

# **CORRELATION BETWEEN GERIATRIC DEPRESSION SCALE AND OT TASK OBSERVATION SCALE**

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## **ABSTRACT:**

Geriatric depression is a mental and emotional disorder affecting older adults. Feelings of sadness and occasional “blue” moods are normal. However, lasting depression is not a typical part of aging. Older adults are more likely to suffer from subsyndromal depression. This type of depression doesn’t always meet the full criteria for major depression. However, it can lead to major depression if left untreated. Depression in older adults can reduce the quality of life, and it increases the risk of suicide. The current study aimed to find the correlation between Geriatric Depression Scale and OT Task Observation Scale

**Keywords** –Geriatric depression, Task observation, Occupational Therapy

## **I. INTRODUCTION**

Geriatric depression is a mental and emotional disorder affecting older adults. Feelings of sadness and occasional “blue” moods are normal. However, lasting depression is not a typical part of aging. Older adults are more likely to suffer from subsyndromal depression. This type of depression doesn’t always meet the full criteria for major depression. However, it can lead to major depression if left untreated. Depression in older adults can reduce the quality of life, and it increases the risk of suicide. (14)

Causes for geriatric depression:

- Biological factors
- Social factors
- Psychosocial factors
- Low levels of key neurotransmitter chemicals in the brain (such as serotonin and norepinephrine)
- A family history of depression
- Traumatic life events, such as abuse or the death of a loved one

Complications associated with aging may contribute to depression in older adults. These problems can include:

- limited mobility

- isolation
- facing mortality
- transitioning from work to retirement
- financial hardships
- prolonged substance abuse
- deaths of friends and loved ones.
- widowhood or divorce
- chronic medical conditions

Symptoms of geriatric depression:

They can include:

- Sadness
- Feelings of worthlessness
- Irritability
- Fatigue
- Crying spells
- Apathy
- Restlessness
- Lack of concentration
- Withdrawal
- Sleep problems
- Changes in appetite
- Thoughts of suicide
- Physical aches and pains

## **2. Aims and objectives**

Aims: To find the correlation between Geriatric Depression Scale and OT Task Observation Scale.

Objectives: To find out the reliability and validity of the OT task observation scale.

Correlation between task behavior & general behavior.

## **3. Review of literature**

3.1. Forrest Scogin, Lisa McElreath                      Journal of consulting and clinical.  
psychology 62 (1), 69, 1994

A meta-analysis of 17 studies examined the efficacy of psychosocial treatments for depression among older adults. Studies were included only if a comparison was made to a control condition (no-, delayed-, or placebo-treatment) or another psychosocial intervention. Results indicated that treatments were reliably more effective than no treatment on self-rated and clinician-rated measures of depression. Effect sizes for studies involving participants with major depressive disorder were also reliably different from zero, as were effect sizes from studies involving participants with less severe levels of depression. These findings compare favorably with several other quantitative reviews of treatments for depression.

3.2. Eric J Lenze, Joan C Rogers, Lynn M Martire, Benoit H Mulsant, Bruce L Rollman, Mary Amanda Dew, Richard Schulz, Charles F Reynolds III

The American Journal of Geriatric Psychiatry 9 (2), 113-135, 2001

Depression and anxiety disorders are associated with excess disability. The authors searched the recent geriatric literature for studies associating late-life depression or anxiety with a physical disability. Studies showed depression in old age to be an independent risk factor for disability; similarly, disability was found to be a risk factor for depression. Anxiety in late life was also found to be a risk factor for disability, although not necessarily independently of depression.

3.3. Matthew J Bair, Rebecca L Robinson, Wayne Katon, Kurt Kroenke

Archives of internal medicine 163 (20), 2433-2445, 2003

The prevalences of pain in depressed cohorts and depression in pain cohorts are higher than when these conditions are individually examined. The presence of pain negatively affects the recognition and treatment of depression. When pain is moderate to severe, impairs function, and/or is refractory to treatment, it is associated with more depressive symptoms and worse depression outcomes (eg, lower quality of life, decreased work function, and increased health care utilization). Similarly, depression in

patients with pain are associated with more pain complaints and greater impairment. Depression and pain share biological pathways and neurotransmitters, which have implications for the treatment of both concurrently. A model that incorporates assessment and treatment of depression and pain simultaneously is necessary for improved outcomes.

