

#### SCIENTIFIC LITERATURE REVIEW SUMMARY SHEET

#### What will you find on this summary sheet?

This document summarizes the scientific literature regarding living conditions and socioeconomic status and how they can impact international migrants' health within the Region of the Americas. The information provided here is based on a broader scoping review of the published scientific literature regarding international migrants' health in the Region of the Americas between January 2016 and March 2023.

This summary sheet is a narrative and descriptive synthesis of main topics related to the field, with a focus on international migration and health in the Region. It does not fully represent the heterogeneity of information available internationally in terms of type of migrants, countries of origin, and study designs; however, it provides a description of general patterns often found in this literature. In this scoping review, 105 articles addressed living conditions and socioeconomic status and how they can impact health in the context of international migrants.

The results presented in the following scientific literature review summary sheet are based on selected articles from the review and are not intended to be an exhaustive review of all current literature. You can find all references in the interactive dashboard located within PAHO's Information Platform on Health and Migration.

#### Access the PAHO Information Platform on Health and Migration

## Are there other similar scientific literature summary sheets on international migrants' health available?

The scoping review on international migrants' health included a total of 837 academic articles categorized within three broad themes: health outcomes, health systems and health determinants. All these articles are described and presented in an interactive dashboard along with 11 other similar summary sheets that are available and that touch upon more specific categories within these three major themes. Additional findings on living conditions and socioeconomic status and how they can impact health can also be found in summary sheets on Health Outcomes and Systems.

## MAIN FINDINGS

What can we learn from the scientific literature so far about living conditions and socioeconomic status as social determinants of health in the context of international immigrants?

Studies retrieved from the published scientific literature suggest some of the following findings:

The World Health Organization (WHO) defines social determinants of health (SDH) as "the circumstances in which people are born, grow up, work, live and age, including the broader set of forces and systems that influence the conditions of everyday life (1)". Intermediary determinants of health consider material circumstances such as living conditions, closely linked to structural determinants of health, such as income and education (2).

#### LIVING CONDITIONS

- Refugees and irregular migrants often live in overcrowded conditions or peripheral urban or rural spaces, which affects their everyday life experiences (3).
- The literature recognizes the influence of previous social structures associated with housing as a determining factor in health, particularly in the development of cardiovascular pathologies (4).



 The literature indicates that refugees face precarious living conditions because they are forced to live in housing located in areas isolated from the poles of development, particularly due to lack of resources, poor connections, or even particular situations of social self-exclusion. Post-traumatic stress and general mental health

- require contained spaces to overcome them, which is why housing becomes not only a social determinant of health, but also a strategy to overcome the mental health conditions of refugees (3).
- For Mexican migrants in the United States of America (USA), safety is consistently associated with good self-rated health, especially when rating the neighborhood (5).

#### **WORKING CONDITIONS**

- o The literature reviewed includes studies that analyze ethnicity and migration in countries such as the USA, and how migrants with minority ethnic origins face complex labor spaces (6). What for the national population might be considered unsustainable working conditions, for migrants of minority ethnic origins, it might be considered the only possible condition to find a job. In other words, ethnic origin contributes to modifying the international migrant's response to working conditions and can ultimately have a favorable or negative impact on his or her health (7).
- With respect to the COVID-19 pandemic, the literature shows changes in the working conditions of migrant agricultural workers in the USA, such as decrease in job openings and informality of working conditions (low wages or reduction of labor benefits such as transitional housing during harvest time) (8). Also, under pandemic conditions, migrant workers in essential industries were found to have a high infection rate (9). When consulted, they stated that health safety conditions at work were

precarious, and in addition to this, interviewed migrant workers had seen a reduction in their work benefits or directly in their salaries, which resulted in them having to move to precarious and overcrowded living conditions (9).

