Using Simulated Patients to Develop Nursing Students Communication Skills

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Abstract: Background: Having an effective communication skills and being able to employ them in communicating to the patients is very essential for every nurse, including nursing students. Preparing nursing students to interact and create constructive communicative relationships with clients is essential to nursing practice. Effective communication trainings should equip (future) nurses with fundamental abilities for life-long professional development that help them in dealing with a diversity of patients having a wide range and constantly changing set of communicative needs. **Objective**: present study was carried out to use simulated patients to develop nursing students communication skills. **Design:** an experimental design was used**. Methods** the study was conducted at Faculty of Nursing at Tanta University. The sample consisted of 25 undergraduate female students in the last academic year in the above mentioned setting and willing to participate in the study. All nursing students had previously dealing with patient in real clinical setting. To achieve the aim of the present study three tools were used: (1) Knowledge questionnaire sheet (40) questions to collect data from undergraduate students for the purpose of assessing their knowledge about communication. (2) Communication Skills Attitude Scale was used to collect data from the subjects for the purpose of assessing their attitude toward communication skills. The (CSAS) consists of 26 items. (3) Observation checklist : was developed by the researcher based on reviewing recent literature for the purpose of assessing the studied group communication skills. The checklist was included 45 items divided on five parts namely: good starting, monitor body language, effective listening skills, ask questions, and give answers. **Results:** A statistical significant improvement ($P \leq 0.05$) was found in student nurses level of knowledge, attitude about communication, and performance of communication skills on post program. Pre program, all nurses student were at low level in body language, active listening, give answers, and total communication skills, Post program, 92%, 88%, 68%, and 64% of nurses student level of communication skills were improved to be high level in body language, get start communication, ask questions, and all items of practicing effective listening skills, respectively. **Conclusion:** At pre program, the majority of student nurses level of knowledge and attitude on communication were low. Most of student nurses had low level in performing communication skills and were in need for training. Post implementation of a educational program student nurses' knowledge, attitude about communication and their performance of communication skills were improved. **Recommendation:** Based on the finding of this study it is recommended that, using of simulation as a teaching strategy to reinforce educational training activities and supplying the nursing staff specially new graduates with needed orientation knowledge and performance skills is needed.

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1. Introduction:

The student nursing population is diverse in age and experience, millennia's and baby boomers and those in between combine to form our nursing discipline today. Student diversity creates a challenge for nurse educators in meeting varied learning styles when designing education programs. As a result, nurse educators are utilizing a variety of teaching/learning strategies to help meet student learning needs. Traditional theory/lecture has been and is still, the primary method of educational instruction in most nursing programs. However, with a shortage of faculty to teach and a shortage of clinical sites available for nursing students to gain practical experience, simulated patient care is becoming more common place in schools of nursing as a teaching/learning strategy[(1)].

In general terms, simulation is a technique or device that attempts to create characteristics of the real world. According to the Oxford Dictionary, the word simulate is defined as "to reproduce the conditions of (a situation), as by means of a model, for study or testing or training. In health care, simulation may refer to a device representing a simulated patient or part of a patient; such a device can respond to and interact with the actions of the learner. Simulation in nursing education at any level offer several advantages. First, it enables nurses to train without the stress of patient harm, treatment error, or omission. Second, it allows for larger numbers of students to experience controlled learning situations than is possible in ac-

tual clinical environments[2,3]. Finally, it improve students knowledge base, critical thinking, nursing process and interventions, communication, socialization and self evaluation. Students maintain the majority of their clinical hours, but have these pre-practice experiences that enhance their integration of classroom learning and clinical performance, ultimately improving patient care[2,4].

Currently, a variety of simulations are incorporated into nursing education programs nationwide. Simulators have been used in training for many years and are available in many disciplines, varying from low-fidelity static models to high-fidelity simulators that highly reproduce reality. High-fidelity simulators are computerized simulators which provide realistic physiological and pharmacological indices in real time. Available in adult, pediatric and infant models, this level of simulator provides the most realistic experience. In contrast, low-fidelity mannequins provide anatomical representations only. Medium-fidelity simulators may breathe, have heart, lung and bowel sounds, and even pulses, but provide no computerized physiological feedback or responses. Lastly, there are part-task trainers which are models of a body part or specific system. These focus on specific skills such as heart auscultation venipuncture, lung auscultation, etc. (part task trainers , simulating patients, screen-based computer simulators, complex task trainers, integrated simulators and human patient simulators[1,2,5,6].

