A correlation study on the factors affecting self-rated health of healthy older people in Beijing

Yang, Hui Helena

Renmin University of China

Abstract

It is well established that self-rated health is a valid measure of health status. This study investigated whether demographic status, positive lifestyle and family relationship had significant effects on self-rated health of healthy older people living in Beijing. Data retrieved from the 2005-Survey of the Healthy Elderly Population in Beijing, and method is binary logistic regression. Compared with rating health moderate, findings indicate that the younger and male older people, being order to lifestyle, taking physical exercise, and family harmony were strongly associated with better self-rated health. Compared with never eating health food, the analysis revealed the inverse relationship between eating health food and self-rated health. This study discussed the probable reasons and practical implications of these findings.

Keywords: Self-rated health; Positive lifestyle; Family relationship

Introduction

Background

China's population is rapidly ageing. There are more than 88.27 million people aged 65 and over in 2000 (China National Statistical Bureau [CNSB], 2002). By 2030, the number of older people will be 236 million (Du et al., 2005). Coming with ageing, healthy, older persons are a resource for their families, their communities and the economy (Kalache & Keller 1999). Healthy older people in Beijing are 'special' older people who are different from the general ones without illness and seldom smoking or drinking with positive lifestyle. It is useful to study the factors affecting health of the general older people, and it is also useful to study the factors correlating to the health of healthy, older people. Abundant studied have found that many factors including environment, racial-ethnic status, social relationship and support, socioeconomic status, life events, and lifestyle are related to risk factors for health (e.g. Shmueli 2007; Berkman & Breslow 1983; Cassel 1976; House et al, 2000; Palombo 2004).

Self-rated health, which is rated health in general by the subject, is not only a valid summary of more detailed measures of health status (Bailis et al 2003), but also a high predictive validity for physical disability and chronic disease status (Ferraro et al, 1997; George 2001; Idler & Angel 1990; Idler & Benyamini 1997; Malmstrom et al, 1999; Patrick & Erickson 1993; Daniilidou et al, 2004). Moreover, self-rated health is useful for predicting long-term service and medication use among older people (Bath 1999). In addition, self-rated health is simple, inexpensive, easy to obtain, and already available in nearly all health surveys (Idler & Angel 1990). Therefore, this study is particularly aimed at self-rated health and its correlation factors affecting healthy, older people.

Literature Reviews

A great deal of literature has investigated the relationship between self-rated health and its relative factors. After Idler (1993) examined the relationship between age and self-rated health, he found that older participants (65 and older) rated their health as better than younger participants. Menec (2002), who investigated 1066 aging participants in Manitoba of Canada, self-rated health was significantly related to deterioration of health. Another study in Greece found that age, income, and education were related to self-rated health (Danilidou et al, 2004). Molarius et al. (2007) found that in Sweden, poor self-rated health was most common among persons who had experienced economic hardship, short of social support, a low educational level or earlier retirement. Palombo (2004) investigated older people in Massachusetts and found that adequate social connections, social activities, and emotional support, were significantly for those with functional limitations and chronic condition. With health and religiosity, among Israeli Jews who were investigated, showing that religious persons generally reported worse health than the others (Shmueli 2007).

Other researchers also found that not only social support and socioeconomic status strongly affected self-rated health (Bailis et al, 2003; Palombo 2004), but also employment grade, education level, and material inequalities were all strongly associated with self-rated health. Moreover, based on analyzing the findings from various studies, researchers demonstrated the links of healthy lifestyles with current health status (Berkman & Breslow 1983). In addition, Raija (2002) found that the most powerful determinants of self-rated health were the ability to perform the physical activities of daily living, number of chronic diseases, number of depressive symptoms, maximal working capacity, cognitive functioning, social functioning and physical activity.

All of these findings about self-rated health above mentioned are from the western countries, and are very important references for understanding self-rated health of older people in China. Nevertheless, being a developing country, with also differences of cultural and socioeconomic status between China and the west countries, the research in developed countries can't explain the characteristics of self-rated health and its correlated factors of older people in China. Furthermore, the age profiles of these studied populations are not exactly 65 and over, for example, the age span of some samples is from 16 to 75 and over. However, some only include 77 years old and over; besides most of the samples consist of profile with chronic disease , so that these studies of self-rated health are thus about unhealthy versus healthy. So, based only on earlier findings, it is hard to know the factors affecting

better self-rated health versus moderate. Therefore, it is necessary to study self-rated health of healthy older people in China.

