

Social Policy and Services for the Elderly in Japan : The Need to Build Social Capital Intervention Strategies

Inaba, Miyuki

Faculty of Languages and Cultures, Kyushu University : Associate Professor

<https://doi.org/10.15017/1546596>

出版情報 : 言語文化論究. 35, pp.103-112, 2015-11-24. Faculty of Languages and Cultures, Kyushu University

バージョン :

権利関係 :

Social Policy and Services for the Elderly in Japan: The Need to Build Social Capital Intervention Strategies

Miyuki INABA

Introduction

Population aging is a success story of modern times across the globe because public health achievements, medical advancements, and economic growth have removed many factors that used to hinder long life expectancy have been (Muramatsu & Akiyama, 2011; Tomiya et al, 2011). Japan's population is also aging rapidly due to another factor, a low fertility rate, 1.41 in 2013 (Ministry of Internal Affairs and Communications, 2014a). According to the latest report released by the Ministry of Internal Affairs and Communications (MIC) on May 4, 2014 on National Children's Day, Japan has lost 160,000 children under the age of 15 since last year, dropping for the 33rd year straight. As of April 1 2014, children under 15 made up 12.8% (16.33 million) of the Japanese population (127.6 million). While the number of children hit a record low, people aged 65 years and older have outnumbered children since 1997 and have reached a record high of 25.9% (32.9 million) of the total population of 127.1million. This demographic trend is expected to continue as Japan's population ages and shrinks even further in the future.

This paper will provide an overview of the demographics of aging, and current changes under the Long-term Care Insurance (LTCI) policy, and new initiatives to cope with an increasing number of the elderly with dementia. A brief case description of a city that has been trying to build community capacity through dementia care in Japan is presented to show how neighborhoods and a community are coming together to cope with this the emerging issues of elderly care while reaffirming that the formal services alone are not adequate but that we need individuals, family, friends, neighbors, professionals, young and old, business and all people providing support as needed.

Japan's Unprecedented Population Aging

On September 14 2014, the Ministry of Internal Affairs and Communications (MIC) released a report stating that the number of people aged 65 and over hit a record high of 32.9 million, accounting for 25.9 % of the nation's total population (MIC, 2014b). This is an increase of over 1.1 million (0.9 %) from the previous year while the proportion of people aged 75 and over accounted for 12.5% and aged 85 and over was 3.8%. The main factor affecting this increase is the fact that the last group of baby boomers (those born from 1947 and 1949) will all be turning 65. By 2035, it is predicted that one in every three people will be 65 and older and one in five people 75 and over (Cabinet Office, 2013; National Institute for Population and Social Security Research, 2012). Moreover, the number of people aged 100 or older has also hit a record

high for the 44th straight year and Japan's centenarian population jumped by 4,423 from the previous year to a record 58,820 as of September 1, 2014, adding that 87.1 percent of them were women (MHLW, 2014). The average life expectancy at birth is now 86.4 years for women, second following Hong Kong (86.3) and 79.9 years for men, ranking behind Iceland (80.8) and Hong Kong (80.6) (Cabinet Office, 2013).

Life expectancy is expected to increase into the next century, and it is likely to increase at a slightly higher rate among women. This poses some challenges including economic insecurity particularly for older women in late life (United Nations Population Fund, 2012). Among the many issues that older women face are loneliness, higher prospects of disability, and low income (Higuchi, 2004; Cabinet Office, 2013). Women have traditionally been and continue to be the primary caregivers of their children and the elderly. This role is reinforced by social values of filial piety (Hashimoto & Ikels, 2005) and conformity to group opinion (Yamamoto & Wallhagen, 1997). Consequently, many women make a decision to quit their jobs in response to these pressures to provide care.

As Japan's older population is growing more and faster, the aging-associated illness of dementia is increasing. Dementia has become an important agenda for policy makers in Japan. In June 2013, the number of people with dementia aged 65 or older was slightly over 4.6 million, 15 % of the age group (MHLW, 2013b; The Japan Times, 2013). This figure is roughly 1.2 million more than the revised estimation of 3.45 million in 2015 that was released by the Ministry of Health, Labour and Welfare (MHLW) in 2013. In addition, the Ministry calculated that another 4 million older people suffer from mild cognitive impairment (MCI) that can evolve into dementia. In other words, combining these two groups together, one in four people aged 65 and over are facing some symptoms of dementia in Japan. However, the actual number of elderly with dementia may far exceed these estimated figures since many people with dementia do not use services and/or families feel embarrassed and often do not ask for help.

