**Support for older people in households with bare branches in rural China: vulnerability, dilemmas and possible solutions**

First Author: Huijun Liu (PhD)

Second Author’s Institution: Institute for Population and Development Studies, Aging and Health Research Center, School of Public Policy and Administration, Xi'an Jiaotong University, Xi’an, China

Email：[liuhuij@xjtu.edu.cn](mailto:liuhuij@xjtu.edu.cn)

Second Author: Zhixin Feng (PhD)

Third Author’s Institution: Primary Care and Population Sciences, Faculty of Medicine; University of Southampton, Southampton, UK

Email: frankfengs@gmail.com

Corresponding Author: Zhixin Feng

Corresponding Author’s Institution: School of Primary Care, Population Sciences and Medical Education, Faculty of Medicine, University of Southampton, Southampton, UK

Address: Room AB230, Level B, South Academic Block, University Hospital Southampton, School of Primary Care, Population Sciences and Medical Education, Faculty of Medicine, University of Southampton, Southampton, SO16 6YD, United Kingdom

Email address: frankfengs@gmail.com

Telephone: +4407575053678

**Acknowledgements**

Data collection and analysis for this study was possible thanks to jointly financial support of National Nature Science Foundation of China (71573202), Ministry of Education Foundation of China (18JHQ073). We are very grateful for the funding.

**Conflict of Interest**

No

**Institutional Review Board (IRB)**

Xi’an Jiaotong University

**Abstract**

This study explored potential challenges and solutions for the support of older people among households with “bare branches” (unmarried men aged 28 years or older in rural China). Qualitative interviews were conducted in Ankang district of Shaanxi Province with 33 “bare branches” and 18 older parents of “bare branches”. Results showed that support from sons was still the main choice for older parents of “bare branches” in later life, and that most “bare branches” were the primary carers of their older parents. Older unmarried men faced a dilemma between staying at home to provide care to their parents, and migrating to cities to seek economic and marriage opportunities, and this was more common for unmarried men without a married brother. Government support is essential in relieving the challenges in old-age support faced by households with “bare branches”, such as developing social charities, training social workers, and improving social security benefits.

**Key Words:** psychological distress, care, bare branch, old-age support, rural China

**Introduction**

Higher female infant mortality, a strong preference for sons, and discrimination against females have resulted in the national abnormal sex ratio at birth (SRB) since the 1980s thus causing an imbalance of gender structure in China. As a consequence, a large number of adult men are unable to marry when their cohorts enter the marriage market because of a shortage of females. This group of unmarried men are called “bare branches” by academics. It has been estimated that the number of “bare branches” has reached above 30 million and this number is likely to increase after 2030 due to the one child per couple policy (OCP) (Ebenstein & Ethan, 2009; Jiang, Guo, & Li, 2010). “Bare branches” mainly live in less developed rural areas and poorer households in China, where vulnerable groups have a higher dependence on family support due to low levels of state support or social protection (Das Gupta, Ebenstein, & Sharygin, 2010; Jin, Liu, Feldman, & Li, 2013).

In rural China, the care of older people has traditionally been a family responsibility (Liu, Xiao, Cai, & Li, 2015). Most older people, especially those living in rural areas, are still heavily dependent on their children (generally married sons) for old-age support, even though filial piety culture (the virtue of respect for one’s parents, elders, and ancestors in Confucian philosophy) is weakening (Phillip & Feng, 2015). For households with “bare branches”, not only will the “bare branches” face psychological distress in old age without the support normally provided by wives and children, but their older parents may also experience a negative psychological impact and a lack of care support because daughters-in-law are usually responsible for the care and support of older parents-in-law in China (Pei & Pillai, 1999).

On the other hand, many demographic researchers have raised concerns about the quality of life of “bare branches” in China (Liu, 2017; Wang, 2012) and its potential impact on social security, such as increasing violence and spreading the transmission of sexual diseases by “bare branches” (Jin, Xie, Guo, & Li, 2012; Hudson & Den Boer, 2004). Several studies highlighted the importance of studying support for “bare branches” as they will face a severe lack of support from a wife and children (Das Gupta et al., 2010; Guo & Jin, 2016; Wang, 2012). Compared to married men, “bare branches” have fewer resources for their support (i.e. care or financial support) and are more likely to have none preparation (saving or pension) (Guo & Jin, 2016) or are heavily dependent on social security in later life (Wang, 2012). Although previous studies have highlighted the importance of studying support for “bare branches”, few studies have examined how households with “bare branches” cope with support issues, or the role that “bare branches” play in supporting their parents’ care and support needs. The combination of caring for their parents, coupled with a lack of preparation (saving or pension) for their later life is likely to increase distress of “bare branches”.

