

Perspectives

Challenges and Responses of Left-Behind Elderly and Children in Rural China Amid the New Population Development Stage

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The disparate economic growth in China has compelled numerous adults from rural areas to migrate to cities in search of more lucrative employment prospects (1). In the 7th National Census, it was reported that the floating population totaled 375,816,759, accounting for approximately 26.00% of the overall population. Such migratory patterns often result in leaving behind vulnerable groups, particularly children and older adults, in rural regions. Given the inadequately established care systems, these groups are particularly susceptible and have consistently been at the forefront of social security concerns in China (2).

The inadequate public pension benefits and health insurance systems result in older adults relying heavily on their offspring, generally their sons, for their overall well-being (3). Migration has led to the rise of a vulnerable group known as the “rural left-behind older adults”, where older family members lack necessary support as their caretaker children move to urban areas. Simultaneously, the growth and well-being of children hinge on parental care, but employment constraints, limited financial resources, and rural residency restrictions often make it unfeasible for migrant workers to bring their children to the cities where they work (4). Consequently, these children are regularly left behind in their rural homes, becoming the “left-behind children in rural areas”.

During the first meeting of the Financial and Economic Affairs Commission under the 20th Communist Party of China (CPC), Xi Jinping, General Secretary of the CPC Central Committee, accentuated that the country is entering a new stage of population development. This phase is characterized by declining birthrates, an aging population, and uneven population growth among regions. Additionally, the rural population characterized by an unbalanced age population structure, has been pronouncedly affected by the inconsistent economic development and these factors.

Status of Imbalanced Age Structure and Increasing Burdens

The 2020 Population Census reported that in China, the child-age dependency ratio was 26.24 per 100 working-age individuals, while the old-age dependency ratio was 19.74. Notably, rural areas displayed significantly higher dependency ratios in comparison to urban areas. In rural areas, the child-age dependency ratio was at 30.58 and the old-age dependency ratio was 28.13. Contrastingly, in urban areas, these ratios were 24.07 and 15.56, respectively. The heavily skewed age structure in rural areas has imposed a greater burden on the adult population due to these pronounced dependency ratios. Moreover, notable societal aging has been recorded in China, predicting a future transition from an aging society to an aged society, which may exacerbate the existing burdens.

Concerns over declining fertility rates and rising populations of older adults are not unique to China. According to the World Population Ageing 2020 report and the United Nations Population Division, over the last fifty years, the total fertility rate (TFR) has halved. As of 2021, the global TFR stands at 2.32. Furthermore, projections suggest that the global population of individuals aged 65 years or older will increase from 9.3% in 2020 to 16.0% by 2050.

Population pyramids effectively illustrate the age and sex composition of both rural and urban populations in 2010 and 2020 (Figure 1A). Compared to urban populations, the rural population pyramids display a more marked decline. This is characterized by a significantly smaller children’s population, an expanded older-adult population, and the outflow of working-age adults. It’s notable that from 2010 to 2020, the middle section of the rural regions’ pyramid has narrowed, paired with an evident bulge at the top. This indicates a substantial decrease in the adult population and a growing proportion of elderly people, placing increased strain on the diminishing labor-age population. In light of declining fertility rates and

