

PART
1

DEMENTIA AND COGNITION- BASICS

A FEW FACTS THAT EVERYONE SHOULD KNOW

THIS BOOKLET GIVES A BRIEF INFORMATION TO THOSE HAVING MEMORY
ISSUES

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PART 1



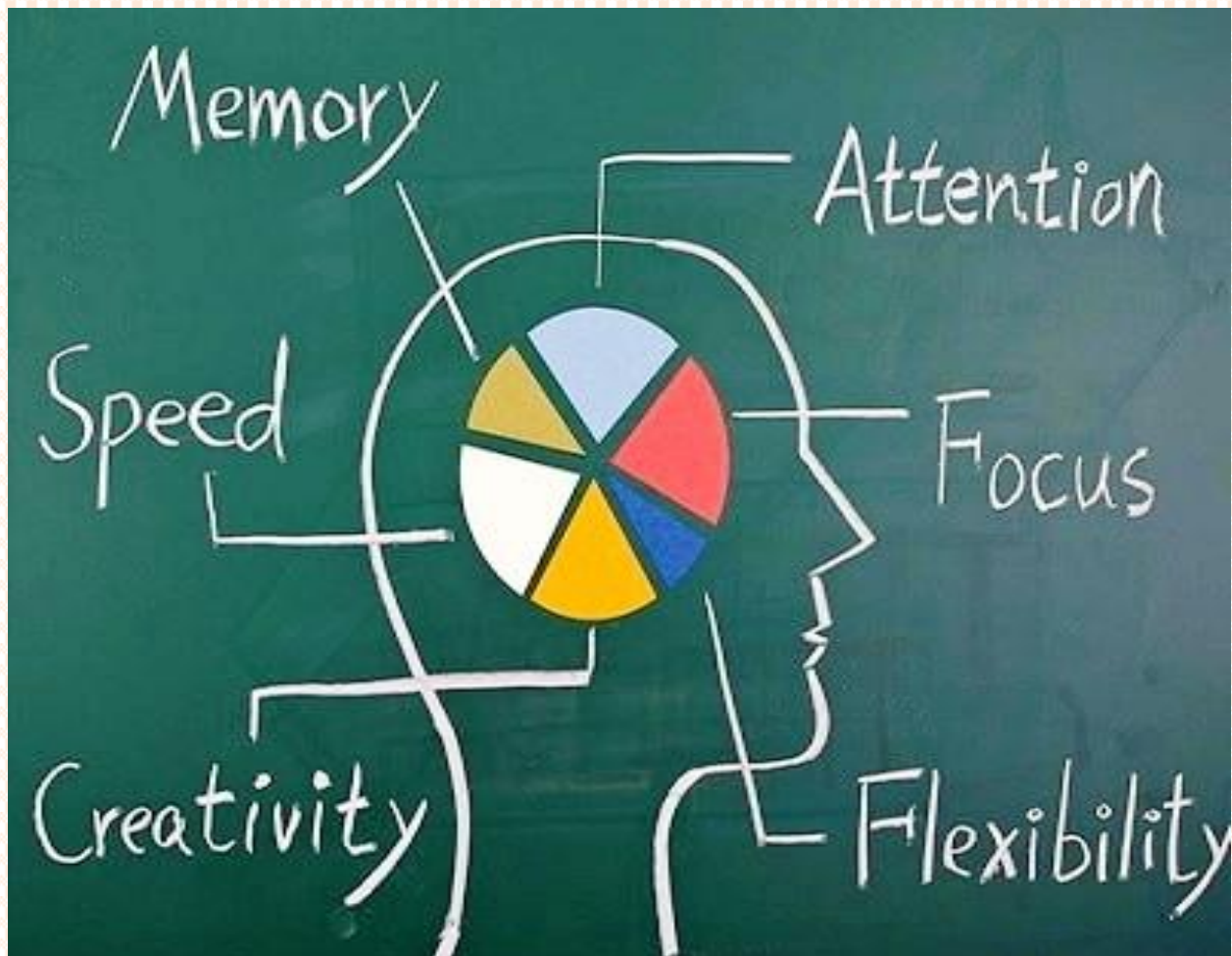
DEMENTIA AND COGNITION- BASICS

**A FEW FACTS THAT EVERYONE
SHOULD KNOW**

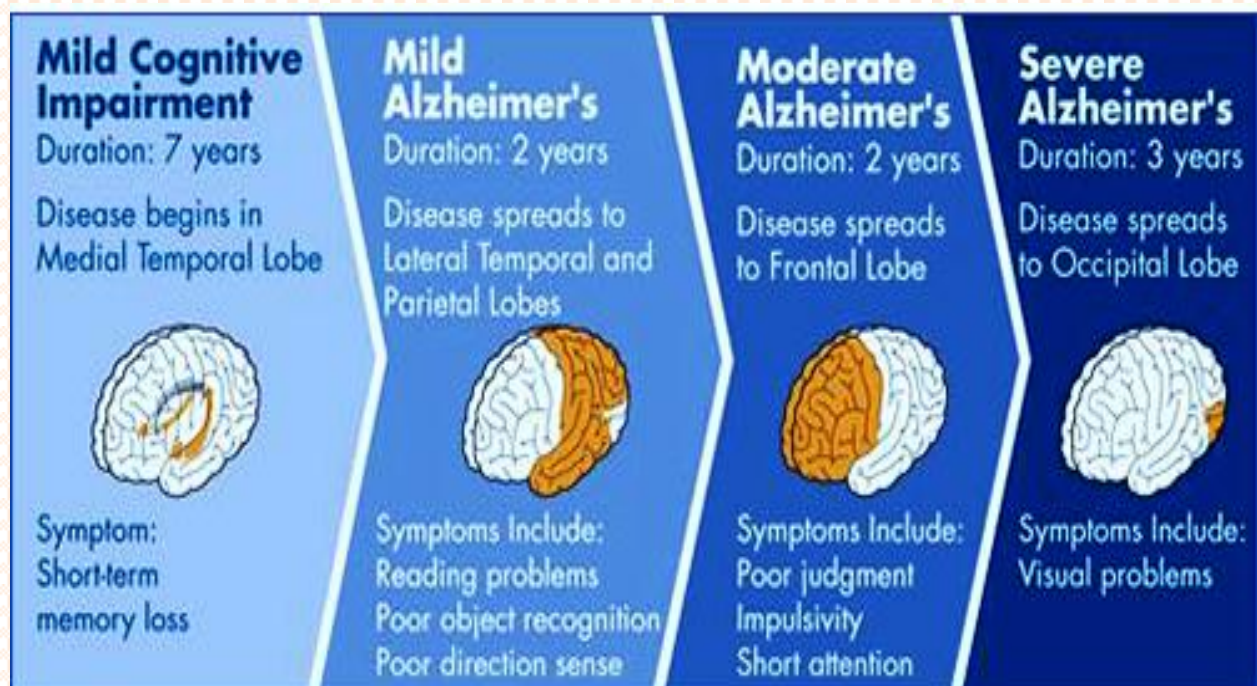
DR SAUMYA H MITTAL

*Dedicated To People With
Memory Loss Everywhere.*