Regarding the increasing number of elderly with dementia, a report released in 2013 stated that 10,322 elderly people suffering from dementia were reported missing by their families, up from 9,607 or an increase of 715 from 2012. Although many of them were united with their families as they returned by themselves or were rescued by people after loitering days, weeks, or months. However, 359 were discovered to have died (The Japan Times, 2014). These reported numbers might be still far less, considering the fact that many families may search for their missing elderly on their own without enlisting the police. After much media attention to these unfortunate happenings, particularly the issues related to the elderly with dementia have become the great concern to families and policy makers.

Changing Family Patterns

Japan is currently undergoing several sociocultural and economic changes that are challenging the traditional family caregiving for older people. These changes include the low fertility rate, more households of elderly alone and elderly couples, and more labor participation among women. The number of households consisting of one elderly person or an elderly couple marked a high of 20.1 million out of 48.1 million, making up 43.4% in 2013 (MHLW, 2013a). Although the proportion of elderly aged 65 and over living in three-generational households is still high compared to other countries, the rate has declined from 50.1% in 1980, 26.5% in 2000, 21.3% in 2005 to 15.3% in 2012. Combining both elderly couples (30.3%) and elderly living alone (23.3%) in 2012 this group exceeds half of the total households in Japan (Cabinet Office,

2013). The total number of elderly living alone increased from 11.2% in 1980 to 20.3% in 2010 for women and from 4.3 % to 11.1% for men. In 2010, one out of five older women were living alone.

This new family structure trend makes the traditional style of family caregiving, primarily based on three-generation households and filial piety (moral obligation on children to look after elderly parents), more difficult unless children are living geographically close to their elders. As an increasing number of young women with higher education and more skills are getting into the labor market for career and economic security, many are not readily available to assume family care giving roles as before. In addition, many married women go back to work to meet basic needs of their families, which often requires a double income in order to support a decent standard of living. In reality, the number of lifetime and full-time jobs has been declining for decades; according to government data, part-time positions now make up almost 40 percent of the workforce. These jobs also earn on average 38 percent less per hour than full-time positions (Clenfield, 2014). Reentry into the labor market of many women who found employment has been at lower wage ant/or part-time jobs. This type of employment often results in working longer hours and providing less available income.

With regard to informal care for frail elderly in Japan, traditionally co-resident family members are the most dependable source of social support and care giving (Koyano et al, 1994). According to the government study, co-resident family members still provided more than 60% of caregiving for elderly: 25.7% by spouse, 20.9% by children, and 15.2 % by daughters in laws. Sixty-nine and four tenths of all caregivers were female and 30.6% were males (Cabinet Office, 2013). In addition, 61% of female caregivers are over 65, which is referred as “Rou-Rou Kaigo (elderly-to elderly caregiving)” and that Rou-Rou Kaigo accounted for more than 50 % of elderly care (MHLW, 2013a). A new study reported the very tough decision faced by middle-aged family caregivers between continuing to work versus taking care of frail parents. The study found that 27.6% of women between 40 and 64 years of age living with parents requiring care and utilizing LTCI services at different levels had quit their jobs, compared with 13.4% of men facing the same situation (Institute for Research on Household Economics, 2013). The number is increasing for men who provide care and some experts say this may be the reason that some men remain single. Financial support required to care for parents is not a small amount, costing around ¥69,000 on average per month for home-based care. They are “squeezed in the middle” by high cost of elderly care services and the need to save for their own retirement.

Revised Long-Term Care Insurance System and Dementia Strategy

Since the inception of LTCI system, the government has made several changes to the system. Changes in 2006 included were devised to contain ever increasing costs, and to develop and implement a new program of preventive intervention designed to help frail elderly to live at home as long as possible, through providing simple exercise guidance and nutrition counseling. The program was also expected to make the system more sustainable and manageable financially (Campbell, Ikegami & Jo Gibson, 2010; Tsutsui, 2010). Under this revision, an integrated community care system was introduced to provide more comprehensive services to meet the needs of the elderly (Tsutsui, 2010; Yong & Saito, 2012). The Community Comprehensive Care Support Centers were established to build a support network with formal and informal care resources in order to integrate health and social needs of the frail elderly at home. Nurses, social workers, and care

managers must be employed at each Center. This new scheme also introduced a new long-term care prevention program which includes exercise guidance and nutrition counseling in order to improve the physical and mental health of people aged 65 and over, and promotes living at home in the community (Yong & Saito, 2012). However, there seems to be a gap between the available programs under the LTCI and the needs of the elderly: for example, many elderly wanted to participate in the dementia prevention programs instead of the exercise programs (Fukutami et al, 2013).