Simulating patients through role play between learners and educators is commonly used in medical and nursing education. Students are given a role to play in the scenario, and roles are rotated to assure equalization of experience opportunities. Role play is defined as ‘‘an experiential learning technique with learners acting out roles in case scenarios to provide targeted practice and feedback to train skills. In nursing education, roles may include patient, nurse, family member, other health care professionals, unlicensed assistive staff members, and/or observer/recorder. Physical assessment skills, history taking, and communication techniques are often taught using student pairs[2,4,7].

Simulation allows nursing students to practice communication, delegation, management and safety with an understanding of the disease process[8]. Hunter& Ravert (2010)[9] reported that simulation is useful in improving communication with patients and the healthcare team. In addition, students perceived that their communication improved, and simulations increased their confidence in communication[9]. That it is a process which can enable the nurse to establish a human-to-human relationship and thereby fulfill the purpose of nursing, namely, to assist individuals and families to prevent and to cope with the experience of illness and suffering and, if necessary, to assist them to find meaning in these experiences. Communication has been defined as “the transmission of information, thoughts, and feelings so that they are satisfactorily received or understood.” Important elements of communication are sender, recipient, message and context. People transmit and receive signals which they encode and decode in order to understand what is communicated[10,11].

Communication can be classified as verbal and non-verbal.. A student nurse learn to use verbal and non-verbal communication skills to convey ideas, feelings, and meaning to others. Through verbal communication skills students instruct patients how to get better, or collaborate with colleagues to come up with solutions to various nursing problems. Listen with full attention and give constructive feedback while in a professional setting. This applies to communicating with both colleagues and patients. Proper listening includes attention to verbal detail, which is important for both proper diagnoses and effective treatment. Constructive feedback can increase the level of trust and help find solutions to difficult problems in patient care. Use a positive tone of voice in a professional setting to increase relationship-building skills[12].

Further, students must learn how to use touch, facial expressions and other nonverbal communication principles while in a professional setting. Proper nonverbal communication skills will allow the student to effectively express both ideas and willingness to serve patients. Touch especially can create a concrete bond with patient, but be careful to make sure that touch remains within the patient's comfort level. Non-verbal signs can be categorized as follows: kinetic, proxemic and paralinguistic. Kinetics studies body movements, proxemics studies body position and spatial relations and paralanguage focuses on the study of the voice and vocalization. Many non-verbal behaviors are interrelated in a message, as one single body movement in itself rarely communicates a meaning[12,13]. Ability to communicate clearly and effectively with patients impacts patient care and the patient's perception of care. Strategies for improving communication in this context emphasize enhancing the today’s clinical environment: get the patient encounter off to a good start, monitor body language practice effective listening skills, ask questions that yield information and offer support as well as give answers that will be understood[14,15].

In an academic environment it is not sufficient to provide undergraduate students with only technical knowledge[16]. Many nurses recognize a gap in their skills set and report inadequate preparation in communication skills during their nursing education[17]. Traditional classroom teaching of communication

skills does not allow for practical application .Observing and recording actual nurse-patient communication for the purpose of evaluation is time consuming and tedious. The nurses' development of effective communication in the health care setting should begin in the nursing education program[18]. The quality of preserves education, specifically communication skills education, is believed to contribute to this practice reality. Nursing students having a serious lacking in communication skills as reported by **Abd UI-Muhesn (2009)** [19]. Practicing communication skills through simulation in a clinical learning laboratory allows students to practice and test skills in a safe, non threatening environment and allows faculty to evaluate and provide feedback to the students[17]. So the present study is to develop nursing students communication skills by using simulated patients.

Aim of the Study

Aim of the present study is to use simulated patients to develop nursing students communication skills.

2. Materials and Method

Design:

An experimental design was used

Setting:

The study was conducted at Faculty of Nursing at Tanta University.

Subjects:

The sample consisted of 25 undergraduate female students in the last academic year in the above mentioned setting and willing to participate in the study. All nursing students had previously dealing with patient in real clinical setting

Tools

To achieve the aim of the present study three tools were used

1- Knowledge Questionnaire Sheet

This tool was designed to collect data from undergraduate students for the purpose of assessing their knowledge about communication. The questions were constructed in either the form of true & false, cross matching, multiple choices, or complete. The tool was developed by the researcher after reviewing of related literatures. The tool consisted of two parts as follows.

