Title:
Effects of Care Arrangements on Chinese Older Adults' Relocation to Long-Term Care Facilities

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Session Title:
Transitions in Care of the Older Adult
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Scheduled Time:
8:30 AM

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Caregiving, China and Institutionalization

References:
Chen, L., & Ye, M. (2013). The role of children's support in elders' decisions to live in a yanglaoyuan (residential long-term care). Journal of Cross-Cultural Gerontology, 28, 75-87.

Chen, Y.-M., & Berkowitz, B. (2014). Older adults' home- and community-based care service use and residential transitions: A longitudinal study. BMC Geriatrics, 12(1), Article 44.

Cheng, Y., Rosenberg, M. W., Wang, W., Yang, L., & Li, H. (2012). Access to residential care in Beijing, China: Making the decision to relocate to a residential care facility. Ageing & Society, 32, 1277-1299.

Chinese Academy of Social Sciences. (2014). China aging development report. From http://baike.baidu.com/view/10180645.htm

Abstract Summary:
China's population is experiencing the most rapid aging process in the world. Elder care in China has become a growing public concern. This study was among the first to use national longitudinal survey data to examine how different care arrangements would affect institutionalization among Chinese community-dwelling older adults.
Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner should be able to understand aging process and care arrangements of older adults in China	The study will show learners national survey data on aging process in China and primary care arrangements of older adults in China
The learner should be able to understand the institutionalization of older adults in China and factors impacting on it.	The study will interpret factors impacting institutionalization of older adults in China by analyzing a true longitudinal national survey

	data and also by placing results under specific socioeconomic context of China

Abstract Text:

Purpose:

By the end of 2013, the number of China's older adults aged 60 and above reached 202 million, accounting for 14.8% of its total population (Chinese Academy of Social Sciences, 2014). It is estimated that more than 100 million older adults are diagnosed with one or more chronic diseases and 37.5 million of them are living with functional disabilities. Although the rate of institutionalization of Chinese older adults in long-term care (LTC) facilities has increased rapidly from 0.86% to 1.51% between 2005 and 2012 (Ministry of Civil Affairs of the People's Republic of China, 2013), China's long-term care facilities are in a preliminary developmental stage (Peng & Wu, 2015). Placing older parents in LTC facilities is still stigmatized by Chinese society to some extent (Gu, Dupre, & Liu, 2007).

Most Chinese older adults still rely primarily on family support, particularly after they become functionally dependent (Wang, Zheng, Kurosawa, Inaba, & Kato, 2009). However, the traditional familial care for older adults has been decreased by fewer children, smaller family size, out-migration of adult children from rural to urban areas for employment opportunities, and increased women employment. Older adults in empty nest families surpassed 50 million by the end of 2013 (Chinese Academy of Social Sciences, 2014). Under this circumstance, elder care in China has become a public concern.

As a developing country with widened urban and rural divide and limited social and economic resources, early and unnecessary institutionalization of older adults can be a heavy burden on the country and taxpayers. It is crucial to understand factors impacting on institutionalization of older adults in China. In a study based on national survey data, Gu et al. (2007) identified poor health status at baseline (ADL disability, cognitive impairment, and having one or more chronic diseases), as risk factors for institutionalization. However, no study so far in China investigated the effects of different care arrangements on institutionalization of older adults although care arrangement is a key point to understand China's elder care development.

The objective of this study was to examine care arrangement in China and to explore effects of care arrangements on Chinese older adults' age to relocate to long-term care facilities (institutionalization) after taking their ability to perform activities of daily living, self-rated health, residence, and other demographic variables into account. We hypothesized that different types of care arrangements will have significant impacts on older adults' age to institutionalization.

Methods:

This study is a secondary data analysis using a true longitudinal dataset of Chinese Longitudinal Healthy Longevity Survey (CLHLS). Data collection was cosponsored by the US National Institute on Aging, the United Nations Fund for Population Activities, and the China National Foundation for Social Sciences. Its study sample was randomly selected from half of the counties and cities in the 22 provinces of China, representing 85% of the total population of the country.

The 2002-2011 longitudinal dataset composed of 15475 older adults who were surveyed in 2002 and then followed up in 2005, 2008 and 2011. Event is coded as 1 or 0. Event =1 is defined as "residing in nursing home (institutionalization)" at the time of follow-up interview and event=0 is defined as "living alone in the community" or "living with household members in the community" till 2011. The missing data of the included variables of our samples is less than 5%. After deleting missing data, I have a sample of 2628 older adults with 233 of them moving to nursing home in 2005, 2008, or 2011 (event=1) and 2395 of

them still live in the community in 2011(event=0). In China, those who reside in nursing home have less than 0.2% chance of going back to the community (Gu, Dupre, & Liu, 2007), so that we regard institutionalization as a fixed event that will not change once happened. The time variable in the current study is defined as older adults' age when they were first institutionalized in the study.