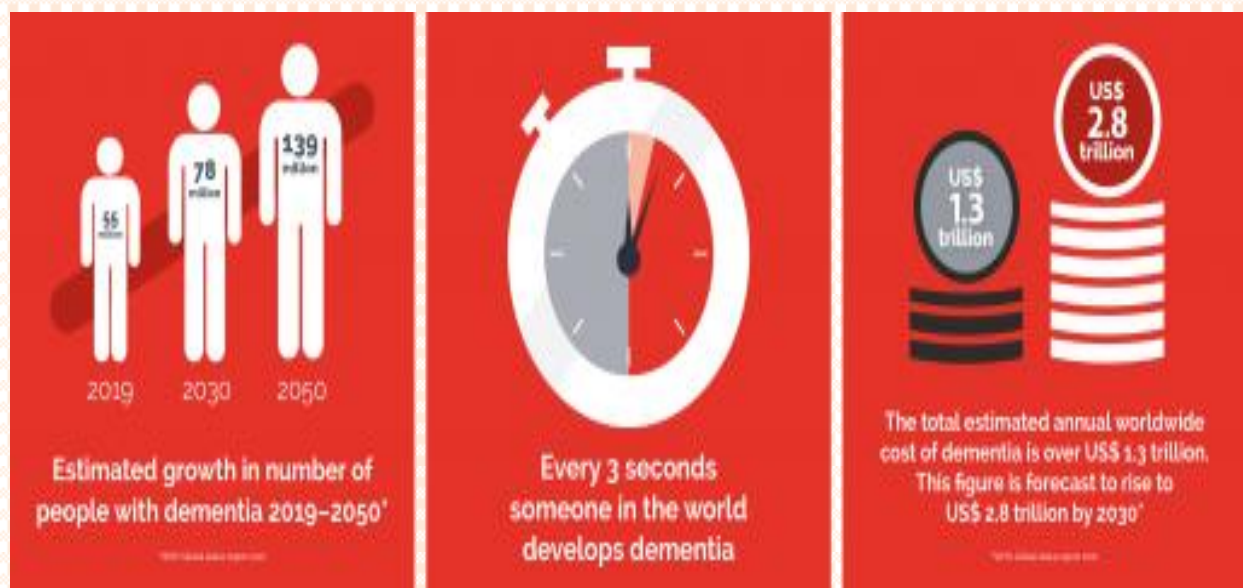
COGNITION involves processes and states involved in the process of **KNOWING**. It includes all conscious and unconscious processes that are used by humans in the process of acquiring **KNOWLEDGE**. The intellectual processes of **JUDGEMENT, REASONING, EVALUATION, PROBLEM SOLVING, DECISION MAKING, COMPREHENSION, PERCEPTION** and of course **MEMORY** are included in these processes.



