#### ISSN NO: 2249-3034

## Cognitive impairment and depression among elderly

### .PROF.KALAM NARREN PROF.V.VINAY KRISHNA

<sup>1</sup>M.sc nursing second year student, Teerthanker Mahaveer College of nursing, TMU, Moradabad.

<sup>2</sup>Assistant professor, Teerthanker Mahaveer College of nursing, TMU, Moradabad.

### **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.

1.1.2 NEED 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.

<u>1.1.3 AIM – The aim of the study is early detection of depression and cognitive impairment among elderly.</u>

#### **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 "depression" [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

**<u>OUTCOME</u>**: 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 year 2004.- 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..

Volume IX, Issue V, MAY/2020

## **PRISMA FLOWCHART** Records identified through Additional records identified database searching DENTIFICATION through other sources n=20,705n=0 Number of records screened after duplication Records excluded due to exceed limitation of the year n = 17995SCREENING n=2,710Records excluded n = 17096Records screened n = 899ELIGIBILITY Full text articles assessed for Full text articles excluded eligibility due to irrelevant content n = 26n=873Studies not included to the Studies included in qualitative INCLUDED qualitative synthesis synthesis n = 6n=20(Rest of the articles were not similar to the study)

# **RESULT -**

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

							The study clearly concluded
2. David	A	Netherl	Depression	Standardized	500 elderly aged	A prospective study was	the findings that –
J,	prospective	ands	and cognitive	Mini Mental	from 65 years	conducted on 500	1. How important is it
Jacobijn	study on		impairment	Status	and above	elderly between 1st	improves mental health
Gussekln,	temporal		in old age	Examination		September 1997 and 1st	among geriatric patient.
Max L	relationship			and Geriatric		September 1999 and	2. Urgent need of proper
Stek .etal	between			Depression		data was collected	coordination between
	depression			Scale		through interview	Psychiatric and medical
	and					method.	care to reduce disease
	cognitive					The Pearson correlation	burden.
2004	impairment					was calculated -0.182	3. Routine screening of
2004	in old age					with various measures	elderly for cognitive
						of cognitive impairment	impairment.
						and depression	4. Large multi center
							hospital needed so that
							there is proper
							assessment of socio
							economic factors,
							depression, dementia
							and disease burden.

			Cognitive				
			Impairment,		3,041	The study as conducted	When a person is in its early
3.	Cognitive	Korea	Depression,,	Korean version	participants	to find the prevalence of	sixties than retirement and
Boyoung	Impairment,		Comorbidity	of the Mini-	Elderly	both cognitive	other lifestyle changes can
Park et.al	Depression,		among the	Mental State	aged 60–64	impairment, depression	trigger physical, social and
	Comorbidit		Early Sixties	Examination,	years	and co morbidity and its	emotional changes which
2013	y of the			Geriatric		related factors in elderly	should be investigated.
	Two and			Depression		above 60 years. The	As cognitive impairment
	Associated			Scale (GDS-		findings revealed the	worsen depression and an
	Factors			15).		overall prevalence of	individual with both cognitive
	among the					cognitive impairment	impairment and depression is
	Early					17.4%, depression	at high risk for medical and
	Sixties in a					26.0% and co morbidity	psychological outcomes.
	Rural					was 7.1%.	
	Korean					The correlation	
	Community					coefficient was -0.25, P	
						value <0.01 showing	
						positive association	

					A descriptive study	
					conducted on 26 men	The study concluded that
Relationship	Tehran	Depression	Gediatric		from age 60 years. The	depression is linked with
between	,Iran	and cognitive	Depression		samples were been	decrease in his /her own
depression		disorders in	Scale ,	26 elderly aged	divided in 2 groups from	attention and it somewhere
and		women	Rowland's	from 60 years	age 60 to 75 years and	make person incapable for
cognitive		affected with	Universal	and above	76 years – above .	proper working of cognitive
disorders in		dementia	Dementia	Descriptive	Findings showed	functions. Hence there should
men		disorder	Assessment	study	correlation between	be regular cognitive
affected			Scale (RUDAS)		depression and cognitive	rehabilitation programme for
with					dysfunction in women	elderly and special attention
dementia					with dementia at 0.05	should be given to one
disorder					level of significance as	suffering from dementia.
					0.35.According to	
					findings 73.07 of men	
					were affected with	
					moderate depression and	
					26.92% with severe	
					depression.	
	between depression and cognitive disorders in men affected with dementia	between ,Iran depression and cognitive disorders in men affected with dementia	between ,Iran and cognitive depression disorders in women affected with disorder affected with dementia disorder	between ,Iran and cognitive Depression disorders in Scale , and women Rowland's cognitive disorders in dementia Dementia Dementia men disorder Assessment Scale (RUDAS) with dementia	between ,Iran and cognitive depression disorders in Scale , 26 elderly aged and women Rowland's from 60 years cognitive disorders in dementia Dementia Descriptive men disorder Assessment study affected with dementia disorder Assessment study scale (RUDAS)	Relationship Tehran Depression Gediatric from age 60 years. The samples were been disorders in women Rowland's from 60 years age 60 to 75 years and affected with dementia dementia dementia dementia disorder  with dementia dementia dementia disorder  disorder  with dementia disorder  disorder  with dementia disorder  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

							1
5.							
Salary S	Relationship	Tehran	Depression			A descriptive study was	
	between	, Iran	and cognitive			conducted on 64 women	
	depression		impairment			of age 60 years and	
2013	and		affected with	Gediatric		above, which were	The risk of being affected with
	cognitive		dementia	Depression	64 women	affected with dementia.	dementia doubles after every 5
	disorders in		disorder.	Scale ,	affected with	Pearson correlation was	years after the age of of 65
	women			Rowland's	dementia with	calculated as -0.67 at	years. Continuous decline in
	affected			Universal	age 60 years to	0.05 level of	one's mental functioning
	with			Dementia	75 years.	significance. Hence it	should be evaluated in
	dementia			Assessment		showed that there is	accordance with his/ her
	disorder			Scale (RUDAS		significant relationship	previous level of performance.
	disorder.					between cognitive	
						impairment and	
						depression.	
						The study revealed that	
						56.25 % of women were	
						affected with moderate	
						depression and 43.75%	
						from severe depression.	

			Prevalence				
6. Mohan	Prevalence	China	and				
Giri,Tian	and		correlates of			A cross sectional study	This study provide useful
Chan	correlates of		cognitive			from September 11 to	information about prevalence
,Weihua	cognitive		impairment			August 2012. The	of cognitive impairment and
Yu,Yang	impairment		and	Chinese version	538 elderly aged	results shows the	depression among elderly . the
Lu	and		depression	of Mini mental	60 years	prevalence of cognitive	study clearly shows the linkage
	depression			State		impairment 12.6% in	between depression and
	among			Examination		which female 16.7% and	cognitive impairment and they
	elderly			and 30 item		male 7.6% and for	are nowadays are very
2016	people			Geriatric		depression 24.3%.	common.
				Depression		Depression was slightly	
				Scale		higher in females 25.3%	
						then in males 23%	
						The study clearly shows	
						that cognitive	
						impairment and	
						depression are prevalent	
						in elderly	

<u>OUTCOME</u> — 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

<u>DISCUSSIONS</u> — 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.

<u>IMPORTANCE IN EDUCATION</u>: 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.

<u>FUTURE SIGNIFICANCE</u>:- 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.

- <u>LIMITATIONS</u>:
- 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

<u>SUMMARY</u>: 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.

#### **REFRENCES**

- 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.