

Effect of Task Oriented Approach to Improve Self Drinking Skills among Patients with Hemiplegia

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INTRODUCTION

Stroke rapidly developing in cerebral function and lasting more than 24 hours leading to death, with no apparent cause other than of vascular origin. Stroke or cerebrovascular accident describes a variety of disorders characterized by the sudden injury to the brain. Vascular damage in the brain disrupts blood flow, limits oxygen supply to surrounding cells and lead to brain tissues death or infarction. Stroke is usually classified by the mechanism and location of the vascular damage. The two broad causes are ischemia and haemorrhage (Aho et al.,1980)

Ischemic stroke results from a blockage of a cerebral vessel and can further be categorised as caused by thrombosis or embolism. Thrombosis is the stenosis or occlusion of a vessel, usually as a result of atherosclerosis. This occlusion is typically a gradual process, often with preceding warning signs, such as transient ischemic attack. Embolism is dislodged platelets, cholesterol, or other Material the travels in the blood stream and blocks of vessel. Ischemic strokes are the most common type, representing roughly 80 percentage of strokes. (Roth&Harvey,1996).

Hemorrhagic strokes result from a rupture of a cerebral blood vessel. In such strokes, blood is released outside of the vascular space, cutting off pathways and leading to pressure injuries to brain tissue (Caplan&Stein,1986).

Haemorrhages which are either intra cerebral or subarachnoid, maybe caused by Hypertension, arteriovenous malformation, or aneurysm. CVAs Account for only an estimated 20% of strokes but they can be the most catastrophic accounting for an estimated 3rd of stroke deaths.

Aim: To find out the effect of task oriented approach along with training of self drinking skills among clients with hemiplegia

Objectives:

- To identify clients with hemiplegia who have poor self drinking skills.
- To Find out the effect of conventional occupational therapy in control group.
- To find out the effect of task oriented approach along with training of self drinking skills in experimental group.
- To compare the effect of task oriented approach with conventional occupational therapy program.

HYPOTHESIS

Null Hypothesis:

1. There is no statistical significant difference between pre and post tests of control group
2. There is no statistical significant difference between pre and post tests of experimental group
3. There is no statistical significant difference between post tests of control and experimental group

Alternate Hypothesis:

1. There is a statistical significant difference between pre and post tests of control group
2. There is a statistical significant difference between pre and post tests of experimental group
3. There is a statistical significant difference between post tests of control and experimental group

Research Design: Quantitative research with quasi- experimental design

Sample Techniques: Convenient sampling technique is used

Sample Setting:

- . Pain & Stroke rehab centre at Tnagar.
- . Saveetha hospital at Thandalam.

Inclusion Criteria:

- Age between 30 and 70
- Both right and left hemiplegia
- Brunnstrom stage 4&5
- Both genders

Exclusion Criteria:

- Age between 80+
- Spinal cord injury
- Coronary heart problems
- Insufficient mental capacity
- Current coma patients

Instruments Used: Box & Blocks test

PROCEDURE (INTERVENTION)

In each session, introduction is given about the session goals, sessions started with warm up activity and end with wind down activity. In all the sessions clients were encouraged to perform the activities which are needed for the self-drinking skills.

The goal of the study was to analyse stroke patients and provide task oriented approach to help them improve their self drinking skills. Each session lasted for 45 minutes with an introduction to the session and activity and closing with a wind down session. Some activities include ball squeezing, coin towers, theraputty, making a full fist, reaching ball behind back etc.