#### **INCOME**

- The literature provides important background on socioeconomic and cultural factors related to the prevalence of type 2 diabetes (T2D), both diagnosed and undiagnosed, almost twice as high among Hispanic/Latino adults of Mexican origin compared to non-Hispanic whites, and particularly in the migrant population living in poverty (10).
- Evidence from a study shows that rates of diabetes-related complications, e.g., acute stroke and end-stage renal disease, are also higher among Hispanic/Latino adults compared to their non-Hispanic/Latino White counterparts (11).
- In addition to genetic and biological factors, socioeconomic influences are also recognized as important factors in determining the risk of T2D and associated complications. These influences include ethnicity, acculturation, residence, education, but particularly economic status (11).
- Socioeconomic conditions of poverty experienced by refugees upon entering a country increase the deterioration of migrants' mental health, with the appearance of specific symptoms of distress, generalized anxiety disorders and/or depression (12,13).
- o The literature points out that post-traumatic stress (14) is an important part of the difficulties that refugees present in terms of their mental health, but there is also a persistent social adversity in host societies (15). In addition to this, are the health conditions of refugees, the lack of treatment for chronic diseases or undiagnosed pathologies due to health deficiencies of the country of origin that most likely faces political, social, and armed crises (16).
- Poverty and lack of basic living resources deepen the deteriorating mental health of refugees (17),

- risk of perinatal mental disorders increases for pregnant refugee women (18) and, in general, there is significant evidence that the prevalence of kidney disease is also increasing (19).
- The literature has revealed the prevalence of infectious and autoimmune diseases generated from a deficient immune system, and mental health pathologies that affect health in a holistic way (20).



#### **EDUCATION**

- The evidence included in this scientific literature review shows a direct and indirect influence of education as a social determinant of health. Directly, through the development of intelligence, cognitive skills and increased knowledge, habits, and problem-solving skills. The indirect influence is through improved working opportunities and higher income due to educational status over the life course, hence generating better present and future living conditions for people (21).
- o In the North American context, the literature analyzes the relationship between educational attainment of pregnant women and the incidence of cesarian sections due to pregnancy complications (22). Although the conclusions are not definite, the study indicates that women who did not have a college education during the pregnancy process faced complications that made a cesarean section urgent. These complications were effectively derived from conditions of care during pregnancy, ruling out the possibility that ethnicity or socioeconomic

level could separately condition pregnancy and delivery complications (23). In other words, for the purposes of the literature reviewed, education is considered a social determinant of health.

#### **REGULARIZATION**

- One study placed immigration status as a foundational determinant of health for people without status in Canada (24).
- Undocumented migrants face multiple challenges associated to social determinants of health, with repercussions that influence their health: economic stability, education, healthcare, the social and community context, and the neighborhood and built environment (25).
- In the USA, anti-immigrant policies increased dangers experienced by children migrating to the USA and limit access to medical care. This deprivation, together with stress, are associated with adverse physical and mental health consequences (26).

#### **FOOD INSECURITY**

- Food insecurity disproportionately affects specific populations, such as immigrant families, families headed by single women, families with lower healthy literacy, and Black or Hispanic families (27). COVID-19 impacted food security among migrants, exacerbating pre-existing health inequalities (28).
- Another study in the USA highlighted that immigrant families are not eligible for all federal nutrition assistance programs, thus creating a larger gap in access to food and nutrition programs for these families (29).
- Immigrants attempted to access fresh, traditional, healthier food, though they faced structural and family-level barriers that impacted the healthiness of the food they acquired (30).
- A refugee's literacy level, cultural, and language barriers were found to be the common challenges to nutrition education delivery (31).

## Featured Article

## Associations of Poor Housing with Mental Health Among North Carolina Latino Migrant Farmworkers (32)

This article explores the association of housing conditions with mental health among migrant farmworkers. Researchers used data from a 2010 cross-sectional study conducted in 16 counties in North Carolina, in the USA. Further, interviews and housing inspections were completed with 371 farmworkers. Housing measures included number of people per bedroom, perceived security of self and belongings, having a key to dwelling's door, and having bedroom storage, amongst others.

