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The Influence of Health Literacy on Self-Care Agency in an Older Adult Population in Xinjiang, China

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Dear Editor-in-Chief

The aging of China's population is accelerating. By the middle of this century reaches its peak. The elderly population >65 years of age is approximately 137.55 million (1), which accounts for approximately 10.1% of the total Chinese population. It is estimated that the proportion of elderly will increase to 16% in 2030 and to 23% in 2050(2). That means there will be one elderly person among nearly every four Chinese in average. There will be one senior citizen among every two to three people in big cities.

Health literacy has been defined as "the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions"(3). Lower health literacy is associated with poorer health status, less health care knowledge, poorer self-care abilities (e.g., medication adherence), reduced use of preventive services, and increased hospitalization and health care costs (4-6). Self-care is a decision-making process where by individuals chooses to perform health behaviors that promote physiological stability (known as self-care maintenance) and respond to symptoms (known as self-care management) (7). Self-care utilizes both the skills and knowledge of individuals (8, 9). Self-care can be more challenging when there are barriers to gaining knowledge, such as inadequate health literacy (6).

Research is requisite regarding further understanding of the relationship between health literacy and self-care to transmit effectively healthcare information to elderly who have inadequate health literacy in China; the study has not been carried out yet. If elderly population have inadequate health literacy and have not gained enough information to comprehend fully self-care, they may lack the belief, or self-confidence, in their ability to execute self-care. The purpose of this pilot study was to examine the relationship between health literacy level and self-care agency in elderly population in nursing home of Xinjiang. The results of this study could determine the usefulness of health literacy affects individual self-care agency and guide the development of nursing interventions that can enhance the self-care agencies of older adults in China.

A cross-sectional study design was used in an older adult population in nursing home. The sample for this study consisted of a volunteer, stratified cluster random sample of older adults' ages 60 to 99 yr (average age, 77.5 ± 9.2 yr) recruited from fifteen nursing homes, which were randomly selected from twenty-seven nursing homes in Urumuqi.

Ethics approval was granted by the institutional Ethics Committee, and the elderly gave written informed consent to participate in this study.

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The three instruments used in this study were the Chinese Citizen Health Literacy Questionnaire (China Health Education Centre, 2008), the Exercise of Self-Care Agency Scale (Kearney & Fleischer, 1979) and a demographic information instrument. SPSS version 17.0, (Chicago, IL, USA) was used to test the assumptions and perform the canonical correlation on the data.

The subscale of health belief and health behavior, as measured by the Health Literacy, had a significant relationship with the subscale of self-care ability and self-care evaluation of the self-care agency components, as measured by the Exercise of Self-Care Agency Scale. The results showed that older adults who owned health belief and health behavior also took the positive self-care ability and self-care evaluation for self-care. These research results suggest that the assessment and promotion of older adults' health literacy is important to improve self-care agency and health in nursing practice. However, because of the limitation of participants, the generalizability of these findings is limited to the older adult populations, in nursing home.

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References

1. National Bureau of Statistics of China (2015). *Statistical Communiqué of the People's Republic of China* on the 2014 National Economic and Social Development; Chinese Statistics Press: Beijing, China.

- United Nations¹ Department of Economic and Social Affairs(2001). World Population Prospects; UN: New York, USA. Available from: http://esa.un.org/unpd/wpp/.
- David Satcher (2000). Healthy People 2010, Understanding and Improving Health: Understanding and Improving Health, 2nd edition. U.S. Department of Health and Human Services, *Washington, DC, USA*.
- Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, American Medical Association (1999). Health literacy: Report of the Council on Scientific Affairs. JAMA, 281(6):552–7.
- 5. DeWalt DA, Berkman ND, Sheridan S, et al. (2004).Literacy and health outcomes: A systematic review of the literature. *JGIM*, 19:1228–1239.
- Nielsen-Bohlman L, Panzer AM, Hamlin B, et al. (2004). Health literacy: A prescription to end confusion. Washington, DC: National Academies Press. Available from: *www.nap.edu*
- Riegel B, Carlson B, Moser DK, et al. (2004). Psychometric testing of the self-care of heart failure index. J Card Fail,10 (4):350–360.
- Orem D, Taylor S, McLaughlin K (2001). Nursing concepts of practice. 5th Edition, *Mosby-Year Book*, St. Louis.
- Renpenning KM, Taylor SG(2003). Self-Care and Health Promotion: Understanding Self-Care. Self-Care Theory in Nursing: Selected Papers of Dorothea Orem. Springer Publishing Co, Inc, American, pp.:212.