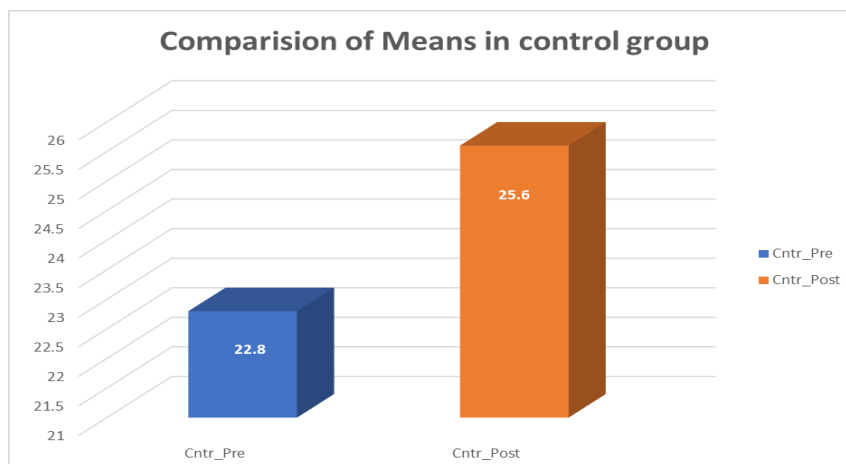
DATA ANALYSIS AND RESULT

Statistical analysis of pre- test and post- test in control group

	Mean	N	Z value	p value
Cntr_Pre	22.8	15	-3.439	0.001*
Cntr_Post	25.6	15		

* Significant at 5% alpha level

Since the p value of 0.001 is lesser than 0.05, alternate hypothesis **1** accepted. Hence, there is statistically significant difference between pre- test and post test scores in the Control Group of the BBT scale. This suggests that the intervention received by the control group had significant improvement.

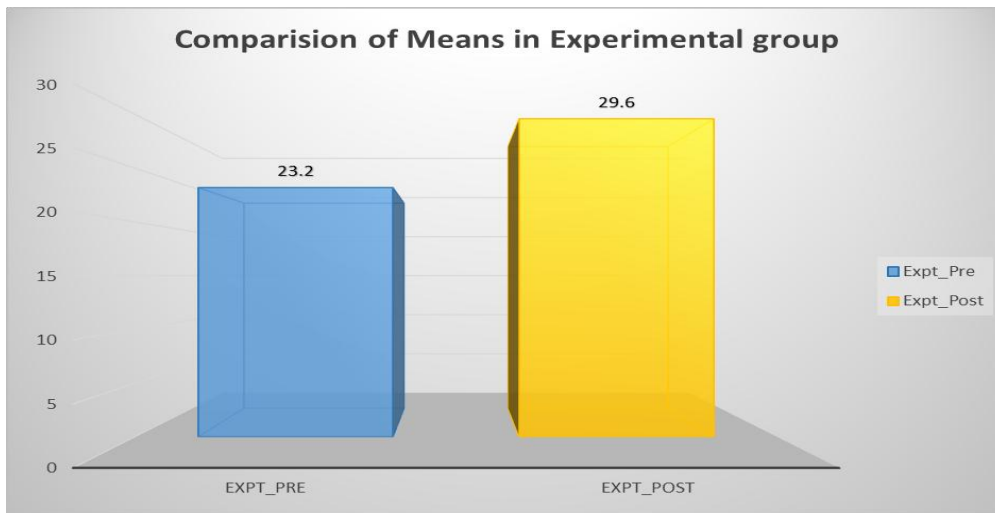


Statistical analysis of pre- test and post- test in experimental group

	Mean	N	Z value	p value
Expt_Pre	23.2	15	-3.45	0.001*
Expt_Post	29.6	15		

* Significant at 5% alpha level

In the Experimental group, since the p value of 0.001 is less than 0.05, alternate hypothesis 2 is accepted. Hence, there is statistically significant difference in Experimental Group between pre-test and post test scores of BBT scale. This suggests that the intervention received by the experimental group had significant improvement.

