# Access to residential care in Beijing, China: making the decision to relocate to a residential care facility

YANG CHENG\*, MARK W. ROSENBERG†, WUYI WANG‡, LINSHENG YANG‡ and HAIRONG LI‡

#### **ABSTRACT**

The demand for residential care by older people is increasing in Beijing as a result of dramatic demographic and socio-economic transformations. Little is known about the way older people access residential care in the context of Beijing. In this research, qualitative data collected from 46 in-depth semi-structured interviews with residential care facility (RCF) managers, older residents, and their family members in six RCFs in Beijing were transcribed and analysed using the constant comparative method. The findings included the following themes: access to residential care as geographical access, information access, economic access, socio-cultural access, and the sociomanagerial environment. Geographical access is influenced by location, distance, and the micro-physical environment and amenities of RCFs. Information access refers to the capability to acquire related information on available resources. Economic access is the financial affordability for the resources. Socio-cultural access is affected by individual attitudes and aggregative cultural values on ageing and care of older people. Additionally, the social-managerial environment such as reputations of RCFs, quality of services, and management mechanisms are also important to the decision-making process. All these factors influence older people and their family members' decision-making process of which RCF to choose. The research provides a multi-perspective analysis of access to residential care and suggestions on improving the accessibility of residential care for older people in Beijing.

**KEY WORDS** – access, decision making, residential care, qualitative study.

#### Introduction

Residential care has developed quickly in recent years in Beijing as a result of the dramatic demographic and socio-economic transformations that are taking place. The number of older people in Beijing is continuing to grow

- \* School of Geography, Beijing Normal University, Beijing, China.
- † Department of Geography, Queen's University, Kingston, Ontario, Canada.
- ‡ Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China.

rapidly. The population aged 60 and over was 2.26 million in 2009 in Beijing (18.2% of the total population), and the number is expected to be 4.15 million (30% of the total population) in 2025 (Beijing Municipal Bureau of Statistics 2000; Committee on Ageing of Beijing 2010). Secondly, women's involvement in the labour force and the increased geographical migration of adult children have decreased the availability of informal family care-givers to provide continuous care for older family members (Gu, Dupre and Liu 2007; Ng, Phillips and Lee 2002). Thirdly, recent research in China has found that some of the newly developed residential care facilities (RCFs) provide available care-giving resources and create healthy lifestyles for the older residents (Cheng 2010; Zhan, Feng and Luo 2008). The challenges of loneliness, poor physical and social living environments at home, and the advantages of newly developed RCFs have all contributed to the increased utilisation of residential care by older Chinese people.

RCFs in Beijing have a wide range of functions and provide various services. They are named differently and this is based on the types of ownership and functions – social welfare homes, respected senior homes, rest homes, senior apartments, and nursing homes. In this study we use the term RCFs to refer to long-term care facilities and focus on the first four types of RCFs which provide similar services to retirement homes and assisted living facilities in North America. Nursing homes usually provide services for older residents with some or no self-care ability or functional and cognitive impairment. For older people aged 60 and over, retirement homes and assisted living facilities are more likely to be used, while nursing homes are more likely to be needed by the oldest-old (Wei 2007; Zhan *et al.* 2006).

The equity and efficiency for allocation and utilisation of residential care resources is a significant task in planning and management, especially under the goal of doubling the number of RCF beds in a decade in Beijing. Increasingly, older people choose residential care, but the spatial distribution of the older population and residential care resources is uneven. For example, central districts in Beijing have a high demand and limited resources, whereas the suburban districts such as Changping have more residential care resources with occupancy rates under 50 per cent (Cheng 2010). The allocation of care resources is not only a question of availability of land resources, but also a sociological issue related to individual and social contexts. It is important to understand the decision-making process of relocation from home to RCFs and its factors, in order to make knowledge-based plans for the allocation of care resources and to improve the efficiency of the utilisation of care resources and quality of care that RCFs provide.

This paper aims to discuss how a sample of older people and their family members made the decision to move to a specific RCF and what factors influenced the decision-making process in the socio-economic and cultural context of Beijing. In the next section, theoretical and empirical research on access to health-care resources and decision-making processes of relocation in both English-speaking countries and China is reviewed. Drawing on this literature, a qualitative design is adopted using in-depth semi-structured interviews. More details on data collection and analysis are introduced in the third section. The findings are summarised in the fourth part of this paper. Conclusions of the study, policy implications, research limitations, and future directions are presented in the last part. The results provide suggestions for future policy making on residential care and improvement in access to residential care for the older people in Beijing.

#### Literature review

Accessibility and utilisation of residential care

Accessibility and utilisation of residential care is a research area in various disciplines. Many studies explore the location of care (ageing in place or institutions), autonomy in decision making, cultural impacts on decision-making options for long-term care, and the transition experience into residential care. Research on access to residential care has shifted its focus from geographic access to a multi-dimensional concept including geographic, economic and socio-cultural factors (Andrews 2005).

Existing research indicates that, until the 1990s, most geographical work limited the concept of access to geographic access (Andrews 2005). The geographic concept of access has been broadly applied to the study of healthcare delivery (Meade, Florin and Gesler 1988). Early studies emphasised distance decay in health-care utilisation. Gradually, health geographers became aware of the limitations of distance measures and put more effort into better understanding of how distance interacts with other non-spatial factors in health-care accessibility and utilisation (Joseph and Phillips 1984; Penchansky and Thomas 1981; Rosenberg 1983). Geographers used statistics, mapping, and more recently geographic information systems (GIS) to study the population distribution, location of health-care facilities, transport links and other factors (Cromley and Shannon 1986; Gatrell and Loytonen 1998; Joseph and Bantock 1982; Joseph and Cloutier 1990, 1991; Love and Lindquist 1995; Morrison et al. 1999). These studies contributed to analysing access to health services and equity in their provision by providing information on service locations, availability and visualising the spatial match between service needs and resources.

Outside of geography, Andersen's revised Behavioral Model of Health Services Use uses a multi-dimensional term to measure access: potential access (enabling resources), realised access (actual use of health service), equitable access (occurring when demographic and need variables account for most of the variance in utilisation), and inequitable access (occurring when social structure, health beliefs, and enabling resources determine who gets medical care) (Andersen 1995).