With this revision, the notable shift from the provision of formal services under the LTCI system to a more community-based approach took place for dealing with elderly care challenges. Since it has become apparent that the comprehensive LTCI system is very expensive and in order to secure its sustainability, the government faces a huge challenge to contain public expenditures. Currently, the government stresses terms such as mutual help, self-care, connectedness, neighborhood network, or comprehensiveness in the implementation of LTC services (Tsutsui, 2010). A new reform of the LTCI system came into effect in 2012 with the aim of promoting an integrated community care system across different sectors such as health care, long-term care, prevention, housing, and daily support for the elderly living in a community.

Currently in its efforts to control the cost and focus more on community resources, the government has launched a number of dementia-related initiatives including a dementia care training program in 1984, establishment of a dementia medical center in 1989, and dementia support training for healthcare professionals and dementia supporters in 2005. In 2004 the Japanese term referring to dementia was officially changed from *Chiho* (foolish, stupid, and absent-minded) with insulting connotations and negative image to *Ninchisho* (cognitive disorder) which is less stigmatizing in Japanese. Under the LTCI system, people with dementia were not diagnosed early stage and/or identified by social and health professions due to poor coordination (Nakanishi & Nakashima, 2014). The Ministry of Health, Labour and Welfare announced Five-Year Plan for Promotion of Measures Against Dementia (Orange Plan, 2013-2017) in 2012. This plan includes earlier diagnosis and intervention, improved health care services to support living in community, improved long-term care services to support living in community, better support for daily living and family caregiving, reinforcement of measures for early onset dementia, and increasing human resources for dementia care (MHLW, 2012). While challenged with a growing aging population and demographic changes, the shift towards the community to look after frail elderly in a community has been given much policy attention.

Social Capital as Key Asset

The term social capital appeared independently in different disciplines and has played an important role in social work although it has not typically recognized as such, but perhaps is better known as social networks and/or community organizing (Loeffler et al., 2004). Social capital is generally defined as trust, norms, and social networks (Hanifan, 1916; Putnam, Leonardi, & Nanetti, 1993; Putnam, 2000). Loeffler et al. (2004, p.24) states “social capital for social work is a process of building trusting relationships, mutual understanding and shared actions that bring together individuals, communities, and institutions”. Woolcock and Narayan define social capital incorporating many elements that have appeared in the literature: “Social capital refers to the norms and networks that allow people to act collectively” (p.226). When applying the concept of social capital to community context, social capital can be regarded as a collective asset that can

help to improve the health, education, safety, economic conditions, political participation, mental health care, caregiving, disaster preparedness, recovery and survival, and quality of life of residents and other measures of well-being in communities (Muramatsu & Akiyama, 2011; Saegert, Thompson, & Warren, 2001; Zhang & Anderson, 2014).

The role of social capital facilitates collective actions to find solutions for different issues in community. The question is how we can development social capital. Creating or enhancing the social capital of communities is not an easy task and does not happen without conscious, intentional, and/or planned efforts to meet the needs of people and improve the lives of the families in communities. When financial resources are particularly tight, social capital could play an significant role to meet the needs of increasing elderly care as a supplement to, not the replacement of, the formal provision of individual services and community-based services as well as family caregiving (Blannchard, 2013; Cox, 2008; Kretzmann & McKnight, 1993).

Building Social Capital through Dementia Care: the case of Omuta City

Omuta city is located in the southern most end of Fukuoka prefecture and is formerly a thriving coal-mining town. This city has witnessed the rapid aging of its residents. As of October 2013, the number of people aged 65 years or older is 38,803 out of 122,628 total population making approximately 32 % of the total population, which far exceeds the national aging rate of 25.1%. This population has been increasing slowly but steadily. Moreover, the population aged 75 and over constitutes 17.3%. And single-person elderly households are soaring; 22.5% of elderly over 65 were living alone in 2013. Among elderly living alone, nearly 99% are women (98.2%) (Omuta, 2013).

