ORIGINAL ARTICLE

Effectiveness of Structured Teaching Programme on the Level of Knowledge of Communication Skill among Nurses Working at NIMHANS, Bangalore

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Abstract:

Background: Mental disorders of different kinds leave the clients with communication problems that make the interaction difficult to understand. Almost all the mental disorders lead to a pathological communication pattern. Like other skills of professional nursing, communication requires intense education. *Aims and Objectives:* 1. To develop structured teaching programme on communication skill for nurses 2. To identify the socio demographic characteristics of the nurses in the study. 3. To assess the level of knowledge of communication skill before the structured teaching programme. 4. To evaluate the effectiveness of structured teaching programme. *Material and methods*: A quasi experimental study design with two groups' pre test and post test was used. The study population comprised of 32 nurses, 17 in experimental group and 15 in control group, working at NIMHANS, Bangalore using convenient sampling technique. The data were collected by using socio demographic data sheet and knowledge assessment questionnaire. The tools were prepared with the experts' guidance. Pilot study conducted was found to be feasible and reliable. The collected data were statistically analyzed. *Results:* The subjects in control and experimental group matched with each other in six socio demographic characteristics. There was a significant improvement in the level of knowledge in experimental group subjects after the intervention. *Conclusion:* Structured teaching programme was effective in improving the knowledge of communication skill.

Keywords: Communication skill, Effectiveness, Knowledge, Nurses, Structured teaching programme.

Introduction:

Communication is the heartbeat in nursing, whereas nurse-client interaction is the mainstream in the treatment of the clients. Communication is a process of exchanging information and the process of generating and transmitting meanings between two or more individuals. The ability to communicate is basic to human functioning and well-being [1].

Effective communication with a patient suffering from mental disorders will play a vital role in identifying the right process of treatment and quicken the pace of recovery. A psychiatric nurse should possess far better communication skills as the goal of psychiatric nursing is the whole care of the patient and not just the disease or ailment and formulate nursing process and procedures based on the input from the patient [2]. Clients have a special need for concrete communication in cognitive impairment, anxiety, or severe mental illness [3].Caring for people with mental illnesses demands an intensified presence and a strong desire to be supportive [4].

The emergence of communication skills as a core component of undergraduate nursing courses led to a new emphasis on communication skills in nursing education [5]. Ineffective communication remains a potent barrier in healthcare and that wide variations are evident in terms of the quality and quantity of nurse–client communication [6-8].

Nurses who join the psychiatric unit with a general nursing background need to learn about communication strategies to work effectively in the psychiatric units. Based on these needs, the researcher has chosen this study to assess the effectiveness of structured teaching programme on the level of knowledge of communication skill among nurses working at NIMHANS, Bangalore.

Material and Methods:

The study adopted the quasi-experimental research design in order to accomplish the objectives. The study was approved by the ethics committee of NIMHANS. Socio-demographic data sheet and knowledge assessment questionnaire on communication skill were prepared under experts' guidance. The knowledge assessment questionnaire consisted of 60 multiple choice questions divided into five dimensions containing 12 items of (20%) each-1. concepts and principles; 2. types and process; 3. general therapeutic communication techniques: effective and ineffective techniques; 4. factors promoting & hindering (therapeutic) communication and 5. pathological communication in clients with mental illness. Each question consisted of four choices with one correct answer. Minimum score was 0 and the maximum score was 60. Each correct response was given the score of 1. Scoring interpretation was that higher the score, higher the knowledge on communication skill.

Validity of the scale was established by giving the scale to seven mental health experts who expressed the appropriateness of the tool with few modifications in language. There was 100% consensus for each item seen among the validators. Reliability of the tool was established using test-retest reliability method showing paired 't' test value of -0.552 and 'p' value 0.586 indicating a high reliability.

Pilot study was conducted for the feasibility and reliability of the tool. 32 study subjects were selected using convenient sampling technique of which 17 who worked in the psychiatric unit at the time of study were selected for experimental group and 15 who worked in neuro centre at the time of study were selected for control group to avoid the chance of contamination between the study subjects. The number of subjects in the samples selected was on the basis of 32 newly joined nurses in the year 2011. The interest for newly joined nurses was that they were freshly exposed to psychiatric and neuro setting for the first time at NIMHANS. Inclusion criteria for study subject were male and female nurses working in inpatient units at NIMHANS with the qualification of either GNM or B.Sc in nursing who had joined NIMHANS in 2011 and had experience of less than one year at NIMHANS. Exclusion criteria were nurses who had undertaken any course in communication skill, had previous experience in psychiatric nursing unit and any physical ailment at the time of the study.