The results from empirical studies suggest that inequality exists in access to care resources, which is shaped by many factors, including geographical distribution of care resources, older people's health and functional levels, and their socio-economic status (Aminzadeh *et al.* 2004). Moreover, the location of a RCF affects the maintenance of older residents' previous social networks through influences on their participation in social activities or visits by families and friends (Corden and Wright 1993; Reed, Payton and Bond 1998). The convenience of transportation is highly related to access to health, recreation, commercial facilities, family and friends, and social services for older people (Hodge 2008; National Advisory Council on Ageing, Canada 1989). Access is not only affected by geographical factors, but also has a much deeper meaning related to economic, social and cultural factors.

## The development of residential care in China

Residential care has existed in China for several decades; however, services only began to improve and the number of residents of RCFs to increase in recent years. Prior to the establishment of the People's Republic of China in 1949, RCFs were almost non-existent. In the 1950s, the government changed charitable homes into social welfare homes. At this stage, social welfare homes were for the shelter of poor older people who were without families. In the 1980s, the Chinese government decided to expand and improve services and increase the number of beds. It expanded services related to housing, health care, education, exercise and social activities to all older and disabled people. In the 1990s, the Chinese government opened up opportunities for the private sector and non-profit organisations to invest in developing RCFs (Wei 2007). By the end of 2009, there were 38,060 RCFs with 2.67 million beds in China, which provided 1.6 beds per 100 older people (China National Committee on Ageing 2010). Prior to the 1980s, there was stigma attached to living in RCFs, but attitudes are now shifting from stigma to privilege because of the high costs of these services and the physical improvements in RCFs in recent years (Chen 1996; Shang 2001; Zhan, Feng and Luo 2008).

The ownership of RCFs in Beijing is divided among government-operated RCFs (4.5%), community RCFs (60%), private RCFs (31.6%), and publicly owned and privately run RCFs (3.9%) (Beijing Civil Affairs Bureau 2009). Government-operated facilities include those operated and funded by local

governments. Community facilities include those operated by city neighbourhood committees and village committees, and they are usually funded by local government and communities. Facilities operated by persons, companies, enterprises, and organisations are categorised as private facilities. The publicly owned and privately run facilities are a new type of ownership developed in recent years, which are set up and funded by the government, but managed by the private sector. The properties of RCFs are owned by the government and the private sector does not pay rent for using the properties, which is a cost saving of managing RCFs. However, the private sector assumes sole responsibility for the profits or losses in the management of RCFs (Beijing Civil Affairs Bureau *et al.* 2008). Most of the residents in RCFs are self-funded, and only the 'Three-No'¹ older people in urban areas and older people with 'Five Guarantees'² in rural areas are eligible for government-operated and community RCFs with public funding.

#### Related research in China

Research on population ageing and residential care is relatively limited in Mainland China. The topics mainly focus on social welfare system reform (Bartlett and Phillips 1997; Huang 2003), the challenges of population ageing and care of older people with decreased family care resources, the availability of family and community care resources, and alternative ways of care-giving in urban and rural areas of China (Arnsberger et al. 2000; Bartlett and Phillips 1997; Davis-Friedmann 1991; Jiang 1995; Joseph and Phillips 1999; Leung 1997; Zhan 2002; Zhang and Goza 2006). Some researchers have studied the characteristics of older residents in RCFs, the changing attitudes towards residential care, reasons for choosing residential care, and socio-cultural factors on access to residential care among older Chinese people (Cheng 2010; Gu, Dupre and Liu 2007; Zhan, Feng and Luo 2008; Zhan, Liu and Bai 2005; Zhan, Liu and Guan 2006). The results from existing studies have revealed that reduced family sizes, geographic mobility, and conflicting work and family obligations have led to less family care resources being available for traditional home care in China. This has contributed to the growth of residential care. Older residents tend to be male, reside in urban areas, and have poorer health and lower family-care resources than those living in the community or at home. Residential care has become an alternative option to traditional family care in urban China for those who need care, have enough money and are in a position to access a RCF (i.e. a RCF is proximal to where they want to live). The meaning of filial piety is no longer solely about providing care for older people at home, but now includes provision of good quality care and consistent financial support. The stigma attached to residential care is gradually being broken down and

many older people and adult children consider that living in a RCF is a privileged choice because of its relatively high cost (Zhan, Feng and Luo 2008).

Similar findings come from research conducted in Taiwan and Hong Kong. For example, Kao and Stuifbergen (1999) and Liu and Tinker (2001, 2003) studied the factors associated with nursing home entry and family experiences in decision making for the institutionalisation of older people in Taiwan. In Hong Kong, Lee (1999) studied the experiences of transition into residential care among Chinese older people. Wu, Tang and Yan (2004) examined psychosocial factors associated with the acceptance of long-term placement in old-age homes, and Chan and Pang (2007) studied the concepts of autonomy and dignity of older people, quality and location of care, decision making, and financing of long-term care from the perspectives of older people, family members, and health-care professionals and administrative staff. The findings from these studies indicate that decisions about residential care placements are not only associated with advanced age, gender, educational level, and dependency levels of older people, but are also influenced by other factors such as burden of care, coping strategies, resource availability, financing of long-term care, and attitudes and beliefs about residential care.

These studies also highlight the importance of sharing financial responsibility between older people, their adult children and government albeit the emphasis is placed on individual families. Financial affordability for residential care is likely to be the major factor that influences older people's choice for care in the future in China (Zhan *et al.* 2006). Older people who have few financial resources are more likely to be cared for by their adult children, and thus have a stronger expectation of filial piety (Ng, Phillips and Lee 2002).

The absence of rich information on services, benefits, and rights restricts older people from having access to the residential care system, and also affects their decision-making ability. Whilst the existing Chinese literature on the long-term care of older people (Liu and Tinker 2001, 2003; Zhan *et al.* 2006) has tended to focus on decision-making issues concerning the location of care (*i.e.* whether at home or in an institution), few have examined the specific motivations that lead families and individuals to choose a particular RCF over another.

To summarise, there is a lack of studies on decision-making processes for selecting a specific RCF and access to residential care considering the interaction of geographic factors and non-spatial factors, especially in the socio-cultural context of Beijing. More research, therefore, is required to provide a deeper understanding of access to residential care resources in China.