In China, some scholors studied self-rated health and its relative factors. Yang et al. (1998) compared self-rated health of older people aged 60 to 83 in China, Australia, and the United States. They found that the best self-rated health was in the United States, then Australia, and the lowest is in China. Zheng (2000) analyzed the importance and principle of self-rated health of older people in China. Liu and Li (2004) investigated the relation between self-rated health and mortality risk of the oldest old aged 80 to 105, based on Chinese Longitudinal Healthy Longevity Studies conducted in 1998, 2000, and 2002. Based on a national survey of older people, Zeng et al. (2002) analyzed the sex, age, and urban-rural difference in self-rated health of the oldest old in China, and another study found that not only healthy lifestyle was active to self-rated health, but also activities of daily living and chronic disease were significantly associated with self-rated health; however, socio-demographic status was not associated with it (Gu & Qiao, 2006). A comparative analysis of self-rated health of older people in Guangdong province of China found that the effects of marriage status, education level, urban-rural difference were not statistically significant, but income and medical care were strongly associated with self-rated health. Cheng & Chan (2005) found that the frequency of falling ill, the number of chronic illnesses, sleep quality, mobility and positive emotions were most important determinants of self-rated health. Du et al. (2007) explored the features of the healthy older people in Beijing who were chosen through public appraisal by Beijing Committee on Aging in 2005

All these findings are about the 'universal', older people, except for the features of the healthy older people in Beijing. For the healthy older people in Beijing are a special category of the universal ones; their related factors are a little different from the earlier ones. Considering gender and age group are the basic characteristics of demographic characteristic, so demographic characteristic are analyzed firstly in this paper. Studies found that most of the diseases afflicting older people are so-called lifestyle diseases (Chi & Leung 1995), so positive lifestyle, which was likely to be one of important factors of self-rated health, should been studied further.

Moreover, family relationship is very important to the well-being of older people (Macera 2005). In China, because of the effect of filial piety, with the family providing for aged, is the primary strategy of providing for the aged. People in China depend on family and regard it as a very important part of one's life (Fang 2001), especially in late life for the following reasons. Primarily, only less than 7% of the oldest live in nursing homes (Zeng & Wang 2004), more than 90% older people live with their family; secondly, the economic support of more than 58% of men and

nearly 72% of women in old age is received from their family (CNST, 2005); finally, family members are the main health care providers of older people (Du et al, 2007). Thus, most of older people are living with family and getting support from it such as daily living care, health care, financial and emotional support, and psychological comfort. Therefore, if the relationship among family members is harmonious, older people are likely to get adequate support, with their physical and mental health status also being better, and their self-rated health may be better too, likewise, the converse. Therefore, whether family harmony or not is especially important for older people, making family relationship an important factor studied in this paper.

In a word, the aims of this research are to study self-rated health of healthy older people in Beijing and the correlation factors such as Demographic status, positive lifestyle and family relationship (see Fig.1).



Figure 1. The model of correlative factors affecting self-rated health

Hypothesis

Based on the advantages and effects on measured health on self-rated health, the aims of this research is to study self-rated health of healthy, older people in Beijing and its correlation factors. The main research question is which factors affect the self-rated health of healthy older people. The hypothesis is the following:

Hypotheses 1, self-rated health may be related to demographic status. (**Refer to variable** *a* **and** *b*)

Hypotheses 2, self-rated health may be related to positive lifestyle which consists of whether eating health food, being order to lifestyle, and taking practice (**refer to variable** *c* **in the "method" chaper**).

Hypotheses 3, self-rated health may be related to family relationship which comprises whether family harmony or not (refer to variable d in the "method" chaper).

Method

Population

Healthy ageing emphasizes aspects of physical, social, and emotional health (Vaillant, 2002), or the development and maintenance of optimal physical, mental, and social well-being and function in older adults, which are most likely to be achieved when environmental conditions are adequate (Healthy Aging Research Network, 2005). There are 1.66 million older people in Beijing; the ageing index is 10.81% (CNTB 2006). To research healthy ageing effectively, the second "Healthy Older People" were assessed in Beijing. After scrutinized healthy old people voluntarily, these applied people were assessed in absence of illness, mental health, adaptability of society, properly dealing with relationship, and community participation actively (Du et al, 2007). Ten thousand healthy older people were chosen through the Beijing Committee on Aging appraisal. Because healthy, older people are the ideal model of active aging, so that their characteristics and the factors related to self-rated health tend to be known urgently. Furthermore, related to the policy perspective, the population ageing level in Beijing is one of the highest groups in China; the more is known about self-rated health of older people, the more one can plan in response to rapid population ageing in the coming decades. Moreover, as a capital city, the economic and social development in Beijing keep ahead of other districts, and great efforts for active aging have been made by the Beijing government, so self-rated health of healthy older people in Beijing deserves studying. In view of these reasons, the sample only consists of healthy older people in Beijing.

