Innovations

A Study to Assess the Effectiveness of Post Stroke Rehabilitation Module on the Level of Knowledge and Practice among the Care Givers of Patients with Stroke at SRM General Hospital, Kattankulathur

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Abstract : *Acute compromise of the cerebral perfusion or vasculature is a stroke or cerebrovascular accident . Approximately 85 percent of strokes are ischemic and 15 percent haemorrhagic stroke.****AIM:****This study was to assess the effectiveness of knowledge and practice regarding post stroke rehabilitation module among the care givers of patients with stroke in study group and control group.****METHODS :****Research approach was quantitative approach. the research design adopted for the study was quasi experimental research design . The sample size was 50 care givers of patients with stroke were selected by using non probability convenient sampling technique at*

*SRM General Hospital, Kattankulathur. Pre test was conducted in Study group and control group. Module and demonstration was given on stroke rehabilitation in study group on the same day and post test was conducted after 7 days in study group and control group . The sample were tabulated , analysed and interpreted using both descriptive and inferential statistical method. **RESULTS:**The study group p value 0.000 and less than 0.01 is highly significant difference between the mean pre test knowledge score and mean post test knowledge score and p vale 0.000 is less than 0.01 and is high significant difference between the mean pre test practice score and mean post test practice score. The p value 0.041 is less than 0.05 and significant at 5% level "r" value 0.217 which shows that there was significant positive correlation found between knowledge and practice regarding post stroke rehabilitation in care givers of patients with stroke. The study reveals that the post stroke rehabilitation module was effective in improving the knowledge and practice of care givers of patients with stroke. **Conclusion** The study concludes thatthe post stroke rehabilitation module and demonstration was effective to improving knowledge and practice ofcaregiversof patients with stroke.*

***Keywords**: stroke, post stroke rehabilitation module, care givers of patients with stroke.*

Introduction

Health is the level of functional and/or metabolic efficiency of a living being. In human, it is the general condition of a person in mind, body and spirit, usually mean to being free from illness, injury or pain. The World Health Organization defined health in its broader sense in 1946 as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Generally, the context in which an individual lives is of great importance on health status and quality of life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society.

According to the **World Health Organization (2020),** the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviours. Health damaging behaviours particularly tobacco use, lack of physical activity and poor eating habits are major contributors to the leading chronic diseases. A disease is an abnormal condition affecting the body of an organism. It is often considered to be a medical condition associated with specific symptoms and signs. Chronic diseases generally

cannot be prevented by vaccines or cured by medication, nor do they just disappear.

Nogueira RG, Jadhav AP , et al (2016) defined the acute compromise of the cerebral perfusion or vasculature is a stroke or cerebrovascular accident. Approximately 85 percent of strokes are ischemic and 15 percent haemorrhagic stroke. In this discussion, we are mainly limited to ischemic strokes. Throughout the past several decades, the incidence of stroke and mortality is decreasing. Worldwide, stroke is the leading cause of adult disability. In order to prevent or minimize morbidity and mortality, it is thus critical to recognize stroke early and treat it quickly. Many causes of stroke exist. The largest cause of ischemic stroke is hypertension. There are numerous causes of stroke in the younger population, including clotting disorders, carotid dissection, and illicit drug abuse. A quick history and examination to be performed in the acute environment. It is very important not to waste any time as "time is brain". As acute stroke management evolves rapidly, patients should be considered for plasminogen activator intravenous tissue Up to 4.5 hours, with up to 6 hours of mechanical thrombectomy. The recent Drug abuse warning network trial showed that in selected cases of large vessel occlusion, the window for mechanical thrombectomy can be extended for up to 24 hours .

Materials and Methods

It was a single blinded quantitative study with quasi experimental research design based on knowledge and practice of care givers of patients with stroke at SRM General hospital Kattankulathur. Formal approval was obtained from SRM Institute of Ethical committee. After explaining the need for the study and getting the written consent data was collected from 50 caregivers of patients with stroke. convenient sampling technique was used to collect the data. Prior permission was obtained from the Medical superintendent, SRM General Hospital, Kattangulathur, Chengalpet Dt. The pilot study was conducted from 18/01/2021 to 25/01/2021. For the pilot study 10 care givers of patient with stroke was selected who fulfilled the inclusion criteria was selected. Convenient sampling technique was used to collect the data. The care givers of patient with stroke were pre assessed for the knowledge and practice on post stroke rehabilitation , after giving the post stroke rehabilitation module , imparting the knowledge regarding post stroke rehabilitation module for the care givers of patient with stroke by means of post stroke rehabilitation module and demonstration for 30 minutes . were reassessed for the knowledge and practice on post stroke rehabilitation module for care givers by post test. The completion of the tool was ensured. Tool was found to be a good tool

in terms of clarity and simplicity. The tool was feasible for the main study; it showed the reliability of 0.86 for knowledge and 0.85 for practice.

The investigator had collected data within four weeks with effects from 25/1/2021 to 28/2/2021 and formal approval was obtained from the Medical superintendent of SRM General Hospital, Kattankulathur, Chengalpet Dt.

