

# Understanding of Dementia Prevention among Chinese Older Adults

**WHO CC Webinar 2023**

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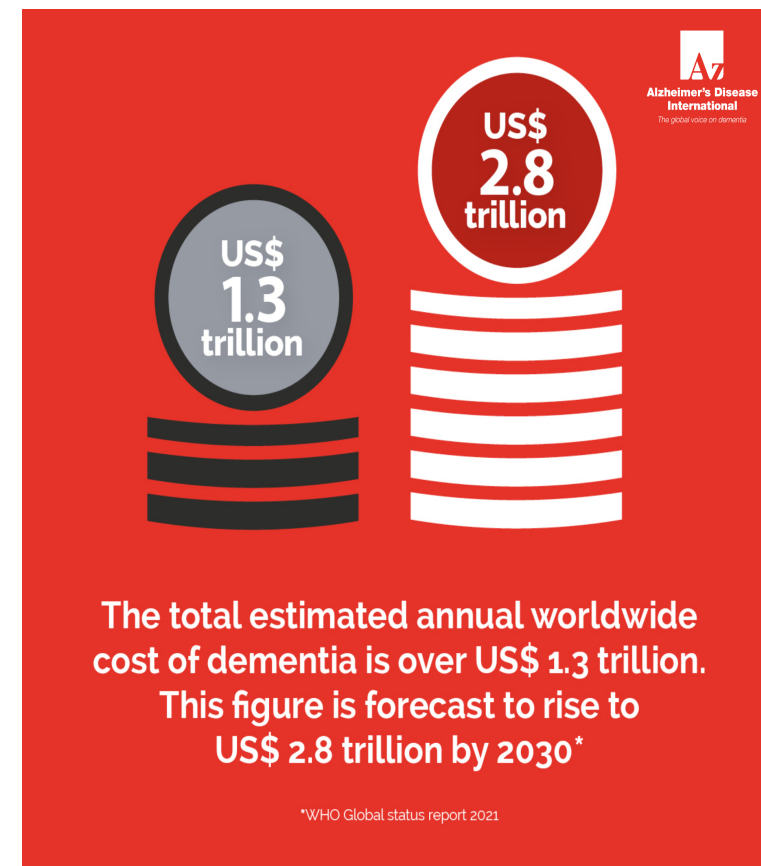
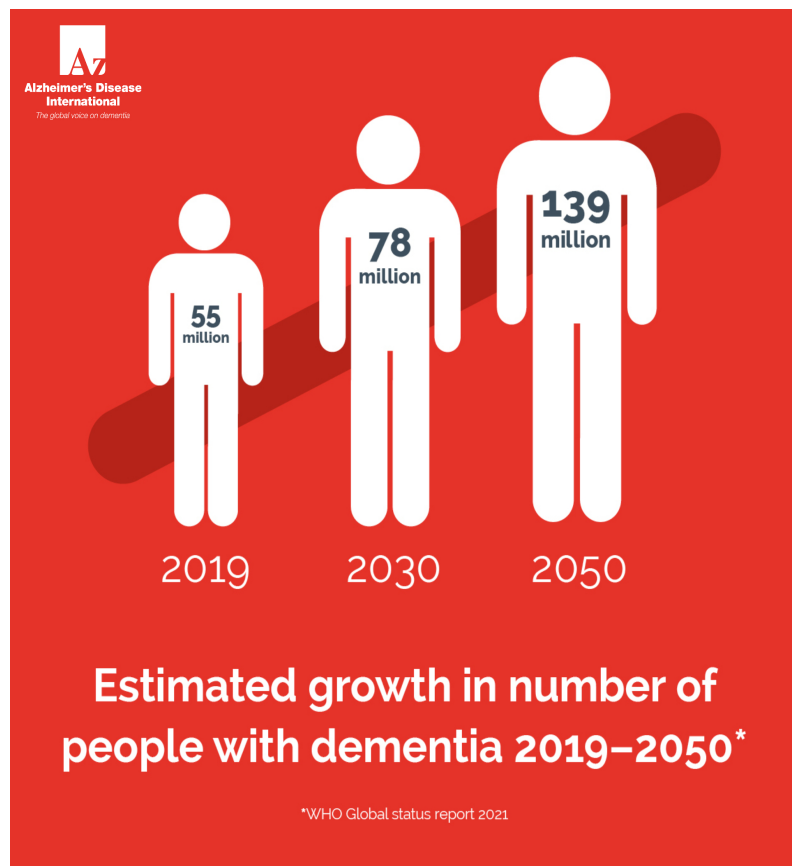
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# Presentation outline

1. Contemporary scientific evidence on the risk factors of dementia
2. Study findings : great gaps exist between the understanding of dementia prevention among Chinese older adults and research progress of dementia prevention.
3. Recommendations: What we can do to bridge the gap?

