# Geriatric Mental Health Assessment-A Prospective Observational study of geriatric clinic.

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## ABSTRACT
**The Objective of this study was to** Examine the Relationship Between Depressive Symptoms and Treatment Outcomes in An Unselected Consecutive Sample of older Medical Out Patients of the Geriatric Depression Scale in its 15-item version (GDS-15) in Mumbai Maharashtra older adults.

**Study Design:** A Prospective Cohort Study of Individuals Screened in Geriatric Clinic.

**Material and Methods**
The data was collected from the patients attended Geriatric OPD at Regional Research Institute of Unani Medicine (RRIUM), Mumbai. Ethical clearance was obtained from IEC. Informed consent was obtained from each participant. From 108 eligible registrants over a period of 15 months medical out Patients Aged 60+ Were Randomly Selected from Consecutive Registry for Assessment of Depression.

Main outcome measures: length of illness; recurrence of symptoms, reference to a community hospital (for rehabilitation),

**Results:** Depressive Symptoms Are Independently Associated with Longer Treatment Period and Increased Likelihood Transfer to A Community Hospital for Rehabilitation.

**Conclusions:** Research Evaluating Effectiveness of Identification and Treatment of Depression. In Older Medical Patients Should Be Considered Including Use of Rehabilitation Services for Potential Outcomes. Early detection of depressive symptoms in older adults leads to better treatment results and a better quality of life. The GDS-15 can help with the early detection of symptoms and diagnosis of depression, but it is important for this tool to be valid, reliable, and culturally appropriate in the population being used (Dow et al., 2018). Details of the Study Will Be Discussed In The Paper.

## I. INTRODUCTION
Studies suggest that a substantial proportion of older patients have depressive symptoms that may hinder their recovery. (Adshead, et al., 1992). Adverse outcomes include delayed or no response, greater risk of recurrence, increased need for rehabilitation or institutional care and higher morbidity (Toner, et al., 1988, Remick, et al., 1996). In order to attempt to reduce the impact of depression on patients' health outcomes and healthcare costs, recent health policy encourages screening and treatment programmes for older people in mainstream healthcare settings (Blazer, 1999, Susman., 1995).

Depression reflects an underlying diminution in the body's ability to recover from any physical illness, thus increasing the likelihood of patient not responding to treatment and/or need for rehabilitation services. (Blazer, et al., 1999) Hospital staffs often misdiagnose depression as slower recovery from physical illness and thus recommend rehabilitation when they should be recommending treatment for the depressive illness instead. (Alexopoulos, G. S. 1989).Frailty is used loosely to describe a range of conditions in older people, including general debility and cognitive impairment associated with increased economic costs (Jorm, et al., 1995). It is generally asserted that a combination of biomedical and psychosocial factors influences frail people's physiological state to the extent that its function is reduced, and subsequent exposure to further minor environmental stresses may lead to dependence. (Hamilton, M.1976)

Depression reflect an underlying diminution in the body's ability to recover from serious physical illness,

thus increasing the likelihood of patient not responding to treatment and increases the need for rehabilitation services (Alexopoulos, 1989). Depression leading slower recovery from physical illness is often misdiagnosed. While treating the physical illness the factor of depression affecting the outcome of treatment is often ignored. Depression in old age is a pathological process, not a normal reaction to growing older. The majority of people cope with ageing, and many feel happy and fulfilled. However, there is a bias among health professionals and the community in general to accept lower functioning and more symptoms in older people. Elderly people may actively deny depressed mood because of perceived stigma both of depression itself and of the need for help with psychiatric problems (Adshead, et al., 1992, Murphy, 1989)

Frailty is used loosely to describe a range of conditions in older people, including general debility and cognitive impairment associated with ageing. It is generally asserted that a combination of biomedical and psychosocial factors influences frail people's physiological state to the extent that its function is reduced, and subsequent exposure to further minor environmental stresses may lead to depression. (Toner, et al., 1988, Remick.et al., 1996).The findings of this study suggest that depressive symptoms may be an important indicator and marker of frailty and depressive symptoms are a marker for frailty.

