Risk Factors
unmodifiable
modifiable
aging
genetics
being female
head trauma + brain injury
deterministic genes
risk genes
Amyloid precursor protein
Presenilin-1 (PS1)
Presenilin-2 (PS2)
Apolipoprotein (ApoE)
Alleles
Apolipoprotein E e4 (ApoE4)
Apolipoprotein E e3 (ApoE3)
Apolipoprotein E e2 (ApoE2)
new gene variants
CR1
CLU
PICALM
BIN1
MS4A7
CD33
CD2AP
ABCA7
EPHA1
other diseases
inflammation
Vascular disease
Type 2 diabetes
insulin resistance
sedentary lifestyle
high blood pressure
high cholesterol
obesity
limited formal education (8 years or less)
socioeconomic factors
tobacco exposure
Prevention
quality of life
protective factors
physical activity
BDNF
cognitive reserve
diet
higher education
environment
stop smoking
stress management
sleep quality
Diagnosis
awareness
patient + family members
cognitive change
smack moment
no action
stigma
fear
denial
medical search
information + resources
primary care physician
initial investigations
office examination
lab tests + surveys (to rule out other causes)
medication inventory
mental status examination
psychiatric assessment
diagnostic process
secondary investigations
follow-up investigations
cognitive reassessment
review diagnostic criteria
specialist
memory assessment service
initial investigations
additional cognitive assessments
results
no diagnosis
misdiagnosis
Mild Cognitive Impairment (MCI)
Dementia diagnosis
Alzheimer's disease diagnosis
possible
probable
3 phases
Treatments
existing
future
drugs
non-drugs
other therapies
cholinesterase inhibitors
Namenda
beta-amyloid
tau protein
inflammation
insulin
imaging + biomarkers
genetics
Comorbid Diseases
Primary
Other
Cardiovascular diseases
Sensorial disabilities
Neurological diseases
Obesity
Psychosis
Down syndrome
Depression
research
education
clinical
caregiving
community
environment
society engages researchers to discover opportunities to advance knowledge about Alzheimer's disease for the benefit of society
including
the arts and sciences
and
private sector
and
government
the most prevalent form of
dementia
is
which is a result of a complex
disease process
associated with multiple
risk factors
that is difficult to
diagnose
and results in
progressive deterioration
of the
brain
including the
aging population
and their
caregivers
Research Community
Research
clinical trials
drug development process
drugs
treatments
caregiving studies
Government
policy
legislation
disease data
research data
non-profit agencies (NPOs)
workgroups
public outreach projects
disease standards
genes
input
public
patients
perceptions
stigma
private
technology companies
biotech companies
genome service agencies
imaging techniques + diagnostic tools
genomic + phenotypic data sets
Symptoms
stages
Mild Cognitive Impairment
Early Alzheimer's
Mid Alzheimer's
Late Alzheimer's
cognitive decline
memory problems
recent memory loss
communication difficulties
functional changes
cognitive changes
confusion
pervasive + persistent memory loss
changes in mood + behavior
intellectual impairment
loss of basic abilities
unable to care for self
extreme problems with mood + behavior
cannot remember, communicate, or process information
problems with bodily functions
Disease Process
chemical changes
plaques
immune system cells
inflammation
disabled cells
beta-amyloid protein
tangles
vital cell transport system
nutrients + essential supplies
protein tau strands
biological processes
cell communication
synapse + cell death
nerve cells (neurons)
synapses
neuron forest
cognitive function
neurotransmitters
acetylcholine
brainstem
electrical charges
cholinergic pathways
signals
memories, thoughts, + feelings
hippocampus region
brain shrinkage (atrophy)
development of ventricles
frontal lobe
temporal lobe
parietal lobe
rear temporal lobe
cerebellum
Aging Population
people 65+
baby boomers
people 85+
aging
normal
brain
plasticity
memory
Causes of Dementia
degenerative neurological diseases
chronic alcohol or drug use
vascular disorders
types of hydrocephalus
traumatic brain injury
infections of Central Nervous System
Caregiving
patients
tasks
symptoms
health
emotional well-being
financial security
caregivers (self-care)
tasks
manage decreasing functional ability
manage safety issues
find and use caregiving services
hire and supervise others
Instrumental Activities of Daily Life (IADLs)
Activities of Daily Life (ADLs)
tests
maintain wellness
education
find information and support services
plan for the future