# Dementia

- Dementia is a syndrome in which there is deterioration in cognitive function beyond what might be expected from the usual consequences of biological ageing.
- Dementia has physical, psychological, social and economic impacts, not only for people living with dementia, but also for their carers, families and society at large.
- Dementia is currently the seventh leading cause of death among all diseases and one of the major causes of disability and dependency among older people globally (WHO, 2022).



<https://www.alzint.org/about/dementia-facts-figures/dementia-statistics/>



# Treatment and Prevention

- **Treatment:** There is currently no treatment available to cure dementia. Anti-dementia medicines and disease-modifying therapies developed to date have limited efficacy, though numerous new treatments are being investigated in various stages of clinical trials.
- **Prevention:** While there is no curative treatment for dementia, the proactive management of modifiable risk factors can delay or slow onset or progression of the disease.

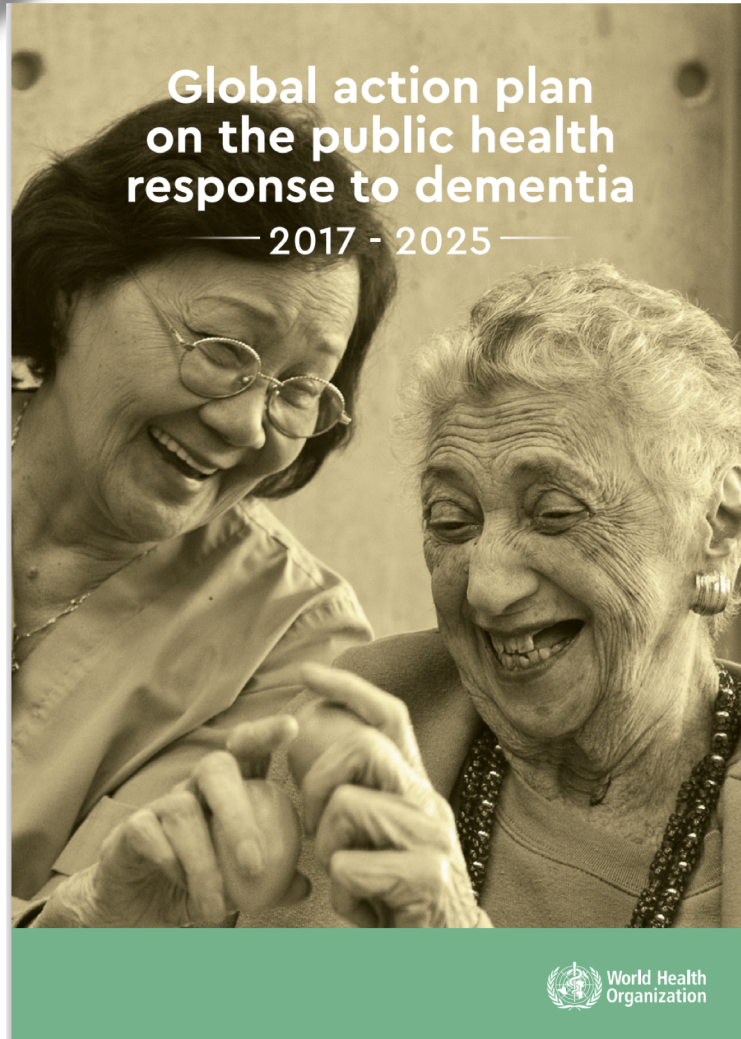
# Dementia Risk Factors

Non-modifiable	Modifiable
Age > 65	Hypertention
Gender-female	Dyslipidaemia
Family history	Diabetes mellitus
Ethnicity : Black American	Obesity
Apolipoprotein E ε4,	Depression
Genetic variants	Hearing loss
Altered gene regulation	Alcohol abuse
	Smoking
	Soical isolation
	Physical activity
	Cognitive activity
	Healthy diet

## RISK REDUCTION OF COGNITIVE DECLINE AND DEMENTIA

### WHO GUIDELINES





- In 2017, WHO released the Global Action Plan on Dementia, which urges all countries to implement campaigns to raise public awareness about dementia (World Health Organization, 2017).
- One of the major priorities to inform this action is to determine the knowledge gaps about cognitive health and related risk factors among the general public such that education programs can be most effectively targeted.

