

The findings of this study contradict the portrayal of migrants as a health burden for host countries or societies, and highlight the need to improve the affordability and access to safer ways of living, and health care for migrants, which will ensure that their susceptibility to infectious disease and external causes of mortality remains low.

Although the study highlights the need for better data on under-represented and marginalised groups, such as asylum seekers and undocumented migrants, there is a clear need to extend this to internal migrants. A few studies done in Indonesia and China support the healthy migrant hypothesis,<sup>3,4</sup> but the need for further evidence persists, particularly for migrants in low-income and middle-income countries.<sup>10</sup>

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- 1 Hull D. Migration, adaptation, and illness: a review. *Soc Sci Med Med Psychol Med Sociol* 1979; **13A**: 25–36.
- 2 WHO. Health of migrants—the way forward. Report of a global consultation. Geneva: World Health Organization, 2010.
- 3 Lu Y. Test of the ‘healthy migrant hypothesis’: a longitudinal analysis of health selectivity of internal migration in Indonesia. *Soc Sci Med* 2008; **67**: 1331–39.
- 4 Hesketh T, Ye XJ, Li L, Wang HM. Health status and access to health care of migrant workers in China. *Public Health Rep* 2008; **123**: 189–97.
- 5 Aldridge RW, Nellums LB, Bartlett S, et al. Global patterns of mortality in international migrants: a systematic review and meta-analysis. *Lancet* 2018; published online Dec 5. [http://dx.doi.org/10.1016/S0140-6736\(18\)32781-8](http://dx.doi.org/10.1016/S0140-6736(18)32781-8).
- 6 Calderon J, Rijks B, Aguinas DR. Asian labour migrants and health: exploring policy routes. Geneva: International Organization for Migration, 2012.
- 7 Xu Q, Guan X, Yao F. Welfare program participation among rural-to-urban migrant workers in China. *Int J Soc Welf* 2010; **20**: 10–21.
- 8 International Labour Organization. ILO multilateral framework on labour migration. Geneva: International Labour Office, 2006.
- 9 Carballo M, Grocutt M, Hadzihasanovic A. Women and migration: a public health issue. *World Health Stat Q* 1996; **49**: 158–64.
- 10 Borhade A, Dey S, Tripathi A, Mavalankar D, Webster P. Migration and health: a review of policies and initiatives in low and middle income countries. *Lancet* 2016; **388** (suppl 2): 526 (abstr).



## Forgotten needs of children left behind by migration

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Little evidence is available about the impact parental migration has on children who are left behind. Although parents leaving children in the care of their extended families while they seek employment—either within their origin country or internationally—is common in low-income and middle-income countries (LMICs), few studies have investigated the impact this has on the health outcomes of these children.

The systematic review of children left behind by migrant parents by Gracia Fellmeth and Kelly Rose-Clarke and colleagues<sup>1</sup> in *The Lancet* included studies from all LMICs, and considered both forced migration and labour migration. Most studies were done in China. 91 of the 111 included studies reported the health outcomes of children residing in rural China, who were left behind when one or both parents moved to urban areas for employment. The authors report that although families might benefit economically from remittances sent back home, migration had few benefits for children who were left behind. Compared with children of non-migrant parents, left-behind children had an increased risk of mental health problems, including depression (risk ratio [RR] 1.52 [95% CI 1.27–1.82]; standardised mean difference [SMD] 0.16 [0.10–0.21]), anxiety (RR 1.85 [1.36–2.53]; SMD 0.18 [0.11–0.26]), and suicidal ideation (RR 1.70 [1.28–2.26]), and nutritional problems such as wasting (RR 1.13 [1.02–1.24]) and stunting (RR 1.12 [1.00–1.26]).