This study aims to explore the potential challenges and solutions for the support of older people in households with “bare branches”, and to understand the perspectives of support burden and the psychological distress experienced by “bare branches” and their older parents.

**Method**

This study is part of a larger project (Survey on the Livelihood of Farmers and Health and Welfare of Older People in Southern Shaanxi) exploring experiences with bachelorhood of “bare branches”, their quality of life and health risks. This study focuses on interviews with “bare branches” and older parents of “bare branches” who migrated to urban areas.

Qualitative data were collected from in-depth interviews in the Ankang district of Shaanxi Province in 2015. Ankang district has ten counties, nine of which are National Key Poverty Alleviation Work Counties. The participants were recruited through local village committees. Stratified multistage sampling and purposive sampling were used to identify the households with “bare branches” within 15 randomly selected villages from 15 rural townships in five counties of Ankang district. Three townships in each county were selected according to their levels of economic development. These areas contain the highest levels of “bare branches” in China, as previous studies showed that the “bare branches” were concentrated mainly in under-developed regions of China, especially in rural areas of western China (Das Gupta et al., 2010; Jin et al., 2013). The “bare branches” in these areas could help us to understand a deeper level of the “bare branches” in China. To identify the potential participants, the study coordinator completed a preliminary screening to determine eligibility for participants in the selected villages. Participants were eligible only if they were “bare branches” or older parents of “bare branches” who had migrated to urban areas (Ritchie, Lewis, Nichols, & Ormston, 2013). In this study, we refer “bare branches” to those never married men aged 28 years or older (It is the threshold for Chinese rural men to get married).

Participants in the in-depth interviews included 35 “bare branches” who were living in the villages, and 20 older parents of “bare branches” whose “bare branches” had migrated to urban areas (we only randomly interviewed one parent if both parents were in the household). Because two “bare branches” refused the interview and two older parents of “bare branches” who did not finish the interview were deleted; therefore, interviews from 33 “bare branches” and 18 older parents of “bare branches” were used for final data analysis. Their characteristics are shown in Table 1. Among “bare branches”, 33% of them were aged 46 or older, 33.4% of them were illness or disability, 45% of them were living with parents, 51% of them have brothers, and less than one quarter of them were illiterate. Among older parents of “bare branches”, 72% of them were aged between 60 and 65, about 89% of them were illness or disability, 50% of them were living with “bare branches”, 50% of them have other sons, 61% of them were male and 78% of them were married.

<Table 1 about here>

The research team drafted the semi-structured interview guides, participant information sheets and consent forms in Mandarin. Trained researchers interviewed the participants individually in their own houses. The interviews began with an open-ended question: “what has it been like for you without a wife or daughter-in-law in your family?” Some probing questions were followed to encourage participants to express their experiences or feelings, such as “what were the problems or difficulties they faced in supporting their parents (or their old-age support)”, “what caused their problems”, “how they felt about it”, “how they handled these problems” and “what were their plans for their and their parents’ old-age support in the future”. Ethical approval was reviewed and approved by the academic committee of Xi’an Jiaotong University.

All interviews were audio-recorded and transcribed in Mandarin by the researchers. Thematic analysis of the interviews was carried out by our research team, using the scissor-and-sort technique (Braun and Clarke, 2006). Open coding which began at the descriptive level was independently completed by two senior researchers to develop the codebook. Disagreement in the coding scheme was resolved through discussion and consultation of other researchers in the research team. Once the codebook was agreed among our research team, the first author independently coded the transcripts. The initial coding scheme was also refined during the coding process based on the discovery of new emerging analytical thoughts among the coding team members. Following a combination of deductive and inductive perspectives, similar themes were grouped into higher-order categories based on how they were related and some unexpected themes emerged which were linked to our research questions. For example, the parent node of “Choice of old-age support” was linked to the child node of “Practices in supporting their parents” and “Old-age support from only son” emerged as an unexpected concept and was grouped into the higher-order theme of “Old-age support in later life”.

