



12-2016

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Recommended Citation

Naveed Babur, Muhammad; Habibullah, Shiasta; and Aftab, Anam (2016) "Attitude and perception of physical therapists towards multidisciplinary team approach in stroke rehabilitation," *Pakistan Journal of Neurological Sciences (PJNS)*: Vol. 11 : Iss. 4 , Article 7. Available at: <http://ecommons.aku.edu/pjns/vol11/iss4/7>

ATTITUDE AND PERCEPTION OF PHYSICAL THERAPISTS TOWARDS MULTIDISCIPLINARY TEAM APPROACH IN STROKE REHABILITATION

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Date of submission: May 25, 2016 **Date of revision:** June 29, 2016 **Date of acceptance:** July 15, 2016

ABSTRACT

INTRODUCTION

Stroke is a long term disability in developing countries which is considered as major economic burden on part of Health care system. In developing countries multidisciplinary team approach for stroke rehabilitation is emerging in tertiary care hospitals and has considerably increased the chance of early independence, fast recovery and maximum outcome in daily activities of life.

Objective: Objective of the study was to evaluate the attitude and perception of physical therapists towards multidisciplinary team approach working in stroke rehabilitation.

METHODOLOGY

The study was conducted in major cities of Pakistan in tertiary care hospitals. Physiotherapists working in multidisciplinary line service with 2- year experience. Data was collected through structured questionnaire Attitude Towards Health Care Team Scale (ATHCT) and analyzed through SPSS version 20.

RESULTS

Findings indicate that the perception of physical therapists towards multidisciplinary team approach is excellent with better outcomes. They believe in team work while treating stroke patients for early independence.

CONCLUSION

Physiotherapists perceived that MDT approach makes the delivery of Health care in stroke rehabilitation more efficient and achievable. Quality care and patient satisfaction can be improved while treating in team.

Key words

MDT (multidisciplinary team), ESD (early stroke discharge), WHO (world health organization).

INTRODUCTION

According to world health organization stroke or cerebrovascular accident is a rapidly developing clinical sign of focal disturbance of cerebral function lasting for more than 24 hours with the interruption of death with no obvious cause of vascular origin.”(1)

There are two main types of stroke ischemic stroke and hemorrhagic stroke but the occurrence rate of ischemic type is 80% which causes high economic burden on the developing countries. (2) In developing and developed countries the most prevalent cause of disability is stroke. (3) Fifteen million is the total global annual incidence of stroke and out of the one-third of them die because of secondary complications of stroke. (4) It was noted in the Western population that the incidence rate of stroke has been declined but in the South Asian countries like Pakistan and India the incidence rate of stroke has inclined. Because of uncontrolled and undiagnosed hypertension the incidence rate of hemorrhagic stroke is higher (21-31%) in Pakistan in comparison with Western World (10-15%). (5, 6) In the follow up rehabilitation only Western countries stroke usually affects geriatric population but in Pakistan it usually affects the younger population. Stroke is a long term disability which causes economic burden which is considered as a burning issue. (7, 8)

Stroke rehabilitation is defined as “a multidisciplinary progressive, dynamic, goal-oriented process aimed at enabling a person with impairment to reach optimal, physical, cognitive, emotional, communicative and/or social functional level.” The management of stroke is based on the intensive intervention and performance of different purposeful

activities. (2, 9-11)

Core and periphery members are the constituents of multidisciplinary teams in hospitals. Core members are usually the foundation of stroke units, and less usually part of an early stroke discharge team, which is usually based on in a community setting or in an inpatient unit. The members of the core group include stroke physicians, nurses, physiotherapists, speech and language therapists, occupational therapist and health care assistants. Support is provided by the therapy assistants to physiotherapists or occupational therapists. Moreover physiotherapists, speech language therapists, occupational therapists and nurses are supported by generic rehabilitation assistants.

There is unambiguous evidence of better outcomes when stroke patients are treated by multi-disciplinary teams in a stroke unit. (12). In comparison with conventional treatment organized care of stroke inpatients resulted in decline in death, dependency and requirement for institutional care for a longer duration of time. The beneficial outcomes of early stroke discharge teams earlier discharge from hospitals, increase in the chances that that patient will gain independence in activities of daily living.^{12,13,14}

The study aimed to evaluate the attitudes and perceptions of physical therapists towards multi-disciplinary teams for stroke rehabilitation. The study is one of the new studies conducted in Pakistan regarding the attitudes and perception of physical therapists towards MDT in stroke rehabilitation

METHODOLOGY

This cross sectional study was conducted in different hospital of main cities of Pakistan and the data was collected from the total of 38 physiotherapists working in a multidisciplinary service line for more than two years. Consent and ethical approval was taken prior to conduct the study. Physical therapists of all the ages and both the genders were included the study. The data was collected through standardized tool of Attitudes Toward Health Care Teams scale (ATHCT) scale which is a 20-item tool and subscales on a 6-point Likert scale. Data was evaluated through SPSS version 20.

