

Challenges for Elderly Care in China: A Review of Literature

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China is one of the most dynamic markets for healthcare and products relating to healthcare, this is credited to its burgeoning economy and its demographic capital. However, the generation which had powered the Chinese economy to where it is currently, is ageing. The projected demographic shift show that China is growing old at a faster rate and at an earlier stage of development than most countries. Match that with strict family planning policies in the past; a weak social security system; increasing commercialisation of healthcare; urban and rural divide in development, opportunities, resources, and benefits; and changing socio-cultural values; the country lacks many of the capacities which have aided other countries deal with an ageing population. On the other hand, the Chinese government has overturned the one-child policy, expanded the limitations of the urban *hukou*, plans on increasing the age of retirement, implemented various chronic-disease prevention programmes at the national level, encouraged community based long-term care delivery systems for the elderly, and has encouraged private investments in the elderly care industry and other social sectors. However, it is pertinent to enquire as to where such investments are directed to and which part of the population it would benefit the most. Since ensuring and balancing elder care challenges would be crucial for the social and economic development and stability of China.

Purpose – The purpose of this paper is to analyse the latest findings on challenges of an ageing and elderly population in China with emphasis on the city of Shanghai. The relevant question relating to this end was: What is the pattern of demographic transformation in China (Shanghai)? What are the types of services available for the aged? How is the government prepared to handle its ageing population?

Design/methodology/approach – Narrative synthesis of publications was conducted. It involved a systematic search of journals, books, databases, news articles, government white papers collected from the internet from 1980 onwards.

Findings – A total of 122 relevant publications were identified in this review (extending from 1985 to 2017). Of which, a majority of the publications were from 2010 onwards.

Research limitations/implications – This review only took into account publications in English and limited number of translated Chinese papers. Therefore, the review may fail to encompass all

published literature. Additionally, this study did not endeavour to evaluate the methodological quality of each scientific publication, and as such the study findings were taken as reported.

Keywords: Demographic change, aging population, China, commercialisation of care, Gerontology, Population ageing, Economics of ageing, Chronic diseases, Community based care.

Paper type: Literature review

A UN report, *World Population Prospects: The 2017 Revision*, estimated that in 2017 there are about 962 million people aged 60+ in the world, comprising 13 percent of the global population (UN DESA 2017, 11). Of which approximately 225 million are from China¹, which suggests that China holds 23 percent of the global population over the age of 60. As China's life expectancy at birth is projected to increase to 80 years in this decade (UN DESA 2013a) the concern is that China will double its 60+ population within the next 23 years (UN DESA 2013b, 13). In comparison it took Germany sixty-one years to double its elderly population and sixty-four years for Sweden. Already a large proportion of the population (54 percent) are concentrated in the age band of 25-59 as of 2017, and 16 percent are in the 60+ band². This means that the working population will experience a contraction in its numbers while those retiring would increase. This has resulted in growing concerns not only in the social and cultural transitioning of China, but also concerns regarding the economic repercussions an ageing population may prompt as well. Hence, the dual nature of the problem can be surmised as a need to sustain strong economic growth while at the same time develop social systems that would take care of the ageing population.

In comparison to this India has only 9 percent in the 60+ age group with a healthy 28 percent in the 0-14 age group (UN DESA 2017). China also finds itself as one of the most populated countries having below replacement fertility levels (UN DESA 2017, 14) a total fertility rate of 3.00 (live births per woman) in 1975-80 which almost halved by 2005-2010 to 1.53. At the same time, China's gross dependency ratio has decreased from 62.2 percent (54.6% Children, 8% Old aged) in 1982 to 37.0 percent (22.6% Children, 14.3% Old aged) in 2015 (National Bureau of

¹ 16 percent of China's population are over the age of 60. (UN DESA, 2017. Table S.1, p. 18)

² UN DESA projection suggests that by 2050 China's 60+ will make up 34 percent of its total population.

Statistics 2016). But the shift in dependency from children to the aged will only magnify in due time. However, as the population ages its social programmes are considered insufficient, and not what one would expect from a nominally socialist country. China presently is thought to be at the end leg of the ‘golden age’ of population age-structure transformation³, therefore, it is suggested that China learn from other Asian countries such as Japan and Korea to avoid being caught in the ‘middle-income trap’ (Tian 2017).

China needs to modify and develop its resources in order to provide services which are of an equivalent quality in the rural as it is in the urban areas. With an emphasis on caring for the most vulnerable elderly, an increased attention to the prevalence of chronic illnesses (Liu, et al. 2009) (Smith, Strauss and Zhao 2014) (WHO 2015), provision for support to the family in caring for the elderly (Li and Chen 2011), altering the present medical care system (Li and Tracy 1999) (WHO 2015) and increasing the reach of their social security schemes. Presently, the infrastructure in place in China is insufficient to provide for their projected population trajectory [see table 1.].

Institutions	Nos.
Medical Institutions	990,248
Hospitals	27,215
Hospital beds	5.3 million
Community Health Service Centres	34,588
Clinics	195,866
Elderly Care Institutions	28,000
Elderly care Beds	6..7 million

Table 1 - Source: Statistical Communique of the People’s Republic of China, 2015 National Economic and Social Development, National Bureau of Statistics PRC, February 2016.

Economic Impact of Ageing

An OECD report summarised the potential negative impact of a skewed demographic dividend on the Chinese economy as a likely loss in advantage over both high-income and low-income countries (OECD Local Economic and Employment Development (LEED) 2014). As on the one

³ “The ‘golden age’ refers to the early phase of population aging, where the proportion of working-age population increases and the proportion of senior people and youth decreases.” (Tian 2017, xi)

hand, China has not yet gained the advantage in technology and innovation as other developed countries have, and on the other hand the decrease in working population could hamper the economy.

A significant portion of the debate about ageing is prompted by the concept of '*demographic determinism*', which is the notion that changes in the society and economy are due to specific changes in population, and visa-versa. It emphasises on a 'crisis' which needs rectification, but as it is with China the 'crisis' is looming due to the implementation of the same logic which pushed for demographic engineering. That is, the discussion emerges from the neo-Malthusian school of thought which stressed on birth control methods, which also identifies the working class with the problem of overpopulation. The prospects of other conditions driving societal change and public expenditures are pushed aside, allowing for reasoning along the lines of economics of labour and industrial output (Lee, Mason and Park 2012) (China Power Team 2017) (Maestas, Mullen and Powell 2016). The understanding follows that, expenses in taking care of the elderly would increase while at the same time the economy will be devoid of high speed growth due to a shift in the number of working age population. The terminology through which they convey this argument is that of *demographic dividend*. In a crude sense, it measures the ratio of the working population paying taxes and contributing to society economically and retirees who do not, while at the same time draw a pension.

In this way the reasoning negates the social and economic contribution the elderly provides. Subsequently, compelling evidences linking the impact of population to economic changes are vague and few, this allowed for a more *neutralist view* of population to take root. In its place presently, "the importance of population age distribution in the determination of macroeconomic performance" have gained a dominant standing (Bloom and Canning 2008, 27).

Such debates do not take into consideration the fact that the amount spent by the government on health in proportion to the GDP is still very low. According to the World Bank data, China spends about 5.5 percent of its GDP on health of which 3.09 is public spending (2.4 percent is private expenditure) (World Bank Group 2017). Additionally, there are only a few studies which analyses differential health care spending correlation to 'life-cycle' in China (Feng, Lou and Yu 2015). Such studies are stimulated by the logic that as we grow older our health needs increases and therefore health expenditure also increases. It has been deduced that above the age of 65

people's spending was 2.5 times higher the amount than those below 65 years of age. It also negates the fact that the ageing problem is also about how the overall demand for certain goods will be affected, since they will not provide any utility for the older household (Walder and Döring 2012).