**Results**

The overarching themes include “the choices of old-age support in later life”, “living arrangements and support”, and “challenges in support from “bare branches” to their parents”.

**3.1. Theme 1: Old-age support in later life**

**3.1.1. Choices from older parents of “bare branches”**

Interviews with older parents of “bare branches” revealed that few (four out of 18) intended to depend on the government for support in the future, and one older parent reported they would depend on themselves in later life. Most older parents of “bare branches” (13 out of 18) chose to rely on their sons for support in the future, regardless of whether they had another married son. Eight out of 20 of the surveyed households had another married son in addition to a bare branch. Some households had more than one “bare branch”.

Although many older parents realised that their only son may have no opportunity to get married, they still expected that their son would provide care support to them in later life. The main reason for these parents’ expectation was attributed to the traditional culture of bringing up sons to support parents in old age, and there was no alternative for older people who living in rural areas. When asked about the potential impact of the absence of a daughter-in-law, most parents of “bare branches” believed that their unmarried children would provide care support, because if their son got married, his burden would be shared rather than replaced by the presence of a daughter-in-law.

Interviewer: *Who do you think will provide old-age support for your later life?*

Older parent of “bare branch”: *Our later life will depend on our only son* [the participant’s son was a “bare branch” and had a daughter who was married to other household]*.*

Interviewer: *Does the bachelorhood of your son have any influence?*

Older parent of “bare branch”: *It’s the local custom that older people live with a son for old-age assistance. There is no influence. If he can get married, there is only one more person to share his burden.* (Participant no. Zp2)

**3.1.2. Old-age support from “bare branches”**

Interviews with “bare branches” also showed that most of them had taken or were taking responsibility for the old-age support of their parents, by providing financial and/or care support to their older parents on demand. If the “bare branches” had a married brother who could share the burden of support, they might have been partly relieved from providing care support to their parents, but generally they provided financial support in compensation.

Interviewer: *Who provided old-age support to your parents? What was your role in providing old-age support?*

“Bare branch”: *At that time, it was my older brother and his wife taking care of my parents. I was not expected to provide care to my parents. It was enough if I could take good care of myself. But I had to contribute as much of my earnings as I could to my parents.* (Participant no. Ps9)

**3.1.3. The only sons and their choices for supporting their parents**

However, in most cases, “bare branches” were responsible for providing all aspects of support to their older parents because they were the only sons in their households (including households with other daughter(s)).

Interviewer: *How do you think bachelorhood affects your life?*

“Bare branch”: *I have to stay at home to take care of my mother who is seriously ill because there is no one else who lives in this household. I usually find some part-time jobs near this village to earn some money so that I can afford my mother’s medical expenditures and daily living. The income is low and work opportunities are uncertain in this village. There is nothing left after all expenditures. (Participant no. Hs4)*

For the “bare branches” who were their parents’ only sons, if their parents experienced a decline in health, the “bare branches” were under more pressure to get married as their wife could share higher burden of caring for their older parents. Therefore, the burdens of care and illness-related financial obligations usually reduced their chances of getting married. Consequently, some “bare branches” accepted that they would never marry. In one case, a “bare branch” who lived in a poor family and his parents were suffering from a long-term illness decided to forego his marriage and take care of his parents by himself. For himself, his main concern was as follows:

*No matter how, looking after my parents is my responsibility. I do not want to drag anyone else down* [meaning a woman who may be his wife if he married]*. If I get married, it will ruin someone’s life because of my struggling situation.* (Participant no. Ss7)

**3.2. Theme 2: Living arrangements and support**

Healthcare support and help with the activities of daily living (a form of people’s daily self-care activities) for older people are to some extent closely related to their living arrangements. The person who lives with older people provides emotional, physical and material help to their older parents. In our study, seven out of 18 older parents had another married son. Only two parents lived with their married son, and twelve older parents of “bare branches” lived with their unmarried son (including one participant who also had a married son).

This type of living arrangement may also suggest mutual support or a corporate group model between “bare branches” and their older parents. When their older parents were still experiencing good health, the “bare branches” mainly provided financial support, while their parents – generally their mother – took care of household tasks and even provided help with household tasks to their unmarried sons as part of living together. As the health condition of their parents grew worse, the “bare branches” tended to stay at home to provide health care and assistance with activities of daily living to their older parents in return.

