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Advanced Care Research Centre

Quality of care in later life in low- and middle-income countries

Dr Nav Aujla, Senior Research Associate, ACRC/NIHR ARC NENC, Newcastle University

ACRC briefing paper 4

What is the problem?

The work of the Advanced Care Research Centre (ACRC) recognises that there are considerable inequities in health, so 'later life' can happen early for vulnerable groups such as homeless people[1, 2]. However, this paper focuses on older people aged 60-years+ in LMICs. It first describes the challenge of ageing populations in LMICs, including the implications of ageing to health and the health and social care system in LMICs, and then discusses quality of care research in later life in LMICs and summarises key global policy and focal points for future research.

The 'grand challenge' of ageing in low-and middle-income countries

In 2017, the United Kingdom (UK) government's Industrial Strategy announced that an ageing society is one of four 'grand challenges' that need to be tackled to ensure that by 2035 more people can live well for longer[3]. However, the 'grand challenge' of ageing is not unique to the UK. In fact, this is a 'global grand challenge' that started in high-income countries (HICs) but is now facing many LMICs around the world[4].

Populations in LMICs are ageing at pace[5]. The United Nations (UN) estimated that in 2020, 728 million people worldwide were aged 65-years or older and predicted that this number would more than double to 1.5 billion by 2050[6]. Recent forecasts suggest that in 2050, 80% of all older people will be living in LMICs[7]. As shown by the UN in Figure 1[8], east and south-east Asia will continue to have the largest proportion of older people, but large increases in the 65+ population by 2050 are also expected in central and south-Asia (*+204 million*)[6].

Key points

- This briefing paper summarises policy, research, and other evidence to demonstrate the shared need globally to conduct further research into the quality of care in later life in low-and middle-income countries (LMICs).
- The 'grand challenge' of ageing is facing many LMICs around the world, where populations are ageing at pace. The largest increase in the 65+ population by 2050 is expected in Asia. Populations in LMICs are also ageing faster than they did in high-income countries (HICs).
- It is urgent to address the complex care needs of an ageing population in LMICs. However, more research is needed to improve the quality of later life care in this context.

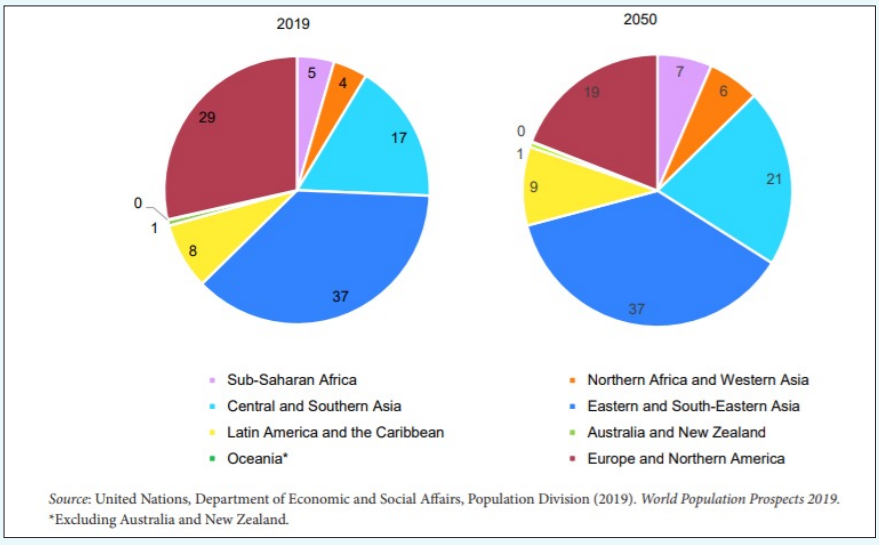

Figure 1: Percentage of older adults aged 65+ in 2019 and 2050, by global region (extracted from the UN[8])

In addition, while it took around 50-years for the population of older adults in Australia, Japan, and New Zealand to double, Cambodia and Papua New Guinea are expected to get there much faster, in around 30 years, so have considerably less time to take action[9]. It is often suggested that LMICs will *'grow old before they grow rich'*[10]. As a world first, older people aged 60+ are set to outnumber younger people aged below 25 years by 2050 and beyond[8,11]. The future population of under 25's is also projected to decline in LMICs, as shown by the UN in figure 2[8,34]. In 2019, the population of the oldest old (80 years and over) was the fastest growing age group in many countries[10].