A study correlating the impact of socioeconomic status on the place of death (1998-2012) shows that a majority of deaths occurred at home (87.78%) (Cai, Zhao and Coyte 2017). Furthermore, the study showed that the elderly with higher socioeconomic status were more likely to die where health resources were concentrated, i.e., in a hospital or other type of institution. However, no correlations can be made as to whether this signified a higher demand for healthcare services in the higher socioeconomic classes as alternatively, the paper also highlights the important cultural meanings of what it means to die at home. Subsequently, on the subject of cultural values; the status of an elderly has little influence on their consumption patterns as family members and close friends exert a strong influence on personal health behaviour and disease/illness management (McLaughlin and Braun 1998). Nevertheless, the publicly subsidised healthcare system in China are primarily funded through three sources: government subsidies, user fees, and drug mark-ups (Meng, et al. 2004).

As the role of the state reduces in healthcare financing we see an increase in medical spending, a study in 2003 shows that the medical spending raised the number of rural households living below the poverty line by 44.3% (Liu, Rao and Hsiao 2003). A similar trend is observed of elderly care in China, as the state relaxes norms allowing investments from foreign investors, thereby, reducing the role of the state in providing social security in old age. The State Council has been encouraging commercialisation by waiving business taxes on maintenance at facilities for the elderly, and lowered taxes (Adinolfi 2013) in order to make the ventures lucrative to outside investors. Nevertheless, such facilities must be matched with the ability of the majority of Chinese seniors to pay.

Social Security for the Elderly

China endorses a social insurance type of social security programme, which mandates every individual to maintain an account to receive social assistance. The social security system in China is exclusive in nature, as outlined in their Social Insurance Law, it is largely for those who

participate in the social insurance scheme (Standing Committee of the National People's Congress 2010). Despite the government's commitment to respond aggressively to the ageing of the population; by establishing social endowment services, and developing the service industry for the elderly, the level of secureness for these projects and programmes are considered to be relatively low (Jiang, Yang and Sánchez-Barricarte 2016). Especially in its capacity to pay for all medical expenses and living expenditure after retirement, and this is more uncertain for the rural ageing population (*ibid.*). Considering, the differences in the source of income for the rural population, which is mainly through family remittances in comparison to the urban elderly whose main income source after retirement is their pensions (Li, et al. 2013) (Giles, Wang and Zhao 2010).

In 1951, the *Laodong Baoxian Tiaoli* (Labour insurance regulations) was introduced by the State Council of the People's Republic of China, as the first social security system for the state-sector employees (Liu and Sun 2016) (Williamson, Lianquan and Calvo 2017), designed to benefit employees of state-owned enterprises with an “iron rice bowl” (employment, housing, healthcare and pension) (Fung 2001). However, no such programme was extended to workers in the private

Peoples' Republic of China Social Security	Pension System	Health System
	The Urban Enterprise Pension System (UEPS) covers urban workers, who in practice are mainly employees of large private enterprises and State-owned-Enterprises (SOEs).	Government hospital and clinic system severely underfinanced by governments, such that effective access is highly inequitable, being contingent on ability to pay out-of-pocket for most services and drugs.
	Rural Pension scheme allows rural workers to make voluntary contributions to individual accounts that are subsidized by local and central governments.	There exists a significant differential in the availability of health care services between urban and rural areas. Although charges for basic services are in principle publicly regulated, private and public hospitals, particularly in urban areas, are motivated to mobilize revenues by acquiring modern technologies and charging for these as well
The much smaller pension plan for		

<p>non-employed urban residents (though this smaller plan is sometimes seen as a subset of the UEPS)</p> <p>The Civil Service pension system covers most employees of government agencies and related governmental bodies—without contributions required from these workers. In January 2015, the pension programme for civil servants and public-sector employees was abolished, and they are now subject to the same pension rules as employees in enterprises</p>	<p>as pharmaceuticals.</p> <p>Urban: Initiatives are underway to provide basic medical insurance (BMI) for urban employees in the formal sector (though not for migrant workers from the rural areas), through medical savings accounts and some risk pooling within an urban area. Benefit coverage is limited and there are still significant out-of-pocket costs for significant medical episodes, particularly for the poor. About one third of the urban population is covered by BMI schemes, and one half of urban residents is uncovered by health insurance. Cross-subsidization by contributors to elderly retirees is also proving costly to the system.</p> <p>Rural: Only a small fraction of rural residents has access to the new rural cooperative medical insurance scheme, which is voluntary in coverage, subject to adverse selection problems, and limited in benefits. Also, China is experimenting with initiatives to establish subsidized community health centres. In some cases, some basic medical insurance fund managements have started to use DRGs or fixed-fee-for-service schemes to pay for inpatient service.</p>
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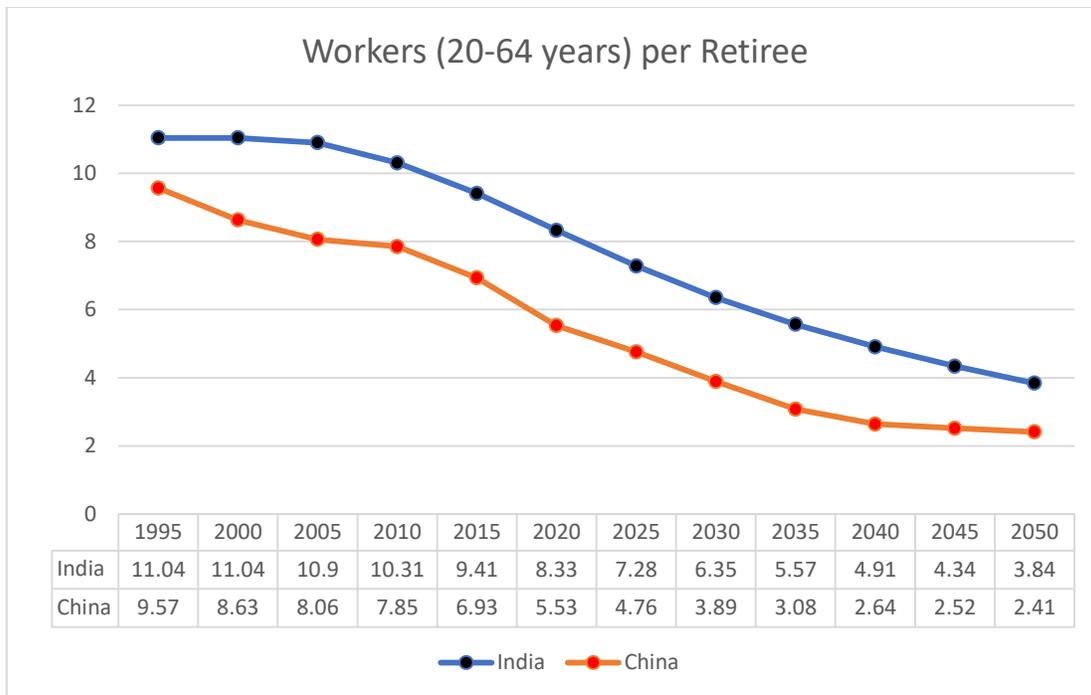
Table 1 IMF Working Paper, Is Asia Prepared for an Aging Population?, 2006.