#### **Methods**

This study used in-depth semi-structured interviews to collect qualitative data. Interview topics were designed for the three groups involved in the decision-making process of selecting a residential care facility: older residents, family members, and RCF managers. For example, older residents were asked how they got information on RCFs, why they chose a specific RCF, and what roles their families played in the decision-making process. Family members were asked similar questions, and RCF managers were asked about the eligibility and general characteristics of older residents, and the types of services that they provide for older residents.<sup>3</sup>

An experienced research group in the Institute of Geographic Sciences and Natural Resources Research at the Chinese Academy of Sciences in Beijing recommended one RCF as a study site, and the manager from this RCF recommended another five RCFs of various types for the study. Among the six RCFs, three of the RCFs were located in the central districts of Beijing, and the other three were in suburban areas. In terms of ownership and size, one was a private RCF with 102 beds, one was a rural community RCF with 80 beds, two were urban community RCFs (25 beds and 32 beds), and the remaining two were publicly owned and privately run RCFs (76 beds and 100 beds). The occupancy rate was over 80 per cent in all six RCFs, and the standard charge varied from 1,000 to 4,000 Yuan per month.

The six RCF managers were contacted initially by phone, and with their permission a time to visit the RCF was arranged. RCF managers helped to identify and recruit older residents who were willing to participate. Based on the manager's knowledge of the residents, only those who were physically and mentally able to participate in interviews were selected. Hence, residents with cognitive disabilities were not included in the study. Both managers and residents helped contact and recruit residents' family members as participants. The sampled family members were not paired with the residents who participated. Family members were recruited during their weekend visits.

In total, 27 older residents (17 females and ten males, average age of 80), 16 family members (14 females and two males, 11 were the children of the older residents, three siblings, one granddaughter and one nephew), and five RCF managers were interviewed in the six RCFs. The interviews were carried out in private and quiet rooms or outdoors in the six RCFs. The interviews varied from 30 to 90 minutes. They were audio recorded and notes were taken at the same time. Mandarin was the language used during the interviews. Ethics approval for the research project was obtained from the General Research Ethics Board of Queen's University in Canada.

## 1284 Yang Cheng et al.

The analysis of the data was based on the constant comparative method (Glaser and Strauss 1967). The content of the audio recordings was fully transcribed. The first step was open coding, and the transcripts were read line-by-line several times in order to mark the key points with a series of codes, such as 'distance', 'transportation', 'health-care facilities', 'expenses', and so on. In the next step, similar codes were grouped into a concept, such as 'location', 'facilities' and 'affordability'. As concepts developed and their descriptions became more detailed, similar concepts were rearranged by common themes and thematic categories were developed, such as 'geographical access' and 'economic access'. The differences in individual characteristics and location and ownership of RCFs in relation to accessibility and decision-making process were also examined. Finally, thematic categories were examined to analyse their associations. Together the thematic categories, concepts and resulting associations were used to generate the findings (Strauss and Corbin 1990, 1998).

## **Findings**

The older residents and their family members reported that their accessibility to a RCF was affected by the interaction between geographical, economic and socio-cultural factors. The decision to select a specific RCF in which the older residents would like to live was a process of balancing geographical location, quality of services, care demands and financial affordability. In the presentation of the findings, we divide access to residential care into five components: geographical access, information access, economic access, socio-cultural access and socio-managerial environment.

# Geographical access

Geographical access to residential care is influenced by location and distance at the macro-level and the physical environment and amenities of RCFs at the micro-level. Most of the older residents who used to live in the city preferred to move to a RCF in central or suburban districts to exurban districts (counties).<sup>4</sup> The location of a RCF, convenience of transportation, time–distance for families' and friends' visit, and access to health-care resources were important aspects for the decision-making process:

I chose this RCF because it locates close to where my children live. That is easier for them to come to visit. The public transportation here is convenient too. I can get to my appointed hospitals easily. (older resident)

I live very close to here. I can stop by several times a day, on my way to work and way back home. I always drop by to talk to him [the interviewee's father] for a while, check

if everything is alright, and bring him some of his favourite dishes . . . I won't be able to do so if he lives in a RCF far from me, (in that case) maybe I can only visit him twice a month. (family member)

The importance of location and distance varied among individuals. The older residents who chose RCFs in central districts considered geographical location to be one of the most important factors in their choice. Those who choose RCFs in suburban districts, however, were more often concerned with the physical and social environment of the RCF rather than the location of RCFs and distance to their former homes.

The physical environment of a RCF including its natural and built environment is also important for an older person's choice. Older residents reported that the open space within and around a RCF, such as gardens, parks, and green lands, is considered when they look for a RCF. Older residents prefer housing styles such as bungalows and courtyards to apartment buildings for the convenience of their daily activities and traditional home environments to which they are accustomed.<sup>5</sup> They also have preferences in the room distribution, such as single rooms or shared rooms, room location and size, and the window direction of rooms.

We [an older couple] had visited several RCFs before we found this one. The room size of some RCFs is very small and the open space is limited. Compared to the ones we visited, this RCF has the best physical environment. Besides the garden, there is a park nearby. We like to walk and exercise in the park. The complex we live in now is quite new. There are common rooms for reading, painting, playing cards, and exercising. We are quite satisfied with the living environment here. (older resident)

Regarding amenities in RCFs, older residents have most concerns about the in-house health-care facilities and whether there are private rooms with telephones and bathrooms. In-house health-care facilities such as a clinic and medical equipment are necessary for a rapid response to emergencies and routine physical examinations within a RCF. The availability of in-house health-care facilities varied among different types of ownership of RCFs. Government-operated RCFs are better off than private and community RCFs in terms of providing in-house health-care services because of the support from the government, as noted by some of the RCF managers.

Private rooms with telephones, alarms and bathrooms are not available in every RCF. In some RCFs, one or two telephones are installed in the hall and shared by the older residents living on the same floor. Some older residents use cell phones, instead, for convenience and privacy, but they report their preference for using desk telephones to cell phones for several reasons, such as difficulty in using small buttons and screen, and battery-charging issues. With regard to washrooms, the older residents in some RCFs have to share washrooms located in a yard or at the end of a hall on each floor. The location of washrooms causes many concerns and complaints from older

## 1286 Yang Cheng et al.

residents and their family members with regard to the usage during the night time and in winter.

