

Editorial

HIV in the elderly: An emergent challenge

The age distribution of human immunodeficiency virus (HIV)-infected individuals is generally younger. However, HIV prevalence and incidence among people aged 50 years and older (elderly group) seem surprisingly high from the scant data that exist.^{1–3} The prevalence data are limited because elderly people are rarely included in demographic health surveys in the developed, not to mention the developing, countries. There were only 13 of 30 surveys which included older males, and none included older females, in a World Health Organization (WHO) report.¹ Nevertheless, the incidence of HIV epidemics in elderly individuals appears to be increasing. Although the developing countries have limited case reporting systems, in the United States, the HIV-positive cases through reporting system have climbed from 20% to 25% from 2003 to 2006 in the elderly group.^{1,4} Similar case reporting data from the WHO's European Region in elderly individuals in 2005 shows 8%.⁵ By estimation, there is a consistent pattern that prevalence in elderly individuals is one-quarter to one-third that of the 15–49-year age group, which is unexpectedly high.¹

Although 50 years old is not the usual definition for the aged group, the Centers for Disease Control and Prevention identified a group of HIV-infected patients aged 50 years and older who presented with higher morbidity, higher mortality, and a shorter acquired immunodeficiency syndrome (AIDS)-free survival time than younger patients in the early days of the HIV epidemics.^{2,3} Subsequent studies adopted this age threshold for comparing young and elderly HIV-infected individuals. After the introduction of highly active anti-retroviral therapy (HAART), the median age at the development of AIDS has been older, partly because of the effect of HAART in reducing mortality and mobility of people infected with HIV and partly because of the emergence of a late-diagnosed AIDS group, HIV-infected people aged 50 years and older.^{3,6–8}

The considerations for managing and treating elderly HIV-infected individuals may be different from those in the younger.^{3,8} With the advent of HAART, the life expectancy of individuals with HIV infection has been dramatically prolonged. Recently published data indicated that the average life expectancy for a patient at the age of 20s is 43 years.^{8,9} However, limited information was available for the elderly group. Although prevention and early diagnosis plus treatment are two cornerstones in combating HIV infection, prevention campaigns generally target the younger. Furthermore, many elderly people

do not consider themselves to be at risk.^{8,10} As a consequence, older patients are likely to present with advanced HIV disease, mainly because of inadequate risk assessment by doctors and late diagnosis, and therefore have poorer outcome.^{8,10} Treatment considerations for the elderly are different. It is well accepted that the general immune status decreases with age, but some studies showed similar response for the elderly group compared with the younger. A multicohort collaboration study indicated that elderly HIV-infected individuals are subject to poorer immunological responses and increased clinical risk by HAART; however, the efficacy of viral load reduction by these medications may be better in the elderly group.¹¹

Starting from the first autopsy-proven HIV/AIDS case in Taiwan in 1985,¹² information related to this disease in the elderly population in Taiwan has been limited. Concerning the rapid increase of aged people in the Taiwanese population, it is imperative to understand the epidemiological status of HIV and AIDS in the elderly. In this issue of the *Journal of the Chinese Medical Association*, Kang et al.¹³ report the characteristic epidemiological features of elderly HIV-infected individuals in Taiwan. They retrospectively reviewed the National HIV/AIDS Registry data, with emphasis on the newly diagnosed cases in 2007. There were 153 in the elderly group and 1,458 in the younger (age between 15 and 39). They found similar patterns of acquisition of the disease in both groups in terms of sex and nationality distribution, mode of transmission, and ways of surveillance. However, there were distinct features for the elderly group. The marital status and occupational distribution were different. Furthermore, the elderly group presented with fewer inmate cases, higher number of heterosexuals, high mortality and higher ratio of initial presentation as AIDS. The percentage of newly reported elderly individuals with HIV in this report is similar to that from the WHO's European Region (7.7%, 153/1,975) but less than the US survey. However, the number of injection drug users (IDUs) was relatively high in this series, probably reflecting the HIV in IDUs starting from 2003.¹⁴ It would be more informative if the authors analyzed the HIV/AIDS data for a longer period of time (several years) to demonstrate the chronological change of the epidemics in Taiwan. It is surprising that the authors report a high percentage of joblessness in both the younger and elderly HIV-infected individuals, indicating a potential socio-economic problem. Proper interventions and supports from in-charge authorities may help.

As to the combining effects of increasing HIV case reports among elderly individuals and the implementation of nationwide distribution of free HAART since 1997,^{7,15} the population expansion of HIV-positive cases in elderly people is expected. Although HAART resulted in dramatic decreases in disease transmission, hospital administration and mortality from HIV infection,^{7,15,16} new challenges emerged. The elderly group with HIV infection is prone to side effects and toxicities of HAART as well as age-related co-morbidities, such as metabolic, cardiac, neurological, hepatic or renal diseases. The impact of anti-retroviral therapy for the older group merits further investigation.

In conclusion, the percentage of the elderly in HIV/AIDS-infected individuals seems to be increasing. Considering the limited information available for this group, it is imperative to pay more attention in terms of disease prevention and early detection of HIV infection. At the same time, combining close surveillance of the HIV/AIDS epidemiological trend and proper treatment protocols, we might be able to control and improve the life quality in the long-term treatment of this chronic viral disease in the elderly.

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