CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187

http://doi.org/10.5281/zenodo.4543721

Avalable online at: http://www.iajps.com *Research Article*

TREATMENT AND ASSESSMENT PREFERENCES FOR THE MANAGEMENT OF STROKE AMONG PHYSICAL THERAPISTS WORKING IN CLINICAL SETTINGS

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Article Received: January 2021 **Accepted:** January 2021 **Published:** February 2021

Abstract:

Background: *Educating people with stroke about rehabilitation exercise programs is a recommended practice that physical therapists are positioned to implement.*

Objectives: *The aim of this study was to evaluate the provision of education about assessment and treatment preferences for stroke to the People raised an AVC, obstacles to education and resource preferences to facilitate the education of physiotherapists.*

Design: *A cross-sectional survey of physical therapists' treatment and assessment preferences of stroke patients in Faisalabad, Lahore, Islamabad and Peshawar.*

Methods*: A link to the questionnaire was emailed to physical therapists in a provincial stroke network, and also takes data to fill the questionnaire form from physical therapists.*

Results*: 293(50%) were male participants and 299(51%) were female. The age range of participants was <25 to >30 years. 216 (37%) participants were <25 years, 304 (51%) participants were between 25-30 years and 72 (12%) participants were >30 years. 106 (18%) participants were Bachelor's degree, 306 (52%) participants were master degree, 6 (1%) were PHD degree participants and 174 (29%) participants were DPT degree participants. 127 (22%) participants were Faisalabad region, 191 (32%) participants were Lahore region, 131 (22%) participants were Islamabad region and 143 (24%) participants were Peshawar region. 405 (68%) participants were from private sector and 187 (32%) participants were from Govt. sector. 505 (85%) participants were 0 to 5 years' practice and 87 (15%) were 6 to 10 years of practice.*

Limitations*: Limitations of this research were short time duration due to short time duration we were unable to conduct study on larger scale and the sample was selected on the basis of the time available. This results in small sample size and that small sample was not representative of whole population of physiotherapists of Pakistan. But it provides us the estimate Management of stroke patients by physiotherapists.*

Conclusions*: Although a high proportion of physiotherapists provide physiotherapy education, education is not consistently provided to most patients with stroke. Although this research facilitates and educate regarding existing stroke rehabilitation, efforts to implement the stroke rehabilitation that are not properly available for stroke patients.*

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Please cite this article in press Hafiz Umair Ali et al, ***Treatment And Assessment Preferences For The Management Of Stroke Among Physical Therapists Working In Clinical Settings.,*** *Indo Am. J. P. Sci, 2021; 08(02).*

INTRODUCTION:

1.1 Introduction:

Yearly in the U,S 800,000 are stroke patients and the country bear the cost of 33.6 billion dollars.(1) Certain patients who have raised and fully comply with the requirements, so they do not face the importers of disabilities, and the stroke is the leading cause of disability in the states.(2) Effect of the is that on stroke considerable resources were dedicated to their care of assessment and treatment purposes, To gain the knowledge that which treatment and assessment tool used for their treatment purpose.(3)

Controversy of one area were the type of the rehabilitation facility where the stroke patients were received their rehabilitation care.(4) Options for the rehabilitation of stroke patients were included that inpatient rehabilitation services (IRFs), capable nursing conveniences (SNFs), extensive expression acute reflect hospitals (LTACHs), home therapy, and outpatient therapy.(5) The process of assessment and treatment preferences are compound and they were not study in good health in past.(6) It was the responsibility of the institute and professional teachers, if they got the determination it will be made the nurses and health professionals, holder managers, community workers, physical therapists, work-related therapists, language and verbal communication pathologists, and/or physicians (including physiatrists, neurologists, internists, and others).(7)

