



January 13-14, 2011, Geneva, Switzerland

IAGG/WHO/SFGG Workshop n°2

“Health promotion program on prevention of late onset dementia”

The Global Burden of Dementia Worldwide

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I. Population ageing and dementia

As the achievements of socioeconomic developments in the past decades, world population has been ageing rapidly, which poses a series of challenges to the existing health system as well as the development itself worldwide. With the growth of aged population and the ageing of the aged population, dementia has become one of the leading causes of death and the increasing burden for the society, family and the elderly themselves, this trend deserves more and more attention from the governments and public awareness worldwide.

In 2009, the number of older persons aged 60 and over surpassed 700 million globally, and it is projected to increase to 2 billion by 2050, implying that their number will triple over a span of 40 years. The older population will increasingly be concentrated in the less developed regions, currently 64 per cent older persons are living in less developed countries, it is expected to increase from 473 million in 2009 to 1.6 billion in 2050, namely nearly 80 per cent of the world's older population is expected to live in developing countries by 2050 (United Nations, 2010). This scenario reminds both the developing countries and developed countries need to pay more attention to dementia and health cares for the elderly.

Dementia is a syndrome that can be caused by a number of progressive illnesses that affect memory, thinking, behavior and the ability to perform everyday activities. Dementia mainly affects older people, although there is a growing awareness of cases that start before the age of 65. After age 65, the likelihood of developing dementia roughly doubles every five years (ADI, 2010) .

According to Alzheimer's Disease International's estimates in the World Alzheimer Report 2009, there are 35.6 million people living with dementia worldwide in 2010, it will increase to 65.7 million by 2030 and 115.4 million by 2050. Nearly two-thirds live in low and middle income countries, where the sharpest increases in numbers are set to occur (ADI, 2009). In the latest World Alzheimer Report 2010, Alzheimer's Disease International estimates the total worldwide costs of dementia are US\$604 billion in 2010, about 70% of the costs occur in Western Europe and North America (ADI, 2010).

II. Global burden of dementia

Dementia is a health issue as well as societal issue; it affects not only the medical costs but also the community care, family care and the elderly persons' quality of life. Therefore, the burden of dementia includes economic costs for the medical treatment and institutional care, community services for the home care, and daily care burden as well as emotional burden on family members, relatives and friends.

It is important to notice that medical costs of dementia worldwide are only the minor part in the global burden, and the majority of dementia burden is on the informal and social care. According to ADI's estimate in 2010, costs of informal care (unpaid care provided by families and others) and the direct costs of social care (provided by community care professionals and in residential home settings) contribute similar proportions (42%) of total costs worldwide; while direct medical care costs are much lower (16%) (ADI,2010). This estimate turns our focus on the burden of care, as the older persons with dementia usually need long term care and services.

The feminization of the older persons with dementia makes the situation even worse, usually the females take the daily responsibility to care the husband with dementia, especially in developing countries, with the increasing gap between genders on life expectancy and the higher prevalence rate of dementia for female elderly comparing to males, the older persons with dementia need more and more help from their children or community care, the care burden of dementia becomes more social and depends on the generational solidarity.

The global burden of dementia is uneven between developed countries and developing countries. Economically, the current estimated costs of dementia is mainly occurring in developed countries, however, with the growing numbers of older persons and increasing prevalence in developing countries, at least the societal and family burden of dementia can be expected to surpass the developed countries in the near future. At the same time, the medical costs in developing countries will certainly increase simultaneously with the better awareness and more health intervention programs develop. For example, as a developing country with the biggest population in the world, China has 6.35 million older persons with dementia by 2010, the average medical cost for each person is estimated at around 2,000 US dollars, and each year 300 thousand new cases are added.

Although the burden of dementia is well estimated worldwide from the perspectives of medical care, institutional care and community services, the burden on family members and others is still underestimated, especially in developing countries, many family members have to give up their job to take care of the older persons with dementia, devote a lot of time and efforts on daily care, experience stress and emotional difficulties, their contribution to the society and older persons is not well appreciated both economically and socially.

Generally, the global burden of dementia worldwide is enormous even measured by the current available estimates, it will be a more serious challenge when we consider the burden on family members and others and the quality of life on the older persons themselves. Dementia is a bitter process for the older persons and their family members, early diagnosis and treatment, good community services, better emotional support and family care are crucial to slow the process and improve the quality of life both for older persons with dementia and their family members. It is urgent to raise the awareness of government and the public worldwide, take further actions to make it a priority both in health prevention and care system, and eventually decrease relatively the burden of dementia worldwide.

III. Further actions needed

Dementia is a challenge worldwide, both in developed countries and developing countries; the global burden of dementia deserves more attention and actions from governments, the public and families. Active policies and health prevention programs will play an important role in promoting the early diagnosis and treatment, keeping the functions of the older persons with dementia as long as possible, and finally have positive economic and social impacts, help to save medical resources and social/family costs of care.

At government level, governments should make dementia a health priority. It is also governmental responsibility to invest much more on research on dementia, aiming at early diagnosis, cost-effective treatment and better care. Based on the rapid developing trends of dementia, it is urgent for governments in developing countries to reform its existing health prevention strategy and formal/informal care systems. For example, more medical doctors to be trained for the purpose of early diagnosis of dementia, more institutional care for the older persons with dementia, more training on the specific skills for family care givers.

At societal level, public awareness of dementia needs to be raised. The majority of older persons with dementia in developing countries are not diagnosed; the symptoms of dementia are misunderstood as normal process of ageing. Therefore, public media and health professionals should make more efforts to disseminate the relevant knowledge of dementia, so that policy makers, service providers, family members can learn more about dementia and its possible impacts on the society, family and the older persons' quality of life, take more concrete actions to provide better treatment and care. Developing countries should make more efforts due to the rapid increase of older persons with dementia, changing living arrangements and the lack of social support system to the older persons with dementia and their family members.

At family level, family members need to be knowledgeable on the early symptoms of dementia of their older members, seek early diagnosis, provide more emotional support and daily living support, and improve the living environment for the older persons with dementia. Family care givers also need more professional guidance and social support to take the responsibility of long term care for these older persons.

At global level, international collaborations led by WHO and Alzheimer's Disease International should be further enhanced, findings from monitoring report on dementia and good experiences on the diagnosis, treatment and care should be shared and promoted effectively worldwide.

References:

United Nations (2010) World Population Ageing 2009, ST/ESA/SER.A/295, New York.

Alzheimer's Disease International (2010). World Alzheimer Report 2010. London: Alzheimer's Disease International.

Alzheimer's Disease International (2009) World Alzheimer Report 2009. London: Alzheimer's Disease International.

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