**Unani concept:** Unani system of medicine has been Exhaustive information on geriatric care is available in Unani texts like Al Qanun Fit Tib, Kamil-us-Sanaah, and kitab-ul-Mansoori, Zakheera Khwarzam Shahi, Firdaus-ulHikmat, Ain-al-Hayat, Kitab-ul-Kulliyat and Kitabul Mukhtarat Fil Tib, etc. The comprehensive explanation of geriatric care is mentioned under the heading of Tadabeer-eMashaikh. Under this heading, a vast list of single and compound drugs have been mentioned by Unani scholars, which are very much effective, and form an important part of geriatric treatment.

**Objective:** The Objective of this study was to Examine the Relationship Between Depressive Symptoms and Treatment Outcomes in An Unselected Consecutive Sample of older Medical Out Patients of the Geriatric Depression Scale in its 15-item version (GDS-15) in Mumbai Maharashtra older adults.

**Design:** A prospective study of individuals screened in geriatric clinic.

## II. MATERIALS AND METHOD:

**Participants:** Registrants to medical outpatient department of a RRIUM aged 60 and over who had been visiting hospital and registered in geriatric clinic were eligible for the study. 50% of consecutive admissions were randomly selected for the study using a list generated using block randomization.

108 eligible registrants over a period of 15 months, 60 medical out patients were randomly selected into the study.18 patients did not meet the inclusion criteria for screening .20 patients refused consent and 10 patients were excluded after screening. Thus, data from 60 patients were used in analysis

Patients were excluded if they had suicidal tendencies, severe dysphasia, and severe deafness or were too physically unwell and/or confused to be interviewed; the remainders were approached for consent to take part in the study. Participants who screened positive for depression were subsequently invited to a further diagnostic interview and counseling

Participants were assessed using the 15-item Geriatric Depression Scale (GDS-15), A higher score ≥5 on the GDS-15 indicates that the patient has depressive symptoms.

**Ethical clearance and consent:**
The study was approved by the RRIUM's institutional ethics committee. Before enrolling in the study, a signed consent was obtained from eligible participants and informed family members with a recommendation for further assessment by a mental health professional in cases of severe depression

**Statistical Analysis**
Statistical analysis was done using chi square test. Calculated value of chi square is 3.9 and tabulated value is 3.84 at degree of freedom 1, $(p>0.05)$ the study is slightly significant.

**OBSERVATIONS**
Main outcome measures: length of illness; recurrence of symptoms, Response to treatment, reference to a community hospital (for rehabilitation)

**Table-1.AGE WISE SEX RATIO**

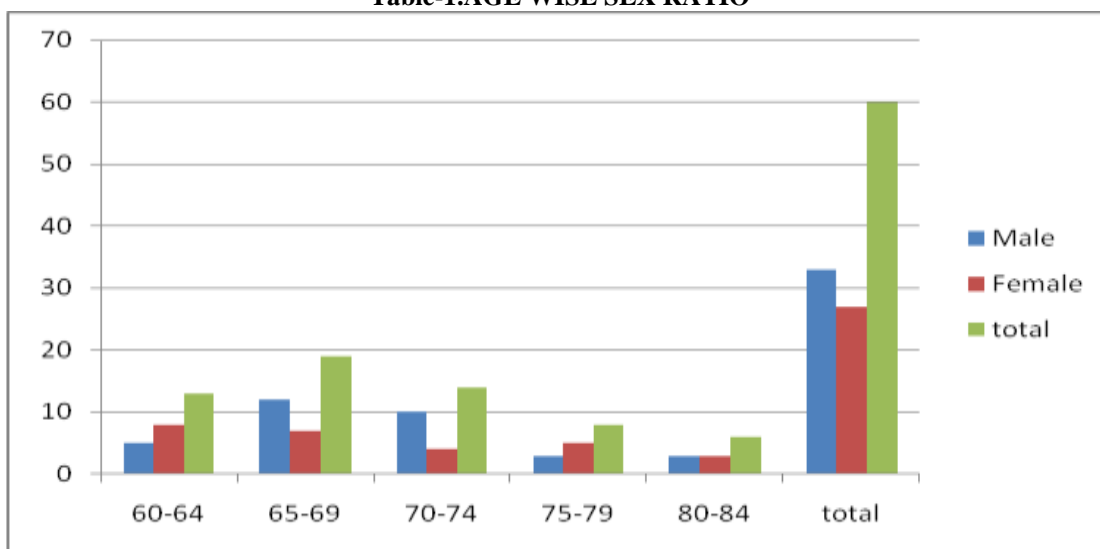| Age Group | Male | Female | Total |
|---|---|---|---|
| 60-64 | 5 | 8 | 13 |
| 65-69 | 12 | 7 | 19 |
| 70-74 | 10 | 4 | 14 |
| 75-79 | 3 | 5 | 08 |
| 80-84 | 3 | 3 | 06 |
| TOTAL | 33 | 27 | 60 |