In this practice the role of the physical therapists are quiet different in the hospitals set up, in some hospitals the physical therapists were in routine, and others were involved rarely or never.(8) The role of the physical therapists was assessment and treatment for the stroke rehabilitations, every rehabilitation plan prepared in a well-built bond with the squad. Physical therapists physician done specific training for stroke patients, and the physical therapists are better understand their treatment and assessment preferences.(9)

Many factors were considered when the rehabilitation occurs for stroke patients.(10) These factors are consist of the harshness and character of the neurological and useful loss, therapeutic co morbidities, supplier plus capability dealings, indemnity exposure, rate, environmental closeness in addition to scene of obtainable services, as well as the preferences of patients along with relative members.(11) When we were consider to refer an IRF, than we were thought that is the patient was able to benefit the 2 hours of therapy particularly IRF was considerate (12) procedure used for the estimation were not consistent, and there was a little declaration that the patients who acknowledged the therapy plan is correct as well as trustworthy.(13) Additionally, here be present no identical criterion or else strategy to support medical appointment team in predict the finest expulsion options for the situation handling of the stroke patients.(14) There were a set of community participate in the decisions construction and performance of therapy plan on the stroke patients.

Subsequent to the incidence of stroke, patients are extra required of therapy in a stroke rehabilitation unit.(15) Amount of the actions of daily livelihood (ADLs) extra forecast to obligatory a rehabilitation concern in the rehabilitation entity as contrast to the house services of rehabilitations, but it is not notable to release from the SNF and IRF care.(16) When the rehabilitation panel of physical therapists take the decisions with support of their learned classmates and with the EBP the state of patient enhanced.(17)

Inlet et al.(18) When the patients of stroke try out from the rehabilitation unit of the hospitals it was see variations in the rehabilitation of the stroke.(19) Variations in the operation and amount of sessions of stroke patient's rehabilitation services had also been explained by physical therapist.(20) Patients of the stroke can advantage untimely with the rehabilitation plan.(21) There is also indicate that the IRF curriculum explain superior revival than SNF.(22) Two facts study compare that IRF to SNF outcomes in the United States have all been observational learning in character, and no randomized study had been in use.(23) As a end result that compare IRF to SNF in the stroke rehabilitation outcome was convoluted by the differences involving the patients that are referred for these 2 types of care.(24) Compound factors influences the outcomes behind the stroke that are (era, cognition, efficient level, continence) have also been prepared to the unusual in those that are getting the post-acute stroke rehabilitation in the IRFs and those that are in receipt of this rehabilitation the in the SNF.(25)

We effort to inspect the post acute stroke rehabilitation in the referral preferences between physical therapists.(26) We are terminate that there is variation alike to physical therapists in the referral preferences that has been base on the demographic variables and/or geographic attend to, regulation to the stroke Patients with the similar history and functional boundaries are being referred to the unlike type of rehabilitation.(27) Particularly that the rehabilitation option have dissimilar outcome, and this separation in the referral preferences of the stroke patients may guide to sub-optimal rehabilitation outcome for a few

stroke patients.(19) There is a lessons that tells that 15 million people are incident the stroke in every year. Stroke is a chief source of disability, as 51% of people drop the capacity to stride on his personal after stroke 1,2 and 80% have sit, step, and footing and steadiness problems.(28)

MATERIAL AND METHOD:

3.1 STUDY DESIGN:

The study was a general survey on the treatment preferences for stroke patients by physiotherapists.

3.2 SETTING:

Study was conducted from Pakistan. Data was collected from physiotherapists

3.3 STUDY DURATION:

The study was completed within 6 months after the approval of synopsis.

3.4 TARGET POPULATIONS:

The study main focus on physiotherapist's practitioner

3.5 SAMPLE SIZE:

A sample size of physiotherapist's practitioner was taken in this study using 95% power of study and 5%level of significance.

