

Assessment of the Effectiveness of Training Program on Knowledge and Skills Regarding Selected Breathing Exercise among the Care Giver of NCD Patients at Selected Area in Tamilnadu

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Abstract: The aim of the study was, to assess the effectiveness of training programme on knowledge and skill regarding selected breathing exercise among the care giver of NCD patients. **Methodology:** The investigator used quasi experimental approach and selected the 30 samples by using non probability convenient sampling technique. By using a self-administered questionnaire, the knowledge was assessed and skill was assessed by using a check list on steps of doing selected breathing exercise. **Results:** Study finding revealed that in the pre-test none of them had adequate knowledge. 10(33.33%) had moderate level of knowledge. The remaining 20(66.66%) had inadequate knowledge regarding selected breathing exercise. In the post-test 19(63.33%) had adequate knowledge 11(36.66%) had moderate level of knowledge. None of them fall in the category of inadequate knowledge. In the pre-test all 30 (100%) caregivers of NCD had inadequate skill regarding breathing exercise. Likewise, in the post-test 25 (83.33%) of them had adequate skill and 5(16.66%) had average skill regarding breathing exercise that the mean knowledge score of pre-tests was 7.9 with the standard deviation of 3.30. Similarly, the post-test mean was 13.63 with the standard deviation of 4.06. The calculated paired t test value of $t=8.43$ which was statistically significant at $p < 0.001$. Whereas the skill mean score of pre-tests was 0.67 with the S. Dof 1.85. Similarly, the post-test mean was 17.27 and the SD was 1.83. The paired t test value was $t=30.07$ which was statistically significant at $p < 0.001$, the mean knowledge score was 16.73, S.D was 2.46 similarly the mean skill was 17.37, S.D was 1.90, calculated Karl Pearson's correlation coefficient value $r = 0.522$. **Conclusions:** The study concluded that the exposure of the training programme regarding breathing exercise among caregiver of NCD patients has an effect on improving their knowledge and skill to implement it for their own family members.

Keywords: training programme- caregiver of NCD patient.

1. Introduction

As per the estimation of World Health Statistics (2012), around 57 million global mortality registered in 2010, in that 36 million mortality (63%) were due to Non-communicable diseases (NCDs). The largest proportion of Non-communicable disease deaths is caused by cardiovascular diseases (48%). In terms of attributable deaths, raised blood pressure is one of the leading behavioral and physiological risk factors to which 13% of global deaths are attributed. Hypertension is reported to be the fourth contributor to premature death in developed countries and the seventh in developing countries. Recent reports indicate that nearly 1 billion adults (more than a quarter of the world's population) had hypertension in 2000 and this is predicted to increase to 1.56 billion by 2025.

Coronary artery disease is one of the main reasons for deaths in the developed as well as developing countries. The World Health Organization predicts that by 2020 CAD will become the world's most important cause of death and disability. In today's world, most deaths are attributable to non-communicable diseases.

Rural people not taking proper treatment because of their low economic status, and preferring for home remedy, so the researcher wants to train their care giver to administer the breathing exercise for NCD patients.

Objectives of the Study

- 1) To assess the pre and posttest level of knowledge and skill regarding breathing exercise among caregivers of NCD patients at selected area in Tamilnadu.
- 2) To assess the effectiveness of training programme regarding breathing exercise among caregivers of NCD patients at selected area in Tamilnadu.
- 3) To correlate the knowledge and skill of the caregivers of NCD patients regarding breathing exercise among caregivers of NCD patients at selected area in Tamilnadu
- 4) To associate the posttest level of knowledge and skills regarding breathing exercise among caregivers of NCD patients with their selected demographic variables

Null Hypothesis

- H₀₁:** There is no significant difference between pretest and post test level of knowledge and skill regarding breathing exercise among caregivers of NCD patients at selected area in Tamilnadu.
- H₀₂:** There is no significant association between post test level of knowledge and skill regarding breathing exercise among caregivers of NCD patients at selected area in Tamilnadu with their selected demographic variables.

2. Methodology

In this study, quantitative research approach and quasi experimental design were adopted. 30 Samples were selected by using non probability convenient sampling technique. By using a self-administered questionnaire, the knowledge was assessed and skill was assessed by using a check list on performing breathing exercise for NCD patients. After the pre-test investigator administered a training programme by demonstration. At the end of the training Post-test was administered. Finally, the data was tabulated for analysis.

3. Results

Table 1(A): Assessment of the pre and posttest level of knowledge regarding breathing exercise

Knowledge	Adequate	Moderate	Inadequate
pre-test	-	10(33.33%)	20(66.66%)
Post test	19(63.33%)	11(36.66%)	-

Table 1(B): Assessment of the pre and posttest level of skills regarding breathing exercise

Skill	Adequate	Moderate	Inadequate
Pre-test	-	-	30 (100%)
Post test	25 (83.33%)	5(16.66%)	-

Table 2(A): Assessment of effectiveness of training programme on breathing exercise among caregivers of NCD patients (knowledge), N=30

Knowledge	Mean	Standard deviation	Paired 't' test
Pre-test	7.9	3.30	t=8.43, df=29 p=0.001, S*
Post-test	13.63	4.06	

Significant at $p=0.05$, N=significant, NS= not significant

Table 2(B): Assessment of effectiveness of training programme on breathing exercise among care giver of NCDs (skill), N=30

Skill	Mean	Standard deviation	Paired 't' test
Pre-test	0.67	1.85	t = 30.07, df=29 p<0.001, S*
Post test	17.27	1.83	

Significant at $p=0.001$, N=significant, NS= not significant

Table 3: Relationship between post-test knowledge and skill regarding breathing exercise among care giver of NCDs, N=30

Domains	Mean	S. D	'r' value
Knowledge	16.73	2.46	'r'=0.522 P=0.001, S**
Skill	17.35	1.90	

** $p<0.01$, S-Significant

4. Discussion

The finding revealed that the mean knowledge score of pre-tests was 7.9 with the standard deviation of 3.30. Similarly, the post-test mean was 13.63 with the standard deviation of 4.06. The calculated paired t test value of $t=8.43$ which was statistically significant at $p < 0.001$.

Whereas the skill mean score of pre-tests was 0.67 and the standard deviation was 1.85. Similarly, the post-test mean was 17.35 and the standard deviation was 1.90. The calculated paired t test value was $t=30.07$ which was statistically significant at $p < 0.001$.

Hence, it was proved that training conducted to the caregiver of NCD patients was highly effective to improve the knowledge and skill regarding breathing exercise.

Finding revealed that the mean knowledge score was 16.73, S.D was 2.46 similarly the mean skill was 17.35, S.D was 1.90, calculated Karl Pearson's correlation coefficient value $r = 0.522$ it shows the moderate positive co-relation between knowledge and skill regarding breathing exercise and was found to be statistically significant at $p < 0.01$ level. This clearly indicates that when the knowledge increases among caregivers of NCD patient's skill also increases.

There was no significant association found between the posttest level of knowledge and skill with any of their demographic variables

5. Conclusion

By empowering the care giver of NCD patients in the community we can do treating the people at their home set up. This study concluded that the exposure of the training programme regarding breathing exercises has an effect on improving knowledge and skill among caregivers of NCD patients.

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