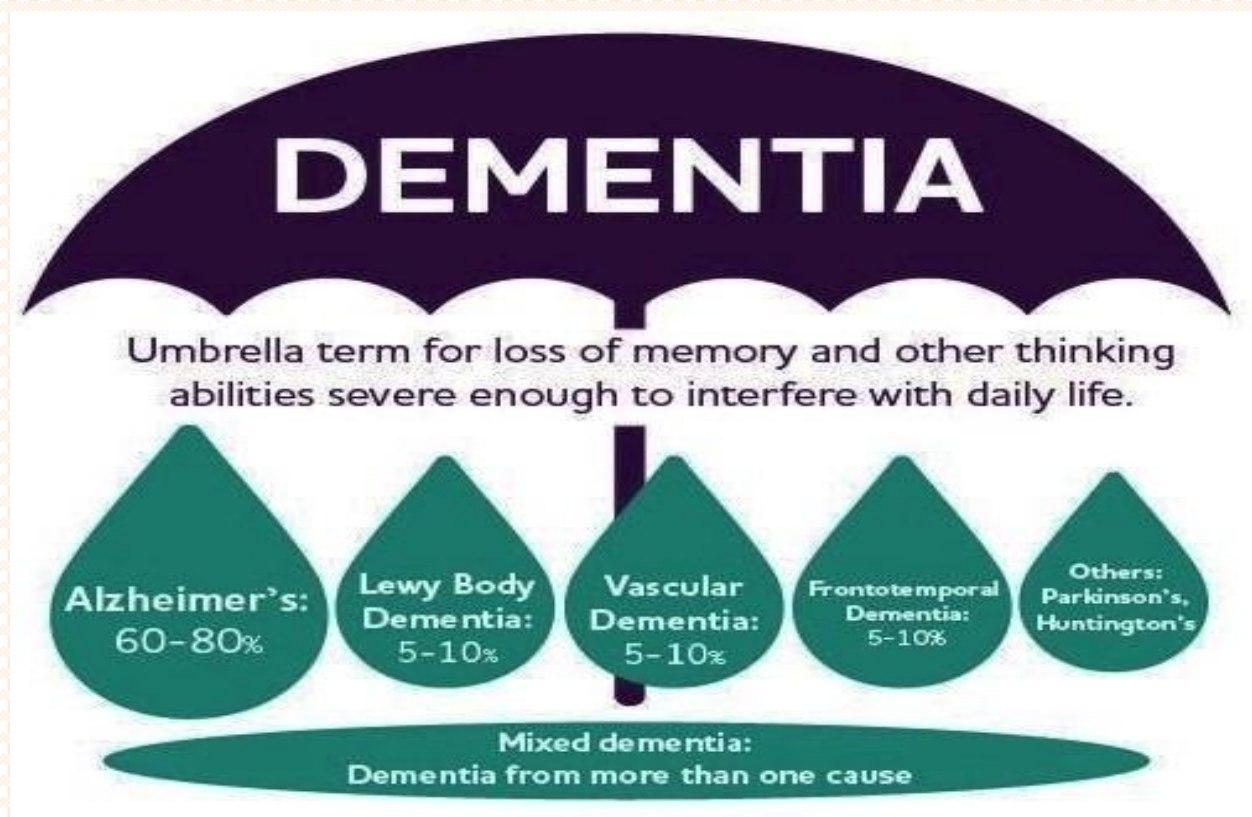
COGNITIVE IMPAIRMENT occurs when a person has difficulty in remembering things, learning new skills and new things, concentrating on ongoing activities, decision making in matter of day to day activity become difficult. Cognitive impairment can be **MILD** – when people begin to notice changes, or **SEVERE** when a person loses the ability to comprehend the things, their meaning and their importance. The inability may be severe enough to cause inability to talk, write, feed etc resulting in independent functioning in day to day life.