Part one

The first part for data pertaining to the demographic data of the study subjects such as age, marital status

Part two

The second part of the tool contained (40) questions grouped under four headings as follow: general part (12 items), verbal communication (7 items), non verbal (21 items): including; listening, empathy, rapport, and body language. The question types were true & false, multiple choice, cross matching questions and complete.

Scoring system

The question was scored by one for each correct answer and zero for incorrect answer The total score was 50 grade. Scoring represent varying levels of nurses knowledge ranging from good (85-100), fair (85<65), and poor (<65) points.

2- Communication Skills Attitude Scale

A modified version of the Communication Skills Attitudes Scale (CSAS) (Rees, **et al (2002)**[20] was used to collect data from the subjects for the purpose of assessing their attitude toward communication skills. The (CSAS) consists of 26 items, 13 of which are written in the form of positive statements and 13 negative statements about communication skills learning. Each item is accompanied by a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Both scales range from 13 to 65 with higher scores indicating stronger positive or negative attitudes.

3- Observation checklist:

This tool was developed by the researcher based on reviewing recent literature [15,21-22] for the purpose of assessing the studied group communication skills. The checklist was included 45 items divided on five parts namely: good starting, monitor body language, effective listening skills, ask questions, and give answers

The items in the observational rating scale were assessed by using two point rating scale. **Scoring system** for the observational checklists was a score one gave to done and a score zero gave to not done steps. Scoring represent varying levels of nurses performance ranging from high (85-100), moderate (85<65), and low (<65) points.

Methods

1. Official permission and informed consent from the study subjects to conduct the study were obtained before starting the study.
2. Pilot study was done before starting data collection to test the reliability and clarity of the questions. It was done on 5 students. Subjects of pilot study were excluded from the study sample. There is no statistical significant differences occur between average scores of test-retest of the tools, so the knowledge and attitude sheets are reliable scale. Based on the pilot study slight correction of the questions was done

3. Content validity of the tool was performed by four experts in the field of administration, and community nursing,
   An evidence of content validity was then calculated. The content validity of the study tools were for the tool (1) 88.5% , tool (2) 94.9%, and tool (3) 97.7%. Content validity index (CVI) for the tool =% of total items rated by the experts as either 3 or 4. A CVI score of 0.80 or better is generally considered to have good content validity. Based on the experts responses the researcher takes the items agreed on and work with it.
4. Scenario process: two scenarios were selected to reflect the students' level of training in communication skills. The role-playing scenarios were focused on the student's discipline (Nursing). Students were informed that on this occasion they were not being tested on knowledge relating to the 'patient's' condition (e.g. Diabetes, Obesity,…).
5. Scenario Assessment: the researchers present for every student encounter. The students were allocated 5 minutes to read the scenario briefing and a further 15 minutes to complete the scenario. Upon completion of the scenario, the student was asked to leave the room. The researchers documented their grade of student performance (this done two times pre and post an educational program).
6. For data collection
   At the beginning the student samples were observed for communication skills. The observation was taken by the researcher using simulated patient (pre and post program). The educator selected a group of other students to practice communication skills during a patient assessment encounter by role play to their colleagues (simulated patient). Data for knowledge on communication skill and attitude were collected by using a written exam method. The researcher distributed the questionnaire and collected it after 30 minutes. The researcher was present during collection of data for any needed guidance and clarification. The questionnaire collected immediately after filled.
7. An educational program was designed and implemented by the researcher to improve students knowledge, attitude, and skills about communication.
8. The duration of the program was two days, one session every day, two hours for each day. Data were collected by the researcher during the period from April to May, 2011.
9. Before the program, an assessment phase (pre test) initiated followed by period of preparation of the program. Implementation of the program and post test.
10. During the preparation phase a session on simulation and simulated patient was conducted to the students.
11. By the end of the program, data on nurses student knowledge, attitude and skills were collected as pre program
12. Ethical consideration: all participants interviewed for explaining the purposes and procedures of the study, and they have the right to withdrawal from the study at any time of the study. Oral consent to participate was assumed of filling the questionnaire sheet.