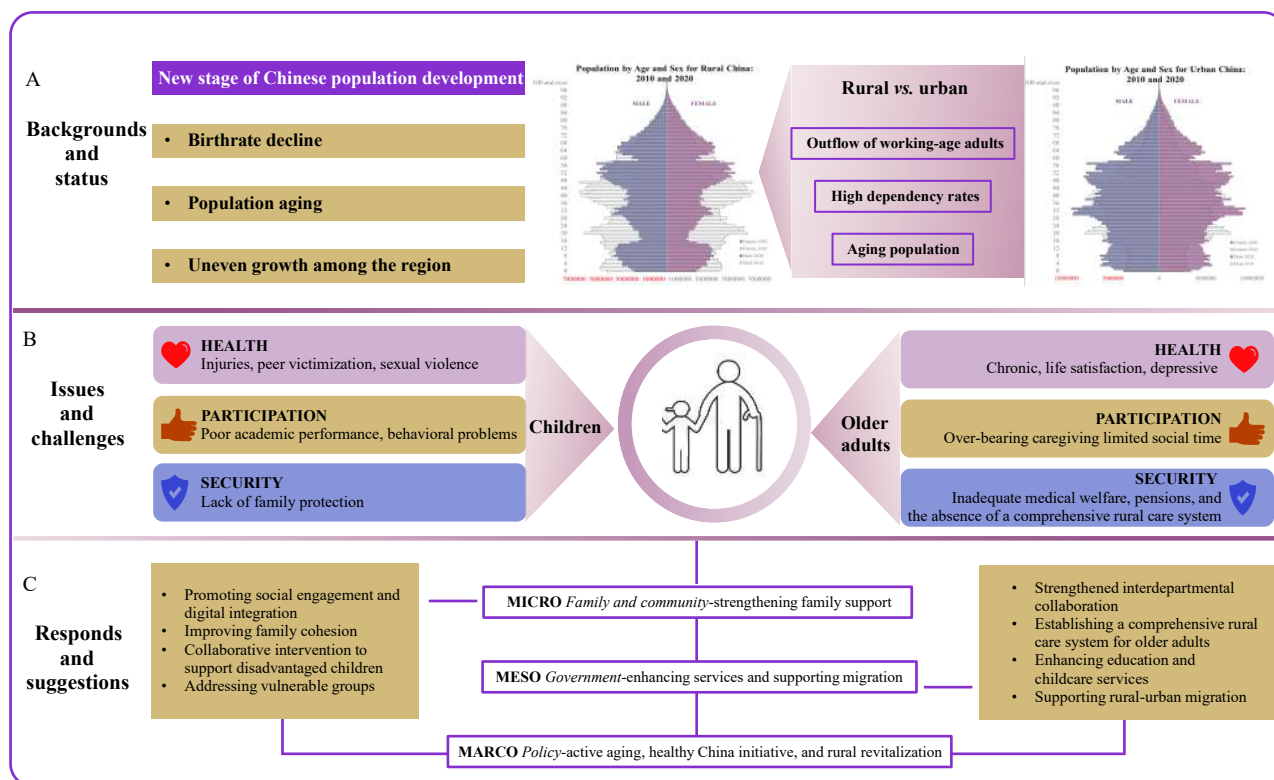


FIGURE 1. Conceptual framework addressing the challenges for left-behind older adults and children in rural areas. (A) Backgrounds and status; (B) Issues and challenges; (C) Responds and suggestions.

heightened life expectancy, the middle-aged population will shift towards an older population. This shift will result in a diminishing number of working-age adults available to support the growing older generation, which may exacerbate existing resource scarcity.

Social security issues in rural China have been amplified due to simultaneous labor force emigration and aging population. The lack of parental and formal institutional care (5), along with shifting family dynamics towards smaller family units and weakened family functions (6), not only inhibit childhood development but also place severe health management demands on the elderly population.

Triple Challenges of Health, Participation, and Security

The aforementioned context underscores the pressing necessity for all-encompassing support mechanisms that cater to the needs of child-rearing and elderly care during diverse stages of societal transition. These associated challenges encapsulate health, participation, and security concerns, which are applicable to both left-behind children and the elderly population (Figure 1B).

Health challenges in both physical and mental

wellbeing: Elderly individuals left behind confront grave health challenges, as evidenced by lower self-rated health and heightened severity of mental health issues (7), predominantly attributed to their children's lack of care. For instance, when children migrate, the resulting increased levels of depressive symptoms and loneliness, as well as diminished life satisfaction, plaguing their left-behind parents (8). Also, the incidence of chronic diseases amongst these deserted seniors tends to be higher (9). Furthermore, it's important to underscore that female elderly individuals left behind confront more severe health issues and bear heavier living burdens (10).