Secondary data retrieved from the 2005-Survey of the Healthy Elderly Population in Beijing [2005 SHEPB] are used to analyze factors related to self-rated health of healthy older people in Beijing, produced by the Beijing Committee on Aging and Gerontology Institute of Renmin University of China. According to the older people's ratio in different districts in Beijing, ten thousand questionnaires of Beijing healthy older people handed out and were filled in by the healthy older people themselves. The questionnaire includes the following questions: basic information, health status of behavior, physical and psychological status, and social function and security. Six thousand sixty-nine effective questionnaires were completed and returned to the Beijing Committee on aging by healthy older people aged 53 to 104. The other 3931 questionnaires were either uncompleted or unreturned. The 6069 questionnaires' information was double input in EpiData3.0. Because there are 645 interviewees' age less than 65, and in the present study, eligibility criteria are 65 years or older and the questionnaires completed effectively. So there are 5424 interviewees in this sample.

Variables

8

The factors affecting self-rated health are chosen not only because of the earlier findings which associates with self-rated health, but also considering the characters of healthy older people based on the special cultural and socioeconomic status including.

a. Self-rated health. Self-rated health is assessed using a single item as the dependent variable which by asking, "How do you rate your health in general?" The response categories are "very good," "good," and "fair", which different from other categories including "poor," and "very poor" because all of these interviewees are healthy older people.

Measures of variables. Affected by golden mean (Du et al, 2007), majority of older people rated their health as "fair", and only 4.68% older people rating their health as "very good", although all of them are healthy older people. Therefore, it's necessary to combine "good" and "very good" into one category. Thus, this variable contained two levels and the measure of self-rated health dichotomized into good or very good versus fair.

b. Demographic characteristic. Demographic characteristic is measured using two items: the gender and age of the respondents. Considering the difference of younger old and older old, age dichotomizes into 65-79 and 80+.

c. Positive lifestyle. In China some people eat health food in order to maintain health. Health food is a food type, such as tea, the honey, honey tonic, royal jelly, the foods with Chinese medicines mixed in, and so on, which has the common food general character, can adjust human body's function, is suitable in the specific crowd edible, but does not treat illness as the goal. Lifestyle is assessed with five different questions: the first one is: "Do you smoke?" The response categories are "never smoked", "ever smoked", or "always smoking"; the second one is: "Do you drink?" The response categories consist of "never drinking", "drinking sometimes", or "often drinking"; the third one is: "Do you eat health food?" The response categories consist of "never", "seldom", or "often"; the fourth one is: "Is there order to your lifestyle?" The response categories are "yes" or "no"; the fifth one is: "Do you take physical exercise?" The response categories consist of "never", "seldom", or "often".

Measures of variables. Based on a majority of healthy older people they do not have the hobby of smoking and drinking; the proportions of both smoking and drinking are very small (Du et al, 2007). Moreover, smoking and drinking are harmful to health, and they don't contribute to positive lifestyle. In addition, if smoking and drinking are put into regression logistic model, the model's R Square does not improve but decline. So, smoking and drinking are not analyzed in this study. However, whether eating health food, being order to lifestyle, and taking physical exercise are put into model directly.

d. Family relationship. Family relationship is assessed by one question: "Is your

family harmonious?" The response categories consist of "harmonious", "relative harmonious", "not harmonious", and "hard to answer".

Measures of variables. Based on the special culture in China, even if the family is not relative harmonious, most of they prefer answer "hard to answer" rather than "not relative harmonious" or "not harmonious". So there are only 34 interviewees answered "not harmonious", and 80 interviewees answered "hard to answer". In this study, in order to test whether family harmony affect self-rated health, based on the degree of harmonious and the special culture, "harmonious" and "relative harmonious" are combined into family harmony, "not harmonious", and "hard to answer" are combined into not harmony. Therefore the four answers were dichotomized into "family harmony" and "not harmony".

Statistical Analysis

All quantitative data analyzed by correlation and binary logistic regression performed with the SPSS (version 15.0) statistical package program. In this study, logistic regression is more suitable than correlation analysis because comparisons of odds ratio between predictor variables help determine the factors of greatest importance. In addition, based on the distribution of self-rated health, binary logistic regression is better than multi-normal regression.

The processing order is: primarily, demographic status is put into model 1; then the variables of positive lifestyle are put into model 2; finally, whether family harmony is put into model 3.

The statistical significance was considered at $\underline{P}=0.05$. The dependent variable is self-rated health; The independent variables are demographic status, positive lifestyle, and family relationship respectively.

Results

Based on the survey of healthy older people in Beijing, the information of 5424 healthy older people aged 65 and over is analyzed in this study. The basic information related to this study includes structure of gender and age group, and self-rated health. There are 1950 women and 3474 men in this sample. Although there are more older women than older men, based on the following two reasons, among the sample there are fewer women than men. The first reason is "women are sicker, but men die quicker" (Lahelmaa et al., 1999). Women have significantly lower overall and health-related quality of life than men. The second reason is the less participation rate of women than men during applying for the healthy older people in Beijing. The mean age of subjects is 76.30±7.90 years. Self-rated health of more respondents (54.00%) is fair, while 40.67% and 4.65% is "good" and "very good" respectively, 0.68% is not complete in questionnaire.