Ethical clearance was obtained from institutional ethics committee. Written informed consent was obtained from subjects after giving explanation about the nature of the study. The knowledge of communication skill was measured by pre test for both experimental and control group on first day. On second day, the experimental group was instituted with structured teaching programme on communication skill.

The schedule for the conduction of the study along with date, time, and durations were planned and given to all the wards 15 days prior so that the ward in charges were able to arrange the ward duties in advance and made the study subjects available for the study. Seven sessions were given in a day at Arts theatre, NIMHANS, lasting for 7 hours. The topics covered were according to the dimensions - one session for each dimension except third and fifth dimension which required 2 sessions for each dimension. The methods adopted to teach were lecture, discussion, demonstration and role play. The AV aids used were black board, chart, game materials and LCD slide. A break of 10 minutes was given in between each session. Every session was started with energizing game lasting for 5-7 minutes. The games were treasure hunt, draw a diagram, finding your star, how listeners affect speakers and Chinese whisper.

On third day post test was conducted for both the groups and the follow up post test also was conducted for both the groups after 2 weeks of first post test for finding the sustainability of the effectiveness of the intervention given. The difference due to the application of structured

teaching programme was determined by comparing the pre test and post test scores within and between the groups. Systematically collected raw data were coded, computed into excel sheet using SPSS 15 version. The data were analyzed and processed using descriptive and inferential statistics. The descriptive statistics used were mean, standard deviation and percentages. The inferential statistics used to compare the scores in between the groups was independent sample't' test and within the group was paired 't' test. Normality of total knowledge score was tested using Shapiro-Wilks' test, and it was seen that knowledge scores were following Normal distribution. Hence, the parametric tests were adopted for the between groups (t-test) and within groups comparisons (paired t-tests) with the given sample size.

Results:

Table1: Frequency Distribution of Staff Nurses Working at NIMHANS According to Socio-Demographic Data (N=32)

S1. No.	Socio-demographic Variables	Experimental group (N=17)		Control group (N=15)	
		No	(%)	No	(%)
1	**Age in years**				
	21-26	10	58.82	13	86.66
	27-32	7	41.18	2	13.34
2	**Sex**				
	Male	6	35.3	6	40
	Female	11	64.7	9	60
3	**Marital status**				
	Married	6	35.3	-	-
	Unmarried	11	64.7	15	100
4	**Religion**				
	Hindu	13	76.5	8	53.3
	Muslim	3	17.6	4	26.7
	Christian	1	5.9	3	20
5	**Professional qualification**				
	GNM	3	17.6	4	26.7
	BSc Nursing	14	82.4	11	73.3
6	**Professional experience**				
	< one year	3	17.6	5	33.3
	1-2 years	4	23.5	5	33.3
	3-4 years	5	29.4	4	26.7
	5-6 years	3	17.6	1	6.7
	7-10 years	2	11.8	-	-

The majority of the subjects 10 (58.82%) in experimental group belonged to age group 21-26 years. Among them 6 (35.3%) were male and 11 (64.7%) were female. Most of them 11 (64.7%) were unmarried, majority belonged to Hindu religion 13 (76.5%), 14 (82.4%) with Bsc Nursing qualification and varied prior experience (other than psychiatric nursing) of less than 1 year to 10 years.

The majority of the subjects 13 (86.66%) in control group belonged to age group 21-26 years. Among them 6 (40%) were male and 9 (60%) female. All 15 (100%) were unmarried, majority 8 (53.3%) belonged to Hindu religion, 11 (73.3%) with B.Sc Nursing qualification and varied prior experience (other than psychiatric nursing) of less than 1 year to 6 years (Table -1)

The pretest conducted to the study subject (N=32) had the mean score of 36.82 ± 5.03 and 36.67± 5.45 for experimental (N=17) and control group (N=15) respectively. The 't' value was 0.085 and it was not significant since 'p' value was 0.9333 (Table 2).

Comparison within the group showed that in experimental group (N=17) the mean pretest score was 36.82 ± 5.03 and mean post test score was 48.59 ± 3.52 indicating significant improvement. The 't' value was 10.4 and found significant at 'p' = <0.001. Whereas in control group, the mean pretest score was 36.67 ± 5.45 and mean post test score was 37.17± 5.82. The 't' value was 0.233 and was not significant as 'p' value was 0.817 (Table 3).