Mom uses a cell phone because she does not have a desk phone in her room. She always complains about how hard it is for her to dial the numbers and read on the screen with her shaking hands and poor eyesight... She forgets to charge the battery sometimes. We always get worried when we cannot reach her... (family member)

I hope the washroom can be improved. You know, now all the residents share the public washroom located in the yard. During the daytimes and in summer, it is OK, but it will be a different situation during night times or in winter. It is not convenient and safe for the older residents. (family member)

# Information access

Information access refers to the capability of older people to acquire information about the available residential care resources. The findings indicate that information access to RCFs is relatively poor in Beijing. Currently, there is no official system that provides residential care information to older people in Beijing. Most of the residents and family member interviewees obtained information about RCFs from their friends and acquaintances. Some of them obtained the information from media such as newspapers, television, radio, or from flyers. A few of them got information from RCF tours, retirement magazines, and consultations offered by their retirement departments or offices of their former workplaces. Few participants obtained information from the internet or community services.

Investigations, visits and temporary residence in RCFs were reported to be helpful for getting detailed information on the environment, services, regulations and amenities of RCFs. All of the older participants and family members interviewed reported that they visited the RCFs and evaluated their suitability before they made their decisions. Some older residents had lived temporarily in the RCF during different seasons before their final relocation.

I don't want to make a quick decision ... I first lived here in spring for a month, and I came back in winter for another month. I'd like to try and experience the differences in various seasons ... then I know if I can adapt to the life here and make my final decision. (older resident)

#### Economic access

Financial affordability is of primary importance for older people's access to residential care resources. Older residents balance affordability, with geographical location and distance, the service quality, and amenities of RCFs when they make a relocation decision. Both the pension and

health-care system are still undergoing reform in China, even though reforms have been carried out since the 1990s (Ministry of Labour and Social Security of China 2007; State Council Information Office of China 2004). Older people living in rural areas do not enjoy stable financial security because many are not covered by a pension system. In Beijing, only 70 per cent of older people aged 60 and over compared to 57 per cent of the oldestold (aged 80 and over) receive pensions, and 40 per cent of the oldest-old depend on their families for financial support (Beijing Municipal Bureau of Statistics 2007). The average income of older people was 1,338 Yuan per month in 2006 (1,643 Yuan for older people in urban areas and 316 Yuan for older people in rural areas) (Li 2007). The average standard charge for RCFs in Beijing is between 1,500 and 2,000 Yuan per month (Beijing Civil Affairs Bureau 2009). For many older people residential care is a relatively expensive option compared to traditional home care. Some new types of services are offered by insurance companies, commercial banks and RCFs to enable individuals to afford residential care. For example, there are options to mortgage one's house to agencies or to rent it out by agencies. The mortgage loan or rent releases equity that can be used to pay for the expense of residential care. Some older people choose to sell their housing and deposit the money into their saving accounts for the future expense of care (Yuan and Yang 2006).

The findings also demonstrate the levels which older people participate in the decision-making process of relocation, including the decision to move and the type of facility to move to. The decision is highly related to their economic status. Most of the older participants, who made their own decision to relocate to RCFs, receive pensions and are financially independent. Older residents who were not willing to move into a particular RCF were more likely to be financially dependent on their adult children.

My mother-in-law does not have pension. Her four children split all the expenses, including her living expenses and health-care expenses . . . For some upscale RCFs, we cannot even think about it because of the high expenses. (family member)

My pension is a little more than 1,000 Yuan per month . . . I moved to a single room at the beginning, but my son persuaded me to switch to a three-bed room a month later, because the single room is twice as expensive as the shared three-bed room. (older resident)

The other economic/geographical issue that influences relocation decisions is access to health care. As a result of various forms of health-care insurance in the current system, access to health services can take place either in the RCF, assuming in-house health-care services are available and covered by the person's health insurance, or at appointed hospitals that are linked to the person's health insurance. Therefore, to choose a RCF that is convenient

for their access to health care is an important aspect in the decision-making process. Government-operated RCFs receive support from the government to work with hospitals, and most community RCFs either set up clinics to provide in-house health care or work with nearby community clinics. Private RCFs, however, have less available and accessible health-care resources compared to government-operated and community RCFs. One reason is that private RCFs are less likely to co-operate with hospitals and community clinics. Another reason is that the majority of health-care insurance plans are unable to cover the health-care expenses of the clinics of private RCFs.

A new model of health-care service provision has been developed for community RCFs. This involves the use of community clinics, however, there are difficulties with this model. The limited health-care resources in community clinics are unable to meet the needs of older residents because this population requires diverse health-care resources and complex treatments in comparison to other sectors of the population. Many RCFs only accept older people who have self-care abilities for activities of daily living (ADLs), including bathing, dressing, eating, indoor transferring, toileting and continence, because they are unable to provide health-related services for older people with physical or mental impairments. Consequently, older residents are worried that they may be forced to relocate to a RCF with a higher level of care assistance when their health declines and care needs increase.

#### Socio-cultural access

Socio-cultural access to residential care can be defined by traditional Chinese values of care for older people and attitudes to ageing. Some older people and their family members are in agreement with relocation to a RCF. Some older residents adopt the attributes of active ageing (*e.g.* active participation in social activities) and tend to have a positive outlook on life. They move to a RCF based on free will and this promotes a positive adjustment to the relocation process. There are, however, some older people who are reluctant to move into a RCF and do so as a result of negotiations with their families. Some of these older residents view themselves as burdens for their family, feel valueless, and are pessimistic about their lives.

The Chinese traditional value is that adult children have an obligation to care for their older parents both physically and emotionally (Ng, Phillips and Lee 2002). It is widely believed that adult children fail to meet their obligation of filial piety to their parents if an older parent lives in a RCF. Under such a conception, some family members prefer to care for their older parents at home. Zhan, Liu and Guan (2006) have demonstrated that the attitudes of family members toward residential care are influenced by

such values. Some family members support and respect the older person's choice of moving to residential care. In contrast, some family members are concerned about their older relatives' decision about relocation at the beginning, but they change their views and support residential care after visits to RCFs and following the older person's relocation. There are also some family members who reject the choice of residential care for various reasons. For example, they are concerned about pressure from the public. They do not want to relocate their older family member to RCFs of poor quality, but the costs of upscale RCFs are high. Some family member interviewees stated that the relocation of their older family member to RCFs was not their preferred choice and they kept their older family members' relocation a secret from their neighbours and relatives. In contrast, some think living with families provides a sense of security to their older relatives. They also stated that older people are likely to help their children organise family affairs even though they may not be able to help with the housework.