DEMENTIA is a condition in which there is loss of cognitive functions. The cognitive loss affects older people more, but is not restricted to them. Younger individuals can also be affected by loss of cognitive functions. Worldwide, estimated 55 million people suffer from dementia. And 10 million people are added to this list every year. Dementia is a major cause of disability and dependency. Incidence of dementia is bound to rise as the massive population on Earth ages. WHO expects 139 million people to have dementia in 2050. The increase in the number of people living with cognitive impairment will place demands on the medical system. The economic burden is likely to grow unless the ongoing research succeeds in providing a reliable therapy.

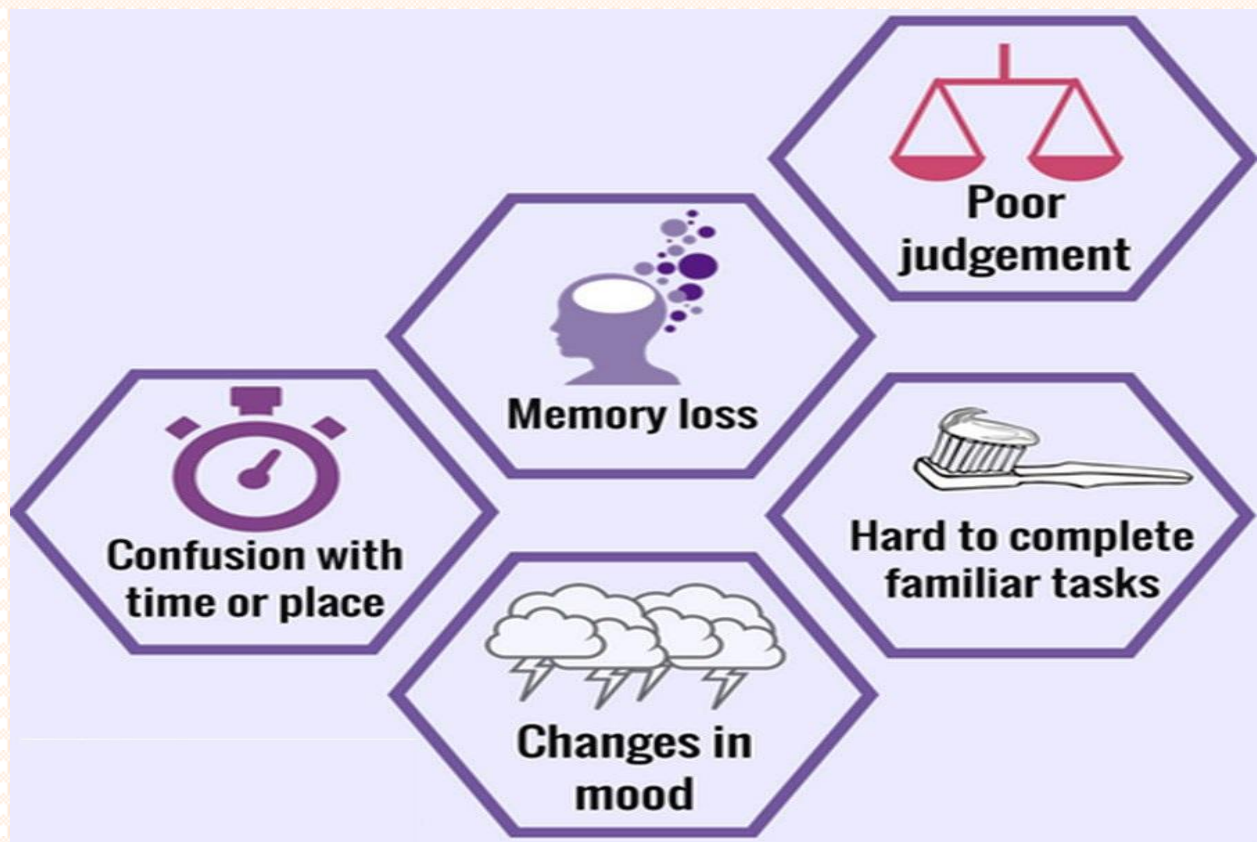


