

## **Cognitive impairment and depression among elderly**

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### **ABSTRACT**

**INTRODUCTION** – Gradually with the age elderly people report many medical problems and due to which psychiatric problems are been ignored or left untreated which leads towards more darker side of life and suffering. Cognitive impairment and depression are common problems which are been faced in elderly and study suggests the prevalence rate of Cognitive impairment and depression which need urgent attention.

**METHOD-** A comprehensive systematic search of published literature and journal articles from . Pub Med, MEDLINE, EBSCO was taken. Search strategy specific to each data repository was used. During initial search 20705 titles were retrieved and finally 6 research articles were selected based on the inclusion criteria.

**RESULT** – Total 6 articles were selected, out of which 2 studies shows correlation (-0.182, -0.25) between cognitive impairment and depression while other studies shows the rate of prevalence of cognitive impairment and depression which depicts that females have high rate in comparison to male.

**CONCLUSION** - It is very important that psychiatrist and health care workers should pay special attention for early detection and treatment of depressive and cognitive impairment symptoms in elderly as the symptoms are been ignored are left untreated

**KEYWORDS** – Cognitive impairment, depression, elderly, prevalence

## **1. TITLE: Cognitive impairment and depression among elderly**

**1.1 INTRODUCTION:** Healthy mind plays an important role in every individual despite of age. Older adults which are 60 or above have important contribution to our family as well as our society , out of which few develop mental disorders. Many people realize that geriatric mental health issue can be treated, this is due to the stigma been placed on aging because of which more of our older adults are getting failed to get proper treatment which eventually leads towards a failure of living a good quality of life .If seen than depression and cognitive impairment can be more severe in elderly then in younger adults. In spite of creating so much awareness people are forced to abstain from receiving proper mental health care. According to the reports by WHO about 300 million people worldwide are suffering from depression. False myths and beliefs deprive many elderly people to receive continuous care and treatment which then constantly leads to dementia, Alzheimer’s disease and early death. Depression and cognitive impairment cause great suffering and disturb the functioning of daily living also. Depression and cognitive impairment are under diagnosed as well as undertreated as the symptoms are often ignored and untreated because they co-occur with other problems and with aging. As one study shows that the physicians were not able to diagnose cognitive impairment in about 40 % of their cognitively impaired patients which clearly shows that the cognitive problem will worsen over time .

**1.1.2NEED FOR THE STUDY:** According to report by WHO conducted for NCMH (National Care of Medical Health) India is the most depressed country in the world in which about 6.5% of population is suffering from serious form of mental disorders in both rural and urban areas. If noticed then there is little awareness regarding mental health in comparison to other medical conditions which can lead to drastic increase in the number of cases for mental problem/disorders. Common causes for cognitive impairment and depression can be substance abuse , drug intake , physical injury ,restless sleep , early awakening , poor memory , death of spouse and dissatisfaction towards life.

With the growing cases for cognitive impairment and depression it is very important for our mental health professionals to detect and treat it as early as possible so there can be some improvement in geriatric mental health. Most importantly there is a need of proper coordination between psychiatric and medical care which will eventually improve the results.

Despite of high literacy rate (Rural **India** is 64.7 %and Urban **India** is 79.5 %) there are certain strong myths for depression and cognitive impairment which are been practice by large population which is affecting the life of sufferer as well as the family members. There is lot of need for awareness in rural and urban areas regarding depression and cognitive impairment to the person, family members, or others concerns about which will definitely improve the status of mental health to some extent .We all fear of losing our mental capacity and so about 60% of adults are very or somewhat worried about memory loss.

**1.1.3 AIM** – The aim of the study is early detection of depression and cognitive impairment among elderly.

**1.1.4 OBJECTIVE:**

- To determine the prevalence of cognitive impairment and depression

**2. METHODOLOGY:**

**2.1 SEARCH STRATEGY METHODS** The cognitive impairment and depression was selected as the area of interest and a search was conducted on online database. Pub Med, MEDLINE, EBSCO to retrieve quantitative research article published from 2004-2019 and the search was confined to only English accent. The search terms used cognitive impairment, depression, elderly people , mental health . The studies were conducted in diverse countries, such as rural and urban areas.

### **2.1.1 SEARCH STRATEGY:**

Cognitive impairment and depression among elderly [All Fields] "Cognitive impairment"[Mesh] AND "Depression"[Mesh]) AND "elderly"[Mesh]) AND "Mental Health"[Mesh]) AND "Mental disorders"[Mesh] AND "relationship"[Mesh].