sector, however negligible it may have been at that time (Song and Chu 1997). This benefit was provided until 1997, also known as legacy pensions it did not require regular contributions from

the workers. Post 1997, a contributory pension system was set up (*State Council Decision on the Establishment of a Unified Basic Pension System for Enterprise Workers, 1997*) which until 2011 had covered 284 million urban workers (Ministry of Human Resources and Social Security 2013). However, the new pension scheme (*the New Rural Pension Scheme (NRPS)*) is an attempt to universalise and widen the social safety net, by establishing: i. a universal non-contributory social pension plan, and ii. A voluntary funded contribution scheme (Williamson, Lianquan and Calvo 2017). The social pension is available to rural residents who have reached the age of retirement even if they have not contributed to the scheme ever, but it is conditional contingent on the provision that their adult children enrol and contribute to the NRPS (*ibid.* p. 67). This new plan has been which has been combined with the pre-existing pension plan covering urban employees and extended to cover urban non-employed workers and all rural residents. This fact highlights another shortcoming to the devices of the Chinese government to mitigate the pressures of elderly care which will be addressed in the section on vulnerable groups within the aged. Nevertheless, the Chinese pension system is still very fragmented, i.e. no one-system of pensions exists, with the population divided into different pension pools of urban and rural residents, public employees, civil servants, private enterprise employees, and so on.

The featured universal coverage suffers from the fact that the benefit levels are very low (US\$10 per month) (Williamson, Lianquan and Calvo 2017, 67) (Liu and Sun 2016, 16), and the benefit level varies from region to region. In provinces like Liaoning, Jilin, and Heilongjiang pension pay-outs exceed revenue collection (Rueters September 6th 2016). As the data below (see graph 1.) demonstrates, the 1980 census statistics show a ratio of 13:1 (workers:retirees), 10:1 in the 1990s, but by 2005 the ratio became 8:1, signifying an increasing pressure on the working population.

Medical insurance coverage is low, with out of pocket expenses increasing, inter-regional differences in resource distribution and medical security is large, prices of drugs and treatment are expensive. However, specifically related to elderly care in China— there is a lack of skilled labour (nursing). The ageing industry, it is argued, also lacks appropriate policy support, with companies arguing that in the said field the initial investments are large, while at the same time the earnings are low, and the capital recovery period is long.



Graph 1. Source: U.S. Bureau of the Census, International Data Base (www.census.gov/ipc/www/idbacc.html)

However, the fact that China has made ageing a top priority for its provinces (see table 4.) has not alluded investors with markets interests in the silver and white industry⁴. Areas of high potential has been identified, with opportunities for a market base of about 440 million elderly people by the year 2050. These potential areas are mainly concentrated in the service sector with opportunities in home nursing services, home care service, e-healthcare services, products and hardware related to elderly care. Nevertheless, as Benjamin Shobert, founder and managing director of Rubicon Strategy Group, put it, “today’s elderly in China still have to reveal their appetite for senior living products” (Shobert 2015). However, a majority of the elderly population are represented in the rural areas (WHO 2015) (Lei, et al. 2015), add to this the impact of rural to urban migration and the fact that ageing in rural areas are progressing at a faster rate (Cai, et al. 2012): the major demand for care services would be from the mid to low-end market. As such China is said to have three categories of market for elderly care: low-end, mid-end, and high-end, and “74% of the total elderly care facilities are located in rural areas, and are mostly low-end public nursing homes”

⁴ China’s 13th Five Year Plan, has dedicated a huge budget to elderly care.

	Population Age (%)				Population (thousands)			Total Fertility (Live births per female)	
	0-14	15-24	25-59	60+	Total	male	female	2015-2020	2045-2050
India	28	18	45	9	1 339 180	693 959	645 221	1.63	1.75
China	18	12	54	16	1 409 517	726 320	683 197	2.30	1.86
	Population (millions)								
India	374.9	241.05	602.6	120.5					
China	253.7	169.1	761.1	225.5					

Table 2 Source: UN DESA (2017)

Commercialisation of the Chinese Senior Living Home System

Over the last few decades, the Chinese government has issued numerous laws, policies and regulations concerning the well-being, healthcare, education, and rights of older people (State Council of the People's Republic of China, 2006.) An example of which is shown above in *Table 2*. In the rural areas especially, the government has recognised the problem of elderly care and has launched several measures to that end. Even among the rural populations the poorest western parts of China said to become the fastest ageing area (Woo, et al. 2002). However, it is argued that what the rural areas lack in in terms of welfare and social benefits

China is currently experiencing a decline in family care and the rise in nursing homes for the elderly (Chu and Chi 2008). However, this is not a feasible solution for the elderly in China as according to the current regulations the cost of nursing homes is classified into three levels (Wan, Yu and Kolanowski 2008), and the costs of which account for a huge proportion of the pensions. Therefore, it is argued that the nursing home model only fits the needs of better-off Chinese families (*ibid.*). Also, China does not have the capacity for a western-style social care

model (Zhou and Walker 2016), then again, a western-style care and services may not align to the needs of the preferences of the people as well (Feng, et al. Dec 2012). Hence, there is a need to incorporate Chinese characteristics into the care component instead of simply mimicking western welfare services.

According to Deloitte Analytics there are four main investors, investing in four major areas of elderly care. Four main investors are- i. real estate developers, ii. Elderly care service institutions, iii. Insurance institutions, and iii. Others, investing in either senior housing development, operation of elder care service, insurance and wealth management products aimed at the elderly market, or care projects financing (Deloitte Analytics 2014). A market research on (specifically only on old-age real estate market) have estimated business opportunities worth approximately RMB4 trillion in the Chinese aged care market, which could be expected to grow to RMB13 trillion by 2030 .

Mode of care for the elderly in China (informal vs formal)

1. Family care

This could also be termed as the informal form of senior support (R. J.-A. Chou 2010), as care is provided by spouses or adult children, i.e. the immediate family (Wan, Yu and Kolanowski 2008). According to Chinese tradition, co-resident family members provide material and instrumental care for aging parents (Baker 1979). Underlying this tradition is the Confucian system of *xiao*, most often translated as "filial piety." It promotes obedience, respect, and reverence for elders and has long permeated Chinese society, apparently surviving the Cultural Revolution and other political upheavals (Davis 1983; Sher 1984, cited in (Lowry October 2009)). However, family care is declining in China as “subjective wishes collide with objective conditions” (Ed. Board of Population Resesearch 2001)

2. Self-care

It is the most basic form of primary care (Padula 1992) which is based on learned goal centric human activity often based on the need to meet certain requisites in relation to their condition or circumstance (Söderhamn and Cliffordson 2001). However, this would depend on an

individual’s ability to remain an active agent, instead we see that advanced age is trailed by a loss in independence. It is not a traditional method of caring for older people in China but presently the situation in China has led to an increase in *empty-nests*, which has forced many older adults to rely on themselves (Wan, Yu and Kolanowski 2008).

3. Community care (volunteers or low-paid caregivers)

The concept of ‘ageing in place’ is said to translate, in policy terms, to ‘community care’ (Zhou and Walker 2015). It is a mode of care which combines both home care and social care, which relies not on infrastructure and real estate for elderly housing but on services.