3.4. Mark Snowden, Kersten Sato, Peter Roy- Byrne

Journal of the American Geriatrics Society 51 (9), 1305-1317, 2003

Depression and the behavioral symptoms associated with dementia remain two of the most significant mental health issues for nursing home residents. The extensive literature on these conditions in nursing homes was reviewed to provide an expert panel with an evidence base for making recommendations on the assessment and treatment of these problems. Numerous assessment instruments have been validated for depression and for behavioral symptoms. The Minimum Data Set, as routinely collected, appears to be of limited.

3.5. Liana G Apostolova, Jeffrey L Cummings

Dementia and geriatric cognitive disorders 25 (2), 115-126, 2008

Neuropsychiatric symptoms are common features of MCI. The behavioral changes observed in MCI are similar to those of AD and may help identify the subgroup of MCI patients with prodromal AD. Large prospective longitudinal studies would greatly contribute to our understanding of the epidemiology, diagnostic and prognostic value of the neuropsychiatric features in MCI

3.6. JM Valderas, A Kotzeva, M Espallargues, G Guyatt, CE Ferrans, MY Halyard, DA Revicki, T Symonds, A Parada, J Alonso

Quality of life research 17, 179-193, 2008

Out of 1,861 identified references published between 1978 and 2007, 34 articles corresponding to 28 original studies proved eligible. Most trials were conducted in primary care settings performed in the USA and assessed adult patients. Information provided to professionals included generic health status, mental health, and other. Most studies suffered from methodologic limitations, including analysis that did not correspond with the unit of allocation. In most trials, the impact of PRO was limited. Fifteen of 23 studies (65%) measuring process of care observed at least one significant result favoring the intervention, as did eight of 17 (47%) that measured outcomes of care. Methodological concerns limit the strength of inference regarding the impact of providing PRO information to clinicians. Results suggest great heterogeneity of impact; contexts and interventions that will yield important benefits remain to be clearly defined.

#### **4. METHODOLOGY**

GDS consisting of 15 questions was developed in 1986. Questions from the Long Form GDS which had the highest correlation with depressive symptoms in validation studies were selected for the short version. Of the 15 items, 10 indicated the presence of depression when answered positively, while the rest (question numbers 1, 5, 7, 11, 13) indicated depression when answered negatively. Scores of 0-4 are considered normal, depending on age, education, and complaints; 5-8 indicate mild depression; 9-11 indicate moderate depression; and 12-15 indicate severe depression. The Short Form is more easily used by physically ill and mildly to moderately demented patients who have short attention spans and/or feel easily fatigued. It takes about 5 to 7 minutes to complete.

##### **4.1 TARGET POPULATION:**

The GDS may be used with healthy, medically ill, and mild to moderately cognitively impaired older adults. It has been extensively used in the community, acute, and long-term care settings.

##### **4.2 VALIDITY AND RELIABILITY:**

The GDS was found to have a 92% sensitivity and 89% specificity when evaluated against diagnostic criteria. The validity and reliability of the tool have been supported through both clinical practice and research. In a validation study comparing the Long and Short Forms of the GDS for self-rating of symptoms of depression, both were successful in differentiating depressed from non-depressed adults with a high correlation ( $r = .84$ ,  $p < .001$ ) (Sheikh & Yesavage, 1986).

##### **4.3 METHOD TO APPLY ON TASK OBSERVATION SCALE**

OTTOS contains two parts, 10 items for evaluation of specific task functions and 5 items for rating general behavior. Field use demonstrated that the scale successfully tracked changes in functional capacity and included most facets of patient functions evaluated during task groups. The use of OTTOS required minimal training, and scoring required less than 2 min for each patient. The correlation between the scores of experienced occupational therapists was high (.92 for the total scores). The correlation between OTTOS and the other rating instruments ranged from .880 to .340; the highest correlations, as expected, were with test subscales that most closely resembled OTTOS.