**Table-1.AGE WISE SEX RATIO**



**Table-2. GDS-15 SCORE WISE SOCIO-ECONOMIC STATUS**

| GDS Score | Socio economic status good | Socio economic status average | Socio economic status poor | Total |
|---|---|---|---|---|
| GDS 0-4 | 11 | 4 | 6 | 21 |
| GDS 5-7 | 9 | 2 | 3 | 14 |
| GDS 8-10 | 4 | 1 | 8 | 13 |
| GDS 11-15 | 1 | 2 | 9 | 12 |
| TOTAL | 25 | 9 | 26 | 60 |
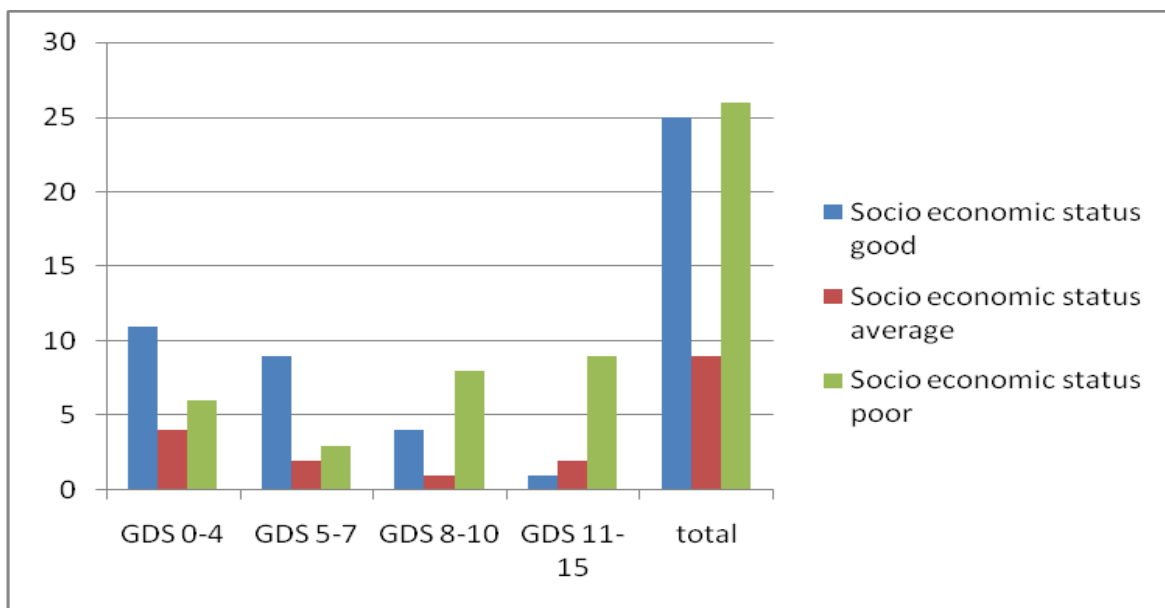
**Table-3.SEX WISE GDS 15 SCORE**

