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# The Effect of Training on Communication Skills of Child's Nurse through Role-playing

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#### Abstract

## Introduction

Nurse-patient communication is highly important especially when the patient is a child. One thing that has been overlooked in the nursing profession or less discussed is how to communicate with children. Design and training courses for the development of communication skills is considered as an important step in this direction. This study investigated the effect of training communication skills on children's nurses through role- playing.

## Materials and Methods

This study is a clinical trial with pre-test and post-test which was done on 60 nurses in Dr. Sheikh Hospital in Mashhad-Iran. Nurses were randomly assigned into either intervention or control groups. Nurses' communication skills were measured using the tools of Calgary Cambridge communication skills assessment before and three weeks after the intervention. During one-day workshops, 6 hours of teaching communication skills with children were given to nurses as role playing and based on preprepared scenarios.

## Results

The results showed there was no significant difference between the two groups in the mean score of nurses' verbal and non verbal communication skills before the intervention (verbal :P=0.302, non verbal :P=0.795). But after the intervention, the mean score of nurses' verbal and nonverbal communication skills in the experimental group were statistically significant and higher than those in the control group (P<0.001).

## **Conclusion**

Now, due to the weakness in the relationship between nurse and child at the bedside and nurses also receive instruction on communication specific skills related to children, it seems essential that the effect of the implementation of various educational practices be examined to nurses' communication skills.

Keywords: Child, Communication skills, Education, Nurse, Role playing.

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## Introduction

Communication is the key for role playing in nursing profession and is in fact considered as the basis of nurses' work in patients (1). Nurse-patient care for communication is highly important especially when the patient is a child because childhood is one of the most important stages of development (2). The main task of nurse is to take care of patients and its brightest aspect manifests in the relationship between patient and nurses (3). One note ignored or less discussed in nursing profession is how to communicate with children (4). Children are the most important resources and assets of countries. Appropriate and honest communication, respect for values and sensitivity to differences are necessary for the optimal care of patients, especially children (5). Statistics show that about 30% of children are hospitalized at least once during their childhood and about 5% of them are admitted for several times (6). Hospitalization can never be without influence in children's lives. The unclear results of disease, special treatments for child and observing child's pain and fear cause increasing stress in the child and family and have an effect on their performance and planning for the future (7). Given the nature of nursing job based on 24-hour care, communication skills has been recognized as an essential part in the delivery of nursing services and several discussions have always been on that the effective communication forms on the basis of the quality of services and cares (8, 9). Although establishing an effective communication with all patients establishment of essential. the such communication is crucial for pediatric patients (10). When one spends enough communicate properly time to effectively with clients, it will have many consequences. positive These consequences not only have mental (satisfaction) and behavioral (complete treatment period) aspects, but also have physical aspects such as improvement in vital signs, reduction in pain and anxiety and better participation in the treatment programs and on the other hand, failure to misdiagnosis, communicate leads to reducing patient participation in treatment and decreasing in presenting needed information by patients (11, 12). Studies indicate that the time when nurses spend for communicating with patients is very short and their dialogue with patients is very superficial and patients are unhappy on that nurses do not listen to them (13). Evaluating nursing communication skills in different parts of a hospital reveals that students did not have enough skill in this area and they communicate with patients only along with providing services and the necessity of more effective education of students was emphasized (14). On the other hand, the results of studies emphasize that the lack of communication skills in health care providers originates from inadequate training and is yet caused by the absence of understanding the importance of central role of communication skills with clients (15). Coeling believes that familiarity with communication skills is essential to establish a good relationship, while poor communication skills can have a negative effect on nurses' performance (16). Designing and holding appropriate training courses is an important step to develop communication skills of health care providers (15). The results of the study by Kruijver et al. recommend the need for training nurses to establish an effective communication with patients (17). Studies show that learning and communication skills by nurses not only causes behavioral changes in them but also appears some positive changes in clinical conditions (18). Thus, today, training interpersonal communication skills to nurses is recognized as one of the main ways to promote the quality of cares because it causes change in their behavior and attitude to the usefulness of these improvement skills. of their satisfaction, creation of positive change in the clinical status and achievement of patients' satisfaction (19, 20). Among the educational methods influencing people's attitudes, role playing can be pointed out (21). In this method, one puts himself in the desired position and behaves as necessary. So, he learns how to deal with situations and problems in certain circumstances. Using these educational methods of communication skills with patients is strengthened and learner will be in true conditions. One of the top features of role playing method is that observers establish emotional communication with play operations and actors, see the excitement of play stages and themselves in the scene (22). This method aims make the status clearer through role playing and people are encouraged to talk about it. The important thing is that in this method, individuals can freely express their reactions and emotions (23). Given the importance of promoting communication skills of nurses and its undeniable advantages and also the gap of its application in clinical cares that fundamental training may help fill this gap, it seems essential that the impact of the implementing various ways of training investigated on been nurses' has communication skills because each of these methods has its own advantages and limitations and this study was designed to answer the question whether training by role playing is effective on nurses' communication skills with children or not?