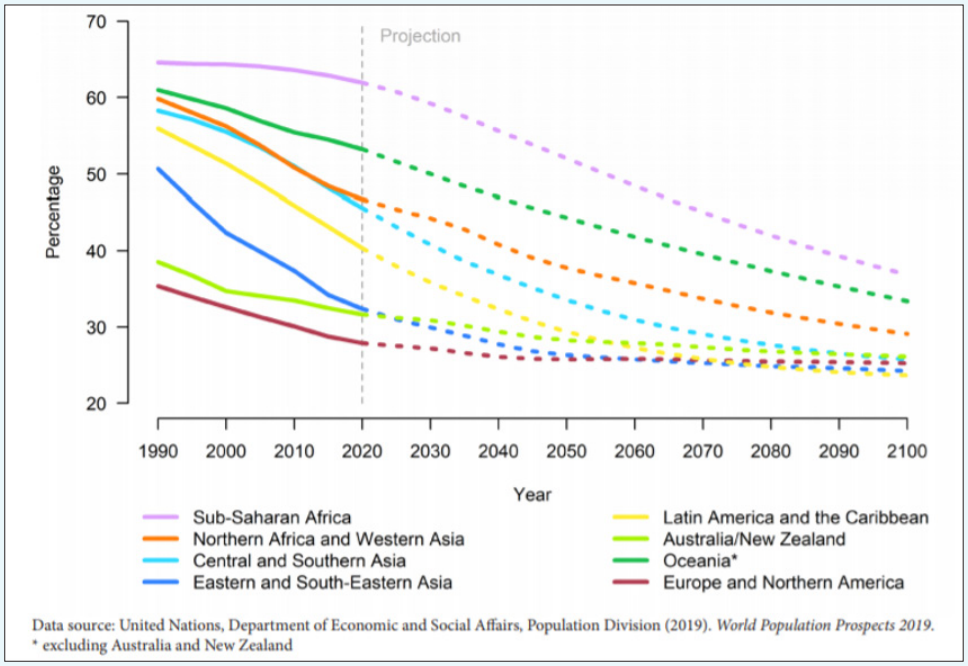

Figure 2: Declining population under 25-years of age in LMICs (extracted from the UN[8,34])

What do we know about it?

Why is the population ageing?

The two main reasons that populations in LMICs are ageing are declining fertility in tandem with increased life expectancy. Women in many countries around the world are having fewer babies than before. In 1970-1975, the median total fertility rate was over double the 2.3 live births per woman reported in 2010-2015[12]. Declines are most marked in Asia, Latin America, and the Caribbean[12]. In addition, average life expectancy at birth increased globally by 12% to 7.7 years between 1990-1995 and 2015-2020, with the largest gains in sub-Saharan Africa[8]. It is expected to increase by a further 6% or 4.5 years between 2015-2020 and 2045-2050, with the largest increases again in east and south-east Asia and Latin America and the Caribbean[8]. Life expectancy at age 65 is also set to increase in LMICs, particularly in east and south-east Asia[8]. In addition, women are living longer than men. In 2015-2020, female life expectancy at birth was around 4.8 years longer than for males and the gap remained well into older age – this pattern was again most evident in Latin America and the Caribbean (*+6.5 years*), and east and south-east Asia (*+5.3 years*)[8]. The ongoing Coronavirus pandemic may lead to a dip in life expectancy globally, in the most affected regions[13]. Minority ethnic groups and older people have disproportionately suffered loss of life due to COVID-19[14].

Health challenges of ageing

Health often worsens as people age, so while people may be living longer, they may not spend those years in good health[5]. Non-communicable diseases (NCDs), such as dementia, diabetes, heart attack, and stroke, are leading causes of death and disability in LMICs[15]. NCDs are driven by rapid urbanisation, which has paved the way for unhealthy diets, sedentary lifestyles, tobacco use and harmful drinking that lead to major risk factors of NCDs including obesity and hypertension[16]. The risk of NCDs also increases with age[15]. According to the World Health Organisation (WHO), NCDs account for 71% of all deaths worldwide – around 45 million people die each year from NCDs – and 77% of deaths are in LMICs[15]. Around 15 million deaths from NCDs are in the 30-69 age group, and 85% of these are in LMICs[15].