| GDS 15 SCORE | MALE | FEMALE | total |
|---|---|---|---|
| GDS 0-4 | 11 | 10 | 21 |
| GDS 5-7 | 09 | 05 | 14 |
| GDS 8-10 | 03 | 10 | 13 |
| GDS 11-15 | 01 | 11 | 12 |
| Total | 33 | 27 | 60 |
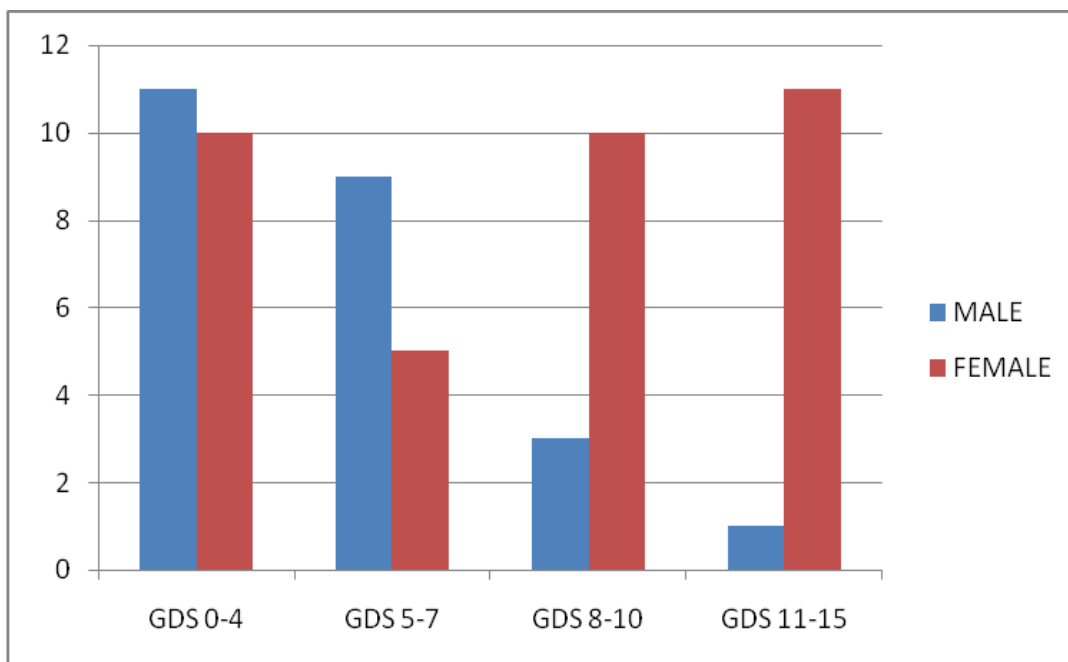
**Table-4.:RESPONSE WISE GDS SCORE BEFORE COUNSELLING**