There are many types of dementia. The most commonly known dementia is ALZHEIMER'S DISEASE. However, this commonest form of dementia, is not the only form of dementia. Neurodegenerative causes of dementia include other forms of dementia like FRONTOTEMPORAL DEMENTIA, DEMENTIA WITH LEWY BODIES, etc. There can be other causes of dementia like Stroke, Trauma, Infections like HIV, Nutritional Deficiencies and Toxic Causes. This list is by far not complete. Cognitive decline and dementia are neither caused by any one disease, nor is it restricted to any one age group.

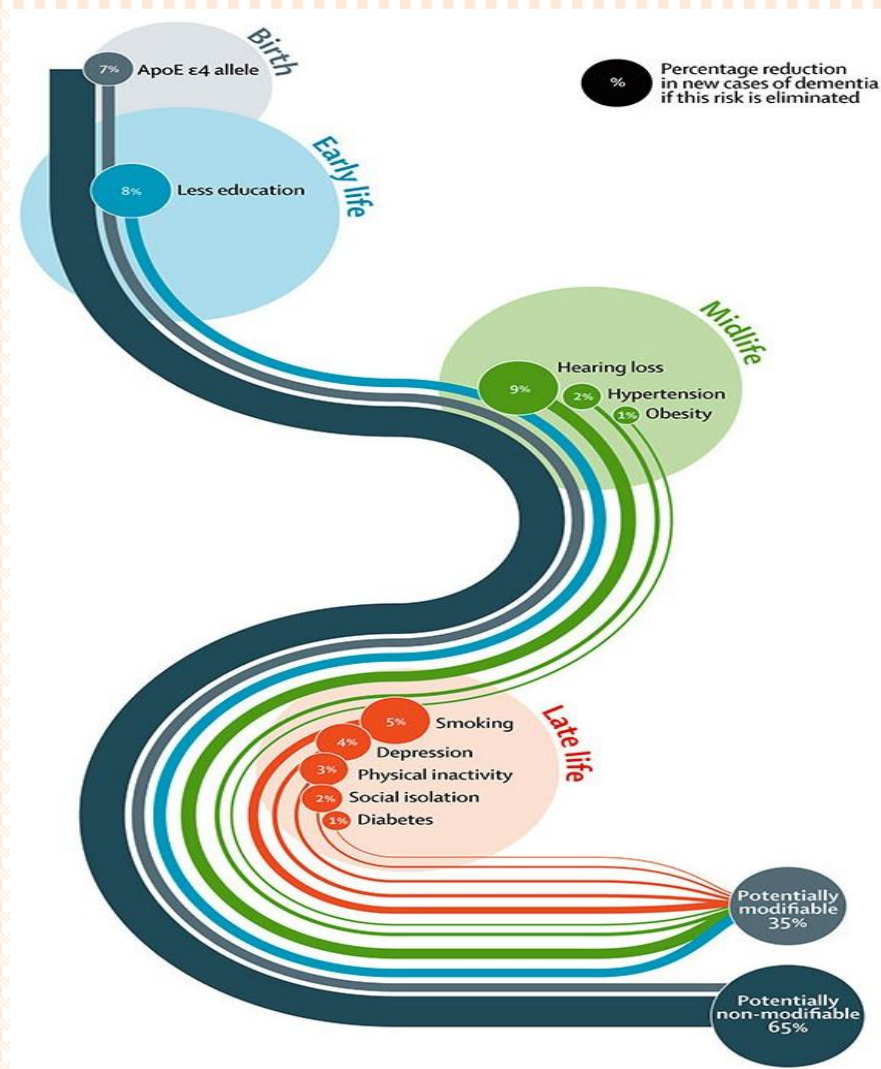


A few common signs of cognitive impairment/dementia include the following:

- Memory loss.
- Frequently asking the same question or repeating the same story over and over.
- Not recognizing familiar people and places.
- Having trouble exercising judgment, such as knowing what to do in an emergency.
- Changes in mood or behavior.
- Vision problems.
- Difficulty planning and carrying out tasks, such as following a recipe or keeping track of monthly bills.



