Gender’s Effects to the Early Symptoms of Alzheimer’s Disease in 5 Asian Countries

Yuan-Han Yang, MD, MS, PhD¹,²,³ Kenichi Meguro, MD, PhD⁴, Jacqueline Dominguez, MD⁵, Christopher Li-Hsian Chen, MD, PhD⁶, Huali Wang, MD, PhD⁷, and Paulus Anam Ong, MD, PhD⁸

Abstract

Background: Asia has the greatest population and more patients with dementia in the world. Early recognition of clinical symptoms of Alzheimer’s disease (AD) is crucial for dementia care. In order to foster collaboration in AD care, a uniformed manner to report the early clinical symptoms of AD is necessary. Methods: We have recruited clinically diagnosed patients with AD at their very mild stage with Clinical Dementia Rating (CDR) 0.5 in Taiwan, Japan, China, Philippines, and Singapore. Demographic characteristics and psychometrics including Ascertain of Dementia-8 (AD8) questionnaire were administrated to collect and report the clinical presentation in these countries. Results: In total, 713 clinically diagnosed patients with AD at very mild stage, CDR 0.5, have been recruited from these 5 countries. “Repeats questions, stories, or statements” were consistently the frequently reported symptom across these countries. Taiwan, China, and Singapore have the higher AD8 total score compared to that in Japan and Philippines. Japan and Philippines have the gender-related differences in clinical presentation of early AD. Conclusion: Difficulties in using small trouble appliance and in handling complicated financial affairs were frequently reported in Japan female, compared to male, patients with AD. Identifying the clinical symptom of AD and the gender-related issues would be crucial in the dementia care in Asia.

Keywords
AD8, Alzheimer’s disease, Taiwan, Japan, Philippines, Singapore, China

Introduction

Alzheimer’s disease (AD) has been becoming one of the major impactions to the socioeconomic status in currently aged society.¹⁻³ Although current treatments cannot totally cure it, the early diagnosis and treatment still be the golden standard to the care of AD.⁴⁻⁵ Unfortunately, most patients with a dementing illness do not report cognitive problems or symptoms of dementia to their health-care providers and their family until several years after the symptoms worsen. The recognition of dementia by primary care physicians will be made until it is moderately advanced.⁶⁻⁷ Lacking confidences for a physician to make the diagnosis of dementia are frequently met.⁸⁻¹⁰ In order to compensate the possible delayed diagnosis of dementia, the screening test or questionnaire with high sensitivity and specificity was recommended to achieve these goals.¹¹ Not only to capture dementia but also to capture dementia at its early stage are crucial in the dementia care. For such purposes, 3 stages of AD were proposed, preclinical stage of AD, mild cognitive impairment (MCI) due to AD, and AD.¹² Mild cognitive impairment due to AD, early stage of AD, has become a target for early diagnosis and treatment. Some psychometrics have been proposed and administrated for its capability in telling MCI from others.¹³⁻¹⁵ However, these psychometrics are necessary to be conducted by an experienced neuropsychologist with a required space and time and have to compare the testing results to norm, which is not easy and practicable to be used in routine clinic or in general population. Meanwhile, whether

¹ Department of Neurology, Kaohsiung Municipal Ta-Tung Hospital, Kaohsiung, Medical University, Taiwan 
² Department of and Master’s Program in Neurology, Faculty of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan 
³ Department of Neurology, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Taiwan 
⁴ Department of Geriatric Behavioral Neurology, Tohoku University Graduate School of Medicine, Sendai, Japan 
⁵ Institute for Neurosciences, St Luke’s Medical Center, Metro Manila, Philippines 
⁶ Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore 
⁷ Dementia Care and Research Center, Peking University Institute of Mental Health, Beijing, China 
⁸ Department of Neurology, Hasan Sadikin Hospital, Padjadjaran University, Bandung, Indonesia

Corresponding Author: Yuan-Han Yang, MD, MS, PhD, Department of Neurology, Kaohsiung Municipal Ta-Tung Hospital, No 68, Jhonghua 3rd Road, Cianjin District, Kaohsiung City 80145, Taiwan.
Emails: endlessyhy@gmail.com; endless@kmu.edu.tw