Interviewer: *Who does the household chores?*

“Bare branch”: *It’s my mother who does the household chores and I have to work outside to earn our bread.* (Participant no. Zs4)

“Bare branch”: *Because the health condition of my mother is not well, I usually help her with the household chores when I come back from work.* (Participant no. Ns5)

“Bare branch”: *I live with my older father. He has some difficulty with his daily living tasks. I have to spend more time at home to take care of him.* (Participant no. Ss6)

“Bare branch”: *My parents are too old to keep taking care of us. It’s time for me to look after them. I have to deal with everything in this family.* (Participant no. Ns3)

**3.3. Theme 3: Challenges in support from “bare branches” to their parents**

**3.3.1. Challenges for some “bare branches” in their responsibility for care support**

Although the mutual support between “bare branches” and their older parents could partly compensate for the absence of a wife and a daughter-in-law, support from “bare branches” faced a great challenge for those households with “bare branches” who had lower education levels, poorer health and lower socioeconomic status. As suggested by Das Gupta et al. (2010) and Jin et al. (2013), adult men with lower education levels, poorer health and lower socioeconomic status experienced higher rates of bachelorhood. If the “bare branches” are only sons with poor health, it is more challenging for them to support their older parents in later life because they also need support for themselves.

In addition, support for older parents was also made more difficult by the outward migration of adult children. The “bare branches” faced a dilemma between outward migration for work and providing care support to their older parents when their parents’ health worsened. If there were no other care resources available, the outward migration of “bare branches” put their widowed or empty-nest older parents in a risky situation.

Interviewer: *Can you tell me what problems you face?*

Older parent of “bare branch”: *I stay at home alone. My daughter has married and moved out and my unmarried son has migrated to a city for work. I cannot do any physical work but still can manage my personal daily living. Because I feel too tired to go outside, I seldom visit relatives or friends now. As you know, I live in a remote area and there is no one to look after me, I always worry that nobody will know if something happens to me and I pass away.* (Participant no. Hp2)

In rural areas of China, both government-financed and market-oriented care services are underdeveloped. When their older parents needed health care or assistance with activities of daily living, most outward-migrating “bare branches” chose to stay at home to take care of their parents even though they needed to resign from their paid work and pay for their families’ daily expenditures. In this case, the “bare branches” often faced financial difficulty due to lower or no income in rural villages. Therefore, once they were relieved from the burden of caring for their dependent parents, outward migration was still their first choice because they were more likely to find more opportunities for well-paid work or marriage in urban areas.

Interviewer: *Do you come across any problems when providing care to your parents?*

“Bare branch”: *I have stayed at home since my mother died. Because the health of my father is not very good, I cannot migrate to other areas for work. I am not sure whether I will migrate out or not. It depends on the health condition of my father.* (Participant no. Ss1)

“Bare branch”: *I have to stay at home temporarily to look after my mother. I plan to migrate out for more work after my mother passes away. I have spent all my savings on my mother. I have no earnings in the village and have also lost my land. There are more opportunities outside.* (Participant no. Hs4)

**3.3.2. The burden of support and psychological distress related to bachelorhood**

The interview data also revealed that some older parents of “bare branches” did not want to depend on their unmarried sons for support in their later life, even though they had no other choice, because they did not want to become a burden on their unmarried sons. In the case introduced above (Ss7), the bare branch’s widowed mother tried to kill herself several times to avoid being a burden on her son. One reason given was that older parents recognised that their need for support represented a barrier to their sons to find a marriage partner.

Older parent of “bare branch”: *Even when I get older and cannot move, I will not depend on him* [her unmarried son] *to look after me. The only request for him is to find a partner and get married as soon as possible. That is what I am most worried about. I always cry for this.* (Participant no. Hp7)

Another reason was the detrimental effect on the intergenerational relationship caused by bachelorhood. In contrast with Western societies, parents take greater responsibility for their sons’ marriage morally and have to pay for a bride price, a wedding and other expenditure (Jiang et al., 2012). Because the households that were squeezed in the marriage market were usually in low social economic status, the parents of “bare branches” felt guilty and pressure over the bachelorhood of their sons. Some “bare branches” also attributed their bachelorhood to their financially incompetent parents. Mutual complaints and blame were evident within this intergenerational relationship:

Interviewer: *what caused the problems of the relationship between you and your son?*