They don't support my moving. They have concerns of the public pressure. She [daughter] thinks her home is a better place for me...the best RCF is expensive though. To live in such an expensive RCF will be an additional expense for the family...and I can help her organise family affairs if I live with her. (older resident)

My mom told us she wanted to move into RCF to enjoy her older life ... We were not willing to do so ... she has five children, two supported and the other three rejected. We were concerned at the beginning. You know, the pressure from the public is strong ... we came to an agreement eventually, and we agreed to let her try, then she moved ... only my family knows that mom moved into a RCF. We still keep it a secret from our neighbours. We tell them my mom went to visit my sister for some time. .. (family member)

Chinese traditional values also influence the older person's decision-making processes. Traditionally, older Chinese people prefer to live at home as long as they can. The existing literature has revealed that older couples tend to rely mostly on each other for support (Ng, Phillips and Lee 2002). Other secondary forms of support include relying on their adult children as well as a range of other resources (Ng, Phillips and Lee 2002; Streib 1987; Zhan and Montgomery 2003). Some older people choose residential care because they are not willing to place care-giving burdens on their families. When they choose a RCF, they consider the location of the RCF and convenience of transport to enable their family and friends to visit. Whilst relocation from home to a RCF can be viewed as a social surgery (Rosen and Kostic 1957), the older residents indicated that they sought to keep their social network and connections with their families and friends after their relocation. To sum up the time—distance for their family members and friends to visit is a key consideration in the choice of RCF.

## Socio-managerial environment

In additional to the cultural values discussed above which exist at an individual level between older people and their families, the social environment of the RCF is important. The reputation of RCFs, quality of services, management mechanism, characteristics of residents, social activities and social connections affect the older person's decision to relocate to a particular RCF and their wellbeing after the relocation. Many of the interviewees reported that they considered the social environment of a RCF more important than its built environment and facilities. RCFs provide various types of services for supporting older residents' daily life, including food service, laundry and cleaning of the rooms. Food services receive a lot of attention from older residents and their family members because of the importance to the lived experience in RCFs. Most RCFs provided shared meals for older residents. Some of the older residents were satisfied with the meal service. This saved them time and energy on food preparation in comparison to the difficulties that they had experienced at home:

I am quite satisfied with the food services here. Staff members work hard on the food preparation. They try to match vegetable and meat in each meal and they change the menu every week. We always have fresh and healthy meals on time . . . Before I moved here, I skipped my meals sometime because of being tired of cooking. (older resident)

However, some of the older residents complained about the poor quality of food and the lack of choice. They were dissatisfied with the way the food was cooked. This point was particularly made by those who had food allergies or food restrictions as a consequence of their health problems. Some of them adopted strategies to buy food from sources outside of the RCF or to cook simple meals for themselves. This overcame some of the limitations that they experienced with the meals service. Some of the older residents made suggestions for cafeteria-style or buffet-style service, however the cost of these forms of catering services is more expensive than the shared meal service that is offered by the majority of RCFs:

It is hard to satisfy everyone. Some of the older residents may prefer rice to noodles and some may prefer soft to hard cooked food. Food is wasted if someone cannot take certain kinds of food because of their health problem ... I cannot eat tofu, seafood, spinach and beans ... For example, I cannot have two dishes out of the three dishes provided yesterday. I ended up with going out to buy something else for my meal. (older resident)

The management mechanisms between staff members and older residents also influenced the resident's access to residential care resources. Some of the older residents were concerned that their safety might be affected by the

loose security that is enforced at RCF entrances when they found strangers entering RCFs without registering at the entrance.

Some older residents reported their dissatisfaction with the reporting system in the large RCFs. They considered these systems to be inefficient for the reporting of difficulties. Lack of professional training of the staff limited the variety and quality of services being offered, for example, interviewees reported that staff of some RCFs were not able to provide consultation or medical assistance and they only provided cleaning services. Some older residents moved from one RCF to another for better management or access to different services. This was not without its difficulties – it is difficult to gather detailed information about RCF management mechanisms prior to making the decision to move to a particular RCF.

Older residents also reported that characteristics such as their health status, life experiences, personalities and social skills impact on the social environment of a RCF. A welcoming and inclusive environment of a RCF was considered to be important for the interviewees to experience a sense of home and enjoy their lives with other older residents after their relocation. Interviewees reported that residents with similar characteristics were more likely to get along with each other and share common interests. They also reported that they preferred to live with healthy older residents rather than live with those who have physical or mental impairments. Old friends, colleagues and neighbours who lived in the same RCF helped each other keep their former social networks. Diverse social activities, especially those that happen outside of the RCFs, such as short trips and visits to schools or universities, helped the interviewees maintain their social connections without being isolated and segregated in the RCF.

The managers are really warm-hearted and care about us... most of the residents here were well educated and used to be the cadres in their former workplaces... we share some similar experiences. We can get along well with each other... some of my old friends and colleagues also live here. (older resident)

#### Discussion and conclusion

The expanding older population, the shortage of family care-givers, and policy framework facilitate the increased usage of residential care in Beijing. With the improvements in residential care that has occurred in recent years, older people are increasingly making decisions to relocate to residential care. The findings reported here suggest that older people have unequal access to residential care because of the influence of geographical, economic and socio-cultural factors. Financial affordability is an important determinant for access to residential care as a consequence of the majority

of older residents having to pay for RCF care under the current social welfare system in China. The geographical distribution pattern of the older population and residential care resources affect the utilisation of residential care resources, occupancy rate of RCFs as well as service quality. Additionally, the influence of traditional Chinese culture plays an important role in the decision-making process even though the stigma of residential care is reducing. Older people and their family members balance these factors before they make the decision to move to a specific RCF. In the majority of cases, both older people and their family members participate in the decision-making process. In a small proportion of the cases, older people either move to the RCFs without the agreement of their family members or are passively relocated to RCFs by their family members. The results are consistent with the studies conducted by Liu and Tinker (2001, 2003) in Taiwan and Chan and Pang (2007) in Hong Kong.

The spatial distribution of the older population and RCF resources is uneven and mismatched (Cheng 2010). Central districts of Beijing have high proportions of the older population with relatively limited access to residential care resources. Many RCFs in central districts of Beijing are fully occupied as a result of the limited resources and high demand for placement. Exurban areas have relatively abundant residential care resources but with low occupancy due to their geographical location or poor quality of services. The mismatch between the spatial distribution of the older population and RCF resources limits equal geographical access to residential care resources by older people in Beijing. The current situation requires a better allocation and more efficient utilisation of care resources to address various levels of need, charge standards, location, size and services. In terms of social policies, the Beijing municipal government has a plan to develop the '9064' model for elder care by 2020, which refers to 90 per cent of older people depending on family care with the assistance of community services, six per cent of the older population depending on community care that is funded by the government, and four per cent of the older population being supported by residential care. The government aims to create a city-district (county)-street (village) multi-level residential care system to ensure that all the residential care resources in both public and private sectors meet the various demands among the older population in Beijing. Additionally, some communities in central districts have transformed under-used public facilities such as kindergartens and primary schools into RCFs in response to the changing demography of these communities in past two decades. These changes have led to increased bed numbers in the RCF sector-from 55,809 in 2009 to 140,000 in 2020 (Beijing Civil Affairs Bureau et al. 2008; Committee on Ageing of Beijing 2010).