Table 1 displays the inter-correlations among all the variables which analyzed in this study. The following findings about demographic status, positive lifestyle and family relationship differences and self-rated health are evident. All of the variables are positively associated with self-rated health except age which is inverse related to self-rated health.

Table 1. Pearson's Correlations among self-rated health, demographic, lifestyle and

Self-rated health	gender	Age group	Whether eating health food	Whether taking practice	Whether being order to lifestyle	Whether family harmony
Pearson Correlation	0.057	-0.068	0.075	0.181	0.081	0.054
Sig. (2-tailed)	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Ν	5387	5387	5268	5331	5194	5356

family relationship

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.01 level (2-tailed).

The results of binary logistic regression models are given in table 2, with the odds ratio, probability values, -2 Log likelihood, and Nagelkerke R Square for each model. Rating "fair" of self-rated health is reference category.

Gender and age group

In table 1, gender and age group are strongly related with self-rated health (p < 0.001). It can be seen that females are less likely than males to rate "good or very good" as self-rated health (odds ratio = 0.76, p < 0.001). The gender difference is consistent with earlier findings that men were more likely to report better and less

likely to report worse self-rated health than women (Li et al, 2006). The reason probably based on gender differences in old age health encapsulating that "women are sicker, but men die quicker" (Lahelma et al., 1999). In a survey, it is also found that health status of female is worse than male in old age. (China Research Center on Aging 2002).

Simultaneously, younger age group are more likely than elder age group to rate "good or very good" as self-rated health (odds ratio = 1.32, p < 0.001), which is consistent with Danilidou et al, (2004) and Du et al, (2007). The reason is mainly because health status declines with aging, and the significantly linear trends between age-comparative self-rated health options from better to worse for physical health problems, such as disease and disability (Li et al, 2006).

Positive lifestyle

Model 2 demonstrated not only gender and age, but also the effects of positive lifestyle affecting self-rated health. The effects of gender and age group are similar with model 1. Compared with never eating healthy food, the odds ratio of often eating health food decreases 37% and 35% decreases of seldom eating health food. The analysis reveals the inverse relationship between eating health food and self-rated health. For the variable of being order to lifestyle, compared with not being order to lifestyle, the odds ratio of rating better of being order to lifestyle improves 95%. Toward the variable of taking physical exercise, it can be found that taking physical activities is positive related to self-rated health. Compared with often those who taking physical activity, the odds ratio of those who never taking physical exercise decreases 58%, and the odds ratio of those who seldom taking physical exercise decreases 56%.

Family relationship

Model 3 investigated the effects of all these independent variables. Gender, age group, and positive lifestyle affected self-rated health similarly had the effects of model 2. Furthermore, family harmony related to self-rated health strongly. The odds ratio of better self-rated health of those older people whose family harmony is 2.03 times of those whose family is not harmony. In this study, among the 6 factors, family harmony is the most important determinant factors of self-rated health.

	Model 1		Model 2		Model 3	
	<u>Odds</u> <u>ratio</u>	<u>p</u>	<u>Odds</u> <u>ratio</u>	<u>p</u>	<u>Odds</u> <u>ratio</u>	<u>p</u>
Demographic status						
Gender						

Table 2. Binary logistic regression of self-rated health

Female vs. male	0.76	.000 * * *	0.82	0.001 **	0.81	.001 * *
Age group						
65-79 vs. 80+	1.32	.000 * * *	1.12	0.016 *	1.17	.016 *
Positive lifestyle						
Eating health food or not						
often eating vs. never eating		0.63	.000 * * *	0.63	* * * 000.	
seldom eating vs. never eating			0.65	.000 * * *	0.65	.000 * * *
Being order lifestyle						
being order to lifestyle vs. not			1.95	.000 * * *	1.86	.000 * * *
Taking physical exercise or not						
never taking vs. often			0.41	.000 * * *	0.42	* * * 000.
Seldom taking vs. often			0.44	* * * 000.	0.44	.000 * * *
Family relationship						
Family harmony or not						
family harmony vs. not					2.03	.004 * *
-2 Log likelihood	6	880.89	6640.05		6631.06	
Nagelkerke R Square		0.011	.073		.076	

* p < .05; * * p < .01; * * * p < .001 on Chi-squared analysis.

Discussion and conclusion

Discussion

To elucidate the factors affecting self-rated health of healthy older people, a sample of 2005 SHEPB is examined in demographic status, positive lifestyle and family relationship.