Older parent of “bare branch”: *He* [unmarried son] *often quarrels with me and complains that I am not capable of this and not capable of that. As a rural older person, I do not have a lucrative retirement pension and could not earn much money to assist him in getting married. We do not want to live with him. My pension is 60 Yuan (about 9 dollars) per month and my couple’s pension is 70 Yuan (10 dollars) per month. We will depend on this pension for our later life. (Participant no. Sp6)*

“Bare branch”*: My mother is always keen for me to get married as soon as possible though she cannot help me to get married. When she puts too much pressure on me, I feel like losing my temper. (Participant no. Hs4)*

In a society with a culture of near-universal marriage, most “bare branches” and their parents reported that they found it difficult to accept bachelorhood. Some “bare branches” admitted to feelings of bitterness and inferiority, and the parents of the “bare branches” also suffered psychological distress because of harsh judgement from neighbours on their son who was unable to marry. To avoid the psychological distress and increase their marriage prospects and opportunities to work, most “bare branches” chose or were encouraged by their parents to migrate to urban areas.

Interviewer: *How does bachelorhood have an impact on your life?*

“Bare branch”: *I don’t want to stay in this village. My sisters and brothers have their own families. When I come back from outside of this village, it’s only me staying at home alone. The life is meaningless.* (Participant no. Ss6)

Interviewer: *How does your son’s bachelorhood have an impact on your life?*

Older parent of “bare branch”: *I prefer him to migrate outside because I feel great pressure from my son’s bachelorhood. As you can see, he has not yet got married at his age. Neighbours must have thought about there is something wrong with him. They often ask why your son has not yet married. I do not know how to reply. I have to say that my son is going out with a girl and will bring her back soon.* (Participant no. Hp6)

**Discussion**

Using the qualitative data from the in-depth interviews in the Ankang district of Shaanxi Province, this study explored the availability of support for older parents of “bare branches” and the role that “bare branches” play in their support to their parents. Our findings provide a better understanding about the absence of a daughter-in-law, as this has a limited effect on the support of older parents, but represents a dilemma for the “bare branches” in balancing the responsibilities in their parents’ later life with their own personal needs. Our findings also highlight the importance of the need to provide health and social care support to households with “bare branches” for policy makers to consider in the future.

Traditionally, support for Chinese older people in later life has been guaranteed by their married son and daughter-in-law, who tend to share the responsibility of financial and care support. This support usually follows a pattern of gender roles. For older parents of “bare branches”, particularly those who have no other married sons, the present study shows that support from sons is still their main option in later life. Unmarried sons tend to play an important role in the support of their older parents by providing them with both financial and care support, or sharing support with their married brothers. This finding is in line with other studies which found that unmarried sons are more obedient to their parents than their married brothers generally (Wei, Jin, & Li, 2008). Hence, the filial piety culture still determines the practice of old-age support in rural China, which guarantee the quality of later life of unmarried sons’ older parents, but can also impose different challenges in old-age support on those unmarried sons. This practice of support from “bare branches” is likely to become more prevalent as the demographic transition and marriage squeeze continues in China. In the 1970s, China initiated the one child per couple policy in urban and some rural areas (in most rural areas, couples were allowed to have a second child if their first child was a girl), which accelerated population ageing and reshaped family structures. Along with smaller families, particularly one-child families, the imbalance of the gender structure resulting from a higher sex ratio at birth is creating more households with a “bare branch”, as usually their only adult child is a son. Therefore, support from the only son has become a necessary choice for most households with a “bare branch”.

It has been reported that family solidarity significantly contributes towards all aspects of intergenerational support in China (Luo & Zhan, 2012; Liu et al., 2015). Solidarity reflects the underlying potential of members to share instrumental, emotional and other resources that can be activated primarily when someone within the family network is needed (Silverstein et al., 1997). Our study suggests that most “bare branches” and their parents chose to live together to provide mutual financial support and housekeeping, and that the “bare branches” tended to take on more responsibilities, including health care and daily living assistance to their older parents when the health condition of their parents grew worse. The mutual support or solidarity between “bare branches” and their older parents through living together may not only partly compensate for the absence of care support from a wife or a daughter-in-law, but also reinforce the “social contract” between parents and children to fulfil their filial duty.

