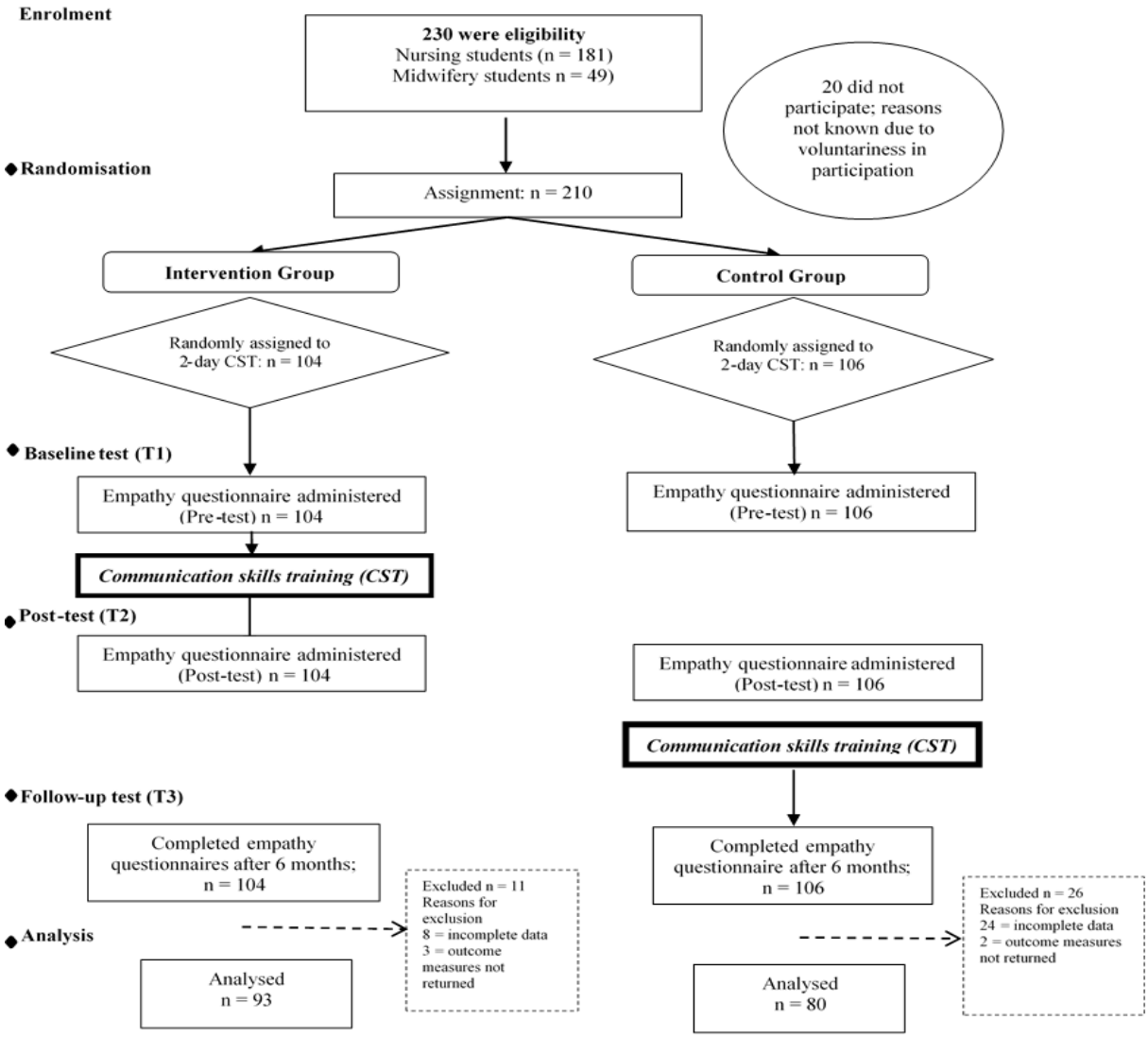
2.2.1 Scoring

In dealing with incomplete and missing data, a respondent must answer at least 80% of all items; otherwise, the questionnaire was regarded as incomplete and excluded from the data analysis. If a respondent fails to answer 20% or fewer items, the missing values would be replaced with the mean score calculated from the items the respondent completed. The total score is the sum of all item scores. The maximum total score for each participant was 180 and the minimum score was 36. Higher total scores indicated higher communicative competence whereas lower total scores indicated lower communicative competence.