The analysis reveals that not only gender and age group, but also positive lifestyle have important effects on self-rated health which is consistent with the findings of Zeng et al (2002), and Berkman & Breslow (1983), etc. Compared with rating "fair", all of the 3 dimensions of positive lifestyle and family harmony are strongly correlated with rating "good or very good". As (Berkman & Breslow 1983; Raija 2002; Pia et al, 2006; Gu & Qiao 2006; Du et al, 2007) demonstrated, and as is supported by this study, a positive lifestyle especially being order to lifestyle and taking physical exercise are the most two important factors relating to self-rated health; playing bigger role than eating health food in contributing to the relation between rating better and lifestyle.

Another interesting finding is that eating health food can't improve self-rated health significantly. In mainland of China, there is a great deal of health food such as honey capsule, invigorant, sanitarian wine, and sanitarian tea, etc. All of these health food propagandize their important effects on health, therefore a large number of older people eat health food in order to maintain health. In 2000, the sale of health food was 50 billion Chinese Yuan (The history of health food in China 2007), and in the year of 2010, it will be 130 billion Chinese Yuan (It can't preserve one's health depending only on health food 2007). However, the inverse relationship between eating health food and self-rated health reveals that self-rated health of those healthy older people who never eat health food is better than its comparable group. Notwithstanding, it is hard to say the reason for this and which is the result of eating health food and fair of self-rate health. Moreover, there is no longitudinal survey to analyze the effect of health food. But in some degree, it can be said that it is not depending on eating health food to maintain better self-rated health.

Moreover, evidence from this study indicated that family harmony is associated with self-rated health. This effect seems to be explainable by the findings of Macera (2005) that family relationship remains an important focus for older adults. It also seems to be explainable by social support (Molarius et al, 2007; Palombo 2004; Yoon & Kropf 2004). In China, some scholars studied household relationship and the mental health of adolescent, they found that the level of adolescents' mental health with good household relationship was higher than those without (Shi et al, 2005; Ye et

al, 2006). In addition, several scholars studied the effect of social support on the mental health of older people; and found that enhancing social support of the older people could promote their mental health and somatic health (Chen & Yao 2005; Wang et al, 2005). However there is little literature investigating the effect of family relationship on self-rated health of older people in China. Therefore, the findings in this study can help to highlight the important effect of family relationship on older people's self-rated health.

Conclusion

In summary, the key findings from this research include male, younger aged group (aged 65-79), never eating health food, being order to lifestyle, taking physical exercise, and having family harmony which are positively related to self-rated health. Moreover, this study makes two important contributions to self-rated health, seldom studied earlier. On one hand, the odds ratios of better self-rated health of subjects who often or seldom eat health food are lower than those who never eating health food, so it is not depending on eating health food to maintain better self-rated health. On the other hand, family harmony is associated with self-rated health strongly; the probability of rating better is more than two times of these older people whose family are in harmony compared with not harmony. Family harmony is a most important factor correlating self-rated health in this study.

In concluding, it is important to note two limitations of this study: The first limitation is that the data used in this study don't have enough right variables to measure family relation. The second one is that Nagelkerke R Square is 7.6%. As mentioned before, because there are a good number of factors affecting self-rated health, however only three domains are analyzed in this study, so the explanation degree of the model is not high. However, this study still answers the research question and validates the hypothesis. In some degree, this paper helps to understand self-rated health of the healthy older people in Beijing.

References

Chinese

- 中华人民共和国国家统计局 [China National Statistical Bureau]. (2003). 中国统计年鉴—2002 [China statistics yearbook 2002]. 北京:中国统计出版社[Beijing: China Statistics Press].
- 中华人民共和国国家统计局 [China National Statistical Bureau]. (2005). *中国统计年鉴—2004 [China statistics yearbook 2004]*. 北京:中国统计出版社 Beijing: China Statistics Press.
- 中华人民共和国国家统计局 [China National Statistical Bureau]. (2006). *中国统计年鉴—2004* [China statistics yearbook 2005]. 北京:中国统计出版社 Beijing: China Statistics Press.
- 中国老龄科研中心 [China Research Center on Aging]. (2002). 中国城乡老年人一次性调查 2000 [survey on the aged population in China in 2000], 北京:中国统计出版社[Beijing: Standards Press of China].
- 杜鹏,李强 [Du, P., & Li, Q.]. (2006). 1994-2004 年中国老年人的生活资料预期寿命及其变 化 Disability-free Life Expectancy of Chinese Elderly and its Change between 1994 and 2004.人口研究 [Population Research], 30(5), 9-16.
- 杜鹏, 伊密, 曲嘉瑶, 张鹏 [Du, P., Yi, M., Qu, J.Y., & Zhang, P.] (2007, March). 北京"健康 老人"研究[A Study of the Healthy Elderly Population in Beijing], *人口与经济* [Population and Economy], 2, 55-59.
- 杜鹏, 翟振武, 陈卫 [Du, P., Zhai Z.W., & Chen, W.] (2005). 中国人口老龄化百年预测 [The Century Population aging tendency in China]. *人口研究 [Population Research]*, 29(6), 90-93.
- 方菲 [Fang, F.] (2001, September). 影响家庭养老精神慰藉的因素分析 [Analysis of factors affecting psychological comfort of family providing for aged] 社会[society], 5, 31-32.
- 谷琳, 乔晓春 [Gu L., & Qiao, X. C.] (2006, November). 中国老年人健康自评影响因素分析 [Analysis of factors affecting self-rated health of the old people in China]. 人口学刊 [Journal Population], (6), 25-29.
- 光靠保健品不能养生 [It can't preserve one's health only depending on health food]. Retrieved September 7, 2007, from <u>http://health.163.com/06/1017/15/2TL6HKTU00181V04.html</u>.
- 刘玉芝,李强[Liu, Y. Z., & Li, Q]. (2004, August). 高龄老人自评健康与死亡风险的关系研究 [The relation between self-rated health and mortality risk of oldest old].中国人口科学 [*Chinese Journal of Population Science*], 4, 28-35.
- 时松和,吴敏,杨翠萍,冯国庆 [Shi, S. H., Wu, M., Yang, C. P., & Feng, G. Q.] (2005). 家庭人际 关系与青少年心理健康 [Household relationship and adolescents' mental health]. 郑州大 学学报 (医学版) [Journal of Zhengzhou University (Medical Sciences),] 40(6), 1070-1072.
- 王建英,崔冬梅,刑华燕,常青 [Wang, J. Y., Cui, D. M., Xing, H. Y., & Chang, Q.]. (2005). 郑州 城区老年人社会支持及心理健康状况调查 [Investigation of social support and mental health of the elder individuals in Zhengzhou urban area]. 郑州大学学报(医学版) [Journal of Zhengzhou University(Medical Sciences)), 40(5), 917-919.

