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Housing need in Canada: Healthy lives start at home

Developed by Orianna Mak, Dr. Nina Mazze and Dr. Sarah Waterston for PedsCases.com.
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Introduction

Orianna: Hi, my name is Orianna Mak. I am a senior medical student at McMaster University, Michael G. DeGroot School of Medicine.

Nina: Hi, my name is Dr. Nina Mazze. I am a pediatric resident physician at McMaster University, McMaster Children's Hospital. Today, we will be reviewing the Canadian Paediatric Society's Position Statement on *Housing need in Canada: Healthy lives start at home*. We worked alongside Dr. Waterston, lead author of the position statement, to create a podcast for physicians and learners to increase their understanding and awareness of housing needs in our patients and their families.

Housing has been named a key social determinant of health, and has direct impacts on the well-being of children. In Canada, one-third of households experience *substandard or core housing need* [1]. As such, pediatricians and other child health advocates have an important role in relieving the health effects of housing need, through our clinical practice and advocacy efforts.

The learning objectives for today are to:

- (1) define types of housing need in Canada;
- (2) understand the health impacts of housing need;
- (3) learn to assess housing status in the clinical setting; and
- (4) discuss how pediatricians, residents and medical students can advocate for housing needs in our patients.

Let's start with a case.

Clinical Case

Orianna: You are seeing A, a 6-year-old female with asthma and her younger sibling E, a 2 month old male, accompanied by their mother. They are new to your clinic and have recently moved to the area. As new patients, it is important to obtain a comprehensive social history, which includes an assessment of housing need.

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Definitions of Housing Need

Let's review the terminology used to describe housing needs in Canada, as defined by the Canada Mortgage and Housing Corporation [2]. "Inadequate housing" refers to accommodations requiring major repairs. "Unsuitable housing", or "crowded housing" are those that have insufficient bedrooms for the household's size and make-up, as per the National Occupancy Standard requirements. "Unaffordable housing" means the costs of shelter constitutes 30% or more of the household's gross income. Housing that fails to meet at least one of the above standards of being adequate, suitable, or affordable, is referred to as "unacceptable". Finally, households are considered to be experiencing "core housing need" when they have both unacceptable housing *and* would have to use 30% or more of their gross income to obtain alternative, acceptable housing in their local area.

In addition to these standards, other factors may also result in housing need. These include infestations, poor water and air quality, unsafe neighbourhoods, unstable housing leading to frequent moves (defined as more than 3 in a child's life), use of temporary housing, and inaccessibility for household members with a disability [2].

Housing Need in Canada and Populations at Risk

Core housing needs vary geographically and between populations. In Canada, greatest rates are seen in the territories, up to 36.5% in Nunavut [3]. Amongst the provinces, Ontario has the highest rate at 15.3%, followed by British Columbia at 14.9% [3]. Within metropolitan cities, unaffordable housing rates are highest in Toronto and Vancouver, at 34% and 32% respectively [4].

Those experiencing housing need have also been reported to access emergency department services disproportionately. A study out of the Children's Hospital of Eastern Ontario, showed that 54% of pediatric presentations to the emergency department had housing needs, of which the majority experienced unstable or unaffordable housing [5].

It is especially important to recognize populations at greater risk of experiencing housing need. These include Indigenous households, other visible minority groups, newcomer and immigrant families, and families led by single-parents, of which greater than one third are living in unaffordable housing [6]. Families with children with disabilities (developmental, physical or mental health) are also at increased risk. Importantly, those experiencing poverty are disproportionately impacted by housing need. Based on a 2013 poll [7], an estimated 1.3 million people had reported experiencing extreme housing insecurity or homelessness in the 5 years prior. From 2005 and 2009, the amount of youth utilizing shelters more than doubled [8]. Recognizing these risk factors will allow students and physicians to adequately assess patients for housing need in the clinical setting.

Health impacts of housing need

Child and adolescent health is impacted by housing need, from physical, developmental, social to mental health.

Inadequate, crowded, or unaffordable housing are all associated with higher rates of aggression, property offences, and poorer performance in school. These children also report more asthma symptoms and an overall decreased health status [9]. Living in inadequate housing exposes children to poorer air quality and higher lead levels, with an associated increase in risks of asthma, injury and other health hazards [10]. Crowded housing is also linked to greater transmission of infectious diseases, including gastroenteritis and lower respiratory tract infections [11,12]. Higher rates of helplessness and psychological distress have also been found in these children [13]. Unaffordable housing is commonly cited as a cause of hunger. There is a close association between increased housing costs, food insecurity, and poorer childhood nutrition [14].

Experiencing housing need also increases the chance of frequent moves [15], as families may need to stay with relatives or friends, or utilize temporary shelters. Unstable housing, in which a child has moved 3 or more times in their life, predisposes to negative school issues, including suspensions, expulsions, and failing a grade. These children are also prone to greater emotional problems [16].