4. State-care

Currently, the state provides social welfare to elderly who either have no children or other dependable legal guardians, no work ability, and no means of livelihood. This is also known as the *three Nos elderly* (Feng, et al. Dec 2012) (Chi, Chappell and Lubben 2001, 181), which is complimented by the *five Guarantees* for (The State Council Information Office and the China International Publishing Group 2017) (S. Wang 2008)food, shelter, clothing, health care, and burial expenses. This was a community-based welfare system which was funded and operated by rural cooperatives.

Models of care:

1. Home care model
2. Institution based model
3. Community based model (CCRC, aka Continuing care retirement communities)

Senior housing development falls into the category of real estate development and is not administered as part of elder care industry. (Ministry of Civil Affairs)

China’s Main Policies in Support of the Elderly Care Industry (2011-2016)		
Document no.	Date	Main Content
Latest Supportive Policies for the elderly care industry		
China issues five-year plan on elderly care	2016	Quality public services for senior citizens, improved pensions and healthcare, private capital and NGOs

		granted more access to the elderly care market.
Cai Shui, no. 36 Appendix III	May 2016	Elderly care industry provided by elderly care institutions exempt from VAT (Value Added Tax)
Min Fa, no. 52	April 2016	Procedures are streamline for medical institutions providing elderly care, and elderly care institutions that provide healthcare services.
Yin Fa, no. 65	March 2016	Guidelines on financial support and subsidies in the elderly care industry, including listing and financing.
Additional Policies in order to encourage FDI in Elderly Care		
Fa Gai Ban She Hui, no. 992	April 2015	Further encouragement to foreign companies to invest in China's elderly care service industry.
Min Fa, no. 78	April 2015	Guidelines on financial support in place for the Elderly care industry.
MOC Order no. 22	April 2015	Nursing Homes are classified as avenues for investment encouragement.
Min Fa, no. 33	February 2015	Detailed measures encouraging foreign firms to invest and engage in home-based, community-based, and institution based elderly care service industry.
Fa Gai Jia Ge, no. 129	January 2015	General policy in order to decide which items and services should be charged in the private elderly care institutions.
Cai Shui, no. 77	January 2015	Policies exempting and reducing administrative fees on elderly care and medical institutions.
Land use standardisation for elderly care industry; FDI barriers broken down; Cultivation of human resource talent		
MOC, MCA Announcement [2014] no. 81	November 2014	Policies encouraging Foreign Investment in elderly care services
Fa Gai Tou Zi, no. 2091	September 2014	Notice on accelerating the construction of healthcare and elderly care projects
Jiao Zhi Cheng, no. 5	June 2014	Opinions on cultivating well-trained human resources for elderly care facilities
Min Fa, no. 116	May 2014	Notice promoting the construction of elderly care facilities
Jian Biao, no. 23	January 2014	Notice to improve the planning and construction of urban elderly care service facilities
Standardisation of the Administration of elderly care services		
Min Ban Fa, no. 23	December 2013	Notice: to develop a comprehensive pilot programme for elderly care services
Guo Fa, no. 35	September 2013	Opinions of the State Council on accelerating the development of elderly care industry, and clarification of the main goals and tasks.
MCA Order no. 48	July 2013	Detailed measures on licencing in the elderly care

		institutions
MCA Order no. 49	July 2013	Detailed Administrative measures on the elderly care institutions
Preferential Policy Framework launched for China's Elderly-care Industry		
Min Fa, no. 209	November 2011	General opinions supporting social elderly care services by utilizing developmental finances
Guo Ban Fa, no. 60	December 2011	The State Council announces its initial preferential policy framework to develop China's elderly care industry.

Table 3 source: China Briefing (May 2016), Dezan Shira & Associates, Issue 165, p. 9. and The State Council, PRC website.

Elderly care in Shanghai

At the end of 2015 Shanghai had a population of 24.15 million (87.6 percent Urban), with a dependency ratio of 12.00 percent (child dependency) and 16.47 percent (elderly dependency) (National Bureau of Statistics of China 2016). Additionally, according to the Shanghai Municipal Civil Affairs Bureau and the Shanghai Statistics Bureau, Shanghai's life expectancy rate is over 82 years, which is one of the highest in China. One of the contributing factor to this was the drastic drop in the crude mortality rate (CDR) in the 1950s, in 1954 Shanghai had a CDR as low as 7 deaths per 1,000 population (National Bureau of Statistics of China). Hence, an increasing life expectancy, and a drop in CDR resulted in the population boom in the mid-20th century. By 1993 Shanghai had achieved a negative growth in its population (B. Gu 1995). All these factors have resulted in an ageing population, wherein it is estimated that by 2030 the elderly in Shanghai will comprise 39.7% of its total population (Zhai Z 1997).

According to the Shanghai Statistical Yearbook 2014, 3.88 million citizens are aged over 60 years old, accounting for the highest old age dependency ratio in all of China (Xiaoyi and Fisher Aug 2011). To address situation such as this, the 12th Five-year Plan (2011-2015) suggests a senior care system, as stated earlier, that is largely based on home-based care, supported by community care, and supplemented by organization care. In Shanghai, the plan is similar with a considerable emphasis place on long-term care at home, also known as the '9073' structure system or the '9064' system (China 2011-2015). That is to say, 90 percent of seniors would receive home based care with the help of family members or trained nurses, while 7 percent

would receive community nursing services such as a day care centre and meals delivery programme. Finally, the last 3 percent would have to rely on nursing homes (Z. Qian 2012). However, the problem with relying on trained workers is that there are very few to go around in the first place (Song, et al. 2014) (Kwok, Wong and Yang 2014), especially for elderly who require special care (Chen, et al. 2017) (Wu, et al. 2016). As such, long-term care (LTC) refers to a comprehensive range of medical as well as non-medical services which would require an increase in investments.

Shanghai has been struggling with an ageing crisis since the 70s, when the population of those aged 65 and over grew from 5.9 to 7.15 percent (Di and Rosenbaum 1994). Then too it was felt that the changing population, family structure, and the growing needs of the elderly necessitated a need to improve the caregiving system relying on family alone. It was felt that an increase in societal involvement to meet these new challenges was what was needed (*ibid.* p. 106). According to the official press agency of the People's Republic of China, *Xinhua* News agency, in early 2016 Shanghai had about 699 nursing institutions with 126,000 beds, 422 daytime elderly care service centres, 163 home-based care centres, as well as 634 community canteens all servicing the elderly (Xinhua 2017).

