A quasi-experimental study to assess the effectiveness of planned teaching programme on knowledge regarding the electroconvulsive therapy among family members of patients with mental illness

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Abstract---Effectiveness of planned teaching programme on knowledge regarding the Electroconvulsive therapy among family members of patients with mental illness Objectives were to assess the pre-test knowledge level about electroconvulsive therapy among family members of patients with mental illness in both control and experimental group; To assess the post-test knowledge level about electroconvulsive therapy among family members of patients with mental illness in both control and experimental group; To determine the effectiveness of planned teaching programme on electroconvulsive therapy among family members of patients with mental illness. And to associate pre-test knowledge level on electroconvulsive therapy among family members of patient with mental illness with selected demographic variables. Methodology: The study was quantitative in approach and the design was Quasi-Experimental with pre test post test control group. The sample size was 60 each in experimental & control. Family members of mentally ill patients are population for this study. A Non-probability purposive sampling technique was used to select the samples. Data was collected by using the tools which consisted of demographic data sheet and Knowledge score on electroconvulsive therapy which consisted of 30 questionnaires. Result: The findings show that most of the variables in demographic data of both control and experimental data were similar. We have seen the demographic analysis of both patient relatives who were sample and the patient data. The intervention was found to be effective as

experimental group showed good level of knowledge post planned teaching, thus the hypothesis for interventions is accepted. There was no association of demographic variables with pre test knowledge level and the null hypothesis for association is accepted. Conclusion: The study concluded that imparting knowledge regarding electroconvulsive therapy was needed as their belief were clarified and the family members also gained knowledge regarding what is Electroconvulsive therapy.

**Keywords**—effectiveness, planned teaching programme, electroconvulsive therapy, family members, patients with mental illness.

**Introduction**

Electroconvulsive therapy (ECT) is a biological treatment procedure involving a brief application of electric stimulus to produce a generalized seizure. ECT is utilized worldwide as one of the most effective biological treatment modalities for various severe, treatment-refractory or treatment-resistant psychiatric disorders, in particular, major depressive disorder (MDD) in western countries and schizophrenia in Asian countries. In the USA, approximately 100,000 patients receive ECT annually. Outpatient ECT, as a continuation treatment or an independent acute course, has become a trend over the past 20 years. Data from the National Institute of Mental Health survey sample showed that a third of ECT recipients were aged 65 years and older; of patients with affective disorders, 3.4% of those under the age of 65 years received ECT, while 15.6% of those 65 years of age and older received ECT. Patient or relatives may refuse ECT when indicated due to myth and little or lack of knowledge about the procedure. The knowledge and attitude towards ECT among the care givers may reflect on patients and influence the treatment of choice. Although ECT is an effective, safe and widely practiced treatment, it has also been one of the most controversial and misunderstood procedure. Unfortunately, in the ongoing debate about the merits and demerits of the treatment, the opinions of their relatives have rarely been sought. Every year, an estimated 1 million patients undergo ECT all around the world. And, according to the data below, nearly ECT has been imposed on a third of the patients, who are either involuntarily patients or have had it imposed on them. Despite psychiatrists' claims that "mental disease" should be treated similar to "physical illness," no one may be forced to have an appendectomy or other surgical procedure against their will or without their agreement. (1) Mental illness also a stigma for our society. People don’t want to talk about mental illness, and for any disease treatment is required. Here the treatment is with antipsychotics to treat the psychiatric disorders but some patient require medicine and ECT. Electroconvulsive therapy is the best treatment for some psychiatric disorders but the patients and family members are not aware about that. So, the public awareness is important. (3)

**Need of the study**

In a quasi-experimental designed research, total of 64 GNM students with 32
each in control and experimental group. Data was collected by using a systematic questionnaire and checklist. The experimental group received organised education module, while the control group received standard hospital exposure training. In terms of knowledge, there was a tremendous improvement score \((t^2=15.892, p=0.00)\) followed by the education module in the experimental group. The control group’s learning did not change much after typical exposure education. Score \((t^2=1.625, p=0.275)\). The results also revealed that the experimental group was more skilled than the normal control at offering care for patients having ECT. The findings revealed the organized training module was helpful in boosting the knowledge and abilities of student nurses

**The study statements**

“A Quasi-Experimental study to assess the effectiveness of planned teaching programme on knowledge regarding the Electroconvulsive therapy among family members of patients with mental illness”

**Material and Method**

In present study, researcher adopted Quantitative approach & Quasi-Experimental design. It was carried out on 120 [60 control, 60 experimental] participants. The non-probability purposive sampling technique was used, data were collected by using structured questionnaire. Tool was validated by experts from all the departments of Nursing. Reliability was done by using Karl-Pearson Correlation Coefficient the \(r\) value was 0.78. Pilot study was done on 12 participants, the study was found feasible. Result: Result was divided into four sections.