# Study project:

## Understanding of Dementia Prevention among Chinese Older Adults



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## Perception and knowledge of dementia prevention and its associated socio-demographic factors in China: A community-based cross-sectional study

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**Background:** Although considerable progress has been made on the risk factors of dementia, less is known about the extent of the gaps between the general public's understanding of dementia prevention and contemporary scientific evidence. This study aimed to determine the beliefs and knowledge of dementia prevention among the Chinese general public and examine the socio-demographic factors of the belief and knowledge of dementia prevention.

**Methods:** The study adopted a cross-sectional design. A total of 358 Chinese adults aged over 40 years were recruited from four healthcare centers. We designed questionnaires that include items on the belief of dementia prevention, risk factors for dementia, and health education needs regarding dementia prevention based on previous literature. Descriptive statistics and multivariate regression analyses were conducted.

**Results:** Only 32.4% of the respondents agreed that dementia is preventable. Less participants were able to correctly identify cardiovascular risk factors (i.e., obesity, diabetes, dyslipidemia, hypertension, unhealthy diet, smoking, and alcohol) as part of dementia risk factors. Younger age, higher education, and having contact with patients with dementia are associated with stronger belief that dementia is preventable. Older age, higher income, higher education, having memory complaint, and having contact with patients with dementia are associated with a better understanding of dementia risk factors. A total of 88.9% respondents thought that they are not well informed of dementia from public education, and most respondents (65%) prefer receiving dementia-related health advice from primary care providers.

**Conclusion:** The present study reveals the great gaps between the Chinese general public's knowledge of dementia prevention and the latest research evidence. Public health educational programs for all age groups are

# Study objectives

1. To compare the Chinese general older adults' understanding of dementia prevention and contemporary scientific evidence;
2. To identify the socio-demographic factors related to the beliefs and level of knowledge regarding dementia prevention;

# Methods

## Study design

- Cross-sectional study design

## Sample

- A consecutive sample of 204 adults aged over 60 years who visited the four community healthcare centers in Hangzhou city, southeast China, for general medical service was recruited.
- Participants were excluded if they had a diagnosis of dementia or cognitive impairment or had impaired hearing or vision, which may inhibit them from giving consent and answering the questionnaires.

# Methods

## Tools:

self-designed questionnaire on the beliefs of dementia prevention, risk factors for dementia, and health education needs regarding dementia

### 1. Beliefs of dementia prevention

Please indicate your answer to the following questions by circling 1 of 3 options.

Questions	Yes	No	No idea
Do you think that dementia is caused by normal aging?			
Do you think that the risk of dementia can be reduced?			

### 2. Risk factors for dementia

Please indicate your answer to the following questions by circling 1 of 3 options (could be multiple choices).

Items	Yes	No	No idea
Hearing loss			
smoking			
Alcohol abuse			
Unbalanced and unhealthy diet			
Hypertension			
Diabetes			
Dyslipidemia			
Obesity			
Physical inactivity			
Cognitive inactivity			
Depression			
Social isolation			

### 3. Health education needs regarding dementia prevention

Please indicate your answer to the following questions by circling 1 of 3 options (could be multiple choices, except the first item).

Items	Yes	No	No idea
1. Whether you are well informed of dementia prevention from public education?			
2. Which dementia health education delivery format do you prefer?			
Community bulletin board			
Health talks by experts			
Advice from family physicians and community nurses			
Education booklets			
Regular peer sharing			