- 杨静宜,孙卫星,李昕, Hawkinsz, B. A., Eklundz, S. J., & Binkley, A. L. [Yang, J.Y., Sun W.X., Li. X., Hawkinsz, B. A., Eklundz, S. J., & Binkley, A. L.] (1998). 中国、澳大利亚、美国老年受试者生活方式与健康状况调查与比较 [Investigation and Comparison of Lifestyle and Health Outcomes of Chinese, Australian and American Aged Subjects]. 北京体育大学学报 [Journal of Beijing University of Physical Education]. 21(4), 25-29.
- 姚远,陈立新 [Yao, Y., & Chen, L. X.] (2005, July). 老年人人格特征对心理健康的影响研究
 [A study of personal characteristics affecting mental health of older people]. 人口学刊
 [Population Journa]1, 4, 10-15.
- 叶苑, 邹泓, 李彩娜, 柯锐 [Ye, Y., Zou, H., Li, C. N., & Ke, R.] (2006). 青少年家庭功能的 特点及其与心理健康的关系 The developmental characteristics of adolescents family functioning and its influence on mental health. 中国心理卫生 [Journal of Chinese psychological sanitation], 20(6), 385-387.
- 赵细康 [Zhao, X. K.] (2000). 老年人健康状况主观评价分析[Analysis of self-rated health of older people]. 人口研究 [Population Research], 24(3), 63-66.
- 郑晓英 [Zheng X. Y.] (2000).中国老年人口健康评价指标研究. [Health evaluation of aging population in China] 北京大学学报[哲学社会科学版] [JOURNAL OF PEKING UNIVERSITY (Humanities and Social Sciences)] 37(4), 144-151.
- 中国保健品的历史 [The history of health food in China]. (2007). Retrieved September 7, 2007, from <u>http://ks.cn.yahoo.com/question/1307020520159.html</u>.

English

- Bailis, D. S., Segall, A., & Chipperfield, J. G. (2003). Two views of self-rated general health status. *Social Science & Medicine*, *56*(2), 203-217.
- Bath, P. A. (1999). Self-rated health as a risk factor for prescribed drug use and future health and social service use in older people. *Journal of Gerontology*, *54A* (11), 565-570.
- Berkman, L. F, & Breslow L. (1983). Health and Ways of Living, the Alameda County Study. London: Oxford University Press.
- Cassel, J. (1976). The Contribution of the Environment to Host Resistance. *American Journal of Epidemiology*, (104), 107-123.
- Cheng, S. T., & Chan, A. C. M. (2005). Social support and self-rated health revisited: Is there a gender difference in later life? *Social Science & Medicine*, *63*(2), 118-122.
- Chi, I., & Leung, E. M. F. (E) (1995). *Toward healthy ageing in Hong Kong*. ST. James' Settlement Hong Kong.
- Daniilidou, N. V., Gregory, S., Kyriopoulos, J. H., & Zavras, D. J. (2004). Factors associated with self-rated health in Greece; A population-based postal survey. *European Journal of Public Health*, 14(2), 209-211.