RESULTS

Demographic information shows that Out of 38 respondents 18 (47%) were male and 18 (47%) were female and rest 2 (5%) didn't respond about their gender.

All items were coded in a way that increases in score over Likert scale showed favorability towards team work. Responses in favor of negative attitudes reflects response errors in data collection as majority of respondents have also showed agreement with their positive counterparts.

*1=Strongly disagree, 2=Moderately Disagree, 3=Somewhat Disagree, 4=Somewhat Agree, 5=Moderately Agree, 6=Strongly Agree

**Reverse coded items

Items	Items	Scores					
		1	2	3	4	5	6
Working in teams unnecessarily complicates things most of the time	A1**	2 5.3%	6 15.8%	8 21.1%	7 18.4%	10 26.3%	5 13.2%
The team approach improves the quality of care to patients	A2	25 65.8%	9 23.7%	3 7.9%	0	0	1 2.6%
Team meetings foster communication among team members from different disciplines	A3	13 34.2%	13 34.2%	8 21.1%	1 2.6%	2 5.3%	1 2.6%

Physicians have the right to alter patient care plans developed by the team	A4	10 26.3%	6 15.8%	8 21.1%	7 18.4%	3 7.9%	4 10.5%
Patients receiving team care are more likely than other patients to be treated as whole persons	A5	14 36.8%	15 39.5%	5 13.2%	3 7.9%	1 2.6%	0
A team's primary purpose is to assist physicians in achieving treatment goals for patients	A6	18 47.4%	15 39.5%	3 7.9%	0	0	2 5.3%
Working on a team keeps most health professionals enthusiastic and interested in their jobs	A7	24 63.2%	10 26.3%	2 5.3%	0	1 2.6%	1 2.6%
Patients are less satisfied with their care when it is provided by the team	A8**	6 15.8%	10 26.3%	8 21.1%	4 10.5%	7 18.4%	3 7.9%

DISCUSSION

The Stroke Unit Trialists' Collaboration review¹⁵ updated in 2001¹⁶ reported that stroke patients who receive inpatient organized care have more chances to recoup independence, earlier discharge from hospital and as compared to those who are receiving care in a less organized setup. In our study 42% of the physical therapists strongly agree that the team approach makes the delivery of care more efficient whereas 21% moderately agree and 31% somewhat agree.

Cifu and Stewart¹⁷ reported review of studies to predict outcome of stroke by receiving treatment through multidisciplinary teams. The authors concluded that assorted professionals constituting a multi-disciplinary team communicate on a regular basis and work towards a common goal which is a main factor for improved outcomes. Likewise, in our study 47% of the physical

therapists strongly agree that a team primary purpose is to assist physicians in achieving treatment goals for patients and 39% moderately agree. Working towards a common goal has a strong relationship with improved functional outcome at hospital discharge and follow ups. Similarly in our study 34% of the physical therapist strongly agree that developing a patient care plan with other team members avoids errors in delivery care and 31% moderately agree and 26% somewhat agree.

Evans and colleagues¹⁸ conducted a clinical trial to evaluate the comparison of multidisciplinary inpatient physical rehabilitation programs with standard medical care for stroke patients. The researchers concluded that multi-disciplinary approach enhance functional abilities, improve survival and most autonomous discharge location for short term. Likewise in our study 65% of the physical therapists strongly agree that team approach improves the quality of care to patients and 23%

moderately agree.

Finding of this study reflect that Speech-Language therapists have positive attitudes towards working in interdisciplinary health care teams. Literature suggests that incorporating interdisciplinary team work education in curriculum designed for degrees of health professionals can result in strong positive inclination towards medical team works.¹⁹

CONCLUSION

Study reveals that MDT approach makes the delivery of care more efficient and treatment goals are easily achievable through better understanding the work of other professionals working in a team. It also described that patients who remained in organized multidisciplinary stroke unit are more likely to achieve functional skills and faster regain independence. It also shows that under the supervision of physicians and MDT the quality of care of stroke patients can be improved with patient satisfaction. Limitations & Recommendations

As mentioned before in results section that majority of participants agreed with negative attitudes on 4 out of 6 negatively worded items with same high percentages on their positive counterparts. Such dissonance in attitudes show response errors from participants which shows that statements have not been read carefully. Sample size was also too small to ensure generalizability of current research findings. Irreplaceable role of physical therapist as a member of health care team demands their positive attitudes towards team members and team work that serve as a predictor of their productive role in team. Therefore it is recommended to teach and train PTs about aspects of multidisciplinary team work during their professional degree education for rapid forward momentum of their expertise when they come in clinical practice.