Construction of the program

The first step in constructing this program was the statement of the instructional objectives. These objectives were derived from the assessed need.

Program objectives

Upon completion of the program the students will be able to:

1- Understand the communication general terms.
2- Know communication process.
3- Apply basic types of communication.
4- Function as an effective and efficient member of a team with a sense of responsibility and dependability.

Selection and organization of program content

After determining the objectives of the program, the content was specifically designed, methods of teaching and evaluation was identified. The content was selected after careful assessment of students' need.

Selection of the teaching method

This is the third step in constructing the program. The selection of teaching methods was carried out according to the subjects and the educational principle.

The methods used were

- Lecture
- Simulation
- Visual aids

Teaching aids used to help for the attainment of the objectives were handouts, pen and paper, and role playing.

Evaluation of the program

Evaluation of the effectiveness of the program is the final step that was planned to determine the extent

to which they have acquired the knowledge and practiced it.

Evaluation sheets used in the program were

1-Pre-test questionnaire sheet about communication knowledge (tool1).
2-Pre-test Communication Skills Attitude Scale (tool 2).
3-Simulation of the communication skills (observational check list) (tool 3).

Statistical analysis:

The collected data was organized, tabulated, and statistically analyzed using SPSS soft ware. **For quantitative data** the range, mean, and standard deviation were used. The difference between two means was statistically analyzed using the student paired (t) test. For compare the significant difference of means the test ANOVA was used.

For qualitative data the number and percent distribution was calculated. Chi square was used as a test of significant and when found inappropriate Fisher exact test was used. Significant was adopted at $p<0.05$ for interpretation of results of tests of significant.

3. Results

Table (1) represents distribution of nurses student according to their level of communication skills pre and post the educational program. The table showed that there was a statistically significant improvement at $P \leq 0.05$ in nurses student level of all items and for total communication skills post program. Pre program, all nurses student were at low level in body language, active listening, give answers, and total communication skills And equal percent (8%) of nurses student were at moderate level in get start communication, reflective listening and ask questions. Only 8% and 4% of nurses were at high level in get start communication and ask questions, respectively.

Post program, 92%, 88%, 68%, and 64% of nurses student level of communication skills were improved to be high level in body language, get start communication, ask questions, and all items of practicing effective listening skills, respectively,. Also, equal percent 24% of nurses student were at moderate level in all items of practicing effective listening skills, and give answers. Still equal percent 16%, and equal percent 12% of nurses student were at low level in ask questions, give answers, all items of practicing effective listening skills and, total communication skills, respectively.

Table (2) presents nurses student mean knowledge on communication pre and post the educational program. The table showed that there was an increase in nurses student total mean knowledge from 44% pre program up to 76.6% post program. Student nurses mean knowledge on total and all items communication were improved significantly at $P \leq 0.05$ from pre program.

Pre program, listening and empathy were the lowest (21.7%, and 29%) nurses student knowledge mean percent, with mean scores 1.96+1.059, and 2.32+1.180, respectively. While, the highest mean percent was 61% for the item of body language with mean scores 4.28+1.671. Post program the highest (100%) nurses student knowledge mean percent was for rapport with mean score 3.24+1.011, with significant improvement at $P \leq 0.05$. the rest item of nurses student knowledge mean percent was ranged from 60% to 82.6% for the empathy, listening, and general communication with mean scores (4.80+1.384, 5.40+1.607and 12.4+1.825) respectively, with significant improvement at $P \leq 0.05$.

Table (3) represents distribution of nurses student according to their level of knowledge on communication pre and post the educational program. The table showed that there was a statistically significant improvement at $P \leq 0.05$ in nurses student level of all items and for total knowledge on communication post program.

Pre program, 100%, 96%, 88%, and 76% of nurses student were had poor level of knowledge regarding to listening, empathy, rapport, verbal communication, total score and general communication, respectively. And 24% and 20% of nurses student were at fair level in general communication and body language, respectively. While, 24% and 4% of nurses student were at good level in body language an total score, respectively.