2.3 Procedure

This study involved both nursing and midwifery students in the second year of studies at Tamale Nursing and Midwifery College, Tamale, Ghana. Participants were randomly assigned to either an intervention or a control group.The nursing and midwifery students were separated before they were randomly assigned to ensure that both professions were approximately equally represented in the intervention group and the control group.

Both groupshad a baseline data collection (T1) at the same time. The intervention group had a CST, followed by post-test (T2) on day 3. The control group had post-test (T2) on day 4 just before their CST. The outcome was communicative competence measured with communication competence questionnaire. Both groups had a follow-up test (T3) at the same time six months after the CST (Fig. 1).



Legend:
CST = Communication skills training
T1 = Baseline test
T2 = Post-test
T3 = Follow-up test

Fig. 1: Flowchart showing enrolment, randomization, CST, and data collection

2.4 Communication skills training

Researchersagreethat effective communication enhances quality health delivery [33–35]. Fisher [58] have reported an improvement communication skills nurses and midwives with the use of Four Habits Model.

The main topics of the CST based on the Four Habits Model are:

(i) Invest in the beginning of the encounter to create rapport and set an agenda.
(ii) Elicit patients' perspective.
(iii) Demonstrate empathy to provide opportunity for patients to express emotional concerns.
(iv) Invest in the end to provide information and closure.

Trainers during the training process informed participants of the need to provide holistic healthcare, working with patients beliefs and values, engagement, shared decision, and having sympathetic presence as provided by McCormack and McCance [61].

The researcher (Mustapha Alhassan) who was the main trainer designed and developed the training guide using the Four Habits Model and Person-Centred Nursing Framework by McCormack and McCance [61]. Subsequently, the researcher trained a co-trainer (Ahmed Abdul-Majeed) to assist in the CST as well as in the data collection. The trainers used various methods to deliver the training. The methods were small group discussions, brainstorming, personal experience from participants, group reports, questions and answers, videos and summaries. Therefore, the training was based on shared agenda. This approach makes it possible for participants to share their previous training knowledge and ideas.At the end of the training participants were provided with photocopies of some relevant material as well as reference books and literature that will be useful for nurses and midwives to have effective communication with patients.

3. RESULTS

3.1 Demographic information

Demographic data in this study were age, gender, specialty (nursing or midwifery), marital status, number of children, ethnicity, and academic writing and communication. A total of 173 participants data were analysed from the intervention and control groups. Table 1 displays the demographic characteristics of the participants. The age distribution showed most students were in the age range of 19 to 30 years (n = 160, 92.5%). There were no students whose ages were below 18 year and above 31 years (Table 2).

In terms of gender the percentage of female nursing and midwifery students (n = 112; 64.74%) were more than the male nursing and midwifery students (n = 61; 35.26%) and most of the participants were in the nursing specialty (n = 131; 75.72%) as compared to the midwifery specialty (n = 42: 24.28%) (Table 2). The results also showed that most of the students were unmarried (n = 160; 92.49%) as compared to those who were married (n = 13; 7.51) (Table 1). The results further showed that a greater majority (n = 127; 73.41%) had 4 months (1 semester) of academic writing and communication (AWC) as compared to those who had no AWC (n = 23; 13.29%), 2 weeks AWC (n = 1; 0.58%), 1 month AWC (n = 1; 0.58%), 2 months AWC (n = 1; 0.58%), 3 months AWC (n = 5; 2.89%), 2 semester AWC (n = 11; 6.36%), 3 semesters AWC (n = 3; 1.73%), and above 4 semesters AWC (n = 1; 0.58%) (Table 2).

