REVIEW ARTICLE

CORRELATION OF FUNCTIONAL IN`DEPENDENCE MEASURE SCALE AND FATIGUE SEVERITY SCALE IN HEMIPLEGIC PATIENTS

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ARTICLE INFO	ABSTRACT
      Corresponding author	**Background:** Stroke is one of the most dominant causes of morbidity and mortality worldwide and poses a major global healthcare challenge. According to the World Health Organization (WHO), stroke can be defined as: "Rapidly developing clinical signs of focal (or global) disturbance of cerebral function, lasting more than 24 hours or leading to death with no apparent cause other than that of vascular origin"(1) Every day activity are basic physical activity necessary to live such as walking , personal care and transfer .individuals carrying hemiplegia or hemiparesis may present several disability that make difficulty in every day activity therefore it was necessary a complementary evaluation to verify and quantify these activities and to follow up functional status of these patients(2) **Aims:** To study the Correlation of functional independence measure scale and fatigue severity scale in hemiplegic patients **Objectives** 1.To find out the fatigue severity in hemiplegic patients. 2.To find out the functional independence measure in hemiplegic patients. 3.To find out correlation between fatigue severity and functional independence measure in hemiplegic patient. **Procedure:** The ethical clearance was obtained from IEC of PDVVPF's COPT for study. After ethical clearance, all subjects were informed regarding the procedure of fulfilling the questioner, written consent was obtained from participants, procedure will be explained and questionnaire will be filled by participants. **Data analysis:** All the data was analyzed using the statistical SPSS 10.0 for window means and standard deviations were calculated and correlation respectively .were analyzed using Pearson's correlation test **Result:** not significant Thus Pearson correlation test shows statistically not co-relate between functional independence scale and fatigue severity scale **Conclusion:** Result of the present study suggest that functional independence measure scale and fatigue severity scale are statistically not co-related.

INTRODUCTION

Stroke is one of the most dominant causes of morbidity and mortality worldwide and poses a major global healthcare challenge. According to the World Health Organization (WHO), stroke can be defined as: "Rapidly developing clinical signs of focal (or global) disturbance of cerebral function, lasting more than 24 hours or leading to death with no apparent cause other than that of vascular origin" (Stroke, 1989). Every day activity are basic physical activity necessary to live such as walking , personal care and transfer. Individuals carrying hemiplegia or hemiparesis may present several disability that make difficulty in every day activity therefore it was necessary a complementary evaluation to verify and quantify

these activities and to follow up functional status of these patients. The sequelae generate economic, social and family impacts, while 15% of the patients present no deficit in functional capacity (Giles, 2008; World Health Organization, 2008 and Cruz, 2009). Stroke is a disorder characterized by focal neurologic deficit (Garrison, 1993). It has influences on the quality of life (QOL) of patients because of its associated physical and cognitive sequela, such as limitations in mobility and physical functioning, and depression (King, 1996 and Murtezani, 2009). Emotional alterations are often observed after stroke (Hackett, 2008 and Carod-Artal, 2009), that are generally associated with reduced QOL in stroke survivors (Clarke, 2000).

MATERIALS AND METHODS

Study Setting – Ahmednagar district
Study Design – cross sectional study
Study Duration – 6 month
Sampling Technique –convenient sampling
Sample Size – 6 elderly hemiplegic patient

Inclusion criteria

- Adult with post stroke.
- Both males and females.
- Age from 60 to 80 year.
- Post stroke after six month.

Exclusion criteria

- Patients with aphasia.
- Patient any other neurological disorder.

Procedure: The ethical clearance was obtained from IEC of PDVVPF's COPT for study. After ethical clearance, all subjects were informed regarding the procedure of fulfilling the questioner, written consent was obtained from participants, procedure will be explained and questionnaire will be filled by participants.

Data Analysis: All the data was analyzed using the statistical SPSS 10.0 for window means and standard deviations were calculated and correlation respectively .were analyzed using Pearson's correlation test.

RESULTS

Relationship between functional independence scale and fatigue severity scale Coefficient of correlation (r)-0.1834
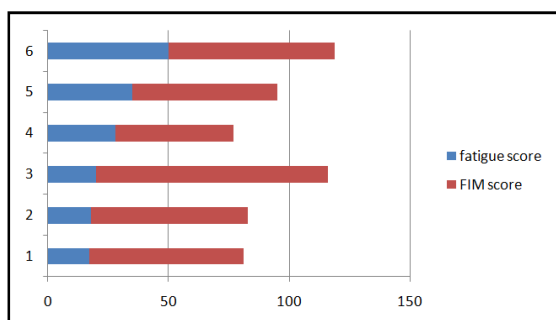Result - not significant Thus Pearson correlation test shows statistically not co-relate between functional independence scale and fatigue severity scale.

Table 1.

Fatigue score	FIM Score
17	64
18	65
20	96
28	49
35	60
50	69

Table 2.