While age is the primary risk factor for cognitive impairment, other risk factors include family history, education level, brain injury, exposure to pesticides or toxins, physical inactivity, and chronic conditions such as Parkinson's disease, heart disease and stroke, and diabetes. Individuals may reduce the risk of cognitive impairment by keeping physically active and maintaining healthy cholesterol and blood sugar levels.



As the aging process progresses, there may be a natural decline in memory, thinking and decision making skills. The progress however is much slower than the dementia syndrome diseases like Alzheimer's disease.

NORMAL AGING	COGNITIVE LOSS IN DEMENTIA
Neurons are stable.	Irreversible, extensive loss of neurons in brain.
Gradual and variable changes in cognition.	Severe and progressive decline in cognition.
Difficulty in recalling information, names, faces etc.	Difficulty in recalling information, names, face, events etc. that progresses as deterioration occurs.
Misplacing objects occasionally.	Constantly misplacing objects till even the responsibility may need to be taken away from the afflicted person.
	There may even be difficulty in speaking normally.

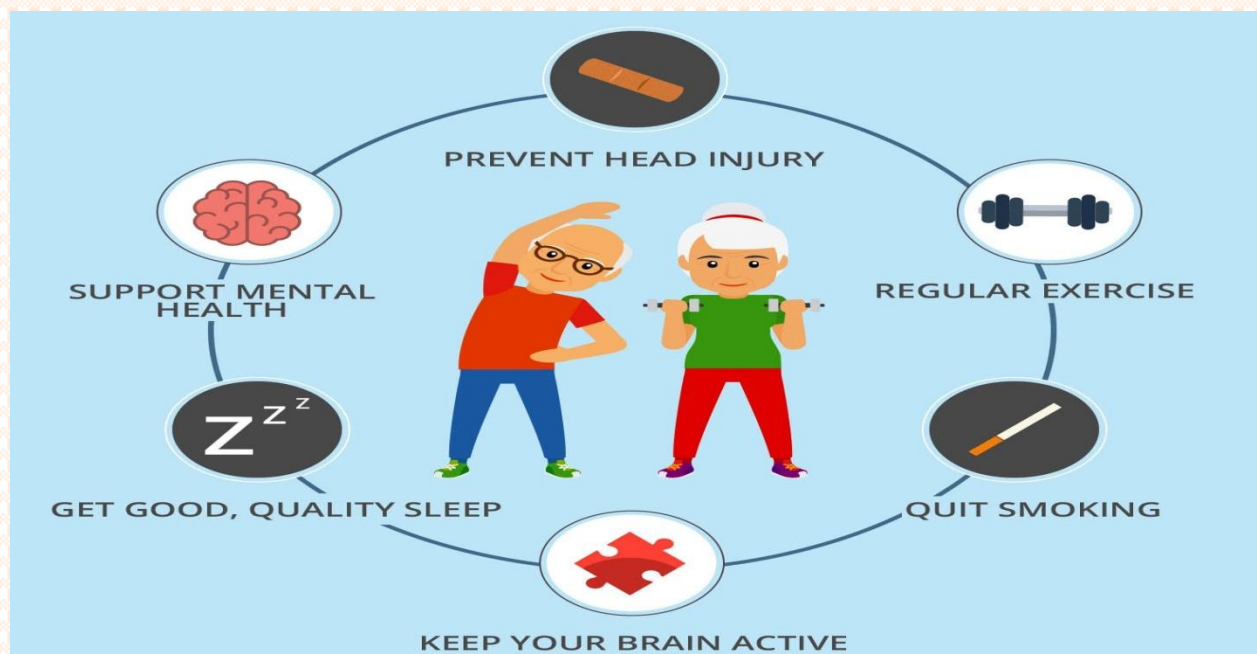
EARLY STAGE OF DEMENTIA	MIDDLE STAGE OF DEMENTIA	LATE STAGE OF DEMENTIA
Forgetfulness.	Becoming forgetful of recent events and people's names.	Near total dependence.
Losing track of time.	Becoming confused when at home.	Inactivity.
Becoming lost in familiar places.	Having increasing difficulty in communicating.	Serious memory disturbances.
	Needing help with personal care.	Unaware of time and place
	Experiencing behavior changes, including wandering and repeated questioning.	Difficulty recognizing family and friends.
		Increased need of support when walking.
		Behavioral changes what may escalate and include aggression.