In order to meet the increasing needs of the elderly with dementia, Omuta city has launched various community-based efforts to cope with the aging population starting in the early 2000s. The Omuta Long-Term Care Providers Council was established to make a smooth transition of care services brought about by the LTCL. In the following year, a Dementia Care Study Group (now called Dementia Life Support Study Group) consisting of 9 core members from care facilities, comprehensive support centers, and local government was set up with the aim of formulating dementia-related programs and policy at the local level. From the outset, participants from the municipality were very cooperative in incorporating the ideas and opinions expressed in the meetings and the city secured the funding for the promotion of the community-based dementia care project in 2002. In the same year, the group first decided to conduct a survey of the dementia care and found that roughly 84% (2,661 out of 3,173) of respondents answered “yes” on the question about whether they felt the need to have a better system and a better understanding about dementia in the community.

Together with the comments and opinions from about 1,500 residents, the city started to work with local residents and elderly care facilities to take up the various measures to help the elderly with dementia to live safely without having a feeling of shame and/or embarrassment in their own home and community. This community-based approach that emphasize friends and neighbors supporting each other become the basis for Omuta model. There are several key features of the Omuta model: 1) Creation of the Circle of Caring and Dementia Loitering SOS Network Simulated Training, 2) Development of an Illustrated Book for school children, and 3) Provision of Dementia Coordinator Training.

1) Creating the Circle of Caring and Loitering SOS Network Training

An increasing number of Japanese know that building a support network in a neighborhood plays an important role in daily lives and the key to success is working together. How can we build on the support network? *Mukou sannkenn ryoudonari* is a Japanese saying for good neighborhood. People in the Hayame Minami area (population about 45,000) formed a Circle of Caring, which is a mutual support group to help each other and holds monthly tea meetings to discuss any issues. The main purpose of this is to create intentional communities of mutual support so as to enhance members' well-being and improve their quality of life. The idea of a mock loitering training in the area took root in this network while discussing various issues such as elderly care, loitering of elderly, childcare, safety, health, education, and economic security. Later in 2004 this training became a city-sponsored event. The city has set up a circle of communication for loitering SOS network. Therefore, as soon as the police receives a search request from families of elderly people, information with permission from the families about the person's name, gender, picture, clothing, and physical features is sent to fire departments, post office, and taxi companies and this information is also transmitted by e-mail to about 4,400 residents on the city's "Love-Net" list. In 2013 more than 2,000 people participated in the training and many outside residents came to participate in order to learn the Omuta model.

2) Illustrated Book for Dementia Classes for School Children

In 2004, the Dementia Care Study group decided to study dementia with 24 children and published a book entitled "Mind Alive: Find the Good in People" about dementia for children and their families in 2006 because the group learned that the management of people with dementia requires a comprehensive plan that requires a partnership between formal and informal caregivers and the whole community. The book is divided into three chapters: the first chapter consist of three stories about grandmothers and grandfathers with dementia written by their grandchildren, the second chapter explains the stories in details and the tips for talking to elderly with dementia, and the last chapter describes the status of dementia in Japan including some statistics.

The book has been designed to help school children from the 4th grade in Elementary schools to the 2nd year students in junior high schools to learn about dementia. In 2012, dementia classes were held at 11 out of 22 elementary schools and 10 out of 11 junior high schools in Omuta city (Omuta City, 2013). Through the dementia classes using active learning methods like role-play and group discussions, students are becoming more aware of dementia and people with dementia. Over ten years roughly 6,000 school children learned to support the elderly with dementia and other dementia related information. School involvement is particularly important factor for building a dementia-friendly community now and for the future.

3) Training of Dementia Coordinators

Even in the early 2000s, the city planned to train dementia coordinators who would play key a role in supporting people with dementia and their families to live at home as well as providing drop-in services providing information and education in the community in the quest for a dementia friendly community. Over a total of 386 hours are required to be completed over a two year period two years. The course covers a wide range of topics from basic knowledge such as dementia policy, dementia care, psychology, and mental

health to general issues such as ideals of dementia care, protection of human rights, and human nature. Students participate in various activities including mock wandering training, forgetfulness prevention and consultation. As of 2014, eighty-five students have completed the course; half of them are nurses at a long-term care facility or a hospital, and another half are care managers or long-term care social workers.

There are other programs including health check-up for dementia, dementia prevention classes, and social gathering of people with dementia and dementia caregivers. To date, much attention has been given to the Omuta Dementia Friendly Community model and consequently more than 100 municipalities have replicated the model in accordance with their local needs in achieving age friendly communities.