| Response | GDS 0-4 | GDS 5-7 | GDS 8-10 | GDS 11-15 | Total |
|----------|---------|---------|----------|-----------|-------|
| GOOD | 3 | 5 | 8 | 12 | 28 |
| NIL | 9 | 9 | 5 | 9 | 32 |
| Total | 12 | 14 | 13 | 21 | 60 |
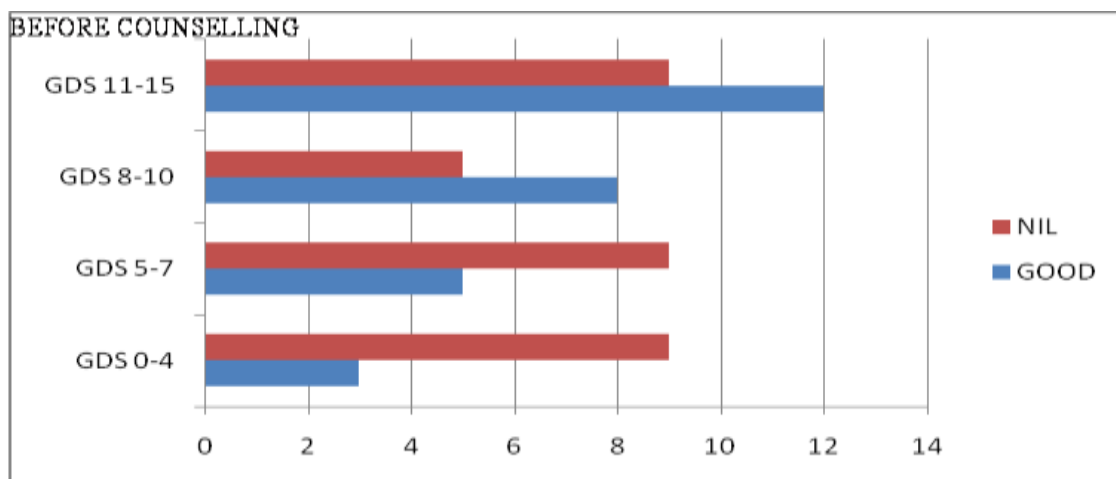
**Table-5.RESPONSE WISE GDS SCORE AFTER COUNSELLING**

| Response | GDS 0-4 | GDS 5-7 | GDS 8-10 | GDS 11-15 | Total |
|---|---|---|---|---|---|
| GOOD | 14 | 6 | 5 | 4 | 28 |
| NIL | 8 | 11 | 9 | 3 | 32 |
| Total | 22 | 17 | 14 | 7 | 60 |
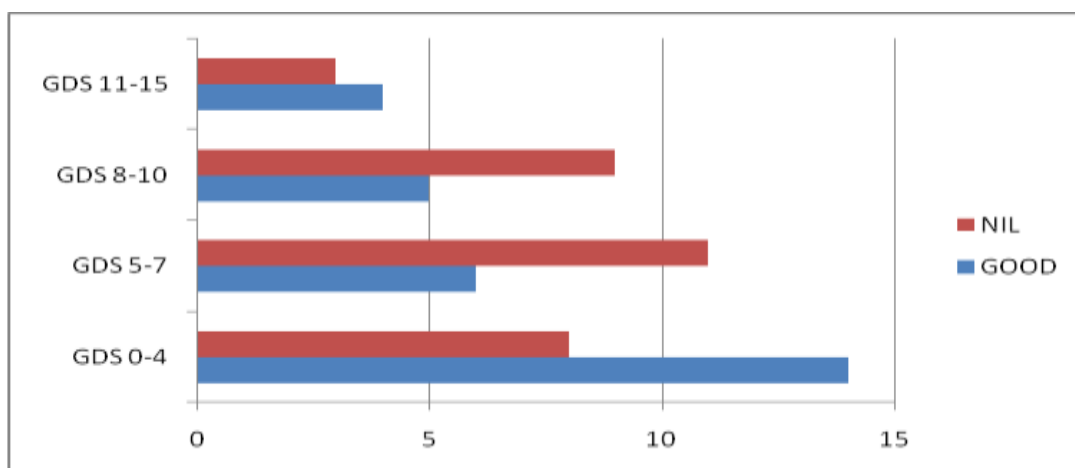


**Table-6. STATISTICAL ANALYSIS AND RESULTS**

| Group | (GDS <5) | (GDS ≥5) | total |
|---|---|---|---|
| Before Counseling | 12(16.9) | 48(43.1) | 60 |
| After Counseling | 22(17.1) | 38(43.9) | 60 |