Post program, high percent (84%, 80% ,and equal percent 60%) of nurses student their level of knowledge were improved to be good level in general communication, body language, empathy and total knowledge score, respectively, with significant improvement at $P \leq 0.05$. Also, equal percent 36% and 24% of nurses student their level of knowledge were at fair level in listening, empathy, and verbal communication, respectively, with significant improvement at $P \leq 0.05$. Still equal percent 20% and equal percent 16% of nurses student their level of knowledge were at poor level in both verbal communication, total knowledge score and, listening, empathy, respectively with significant improvement at $P \leq 0.05$.

Table (4) shows distribution of nurses student according to their level of attitude about communication pre and post the educational program.. The table showed that there was no statistically significant differences at $P \leq 0.05$ in nurses student level of communication attitude pre and post the educational program.

Table (5) shows correlation between nurses student knowledge on communication, total attitude and skills of communication, pre and post the educational program. Pre program, student nurses` knowledge on general communication and rapport had statistical significant correlation (P≤0.05) with their attitude and communication skills..

Post program, statistical significant correlation (P≤0.05) was found between nurses student communication skills and empathy, rapport and total nurses student knowledge. Statistical significant correlation (P≤0.05) was found between nurses attitude on communication and their knowledge on listening, empathy, body language, and total knowledge..

Table (1) Distribution of nurses student according to their level of communication skills pre & post the educational program

Dimensions of communication skills	Level of communication skills	Observation				Chi -square	
		Pre		Post		X2	p- value
		N	%	N	%		
Get Start communication	**Low** **Moderate** **High**	21 2 2	84 8 8	0 3 22	0.00 12 88	9.93	0.001*
Body Language	**Low** **Moderate** **High**	25 0 0	100 0.00 0.00	1 1 23	4 4 92	32.47	0.001*
Practicing Effective Listening Skills							
a) **Active listening**	**Low** **Moderate** **High**	25 0 0	100 0.00 0.00	3 6 16	12 24 64	18.00	0.001*
b) **Reflective listening**	**Low** **Moderate** **High**	23 2 0	92 8 0	3 6 16	12 24 64	8.42	0.004*
c) **Empathic listening**	**Low** **Moderate** **High**	24 1 0	96 4 0	3 6 16	12 24 64	14.10	0.002*
Ask Questions	**Low** **Moderate** **High**	23 2 1	92 8 4	4 4 17	16 16 68	10.27	0.002*
Give Answers	**Low** **Moderate** **High**	25 0 0	100 0.00 0.00	4 6 15	16 24 60	15.91	0.001*
Total communication skills	**Low** **Moderate** **High**	25 0 0	100 0.00 0.00	3 7 15	12 28 60	33.1	0.001*

Table(2) Nurses student mean score of knowledge on communication pre & post the educational program

Dimensions of communication knowledge	Total score	Pre		Post		Paired t test	
		Mean ± SD	Mean percent	Mean ± SD	Mean percent	t	p- value
General communication	**15**	8.32±1.573	54.4%	12.40+1.825	82.6%	-10.428	0.000*
Verbal communication	**8**	3.96±1.059	49.5%	6.36±1.439	79.5?%	-8.66	0.000*
Non-verbal communication	**27**						
a) Listening	**9**	1.96±1.059	21.7%	5.40±1.607	60%	-8.874	0.000*
b) Empathy	**8**	2.32±1.180	29%	4.80±1.384	60%	-7.464	0.000*
c) Rapport	**3**	1.36±0.568	45%	3.24+1.011	100%	-11.289	0.000*
d) body language	**7**	4.28±1.671	61%	6.12±1.268	87.4%	-6.289	0.000*
Total of non- verbal communication	**27**	9.84+2.995	36.4%	19.64±3.860	72.7%	0.485	0.014*
Total of knowledge	**50**	22.20±4.453	44%	38.32±5.647	76.6%	0.851	0.000*

Table (3) Distribution of nurses student according to their level of knowledge on communication pre & post the educational program

Dimensions of communication knowledge	Level of nurses student knowledge							
	Pre			Post			Chi- square	
	Poor N %	Fair N %	Good N %	Poor N %	Fair N %	Good N %	r	p- value
General communication	19 76%	6 24%	0 0.00%	1 4%	3 12%	21 84%	28.84	0.000*
Verbal communication	24 96%	1 4%	0 0.00%	5 20%	6 24%	14 56%	26.92	0.000*
Non-verbal communication								
a) listening	25 100%	0 0.00%	0 0.00%	4 16%	9 36%	12 48%	24.08	0.000*
b) empathy	25 100%	0 0.00%	0 0.00%	1 4%	9 36%	15 60%	32.90	0.000*
c) rapport	25 100%	0 0.00%	0 0.00%	4 16%	5 20%	16 64%	30.84	0.000*
d) body language	14 56%	5 20%	6 24%	2 8%	3 12%	20 80%	22.23	0.000*
Total of non- verbal communication	25 100%	0 0.00%	0 0.00%	4 16%	6 24%	15 60%	30.74	0.000*
Total of knowledge	22 88%	2 8%	1 4%	5 20%	5 20%	15 60%	21.38	0.000*