Conclusion

With an aging population that is unprecedented in speed and scope in Japanese society, the provision of long-term care is crucial. As the first country in Asia where many countries are/will also be confronted with the challenges of elder care, the Japanese government has made long-term care for the elderly a high priority issue for the past two decades and has been implementing a number of policies including a national long-term care insurance system in 2000. After over a decade of implementation of the LTCI, which has attempted to address the issues of providing elder care, this effort is seen as increasingly inadequate to provide necessary care. Consequently, it has become apparent that rebuilding neighborhood networks and community is a key supplement to LTCI services in meeting the needs of elder care because, “Dementia is overwhelming not only for the people who have it, but also for their caregivers and families” (WHO, 2010, p.2) and community support is critical.

The Omuta model, while facing many challenges, could offer an example of community rebuilding by investing in human capital, providing education to youth for better understanding about dementia, and enhancing a sense of urgency and community spirit through different activities. Moreover, building neighborhood and community is also good for disaster preparedness and other unforeseeable emergencies that require social networks, connectedness, and integration of all assets. Two key issues that must be addressed is the development of human resources to adequately build this form of social capital. Specifically, training of professionals in community development, social network development, community organizing, and mobilization of mutual efforts must be enhanced and secondly, development and funding of paid positions in adequate numbers to further this work is critical. Given these resources, community workers, community organizers, social workers, and social justice workers have unique skills and opportunities to build mutual support systems and a sense of connectedness. As for the policy makers, political will is necessary to ensure adequate resources to prepare for a super-aging society.

The world’s older population is growing more than twice as fast as the world’s total population (UN, 2009) and almost half of people with dementia live in Asia. Japan’s experience with aging policies, programs and different approaches to coping with elderly care could offer some lessons for countries that soon will be faced with similar aging challenges. However, many developing countries are less likely to have necessary policies in place and consequently the reliance on informal caregiving by family, neighborhood, and community members will be even greater. Maintaining and expanding existing helping mechanisms and supporting the development of social capital and collective action is necessary and crucial to formulating aging related policies. Tremendous time and effort is required to build or rebuild social networks and

connectedness in communities. Japan is now committed to this process and will provide critical insight into this process and its impact in an ageing society.

Funding

This study was supported by JSPS Kakenhi (Grants-in-Aid for Scientific Research) Scientific Research (C) Grant Number 24530701, “Exploring Empowerment-oriented Community Work Model in Developed Countries” (Principal Investigator: Miyuki Inaba), 2012-2015.

References

- Blanchard, J. (2013). Aging in Community: Communitarian Alternative to Aging in Place, alone, *Generations*, 37 (4), 6-13.
- Cabinet Office. (2013). *Kourei Shakai Hakusho [White Paper on Aging Society]*. Retrieved from http://www8.cao.go.jp/kourei/whitepaper/w-2013/zenbun/s1_1_1_02.html.
- Campbell, J. C., Ikegami, N., & Jo Gibson, M. (2010). Lessons from Public Long-Term Care Insurance in Germany and Japan, *Health Affairs*, 29, 87-95.
- Clenfield, J. (2014, May). Japanese Part-Time Women Have Had Enough. *Business Week*. Retrieved from <http://www.businessweek.com/articles/2014-05-29/japans-women-fight-wage-discrimination-in-part-time-economy>.
- Cox, E. O. (2008). Aging in the United States: Challenges to social policy and policy practice. In K.M. Sowers & C. N. Dulmus (Eds.), *Comprehensive Handbook of Social Work and Social Welfare: Social Policy and Policy Practice* (pp. 177-202). Hoboken, NJ: John Wiley & Sons.
- Fukutami, E., Kimura, Y., Wada, T., Okumiya, K., & Matubayashi, K. (2013). Long-term care prevention project in Japan, *The Lancet*, 381 (9861), 116.
- Hanifan, L.J. (1916). The Rural School of Community Center, *Annals of the American Academy of Political and Social Science*, 67, 130-138.
- Hashimoto, A., & Ikels, C. (2005). Filial piety in changing Asian societies. In M.L. Johnson (Ed.), *The Cambridge handbook of age and aging* (pp.437-442). Cambridge, England: Cambridge University Press.
- Higuchi, K. (2004). Women’s Association for a Better Aging Society. *Geriatrics and Gerontology International*, 4, S229-S231.
- Institute for Research on Household Economics. (2013). *Home-based Care, Finance, and Burden*. Retrieved from <http://www.kakeiken.or.jp/jp/research/kaigo2013/mokuteki.html>
- Koyano, W., Hashimino, M., Fukawa, T., Shibata, H. & Gunji, A. (1994). The social support system of the Japanese Elderly. *Journal of Cross-Cultural Gerontology*, 9, 323-333.
- Kretzmann, J., & McKnight, J. (1993). *Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community’s Assets*. Evanston, IL: The Asset-Based Community Development Institute.
- Loeffler, D. N., Christiansen, D. C., Tracy, M. B., Secret, M. C., Ersing, R. L., Fairchild, S. R., & Sutphen, R. (2004). Social capital for social work: Toward a definition and conceptual framework. *Social Development Issues*, 26(2/3), 22-38.