- Ferraro, K. F., Farmer, M. M., & Wybraniec, J. A. (1997). Health trajectories: Long-term dynamics among black and white adults, *Journal of Health and Social Behavior, 38* (1), 38-54.
- George L. K. (2001). The social psychology of health. In R.H.B.L.K. George, (Ed.), *Handbook of aging and the social sciences*, San Diego: Academic Press.
- Healthy Aging Research Network. (2005). *What is healthy aging*? Retrieved September 13, 2007, from <u>http://depts.washington.edu/harn/about_us.shtml</u>.
- House, J. S., Lepkowski, J. M., Williams, D. R., Richard P Mero, et al. (2000). Excess mortality among urban residents: How much, for whom, and why? *American Journal of Public Health*, 90(12), 1898-1904.
- Idler, E. L. (1993). Age differences in self-assessments of health: Age changes, cohort differences, or survivorship? *Journal of Gerontology: Social Sciences, 48*(6), S289-S300.
- Idler, E. L., & Angel, R. J. (1990). Self-rated health and mortality in the NHANES-I Epidemiologic Follow-up Study, *American Journal of Public Health*, 80 (4), 446-452.
- Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior*, *38*(1), 21-37.
- Idler, Ellen L, Angel, & Ronald J. (1990). Self-Rated Health and Mortality in the NHANES-I Epidemiologic Follow-Up Study. *American Journal of Public Health*, 80(4), 446.
- Kalache, A., & Keller, I. (1999). The WHO perspective on active ageing. *Promotion & Education*, 6(4), 20-23.
- Lahelma, E., Martikainen, P., Rahkonen, O., & Silventoinen, K. (1999). Gender differences in illhealth in Finland: patterns, magnitude and change. *Social Science & Medicine*, *48*(1), 7-19.
- Macera, E. (2005). Subjective well-being in older adults: The role of interpersonal relationships.
 Ph.D. dissertation, University of California, San Francisco, United States. Retrieved
 September 13, 2007, from ProQuest Digital Dissertations database. (Publication No. AAT 3179953).
- Raija, L. (2002). Self-rated health in old age: A follow-up study of changes and determinants. Dr.Sc. dissertation, Jyvaskylan Yliopisto (Finland), Finland. Retrieved September 11, 2007, from ProQuest Digital Dissertations database. (Publication No. AAT C813269).
- Li, Z. B., Lam, T. H., Ho, S. Y., Chan, W. M. et al. (2006). Age-versus time-comparative self-rated health in Hong Kong Chinese older adults. *International Journal of Geriatric Psychiatry*, 21(8), 729-739. Retrieved September 11, 2007, from Academic Research Library database. (Document ID: 1130518931).
- Malmstrom, M., Sundquist, J., & Johansson, S. E. (1999) Neighborhood environment and self-reported health status: A multilevel analysis, *American Journal of Public Health*, 89 (8), 1181-1186.

- Menec, V. (2002). What factors predict changes in self-rated health? A six-year longitudinal study.
 The Gerontologist: 55th Annual Scientific Meeting Relationships in a Changing, 42(1), 102. Retrieved September 11, 2007, from Academic Research Library database. (Document ID: 654487891).
- Molarius, A., Berglund, K., Eriksson, C., Lambe, M., Nordström, E., Eriksson, H. G., & Feldman, I. (2007). Socioeconomic conditions, lifestyle factors, and self-rated health among men and women in Sweden. *European Journal of Public Health*, 17(2), 125-133.
- Palombo, R. (2004). Promoting the health of older adults-social relationships and activities count. *The Gerontologist, 44*(1), 434.
- Patrick, D. L., & Erickson, P. (1993) *Health Status and Health Policy: Allocating Resources to Health Car.* New York: Oxford University Press.
- Pia, S. C., Bardage, S., Sandin, N., & Pedersen, L. (2006). A prospective study of health, life-style and psychosocial predictors of self-rated health. *European Journal of Epidemiology*, 21(10),767-767.
- Shmueli, A. (2007). Health and religiosity among Israeli Jews. *European Journal of Public Health*, *17*(1), 104-111.
- Vaillant, G. A. (2002). Aging well: Surprising guideposts to a happier life from the Landmark Harvard Study of Adult Development. Boston: Little, Brown.

Appendix

北京市"健康老人"情况调查表 问卷编号___

卷首语:尊敬的老年朋友,为了准确地了解您的实际情况,我们设计 了此份调查表,以便进一步做好老龄工作,满足您的各项需求。请您 按照调查题目,选择符合您实际情况的序号、在该位置上画"√"即可; A10 为多选题,可选择多个符合您实际情况的项目,并在相应的位置 上逐一画上"√"。

姓名_____区县____街道_____居委会/村____(1 城市,2 农村) 一、 基本情况

A1 性别 ①男 ②女

A2 您今年多大岁数了? _____周岁

- A3 您的文化程度是 ①文盲或半文盲 ②小学 ③初中 ④高中/中专 ⑤大专 ⑥大学及以上
- A4 您目前的婚姻状况属于下面那一类?