Table 2: Demographic data for this intervention study

Characteristics		Intervention Group (n = 93)		Control Group (n = 80)	
		n	%	n	%
Age	> 18 years	5	5.38	1	1.25
	19 – 21 years	42	45.16	32	40.00
	22 – 24 years	41	44.09	45	56.25
	25 – 27 years	2	2.15	1	1.25
	28 – 30 years	3	3.23	1	1.25
	31 years and above	0	0	0	0
Gender	Female	68	73.12	44	55.00
	Male	25	26.88	36	45.00
Speciality	Nursing student	62	66.67	69	86.25
	Midwifery students	31	33.33	11	13.75
Marital Status	Married	2	2.15	9	11.25
	Unmarried	90	96.77	70	87.50
	Divorced	1	1.08	1	1.25
Religion	Christianity	51	54.84	30	37.50
	Islam	40	43.01	48	60.00
	Other	2	2.15	2	2.50
Do you have children	Yes	1	1.08	8	10.00
	No	92	98.92	72	90.00
Number of children	No child	92	98.92	72	90.00
	1 child	1	1.08	2	2.50
	2 children	0	0	4	5.00
	3 children	0	0	2	2.50
	4 children and above	0	0	0	0
Ethnicity	Akan	11	11.83	5	6.25

	Dagomba	28	30.11	34	42.50
	Ewe	2	2.15	5	6.25
	Fanti	6	6.45	3	3.75
	Frafra (Grunsi)	10	10.75	2	2.50
	Ga-Adangme	3	3.23	0	-
	Gonja	8	8.60	3	3.75
	Kotokoli	0	0	3	3.75
	Basare/Bisa	0	0	2	2.50
	Kasina/Bulsa	0	0	3	3.75
	Dagati/Sisala	5	5.38	4	5.00
	Other tribes	20	21.51	16	20.00
Academic writing and communication (AWC)	None	10	10.75	13	16.25
	1 week	0	0	0	0
	2 weeks	0	0	1	1.25
	3 weeks	0	0	0	0
	1 month	1	1.08	0	0
	2 months	0	0	1	1.25
	3 months	3	3.23	2	2.50
	4 moths (1 semester)	70	75.27	57	71.25
	2 semesters	5	5.38	6	7.50
	3 semesters	3	3.23	0	0
	4 Semesters	0	0	0	0
	Above 4 semesters	1	1.08	0	0

n = sample size in a group; AWC = academic writing and communication

3.2 Descriptive statistics of communicative competence

The results showed no changes in the intervention group from baseline – T1 (M = 131.90; SD = 11.29) to post-test – T2 (M = 132.25; SD = 11.15) and the control group from baseline – T1 (M = 133.64; SD = 12.89); to post-test– T2 (M = 133.65; SD = 12.89). However, there were slight increases in the intervention from baseline –T2 (M = 131.90; SD = 11.29) to follow-up after 6 months – T3 (M = 132.86; SD = 11.07) and the control group baseline –T2 (M = 133.65; SD = 12.89) to follow-up after 6 months – T3 (M = 134.80; SD = 10.98) (Table 3).

Table 3: Descriptive statistics of communicative competence

Time	Group	N	M	SD	SE	Min.	Max.
Post-test (T2)	Control	80	133.64	12.870	1.439	99	156
	Intervention	93	132.25	11.152	1.156	104	160
Follow-up test (T3)	Control	80	133.65	12.889	1.441	99	156
	Intervention	93	132.86	11.065	1.147	99	153
	Control	80	134.80	10.981	1.228	107	169

N = total sample size; M =mean score; n = sample size in a particular group
SD = standard deviation; Min. = minimum; Max. = maximum

The results further showed there was no statistically significant difference in the scores of communicative competence between the intervention and the control group [$F(1, 171) = 1.53$, $P = .218$] (Table 4).

Table 4: Inferential statistics communicative competence

Source	Type III SS	df	MS	F	*P*
Intercept	9153895.28	1	9153895.28	37878.68	.000
Group	369.47	1	369.47	1.53	.218
Error	41324.46	171	241.66		

* Significance level $P = .05$; SS = Sum of Squares; df = degrees of freedom; MS = Mean Squares; F = Statistic; P = Significance level

In this study there was no statistically significant effect between CST, the scores of communicative competence and the demographic variables of gender, age, marital status, specialisation, AWC, ethnicity, and religion (Table 5).