(p>0.05)
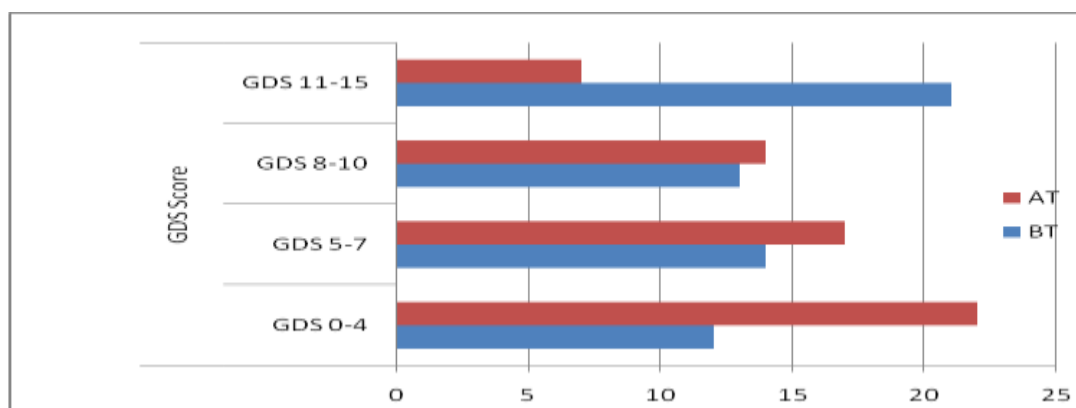
From 108 eligible registrants over a period of 15 months, 60 medical out patients were randomly selected into the study.18 patients did not meet the inclusion criteria for screening .20 patients refused consent and 10 patients were excluded after screening. Thus, data from 60 patients were used in analysis. Statistical analysis was done using chi square test. Calculated value of chi square is 3.9 and tabulated value is 3.84 at degree of freedom 1, ($p>0.05$) the study is slightly significant.

The findings of this study suggest that depressive symptoms may be an important indicator of frailty. Currently, we have no robust research evidence regarding the impact and cost effectiveness of screening, assessment and treatment of depression identified in this population. There is clearly a need for further research in the area, and application of assessment scale like Abbreviated Mental Test Score (AMTS) and the Cumulative Illness Rating Scale—Geriatric (CIRS-G) (Yesavage., et al., 1983) on a large sample size as evidence that identification and treatment of depression in older medical patients effectively improves (or does not improve) health outcomes will influence the development of healthcare policy. Researchers carrying out these studies should consider including inpatient death and use of rehabilitation services as potential outcomes. Further study with larger sample size is to be carried in future.

## III.    DISCUSSION AND CONCLUSION
Very few studies have considered whether depressed mood affects the need for rehabilitative or long-term institutional care, but our study found that depressive symptoms were associated with reduced response to treatment. (Evans,1993, Conwell,et al., 1989,Carroll,1982)  The findings of this study suggest that depressive symptoms may be an important indicator of ill-health and depressive symptoms are a marker for frailty.

Currently, we have no robust research evidence regarding the impact and cost effectiveness of screening, assessment and treatment of depression identified in this population. There is clearly a need for further research in the area, as evidence that identification and treatment of depression in older medical out patients effectively improves (or does not improve) health outcomes will influence the development of healthcare policy (Meakin,1992, Yesavage, et al., 1983). Elderly patients may be reluctant to divulge private matters or feelings and so need repeated evaluation. Primary care and general hospital staff are often reluctant to question sensitive emotional topics. These difficulties can be lessened by the use of appropriate screening scale. Such scales should not be given in isolation. A support service for both the identified patient and the staff involved should be in place before a screening programme is commenced.

The main findings of this study are that a higher depression rating is associated with increased frequency of recurrence of symptoms, increased frequency of being referred to a community hospital for rehabilitation independent of age, sex and physical status. Depressive symptoms were associated with longer follow ups. The active intervention in the trial was assessment and implementation of a management plan compared to standard care.

Failure to identify and treat depression increases morbidity in elderly populations. It increases demands on relatives, health and social services. When required, counseling is effective and safe even with co morbid physical disease. Patients usually respond to counseling although

this may take longer than in a younger adult, improving their quality of life and possibly reducing morbidity and pressure on formal and informal care givers. Our study found that depressive symptoms are independently associated with an increased likelihood of recurrence of symptoms and indication for rehabilitation. Further research is required to establish whether screening, assessment and treatment of depression identified in this population will reduce the morbidity and mortality in geriatric patients

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