3.6 SAMPLE TECHNIQUE:

Non probability convenience sampling technique was used

3.7 SAMPLE SELECTION:

Sample selection was done on the following inclusion and exclusion criteria

3.8 Inclusion criteria:

1. Participant should be Qualified Physical Therapists working in Pakistan as a practitioner
2. Person willing to take part in the study

3.9 Exclusion criteria:

1. Person who are not qualified in physical therapy
2. Person who willing not to take part in the study

3.10 (1) DATA COLLECTION TOOL:

1. Stroke rehabilitation Questionnaire

RESULTS:

Table 1. Demographic information of participants

Variables	Frequency	Percentage
Gender		
Male	293	50
Female	299	51
Age(years)		
<25	216	37
25-30	304	51
>30	72	12
Education		
Bachelor degree	106	18
Master degree	306	52
PhD	6	1
DPT	174	29
Residence		
Faisalabad Region	127	22
Lahore Region	191	32
Islamabad	131	22
Peshawar Region	143	24
Sector		
Private	405	68
Govt.	187	32
Practice (years)		
0 to 5	505	85
6 to 10	87	15

Table 1 shows the Demographic information of participants. 293(50%) were male participants and 299(51%) were female. The age range of participants was <25 to >30 years. 216 (37%) participants were <25 years, 304 (51%) participants were between 25-30 years and 72 (12%) participants were >30 years. 106 (18%) participants were

Bachelors degree, 306 (52%) participants were master degree, 6 (1%) were PHD degree participants and 174 (29%) participants were DPT degree participants. 127 (22%) participants were Faisalabad region, 191 (32%) participants were Lahore region, 131 (22%) participants were Islamabad region and 143 (24%) participants were Peshawar region. 405 (68%) participants were from private sector and 187 (32%) participants were from Govt. sector. 505 (85%) participants were 0 to 5 years practice and 87 (15%)were 6 to 10 years of practice.

Table 2. Number and Percentage of participants using different scales for assessment

Variables	N	%
Scales used for stroke patient balance assessment by Physiotherapist.		
Berg balance scale	546	92
Brunel balance scale	40	7
Other	6	1
Treatment options for balance improvement in Stroke Rehabilitation		
Balance Board Scale	208	35
One Leg Standing	205	35
Endurance and Strength Training	157	27
Other	22	4
Scale used for stroke patient functional assessment?		
The Lawton Instrumental Activity of Daily Living Scale	146	25
Stroke Specific Quality of Life Scale	270	46
Measurement of adult general Functional Status	166	28
Other	10	2
Scale used for stroke patient functional assessment?		
The Lawton Instrumental Activity of Daily Living Scale	146	25
Stroke Specific Quality of Life Scale	270	46
Measurement of adult general Functional Status	166	28
Other	10	2
Treatment options for stroke patient functional training		
Mirror therapy	566	96
Other	26	4
Scale used for Neurological Assessment.		
Canadian Neurological Scale	92	16
European Stroke Scale	69	12
Glassgow Comma Scale	399	92
Methew Stroke Scale	32	7
Treatment options in Neurological Rehab in Stroke ?		1
Balance and Coordination	206	
Muscular Endurance , power and strength training	376	35
Others	10	35
Scales used for gait assessment.		27
Revised Visual Gait Assessment	586	4
Other	6	
Treatment options for stroke patient gait training.		25
used marked surfaces	156	46
lower limb muscle training	424	28
Others	12	2
Scales used for cognition assessment of stroke patient		
NIH Stroke Scale	592	25
which treatment used for		
Derm the atoms assessment	135	23
Myotomes assessment	189	32
MMT	146	25
Two point discrimination	122	21