# **Materials and Methods**

The present study is a clinical trial study with two groups: pre- and post-test which was done with the permission of Ethics Committee of Mashhad University of Medical Sciences and the observance of approved ethic codes (Clinical Trials Number: IRCT2015051122211N1).

The study population consisted of all nurses in the wards of Dr. Sheykh Hospital, Mashhad- North East of Iran, who were working in the wards at the time of the study. Important inclusion criteria included desire to participate in the study, having a nursing degree (minimum BSc degree) and having at least a month of work experience in children ward: however, the exclusion criteria were unwillingness to continue to participate in the study and the absence in one of hours of training classes. The sample size was calculated as 34 ones in each group by reviewing the study guideline considering 10% of sample loss during the study; however, at the end, 8 ones were excluded from the study due to the lack of participation in educational classes and lack of desire to continue to participate in the study. The number of nurses was reduced to 30 cases in both experimental and control groups and 60 ones were totally studied. In this study, sampling was done in four wards of emergency, surgery, hematology and nephrology using cluster sampling method in Dr. Sheykh Hospital. Nurses in all four wards were included in the study using convenient sampling technique and then, nurses in each ward randomly assigned experimental and control groups. The instruments for data collection included selecting subjects form, demographic form of study units, adjusted check list of evaluating Calgary-Cambridge communication skills and survey form of holding communication skills with children's workshop. The adjusted check of evaluating Calgary-Cambridge communication skills includes 20 items that measures nurses' non-verbal and verbal communication skills in connection with school-age children (6-12 years). The content validity of the instruments was investigated and verified. Scientific reliability of the check list for evaluating Calgary-Cambridge communication skills

was calculated using Cronbach's alpha whose coefficient was 0.84.

After presenting a written report to Office of Nursing Services of Hospital and coordination with the authorities, the subjects were selected based on the selection form of the study subjects. The research course selection and the goals and methods were presented to them face to face, and if the oral explanation by participating in the study, written informed consent form was completed by them. Then, at the proper time (active hours in each ward), the researcher referred to wards and observed and registered how to communicate nurses with children based on a check list. Each nurse's work was observed and evaluated three times. After controlling nurses' action. one-day workshop on communication skills with children by role playing was performed during 6 hours by researcher and study team (clinical psychologist and child psychologist) in the intervention group. The place for holding the workshop was the amphitheater at Dr. Sheykh Hospital. The generalities of communication were first mentioned in the form of a short and then. two pre-prepared scenarios were carried out in the form of the roles of child's mother, child and care nurse by the researcher, research assistant and one of the nurses (on a voluntary basis). At the end of each scenario, after reviewing other nurses participating in the workshop, the final conclusion emphasis on the important points of were communication done the researcher and a psychologist. At the end of the training session, nurses' satisfaction with holding workshop and educational method was measured. In the control group, the training program was not carried out and the subjects were observed. Three weeks after holding the workshop, nurses' communication skills

evaluated and recoded based on the available tools at the same time in training group by playing role method and the control group. The data collected in the two groups before and after intervention were analyzed using SPSS version 16 statistical software and descriptive statistical methods of mean, standard deviation, frequency distribution and chisquare test, Fisher exact test, Mann-Whitney test with the level of confidence of 95%.