Children in rural areas who are left behind face increased health risks due to a deficit in parental support and protection. This group of children experiences elevated levels of anxiety and depression (11). Concurrently, they are more likely to suffer from unintentional injuries, an example of which includes falls (12). When compared to their counterparts who are not left behind, these children endure a higher level of peer victimization and have a greater rate of non-suicidal self-injury (13). Moreover, these left-behind children encounter intense issues pertaining to sexual violence and abuse (14). Given that older adults often

assume the role of caregivers for these left-behind children, both generations are exposed to heightened health risks.

Challenges in participation during the information and digital era: The responsibilities of older adults residing in rural areas often encompass care for grandchildren and extensive involvement in domestic and agricultural tasks (15). This increased burden often results in decreased social participation and limited interaction with their children, a dynamic which amplifies their risk of social isolation (16). Coupled with an enlarging digital divide, rural seniors are increasingly becoming marginalized in the digital age, faced with restricted access to resources, information, and new forms of social engagement (17). Amid overwhelming circumstances such as the pandemic situation, dependency on internet services surged (18); an area where the rural elderly found themselves to be increasingly bereft, thereby contributing to heightened stress responses and an amplified sense of vulnerability due to social isolation.

Simultaneously, children who are left behind often exhibit heightened vulnerability to social anxiety, which may result in subpar academic performance and behavioral issues such as inattention, and potentially even deviant behavior (19). Viewed through the lens of a life-course perspective, it can be inferred that a childhood marked by traumatic experiences, such as abuse, exclusion, and various forms of bullying (on campus or online), can indelibly impact the mental health of these left-behind children (20). In conclusion, both senior residents and left-behind children tackle significant obstacles in the form of social isolation and exclusion.

Security challenges related to elderly care and child rearing: With regard to healthcare security, the New Cooperative Medical Scheme (NCMS) has notably increased medical insurance coverage in rural regions. However, its objective is centered on providing affordable basic medical services, indicating that the standard of medical welfare in rural communities significantly trails behind that in urban areas (21). Elderly individuals residing in rural areas often grapple with inadequate medical security and insufficient pensions, exacerbating their already difficult situation (22). Concurrently, the lack of an established rural care system severely impacts the overall well-being of these rural seniors (23). This lack of security further compounds their difficulty in providing adequate care for their dependent grandchildren.

Children who are left behind often experience

deficient familial care. More precisely, the absence of communication and emotional rapport with their parents adversely affects the family stability and adaptability of these children (24). In situations where only the father migrates for work, the responsibility of parenting intensifies for the mother who stays behind. This added burden may lead to a heightened level of control over the children.

A Three-Level Linkage Coping Strategy At Macro, Meso, and Micro Levels

In the context of China's "Actively Responding to Population Ageing" strategy and "Healthy China" initiative, it becomes critically important to address the challenges faced by the elderly and children left behind in rural areas (Figure 1C). As the future of the country and its society, children's health and well-being are a crucial part of ensuring a balanced population development. Simultaneously, the elderly population must be empowered to have healthier and more content lives in their later years, as a component of promoting "active aging." Considering these aspects, this study aims to provide some recommendations.

At the macro level, there is a call for enhanced policy guidance to tackle challenges confronted by older adults and children residing in rural regions. This objective could be realized by reinforcing the growth of these areas, apart from administering favored policies that motivate adult migrants to revisit their native places in the course of applying the rural revitalization strategy. National improvement of rural infrastructure is also essential, fostering an environment conducive for young migrants to return to their familial roots.

At the meso level, it is imperative for the Chinese government to bolster inter-departmental communication and introduce targeted policies to augment implementation efficiency. Specifically, the need for a comprehensive support system for older adults in rural areas is paramount to facilitate better access to medical resources and thereby improve the general health of older adults situated in rural areas (22). Concurrently, investments in rural education and childcare services could alleviate the parenting burden on older adults left behind and elevate the educational achievements of children (10). Lastly, initiatives should be rolled out to lessen the workload of rural young workers in cities, affording them additional time and resources to care for their elderly parents and children at their original domicile.