NCDs can be prevented[16]. However, prevention often requires a complex, multidimensional approach, including screening for risk factors, medication, and lifestyle change[15]. The treatment and management of NCDs can also be complex and is usually long-term and expensive[17]. Between 2011-2025, the economic losses to LMICs of the four most prevalent NCDs was estimated at over US$ 7 trillion, which is a yearly average loss of around US$ 500 billion and approximately 4% of the current annual output of these countries[17]. Older people are increasingly juggling multiple long-term conditions (multimorbidity), including

physical and mental health conditions such as anxiety and/or depression that can lead to social isolation and loneliness[18]. The prevalence of multimorbidity in LMICs is suggested to be at around 30%[19]. Older people in LMICs may also experience a 'double burden of disease' in which care is concurrently needed for both NCD and infectious disease such as tuberculosis and HIV/AIDS[20]. Frailty is also a growing challenge in LMICs. Frailty is characterised by weakness, fatigue, and unintended weight loss in older people, and can co-occur with multimorbidity and often leads to falls, complex health and social care needs and loss of independence and quality of life[21]. The prevalence of frailty and pre-frailty in LMICs is suggested to be around 17% and 49%, respectively[21].

Health system challenges of an ageing population in LMICs

Health systems in LMICs are often fragile, under-resourced and are currently under strain due to the COVID-19 pandemic[22]. Strong integrated, affordable and person-centred primary care is needed in LMICs to tackle the complex needs of an ageing population[23], and is currently a WHO priority[24]. LMICs often have a range of public and private healthcare services that run in parallel, and patients choose where they consult at the point of need[25]. However, people usually pay 'out of pocket' expenses to access healthcare, which further impoverishes the poor and may deter them from seeking care and lead to high unmet need for vulnerable groups[26].

Care is also fragmented and often ill-equipped to deal with the complexity of multiple diseases[27]; quality-of-care is highly variable; and there are considerable rural-urban inequalities in access to care[22]. Geriatric care is also less well developed in LMICs and social care is minimal[28]. Evidence suggests that older people in LMICs may prefer to remain in their own homes, despite deteriorating health[5]. Families commonly care for older people at home - female spouses/relatives most often provide unpaid care alongside or instead of paid work[29], and this can lead to poor carer health and wellbeing[30]. However, unpaid care of this kind has had limited visibility in global policy, though the gender inequity of unpaid care is captured in Sustainable Development Goal (SDG) 5.4, as part of the UN's 2030 agenda on sustainable development[31]. Rural-urban migration of the young for work may lead to dispersal of families and older family members left behind without some of the practical, daily support they might need[32].

Quality of care research in LMICs

Research into quality of care for older persons in LMICs is significantly lacking[22], though good quality care is crucial to achieving 'Universal Health Coverage' (UHC)[33] and SDG 3 'Good health and wellbeing'[31]. Research funders such as the NIHR in the UK committed to generating more research in this area through multiple funding calls in recent years focused on LMICs.

The UN declared 2021-2030 as the 'Decade of Healthy Ageing' with the following priorities, in alignment with the SDGs[27]:

- Age friendly environments
- Combatting ageism
- Integrated care
- Long-term care

Therefore, the time to act is now. Quality of care research in LMICs should consider a *whole system* approach[22]. The Lancet Global Health Commission proposed a framework for high-quality health systems in LMICs, which argues for *macro, meso,* and *micro*-level strengthening across the: *foundations of care*, such as population need, governance and organisation of care; *processes of care*, such as user experience and a competent workforce; and *quality impacts* including trust and confidence in the system and better health outcomes[22]. These elements are essential to strengthening health systems in LMICs in response to the challenge of ageing populations. Research priorities based on the existing evidence include:

- Post-COVID mental health of older people
- Primary healthcare and social care strengthening
- Continuity and integration of care
- Multimorbidity and frailty
- Support for unpaid carers
- Age friendliness of health and care systems

What needs to be done?

Addressing the complex care needs of an ageing population is as urgent a challenge in LMICs as it is in HICs. However, more research is needed to improve the quality of later life care in LMICs. We are now in a 'Decade of Healthy Ageing' – a period of concerted global action to transform health and social care around the world. Therefore, we have the chance now to work in partnership to ensure that in the future older people in LMICs can live well for longer, echoing the ACRC vision of *personalised and affordable* care to support *independence, dignity, and quality of life* in later life.