Mean	SD
28	12.790
67.16	15.689

Graphical presentation

DISCUSSIONS

Stroke is a significant health problem causing severe mental, physical, and spiritual pathologies in patients who survive. Now a-days, the survival rate has increased with advances in diagnosis and treatment and 80% of patients are candidates of rehabilitation (Doğan, 2004). The determination of the initial motor and functional status of the patients with rehabilitation potential is important in prognosis Estimation and in determining the rehabilitation targets. Wyller et al. (Doğan, 1997), evaluated the functional inadequacy of patients 6 months post-stroke using the Barthel index and reported that females were worse in terms of functional improvement.Glader et al. (Glader, 2003), explained that the reason of functional Inadequacy of females at 3 months post-stroke was the more advanced age compared to males and more risk factors. However, Ohwaki et al. (Ohwaki, 2005), stated that there was no effect of gender on functional impairment in patients at 2 months post-stroke.

Age is an important risk factor for stroke. Approximately 70% of stroke survivors are over the age of 65 years. The incidence of stroke increases twice per decade after the age of 55 years (Brandstater, 2007). In our study, patients were divided into two groups according to age. Pretreatment and post treatment FIM values of patients under the age of 65 years were higher than those of patients aged 65 years and above. However, there was no statistical significant difference in FIM gain and FIM efficiency between the patients aged <65 years and >65 years. The present study suggest that the functional independence measure scale and fatigue severity scale in hemiplegic patients is contribute to the assessment of an individual risk of falling and also fatigue severity and daily living activity there by influencing choice of intervention in hemiplegic patients .

Conclusion

Result of the present study suggest that functional independence measure scale and fatigue severity scale are statistically not co-related.

REFERENCES

Barthal index and functional status of patients after stroke in a physical therapy program .anapaula et al. baura v23, n23, p479-488

Brandstater ME. 2007. İnmerehabilitasyonu In: Delisa AJ (Arasıl T cevirieditoru) Fiziksel Tıp veRehabilitasy onİlkelerve Uygulamalar. Ankara: Guneş Tıp Kitapevler. p.1655-76.

Carod-Artal FJ, Egido JA. 2009. Quality of life after stroke: the importance of a good recovery. Cerebrovasc Dis 27:204-14. (CrossRef) 153 Em et al. Stroke and Quality of Life

Clarke PJ, Lawrence JM, Black SE. 2000. Changes in quality of life over the first year after stroke: findings from the Sunnybrook Stroke Study. *J Stroke Cerebrovasc Dis.,* 9:121-7. (Cross Ref)

Cruz KC, Diogo MJ. 2009. Evaluation of functional capacity in elders with encephalic vascular accident. *Acta Paul Enferm.,* 22(5):666-72

Doğan A, Nakipoğlu GF, Aslan DM, Kaya ZA, Ozgirgin N. 2004. The rehabilitation results of hemiplegic patients. *Turk J Med Sci.,* 34:385-9.

Garrison SJ, Rolak LA. 1993. Rehabilitation of the stroke patient. In: DeLisa JA, ed. Rehabilitation medicine: Principles and practice. 2nd edition. Philadelphia: JB Lippincott Co, p.801-24.

Giles MF, Rothwel PM. 2008. Measuring the prevalence of stroke. *Neuroepidemiology.* 30(4):205-6.

Glader EL, Stegmayr B, Norrving B, Terent A.2003. Sex differences in management and outcome after stroke: a Swedish national perspective. Stroke., 34:1970-5. (CrossRef)

Hackett ML, Anderson CS, House AO, Xia J. 2008. Interventions for treating depression after stroke. Cochrane Database Syst Rev., 8:CD003437. (Cross Ref)

King RB. Quality of life after stroke. Stroke 1996. 27:1467-72. (CrossRef)

Kim P, Warren S, Madill H, Hadley M. 1999. Quality of life of stroke survivors. *Qual Life Res* 8:293-301. (Cross Ref)

Murtezani A, Hundozi H, Gashi S, Osmani T, Krasniqi V, Rama B. 2009. Factors associated with reintegration to normal living after stroke. *Med Arh.,* 63:216-9.

Ohwaki K, Hashimoto H, Sato M, Tokuda H. 2005. Gender and family composition related to discharge destination and length of hospital stay after acute stroke. *Tohoku J Exp Med.,* 207:325-32. (Cross Ref)

Stroke--1989. Recommendations on stroke prevention, diagnosis, and therapy. Report of the WHO Task Force on Stroke and other Cerebrovascular Disorders. Stroke 1989; 20:1407-31.

World Health Organization. The atlas of heart disease and stroke (Internet). Geneva: WHO; 2008 (cited 2009 Oct 19). Avialable from: www.who.int/cardiovascular_disease\en/cvd_15_burden_stroke.pdf

Wyller TB, Sodring KM, Sveen U, Ljunggren AE, Bautz-Holter E. 1997. Are there gender differences in functional outcome after stroke? *Clin Rehabil.,* 11:171-9. (Cross Ref)

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