#### **Results**

The results of the study showed that the mean age of nurses was 29.0±7.1 years in the experimental group and  $4.7\pm 29.0$ years in the control group. The majority of subjects in both experimental (96.7%) and control (100.0%) groups had the bachelor degree. The mean and standard deviation (SD) of the working experience of the nurses were 37.6±39.1 in the experimental group and 34.0±23.1 in the control group. The rate of interest in working with children was too much about 41.7% (25 cases) for the majority of subjects so that the interest in working with children was 40.0% (12 cases) and 43.3% (13 cases) for nurses in the control and experimental groups, respectively.

Both studied groups were homogenous based on the results of Mann-Whitney test, chi-square and Fisher exact tests in terms of the above-mentioned variables and background and other intervention variables including marital employment status, location of work, shift work, work experience in pediatric ward, interest in nursing profession, workplace satisfaction and experience participating in the training courses of communication skills with children before intervening (P>0.05) (Table.1).

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Table 1: Frequency distribution of the nurses studied in terms of demographic variables in the two

experimental and control groups

| Variables   |             | Experimental group Number (%) | Control group<br>Number (%) | Total<br>Number (%) | Result of chi-<br>square and<br>Fisher exact<br>tests |
|---|-------------|-------------------------------|-----------------------------|---------------------|---|
| Marital status  | Married     | 20 (66.6)                     | 21 (70)                     | 41 (68.3)           |   |
|   | Single      | 9 (30)                        | 9 (30)                      | 18 (30)             | *P= 0.599   |
|   | Died spouse | 1 (3.3)                       | 0 (0.0)                     | 1 (1.7)             |   |
| Employment status   | Formal      | 3 (10)                        | 2 (6.7)                     | 5 (8.3)             |   |
|   | Contractual | 4 (13.3)                      | 6 (20)                      | 10 (16.7)           | P = 0.871   |
|   | Projective  | 14 (46.7)                     | 11 (36.7)                   | 25 (41.7)           |   |
|   | Contractual | 6 (20)                        | 8 (26.7)                    | 14 (23.3)           |   |
|   | Other cases | 3 (10)                        | 3 (10)                      | 6 (10)              |   |
| Interest in nursing   | Very little | 1 (3.3)                       | 1 (3.4)                     | 2 (3.3)             |   |
|   | Little      | 1 (3.3)                       | 1 (3.4)                     | 2 (3.3)             | *P=0.977  |
|   | Middle      | 8 (26.7)                      | 9 (31)                      | 17 (28.3)           |   |
|   | Much        | 15 (50)                       | 12 (41.4)                   | 27 (45.0)           |   |
|   | Very much   | 5 (16.7)                      | 6 (20.7)                    | 11 (18.3)           |   |
| Interest in<br>working with<br>children   | Very little | 0 (0.0)                       | 2 (6.7)                     | 2 (3.3)             | *P=0.206  |
|   | Little      | 3 (10.0)                      | 0 (0.0)                     | 3 (5.0)             |   |
|   | Middle      | 10 (3.33)                     | 9 (30.0)                    | 19 (31.7)           |   |
|   | Much        | 13 (43.3)                     | 12 (40.0)                   | 25 (41.7)           |   |
|   | Very much   | 4 (13.3)                      | 7 (23.3)                    | 11 (18.3)           |   |
| Workplace<br>satisfaction   | Very little | 7 (24.1)                      | 4 (13.3)                    | 11 (18.6)           |   |
|   | Little      | 3 (10.3)                      | 5 (16.7)                    | 8 (13.6)            | * P= 0.826  |
|   | Middle      | 9 (31.0)                      | 11 (36.7)                   | 20 (33.9)           |   |
|   | Much        | 8 (26.7)                      | 8 (26.7)                    | 16 (27.1)           |   |
|   | Very much   | 2 (7.6)                       | 2 (6.7)                     | 4 (6.8)             |   |
| History of  | Yes         | 1 (3.3)                       | 1 (3.3)                     | 2 (3.3)             |   |
| participating in<br>the educational<br>courses of<br>communication<br>skills with | No          | 29 (96.7)                     | 29 (96.7)                   | 58 (96.7)           | P=1.000   |