On the other hand, previous findings suggest that the absence of a wife may have a greater impact on the bare branch’s current quality of life, and lack of support in the future (Liu, 2017; Wang, 2012). The present study shows that the bachelorhood of sons had little impact on their parents’ old age support as older parents were still supported by their “bare branches” in most households with “bare branches”. However, for the “bare branches” who were squeezed in the marriage market, this means that they will be unable to receive support from a child or wife in later life. In addition, “bare branches” were more likely to be in poorer health or with lower socio-economic status, which exacerbated the difficulty of fulfilling their responsibility for their parents’ old-age support.

In line with previous findings (Wei et al., 2008; Liu et al., 2017), the present study also finds that older parents experienced psychological distress and stigma, because their neighbours tended to harshly judge about their unmarried child. This also leads them to feel being isolated by the local community. The study also finds that intergenerational conflict between “bare branches” and their older parents was increased by psychological distress related to bachelorhood. Hence, older parents in these households were more likely to be at risk of facing unmet need. In addition, our study suggests that even those “bare branches” who were in good health and who enjoyed a good relationship with their parents may still have to face a dilemma between outward migration to seek better financial support, and staying at home as to take care of their parents, particularly when “bare branches” were only sons in their households.

This study also has limitations. The data come from a well-defined area of western China, which is considered to typify the social and cultural conditions of poor rural areas. Previous studies have revealed that “bare branches” were concentrated mainly in under-developed regions of China, especially in rural areas of western China, due to the marriage squeeze (Das Gupta et al., 2010; Jin et al., 2013), and the purpose of this study was to provide some insights into a specific population rather than to generalize. However, given the great regional heterogeneity in economic development and variations in filial piety cultures among different areas of China, an extension of our study to areas in Western or Central China would be more valuable for understanding the nature of the intergenerational relationship between “bare branches” and their parents. Another limitation is that the qualitative analyses focus on the experiences of “bare branches” living in rural areas (including those returned from migration) and older parents of “bare branches” migrating to urban areas. The perspectives and feelings of “bare branches” who were working in urban areas were not collected in detail. Therefore, investigating “bare branches” dilemma in old-age support and their quality of life from both rural and urban areas will be our directions for future research.

In conclusion, the current study identifies that government support is essential in relieving the difficulties in old-age support faced by households with “bare branches”, through improving the affordability of family support and building a better state social support system. The state social support system policy needs to supplement family care by developing the local economy and providing more work opportunities locally to obviate the situation where older people are “left behind”. Another approach by policy makers might be to improve existing social security benefits by expanding the coverage of medical insurance for migrants and their family members, which could encourage “bare branches” to migrate to urban areas with their older parents. The third approach by policy makers could be to address the shortage of family support in healthcare and daily living. Local governments could promote the construction of community healthcare centres or nursing homes to cater for different level of need, and equip them with necessary rehabilitation facilities and appropriately qualified staff. Households with “bare branches” are usually in low social economic status, so local governments could provide reimbursement for healthcare services for households with “bare branches” in the future. Encouraging the development of local social charities and training social workers or local residents to provide volunteer care services or mutual care support would also be beneficial.

**References**

Babbie, E. (2001). The practice of social research, 9th ed. London: Thomson Learning.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Ebenstein, A.Y. & Sharygin, E. J. (2009). The consequences of the ‘missing girls’ of China. World Bank Economic Review, **23** (3): 399-425. Available at: http://documents.worldbank.org/curated/en/498661468221674913/The-consequences-of-the-missing-girls-of-China.

Das Gupta. M., Ebenstein A., & Sharygin. E. J. (2010). China’s marriage market and upcoming challenges for elderly men. The World Bank Policy Research Paper WPS5351. Available at: http://documents.worldbank.org/curated/en/948771468212988136/Chinas-marriage-market-and-upcoming-challenges-for-elderly-men

Guo, Q., & Jin, X. (2016). The effect of marriage squeeze on the rural migrant men’s old-age expectations: An analysis based on theory of stress-copying. Population Journal, **02**:29-39. [In Chinese]

Hudson, V. M., & Den, Boer A. (2004). “bare branches”: the security implications of Asia’s surplus male population. Boston: MIT Press.