Table No 2. Shows the Number and Percentage of participants using different scales for assessment 546 (92%) physiotherapist participants were used Berg Balance scale, 40 (7%) physiotherapist participants used Brunel Balance scale and 6 (1%) participants were used other scales. For balance improvement and in stroke rehabilitation 546 (92%) participants used Balance board scale, 205 (35%) participants used one leg standing, 157 (27%) participants used Endurance and strength training and 22 (4%) participants used the others. For the functional assessment of stroke patients 146 (25%) participants used the Lawton instrumental activity of daily living scale, 270 (46%) participants used the stroke specific Quality of life scale, 166 (28%) participants used the measurement of adult general functional status and 10 (2%) participants used the other scales. For the treatment of stroke patients for functional training 566 (96%) participants were used the mirror therapy and 26 (4%) and 26 (4%) participants were used the other options. For the neurological assessment mostly participants were used 399 (92%) the Glasgow coma scale and least used Mathew stroke scale 32 (7%). Treatment options for the neurological Rehab mostly Muscular Endurance, power and strength training used 376 (35%). Treatment options mostly used for stroke patients in gait training lower limb muscle training 424 (46%) minimally used 12(28%) other scales. Scales used for cognition assessment of stroke patients NIH stroke scale 592 (25%).

DISCUSSION:

Our study was conducted to survey on "Treatment and assessment Preferences for the Management of Stroke among Physical Therapists' Working in Clinical Settings. Cross sectional design was used. Data was collected from Faisalabad, Lahore and Islamabad. Study was completed within 6 months after the approval of synopsis. Target population was Physiotherapist. Non-probability convenience sampling technique was used. Sample size was 592.
In the present study there was no association between Gender and Scales used for stroke patient balance assessment. In our study there was a significant association between qualification and Berg balance scale, Berg balance scale was mostly used by DPT practitioners, Berg balance scale was minimally used by Bachelor degree program. Brunel scale was maximally used by Master Degree practitioners and Brunel scale was minimally used by bachelor degree program practitioners.

Present study showed that there was a significant association between qualification and treatment options for balance improvement in stroke rehabilitation; Balance board scale was mostly used by Master degree practitioners and Balance board scale was minimally used by Bachelor degree practitioners. One leg standing was mostly used by Master degree practitioners; one leg standing was minimally used by Bachelor degree practitioners. Endurance and strength training program was mostly used by DPT practitioners, Endurance and strength training was minimally used by Bachelor degree program practitioners.

In present study there was a significant association between qualification and the scale used for the stroke patient functional assessment. The Lawton activity of daily living scale was mostly used by Master Degree practitioners, The Lawton activity of daily living scale was minimally used by Bachelor degree practitioner. The stroke quality of life scale was mostly used by Master degree practitioners; the stroke quality of life scale was minimally used by Bachelor degree practitioners. The measurement of adult general functional status was mostly used by Master Degree practitioners; measurement of adult general functional status was minimally used by Bachelor degree practitioners.

Our study showed that there was a significant association between qualification and the treatment options for stroke patients, Mirror therapy mostly used by Master Degree practitioners, Mirror therapy minimally used by Bachelor Degree practitioners.

Present study showed that there was a significant association between qualification and the scale used for neurological assessment, Canadian neurological scale was mostly used by Master degree practitioners, and minimally used by Bachelor degree practitioners. European Stroke Scale was mostly used by Master Degree practitioners, and minimally used by Bachelor degree practitioners. Glasgow comma scale was mostly used by Master degree practitioners, minimally used by Bachelor degree practitioners. Mathew stroke scale was mostly used by Master degree practitioners, minimally used by Bachelor degree practitioners.

Our study showed that there was a significant association between qualification and the treatment options in Neurological Rehab in stroke. Balance and coordination was mostly used by Master Degree practitioners, minimally used by Bachelor degree practitioners. Muscle endurance, power and strength training was mostly used by Master Degree practitioners, minimally used by Bachelor degree practitioner.

No previous similar study was conducted which described the prevalence of use of different scale for stroke patient. However, many studies conducted which describe the general treatment options for stroke patient such as a study conducted by Carrie Lau et.al to determine the effectiveness of community-based exercise for people with stroke. They concluded that community-based exercises were effective for people with stroke.

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