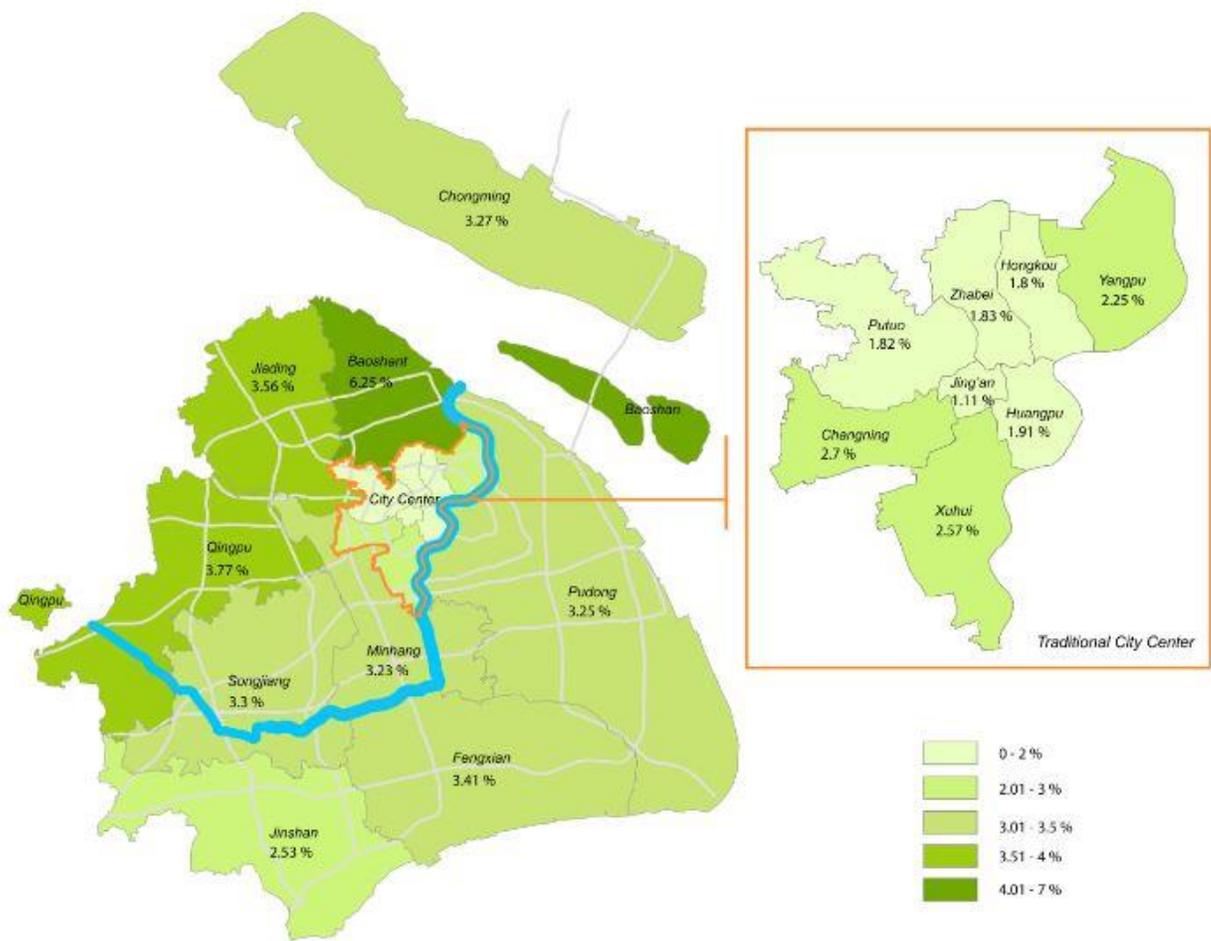


Table 4 Bed Supply for the elderly in Shanghai (X. Qian May 2015)

Nevertheless, partnerships between Shanghai’s leading government agency, the Shanghai Civil Affairs Bureau, and other foreign aged care providers have also opened up new avenues for developing design and operation of elderly care facilities (eg: Baptcare, Australia; Habitat for Humanity;), as well as developing workforce skills and training, and long-term insurance as well (Shanghai Civil Affairs Bureau 2017). Additionally, in June 2017, the 12th edition of the China International Exhibition of Senior Care, Rehabilitation Medicine and Healthcare was held in Shanghai. It is an exhibition that advertises to be an “... expo that understands the emerging trends of the silver industry and its search for deeper cooperation and further development in its related products, technology and services.” (Shanghai Civil Affairs Bureau 2016) However, it is yet uncertain how such programmes could benefit the most vulnerable of the Chinese/Shanghai elderly population.

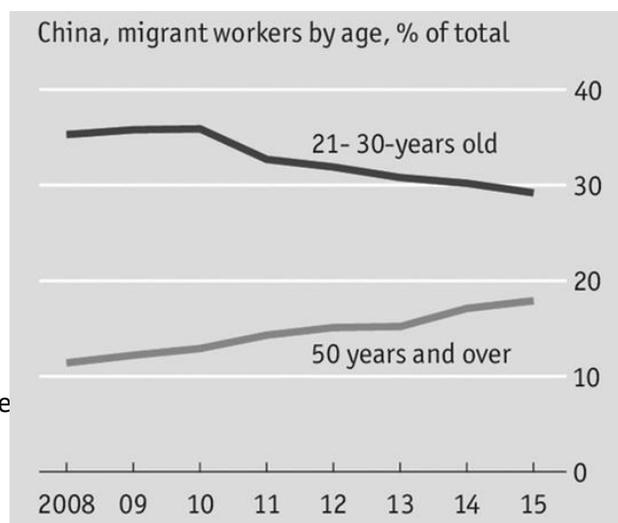
Vulnerable among the Vulnerable

1. Elderly Migrants

Internal migration from rural China, has led to the relocation of a large population of young men and women leaving their parents behind in the villages in search of work in the urban centres. This has resulted in an increase of depressive symptoms among older adults, and such disadvantaged mental conditions have been further compounded by impoverishment (Q. Song 2016). Subsequently, in 2012, China's urbanization rate reached 53 percent; internal migrants were estimated to number 230 million (NBSC, 2013a). However, most rural-urban migrants reside only temporarily in the cities (Roberts, 2000; Wang and Zuo, 1999; Zhang, 2011), but the migrating population demographics show that older people migrating have increased in the subsequent years, as can be seen in the graph ().

The composition of this moving population, dubbed the “elderly vagabonds” (Pinghui 2017), can be interpreted through the National Health Authority Report (Oct 2016), which submits that 43 percent of the older migrants move to look after their children or grandchildren, 22.5 percent migrate for jobs, while another 25.4 percent move for senior care. Another study based on the CHARLS participants found that between 2001 and 2011 approximately 6.6 percent of them had migrated (Dou and Liu 2015). The study showed that females had a slightly higher proportion in terms of long-distance migration (54.2 %) (*ibid.* p. 758).

Many seniors rely on their children for care in old age, while others find work on their own. However, most rural migrants do not have access to welfare services because most urban welfare services are provided only to those urban residents with a local hukou (household registration) (Cai, 2010a, 2010b). This limitation has resulted in welfare inequalities between urban residents and rural migrants in urban China (Lindbeck, 2008).



2. Childless Elderly

Traditional reliance on children for elderly care is not available to childless older people in China, which was estimated at 3.52 million childless older people in 2005 (Sun J, Wang Q (2008). *The current situation, trend, and characteristics of childless older adults in China*. cited in Feng, 2017). Additionally, childless elderly can be divided into three categories: those whose children have died, those who voluntarily remained childless (Z. Feng 2017), and those that never married (Zhang 2007). The group associated with loss of a child have been found to be the most vulnerable among the three to depressive symptoms, difficulty with Instrumental Activities of Daily Living (IADLs), and self-rated health states (*ibid.*). In a study based on the Chinese Longitudinal Healthy Longevity Survey (CLHLS) (Zeng, et al. 1998-2012) childlessness is significantly associated with life satisfaction, feeling of anxiety, and loneliness (Zhang and Liu, Childlessness, Psychological Wellbeing, and Life Satisfaction among the Elderly in China 2007), and this is corroborated by other studies (Chou and Chi 2004) (Y. Li, A perspective on health care for the elderly who lose their only child in China 2013).