## Socio-demographic information

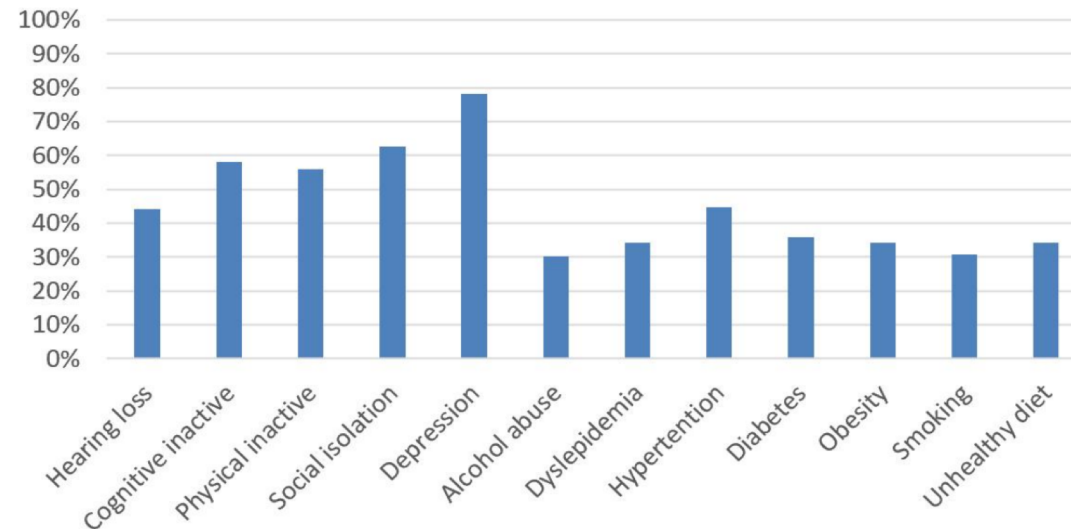
The key socio-demographic factors include age, gender, education, income, whether they had memory complaint, and whether they were in contact with anyone who had dementia.



# Results

## -Beliefs of dementia prevention, and knowledge of risk factors for dementia

- 41.9% of the respondents agreed that dementia is caused by normal aging;
- Less than one third of the respondents (32.4%) agreed that dementia could be preventable;
- Among all the dementia risk factors, social and psychological risk factors were endorsed more by the respondents, while cardiovascular risk factors were less endorsed as dementia risk factors.



**Figure. 1** Proportion of participants who identified each dementia risk factor



# Results

## -Factors associated with dementia prevention beliefs

**Table 2.** Socio-demographic factors associated with dementia prevention beliefs

	Dementia is caused by normal aging		Dementia can be preventable	
	Odds ratio	95% CI	Odds ratio	95% CI
<b>Age group</b>				
40-59 (Ref)				
60-69	0. 87	0. 49-1. 54	1. 73	0. 98-3. 04
≥70	1. 99*	1. 19-3. 34	0. 47*	0. 26-0. 86
<b>Education</b>				
Below high school(Ref)				
High school and above	0. 56*	0. 34-0. 93	2. 24*	1. 34-2. 75
<b>Contact with dementia</b>				
Yes (Ref)				
No	1. 22	0. 76-1. 99	0. 48**	0. 31-0. 75