Eight different care arrangements for older adults are independent variables included in this study: spouses, son and daughter-in-law, daughter and son-in-law, son and daughter, grandchildren and their spouses, other informal caregivers, domestic helpers, and nobody. Covariates in this analysis included gender, place of current residency, self-rated health, ability of performing activities of daily living, financial independence. Except gender as a fixed variable, other four covariates are time-varying variables. Thus, in the current study, we only use participants' report of the other four covariates at the time of the follow-up interview when they moved to nursing homes.

The significance level was set at 0.01. Multivariate cox regression model was applied to investigate how different caregiving arrangements impact on community-dwelling older adults' age to move to nursing homes in China after controlling for covariates included in this study. We also plotted adjusted Kaplan-Meier survival curves, which allows the comparison of curves of different caregiving arrangements that are balanced for other variables in the model. SAS9.3 was used to data analyses.

Results:

The total rate of institutionalization between the 2002 and 2005 waves was 0.5%, compared with a rate of 0.8% between the 2005 and 2008, and 1.2% between the 2008 to 2011 waves. Nearly half (47.87%) of the older participants are still primarily cared for by son and daughter-in-laws. Spouses also play important roles in taking care of older adults included in this study (23.78%). Hiring domestic helpers as primary caregivers for older adults is more common in the city (4.16%) compared to rural areas (1.17%).

Care arrangements are a predictor of older adults' age of institutionalization after adjusting for covariates included in this study. In terms of the covariates, current place of residence and their needs for ADL assistance were found to have a significant impact on the outcome variable. The hazard rate of different care arrangements from low to high are son and daughter-in-law, grandchildren, spouses, daughter and son-in-law, son and daughter, other informal caregivers, domestic helpers, and cared for by nobody. Compared to older adults primarily cared for by their spouses, those who are taken care of by both sons and daughters tend to have a 91% increase (Hazard Ratio=2.49, P=0.002) in the hazard rate; those who are cared for by other informal caregivers (relatives and friends) and domestic helpers tend to have 2.39 times (Hazard Ratio = 4.03, P<0.0001) and 2.53 times (Hazard Ratio = 4.64, P<0.0001) the hazard rate of those cared for by spouses respectively. Those who have nobody to take care of them tend to have a 172% increase in the hazard rate (Hazard Ratio = 5.59, P<0.0001) compared to those who are cared for by their spouses. Those who need ADL help tend to have a 67% decrease in hazard rate (Hazard Ratio = 0.50, P<0.0001) compared to their counterparts who do not need ADL assistance (See table 2).

Conclusion:

Nearly half of the older participants are still primarily cared for by son and daughter-in-laws. This is in line with the Confucian concept of filial piety or "xiao" in Chinese has long been valued in China. The notion of filial peity covers a broad spectrum of attributes. It encompasses "Children's respect, obedience, loyalty, material provision, and physical care to older parents" (Zhan, Feng, & Luo, 2008, p.545).

It is interesting to see that compared to older adults primarily cared for by their spouses, those who are taken care of by both sons and daughters tend to have a higher hazard rate. This can be reflected from increasing reports of family disputes on elder care and older adults' right protection in recent years. When elder care responsibilities are shared by sons and daughters, there are more possibilities that none of them would like to take the leading roles of caring for their older parents. Instead, they are more likely to avoid or shift elder care responsibilities to their siblings.

In contrary to the status in Hong kong, China, hiring domestic helpers as older adults' primary caregivers in Mainland China increases their hazard rate of institutionalization in the current study. Significant differences between Chinese domestic helpers and foreign domestic helpers in Hong Kong concerning their age, educational background, income level, training, and access to social welfare can be potential reasons for this difference. By and large, Hong Kong has long been attracting thousands of foreign domestic helpers with its preferential policies and legal protection and support. For Chinese domestic helpers in mainland China, low income, lack of protective regulation, and ineffective supervision and law enforcement all contribute to the serious shortage of competent and qualified elder care workers and their high turnover.

It is interesting that those with no need of ADL assistance have significantly higher hazard ratio compared to those with ADL assistance needs. This is related to the status quo of China's formal long-term care development. Unlike most developed countries, where the predominant objective of nursing homes is to provide care for persons who are physically or cognitively impaired, most elder care institutions in China tend to preferentially accept younger, healthier, or non-disabled older adults.