Dementia affects women as well. There is a disproportionate impact of dementia on women. 65% of all deaths are in women. Disability adjusted life years due to dementia are 60% higher in women. Women provide the majority of informal care for people living with dementia- upto 70% of carer hours.



How To Maintain Normal Cognition? How To Avoid Dementia?

1. Regular Exercise.
2. Good Quality Sufficient Sleep.
3. Mental Stimulation e.g. Learning Many Languages, Playing Brain Games like SuDoKu.
4. A Healthy Diet Is Essential.
5. Avoiding Stress and Keeping It Under Check.
6. Maintaining A Good Heart & Brain Health.
7. Avoid Smoking.
8. Avoid Alcohol Intake.
9. Maintain weight, BP, Sugars and Cholesterol levels.
10. Avoid Social Isolation.



Currently, there is no cure for cognitive impairment caused by Alzheimer's disease or other related dementias. However, some causes of cognitive impairment are related to health issues that may be treatable, like medication side effects, vitamin B12 deficiency, and depression. This is why it is important to identify people who are showing signs of cognitive impairment to ensure that they are evaluated by a health care professional and receive appropriate care or treatment. **ALZHEIMER'S DISEASE IS TAXING FOR EVERYONE, THE SUFFERER AND THEIR FAMILY AND CARE GIVERS.**



DEMENTIA AND COGNITION- BASICS

COGNITION IS A PROCESS OF NORMAL LEARNING FOR EVERYONE. THERE ARE MANY ASPECTS TO COGNITION. THE MOST WELL KNOWN ASPECT IS PROBABLY MEMORY. BUT THAT IS NOT THE ONLY PART OF COGNITION.

COGNITIVE IMPAIRMENT AND DEMENTIA ARE THE ABNORMALITIES OF COGNITION. ALZHEIMER'S DISEASE IS THE COMMONEST FORM OF DEMENTIA. HOWEVER, IT IS NOT THE ONLY FORM OF DEMENTIA.

MEMORY LOSS REMAINS THE MOST WELL RECOGNIZED SYMPTOM OF DEMENTIA. HOWEVER THAT'S NOT THE ONLY SYMPTOM. AS OF NOW THERE IS NO SIGNIFICANT TREATMENT FOR DEMENTIA. PREVENTION REMAINS THE MORE CRUCIAL AND IMPORTANT STEP FOR DEMENTIA.

ABOUT THE AUTHOR:



DR SAUMYA H MITTAL IS A NEUROLOGIST WORKING IN NCR REGION OF THE INDIAN CAPITAL. HE IS INTERESTED AMONG ALL THE DISEASES THAT A NEUROLOGIST WORKS WITH. AND DEMENTIA AND HELPING DEMENTIA SUFFERERS IS ONE CONDITION THAT IS CLOSE TO HIS HEART.

THE IDEA OF THIS BOOKLET DEVELOPED WHEN THE FRIENDS AND FAMILIES KEPT COMING TO HIM AND IT WAS REALIZED HOW LITTLE THE PEOPLE KNOW ABOUT DEMENTIA. BECAUSE HE STRONGLY BELIEVES THAT KNOWING AND UNDERSTANDING THE DISEASE HELPS THE DEMENTIA SUFFERERS AND THEIR CAREGIVERS IN IMPROVING COOPERATION IN THEIR OWN RECOVERY, THE CONCEPT OF "DEMENTIA AND COGNITION" WAS CONCEIVED. MANY DEMENTIA SUFFERERS HAVE DIFFERENT NEEDS. AND THESE VOLUMES TRY TO ANSWER THESE QUESTIONS AND PROVIDE INKLING ABOUT THE SOLUTIONS TO THEIR NEEDS.

KNOWLEDGE ABOUT DEMENTIA IS EXTENSIVE. HE TRIES HERE TO GIVE THE READERS THE MOST BASIC AND YET VERY IMPORTANT INFORMATION THAT ONE SHOULD HAVE ABOUT THE ILLNESS.