Table 5: Effect of the CST, the scores of communication competence, and the demographic variables

Source	Type III SS	df	MS	F	*P*
Intercept	54,905.07	1	54,905.07	224.49	.000
Group x Gender	157.40	2	78.70	0.32	.725
Group x Age	623.71	2	311.85	1.28	.282
Group x Marital Status	92.64	2	46.32	0.19	.828
Group x Specialisation	294.02	2	147.01	0.60	.549
Group x Religion	402.69	2	201.35	0.82	.441
Group x Ethnicity	341.46	2	170.73	0.70	.499
Group xAWC	179.75	2	89.88	0.37	.693
Error	38,643.49	158	244.58		

* Significance level *P*< .05;SS = Sum of Squares; df = degrees of freedom; MS = Mean Squares; F = Statistic; *P* = Significance level

4. Discussion

Communicative competence questionnaire[29]which was used had the domains of general competence, empathy affiliation/support, behavioral flexibility, and social relaxation.

The findings in this study showed no improvement in the communicative competence between the intervention and the control group. This is in contrast to the findings by Park et al. [64] who conducted a study to determine the relationships among individual communication competence, self-efficacy, and job satisfaction in Korean nurses in an emergency medical center.They found the relationship between communication competence and self-efficacy were strong. This can be explained with the reason that generally people who have high self-efficacy turn to be confident in whatever they are doing including their communication competence.

This study contradicts findings from McLaughlin and Cody [65] where they reported that people in conversations in which there were multiple lapses of time rated each other lower on communicative competence.

One study found a relationship existed between communication competence and communication adaptability [30], and interpersonal communication apprehension [31]. As earlier indicated when people continue to practice whatever they are doing they become confident and with time are able to improve upon it.

Also, Street et al. [66] found that people in conversations speech rate, vocal back channeling, duration of speech, and rate of interruption were related to their communicative competence scores; they also found that people in conversations rated their partners significantly more favorably than did observers. This could be because generally people easily understand each other better when they live together.

Douglas [67]testifiedan inverse relationships between communicative competence and uncertainty and apprehension during initial meetings. Query et al. [32] also found that non-traditional students, those high in communicative competence, had more social supports and were more satisfied with these supports. This can be explained by reason that social support usually has a moderating role in communication competence.

5. CONCLUSION

The findings in this study showed no improvement in the communicative competence between the intervention and the control group. Enhancing communication competence may require that after the skills training students are given the opportunity to practice before an evaluation. This study only examined the impact of the CST 6-months post-training, possibly researchers should consider a longer-term follow-up to determine the effectiveness of the communication skills training. In addition, CST in a multi-location can be beneficial.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

CONSENT

The author declares that 'written informed consent was obtained from the patient (or other approved parties) for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal."

ETHICAL APPROVAL

The authors declare that all experiments have been examined and approved by the appropriate ethics committee(The Research and Monitoring Department of Tamale Teaching Hospital, Tamale – Ghana, approval number is TTH/R6M/SR/13/12) and have therefore been performed in accordance with the ethical standards laid down in the 1964 declaration of Helsinki."

REFERENCES

1. Okaya K. Reliance between a patient and a nurse. Nursing Today. 1995;10:6–11.

2. Schuster PM. Communication: The Key to the Therapeutic Relationship. F.A. Davis; 2000.

3. Ito M, Lambert VA. Communication effectiveness of nurses working in a variety of settings within one large university teaching hospital in western Japan. Nurs Health Sci. 2002;4:149–53.

4. Stewart MA. Effective physician-patient communication and health outcomes: a review. CMAJ. 1995;152:1423–33.

5. Stewart M, Brown JB, Boon H, Galajda J, Meredith L, Sangster M. Evidence on patient-doctor communication. Cancer Prev Control. 1999;3:25–30.

6. Mullan BA, Kothe EJ. Evaluating a nursing communication skills training course: The relationships between self-rated ability, satisfaction, and actual performance. Nurse Educ Pract. 2010;10:374–8.