Children with a disability are also particularly vulnerable, as inaccessible housing is commonly associated with a feeling of being stranded in an area of the home [17]. This has negative consequences on the child's ability to be independent, and has serious effects on self-esteem. Homes with inadequate accessibility are further linked to increased incidences of unintentional injuries, both for the youth and caregivers [18].

Environmental exposures also impact housing need. As children spend a majority of their days at home, exhibit more exploratory behaviours, and have immature and developing physiology, they are inevitably more vulnerable to harmful toxins and exposures. In particular, pest infestations have significant adverse effects on both physical and mental health. Allergens from rodents and cockroaches are linked to worsening asthma [19], and bites from bedbugs are a trigger for allergies and may lead to secondary infections [20]. Negative effects of pests on mental health include symptoms of anxiety and insomnia [20].

Anxiety disorders are disproportionately higher among children living in unsafe neighbourhoods [21]. Such environments also restrict youth from achieving adequate outdoor physical activity [22].

Housing need also impacts access to health care. Housing instability has been associated with decreased access to primary care [5, 23]. Additionally, crowded and inadequate housing are associated with increased respiratory tract illnesses and hospital admissions in pediatric populations [24].

Let's return to our case

We learn that A was diagnosed with asthma last year. She has had 3 asthma exacerbations since, resulting in 2 hospital admissions. Mom tells you she is a single-parent, and hints at their struggles with A's asthma management. Despite adhering to the asthma action plan set out by their previous pediatrician, she believes her nighttime and exercise symptoms have been worsening.

Mom also brings up concerns about the shape of E's head, noting it has flattened since birth. You think about what you know about plagiocephaly and make a note to ask about tummy time.

Assessing housing need

How can pediatricians and learners assess housing needs of children, youth and families? We can start by incorporating screening questions on housing needs into our social histories. Ask the open-ended question: "Do you have any concerns about where you live?"

We can also use the Ottawa Child/Youth Housing Advocacy Initiative screening questionnaire for assessing housing need in our patients [25]. This begins with the following introductory questions:

- On a scale of 1 to 10 (1 being a difficult living situation and 10 being an ideal living situation), how would you rate where you are living now?
- What would you like to make better about where you are living?

The Ottawa Child/Youth Housing Advocacy Initiative screening questionnaire also allows for screening questions by topic using the HOME mnemonic:

- **H** - Harm: Is your home in need of major repairs?
- **O** - Occupancy: How many people live in your home, in how many rooms?
- **M** - Moves: How many times has your child or youth moved? Have you used a shelter or informal, temporary housing such as staying with friends or family?
- **E** - Enough/Income: Do you have enough money for housing, food and utilities?

Addressing Housing Need

Let's go back to the case and discuss how we can address housing need in our patients and their families.

When we ask these to the family in our case, we learn that they have moved five times in the past five years and are currently living in the basement of their family friend's house. They finally decided to move when their previous apartment building had yet another pest outbreak. Mom tells you the building had chronic cockroach infestations. Because of this, she usually kept baby E in his crib laying on his back. There was no smoking in their unit, but a few of their neighbours would, which she could smell from the hallways. When asked about income, mom tells you she is currently working 2 jobs, hoping to find an affordable rental in a safer neighbourhood. As A gets older, she hopes to be able to let her play outside more.

You recognize now that this family is living in housing need. How can we address this?

It is important for providers to first work with families to increase their awareness of the health impacts of their living situation. Clinical recommendations should be adapted to meet the families housing need. For example, when prescribing tummy time for E's plagiocephaly, you can recommend doing this in areas outside of the home, such as community centres. Additionally, the health care provider should have ongoing discussions of the environmental impact on A's asthma. Although there are some non-modifiable exposures, such as the second-hand smoking in the building, you can recommend strategies for the family to limit the amount of dust, allergen and smoke exposure that A experiences within their housing unit.

Health care providers have an important role in advocating for their patients and the communities they serve. Pediatricians, residents and medical students should become familiar with the multidisciplinary resources available in their communities and collaborate with these to best support our patients. They can also help by facilitating applications for subsidized housing and advocate for a national housing strategy that helps mitigate the health impacts of housing need in Canada.

As we have highlighted, housing insecurity has important impacts on the health of children in Canada and is an important issue for the medical community to address. Thank you to Dr. Waterston and the Canadian Pediatric Society for their support of this podcast!

References

CPS Statement:

Waterston S, Grueger B, Samson L. Housing need in Canada: Healthy lives start at home. Canadian Pediatric Society, Community Pediatrics Committee. 2015 October 5 [updated 2019 October 31].