<sup>\*</sup>P: P-value reported by Fisher's exact test.

The result of independent t-test showed that in the stage before intervention, the mean and standard deviation of the nurse's verbal communication skills had no significant difference between the two groups (P=0.302) while at the stage after intervention, the mean and standard deviation of these skills had been statistically significant and higher in the playing role group (P<0.001).

In within group comparison, the results of the paired t-test indicated that in the role playing group, the mean score of communication skills after intervention was significantly higher than that before intervention (P<0.001) while in the control group, the change in the mean score of communication skills was not significant after the intervention (P=0.066) (Table. 2).

**Table 2**: The mean and standard deviation of the score of the nurses' verbal communication skills before and after intervention in both experimental and control groups

| Score of verbal                             | Control           | Experiment        | Result of inter-group |
|---|-------------------|-------------------|-----------------------|
| communication skills                        | Mean and standard | Mean and standard | independent t-test    |
|   | deviation         | deviation         |                       |
| Before intervention                         | 4.2±1.3           | 4.6±1.6           | t=1.04, P=0.302       |
| After intervention                          | 4.6±1.4           | 8.9±1.0           | t=3.8, P<0.001        |
| Difference in before and after intervention | 0.4±0.1           | 4.3±0.6           | t=2.7, P=0.009        |
| Result of inter-group paired t-test         | t=17.4, P=0.066   | t=20.2, P<0.001   |                       |

In the examination of non-verbal communication skills. the result independent t-test showed that the mean and standard deviation of nurses' nonverbal communication skills had significant difference between the two groups before the intervention (P= 0.795) while after the intervention, the mean and standard deviation of these skills had been statistically significant and higher in the experimental group (P<0.001). In within group comparison, the results of the paired t-test in the experimental group indicated that the mean score of communication skills after intervention was significantly higher than that before intervention (P<0.001) while in the control group, the results of Wilcoxon test revealed that the change in the mean score of communication skills after intervention was not significant (P=0.045) (Table. 3).

**Table 3**: The mean and standard deviation of the score of the nurses' non-verbal communication skills before and after the intervention in both experimental and control groups

| The rate of non-verbal     | Control           | Experiment        | Result of inter-group test |
|----------------------------|-------------------|-------------------|----------------------------|
| communication skills       | Mean and standard | Mean and standard | _                          |
|                            | deviation         | deviation         |                            |
| Before intervention        | 3.3±0.9           | 3.4±1.3           | t=0.261, P=0.795           |
| After intervention         | $3.5\pm0.7$       | 6.4±0.9           | Z=-3.3, P<0.001            |
| Difference in before and   | $0.2\pm0.2$       | 3.0±0.4           | t=2.7, P=0.007             |
| after intervention         |                   |                   |                            |
| Result of inter-group test | Z=-4.7, P=0.045   | t=15.9, P<0.001   |                            |

In evaluating the nurses' satisfaction with training method, 27 cases (71.0%) were satisfied with the implemented teaching method.