REFERENCES

1. Broderick J, Connolly S, Feldmann E, Hanley D, Kase C, Krieger D, et al. Guidelines for the Management of Spontaneous Intracerebral Hemorrhage in Adults 2007 Update: A Guideline From the American Heart Association/American Stroke Association Stroke Council, High Blood Pressure Research Council, and the Quality of Care and Outcomes in Research Interdisciplinary Working Group: The American Academy of Neurology affirms the value of this guideline as an educational tool for neurologists. *Stroke*. 2007;38(6):2001-23.
2. WHO. International classification of functioning, disability and health: ICF. 2001.
3. Khan RA, Khan MW, Rauf A, Khan H. A Review on Alarming Stroke Situation in Pakistan. 2015.
4. Kulshreshtha A, Anderson LM, Goyal A, Keenan NL. Stroke in South Asia: a systematic review of epidemiologic literature from 1980 to 2010. *Neuroepidemiology*. 2012;38(3):123-9.
5. Farooq M, Majid A, Reeves M, Birbeck G. The epidemiology of stroke in Pakistan: past, present, and future. *International journal of stroke*. 2009;4(5):381-9.
6. Hashmi M, Khan M, Wasay M. Growing burden of stroke in Pakistan: a review of progress and limitations. *International journal of stroke*. 2013;8(7):575-81.
7. Khealani BA, Hameed B, Mapari UU. Stroke in Pakistan. *Journal of the Pakistan Medical Association*. 2008;58(7):400.
8. Khealani B, Javed Z, Syed N, Shafqat S, Wasay M. Cost of acute stroke care at a tertiary care hospital in Karachi, Pakistan. *JOURNAL-PAKISTAN MEDICAL ASSOCIATION*. 2003;53(11):552-5.
9. Radomski MV, Latham CAT. Occupational therapy for physical dysfunction: Lippincott Williams & Wilkins; 2008.
10. Trombly CA. Occupation: Purposefulness and meaningfulness as therapeutic mechanisms. *American Journal of Occupational Therapy*. 1995;49(10):960-72.
11. Baum CM, Connor LT, Morrison T, Hahn M, Dromerick AW, Edwards DF. Reliability, validity, and clinical utility of the Executive Function Performance Test: A measure of executive function in a sample of people with stroke. *American Journal of Occupational Therapy*. 2008;62(4):446-55.
12. Trialists ES. Services for reducing duration of hospital care for acute stroke patients. *Cochrane Database Syst Rev*. 2005;2.
13. Langhorne P, Bernhardt J, Kwakkel G. Stroke Rehabilitation. *Lancet* 2011;377:1693-1702.
14. Langhorne P, Holmqvist LW, for the Early Supported Discharge Trialists. Early supported discharge after stroke. *J Rehab Med* 2007;39: 103-8. 20.
15. Organised inpatient (stroke unit) care for stroke. Stroke Unit Trialists' Collaboration. *Cochrane Database Syst Rev*. 2000; (2): CD000197.[Update in:Cochrane Database Syst Rev. 2002;(1):CD000197.]
16. Stroke Unit Trialists' Collaboration. Organised inpatient (stroke unit) care for stroke. *Cochrane Database Syst Rev*. 2002 (1): CD000197.
17. Cifu DX, Stewart DG. Factors affecting functional outcome after stroke: a critical review of rehabilitation interventions. *Arch Phys Med Rehabil*. 1999;

- 80(5 suppl 1): S35–S39
18. Evans RL, Connis RT, Hendricks RD, Haselkorn JK. Multidisciplinary rehabilitation versus medical care: a meta-analysis. *SocSci Med.* 1995; 40:1699–1706.
 19. Heinemann, G. D., Schmitt, M. H, Farrell, M.P. Discipline differences in attitudes towards interdisciplinary teams, perceptions of the process of team work and stress levels in geriatric health team. 1994. In J. R. Snyder (Ed.), *Interdisciplinary health*

care teams: Proceedings of the sixteenth annual conference. Bloomington: Indiana University Press. pp. 92-105

Conflict of interest: Author declares no conflict of interest.

Funding disclosure: Nil

Author's contribution:

Naveed Babur; Study concept and design, protocol writing, data collection, data analysis, manuscript writing, manuscript review

Shaista Habibullah; Study concept and design, data collection, data analysis, manuscript writing, manuscript review

Anam Aftab; Study concept and design, data collection, data analysis, manuscript writing, manuscript review