7. Maguire P. Communication Skills for Doctors: A Guide for Effective Communication with Patients and Families. Taylor & Francis; 2000.

8. Evans RG. Patient centred medicine: reason, emotion, and human spirit? Some philosophical reflections on being with patients. Med Humanities. 2003;29:8–14. doi:10.1136/mh.29.1.8.

9. Wikström B-M, Svidén G. Exploring communication skills training in undergraduate nurse education by means of a curriculum. Nursing Reports. 2011;1:7. doi:10.4081/nursrep.2011.e7.

10. Thomas CM, Bertram E, Johnson D. The SBAR communication technique: teaching nursing students professional communication skills. Nurse Educ. 2009;34:176–80.

11. Weissman GV. Evaluating associate degree nursing students' self-efficacy in communication skills and attitudes in caring for the dying patient. Teaching and Learning in Nursing. 2011;6:64–72. doi:10.1016/j.teln.2010.10.004.

12. (CSFN.) CT, Lillis C, LeMone P. Fundamentals of Nursing: The Art and Science of Nursing Care. Wolters Kluwer Health/Lippincott Williams & Wilkins; 2011.

13. Parry RH, Brown K. Teaching and learning communication skills in physiotherapy: what is done and how should it be done? Physiotherapy. 2009;95:294–301.

14. Ahsen NF, Batul SA, Ahmed AN, Imam SZ, Iqbal H, Shamshair K, et al. Developing counseling skills through pre-recorded videos and role play: a pre- and post-intervention study in a Pakistani medical school. BMC Medical Education. 2010;10:7. doi:10.1186/1472-6920-10-7.

15. Alinier G, Hunt B, Gordon R, Harwood C. Effectiveness of intermediate-fidelity simulation training technology in undergraduate nursing education. J Adv Nurs. 2006;54:359–69.

16. Tiffany J, Hoglund BA. Teaching/Learning in Second Life: Perspectives of Future Nurse-Educators. Clinical Simulation In Nursing. 2014;10:e19–24. doi:10.1016/j.ecns.2013.06.006.

17. Tschannen D, Aebersold M, McLaughlin E, Bowen J, Fairchild J. Use of virtual simulations for improving knowledge transfer among baccalaureate nursing students. Journal of Nursing Education and Practice. 2012;2:p15. doi:10.5430/jnep.v2n3p15.

18. Fallowfield L, Jenkins V, Farewell V, Solis-Trapala I. Enduring impact of communication skills training: results of a 12-month follow-up. Br J Cancer. 2003;89:1445–9.

19. Morrison P, Burnard P. Students' and trained nurses' perceptions of their own interpersonal skills: a report and comparison. J Adv Nurs. 1989;14:321–9.

20. Nelson-Jones R. The theory and practice of counselling. Cassell; 1995.

21. Ashmore R, Banks D. Student nurses perceptions of their interpersonal skills: a re-examination of Burnard and Morrison's findings. Int J Nurs Stud. 1997;34:335–45.

22. Harden RM, Stevenson M, Downie WW, Wilson GM. Assessment of clinical competence using objective structured examination. Br Med J. 1975;1:447–51. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1672423/. Accessed 29 Oct 2015.

23. Stillman PL, Wang Y, Ouyang Q, Zhang S, Yang Y, Sawyer WD. Teaching and assessing clinical skills: a competency-based programme in China. Med Educ. 1997;31:33–40.

24. Zayyan M. Objective Structured Clinical Examination: The Assessment of Choice. Oman Med J. 2011;26:219–22. doi:10.5001/omj.2011.55.

25. Hamann C, Volkan K, Fishman MB, Silvestri RC, Simon SR, Fletcher SW. How well do second-year students learn physical diagnosis? Observational study of an Objective Structured Clinical Examination (OSCE). BMC Med Educ. 2002;2:1.

26. Chang E, Daly J. Transitions in Nursing: Preparing for Professional Practice. Elsevier Health Sciences; 2012.

27. Anastasi A. Psychological Testing. Prentice Hall; 1997.

28. Faul F, Erdfelder E, Buchner A, Lang A-G. Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. Behav Res Methods. 2009;41:1149–60.