Access to information needs to be improved. There is still no administrative system to disseminate residential care information. There are some good examples in developed countries; in Canada, for example, the Ontario Ministry of Health and Long-term Care established an agency called the Community Care Access Centre (CCAC) in 1996. The role of the CCAC is to increase public access to government-funded home and community services and long-term care homes. CCAC's function is to assist older people with assessing their personal care needs and eligibility for various provincial schemes and services. They also provide information about available care providers and help with the application process<sup>6</sup> (Ontario Ministry of Health and Long-term Care, Canada 2000). In Beijing, an unofficial RCF association has been founded and this has made some improvements in facilitating access to residential care information. Some RCF managers in the association take responsibility for providing information and recommending suitable RCFs for older people. The consultation is helpful, although the process is somewhat inefficient. The RCF managers who are enrolled in the unofficial association advocate the creation of an official association that is affiliated with the administration department of the Beijing government.

Financial independence has increased among the older Chinese population in recent decades, consequently older people now have more options for care (Zhan, Liu and Guan 2006). The social welfare system in China is, however, under reform. So far, 57 per cent of the oldest-old live on their pension and 40 per cent of the oldest-old depend on financial support from their families in Beijing (Beijing Municipal Bureau of Statistics 2007). The one child policy has been in effect since the end of 1970s, and now the first generation of parents with only one child are now beginning to age. The financial burden on families is likely to increase in the next few decades and this will be influenced by the decreased size of families. Along with the economic development of China, Chinese older people will expect improvements in both pension and health-care insurance to increase their financial security, especially for those with rural household registration.<sup>7</sup> With respect to the inter-relationship of families and society, economic development has improved family economic conditions; however, this has decreased family care resources. Meanwhile, the improvement in the social welfare system is lagging behind economic development and is unable to provide financial security for all older people, especially for those who live in rural areas.

Cultural values of filial piety and attitudes towards residential care are changing in line with social transformations that have resulted in China's rapid economic development in recent years. Older parents understand that adult children are less likely to care for them at home because of

geographical distance or other obligations. Adult children may express their filial piety through financial and emotional support to supplement their inability to provide direct physical care for their parents. With the development of residential care, the ability to provide one's older parents with high-quality residential care in upscale RCFs is considered to be a form of filial piety (Zhan, Feng and Luo 2008). With the increasing improvement and utilisation of residential care, increasingly families are accepting residential care, but the traditional value of filial piety continues to influence families' willingness to choose residential care. Hence, the stigma of residential care still prevails in the public's perception. To improve socio-cultural access to residential care, RCFs and the media can play a role in educating the public about residential care and in encouraging public participation in volunteering for delivery of care services which is supportive for the public to gain more knowledge about residential care.

The development of a market-driven residential care industry does not conflict with respect for older people and filial piety in Chinese traditional culture. Residential care provides older people and their family members with an option for high quality of care. The market-driven residential care industry and participation of the private sector is anticipated to decrease the financial burden placed on the government hence this is encouraged in current policies. However, regulations and standards are urgently needed to improve the quality of care. Improvements in the social environment of RCFs, including the management mechanisms of RCFs, professional training for staff and service quality, are important for high quality of care and access to residential care resources by older people.

This study is one of the first studies that examined the specific motivations that lead families and individuals to choose a particular RCF in the context of Beijing. The findings of the five components of access to residential care, especially socio-cultural access, provide the basis for improvements to residential care in the future. This study has, however, its limitations with regard to its design and recruitment of participants. All the older participants interviewed had self-care ability and urban household registration. This study does not distinguish the various types of RCFs, such as retirement homes and assisted-living facilities. In the future, there should be more research to address these limitations: first, exploration of unequal access to residential care between older people with urban household registration and those with rural household registration; secondly, to study gender differences in access to residential care and the influence of traditional Chinese culture; thirdly, to study how older residents with different health status and care needs access care resources to meet their

demands; and fourthly, how the ownership and size of RCFs affect older residents' access to care services in RCFs.

While residential care is unlikely to replace informal care for the majority of the Chinese older population, a larger residential care sector is inevitable. How geographical, information, economic, socio-cultural access and the socio-managerial environment affect the development of the residential care sector needs to be considered by researchers and policy makers.

## Acknowledgements

All the authors gratefully thank the interviewees for participating in the research, the reviewers and editor for their time and comments, and the Chinese Ministry of Science and Technology for financial support (Grant Agreement Numbers 2007DFC20180 and 2007BAC03A11-07).

## NOTES

- 1 'Three-No' refers to older people who have no living children or relatives, little or no income, and no physical ability to work in urban areas of China (Zhan 2000).
- <sup>2</sup> 'Five Guarantees' refers to the five basic needs which the government provides for childless older people, orphans and the disabled who are unable to work in rural areas food, clothes, shelter, health care and funerals with funding from various local, municipal and governmental agencies (Bartlett and Phillips 1997).
- 3 For a complete list of questions for each group, please contact the first author.
- 4 Beijing is divided into 16 districts and two counties. The two counties are located in the exurban area of Beijing. Although part of the districts and counties of Beijing, some areas, especially in the outskirts, are rural in nature and the older people living in those areas are treated as rural residents. This affects their health insurance and pension schemes which are different for rural residents in contrast to urban residents.
- 5 The traditional housing style in Beijing is bungalows and courtyards. In recent decades, many of the bungalows and courtyards have been torn down to build apartment buildings because of the rapid urbanisation and increase in population. Most older people, however, lived in bungalows and courtyards for many years during their lifecourse.
- 6 There are, however, some criticisms of the CCACs regarding the increasing diversity and uncertainty by service providers and users as a result of the managed competition system during the restructuring of community-based services in Ontario, especially in rural communities (Cloutier-Fisher and Joseph 2000). But CCACs certainly are an example of access to information about RCFs even if there are operational problems.
- 7 The older people with rural household registration receive much lower benefits from pension and health-care insurance schemes and some of them are not covered by any insurance due to the different system among urban and rural residents.