Table(4) Distribution of nurses student according to their level of attitude about communication pre & post the educational program

Dimensions	Pre			Post			X^2 P -value
	low	Moderate	High	low	Moderate	High	
	N. %	N. %	N. %	N. %	N. %	N. %	
Positive attitude scale	5 20%	2 8%	18 72%	0 0.00%	3 12%	22 88%	0.221 0.331
Negative attitude scale	8 32%	6 24%	12 48%	8 32%	6 24%	11 44%	0.112 0.948

Table(5) Correlation between nurses student's knowledge, skills and attitude pre and post the program

Dimensions of communication knowledge	Pre				Post			
	Skills		Attitude		Skills		Attitude	
	r	P	r	P	r	P	r	P
General communication	0.075	0.720	0.389	0.004*	0.199	0.574	0.124	0.363
Verbal communication	0.021	0.921	0.225	0.116	0.086	0.325	0.352	0.538
Non-verbal communication								
a) listening	0.208	0.320	0.082	0.570	0.325	0.064	0.542	0.002*
b) empathy	0.302	0.143	0.372	0.008	0.439	0.003*	0.524	0.009
c) rapport	0.108	0.606	0.289	0.005*	0.524	0.002*	0.358	0.004*
d) body language	0.089	0.583	0.275	0.066	0.247	0.074	0.321	0.005*
Total of knowledge	0.022	0.922	0.082	0.571	0.431	0.000*	7.625	0.000*

4. Discussion

Having effective communication skills and being able to employ them in communicating to the patients is very essential for every nurse ,including nursing students[23]. .It is a critical component of nursing education as well as a necessity in maintaining patient safety[9] . However, despite the development of communication skills in undergraduate students ,it is an issue that has always been of concern in all academic departments[14]. The aim of this study was to use simulated patients to develop nursing students communication skills amongst a sample of female students in the last academic year.

Results of this study showed that all students nurse of the fourth academic year at pre program, were at low level in body language skills **(table,1),**

this may be due to the low total mean score knowledge of nurses students at pre program, (table, 2). **Dergisi (2008)** [24] study inconsistent with this results and found that nurses used body language more effectively and also, revealed that nurses preferred body language to empathize with their patients.

Results of this study showed that all students of the fourth academic year at pre program, were at low level in active listening skills **(table 1)**. This may be due to the fact that these nurses students were had low level (21.7%, and 29%) of mean percent knowledge in listening and empathy (**table, 2**). **Imhof (2010)**[25] study support this results and showed that occupational therapy students have a slightly broader view of listening.. These findings reflect that nursing students have poor listening habits such as, letting the mind wander, or plan how to respond before the speaker finishes talking, further, overreact to what's said and respond or think faster than a speaker can talk, and jump to conclusions emotionally. According to **Segal et al, (2010)** [23] many problems and difficulties in the health care provision arise because of poor listening skills .In fact, statistics reveal that only 10% of people listen properly, and many of the massages were garbled by the listener's interpretation[26] .

Results of this study showed that all students of the fourth academic year at pre program, were at low level in give answers skills. Zakria (2001) [27] study is consistent with this findings and assumed that nurses have a low level of over all performance score related to item of communication: giving information. Macdonald (2001)[28]. similarly reported that the patients complaints are about a lack of information received. Also, Jarrett and Payne (1995) [29] study supported the present study and illustrated that when assessing patient's perception of their health care the major complaint concerned communication and lack of information they received. Further, Gotcher and Edwards (1990) [30] .found that patients' satisfaction with communication is related to the amount of information received, the extent to which it addresses their illness and reduces their fears, and the willingness of health-care professionals to answer questions. Malin Henriksson (2010) [10] mentioned that the nurse gives the patient inappropriate information and engage in opinion giving in order to maintain control over the situation. So, All new graduates must be able to answer questions and give explanations and/or instructions. Answering questions and wearing a reassuring smile can go a long way in improving patient satisfaction. An ability to communicate well orally, through friendly gestures and with a compassionate outlook that makes one sensitive to pain and fear are some of the admirable qualities in a nurse[31].