Comparison between the groups showed that in experimental group (N=17), the mean post test score was 48.59 ± 3.52 and in control group the mean post test score was 37.17 ± 5.82 showing 't' value of 6.514 and it was highly significant as 'p'=0.001 (Table 4).

Comparison of post test 1 and post test 2 scores within the experimental group and control group implied that in experimental group (N=17) post test 1 mean score was 47.41± 3.92 and post test 2 mean score was 48.59± 3.52. The 't' value was 2.25 and was significant as 'p' value was 0.039 (p=<0.005). While the control group (N=15) post test 1 mean score was 37.20 ± 6.56 and post test 2 mean score was 37.17± 5.82. The 't' value was 0.019 and was not significant as 'p' value was 0.985 (Table 5).

Table 2: Mean and Standard Deviation of Knowledge Scores on Communication Skill in Study Subject Prior to Structured Teaching Programme (N=32)

Scores	Experimental Group (N=17)	Control Group (N=15)	t value	p value
	Mean	Mean		
Total	36.82 ± 5.03	36.67 ± 5.45	0.085	0.933

Table 3: Comparison of Mean and Standard Deviation of Pretest and Post Test Knowledge Scores Within the Experimental Group (N=17) and Within the Control Group (N=15)

Scores	Pre Test	Post Test	t value	p value
	Mean	Mean		
Experimental Group (N=17)	36.82 ± 5.03	48.59 ± 3.52	10.4	<0.001**
Control Group (N=15)	36.67 ± 5.45	37.17 ± 5.82	0.233	0.817

*** p < 0.001*

Table 4: Comparison of Post Test Knowledge Scores Between the Experimental Group and Control Group (N=32)

Scores	Experimental Group (N=17)	Control Group (N=15)	t value	p value
	Mean	Mean		
Total	48.59 ± 3.52	37.17 ± 5.82	6.514	<0.001**

** $p < 0.001$

Table 5: Comparison of Post Test 1 and Post Test 2 Scores Within the Experimental Group and Control Group (N=32)

Scores	Group	Post test 1	Post test 2	t value	p value
		Mean	Mean		
Total Score	Experimental	47.41 ± 3.92	48.59 ± 3.52	-2.25	0.039 *
	Control	37.20 ± 6.56	37.17 ± 5.82	0.019	0.985

* $p < 0.05$

Discussion:

Findings Related to Socio-Demographic Characteristics of the Study Subjects in Experimental and Control Group Working at NIMHANS:

The majority subjects were females within the age group of 21-26 years, unmarried, belonged to Hindu religion, held Bsc Nursing qualification, held no experience in psychiatric nursing and with professional experience of less than 1 year to 10 years.

Findings Related to Effectiveness of the Structured Teaching Programme:

The study indicated that the knowledge level was similar in experimental and control group subjects in the pre test showing the homogeneity of the study subjects which also identified the need to implement structured teaching programme. The experimental group subjects showed statistically significant improvement in the scores. This finding is similar to the earlier findings of Wilkinson, Susie, Roberts, Anita, Aldridge [9]; Wilkinson SM, Gambles M, Roberts A [10], Gulsum Ancel [11]; Becker *et al* [12]; Wilkinson S, Perry R, Blanchard K [13]; Canada Boscart VM [14]; Pam Malloy Pam Malloy, Rose Virani, Kathe Kelly, Carla Munvar [15] and Kesten, Karen S [16] where there was a significant improvement in communication skills in all of the studies after the intervention. The second post test that was conducted after 2 weeks from the first post test for assessing the sustainability of effectiveness of teaching also showed that the experimental group subjects were able to score the similar or slightly higher score in the second post test thereby strengthening the intervention package used in the study. After the completion of the 2nd post test structured teaching programme learning module on communication skill was distributed to the study subjects (experimental and control group). There were certain limitations in the study as randomization could not be done to avoid contamination of study subjects and the study was limited to the newly recruited nurses.

It was difficult to gather all the nurses together as they were widely distributed at NIMHANS working area. This problem was tackled by considering the opinions and the ideas offered by

the study subjects and the ward in charges of the respective wards. Constant communication with them helped to conduct the study.

Conclusion:

Structured teaching programme on communication skill was immensely effective in improving the knowledge of communication skill in nurses thereby helping them to render the quality services to the patients.

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