# **Discussion**

The present study aimed to investigate the effect of training through role playing on nurse's communication skills with children. The results of this study showed that (verbal and nonverbal) communication skills of nurses was significantly increased in the experimental group after intervention while the increase in communication skills was not significant in the control group. The results of this study indicated that training through role playing promotes nurses' communication skills (verbal and nonverbal) which are consistent with the results of domestic study by Managheb (24) and studies by Knowles (27), Abraham and Deneve (30). Also, training communication skills holding through workshop increases nurses' communication skills and educational role playing method is an effective way to improve communication skills that is consistent with domestic

studies by Managheb (24), Erfanian (26), Khatibian (33) and study by Perlin (29).

In a quasi-experimental study entitled "The impact of role play and group discussion on the knowledge and attitude of interns of Jahrom Medical School about breaking bad news", Managhed et al. (2011) concluded that role playing increases the performance of interns in the field of communication skills more than discussion method which is consistent with the results of this study (24). Although in Managheb's study, the study samples consist of students and training through role playing has been given to a smaller number (15), the results of this study are consistent with the present study which can be due to the same procedure and training in workshop. In their study, Karimi et al. (2012) improved nurses' communication skills via holding a one-day workshop (25) and their study results are consistent with the results of this study that can be due to the same procedure.

In an empirical study entitled "The Effect of Teaching by Role Playing on Students' Counseling and Screening Skills toward IUD Clients" conducted on 62 midwifery students by Erfanian et al. (2008), the results revealed more effective teaching through role playing that leads to better learning counseling skills of students (26). Despite the difference in the study population, the results of this study are consistent with the results of the present study because of the same performance of role playing.

Knowles et al. (2001)improved communication skills and applying knowledge in dealing with patients with genitourinary system patient through role playing method in comparison with oral presentation method in London (27). In their study conducted by Abraham et al. (2001), role playing method enhanced students' skills in communicating with patients and screening for violence (28). Perlini et al. (2000) increased the mean scores of teenagers' knowledge and attitude towards HIV in Canada (29). The results of the study by Deneve et al. (2002) showed that using role playing improved the students' performance in the field of alleviation of bad news to patient or his companions (30). One of the excellent features of role playing is that visitors can establish emotional communication with playing operation and actors and freely state their reactions and feelings (31), so affect individuals' thev can communication skills and strengthen it.

The results of this study were not consistent with the study by Schlegel. Schlegel et al. (2012) conducted a quasiexperimental study entitled "Effects of Communication Training on Real Practice Performance: A Role-Play Module Versus a Standardized Patient Module". Its results showed standardized training that communications by patient was preferred to role playing by peers (32). On the cause of lack of consistency, using first-year students in this study who still have no clinical experience can be mentioned which makes those not shortcomings in the field of establishing communication so that they cannot perform role playing well. In order to avoid the impact of not dealing with communication challenges with children, we did not investigate nurses who had less than a month working experience in pediatric ward.

In this study, nurses considered role playing method as an effective method for training communication skills. This was consistent with the results of the study by Maghaned (24) and Khatibian (33). In a qualitative study entitled "Experience the midwifery students from learning to role playing in training methods: qualitative study", Khatibian et al. concluded that applying role playing method and subsequently, clinical application can

provide experience of "real role-playing" "transition from student professional person" in midwifery students during training (33). In their study, et al. concluded that using Maghaned experimental methods such as role playing patient in simulated a clinical preferred environment is to using theoretical approach to learning communication skills with patients and transforming bad news (24). One of the relative limitations of the present study is the dissemination of information by nurses in both groups that at the beginning, nurses were asked to refrain from disseminating information.

## Conclusion

Beside an emphasis on the importance of holding educational interventions in the field of improving communication skills, the results of this study to some extent enhanced the nurses' communication skills with children. Thus, further and deeper studies are also required in this field. So, it is suggested that the effect of various training methods on nurse's communication skills with children be measured and training communication skills with children be performed by the most influential way for nurses employed in pediatric hospitals in briefings before and during the service.

# Conflict of Interest: None.

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