The stroke patients got admitted in general medicine ward at SRM General Hospital Kattankulathur . among six (6) units , first three (3) units was selected for control group and second three (3) units was selected for study group.

The   samples were selected by using convenient sampling technique data were collected. The investigator introduced her to the participants and the purpose of the study was ensured to better co-operation and received a written consent from all the selected care givers of patients with stroke.
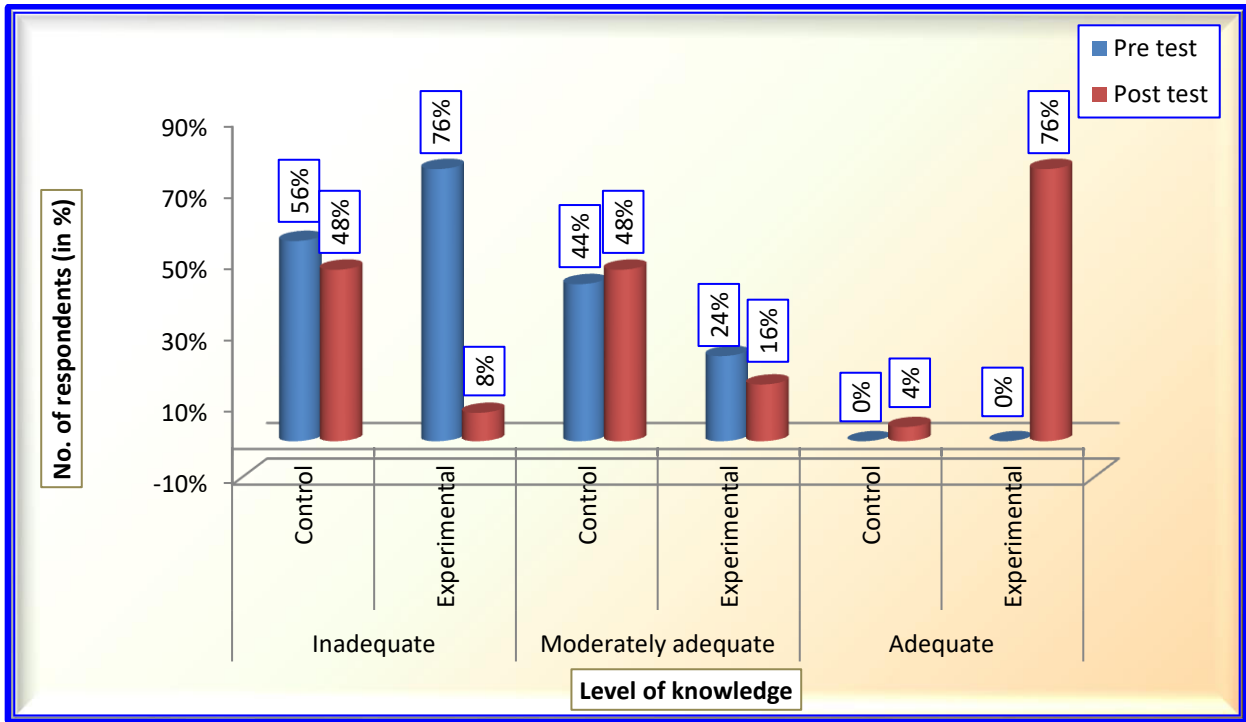
 On the first day of contact , the investigator collected the information about demographic variables from all the selected care givers of patients with stroke.

