Developing Geriatric Services in Taiwan

Ming-Hsien Lin, MD1,2, Li-Ning Peng, MD, MS1,2, Liang-Kung Chen, MD1,2

1Aging and Health Research Center, National Yang Ming University, Taipei. 2Center for Geriatrics and Gerontology, Taipei Veterans General Hospital, Taipei, Taiwan

Taiwan is aging fast, and so are neighborhood countries in eastern Asia. The rapid demographic transition triggers the need of developing elder-friendly health care system. However, developing geriatric services in eastern Asia was not as successful as western countries due to various reasons. In Taiwan, the development of geriatric services has been highly supported by the Veteran Affairs Commission in the past few years. Outpatient and inpatient geriatric services, as well as the post-acute care services have been successfully developed. The success of developing geriatric services in Taiwan was related to the development of geriatric specialty training program, which provided well-trained geriatricians for institutes to start new services. The success of specialty training programs also extended into clinical geriatric researches, especially the health service researches that proved the clinical benefits of outpatient, inpatient, post-acute and long-term care services with active participation of geriatricians. This review summarized the development of geriatric services and clinical geriatric researches in Taiwan in recent years.

Key Words: Aging, Elderly, Geriatrics, Gerontology

INTRODUCTION

Taiwan has become an aging country (people aged over 65 years exceed 7% of total population) in 1993 and is estimated to become an aged country (people aged over 65 years exceed 14% of total population) by 2017, which makes Taiwan one of the fastest aging countries in the world. However, the trend of population aging of Taiwan is escalating even faster after 2017 that it will take only 8 more years to hit 20%1,2. Currently, the elderly population (approximately 11% of total population) spent over 30% of National Health Insurance expenditure, so the increase of elderly population in the coming future will cause various challenges to the societies3. In particular, the medical practice for older people with multiple comorbid conditions will have to make extensive adjustments to cope with the health care needs for older people and the constraint of medical expenditure. Health characteristics of older people differ from the adult population, such as atypical presentations of diseases, multiple comorbid health and social care conditions, the need of post-acute care services, and many others that suggested the need of a specific health care system to provide elder-friendly health care services. Developing elder-friendly health care system needs emphases on the health care system, process of care, and the physical environment3. Health care system reform is dependent on governmental policies, and improvement of physical environments may be limited by financial constraints, but those should always be prepared when the opportunity comes. However, improving the clinical process of care can be done through the enthusiasm of health care professionals themselves. Creating a multidisciplinary team care model that covers all-dimension of socio-health care needs for older patients with multiple complex needs is probably the most important solution to provide elderfriendly health care services. Nevertheless, the success of multidisciplinary team care is dependent on the active participation of geriatricians but only a few training programs were available in Asia to date.

HISTORY OF GERIATRICS DEVELOPMENT IN TAIWAN

The history of the development of Geriatrics in Taiwan
can be traced back to 1940’s when the two major national tertiary medical centers, National Taiwan University Hospital and Taipei Veterans General Hospital both started the geriatric services at the same time. However, both programs failed to continue due to several reasons: 1) the proportion of elderly people was no more than 3% at that time, 2) the focus of health care system development was mainly on acute care services, and 3) unawareness of the needs for geriatric services in medical communities. Both hospitals stopped the geriatric programs in 1970’s. However, both hospitals re-started geriatric services in the 21st century due to population aging in Taiwan, which formally activated the modern development of geriatric services in Taiwan.

In 1982, the Gerontological Society of Taiwan was established to be the platform to share research interests of Gerontology and Geriatrics and it was renamed as Taiwan Association of Gerontology and Geriatrics in 2007. In addition to exchange of research interests, the Gerontological Society of Taiwan launched the first geriatric specialty training program in 2005, which was supported from the National Health Research Institute and the Mt. Sinai Medical School of New York. The design of Taiwanese geriatric specialty training program was similar to that in the United States as a sub-specialty of Internal Medicine, Family Medicine, Rehabilitation Medicine, and Neuropsychiatry. The program was composed of 12-month training for acute geriatric services, outpatient geriatric services, consulting services, rehabilitation, neurology, old age psychiatry, end-of-life care, and long-term care. Following the first program, Taipei Veterans General Hospital started another geriatric specialty training program in 2006 which was collaborated with the British Geriatrics Society. The collaboration of Mt. Sinai Medical School of National Health Research Institute ended in 2007 due to financial constraint. However, in Veteran Affairs System maintained the international collaboration in the specialty training program that teachers invited from United States, United Kingdom, Canada, or Japan came to Taiwan periodically to participate in the educational and research programs for trainees.

By the end of 2011, there were 757 certified geriatricians in Taiwan, which was considered significantly insufficient to provide geriatric services for such a rapidly aging society. Among all certified geriatricians, 46.2 % of their primary specialty was Family Medicine, followed by Internal Medicine (25.8%), and Physical Medicine and Rehabilitation (11.5%).

A fundamental requirement of the specialty training program was to establish a new department of geriatrics and to equip with at least 10 beds of acute geriatric services to facilitate the initiation of geriatric services in the hospitals. This requirement successfully promoted the establishment of geriatric services in main teaching hospitals. Currently, there are 11 geriatric specialty training programs in Taiwan and 6 of them were led by Family Medicine and the others were by Internal Medicine.