Jiang, Q., Guo, Z., & Li, S. (2010). Study on marriage squeeze in future of China. Population and Development, **(3):** 39-47. [In Chinese]

Jiang, Q., & Jesús Javier Sánchez Barricarte. (2012). Bride price in China: The obstacle to “bare branches” seeking marriage. The History of the Family, **17** (1): 2-15. DOI: 10.2190/QXLM-PN99-GPN7-32XF

Jin, X., Liu L., Feldman M., & Li S. (2013). “bare branches” and the marriage market in rural China. Chinese Sociological Review, **46** (1): 83-104. Doi:10.2753/CSA2162-0555460104

Jin, X., Xie, Y., Guo, Q., & Li, Y. (2012). Aggregation of involuntary bachelors and public security in rural communities: Findings from survey in a hundred villages. Journal of Xi’an Jiaotong University (Social Sciences), **32** (6):36-44. [In Chinese]

Liu, H. (2017). Quality of life of old-unmarried men in rural China: Present and future. Population and Society, (**1**):33-43. [In Chinese]

Liu, H., Xiao, Q., Cai, Y. & Li, S. (2015). The quality of life and mortality risk of elderly people in rural China: The role of family support. Asia-Pacific Journal of Public Health, 27 (2): NP2232-45. Doi.org/10.1177/1010539512472362

Luo, B., & Zhan, H. (2012). Filial piety and functional support: understanding intergenerational solidarity among families with migrated children in rural China. Ageing International, 37, 69-92.Doi: 10.1007/s12126-011-9132-1

Pei, X. M., & Pillai, V. K. (1999). Old age support in China: The role of the state and the family. The International Journal of Aging and Human Development, 49 (3):197－212. Doi:10.2190/QXLM-PN99-GPN7-32XF

Phillips, D., & Feng Z. (2015). Challenges for the aging family in the People’s Republic of China. Canadian Journal on Aging-Revue Canadienne Du Vieillissement, 34 (3): 290-304. Doi:10.1017/S0714980815000203

Ritchie, J., Lewis, J., Nichols, C., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers (2nd edition)*. Los Angeles: Sage.

Silverstein, M. & Bengtson, V. L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in America families. *American Journal of Sociology*, *103*(2), 429–460.Doi: 10.1086/231213.

Wang, Y. (2012). The living way and pension status of the elder unmarried and divorced males. Journal of Graduate School of Chinese Academy of Social Science, 05:129-136. [In Chinese]

Wang, L. (2012). Survey and analysis on quality of life of forced male bachelors in rural China. Population Journal, 92 (2):21-31. [In Chinese]

Wei, Y., Jin, X., & Li, S. (2008). Stress and coping in families with old unmarried male: Evidence from YC county in rural Henan China. Population & Development, 14 (5):2-12. [In Chinese]

Table 1. Characteristics of participants

|  |  |  |  |
| --- | --- | --- | --- |
| **“bare branches”**  **(N=33)** | | **Older parents**  **(N=18)** | |
| **Age** | | **Age** | |
| 30–35 | 4 (12.1%) | 60–65 | 13 (72.2)% |
| 36–45 | 18 (54.6%) | 66–70 | 2 (11.1%) |
| 46–55 | 4 (12.1%) | 71–75 | 2 (11.1%) |
| 55+ | 7 (21.2%) | 75+ | 1 (5.6%) |
| **Health condition\*** |  | **Health condition** |  |
| Good health | 22 (66.6%) | Good health | 2 (11.1%) |
| Illness or disability | 11 (33.4%) | Illness or disability | 16 (88.9%) |
| **Living arrangement** |  | **Living arrangement** |  |
| Living alone | 14 (42.4%) | Living alone or with  spouse only | 7 (38.9%) |
| Living with parents | 15 (45.5%) | Living with married son | 2 (11.1%) |
| Living with others | 4 (12.1%) | Living with “bare branches” | 9 (50.0%) |
| **Have any brothers** |  | **Having any other sons** |  |
| Yes | 17 (51.5%) | Yes | 9 (50%) |
| No | 16 (48.5%) | No | 9(50%) |
| **Education** |  | **Gender** |  |
| Illiterate | 8 (24.24%) | Male | 11 (61.11%) |
| Primary school | 14 (42.42%) | Female | 7 (38.89%) |
| Middle school | 7 (21.21%) | **Marital status** |  |
| Higher school | 4 (12.12%) | Married | 14 (77.78%) |
| / | / | Widowed | 4 (22.22%) |

**\* Health condition was assessed based on participants’ physical health status including chronic disease and Activities of Daily Living(ADLs). “Good health” stands for participants did not have chronic disease and any difficulty with ADLs, and “illness or disability” stands for participant reported they had chronic disease and had difficulty with ADLs.**