29. Wiemann JM. Explication and Test of a Model of Communicative Competence. Human Communication Research. 1977;3:195–213. doi:10.1111/j.1468-2958.1977.tb00518.x.

30. Cupach WR, Spitzberg BH. Trait versus state: A comparison of dispositional and situational measures of interpersonal communication competence. Western Journal of Speech Communication. 1983;47:364–79. doi:10.1080/10570318309374131.

31. Hazleton V, Cupach WR. An exploration of ontological knowledge: Communication competence as a function of the ability to describe, predict, and explain. Western Journal of Speech Communication. 1986;50:119–32. doi:10.1080/10570318609374217.

32. Query JL, Parry D, Flint LJ. The relationship among social support, communication competence, and cognitive depression for nontraditional students. Journal of Applied Communication Research. 1992;20:78–94. doi:10.1080/00909889209365320.

33. King A, Hoppe RB. “Best practice” for patient-centered communication: a narrative review. J Grad Med Educ. 2013;5:385–93.

34. Haskard KB, Williams SL, DiMatteo MR, Rosenthal R, White MK, Goldstein MG. Physician and patient communication training in primary care: effects on participation and satisfaction. Health Psychol. 2008;27:513–22.

35. Bonvicini KA, Perlin MJ, Bylund CL, Carroll G, Rouse RA, Goldstein MG. Impact of communication training on physician expression of empathy in patient encounters. Patient Educ Couns. 2009;75:3–10.

36. Campbell ML. End of life care in the ICU: current practice and future hopes. Crit Care Nurs Clin North Am. 2002;14:197–200, ix.

37. Alasad J, Ahmad M. Communication with critically ill patients. Journal of Advanced Nursing. 2005;50:356–62. doi:10.1111/j.1365-2648.2005.03400.x.

38. Chant S, Jenkinson T, Randle J, Russell G. Communication skills: some problems in nursing education and practice. J Clin Nurs. 2002;11:12–21.

39. Suikkala A, Leino-Kilpi H. Nursing student-patient relationship: experiences of students and patients. Nurse Educ Today. 2005;25:344–54.

40. Humphris GM. Communication skills knowledge, understanding and OSCE performance in medical trainees: a multivariate prospective study using structural equation modelling. Med Educ. 2002;36:842–52.

41. Mailloux CG. Using The Essentials of Baccalaureate Education for Professional Nursing Practice (2008) as a framework for curriculum revision. J Prof Nurs. 2011;27:385–9.

42. Maguire P, Pitceathly C. Key communication skills and how to acquire them. BMJ. 2002;325:697–700. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1124224/. Accessed 4 Jan 2015.

43. Innes A, Macpherson S, McCabe L. Promoting Person-centred Care at the Front Line. Joseph Rowntree Foundation; 2006.

44. JaneBall. Data collection and review in the delivery of safe care. Nursing Management. 2011;17:20–2.

45. Jackson A, Irwin W. Dignity, humanity and equality: Principle of Nursing Practice A. Nurs Stand. 2011;25:35–7.

46. Sepucha KR, Levin CA, Uzogara EE, Barry MJ, O’Connor AM, Mulley AG. Developing instruments to measure the quality of decisions: early results for a set of symptom-driven decisions. Patient Educ Couns. 2008;73:504–10.

47. Gill PS. Patient engagement: an investigation at a primary care clinic. Int J Gen Med. 2013;6:85–98.

48. McGilton KS, Heath H, Chu CH, Boström A-M, Mueller C, Boscart VM, et al. Moving the agenda forward: a person-centred framework in long-term care. Int J Older People Nurs. 2012;7:303–9.

49. Nandini V, Sridhar C, Usharani M, Kumar JP, Salins N. Incorporating person centred care principles into an ongoing comprehensive cancer management program: an experiential account. Indian J Palliat Care. 2011;17 Suppl:S61-67.

50. Cloninger CR. Person-centred integrative care. J Eval Clin Pract. 2011;17:371–2.

51. Edvardsson D, Fetherstonhaugh D, Nay R. Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff. J Clin Nurs. 2010;19:2611–8.