- Ministry of Health, Labour and Welfare. (2014). *The Number of Centenarians*. Retrieved from <http://www.mhlw.go.jp/file/04-Houdouhappyou-12304250-Roukenkyoku-Koureishashienka/0000057762.pdf>
- Ministry of Health, Labour and Welfare. (2013a). *Comprehensive Survey of Living Conditions*. Retrieved from <http://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa13/>
- Ministry of Health, Labour and Welfare. (2013b). *Estimated Number of the Elderly with Dementia*. Retrieved from http://www.mhlw.go.jp/houdou_kouhou/kaiken_shiryou/2013/dl/130607-01.pdf
- Ministry of Health, Labour and Welfare. (2012). *Five-Year Plan for Promotion of Measures Against Dementia (Orange Plan)*. Retrieved from <http://www.mhlw.go.jp/stf/houdou/2r9852000002j8dh-att/2r9852000002j8ey.pdf>
- Ministry of Internal Affairs and Communications. (2014a). Statistics Topics No. 82: The Number of Children. Retrieved from <http://www.stat.go.jp/data/jinsui/topics/pdf/topics82.pdf>
- Ministry of Internal Affairs and Communications. (2014b). Statistics Topics No. 84: The Number of elderly. Retrieved from <http://www.stat.go.jp/data/topics/topi840.htm>
- Muramatsu, N., & Akiyama, H. (2011). Japan: Super-Aging Society Preparing for the Future, *The Gerontologist*, 51(4), 425-432.
- Nakanishi, M., & Nakashima, T. (2014). Features of the Japanese national dementia strategy in comparison with international dementia policies: How should a national dementia policy interact with the public health- and social-care systems? *Alzheimer's & Dementia*, 10 (4), 468-476.
- National Institute for Population and Social Security Research. (2012). Population Projections for Japan: 2011-2060. Retrieved from http://www.ipss.go.jp/site-ad/index_english/esuikai/gh2401e.asp
- Omuta City. (2013). Omuta-city Dementia Care Community Development Project report.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American Community*. New York, NY: Simon & Schuster.
- Saegert, S., Thompson, J. P., & Warren, M. R. (Eds.)(2001). *Social capital and poor communities*. New York, NY: Russell Sage Foundation.
- The Japan Times. (2014, May 21). *Caring for dementia sufferers*. Retrieved from <http://www.japantimes.co.jp/opinion/2014/05/21/editorials/caring-dementia-sufferers/>
- The Japan Times. (2013, June 3). *4.6 million elderly are suffering dementia*. Retrieved from <http://www.japantimes.co.jp/news/2013/06/03/national/science-health/4-6-million-elderly-are-suffering-dementia/#.VDjhTUuXjis>
- Tomiya, N., Noguchi, H, Nishi A, Reich, M. R., Ikegami, N., Hashimoto, H., Shibuya, K., Kawashi, I., & Campbell, J.C. (2011). Population ageing and wellbeing: lessons from Japan's long-term care insurance policy, *The Lancet*, 1182-1192.
- Tsutsui, T. (2010). The Current State and Future Development of the Long-term Care Insurance System in Japan. *Journal of the National Institute of Public Health*, 59 (4), 372-379.
- United Nations, Department of Economic and Social Affairs. (2009). *World Population Prospects: The 2008 Revision Highlights*. New York: United Nations.
- United Nations Population Fund. (2012). *Ageing in the Twenty-First Century: A Celebration and A Challenge*. Retrieved from <https://www.unfpa.org/public/home/publications/pid/11584>

- World Health Organization. (2012). *Dementia: a public health priority*. Geneva: WHO.
- Yamamoto, N., & Wallhagen, M. I. (1997). The Continuation of Family Caregiving in Japan, *Journal of Health and Social Behavior*, 38(2), 164-176.
- Yong, V. & Saito, Y. (2012). National Long-Term Care Insurance Policy in Japan a Decade After Implementation: Some Lessons for Aging Countries. *Ageing International*, 37, 271-284.
- Zhang, S., & Anderson, S. (2014). Individual Economic Well-Being and the Development of Bridging and Bonding Social Capital, *Social Development Issues*, 36(1), 33-51.