The Chinese Oldest Old with Dementia:

Study on the Causes of Dementia from Socio-demographic Sight*

Ying Ji, Qiong Zhou & Lei Zhang

BACKGROUND

Dementia is a chronic deterioration of intellectual function and other cognitive skills severe enough to interfere with the ability to perform activities of daily living. Traditionally, dementia has been classified as Alzheimer's or non-Alzheimer's type. It is mostly a disease of the elderly, affecting more than fifteen percent of persons age 65 or above and as many as forty percent of persons age 80 year old (http://www.merck.com/mrkshared/mmanual/section14/chapter171/171c.jsp).

Undoubtedly, dementia is one of the severe syndromes jeopardizing the health of the elderly. Although people know its severity in medical and pathology, few researches are done to explore its socio-demographic causes.

For China, the most populous country in the world, and aging with rapid speed, even much less is known about the cause of dementia. In fact, we have any clear idea about the actual disease rates neither among the elderly nor the oldest old. However, according to the fifth national census, the elderly (age 60 or above) accounted for ten percent, of whom eight percent were oldest old (age 80 or above). Undoubtedly, in China the elderly with dementia, especially the oldest old, will account for a great deal, without people's awareness. That number won't stop increasing before the accruement of the elderly stops, or any progressive medical prevention and treatment of dementia achieves. Because of the advanced age, the oldest old is becoming vulnerable to the dementia, as well as other chronic or acute diseases. Undoubtedly, oldest old is in face of more severe medical needs than other groups of population, except the needs of daily care, transportation, and psychological health. Here, we pay our attention on this group of the elderly, intending to find out what proportion of oldest old is having dementia, and what factors are playing roles from socio-demographic sights.

DATA & METHOD

Data for the analysis comes from 1998 baseline data of the Chinese Longitudinal Healthy Longevity Survey (CLHLS). The CLHLS was firstly conducted in 1998, with two follow-ups conducted in 2000 and 2002, respectively. The 1998 baseline survey randomly selected half of the counties and cities of the 22 Chinese provinces. The survey areas covered 985 million persons, 85 percent of the total population in China.

^{*} The authors thank Center for Healthy Aging and Family Studies (CHAF), Peking University, China for their providing the data to my research.

All centenarians (aged 100 and above) who voluntarily agreed to participate in the survey are interviewed in the randomly selected counties or cities. For each centenarian, one octogenarian (aged 80-89) and one nonagenarian (aged 90-99) living nearby, with per-specific age and sex, were matched and interviewed as well. To try to have approximately equal number of male and female octogenarians and nonagenarians at each age from 80 to 99, the survey over-sampled extremely old persons, and over-sampled male oldest old persons, given the fact there are fewer persons at more advanced ages (Zeng et al., 2001; Zeng et al., 2002; Zeng et al., 2003). 9,073 respondents are interviewed in 1998, and the response rate is 98 percent. Careful evaluations of the 1998 baseline survey indicate that beyond the issue of age reporting overall data quality is generally good (Zeng et al, 2001; Zeng et al, 2002).

The survey questionnaire referred a lot to mental and psychological screening tools (e.g. MMSE) to evaluate the respondents' orientation, concentration and cognition, etc, which make it very convenient to apply the Brief Screening Scale for Dementia (BSSD). Briefly, based on Blessed Dementia Scale (BDS), Mini-Mental State Examination (MMSE), and Hasegawa Dementia Scale (HDS), BSSD is convenient and simple to manage, and effective and appropriate for Chinese population (Zhang, 1998). Taking advantage of these, we applied BSSD to the survey questionnaire to screen the respondents, and to distinguish them into the screened-in and screened-out, on which our research based.

EXPECTED RESULTS

After describing the profiles of screened-in oldest-old, we compare the social-demographic, economic, and cultural characteristics between the screened-in and the screened-out to find out what factors are making functions and causing the differentials. Since the CLHLS is a socio-demographic survey, whose questionnaire focuses on socio-demographic characteristics, we mainly examine the causes of the dementia from sociological and demographic sights, distinguishing from medical or pathological researches. In the paper, except socio-demographic factors, we also include personal behavior, physical health, besides the social-demographic, economic and cultural characteristics. The initial results reveal that only six percent of the respondents are screened-in, most of who are female, those at advance age, those who do physical excise over-frequently, and who can't go to hospital in time when getting sick.

In an all, undoubtedly, the possibility for the oldest old have dementia or any other chronic diseases is creasing as their age advancing. If unfortunately they have, they need special medical treatment, living condition, daily care and transportation because their inability to perform daily living caused by dementia. However, because of the shortage of the social welfares in China, it is the grow-up children who take full responsibility to take care of the elderly parents. The parents' having dementia, therefore, leads to dramatic burden on their grow-up children.

This situation will worsen, when the people who enforce the "one child" policy in 1970s get old, and when their grow-up couple will be responsible for four elderly parents. It will be unfeasible and unrealistic for one couple to take care of one elderly parent with dementia, meanwhile looking after the other three elderly parents (assuming all the four elderly parents are alive, which is highly possible because of the improvement of life expectancy).

Above all, the Chinese government must take actions to deal with the larger and larger elderly population, and to take care of those who are advance, weak and ill, especially those with chronic diseases like dementia, because of the severe results caused by the diseases. One of our suggestions is to construct special hospitals or medical institutions, in which encourage younger elderly to take care of the older elderly. Last but not the least, that the oldest old women are more likely to have dementia, and that they are accounting for a larger proportion in the oldest old than male because of their longer life expectancy, should take into account when make any related policies. In an all, closer attention should be paid to the oldest old by the policy maker and the social workers.

REFERENCE

- 1. Zeng, Yi, James W. Vaupel, Zhenyu Xiao, Chunyuan Zhang & Yuzhi Liu. 2001. "The healthy longevity survey and the active life expectancy of the oldest old in China", *Population: An English Selection* 13(1): 95-116.
- 2. Zeng, Yi, James W. Vaupel, Zhenyu Xiao, Chuanyuan Zhang & Yuzhi Liu. 2002. "Sciodemographic and health profiles of the Oldest Old in China", *Population and Development Review* 28(2): 251-273.
- 3. Zeng, Yi, Yuzhi Liu &. Linda K. George. 2003. "Gender differentials of the oldest old in China", *Research on Aging* 25(1): 65-80.
- 4. Zhang, MingYuan eds. 1998. *Manual for Psychiatric Evaluation Scale*. Changsha: Hunan Science & Technology Press (In Chinese).