Reflective listening is verbal demonstration that the students nurse is paying attention to the patient and to the patient's story. It includes repetition, paraphrasing and summarizing of the patient's statements; it encompasses active use of the patient's language, and it attempts to highlight significant statements from the patient[21] .Results of this study showed that all students of the fourth academic year at pre program, were at low level in reflective listening skills in **(table, 1)** This results reflected that nursing students may be used reflecting listening incorrectly, inappropriate timing of reflections and inappropriate cultural experience and educational level of the patient[32] .

Results of this study showed that all students of the fourth academic year at pre program, were at low level in total communication skills **(Table 1). Ak et al (2011)** [33] study is supported this results and found that most of the complaints in the emergency departments have been related to communication problems rather than poor medical practice. This may be reasoned to that students lacked confidence in their ability, feels inadequate and poorly prepared to effectively deal with the difficult situations of their patients. Adding student's comment is telling of the need for effective communication skills[24]. Nurses in an American study by **(Sheldon, Barrett & Ellington, (2006)**[34] ,which investigated difficult communications in nursing and found nurses unprepared for communicating with patients when they were recently graduated and suggested that it is clinical experience and not formal education that prepares the nurses for this difficult communication. In addition, the research suggests that nurses lack necessary communication skills due to inadequate training, and at times, an under appreciation of the importance to patient- centered communication[14]

The Quality and Safety Education for Nurses (QSEN) Project identifies that nurses must have knowledge of the principles of effective communication, implement the skill of communicating effectively, and possess the attitude of wanting to improve communication skills[35]. Results of study revealed that majority nursing students at pre program were experienced poor level in total percent communication knowledge, listening, empathy, rapport, and verbal communication knowledge **(table,3)**. **Tavakol et al (2005)** [36] study supported this study result and who found that overall, knowledge levels of interns were unsatisfactory, also, results indicated that interns had a limited knowledge of communication skills.. **Zakria (2001)** [27] study support the present study finding and revealed that substandard level of nurses 'knowledge about over all communication knowledge. While, **Abd El- Latif (2008)** [37] not support this results and revealed that most of the nursing students had satisfactory knowledge about communication .

Results of study revealed that many nursing students at pre program were experienced poor level percent regarding rapport knowledge **(table,3)**. Getting acquainted and establishing rapport are the primary tasks in relationship development. It implies special feelings on the part of both the client and nurse based on acceptance, warmth, friendliness, common interest, a sense of trust and a non-judgmental attitude[38] **Home Health Care Management & Practice (2009)** [39] supported this result and mentioned that the central issue is that nurses failed to establish rapport with clients before providing care and treatment. Results of present study revealed that all nursing students at pre program were experienced poor level percent in listening and empathy knowledge. **Ak et al (2011)** [33] study is consistent with this results and revealed that emergency nurse had low score of listening and empathy at pre program.

Results of this study showed that nursing students of the fourth academic year had negative attitude pre program. Most probably this might be due to their poor level of communications skills and knowledge In this respect , negative attitude according to **O'Baugh et al.(2003)** [40] for the nurses 'being negative' was being overwhelmed , giving up, not believing in the treatment, focusing on the bad rather than the good, and being withdrawn and/or angry. Nurses felt that patients manifested being negative by not talking, taking on the sick role, and not trusting in treatment or the staff. However, not all the attitude of the nurse is positive and some nurses believe communication does not help them. For instance, when a patient has financial problem, we can only talk to her or listen to her and try to decrease their anxiety, but we cannot really solve the patients' problem." Another nurse expresses that different patients need different attitude, she believes some patients need positive attitude, but some do not need, and she suggests that palliative care patient need less positive attitude because they did not require aggressive treatment and opportunities to induce their feelings at this stage, they only need comfortable and happy feeling at the rest of their lives.