The predominance of studies in China—where 61 million are left behind by one parent and 9 million are left behind by both parents<sup>2</sup>—reflects the scale of the problem and highlights the challenges faced by these left-behind children. For example, many children are left



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behind by parents who migrate for reasons associated with the household registration system (also known as the hukou system) in China. Children who migrate with their parents are less likely to be admitted to local public schools in destination cities. A previous study<sup>3</sup> has shown that children migrating from rural to urban areas are even less likely to be enrolled in school than those who are left behind by their parents. Other problems associated with the Chinese household registration system include poor access to health care and social welfare, and inadequate community and familial support for migrant parents and their children who migrate with them. Although awareness is increasing among policy makers with regard to the consequences of the widespread internal migration observed in China,<sup>4</sup> little action has been taken in rural areas to target the factors contributing to poorer health outcomes among children (eg, family structure, living conditions and poverty, community social capital, and level of caregiver supervision). Subsequently, little is known about which interventions will be most effective and how these interventions should be evaluated.

Statistics from other countries indicate a substantial research gap with regard to the health outcomes of left-behind children when compared with China. As summarised by Fellmeth and Rose-Clarke and colleagues, economic necessity has resulted in 40% of children in rural South Africa, 27% of children in the Philippines, and 36% of children in Ecuador being left behind while their parents seek employment away from home. However, little is known about the impact of parental migration on left-behind children in LMICs other than China, and research is urgently needed in these countries.<sup>5</sup>

The study describes parental migration in China; however, we would argue that the health outcomes of left-behind children are a global issue. Many parents who migrate are employed by global companies, and thus the

associated health problems of left-behind children cannot be contained within an internal migration framework alone and should be considered within a global context. This approach would be consistent with the 2030 Agenda for Sustainable Development, adopted by all member states of the UN in 2015, which, in addition to the commitment to ensure healthy lives and promote wellbeing for all, identified the contribution and impact of migration as a cross-cutting issue to sustainable development. The core principle of the Agenda—to leave no one behind—needs to be applied to address and prevent the health issues due to parental migration, and would have to account for intergenerationality since many caregivers in rural areas are ageing grandparents. This systematic review highlights the urgent need for more research to understand the impact of parental migration, and the requirement for sustainable policies and strategies to address the needs of left-behind children and families of migrants whose labour is contributing to the rapid socioeconomic development in LMICs.

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- 1 Fellmeth G, Rose-Clarke K, Zhao C, et al. Health impacts of parental migration on left-behind children and adolescents: a systematic review and meta-analysis. *Lancet* 2018; published online Dec 5. [http://dx.doi.org/10.1016/S0140-6736\(18\)32558-3](http://dx.doi.org/10.1016/S0140-6736(18)32558-3).
- 2 China has about 9 million left-behind rural children. *People's Daily Online* (China), Nov 10, 2016. <http://en.people.cn/n3/2016/1110/c90000-9140003.html> (accessed Nov 28, 2018).
- 3 Wu X, Zhang Z. Population migration and children's school enrolments in China, 1990–2005. *Soc Sci Res* 2015; **53**: 177–90.
- 4 Ministry of Health of China. Notice on healthcare work for the left-behind children in 2017. Beijing: Ministry of Health of China, 2017 (in Chinese).
- 5 Jan C, Zhou X, Stafford RS. Improving the health and well-being of children of migrant workers. *Bull World Health Organ* 2017; **95**: 850–52.

## Take a pill for no more polyps: is it that simple?

Colonoscopy is regarded as the gold standard for detection of colorectal cancer and its precursors, colorectal adenomas and sessile serrated lesions. This procedure should be able to prevent colorectal cancer by detecting and removing those precursor lesions. After adenoma or sessile serrated lesion resection, individuals are considered to be at high risk of developing metachronous lesions and

colorectal cancer, and are therefore advised to undergo surveillance colonoscopy. Despite these preventive measures, post-colonoscopy colorectal cancers (PCCRCs) occur at a frequency of up to 8.6%.<sup>1</sup>

Chemoprevention has the potential to reduce the occurrence of metachronous adenomas and colorectal cancers. Such an anticolorectal cancer effect is known



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