It is also felt that this group requires additional support because of the absence of family-based support (Yiqing June 6 2017). As such, socioeconomic factors are an important facet to consider while studying old age, as socio-economic status was strongly related inversely to mortality from more preventable causes than from less preventable causes (Luo and Xie 2014) in those aged over 65 in China. This issue only becomes more foreboding when we consider that in 2011 more than one million families lost their only child (Ministry of Health. 2010 yearbook of health statistics in China, cited in (Li and Wu 2013)). Hence, this section of the elderly requires essential relief from the government in terms of healthcare, social care, economic support, and spiritual comfort (Li and Wu 2013).

3. Oldest-Old

The other vulnerable group is the most elderly, also known as the 'oldest-old' (see figure 1.), which has seen a step increase in number over the past few decades (T. Liu, Super-aging and social security for the most elderly in China 2016) (Population Reference Bureau 2010) (UN DESA 2013b, 32). It has been reported that among this group the rise has been unprecedented within the 90-99 age group, male population in this group has risen up to 38-

fold (1953-2010) (T. Liu, Super-aging and social security for the most elderly in China 2016). While at the same time the female population in this age group has risen by 28-fold. This is what Lui refers to as the ‘second order ageing’, to which he believes the social and political response have been slow and insufficient, with mostly local level intervention and no national social welfare policy.

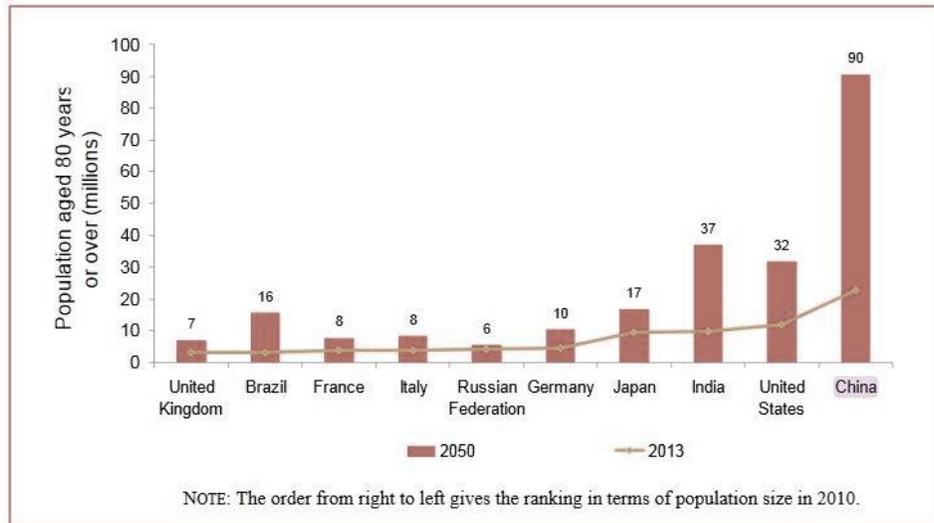


Figure 1 UN DESA, Population Division (2013). World Population Ageing, p. 33.

4. Elderly with Mental Health Problems

Elderly people with depressive symptoms are also another facet of ageing, with nursing home residents often more likely to be depressed and likely to have impaired physical health (Yan and Yi 2011) (Beekman, Copeland and Prince 1999). Depression among the elderly in rural China was also associated with deficient infrastructure (drinking water, fuel, road, waste management, toilet facilities), while supplementary support such as old-age income support, healthcare facilities, elderly activity centres act as effective strategies in lowering depression rates (Li, et al. July 2015). However, while older adults in rural China are shown to have higher rates of depressive symptoms in comparison with the urban population (Wang, Chan and Yip June 2014) (Gao, et al. Dec 2009), they have a lower risk of depression than those in Western countries (Chen, et al. 2005). As such the symptom based prevalence level of depression among older adults in China was found to be at 2% regardless of location of residence and socioeconomic

characteristics (World Health Organisation Oct 2012, 86) (Paul Kowal 2012) (Wu, Gua, et al. 2013).

5. Physically handicapped elderly

In China there are a series of legislation developed for the purpose of improving the living conditions and status of people with disabilities in China. This includes both the differently abled as well as those with intellectual disabilities. The Chinese Constitution, the Law on the Protection of Disabled Persons, and 50 additional national laws contain provisions which concern people with disabilities. These concern matters of **accessibility** (The Provisional Regulations of the Qualification System for Prosthetists and Orthotists (1997); The Regulations on Construction of Accessible Environment (2012)), **health** (The Rehabilitative Medical Education Plan (1992); The Mental Health Law (2012)), and **employment** (The Law on the Protection of Disabled Persons (1991); The Regulations on the Education of Persons with Disabilities (1994); The 12th Five Year National Programme on Disability (2011-2015)). However, when up to 60 percent of the elderly population are dependent on others other for help (Research Group of China, Research Group on Aging, 2011, cited in (Liu, Lu and Feng 2017)) the demands for elderly care increases.

In a study designed to assess disability among the elderly in Xiamen, China, among 14,292 elderly surveyed functional disabilities were commonly reported (Chen, et al. 2015). The relationship between functional disabilities and depression has been mentioned in the earlier heading on the **childless elderly** under activities of daily living (ADLs) or instrumental activities of daily living (IADLs). These are basic daily activities such as bathing, dressing, eating, mobility, and so on.

Hence, functional disability among the elderly requires more attention. In China, disability in old age was generally measured using ADLs (Gu and Yi 2004) (Zeng, et al. 1998-2012) but more recently studies measure both ADLs and IADLs.

Senior Demands and Living Preferences

In an Urban Planning thesis on planning senior living homes (X. Qian May 2015), Xiaomin Qian uses Maslow's classification of human needs (Maslow 1943) to discuss the development or improvement of senior living homes. Maslow argued that human needs arranged themselves in

hierarchies of *pre-potency* (*ibid.* p. 370), which he explained was the appearance of a ‘new need’ rested on the prior satisfaction of a previous need. In summation what Qian argues for is the need for need based development of elderly care in China and not a simple imitation of overseas experience.

Among the ageing elderly of the lower income class the preference for ageing-in-place is greater on the condition of appropriate neighbourhood support (Lum, et al. 2016). Also, in contrast to living with family 89 percent of Chinese citizens indicated that living independently as they age was important to them (Phillips January 2013, 21). The importance of engaging with the elderly on their preferences is due to the fact that such exercise could help provide ‘responsive patient-centred care’ (Themessl-Huber, G and P. 2007).