# Results

## -Socio-demographic factors associated with knowledge of dementia risk factors

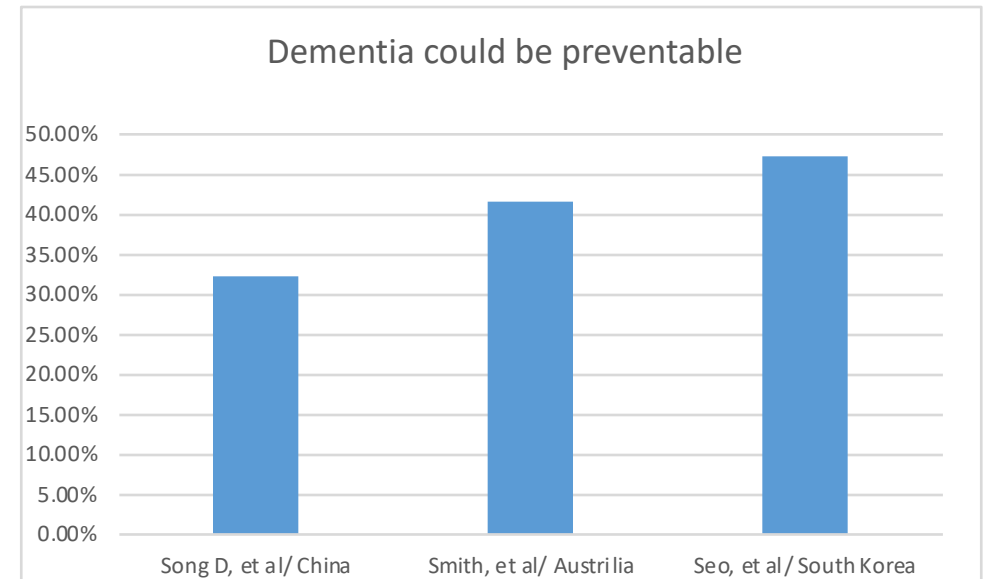
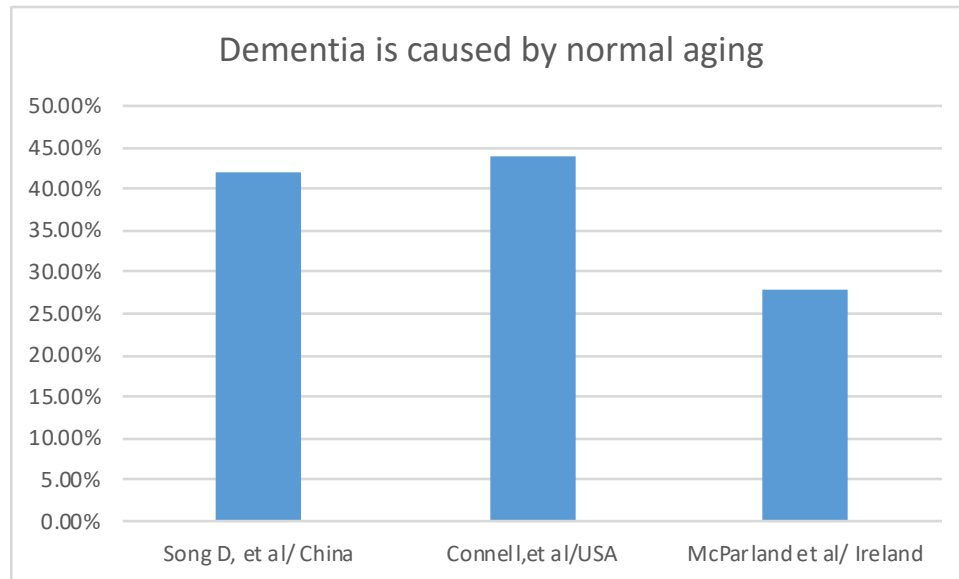
	Hearing loss OR	Cognitive inactive OR	Physical inactive OR	Social isolation OR	Depression OR	Alcohol OR	Dyslipidemia OR	Hypertension OR	Diabetes OR	Obesity OR	Smoking OR	Unhealthy diet OR
<b>Age group</b>												
40-59 (Ref)												
60-69	2. 79**	1. 18	0. 96	2. 46*	0. 88	2. 63**	1. 04	1. 06	1. 05	0. 83	2. 48*	1. 13
≥70	1. 96*	3. 84**	1. 37	1. 95*	0. 68	1. 04	2. 48**	1. 59	1. 25	2. 32	0. 96	2. 73*
<b>Income</b>												
<4000CNY (Ref)												
≥4000CNY	1. 94*	0. 93	1. 66*	0. 80	1. 51	1. 58	1. 58	1. 16	1. 35	1. 33	1. 79*	1. 51
<b>Education</b>												
Below high school(Ref)												
High school and above	1. 76*	2. 02*	0. 77	0. 70	0. 67	1. 09	1. 09	2. 10*	1. 35	3. 21**	3. 37**	3. 67**
<b>Memory complaint</b>												
Yes(Ref)												
No	0. 44*	1. 58	1. 58	0. 64	1. 42	1. 55	0. 55	0. 88	0. 97	0. 40	0. 52*	1. 20
<b>Contact with dementia</b>												
Yes (Ref)												
No	0. 98	1. 18	1. 05	0. 66	0. 46*	1. 04	1. 04	0. 65*	0. 41**	0. 63*	1. 03	0. 51*

# Results

## -Health education needs of dementia

- Most respondents (88.9%) thought that they were not well informed of dementia from public education by the government, media, or medical institution.
- When asked about their preferred health education delivery format,
  - most respondents would like to receive advice from family physicians and community nurses (65%),
  - followed by education booklets (60.9%),
  - community bulletin (53.4%),
  - talks by experts (45.5%),
  - regular peer sharing (36.6%).

# Cross-contry comparison



# What we can do to bridge the gap?

1. There is an urgent need to promote dementia prevention knowledge among the Chinese general public across all age groups;
2. Using community-engaging approach, the partnership between researchers and practitioners can help translate evidence into community practice in a timely manner;
3. Design health education programs that emphasize the important link between cardiovascular risk factors and dementia;
4. Health advice could be delivered by primary care providers during routine chronic disease management, as we identified that the Chinese elders prefer receiving dementia-related health advice from family physicians and community nurses;
5. Special attention should be paid to the population with low income and low education, because they are associated with a low level of dementia prevention knowledge.



**THANKS FOR YOUR  
ATTENTION**

**Welcome any comments  
and questions**