**2.1.2 TYPES OF STUDIES:** Qualitative study, Quantitative study, Cross sectional study.

**2.1.4 TYPE OF PARTICIPANTS:** Elderly people above 60 years and above residing in rural and urban area

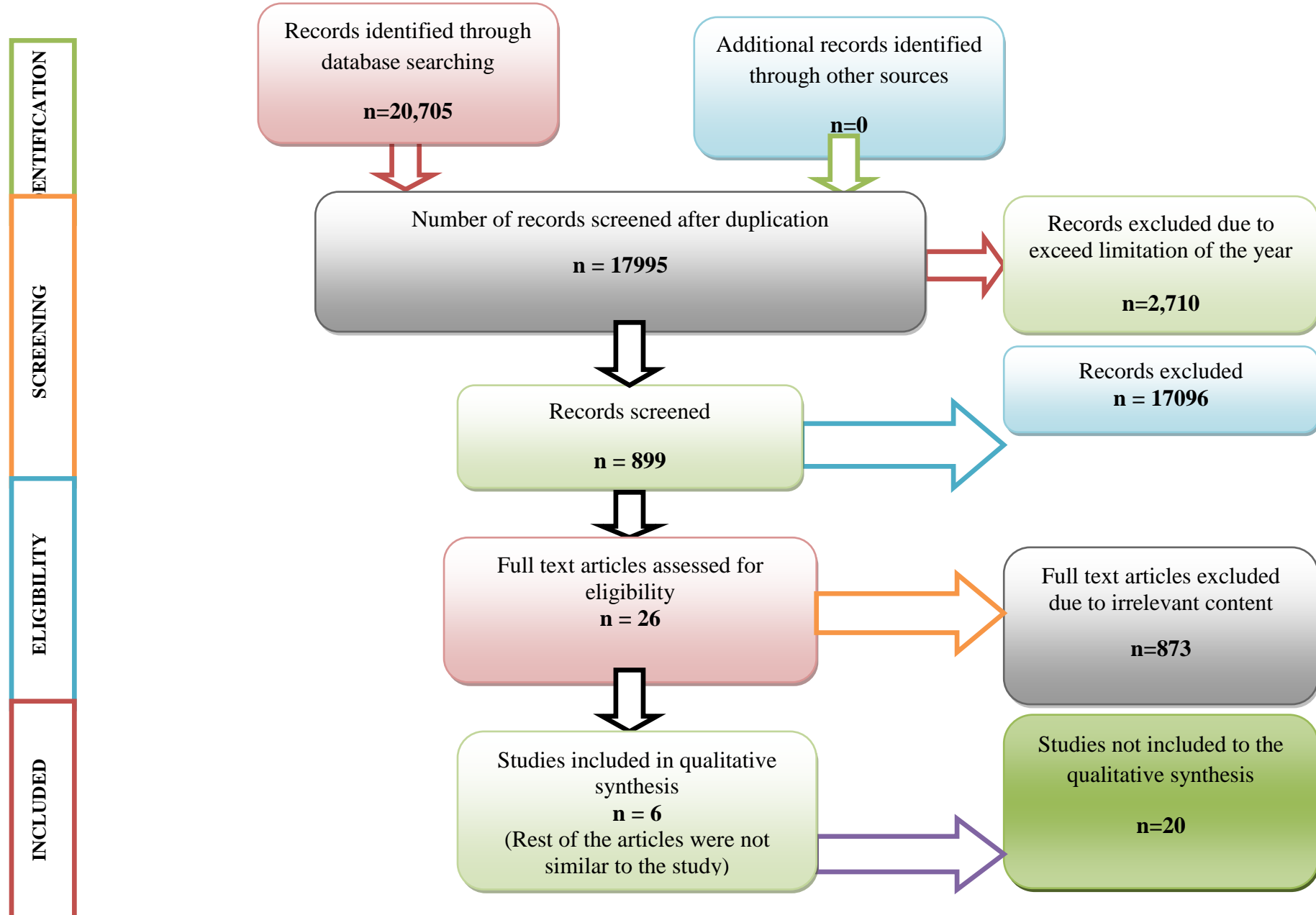
**2.1.5 SETTINGS:** Rural Area, urban area

**OUTCOME:** The narrative review shows cognitive impairment and depression among elderly .It reveals that cognitive impairment and depression are related and are very common among elderly.