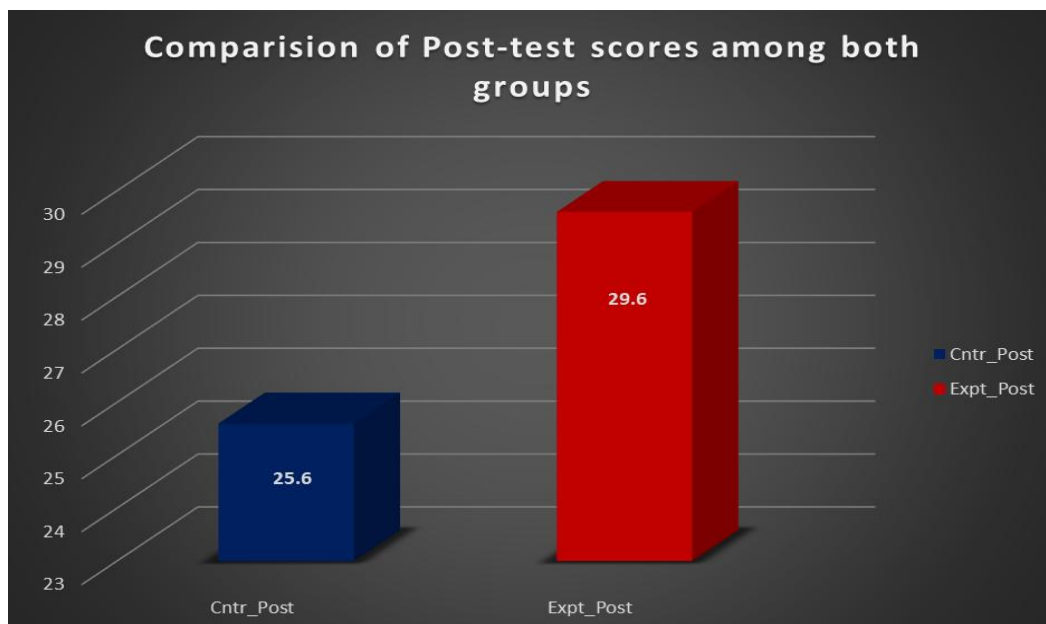


Statistical analysis between the post- test scores of the control and experimental group

	Mean	N	Z value	p value
Cntr_Post	25.6	15	-3.7745	0.000*
Expt_Post	29.6	15		

*Significant at 5% alpha level

Since the p value of 0.000 is lesser than 0.05, alternate hypothesis 3 is accepted. Hence, there is statistically significant difference in post test scores between Experimental and Control Group of the BBT scale. This suggests that the intervention received by the experimental group had more improvement when compared to the control group.



DISCUSSION

The aim of the study was to find out the effect of task oriented approach to enhance self drinking skills among patients with hemiplegia.

The samples were selected from the study from Pain & Stroke rehab centre at T nagar and Saveetha hospital at Thandalam. A total of 30 patients with hemiplegia were selected and divided equally into two groups, control group and experimental group, 15 samples in each group .

The levels of hand dexterity in both experimental and control group was measured using Box & Blocks test. The experimental group alone underwent task- oriented approach for a period of three months and control group underwent conventional occupational therapy intervention.

Table 1 & Figure 1 showed the statistical analysis of pre and post of Box & Blocks test in control group. The results indicated that there was a significant improvement functions and self- drinking skills. The results were obtained with the conventional occupational therapy program.

Table 2 & Figure 2 showed the statistical analysis of pre and post - test of Box & blocks test. The results indicated there was an improvement in upper extremity functions and self- drinking skills.

Table 3 & figure 3 showed the statistical analysis of post test of Box & Block test in between control and experimental group. The results indicated that there was more improvement in upper extremity functions and self drinking in experimental group when compared with the control group. It proved the effect of task oriented approach in improving upper extremity functions and self drinking skills.

CONCLUSION

The study investigated the effect of task oriented approach to enhance self - drinking skills in clients with hemiplegia.

The study was conducted over a period of three months. Totally 30 clients with hemiplegia. 15 samples were in control group and 15 samples were in experimental group. Pre- test and post-test for both groups by using Box & Blocks test. Experimental group underwent task oriented approach whereas control group received only conventional occupational therapy.

The result showed that there was significant improvement in the experimental group than the control group after training in task oriented approach.

Thus the study proved the effect of task oriented approach in improving self- drinking skills among clients with hemiplegia.

LIMITATIONS AND RECOMMENDATIONS

Limitations:

1. The limitations of the study include the small number of sample in hemiplegia.
2. Also, long term follow up was not done for the young adult and old age to identify the long term effects of task oriented approach among hemiplegic patients.

RECOMMENDATIONS:

1. The same study can be replicated in a large sample size and individual to generalise the result.
2. Long term follow up can be done for the neurological patient to identify long term effects of task oriented approach among hemiplegic patients.
3. Task oriented approach can be used in various other neurological conditions
4. Study can be conducted for long duration of time.
5. Instead of convenient sampling, a randomised controlled trial can be used to conduct this study.

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