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References

1. Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. Health equity in England: the Marmot review 10 years on. London: Institute of Health Equity; 2020
2. Ruger JP, Kim HJ. Global health inequalities: an international comparison. J Epidemiology Community Health. 2006;60(11):928-36
3. HM Government. Industrial strategy: building a Britain fit for the future. London: Crown Copyright; 2017
4. Stewart Williams J, Myléus A, Chatterji S, Valentine N. Health systems responsiveness among older adults: Findings from the World Health Organization Study on global AGEing and adult health. Glob Public Health. 2020;15(7):999-1015
5. World Health Organization (WHO). World report on ageing and health. Geneva: WHO; 2015
6. United Nations Department of Economic and Social Affairs Population Division. Population facts (No. 2020/1): government policies to address population ageing. 2020
7. World Health Organization. Ageing and health 2018 [Available from: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health]
8. United Nations Department of Economic and Social Affairs Population Division. World population ageing 2019: highlights. ST/ESA/SER.A/430; 2019
9. World Health Organization. Ageing and health: regional framework for action on ageing and health in the Western Pacific (2014–2019). Geneva: WHO; 2014
10. Age International. Facing the facts: the truth about ageing and development. London: Age International; 2019
11. United Nations Department of Economic and Social Affairs. World population ageing 2017: highlights. New York: United Nations; 2017
12. United Nations Department of Economic and Social Affairs PD. World fertility report 2015 - highlights (ST/ESA/SER.A/415). New York: United Nations; 2017
13. Marois G, Muttarak R, Scherbov S. Assessing the potential impact of COVID-19 on life expectancy. PLOS ONE. 2020;15(9):e0238678
14. Pifarré i Arolas H, Acosta, E., López-Casasnovas, G. et al. Years of life lost to COVID-19 in 81 countries. Sci Rep. 2021;11(3504)
15. World Health Organization. Noncommunicable diseases 2021 [Available from: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases]
16. GBD 2015 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016;388((10053):1659-724
17. World Health Organization, World Economic Forum. From burden to “best buys”: reducing the economic impact of non-communicable diseases in low- and middle income countries. Geneva: World Economic Forum; 2011
18. Vadivel R, Shoib S, El Halabi S, El Hayek S, Essam L, Gashi Bytyçi D, et al. Mental health in the post-COVID-19 era: challenges and the way forward. General Psychiatry. 2021;34(1):e100424
19. Afshar S, Roderick PJ, Kowal P, Dimitrov BD, Hill AG. Multimorbidity and the inequalities of global ageing: a cross-sectional study of 28 countries using the World Health Surveys. BMC Public Health. 2015;15(1):776
20. van der Ham M, Bolijn R, de Vries A, Campos Ponce M, van Valkengoed IGM. Gender inequality and the double burden of disease in low-income and middle-income countries: an ecological study. BMJ Open. 2021;11(4):e047388
21. Siriwardhana DD, Hardoon S, Rait G, Weerasinghe MC, Walters KR. Prevalence of frailty and prefrailty among community-dwelling older adults in low-income and middle-income countries: a systematic review and meta-analysis. BMJ Open. 2018;8(3):e018195
22. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. The Lancet Global Health. 2018;6(11):e1196-e252

23. Global Conference on Primary Health Care. Declaration of Astana. Astana, Kazakhstan 25-26 October 2018
24. World Health Organization. Thirteenth General Programme of Work 2019-2023. Promote health. Keep the world safe. Serve the vulnerable. Geneva: WHO; 2019
25. World Health Organization. Private sector landscape in mixed health systems. Geneva: WHO, Licence: CC BY-NC-SA 3.0 IGO.; 2020
26. Ezeh A, Oyebode O, Satterthwaite D, Chen Y-F, Ndugwa R, Sartori J, et al. The history, geography, and sociology of slums and the health problems of people who live in slums. The Lancet. 2017;389(10068):547-58
27. World Health Organization. Decade of Healthy Ageing 2020-2030. [Available from: https://cdn.who.int/media/docs/default-source/decade-of-healthy-ageing/final-decade-proposal/decade-proposal-final-apr2020-en.pdf?sfvrsn=b4b75ebc_25&download=true]
28. The Lancet Healthy L. Care for ageing populations globally. The Lancet Healthy Longevity. 2021;2(4):e180
29. Alzheimer's Disease International and Karolinska Institute. Global estimates of informal care. London Alzheimer's Disease International; 2018
30. Thrush A, Hyder A. The neglected burden of caregiving in low- and middle-income countries. Disability and Health Journal. 2014;7(3):262-72
31. United Nations. Transforming our world: the 2030 agenda for Sustainable Development. United Nations; 2015
32. Ao X, Jiang D, Zhao Z. The impact of rural-urban migration on the health of the left-behind parents. IZA Discussion Paper No 9350. 2015
33. World Health Organization. Universal health coverage (UHC) (factsheet) 2021 [Available from: https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)]
34. United Nations Department of Economic and Social Affairs Population Division. World population prospects 2019: highlights. ST/ESA/SER.A/423; 2019

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