### **DELIVERY OF INTERVENTION**

This narrative review was predetermined with the exploration of reviews related to the topic “Cognitive impairment and depression among elderly” the exploration begin with the keywords. Online databases which were used for the exploration of review was Pub Med from the year2004.- till now. The search was confined to only English accent. At beginning, the search fetched **20,705** titles were retrieved and number of records screened after duplication were **899** and remaining **2710** excluded because of exceed limitation of the year, after removing articles based on other criteria( shown in prisma chart) finally **6** articles are included in qualitative synthesis..

**PRISMA FLOWCHART**



**RESULT -**

<b>S.No and author</b>	<b>Title</b>	<b>Country</b>	<b>Variable</b>	<b>Instrument</b>	<b>Sample sampling technique</b>	<b>Findings</b>	<b>Conclusion</b>
1. Kumar N, Sudhakar TP  2013	Cognitive impairment and depression among elderly patients attending the OPD	South India , Turipati ,Andhra Pradesh	Cognitive impairment and depression among elderly: a hospital based study	Standardized Mini Mental Status Examination and Geriatric Depression Scale	525 elderly (aged 60 years and above), convenient sampling technique . Data was collected for a period of six months from August 2009 to February 2010	A cross sectional study was conducted and study clearly showed the prevalence of Cognitive impairment as 31.0% (34.7% women, 23.4% men) and prevalence of depression 44.86%. The prevalence rate of depression was found more in elderly females (51.8%) than in males (39.66%).	Cognitive impairment and depression were seen in elderly people and these are more common in the females than in the males. Hence, it is very important that psychiatrist and health care workers should pay special attention for early detection and treatment of depressive and cognitive impairment symptoms in elderly.



3. Boyoung Park et.al 2013	Cognitive Impairment, Depression, Comorbidity of the Two and Associated Factors among the Early Sixties in a Rural Korean Community	Korea	Cognitive Impairment, Depression,, Comorbidity among the Early Sixties	Korean version of the Mini- Mental State Examination, Geriatric Depression Scale (GDS- 15).	3,041 participants Elderly aged 60–64 years	The study as conducted to find the prevalence of both cognitive impairment, depression and co morbidity and its related factors in elderly above 60 years. The findings revealed the overall prevalence of cognitive impairment 17.4%, depression 26.0% and co morbidity was 7.1%. The correlation coefficient was -0.25, P value <0.01 showing positive association	When a person is in its early sixties than retirement and other lifestyle changes can trigger physical, social and emotional changes which should be investigated. As cognitive impairment worsen depression and an individual with both cognitive impairment and depression is at high risk for medical and psychological outcomes.
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4. Salary S  2013	Relationship between depression and cognitive disorders in men affected with dementia disorder	Tehran ,Iran	Depression and cognitive disorders in women affected with dementia disorder	Gediatric Depression Scale , Rowland's Universal Dementia Assessment Scale (RUDAS)	26 elderly aged from 60 years and above Descriptive study	A descriptive study conducted on 26 men from age 60 years. The samples were been divided in 2 groups from age 60 to 75 years and 76 years – above . Findings showed correlation between depression and cognitive dysfunction in women with dementia at 0.05 level of significance as 0.35.According to findings 73.07 of men were affected with moderate depression and 26.92% with severe depression.	The study concluded that depression is linked with decrease in his /her own attention and it somewhere make person incapable for proper working of cognitive functions. Hence there should be regular cognitive rehabilitation programme for elderly and special attention should be given to one suffering from dementia.
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5. Salary S  2013	Relationship between depression and cognitive disorders in women affected with dementia disorder.	Tehran , Iran	Depression and cognitive impairment affected with dementia disorder.	Gediatric Depression Scale , Rowland's Universal Dementia Assessment Scale (RUDAS	64 women affected with dementia with age 60 years to 75 years .	A descriptive study was conducted on 64 women of age 60 years and above, which were affected with dementia. Pearson correlation was calculated as -0.67 at 0.05 level of significance. Hence it showed that there is significant relationship between cognitive impairment and depression. The study revealed that 56.25 % of women were affected with moderate depression and 43.75% from severe depression.	The risk of being affected with dementia doubles after every 5 years after the age of of 65 years. Continuous decline in one's mental functioning should be evaluated in accordance with his/ her previous level of performance.
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6. Mohan Giri,Tian Chan ,Weihua Yu,Yang Lu  2016	Prevalence and correlates of cognitive impairment and depression among elderly people	China	Prevalence and correlates of cognitive impairment and depression	Chinese version of Mini mental State Examination and 30 item Geriatric Depression Scale	538 elderly aged 60 years	A cross sectional study from September 11 to August 2012. The results shows the prevalence of cognitive impairment 12.6% in which female 16.7% and male 7.6% and for depression 24.3% . Depression was slightly higher in females 25.3% then in males 23% The study clearly shows that cognitive impairment and depression are prevalent in elderly	This study provide useful information about prevalence of cognitive impairment and depression among elderly . the study clearly shows the linkage between depression and cognitive impairment and they are nowadays are very common.
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**OUTCOME** – The narrative review outcome shows the cognitive impairment and depression among elderly. It reveals that cognitive impairment and depression are inter- related and are very common among elderly.