**Results**

Section Ia: Demographic profile of family members which depicts that majority 28.4% were from 51-60 years in the experimental group in control group it was 28.3% According to gender in both group males were maximum with 51.7% were males and 48.3% were females In education majority 36.7% were having diploma, in experimental group and In control majority 36.7% were having diploma, 21.7% were having higher secondary certificate. , the occupation in control group, majority 45% were homemaker, whereas in experimental majority 40% were homemaker. In the control group, 66.7 percent had a nuclear family while in the experimental group, 63.3 percent had a nuclear family. According to religion in both experimental and control majority 83.3% were Hindu According to previous knowledge about ECT in control majority 83.3% were having no previous knowledge, whereas in experimental majority it was 75% According to relationship of family member with patient, the experimental group showed majority 36.7% were spouse, in control group majority 26.7% were spouse.

Section Ib: It shows the demographic details of the patient whose family member were the sample. According to the age maximum 28.3% patients in experimental group belonged to age group of 51 to 60 years, however in control group majority were in the age group of 51 -60. In gender majority 53.3 % were male in experimental assemblage and 46.7% were females, but in control group both male
and female were equally distributed with 50% each. The education level shows majority in new group 23.3% had studied till higher secondary, % where as in control group also 33.3% was maximum with higher secondary education, where as in control group also 33.3% was maximum with higher secondary education. The burden of the experimental group’s mental illness was 53.3% with 6 months to 5 years of illness, In control group maximum was 40% with illness for more than 10 years. The majority of patient 32% in experimental group had schizophrenia. In the control group maximum patient had neurotic disorder with 41%.

Section II Pre and post-test knowledge level on the electroconvulsive therapy among family members of patients with mental illness in both groups.

<table>
<thead>
<tr>
<th>Knowledge category/Level</th>
<th>Pre and post-test experimental group</th>
<th>Pre and post-test in control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre test</td>
<td>Post test</td>
</tr>
<tr>
<td></td>
<td>(f)</td>
<td>(%)</td>
</tr>
<tr>
<td>Poor</td>
<td>46</td>
<td>76.7</td>
</tr>
<tr>
<td>Average</td>
<td>14</td>
<td>23.3</td>
</tr>
<tr>
<td>Good</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Section III Effectiveness of the planned teaching program on knowledge regarding electroconvulsive therapy on sample.

Table No.2 : Findings related to effectiveness of planned teaching programme on knowledge regarding electroconvulsive therapy

<table>
<thead>
<tr>
<th>Research Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Control</td>
<td>60</td>
<td>10.43</td>
<td>2.96</td>
<td>10.38</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post Control</td>
<td>60</td>
<td>16.77</td>
<td>4.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Experimental</td>
<td>60</td>
<td>8.52</td>
<td>2.57</td>
<td>29.81</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Post Experimental</td>
<td>60</td>
<td>25.15</td>
<td>3.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: The value in experimental group of t is 29.81 the value of p is < 0.001. The result is significant at p < .05.

Section IV Association between pre-test knowledge score with selected demographic variables.

n=60,60

In association of knowledge score with in the pre-control group, demographic factors were examined. Because the p-value is greater than 0.05, there is no substantial relationship between knowledge and specified demographic characteristics. As a result, the null hypothesis has been accepted.
Discussion

The study's findings were discussed, along with the aims and hypothesis. The drive of this study was to see how effective a planned education programme was at improving understanding of deep brain stimulation with patients with mental disorder. Kiran Patel (2021) a study conducted on A Efficacy of a Planned Teaching Program on Electro Convulsive Therapy Knowledge among Patient's Relatives ECT in Selected Vadodara Hospitals Background: Although electroconvulsive therapy (ECT) is a viable treatment, it has a negative public and professional image. Efficacy and safety of ECT have continued to improve as a consequence of clinical experience and research. It is vital to undertake studies on this premise in order to change people's perceptions of electroconvulsive therapy. 1. Objectives: 1. Determine the current degree of information about electro convulsive therapy among patients' families who are having ECT. 2. To see how successful organised training is at improving patient's relatives' awareness of electro convulsive therapy. 3. To determine if there is a link between patients' relatives'. The 30 samples were chosen using a purposeful sampling strategy. Before and after the intended teaching programme, structural questioners were used to check knowledge of ECT. Results: The effectiveness of planned training on knowledge of electroconvulsive therapy is assessed using a paired t test analysis. The researcher discovered t value= 24.853, which means that the acquired t value in this study is greater than the t test table value at the 0.05 level of significance. As a result, the t value achieved is substantial. As a result, it appears that patient knowledge of electroconvulsive therapy has improved as a result of planned training relative.

Conclusion

The purpose of this study was to see how effective a planned education programme was at improving understanding of electroconvulsive therapy among family members of patients with mental disorder. The investigation will be conducted using an experimental research design. According to the statistical analysis, between pre-test and post-test, as well as the experiment group, there is a substantial variation in educational level recommended that the planned education on electroconvulsive therapy was effective.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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our principal and subject teacher who have contributed to accomplishing the research study successfully. Funding: Self-funded.

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