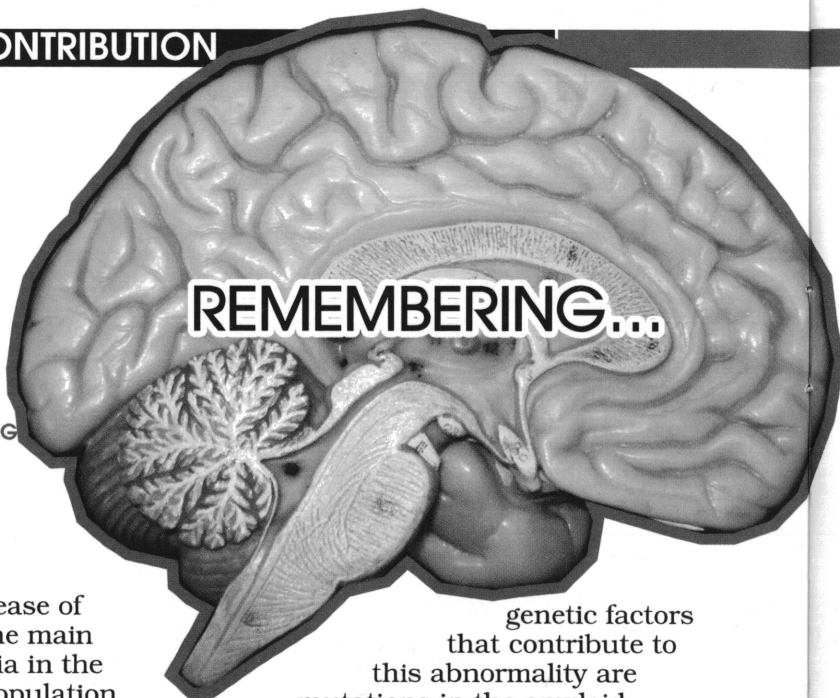


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Alzheimer's disease (AD) is a progressive, degenerative disease of the brain. It is the main cause of dementia in the elderly. As the population ages, AD will become a larger problem for both family and society. AD has started to attract more attention recently, due to well-known people who suffer from the disease. Examples include Ronald Reagan, Margaret Thatcher, and more recently, Nobel Prize winner Professor Charles Kao.

Thanks to the support from many AD patients and their families, our understanding of the disease has improved. The hallmark of AD is the formation of neurotoxic amyloid plaques and neurofibrillary tangles in the brain, which ultimately leads to patients' cognitive and behavioral deterioration. The physiopathology of AD is complex and multifactorial, with amyloid peptide (or A $\beta$ ) generation being the focus of the enigma. The



genetic factors that contribute to this abnormality are mutations in the amyloid precursor protein (APP) gene and those involved in A $\beta$  processing, i.e., presenilin-1 (PS1) and presenilin-2 (PS2). The apolipoprotein E (APOE) gene has also been associated with the increased risk in both familial and sporadic forms of AD. Recently, genome-wide association identified three additional risk factors for the development of AD.

Many AD patients and their families hope to participate in research that would help increase our understanding of the disease. Before actual research begins, the participant's informed consent must be received. The aims of the study, the procedure, confidentiality and risks will be explained. The biggest challenge in AD research is to allow both AD patients and their family members to fully understand and appreciate

the consequences of their participation. Researchers must provide updated and accurate information on the research and for the diagnosis of patients. The major genetic research on AD is to detect genetic risk factors and study the mechanisms on how these risk factors are involved in development of AD. Patients are encouraged to participate in decision-making towards their daily lives and future care. However, when a patient is no longer able to make informed decisions, we should ensure that the decisions made for him/her

are consistent with his/her wishes. It is essential to communicate with AD patients and their family members throughout the research process based on the values of respect, compassion, integrity and competency. Since Hong Kong is an ageing society, more resources are needed to take care of increasing numbers of AD patients and their families, and to do research related to the local population.

## WONDERWORDS

S S E E P E S U T N P B U H A  
 E T Y R S I E Y E A O P U S E  
 Q S T I T I T E R I L M N Z G  
 Q P I Y I I A E I M O O C L O  
 D T N E G P R E J U D I C E I  
 T C G N M P C O R Y T A M P I  
 M S I L A N O I S S E F O R P  
 E S D N T E P S P I M E Y O D  
 I Q E A I R P R J A P T R S M  
 E T U D Z H I E S S I O B Y S  
 O A P I A I H N C L R H M N S  
 T E R L T P N O A A I R E C B  
 Q M R U I Y S U M O C C M U I  
 D M E O O M Q U G Y A I U S E  
 P P E C N E D U R P L O T I P

### HINTS

DIGNITY  
 EMBRYO  
 EMPIRICAL  
 EQUALITY  
 EQUITY  
 HIPPOCRATES  
 HUMOUR  
 LEPROSY  
 PREJUDICE  
 PROFESSIONALISM  
 PRUDENCE  
 STIGMATIZATION

### INSTRUCTIONS

Look for hidden words, remember that they can be horizontal, vertical, or diagonal, frontward or backward!