Pre-test was conducted on the 1st day by using structured knowledge questionnaire to assess the level of knowledge and structured observational checklist to assess the level of practice by structured practice schedule. Approximately 30 minutes was spent to elicit data from the participant. Rehabilitation module package was given through booklet and demonstration. Post test was conducted after 7 days. To complete the data collection process for 50 caregivers of patients with stroke .
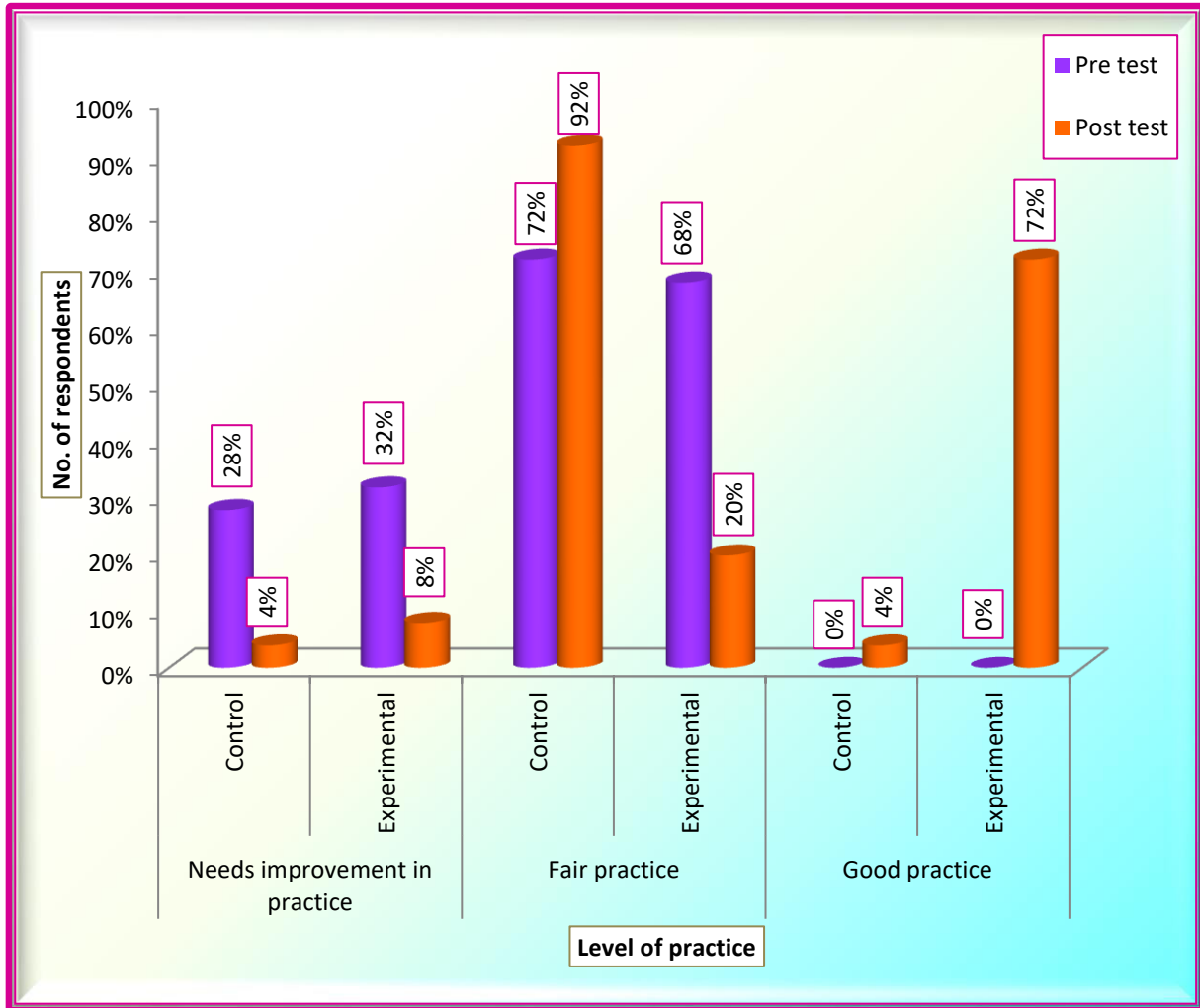
        The collected data was entered in the X-el sheet and it was analysed by SPSS Version 16.0. The p value < 0.05 was used for statistical significant

Results and Discussion

Pre test and post test level of knowledge and practice regarding post stroke rehabilitation module between the study group and control group.

Bar diagram depicting mean score the comparison of knowledge between control group and study group for the pre test and post test.

To determine the effectiveness of post stroke rehabilitation module among the care givers of the patients with stroke study group and control group.

The analysis revealed that in control group the p value 0.278 is not less than 0.05 and is not significant at 5% level respectively. Whereas in study group the p value 0.000 is less than 0.01 and is highly significant at 1% level .

The post test mean score is greater than the pre test mean score in study group hence we can conclude that there is significant improvement in knowledge of caregivers of patients with stroke i.e., the post stroke rehabilitation module was effective.

The analysis revealed that in control group the p value 0.000 is less than 0.01 and is highly significant at 1% level . The post test mean score is greater than the pre test mean score.

In study group the p value 0.000 is less than 0.01 and is highly significant at 1% level . There is high significant difference between the mean pre test practice score and mean post test practice score.

The post test mean score is greater than the pre test mean score hence we can conclude that there is significant improvement in practice of caregivers of patients with stroke.

To correlate the knowledge with practice on post stroke rehabilitation module among the care givers of patients with stroke study group and control group.

The analysis revealed that in control group the p value 0.201 is not less than 0.05 and is not significant at 5% level in pre test respectively. The p value 0.468 is not less than 0.05 and is not significant at 5% level in post test in study group the p value 0.682 is not less than 0.05 and is not significant at 5% level in pre test respectively. the p value 0.041 is less than 0.05 and is significant at 5% level in post test hence we can conclude that there is significant correlation between knowledge and practice scores of study group at post test level.

There is no association of pre test and post test level of knowledge and practice on post stroke rehabilitation module among the care givers of patients with stroke in study group and control group.

Conclusion

The present study assessed the effectiveness of post stroke rehabilitation module on knowledge and practice among the caregivers of patients with stroke . The investigator concluded that the module, demonstration and reinforcing booklet to the caregivers on post stroke rehabilitation module was the effective method to improve the knowledge and practice.

Acknowledgement

Conflict of Interest: The Authors Declared No Competing Interest.

Ethical Clearance

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