52. Coulter A. Patient-focused interventions: a review of the evidence. Health Foundation; 2006.

53. Ahmed F, Burt J, Roland M. Measuring patient experience: concepts and methods. Patient. 2014;7:235–41.

54. Beattie M, Lauder W, Atherton I, Murphy DJ. Instruments to measure patient experience of health care quality in hospitals: a systematic review protocol. Syst Rev. 2014;3:4. doi:10.1186/2046-4053-3-4.

55. Black N, Jenkinson C. Measuring patients' experiences and outcomes. BMJ. 2009;339:b2495. doi:10.1136/bmj.b2495.

56. Coulter A, Collins A. Making Shared Decision-Making a Reality: No Decision about Me, Without Me. King's Fund; 2011.

57. Tritter JQ, Koivusalo M. Undermining patient and public engagement and limiting its impact: the consequences of the Health and Social Care Act 2012 on collective patient and public involvement. Health Expect. 2013;16:115–8.

58. Fisher MJ, Broome ME, Friesth BM, Magee T, Frankel RM. The effectiveness of a brief intervention for emotion-focused nurse-parent communication. Patient Educ Couns. 2014;96:72–8.

59. Frankel RM, Stein T. Getting the most out of the clinical encounter: the four habits model. J Med Pract Manage. 2001;16:184–91.

60. Stein T, Frankel RM, Krupat E. Enhancing clinician communication skills in a large healthcare organization: A longitudinal case study. Patient Education and Counseling. 2005;58:4–12. doi:10.1016/j.pec.2005.01.014.

61. McCormack B, McCance T. Person-centred Nursing: Theory and Practice. Wiley; 2010.

62. MEZZICH JE. Psychiatry for the Person: articulating medicine's science and humanism. World Psychiatry. 2007;6:65–7. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2219901/. Accessed 3 Nov 2015.

63. McCormack B, McCance TV. Development of a framework for person-centred nursing. J Adv Nurs. 2006;56:472–9.

64. Park MS, Jeoung Y, Lee HK, Sok SR. Relationships Among Communication Competence, Self-Efficacy, and Job Satisfaction in Korean Nurses Working in the Emergency Medical Center Setting. J Nurs Res. 2015:23(2):101-8.

65. McLAUGHLIN ML, Cody MJ. Awkward Silences: Behavioral Antecedents and Consequences of the Conversational Lapse. Human Communication Research. 1982;8:299–316. doi:10.1111/j.1468-2958.1982.tb00669.x.

66. Street RL, Wiemann JM, Mulac A. Speech Evaluation Differences as a Function of Perspective (Participant Versus Observer) and Presentational Medium. Human Communication Research. 1988;14:333–63. doi:10.1111/j.1468-2958.1988.tb00160.x.

67. Douglas W. Expectations About Initial Interaction An Examination of the Effects of Global Uncertainty. Human Communication Research. 1991;17:355–84.

APPENDIX

Communication skills training (CST) guide

Researcher as Trainer- Mustapha Alhassan (MA)
Research assistant as co-trainer - Mr. Ahmed Abdul-Majeed (AAM)

Objectives:

To train nursing and midwifery students to acquire communication skills that would be relevant to enhance their empathy, communicative competence, communication skills attitude, and self-efficacy.

The training will focus on the Four Habits model by Kaiser Permanente Groups and Person-Centred Nursing Framework McCormack and McCance.