**SUMMARY OF FINDINGS** – The available literature was refined to get 6 quantitative studies:

- ❖ Out of 6 articles 4 articles shows the relationship between cognitive impairment and depression along with level of prevalence
- ❖ 2 study showed the prevalence

**DISCUSSIONS** – Age above 60 years is considered as the stage full of diseases and due to which mental health problems like depression and cognitive impairment are been left undiagnosed or under diagnosed. Therefore endorsement studies are required to know that elderly people are important part of society and the symptoms should be investigated properly especially depression and cognitive impairment as they both are seen together whereas data of this study is compatible with similar narrative review findings which were conducted by Sarah Shizoko Morimoto And George S Alexopoulos in 2013 on Cognitive Deficits in Geriatric Depression – A review shows that major depression in elderly is often seen along with Cognitive impairment .

**IMPORTANCE IN EDUCATION** :- Having baseline information regarding cognitive impairment and depression will help nursing students as well as healthcare workers to increase their knowledge and it will definitely help in early detection of symptoms and will promote the mental health status of individual suffering from it.

**FUTURE SIGNIFICANCE**:- In order to reduce the cases of cognitive impairment and depression in elderly it is very important that family members need to be educated and informed about the importance of the symptoms so that they can be detected and treated earlier.

- **LIMITATIONS**:
- Database search was limited.

- Search strategy was refined to assess prevalence of cognitive impairment and depression among elderly (Above 60 years).
- Meta – analysis will give more accuracy.

### **STRENGTH AND WEAKNESS:**

#### **STRENGTH**

- Article search was carried out on significant criteria.

#### **WEAKNESS:**

- Only 6 articles were included for data synthesis due to limitations.
- Articles mainly focus only on cognitive impairment and depression among elderly

**SUMMARY :** Elderly age is the stage when everyone needs proper care and attention . In this review I have included the reviews which are showing cognitive impairment and depression in elderly and how important is it for our health care workers to recognize the cases early as soon as possible. Family members also need to be educated. Regular checkup can become one of the factors in order to recognize the cases at risk.

#### **CONCLUSION:**

The review concluded that large number of elderly is suffering from cognitive impairment and depression which is not been diagnosed and left untreated. If in case any elderly is been diagnosed with depression then individual should be checked for cognitive impairment and depression.

## REFERENCES

- D, N. and TP, S. (2013). Prevalence of cognitive impairment and depression among elderly patients attending the medicine outpatient of a tertiary care hospital in South India. *International Journal of Research in Medical Sciences*, 1(4), p.1.
- Chodosh, J., Petitti, D., Elliott, M., Hays, R., Crooks, V., Reuben, D., Galen Buckwalter, J. and Wenger, N. (2004). Physician Recognition of Cognitive Impairment: Evaluating the Need for Improvement. *Journal of the American Geriatrics Society*, 52(7), pp.1051-1059.
- Salary, S. and Moghadam, M. (2013). Relationship Between Depression and Cognitive Disorders in Women Affected with Dementia Disorder. *Procedia - Social and Behavioral Sciences*, 84, pp.1763-1769.
- Salary, S. and Moghadam, M. (2013). Relationship between Depression and Cognitive Disorders in Men Affected with Dementia Disorder. *Procedia - Social and Behavioral Sciences*, 84, pp.1290-1295.
- Giri, M., Chen, T., Yu, W. and Lü, Y. (2016). Prevalence and correlates of cognitive impairment and depression among elderly people in the world's fastest growing city, Chongqing, People's Republic of China. *Clinical Interventions in Aging*, Volume 11, pp.1091-1098.
- Park, B., Park, J. and Jun, J. (2013). Cognitive Impairment, Depression, Comorbidity of the Two and Associated Factors among the Early Sixties in a Rural Korean Community. *PLoS ONE*, 8(11), p.e79460.
- Vinkers, D., Gussekloo, J., Stek, M., Westendorp, R. and Mast, R. (2004). Temporal relation between depression and cognitive impairment in old age: prospective population based study. *BMJ*, 329(7471), p.881.