①有配偶 ②离婚 ③丧偶(丧偶___年) ④未婚A5 您离/退休了吗?

①离休了 ②退休了 ③仍在工作 ④从未工作 ⑤其它___A6 您六十岁以前(包括 60 岁)从事的职业是:

□ 专业技术人员 ②行政管理 ③农林牧副渔 ④工人

⑤商业服务业 ⑥军人 ⑦作家务 ⑧其它

A7 您目前的经济状况是?

①很富裕 ②富裕 ③一般 ④困难 ⑤很困难A8 您目前有几个子女(包括领养或过继的子女)?

儿子___个, 女儿__个

A9 您目前的居住方式是: ①自己单过 ②和老板一起单过 ③和子女 一起同住 ④和孙子女一起同住 ⑤和子女、孙子女一起同 住 ⑥与其它亲戚同住 ⑦住养老院 ⑧其它

A10 您觉得老年人健康的主要原因是什么?(多选题)

□ 身体健康 ②心情愉快 ③能适应社会 ④家庭和睦
 ⑤人际关系好 ⑥积极参与社会

二、行为、生理、心理健康

B1 您抽烟吗? ①从不抽烟 ②过去抽,现在不抽了 ③一直抽(估计 从___岁开始抽)

B2 您喝酒吗? ①从不喝 ②有时喝 ③经常喝(白酒、葡萄酒、啤酒、 黄酒、其它 酒)

B3 您吃保健品吗? ①经常吃 ②偶尔吃 ③从不吃

B4 您吃饭、睡觉等生活有规律吗? ①有规律 ②没规律

B5 您参加体育锻炼吗?

①从不锻炼 ②偶尔锻炼 ③经常锻炼(每天_小时) B6 您觉得您目前的身体健康状况是:①一般 ②健康 ③非常健康 B7 您有慢性病吗?①有 ②没有

B8 在过去的一年中您看过病吗?

①没有 ②看过(看过__次,大约花销__元) B9 您认为自己现在老了吗?①没有 ②老了 B10 您认为老年人多大才能算老?①男____ ②女___ ③不好说 B11 不论遇到什么事您都能想得开吗?①能 ②不能 ③不好说 B12 您经常感到孤独吗?①孤独 ②不孤独 ③不好说 B13 您觉得老年人是社会的负担吗?①是 ②不是 ③不好说 B13 您觉得老年人是家庭的负担吗?①是 ②不是 ③不好说 B15 您对您目前的生活状况感到满意吗?①非常满意 ②比较满意

③一般 ④不太满意 ⑤很不满意 ⑥不好说 三、社会功能及保障状况 C1 您觉得自己能跟上社会发展吗? ①能 ②不能 ③不好说

C2 您觉得人老了还能为社会做贡献吗? ①能 ②不能 ③不好说

C3 您平时参加娱乐活动吗? ①从不参加 ②偶尔参加 ③经常参加

C4 您愿意组织社区老人参加娱乐活动吗?

①意愿 ②不愿意 ③说不清

C5 您平时参加公益活动吗? ①从不参加 ②偶尔参加 ③经常参加 C6 您愿意组织社区老人参加公益活动吗?

①意愿 ②不愿意 ③不说不清

C7 您愿意带头向上级反应社区老人的困难吗?

①意愿 ②不愿意 ③不说不清

C8 您的家庭和睦吗? ①和睦 ②较和睦 ③不和睦 ④说不清

C9 当您身体不好时,主要由谁来照顾您? ①配偶 ②儿子/儿媳 ③女

儿/女婿 ④孙子女 ⑤年迈的父母 ⑥亲戚/朋友 ⑦社区助 老服务机构 ⑧ 其它 ⑨无人照顾

- C10 生病时您的医药费用由谁负担? ①公费医疗报销 ②大病统筹 报销 ③配偶单位报销 ④子女资助 ⑤孙子女资助 ⑥亲 戚/朋友资助 ⑦商业医疗保险 ⑧其它
 - C11 您生活费的主要来源是: ①离/退休金 ②子女 ③孙子女 ④亲 戚/朋友 ⑤社会保险 ⑥其它____

C12 在以后的老年生活中,您是否担心以下问题:

生活照料 ①毫不担心 ②不太担心 ③比较担心 ④非常担心

经济供养 ①毫不担心 ②不太担心 ③比较担心 ④非常担心

医疗费用 ①毫不担心 ②不太担心 ③比较担心 ④非常担心 ※ 您是通过什么方式参加这次健康老人评选活动的?

①自己决定报名参加②子女支持参加③家人鼓励参加④街道社区动员参加⑤愿单位组织参加⑥其它_____

非常感谢您的支持和配合,祝您永远健康、幸福!

北京市老龄工作委员会办公室