Core topics:

1. Invest in the beginning
2. Elicit patients perspective
3. Demonstrate empathy
4. Invest in the end

Day 1 Activities
Morning session
(8.00 to 12.00 Hours)

Activity	Steps	Time	Minutes
Introduction and Pre-test to the two groups	**Introduction** i. Introduce the Trainers/Moderators ii. Trainer explains the purpose of the training. Giving participants assurance of confidentiality, anonymity etc. iii. Allow prospective participants to ask questions. iv. Obtain informed consent from participants.	8:00	120
	Session break	10.00	10
	Pre-test (T1) i. Distribute pre-test questionnaires to participants who have consented ii. Wait until all have submitted their responses to the questionnaires	10.10	110
	Lunch Break	12.00	60

Afternoon session
(13.00 to 17.00 hours)

Activity	Steps	Time	Minutes
Randomization of Groups	i. Trainers out cards for each participant to write out their expectations about the training which they would undergo.	13.00	5
	ii. Allow participants to put the expectations on a flip chart provided.	13.05	115
	Session break	15.00	10
	iii. Randomize the group into two groups. Have pieces of paper written with number 1 and 2 on each according to their total number. After distributing the papers randomly put the number ones together and twos together. iv. Those with number one then become intervention group and those with number 2 become control group. v. Inform them that due to their number the intervention group would be trained first (the next day) followed immediately by the control group (on the third day).	15.10	110
	Close	17.00	

Day 2 Activities

Morning session

(8.00 to 12.00 Hours)

Activity	Steps	Time	Minutes
Invest in the beginning	i. Trainer makes a short presentation on Four Habits Model.	8:00	5
	ii. Trainers put the participants into 10 in a group.	8.05	115
	iii. Participants go into a plenary session where they discuss why they think it is important to Invest in the beginning. They should appoint a chairperson and a reporter (30 minutes)		
	Session Break	10.00	10
	i. Each group should be given 5 minutes to report their group results.	10.10	50
	ii. Whist they report the research and research assistant should create a tally of the points each group has raised on a flip chart		
	iii. Trainer then makes a short presentation on investing in the beginning based on the Four Habits Model.	11.00	10
	iv. Allow open discussion	10.10	50
	Lunch Break	12.00	60

Afternoon session

(13.00 to 17.00 hours)

Activity	Steps	Time	Minutes
Elicit patients perspective	i. Short discussion on what participants learnt in the morning about investing in the beginning	13.00	15
	ii. Each participant should be provided with card where they list the most important issues to consider when eliciting a patients perspective.		
	Session break	15.00	10
	iii. Ask a volunteer to come forward with his/her presentation. After that he/she would select the next presenter until all have had their turns to present.	15.10	140
	iv. Trainer then makes a short presentation on the main issues according to the Four Habits Model.	16:50	10
	Close	17.00	

Day 3 Activities

Morning session

(8.00 am to 12.00 noon)

Activity	Steps	Time	Minutes
Demonstrate Empathy	i. Small Group Discussion: Trainers put them into small groups to brainstorm about the situations in which a professional nurse should show empathy.	8.00	60
	Session break	10.00	10
	ii. Trainers ask a volunteer to come forward with her/his presentation. After that she/he would select the next presenter until all have had their turns to present.	10:10	30
	iii. Show a video on empathy and how it can be demonstrated towards patients.	10:40	10
	iv. Trainers allow open discussion with participants suggesting the differences between empathy and sympathy.	10:50	60
	v. Trainer then makes a short presentation on the main issues of demonstrating empathy according to the Four Habits Model.	11.50	10
	Lunch Break		60

450 Afternoon session
451 (13.00 to 17.00 hours)

Activity	Steps	Time	Minutes
Invest in the end	i. Participants are asked to mention important issues that are relevant in investing at the end. Trainer lists the issues as participants mention them on a flip chart.	13.00	60
	ii. Trainers with the assistance of participants group the lists according: - Delivering diagnostic information - Providing information - Involving the patient in making decision - completing the visit	14.00	60
	Session break	15.00	10
	iii. Trainer makes a short presentation on the relevant issues of investing in the end according to the Four Habits Model.	15.10	10
	iv. Trainers uses discussion method for summarising the training	15.20	40
	Post Test (T2)	**Time**	**Minutes**
Post Test	Trainers administer the same instruments that were used at baseline – T1 (i.e. before the CST) to both the intervention and the control group.	16.00	60
	Close of training	17.00	

452

	Follow-up Test after 6 months (T3)	Time	Minutes
Follow-Up Test	Trainers administered the same instruments that were used at baseline test (T1), post-test (T2) to both intervention and control groups after 6 months as a follow-up test (T3).		60

453