Commercialisation of Elderly care

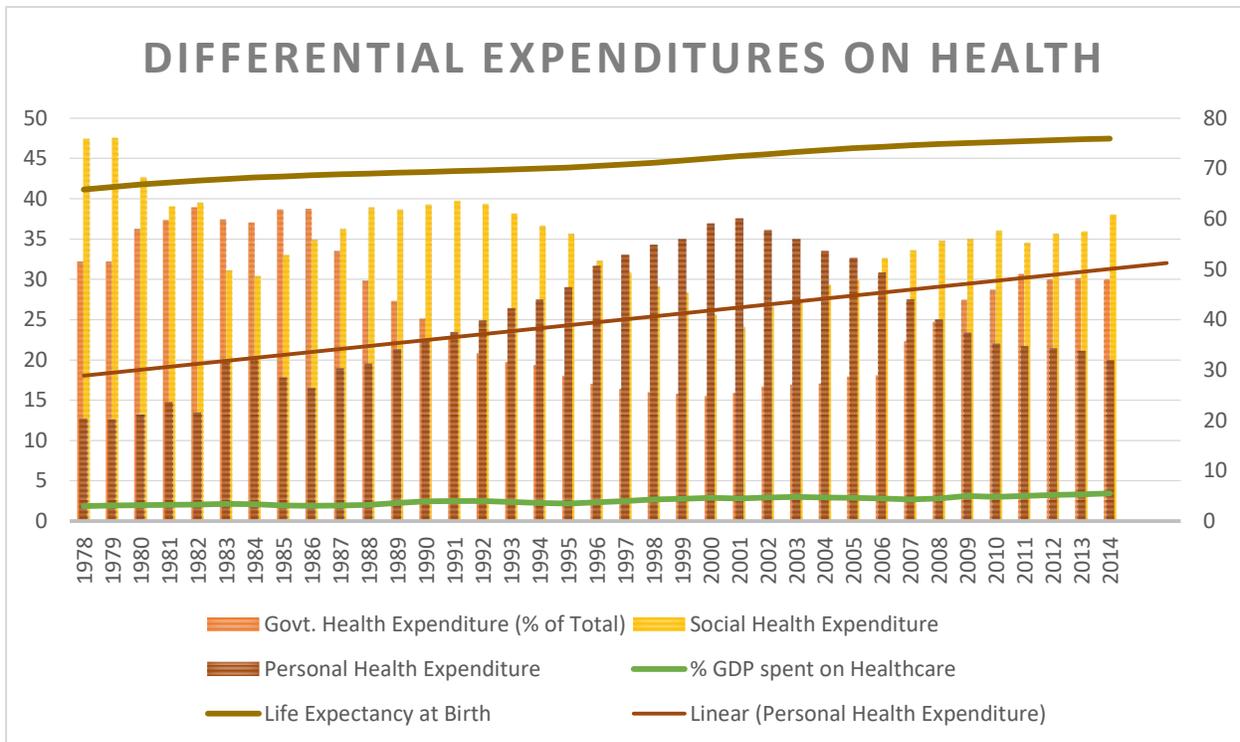
In a paper by Baorong Guo (Guo 2006) (Guo 2004), the reference to Grønbjerg’s conception of the ‘creeping revolution’ is made to illustrate the changing nature of social services and the suggestive altruism it embraces, and this was in specific regard to the United States of America. However, the trend suggested by her can be extended beyond the confines of the United States as it finds broader significance in other countries as well. As such, Grønbjerg refers an extended range of social services which stretch from day care for children, and care for elderly parents to community support for people with disabilities and individuals struggling with various forms of vices. In her paper she refers to the Great Depression of the 1930s, and points out that what we presently understand to be non-profit human service sector established primarily as community-based social service agencies (Grønbjerg 2001, 276). Nevertheless, the core of her argument is similar to those posed by Niel Gilbert (Gilbert 1985), where he discusses the ‘Commercialisation of social welfare’.

Grønbjerg’s paper rests on the premise that since the 1950s there has been a veiled upheaval in human services featuring i.) an ebbing presence of the public sector with the “withdrawal of public responsibility from the traditional social service field” (*ibid.* p. 286). ii.) Followed by a growth in non-profit human agencies fuelled by funding from government revenues, and iii.) for-profit agencies entering into the field of social services which had become conventionally occupied by non-profit organisations (Guo, *The Commercialization of Social Services: Toward an Understanding of Nonprofits in Relation to Government and For-profits* 2004).

Similarly, Neil Gilbert on comparable premises argues that social welfare will not return anytime soon to the liberal welfare state or develop into a corporate welfare state, but will continue increasingly towards privatised, decentralisation, and increased competition among public, non-profit, and for-profit organisations (Gilbert 1985). With regards to China, such discussions should be grounded in the backdrop of the increasing commercialisation of their healthcare system. Concomitantly, the United Nations Research for Social Development also considers health care as an important “test case” for proponents of market-led policy in the social spheres (UNRISD 2007). This the UNRISD state is because the healthcare market one of the early fields for the promotion of a liberalised economy and the development of a private sector (*ibid.*).

The Chinese health care was once held as a model by the WHO for the rest of the world for its great effort in improving the health of their population. The system first bifurcated into a rural and urban health care system, but all aspects of health care delivery were financed by public resources. The Rural system was divided health care into three tiers (village local services, township health centre, and county/city hospitals), and in the Urban healthcare system insurance covered workers in all state-run enterprises and employees in government organs and academic/political institutions. However, post 1979 in China out-of-pocket expenditure begins to rise as central government expenditure recedes, directing responsibility for funding to local and provincial governments through taxation (Blumenthal and Hsiao 2005). This move impacted the central government ability to redistribute health care resources and also had the effect of privatising of most health care facilities in China (*ibid.*).

In China, reforms in the elderly care service expresses similar patterns, with the government selling the idea of investments in elderly care enterprises as a ‘sunrise industry’ (the State Council of the People’s Republic of China 2014). It is a pitch through which they intend to open the markets for elderly care institutions, and open up the market to encourage foreign investments by the year 2020. In the circular the State Council emphasized the need for local governments to “step up efforts to help transform public elderly service institutions into private enterprises” (*ibid.*).



Source: 1 WHO, World Bank & National Bureau of Statistics, China.

Additionally, in the eighteenth National Congress the CPC made a strategy to "make active response to population aging and develop the cause of aging and relevant industries with great efforts".

However, most of the online literature on opportunities in the Chinese elderly care market are from business pundits, investment news outlets, and marketing companies. The general theme is the emphasis on the growing elderly population, also known as China's 'demographic shift'⁵. As the generation which fuelled China's economic growth ages, the replacing generation of single children is much smaller, and faces the task of supporting a large ageing population. Additionally, the present infrastructure is said to be inadequate and ill equipped. China's nursing homes are overcrowded, understaffed with untrained workers, inadequately funded, having poor amenities and this is a report from the authorised government portal (China.org.cn 2011).

⁵ China experience a demographic shift earlier around the 1980s, when fertility rate dropped, and youth dependency ratio decreased. This is thought to have been the fuel that launched China's economic growth since 1989 (Wei and Hao 2010).

The information centre also describes the socio-demographic shift as an opportunity for an “increasingly lucrative and relatively untapped market” (*ibid.*). The main reason behind the opening of this section of the market, it is argued, is due to the inability of the local and the central government to make up for the shortfall in facilities to care for the elderly. It is held that China’s aggressive economic policies for the past few decades have undermined the country’s social stability (Lewis and Litai 2003) making them unprepared for their ageing society. This is despite the fact that this trend in ageing has been observed by the country since 2000 (OECD Local Economic and Employment Development (LEED) 2014) (Heller Dec 2006)

Initially, the government response had been to sponsor studies to explore potential policy strategies specifically for pensions and medical care. Today this has translated into the scrapping of the one-child policy, consideration for increasing the age of retirement (to reduce financial pressure due to population ageing), expansion of pension plans, increase access to healthcare, the government is also emphasising the need to consolidate a family-based old-age care system, and encouraging foreign investment in elderly services.

The Ministry Commerce and The Ministry of Civil Affairs in late November 2014, had announced the opening up of the social-service industry relating to the establishment of for-profit elderly care institutions to foreign investors (MOFCOM, China 2014). Article 7 of the document encourages investors to participate in the reform of state-run elderly care organizations. While article 9 ensured foreign investors “same preferential tax policies and policies on reduction and exemption of administrative and institutional fees as those available to domestic-invested for-profit elderly care institutions” (*ibid. art. 9*).

