Residential mobility: diluting the potential of public health programmes

Leanne Young, Stephanie McLennan, Madeleine Kirk, Elaine Rush

When families move house it is often more than a change of address; it is a repeated change of school, workplace, health service and community. While the reason for moving may be positive such as families relocating to take up new employment, for some, in particular young children, it is mainly due to altered 'housing tenure'.[1] High housing mobility or transience is associated with poorer health and education engagement and outcomes, and may limit the success of health promotion programmes located in these sectors.

Early life development and environment is increasingly recognised as influencing adult health outcomes.[2] Minimising adverse exposures during this period will enhance child health and development and consequently adult health.[3] Residential mobility is of interest as an environmental factor influencing health outcome because it features in the early part of life for many children in New Zealand.[4] The reasons for high residential mobility are complex and interrelated, and may be an indicator of the presence of other negative effects on child health and development such as poverty, family instability, unemployment and single parenthood.[5]

New Zealand has a highly mobile population with 51 percent of the population reporting a change of address between 2001 and 2006.[4] Population residential mobility rates, using age standardised data, show more New Zealanders move in a year compared to other developed countries.[6] Population subgroups experiencing higher rates include families with young (1–4 years) children,[4] Māori (due in part to a young population age structure)[4] and the economically disadvantaged.[7]

Poor health outcomes in childhood and adolescence have been associated with high residential mobility in school age children with the strongest evidence for behavioural problems in childhood and more risk-taking behaviours among teenagers.[3] Lower levels of health service utilisation and disrupted continuity of care are other possible negative effects.[3] Interruption in education is also likely with resulting negative impacts on educational outcomes.[7] An evaluation of the early childhood Participation Initiative Programme found that around one in three children left the initiatives after enrolling for unknown reasons, although the early childhood education providers interviewed commented that transience was a common reason for leaving the services.[8] Transience was highlighted as a cause of non-participation in a survey of Māori mothers to determine knowledge of sudden infant death syndrome prevention during which over a third of the identified sample of mothers were unable to be contacted.[9] Non-participation in research was also noted by Jelleyman and Spencer, stating that 'residential mobility may affect inclusion in studies potentially obscuring these children from research'.[3]

Under 5 Energize (U5E) is a health promotion programme operating since July 2013 in 121 early childhood centres across the Waikato region in four high deprivation cluster areas. An audit in 2015 of 87 participating early childhood centres (excluding four-year old children transitioning to school) found that one in four children moved in the previous year and almost half the centres had three or more staff change. The reported mean number of teachers per centre at programme initiation was suggesting a turnover of around half the staff in these centres. Enrolment and staff turnover was greater in lower equity index (Equity index [EI] is the Ministry of Education measure of the extent to which the early childhood centre enrols children from low socioeconomic areas. An EI of one indicates a centre with children from a

high deprivation area and five is low deprivation) early childhood centres. Project Energize, another similar health promotion programme in primary schools, found lead teachers from schools identified a high school roll turnover as a barrier to 'the levels of engagement and participation' in Project Energize but had the advantage that all primary schools in the Waikato region receive the Energize service[10] if the move was within the region. This has implications for programme delivery and implementation, increasing cost and reducing potential impact. Areas experiencing high mobility require new relationships to be established and ongoing regular message delivery sessions to accommodate new educators and families. A focus on embedding programme aims into policy and practices nationwide is imperative to avoid loss of programme gains when staff and families move.

In conclusion, high turnover of a population is limiting health programme engagement, participation, evaluation and outcomes. Frequent residential change should be an important consideration in the design, implementation, evaluation and funding of health promotion programmes especially in populations experiencing transiency.

Competing interests:
Nil.

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Author information:
Leanne Young, Faculty of Health and Environmental Science, Auckland University of Technology, Auckland; Stephanie McLennan, Project Energize, Sport Waikato, New Zealand; Madeleine Kirk, Under 5 Energize, Sport Waikato, New Zealand; Elaine Rush, Centre for Child Health Research, Auckland University of Technology, Auckland.

Corresponding author:
Leanne Young, Faculty of Health and Environmental Science, Auckland University of Technology, Private Bag 92006, Auckland.
leanne.young@aut.ac.nz

URL:
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REFERENCES:

1. Morton SMB, Atatoa Carr PE, Berry SD, et al. Growing up in New Zealand: A longitudinal study of New Zealand children and their families. Residential Mobility Report 1: Moving house in the first 1000 days. Auckland: Growing Up in New Zealand; 2014.
2. Hanson MA, Gluckman PD. Early developmental conditioning of later health and disease: Physiology or pathophysiology? Physiol Rev. 2014;94(4):1027–1076.
3. Jelleyman T, Spencer N. Residential mobility in childhood and health outcomes: a systematic review. J Epidemiol Community Health. 2008;62(7):584–592.
4. Statistics New Zealand. 2006 Census of population and dwellings. Wellington: Statistics New Zealand; 2009.
5. Dong M, Anda RF, Felitti VJ, et al. Childhood residential mobility and multiple health risks during adolescence and adulthood: The hidden role of adverse childhood experiences. Arch Pediatr Adolesc Med. 2005;159(12):1104–1110.
6. Long L. International perspectives on the residential mobility of America's children. J Marriage Fam. 1992;54:861–869.
7. Wynd D. The revolving door: Student mobility in Auckland schools. Auckland: Child Poverty Action Group; 2014.
8. Mitchell L, Meagher-Lundberg P, Davison C, et al. ECE participation programme evaluation. Wellington: Ministry of Education; 2016.
9. Tipene-Leach D, Hutchison L, Tangiora A, et al. SIDS-related knowledge and infant care practices among Maori mothers. NZ Med J. 2010;123(1326):88–96.
10. Mrkusic A. School engagement in the Project Energize health intervention programme. 'What works, what does not work, what next?' [Master's Thesis] Auckland: Auckland University of Technology; 2012.