(15)

4.4 PROCEDURE:

- Consent was taken from patients to perform the activity and questioners.
- The activity was explained to the patients.
- The questioners (GDS) were asked and scoring was done accordingly.
- Demonstration of the activity was given (shoe lacing)
- The stopwatch was set for 2 minutes and the patients were asked to start the activity and time was noted.
- Patients' performance was scored according to the scales.
  
- The following comparison was done by using Karl Pearson's correlation of coefficient method.  
A) Geriatric depression scale – task behavior  
B) Geriatric depression scale – general behavior

4.5 INCLUSION CRITERIA:

- Age above 65
- Mild to moderately cognitively impaired patients.

4.6 EXCLUSION CRITERIA:

- Patients with visual and auditory impairment.
- Bed ridden patients.

**5. RESULTS**

**Result: GDS and task behavior is not significant.**

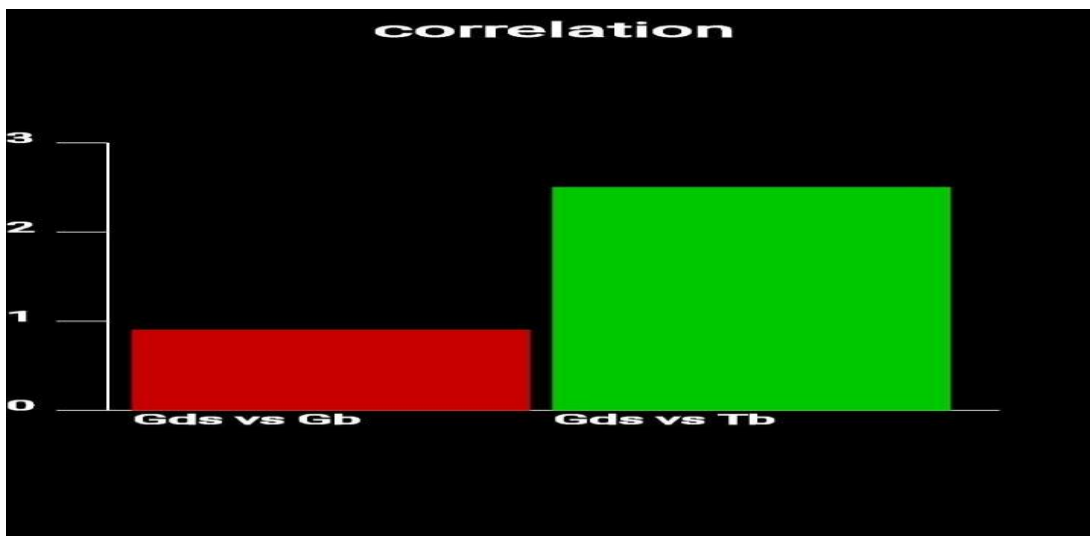


Fig 1

## 6. Discussion

- Significant correlation was found between geriatric depression scale and general behavior which indicates that general behavior is also affected due to depression in geriatric population.
- Significant correlation was not found between geriatric depression scale and task behavior this could be because the study was conducted on subclinical cases in which ADL was not affected.

## 7. Conclusion

This study concludes that depression in geriatric population affects their general behavior as well as task behavior.

## 8. Limitations

- Small sample size
- More females were evaluated than males
- Occupational therapy intervention was not performed

## 9. Recommendations

- Study needs to be conducted on a larger population.
- Ratio for male and female should be 1:1
- Occupational therapy intervention should be done to improve task behavior to maintain Quality of life in old age home.

## 10. Acknowledgements

We express our sincere thanks to Dr. Deepa Pradhan our respected dean and Dr. Aditi Kulkarni our guide to this dissertation for their valuable and timely help. We are grateful to all the patients and the statistician for their support and contribution.

Many thanks to Dr D Y Patil School Of Occupational Therapy and Brahman Seva Mandal Anandashram old age home for letting us conduct the serve.

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