In-text Citations:

1. Canada Mortgage and Housing Corporation. 2011 Census/National Household Survey Housing Series: Issue 3 – The Adequacy, Suitability and Affordability of Canadian Housing, 1991-2011: http://publications.gc.ca/collections/collection_2015/schl-cmhc/nh18-23/NH18-23-2015-2-eng.pdf
2. Canada Mortgage and Housing Corporation. Housing in Canada online: Definitions of variables: http://cmhc.beyond2020.com/HiCODDefinitions_EN.html
3. Statistics Canada, 2017a. Core housing need, 2016 census. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/chn-biml/index-eng.cfm>
4. Statistics Canada, 2017b. Housing in Canada: Key results from the 2016 Census. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/171025/dq171025c-eng.pdf?st=PKk4Bekq>
5. Waterston S, Watt J, Gaboury I, Samson L. The Children’s Hospital of Eastern Ontario Housing Checkup: A survey of the housing needs of children and youth. *Paediatr Child Health* 2008;13(4):293-7.
6. Campaign 2000, 2018. Report Card on Child and Family Poverty in Canada: <https://campaign2000.ca/wp-content/uploads/2018/11/C2000InfographicOverviewNov2018.pdf>
7. Gaetz S, Donaldson J, Richter T, Gulliver T. The state of homelessness in Canada, 2013. Canadian Homelessness Research Network Press. Toronto: www.wellesleyinstitute.com/wp-content/uploads/2013/06/SOHC2103.pdf
8. Segaert A. The national shelter study: Emergency shelter use in Canada, 2005-2009. Human Resources and Skills Development Canada, 2012: http://homelesshub.ca/sites/default/files/Homelessness%20Partnering%20Secretariat%202013%20Segaert_0.pdf
9. Canada Mortgage and Housing Corporation. Special studies on 1996 census data: Housing Canada’s children: www.cmhc.ca/textVersion/?tv=/odpub/pdf/62440.pdf?lang=en+socioeconomic55-4
10. Sharfstein J, Sandel M, Kahn R, Bauchner H. Is child health at risk while families wait for housing vouchers? *Am J Public Health* 2001;91(8):1191-2.
11. Goldstein G, Novick R, Schaefer M. Housing, health and well-being: An international perspective. *J Sociol Social Welfare* 1990;17:161-81.
12. Emond AM, Howat P, Evans JA, Hunt L. The effects of housing on the health of preterm infants. *Paediatr Perinat Epidemiol* 1997;11(2):228-39.

13. Evans G, Saltzman H, Cooperman JL. Housing quality and children's socioemotional health. *Environment and Behaviour* 2001;33:389-99.
14. Krieger J, Higgins DL. Housing and health: Time again for public health action. *Am J Public Health* 2002;92(5):758-68.
15. Canadian Institute of Child Health [CICH]. (2000). Income inequity. In: *The health of Canada's children: A CICH profile* (3rd ed.):188: www.cich.ca/PDFFiles/Profile/CICH%20Profile_07%20Income.pdf (Accessed July 21, 2015).
16. Simpson GA, Fowler MG. Geographic mobility and children's emotional/behavioral adjustment and school functioning. *Pediatrics* 1994;93(2):303-9.
17. C, Beresford B. Home, sick home: Using the housing experiences of disabled children to suggest a new theoretical framework. *Housing Studies* 2000;15:429-42.
18. Rossi L, Jennings S. Bed bugs: A public health problem in need of a collaborative solution. *J Environ Health* 2010;72(8):34-5.
19. Rosenstreich DL, Eggleston P, Kattan M, et al. The role of cockroach allergy and exposure to cockroach allergen in causing morbidity among inner-city children with asthma. *N Engl J Med* 1997;336(19):1356-63.
20. Rossi L, Jennings S. Bed bugs: A public health problem in need of a collaborative solution. *J Environ Health* 2010;72(8):34-5.
21. Meltzer H, Vostanis P, Goodman R, Ford T. Children's perceptions of neighbourhood trustworthiness and safety and their mental health. *J Child Psychol Psychiatry* 2007;48(12):1208-13.
22. Weir LA, Etelson D, Brand DA. Parents' perceptions of neighbourhood safety and children's physical activity. *Prev Med* 2006;43(3):212-7.
23. Kushel MB, Gupta R, Gee L, Haas JS. Housing instability and food insecurity as barriers to health care among low-income Americans. *J Gen Intern Med* 2006;21(1):71-7.
24. Kyle RG, Kukanova M, Campbell M, Wolfe I, Powell P, Callery P. Childhood disadvantage and emergency admission rates for common presentations in London: An exploratory analysis. *Arch Dis Child* 2011;96(3):221-6.
25. Child and Youth Health Network for Eastern Ontario. Housing and health toolbox for children and youth – Screening tool. Ottawa Child/Youth Housing Advocacy Initiative: www.cyhneo.ca/#!/housing/cmwt