On a micro level, numerous strategies can be

implemented to enhance the wellbeing of older adults left behind. To begin with, rural areas should establish dedicated activity centers for these individuals. These centers can provide training on the use of smart technologies, tailored to the specific attributes of the digital age. Alongside this, efforts must be made to improve the health literacy of older adults. Enhanced health literacy is likely to boost their social participation and networks, diminish potential mental health issues, and fortify their social capital. Furthermore, families of left-behind children in rural areas should receive assistance to foster better family cohesion and improve parent-child relationships. Lastly, communities must also work closely with schools and social services to offer interventional social support (19) to left-behind children facing difficulties. This will facilitate their adaptation to school life.

In conclusion, the current stage of population development in China presents pressing issues for the elderly and child populations left in rural areas. These challenges impact and relate to each other across domains of health, participation, and security. Currently, various government departments, including those dealing with civil affairs, health, women and children, family, and agriculture are charged with addressing the challenges faced by rural older adults and children left behind. Nonetheless, these departments must bolster their collaboration or even introduce specialized offices for rural senior and child affairs to ensure the policy effectiveness specifically geared towards the left-behind population.

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REFERENCES

1. He GP, Xie JF, Zhou JD, Zhong ZQ, Qin CX, Ding SQ. Depression in left-behind elderly in rural China: Prevalence and associated factors. *Geriatr Gerontol Int* 2016;16(5):638 – 43. <http://dx.doi.org/10.1111/ggi.12518>.
2. Zou X, Fitzgerald R, Nie JB. “Unworthy of Care and Treatment”: Cultural Devaluation and Structural Constraints to Healthcare-Seeking for Older People in Rural China. *Int J Environ Res Public Health* 2020;17(6):2132. <http://dx.doi.org/10.3390/ijerph17062132>.
3. Huang BH, Lian YJ, Li WS. How far is Chinese left-behind parents' health left behind? *China Econ Rev* 2016;37:15 – 26. <http://dx.doi.org/10.1016/j.chieco.2015.07.002>.
4. Wen YJ, Li XB, Zhao XX, Wang XQ, Hou WP, Bo QJ, et al. The effect of left-behind phenomenon and physical neglect on behavioral problems of children. *Child Abuse Neglect* 2019;88:144 – 51. <http://dx.doi.org/10.1016/j.chiabu.2018.11.007>.
5. Li Y, Zhao YY. Early childhood care and education: current situations and policy options. *Popul J* 2013;35(2):31 – 41. <http://dx.doi.org/10.3969/j.issn.1004-129X.2013.02.004>. (In Chinese).
6. Li T, Song J, Cheng TY. The transition of three-generation lineal family in China: an observation based on age, period, and cohort. *Popul J* 2020;42(3):5 – 17. <http://dx.doi.org/10.16405/j.cnki.1004-129X.2020.03.001>. (In Chinese).
7. Zhong H, Zhao JM. The impact of adult child migration on the health of elderly parents left behind in China. *Can Stud Popul* 2020;47(3):151 – 68. <http://dx.doi.org/10.1007/s42650-020-00034-8>.
8. Liu YX, Wang J, Yan ZQ, Huang R, Cao Y, Song HX, et al. Impact of child's migration on health status and health care utilization of older parents with chronic diseases left behind in China. *BMC Public Health* 2021;21(1):1892. <http://dx.doi.org/10.1186/s12889-021-11927-x>.