Although the specialty training programs have been successfully established in Taiwan, the development of geriatric programs in eastern Asia was not considered successful that even Japan had only 1,300 geriatricians, and Korea failed to develop geriatric specialty due to objection from main medical societies. If patients used to be treated by disease-specific approach, the strength of geriatric services may be overlooked and the quality of care for older people with multiple complex needs may be impaired. Probably, due to the rapid demographic transition in eastern Asia, medical societies may not be completely aware of the importance and differences of Geriatrics in caring older patients than other medical specialties. The unawareness of the importance in developing Geriatric services would certainly limit the development of Geriatrics services and may result in unfavorable outcomes for older people.

CURRENT STATUS OF GERIATRIC SERVICES IN TAIWAN

Aside from the 11 specialty training centers, many hospitals in Taiwan started special health care services for older patients, which were provided by various specialties, such as neurologists, internists, and others. From 2007, Department of Health funded a program to facilitate community hospitals transforming into geriatric hospitals and 19 community hospitals participated in this program with significant improvement in their physical environments and process of care. Moreover, Taiwan’s National Health Insurance promoted integrated outpatient services for frequent outpatient attendees since 2010 that also facilitated the implementation of elder-friendly outpatient services across Taiwan. Although the integrated outpatient service does not equal to geriatric services, it triggers hospital authorities to pay more attentions in developing elder-friendly health care services.

In addition to the development of geriatric services, researches on the benefits of these service models continued to improve the clinical practice. In outpatient services, we found
that most patients visiting outpatient geriatric evaluation and management (GEM) services were well-educated but with various functional impairments, and their items of oral medications were significantly reduced with significant improvement in their quality of life in a year of follow-up. Moreover, our recent discovery showed that outpatient geriatric services can significantly reduce burden of morbidity of elderly patients and to reduce medical utilization, which suggested the strength of geriatric services in treating older patients in primary health care settings. Besides, the benefits of inpatient GEM program to promote functional recovery were clearly shown even though these patients were significantly functionally impaired at admissions.

In addition to, inpatient and outpatient services in tertiary medical centers, the Veteran Affairs System also successfully developed the community hospital-based post-acute care service program in Taiwan. This program clearly demonstrated the clinical benefits of post-acute care services to promote short-term functional recovery as well as long-term survival benefits. In traditional health care service system, the lack of post-acute care service is a major gap of continuing health care system in Taiwan and it may be similar among countries in eastern Asia. Besides, the Veterans Affairs System also implemented InterRAI Minimum Data Set (MDS) in the long-term care facilities to improve the quality of care, which became the biggest MDS research group in Asia and strengthened the feasibility of universal implementation of MDS for health care management. In traditional health care service system, the lack of post-acute care service is a major gap of continuing health care system in Taiwan and it may be similar among countries in eastern Asia. Besides, the Veterans Affairs System also implemented InterRAI Minimum Data Set (MDS) in the long-term care facilities to improve the quality of care, which became the biggest MDS research group in Asia and strengthened the feasibility of universal implementation of MDS for health care management. Overall, the development of geriatric services in Taiwan is very evidence-based and this approach facilitates the other medical societies more aware of the benefits of geriatric services.

**FUTURE DEVELOPMENT**

Eastern Asia is the fastest aging region in the world, so developing elder-friendly health care system under current circumstances is warranted. Nevertheless, developing geriatric services in Asian countries seemed to encounter similar difficulties that traditional medical specialties did not completely realize the clinical benefits of geriatric services. Although geriatric services are not fully supported by some medical specialties and National Health Insurance, the recognition is increasing in Taiwan and people are more familiar with the advantages of multidisciplinary and integrated care for older patients. Nevertheless, presenting the excellence with scientific evidences can facilitate more academic communications between geriatric communities and other medical specialties, so to reduce the resistance in promoting geriatric services. Gradually, the National Health Insurance is evaluating the feasibility of systematically implementing post-acute care services for specific disease entities. More, the national postgraduate medical training program now formally implement core content of Geriatrics in the curriculum to enhance understanding of geriatric approach to older patients.

Despite of the success, there are some challenges for the development of geriatric services in Taiwan. First, Taiwan still lacks a national policy that covers all ranges of social and health care services for older people. Currently the laws and administering ministries concerning older people are yet to be organized and indeed in need for improvement after merging Department of Health with social welfare resources with the Ministry of the Interior. Second, medical education and core curriculum need improvement to cope with the demographic transition, but it may take a longer period of time to show the effects. Third, clinical roles of geriatricians are still limited currently, which need to be expanded. In Taiwan, people are used to specialty-based medical practice, which may limit the clinical roles of geriatricians. However, geriatricians, at least, should demonstrate their expertise in all hospitals to provide consulting services and to facilitate continuing medical education for all health care professionals to improve quality of health care for older people. Lastly, the research of Geriatrics and Gerontology needs constant improvement to share Asian voices with the international societies. Although the research performance of Geriatrics in Taiwan has gained certain international recognitions, still it still need more effort to promote high-quality research and to improve quality of health care by results of researches.

**CONCLUSION**

The development of geriatric services in Taiwan has gained some achievements which are comparable to many western countries in certain dimensions. However, a lot more reforms in health care system and medical education have to be accelerated to cope with the rapid demographic transition. Since the trend of population aging in eastern Asia is similar, experiences of Taiwan may be of some implications to neighborhood countries to facilitate creating geriatric services and researches in Asia.
REFERENCES