On other hand, **De Raeve (1997)** [41] sees positive attitude as a state of mind that involves looking at things with a good feeling**. Wilkinson and Kitzinger (2000)** [42] argue that positive attitude is not an actual representation of state of mind but, rather, a reaction to the pressures of the world we live in. They agree with De Raeve (1997) [41] who suggests that saying that you are positive may be just a way of saying what is socially acceptable. In the aspects of nurses' feeling and attitude, in Ada (2004) [43] study, say that .eight oncology nurses express that nurses' attitudes should be positive .One nurse states that her attitude towards communication with cancer patient is more positive because she is a Christian, may be this is related to her religious .

Post program present study revealed that significant improvement of nurses student level of communication skills in body language, get start communication, empathetic listening, ask questions, reflective listening, give answers and total communication skills, as well as nurses student knowledge in (rapport, empathy, listening, and general communication) and attitudes, this results reflected that patients simulations training are successful in improving communication, increasing nursing skills, understanding classroom material, developing critical thinking, and facilitating teamwork. ***Hunter & Ravert (2010)*** [9] In a more recent study**, Kameg et al**(2010)(44) concluded that simulations helped students learn communication techniques. Messmer's (2008) [45] study provided evidence that simulation is a strategy useful in training interdisciplinary teams to collaborate and communicate effectively. This program supported by **Zakria (2001)** [27] concluded that education program help nurses in keeping up to date with new concepts, increasing knowledge and competence, modifying their attitudes and developing their abilities to deal with problems and work with others .

Results of this study showed that nursing students attitude of the fourth academic year were improved post the educational program but there was no statistically significant differences at P $\leq$0.05 in nurses student level of communication attitude pre and post the educational program **(table, 4)**. The fact document that value may change but beliefs tend to be more permanent and change least, while understanding is not necessarily followed by change. Even when people have learned a new fact and have agreed that some of their existing values and beliefs are undesirable, it does not follow that they will change their behavior. In general changing attitude can be a difficulty task[46] .

Post program, statistical significant correlation was found between nurses student communication skills and empathy, rapport and total nurses student knowledge **(table, 5)**. Statistical significant correlation was found between nurses attitude on communication and their knowledge on listening, empathy, body language, and total knowledge. This result was supported by Akel (1997) [47] ,**Mohamed (2000)** [48] ,Ahmed (2001) [49] and **Zakeria (2001)** [27] Whom their work revealed that the relation between knowledge on communication and performance of it was positive.

Summary

In summary, the study conducted on 25 female nursing students enrolled in the fourth year in Faculty of Nursing at Tanta University and were participated in the training program of communicating skills. **Three tools** were used before and after the program : (1) Knowledge questionnaire sheet (40) questions to collect data from undergraduate students for the purpose of assessing their knowledge about communication. (2) Communication Skills Attitude Scale was used to collect data from the subjects for the purpose of assessing their attitude toward communication skills; the (CSAS) consists of 26 items. (3) Observation checklist: was developed by the researcher based on reviewing recent literature for the purpose of assessing the studied group communication skills. The checklist was included 45 items divided on five parts namely: good starting, monitor body language, effective listening skills, ask questions, and give answers. **The findings showed** that communication skills training programs have effectively improved the students nurse level of knowledge, attitude about communication, and performance of communication skills post program, Post program, statistical significant correlation was found between nurses student communication skills and empathy, rapport and total nurses student knowledge**.** Statistical significant correlation was found between nurses attitude on communication and their knowledge on listening, empathy, body language, and total knowledge.

In the light of the findings, the following recommendations are suggested:

1- Nursing educators must empower students to reach their full potential as communicators and future professionals.

2- Nursing educators must enable the individual nursing student to develop individual skills in therapeutic communication that will lead to the emergence of his or her own style of communication

3- Learning communication skills should go hand in hand with the practice in clinical setting as this will add more tangible value to its learning.

4- Early nursing courses should be planned to include role plays and simulation (Video-tape simulation, written simulation and life simulation) into everyday training.

5- Ensuring appropriate clinical supervision of student and patient and implementation of teaching programs to the student nurses about communication

6- Communication laboratory utilizing SPs should provide enough SPs so that the majority (if not all) of students will be given the opportunity to interact with the SPs.

7- Students should evaluated by SP's**,** should expect to learn their CS through SP's. A single assessment of CS during the schools curricula probably insufficient. Testing should occur at a minimum of two occasions during undergraduate training.

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