Chronic non-communicable diseases in China

Along with a demographic transition, the country also faces an epidemiological transition (Gonghuan Yang Nov 2008) (Tang, Ehiri and Long, China's biggest, most neglected health challenge: Non-communicable diseases 2013) (Paul Kowal 2012) representing a shift in prevalence, morbidity and mortality from infectious to chronic non-communicable diseases (R. Wang, et al. 2015) (Zhao, et al. 2014). In 2013, nearly 100 million older people in China experienced noncommunicable diseases of which more than 37 million suffered from some form of physical disability (Wu & Dang, 2013. Cited in (WHO 2015, 11).

With regards to worldwide mortality due to non-communicable diseases (NCD), ischemic heart disease and stroke were the two leading causes of mortality and disease burden in people age sixty and older (Mathers, Lopez and Murray 2006). Specifically, the 2015 WHO *Report on Ageing and Health* listed the leading contributors to disease burden among older people in China to be:

1. stroke (35.9 million DALYs);
2. malignant neoplasms (30 million DALYs);
3. ischaemic heart disease (22.6 million DALYs);
4. respiratory diseases (16 million DALYs);
5. diabetes mellitus (5.6 million DALYs);
6. mental health conditions such as depression, suicide and dementia (5.3 million DALYs);

of these, malignant neoplasms (highest incidences in Trachea, Bronchus, lung cancer) and stroke were higher in men between 60-69 years, but were higher in women beyond the age of 70 (WHO December 2016) (Yu, et al. 2017). Other conditions such as neurological problems (Alzheimer's, Parkinson's, Epilepsy, Migraines, and so on), diabetes, and depression were higher among women. But in general, the number of projections for China show a decline in total DALYs, but this is due to the considerable decrease in the number of deaths caused by Group I causes.

However, China is experiencing an increase in Group II related deaths due to its ageing population (Chatterji, et al. 2008). Such a transitioning in health states was foreseen when in 1993 the WHO Directors of non-communicable disease brought out a statement in the *British Medical Journal* (WHO Directors of Non-communicable disease 1993) urging the development of “scientifically based national non-communicable disease plans” (*ibid.* p. 588). This they felt was required as in the coming century the world population would age, and in such an instance, non-communicable diseases will tax the resources of all nations. This was termed as the ‘*Shanghai Declaration on non-communicable diseases*’.

On May 8th, 2012, National Health and Family Planning Commission (NHFPC, former Chinese Ministry of Health) together with 14 ministries issued the *China National Plan for NCD Prevention and Treatment (2012-2015)*. This was done in order to fulfil the CPC Central Committee and the State Council's recommendation on “deepening the Medical and Healthcare System Reform” (CDC China 2012). Despite this, there was an underwhelming amount of

attention on the most vulnerable. Shenglan Tang, et. al. (Tang, Ehiri and Long 2013) are of the opinion that the push for achieving Millennium Developmental Goals had been focused primarily on infectious diseases (HIV/AIDS, Malaria, and TB), and reductions of adverse maternal and child health outcomes which had achieved favourable outcomes. Nevertheless, transitions in socioeconomic and demographic factors have led to “an epidemic of chronic, non-communicable diseases” (*ibid.* p.2).

In a review article of the *Study on Global AGEing and Adult Health (SAGE) Wave I*, Wu, F., et al. analysed the prevalence of chronic conditions among older Chinese adults (Wu, Guo, et al. 2013) and concluded that major chronic conditions were common. Therefore, “prevention and early intervention targeting adults aged 50 years and older should be prioritized” (*ibid.* p. 7), especially for hypertension as it emerged as the leading cause of death in their study, and is a risk factor for stroke, heart disease and diabetes. The importance of such findings is in its implementation while considering care-giving.

In a WHO study, women in China and India reported higher levels of chronic conditions as compared to men, and cumulatively Indian respondents aged 50+ reported a higher percentage of at least one chronic condition (33% China, 49% India) o prevention and early intervention targeting adults aged 50 years and older should be prioritized.

Conclusion

China is ageing, of that it is certain, it is also ageing at a considerably rapid pace, which has been established. Nevertheless, China has the distinct advantage of learning from other countries in its immediate geographical location, i.e. South Korea and Japan. However, if the current number and size of Expos across China⁶; relating to elderly care, rehabilitation, and nursing, is to be understood as to the direction of China’s elderly care, then it is imperative that the government reconsider the areas in which they want to attract investments in. Increasingly, ‘innovation’ has become a keyword for most of these conferences and exhibitions, but the needs of the elderly are beyond the confines of innovations in robotics, telemedicine, mobility vehicles, medical devices, senior real estate, and senior care services. The sheer magnitude of China’s elderly population

⁶ Care & Rehabilitation Expo China (“CR Expo”) has been held for 11 sessions so far. Other ‘silver industry’ expos such as The Beijing International Aging Industry Expo, The Aging Industry Expo in Chengdu, CHINA AID (China International Exhibition of Senior Care, Rehabilitation Medicine and Healthcare) all have exhibitions on various senior care products and services.

presently, and what it is to become in the prospective future, requires considerable planning and mediation in the local and central level which would confront the real issues concerning the provision of extensive healthcare services in rural areas, social and financial security, comprehensive in-depth insurance designed specifically for the elderly and the vulnerable groups within them.

The situation in China stems from a policy which aimed to mutate the natural progression of its demography. This makes China unique from other countries dealing with the same problem of an ageing population. Therefore, it was only logical that China would try to buttress the foundation of the population pyramid by relaxing this policy. This new policy being the relatively new law allowing for couples to have two children. However, such policies must also support families in caring for their children without which the expected change may not transpire. As for elderly care laws which force children to visit and care for their parents, it reflects an approach which suggests that the Party does not truly understand the basis for why these laws became necessary in the first place. Care giving may be culturally encouraged by tradition (filial piety), however, changes in society and economy have a bearing on this same culture. China in this respect needs to deliberate more on developing policies which could encourage family development in its traditional form. This would require for jobs and opportunities to be available locally, and transfer investments away from its pearls on the western coast and into the interior country. In doing so, regulate the flood of internal migration and allow for the development of a healthy family structure.

With respect to elderly care laws, culturally appropriate policies and programmes are needed to develop a care model which is principally different from its western counterpart - a model which is reflective of the needs and desires of a unique culture. Furthermore, old age homes and communities may be functional for housing and caring for the medical needs of the aged. But it uproots people from the familiar and locates them in the unfamiliar, and largely fails to provide for the mental care needs of its residents.

Nevertheless, it is fair to say that China is aware of its problems and aware of the different dynamics in their many provinces. Lastly, there are sufficient databases available on the health of their elderly, their social and economic conditions, and so on. This has helped researchers in initiating new discussions which could help strategizing appropriate measures. Nonetheless,

China has been known to use the single party structure to make overarching changes in its economy and society. Therefore, the behemoth task of caring for its large elderly population (over 300 million people aged 60+ by 2050) is a task not beyond the capabilities of a determined council.

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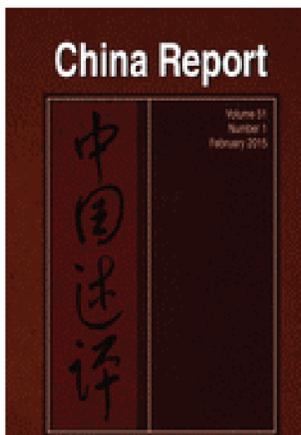


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