#### References

- Aminzadeh, F., Dalziel, W. B., Molnar, F. J. and Alie, J. 2004. An examination of the health profile, service use and care needs of older adults in residential care facilities. *Canadian Journal on Ageing*, 23, 3, 281–94.
- Andersen, R. M. 1995. Revising the Behavioral Model and access to medical care: does it matter? *Journal of Health and Social Behavior*, **36**, 3, 1–10.
- Andrews, G. J. 2005. Residential homes: from distributions in spaces to the elements of place. In Andrews, G. J. and Phillips, D. R. (eds), *Ageing and Place*. Routledge, New York, 61–78.
- Arnsberger, P., Fox, P., Zhang, X. and Gui, S. 2000. Population ageing and the need for long term care: a comparision of the United States and the People's Republic of China. *Journal of Cross-cultural Gerontology*, **15**, 3, 207–27.
- Bartlett, H. and Phillips, D. R. 1997. Ageing and aged care in the People's Republic of China: national and local issues and perspectives. *Health & Place*, **3**, 3, 149–59.
- Beijing Civil Affairs Bureau 2009. Social Welfare Information of Beijing. Available online at <a href="http://bjfl.bjmzj.gov.cn/index.do?websitId=900&netTypeId=2">http://bjfl.bjmzj.gov.cn/index.do?websitId=900&netTypeId=2</a> [Accessed 25 May 2011]. (In Chinese)
- Beijing Civil Affairs Bureau, Beijing Municipal Commission of Development and Reform, Beijing Municipal Commission of Urban Planning, Beijing Municipal Bureau of Finance and Beijing Municipal Bureau of Land and Resources 2008. Notice on Accelerating the Development of Residential Care Facilities. Available online at <a href="http://bjfl.bjmzj.gov.cn/showBulltetin.do?id=10000682&dictionid=70100&websitId=900&netTypeId=2&subwebsitid=[Accessed 25 May 2011]">http://bjfl.bjmzj.gov.cn/showBulltetin.do?id=10000682&dictionid=70100&websitId=900&netTypeId=2&subwebsitid=[Accessed 25 May 2011]</a>. (In Chinese)
- Beijing Municipal Bureau of Statistics 2000. *The Future 50 Years of Beijing Municipality*. Electronics Press, Beijing. (In Chinese)
- Beijing Municipal Bureau of Statistics 2007. One Percent Population Sample Survey of Beijing Municipality (2005). Statistics of China, Beijing. (In Chinese)
- Chan, H. M. and Pang, S. 2007. Long-term care: dignity, autonomy, family integrity, and social sustainability: the Hong Kong experience. *Journal of Medicine and Philosophy*, **32**, 5, 401–24.
- Chen, S.Y. 1996. Social Policy of the Economic State and Community Care in Chinese Culture. Ageing, Family, Urban Change, and the Socialist Welfare Pluralism. Brookfield, Avebury, UK.
- Cheng, Y. 2010. Residential Care for Elderly People in Beijing, China: A study of the relationship between health and place. Doctoral dissertation, Queen's University, Kingston, Canada.
- China National Committee on Ageing 2010. Statistic Report on the Development of China's Undertakings for the Aged 2009. Available online at http://www.gov.cn/jrzg/2010-07/13/content\_1652935.htm [Accessed 25 May 2011]. (In Chinese)
- Cloutier-Fisher, D. and Joseph, A. E. 2000. Long-term care restructuring in rural Ontario: retrieving community service user and provider narratives. *Social Science & Medicine*, **50**, 7–8, 1037–45.
- Committee on Ageing of Beijing 2010. Report on Elderly Population Information and Development of Elder Care of Beijing in 2009. Available online at http://zhengwu.beijing.gov.cn/tjxx/tjgb/P020101014469100020619.pdf [Accessed 25 May 2011]. (In Chinese)
- Corden, A. and Wright, K. 1993. Going into a home: where can an elderly person choose? In Champion, T. (ed.), *Population Matters*. Paul Chapman Publishing, London, 119–35.
- Cromley, E. K. and Shannon, G. W. 1986. Locating ambulatory medical care facilities for the elderly. *Health Services Research*, **21**, 4, 499–514.

- Davis-Friedmann, D. 1991. Long Lives: Chinese Elderly and the Cultural Revolution. Expanded edition, Stanford University Press, Stanford, California.
- Gatrell, A. and Loytonen, M. (eds) 1998. GIS and health. Taylor & Francis, London. Glaser, B. G. and Strauss, A. L. 1967. The Discovery of Grounded Theory. Aldine, Chicago.
- Gu, D., Dupre, M. E. and Liu, G. 2007. Characteristics of the institutionalized and community-residing oldest-old in China. *Social Science & Medicine*, **64**, 4, 871–83.
- Hodge, G. 2008. The Geography of Ageing. McGill-Queen's University Press, Montreal. Huang, J. 2003. Economic restructuring, social safety net, and old-age pension reform in China. American Asian Review, 21, 2, 171–89.
- Jiang, L. 1995. Changing kinship structure and its implications for old age support in urban and rural China. *Population Studies*, **49**, 1, 127–45.
- Joseph, A. E. and Bantock, P. R. 1982. Measuring potential physical accessibility to general practitioners in rural areas: a method and case study. *Social Science & Medicine*, **16**, 1, 85–90.
- Joseph, A. E. and Cloutier, D. S. 1990. A framework for modeling the consumption of health services by the rural elderly. *Social Science & Medicine*, **30**, 1, 45–52.
- Joseph, A.E. and Cloutier, D.S. 1991. Elderly migration and its implications for service provision in rural communities: an Ontario perspective. *Journal of Rural Studies*, 7, 4, 433–44.
- Joseph, A. E. and Phillips, D. 1984. Accessibility and Utilization: Geographical Perspectives on Health Care Delivery. Harper & Row, New York.
- Joseph, A. E. and Phillips, D. R. 1999. Ageing in rural China: impacts of increasing diversity in family and community resources. *Journal of Cross-cultural Gerontology*, 14, 2, 153–68.
- Kao, H. and Stuifbergen, A. K. 1999. Family experiences related to the decision to institutionalize an elderly member in Taiwan: an exploratory study. *Social Science & Medicine*, 49, 8, 1115–23.
- Lee, D. T. F. 1999. Transition to residential care: experiences of elderly Chinese people in Hong Kong. *Journal of Advanced Nursing*, **30**, 5, 1118–26.
- Leung, J. C. B. 1997. Family support for the elderly in China: issues and challenges. *Journal of Ageing and Social Policy*, **9**, 3, 87–101.
- Li, C. 2007. Survey on elderly population in rural and urban areas of Beijing. *Science Times*, **31** January. (In Chinese)
- Liu, L. F. and Tinker, A. 2001. Factors associated with nursing home entry for older people in Taiwan, Republic of China. *Journal of Interprofessional Care*, **15**, 3, 245–55.
- Liu, L. F. and Tinker, A. 2003. Admission to nursing home in Taiwan. *Social Policy & Administration*, **37**, 4, 376–94.
- Love, D. and Lindquist, P. 1995. Geographical accessibility of hospitals to the aged: a geographic information systems analysis within Illinois. *Health Services Research*, **29**, 6, 629–51.
- Meade, M., Florin, J. and Gesler, W. 1988. *Medical Geography*. The Guilford, New York. Ministry of Labour and Social Security of China. 2007. *Business Guide–Pension Insurance*. Available online at <a href="http://www.molss.gov.cn/gb/ywzn/ylbx.htm">http://www.molss.gov.cn/gb/ywzn/ylbx.htm</a> [Accessed 25 May 2011]. (In Chinese)
- Morrison, D., Alexander, D., Fisk, J. and McGuire, J. 1999. Improving delivery of health and community services to welfare recipients, Columbia, SC, 1997. *Journal of Public Health Management and Practice*, 5, 2, 49–50.
- National Advisory Council on Ageing, Canada 1989. *Understanding Seniors' Independence: The Barriers and Suggestions for Action*. National Advisory Council on Ageing, Ottawa.