9. Evandrou M, Falkingham J, Qin M, Vlachantoni A. Children's migration and chronic illness among older parents 'left behind' in China. *SSM - Popul Health* 2017;3:803 – 7. <http://dx.doi.org/10.1016/j.ssmph.2017.10.002>.
10. Zhao MJ, Zhu ZQ, Kong CC, Zhao CS. Caregiver burden and parenting stress among left-behind elderly individuals in rural China: a cross-sectional study. *BMC Public Health* 2021;21(1):846. <http://dx.doi.org/10.1186/s12889-021-10892-9>.
11. Zhang YC, Jiang XS, Xiang YH. The development trajectory of depression in left-behind children and the specific effect of different kinships on it: a longitudinal study. *Curr Psychol* 2023. <http://dx.doi.org/10.1007/s12144-023-04378-7>.
12. Jiang J, Ling WJ, Huang GF, Guo XJ, Chen ZX, Su L. Prevalence of unintentional injury among left-behind children in mainland China: evidence from epidemiological surveys. *Child Care Health Dev* 2021;47(3):387 – 99. <http://dx.doi.org/10.1111/cch.12835>.
13. Yang BL, Guan QM, Huang J, Wang ZY. Peer victimization and nonsuicidal self-injury among Chinese left-behind children: mediation by perceived discrimination and moderation by hardiness. *J Aggress Maltreat Trauma* 2023;32(5):709 – 25. <http://dx.doi.org/10.1080/10926771.2022.2101408>.
14. Wang C, Tang JY, Liu T. The sexual abuse and neglect of "left-behind" children in rural China. *J Child Sex Abuse* 2020;29(5):586 – 605. <http://dx.doi.org/10.1080/10538712.2020.1733159>.
15. Chang HQ, Dong XY, MacPhail F. Labor migration and time use patterns of the left-behind children and elderly in rural China. *World Dev* 2011;39(12):2199 – 210. <http://dx.doi.org/10.1016/j.worlddev.2011.05.021>.
16. Cai S, Park A, Yip W. Migration and experienced utility of left-behind parents: evidence from rural China. *J Popul Econ* 2022;35(3):1225 – 59. <http://dx.doi.org/10.1007/s00148-021-00869-8>.
17. Ye LS, Yang HQ. From digital divide to social inclusion: a tale of mobile platform empowerment in rural areas. *Sustainability* 2020;12(6):2424. <http://dx.doi.org/10.3390/su12062424>.
18. Early J, Hernandez A. Digital disenfranchisement and COVID-19: broadband internet access as a social determinant of health. *Health Promot Pract* 2021;22(5):605 – 10. <http://dx.doi.org/10.1177/15248399211014490>.
19. Xu XH, Sun YI, Wu YN. Strain, depression, and deviant behavior among left-behind and non-left-behind adolescents in China. *Int Sociol* 2023;38(3):394 – 410. <http://dx.doi.org/10.1177/02685809231164036>.
20. Sun M, Xue ZM, Zhang W, Guo R, Hu AM, Li YH, et al. Psychotic-

- like experiences, trauma and related risk factors among "left-behind" children in China. *Schizophr Res* 2017;181:43 – 8. <http://dx.doi.org/10.1016/j.schres.2016.09.030>.
21. Ao X, Jiang DW, Zhao Z. The impact of rural-urban migration on the health of the left-behind parents. *China Econ Rev* 2016;37:126 – 39. <http://dx.doi.org/10.1016/j.chieco.2015.09.007>.
 22. Zhang Y, Wang JX. Chinese rural left-behind elderly: Their individualization, descending familism and difficulties. *Ethnography* 2022. <http://dx.doi.org/10.1177/14661381211050009>.
 23. Nikoloski Z, Zhang AW, Hopkin G, Mossialos E. Self-reported symptoms of depression among Chinese rural-to-urban migrants and left-behind family members. *JAMA Netw Open* 2019;2(5):e193355. <http://dx.doi.org/10.1001/jamanetworkopen.2019.3355>.
 24. Zhang XY, Luo QQ, Li J. Correlation study on social anxiety and family cohesion and adaptability in rural left-behind children. *Ann Med-Psychol, Rev Psychiatr* 2020;178(9):933 – 7. <http://dx.doi.org/10.1016/j.amp.2020.01.008>.