- Ng, A. C. Y., Phillips, D. R. and Lee, W. K. 2002. Persistence and challenges to filial piety and informal support of older persons in a modern Chinese society: a case study in Tuen Mun, Hong Kong. *Journal of Ageing Studies*, **16**, 2, 135–53.
- Ontario Ministry of Health and Long-term Care, Canada 2009. Seniors' Care: Who Do I Contact for Information? Available online at http://www.health.gov.on.ca/english/public/program/ltc/6\_ccac.html [Accessed 25 May 2011].
- Penchansky, R. and Thomas, J.W. 1981. The concept of access: definition and relationship to consumer satisfaction. *Medical Care*, 19, 2, 127–40.
- Reed, J., Payton, V. R. and Bond, S. 1998. The importance of place for older people moving into care homes. *Social Science & Medicine*, **46**, 7, 859–67.
- Rosen, T. and Kostic, A. 1957. Separation and adjustment problems in a home for the aged. *Social Work*, **2**, 1, 36–41.
- Rosenberg, M. W. 1983. Accessibility to health care: a North American perspective. *Progress in Human Geography*, **7**, 1, 78–87.
- Shang, X. 2001. Moving toward a multi-level and multi-pilar system: changes in institutional care in two Chinese cities. *Journal of Social Policy*, **30**, 2, 259–81.
- State Council Information Office of China 2004. *China's Social Security Situation and Policy*. Available online at http://news.xinhuanet.com/zhengfu/2004-09/07/content\_1952488.htm [Accessed 25 May 2011]. (In Chinese)
- Strauss, A. and Corbin, J. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Sage, Newbury Park, California.
- Strauss, A. and Corbin, J. 1998. Basic of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Sage, Thousand Oaks, California.
- Streib, G. F. 1987. Old age in sociocultural context: China and the United States. *Journal of Aging Studies*, 1, 2, 95–112.
- Wei, X. 2007. Research on the development of elder care service in Beijing. *Online Journal on Civil Administration*. Available online at http://www.bjmzj.gov.cn/mzqk/showBulltetin.do?id=2240&dictionid=42005&websitId=400&netTypeId=2&subwebsitid=10 [Accessed 25 May 2011]. (In Chinese)
- Wu, A. M. S., Tang, C. S. and Yan, E. C. 2004. Psychosocial factors associated with acceptance of old age home placement: a study of elderly Chinese in Hong Kong. *Journal of Applied Gerontology*, 23, 4, 487–504.
- Yuan, T. and Yang, X. 2006, The survey on 'elder care on housing'. Worker Daily, 30 October. Available online at http://news.xinhuanet.com/legal/2006-10/30/content\_5265942.htm [Accessed 25 May 2011]. (In Chinese)
- Zhan, H.J. 2000. The Inverted Pyramid: the effect of the one-child policy and economic reforms in China. Doctoral dissertation, University of Kansas, Lawrence, Kansas.
- Zhan, H. J. 2002. Chinese caregiving burden and the future burden of elder care in life-course perspective. *International Journal of Ageing and Human Development*, **54**, 4, 267–90.
- Zhan, H.J., Feng, X. and Luo, B. 2008. Placing elderly parents in institutions in urban China: a reinterpretation of filial piety. *Research on Ageing*, **30**, 5, 543–71.
- Zhan, H. J., Liu, G. and Bai, H. 2005. Recent developments in Chinese elder homes: a reconciliation of traditional culture. *Ageing International*, **30**, 2, 167–87.
- Zhan, H. J., Liu, G. and Guan, X. 2006. Willingness and availability: explaining new attitude towards institutional elder care among Chinese elderly parents and their adult children. *Journal of Ageing Studies*, **20**, 3, 279–90.
- Zhan, H. J., Liu, G., Guan, X. and Bai, H. 2006. Recent developments in institutional elder care in China: changing concepts and attitudes. *Journal on Ageing & Social Policy*, **18**, 2, 85–108.

Zhan, H.J. and Montgomery, R.J. V. 2003. Gender and elder care in China: the influence of filial piety and structural constraints. *Gender and Society*, **17**, 2, 209–29. Zhang, Y. and Goza, F. W. 2006. Who will care for the elderly in China? A review of the problems caused by China's one-child policy and their potential solutions. *Journal of Ageing Studies*, **20**, 2, 151–64.

Accepted 17 August 2011; first published online 17 November 2011

Address for correspondence: Yang Cheng, School of Geography, Beijing Normal University, 19 Xiejiekouwai Avenue, Beijing, 100875, China.

E-mail: chengyang@bnu.edu.cn