Results show that participants with 5+ persons sleeping per room were more likely to have a depression score of  $\geq$ 10 (p=.01), and anxiety scores of  $\geq$ 27 (p=.02). Also, participants who did not feel they or their belongings were secure were also more likely to have a depression score of  $\geq$ 10 (p=.01), and those without a key were more likely to have an anxiety score of  $\geq$ 27 (p=.04). Also, those with no bedroom storage were more likely to have a depression score of  $\geq$ 10 (p=.03).

According to the authors, this paper suggests links between poor housing and farmworkers' mental health. This study's results can inform regulations on farmworker housing and healthcare providers on how to prevent and treat poor mental health among migrant farmworkers.

### **Featured Article**

## **Quantifying Direct Effects of Social Determinants of Health on Systolic Blood Pressure in United States Adult Immigrants (33)**

Researchers developed a theory-based conceptual model, including immigrant-specific factors, and aimed at identifying pathways by which social determinants of health impact systolic blood pressure (SBP) in immigrants. Antecedents included region/country of origin, ethnicity/race, and life-course socioeconomic status (such as education, income, and number of hours worked per week).

This cross-sectional study included 181 adult immigrants. The model showed that global socioeconomic status had a direct relationship with burden of disease and an indirect relationship with SBP by way of burden of disease. Authors argue that the development of interventions should take burden of disease into account as a direct driver of blood pressure in immigrants, and address factors related to socioeconomic status.

#### **Featured Article**

Migration, Housing, and Urban Inequalities: The Socio-housing Conditions of Regional Migrants in Buenos Aires (34)

Using a quantitative approach upon National Population and Housing Census, this study explores the socio-housing conditions of migrants coming from neighboring countries and Peru who are currently living in the city of Buenos Aires.

Results indicate that four of every ten migrants from the included countries of origin experience some level of housing deficit, which is much greater than that of the general population, in which case, only one every ten individuals face such conditions. Further, researchers comment that beneath what might seem stable access to housing through rent, there are circumstances in which rent agreements might be informal without any legalized documentation and would not be captured by census data. These situations would also be considered precarious access to housing since it might imply instability in living arrangements.

Statistical data shows that a significant number of regional migrants in the city of Buenos Aires lives in deficient housing conditions and must resort to informal modalities of access to land, inhabiting urban environments such as villas and settlements, where housing precariousness is combined with the lack of basic services, constant fear of possible evictions and being involved in imaginary stigmatization. Authors conclude that data reveals the existence of a marked relationship between immigration and poverty in the city of Buenos Aires and reflects the existence of an urban structure and conditions of access to housing that exclude certain groups, which accounts for a process of violation of rights towards a large sector of the population.

#### References

- 1. World Health Organization (WHO). 62nd World Health Assembly. March 16, 2019. Commission on Social Determinants. 2019.
- 2. World Health Organization (WHO). A conceptual framework for action on the social determinants of health: debates, policy & practice, case studies. 75.
- 3. Hou WK, Liu H, Liang L, Ho J, Kim H, Seong E, et al. Everyday life experiences and mental health among conflict-affected forced migrants: A meta-analysis. Journal of Affective Disorders [Internet]. 2020;264:50–68. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/31846902/">https://pubmed.ncbi.nlm.nih.gov/31846902/</a>.
- 4. Churchwell K, Elkind MS v, Benjamin RM, Carson AP, Chang EK, Lawrence W, et al. Call to Action: Structural Racism as a Fundamental Driver of Health Disparities: A Presidential Advisory From the American Heart Association. Circulation. 2020;142(24).
- 5. Gaitán-Rossi P, Vilar-Compte M, Ferré-Eguiluz I, Ortiz L, Garcia E. Association between Feelings of Trust and Security with Subjective Health among Mexican Migrants in the New York City Area. IJERPH. 2023 Feb 8;20(4):2981.
- 6. Segal UA. Globalization, migration, and ethnicity. Public Health. 2019 Jul 1;172:135–42.
- 7. Premji S. Discourse on culture in research on immigrant and migrant workers' health. American Journal of Industrial Medicine. 2019 Jun 1;62(6):460–70.
- 8. Quandt SA, LaMonto NJ, Mora DC, Talton JW, Laurienti PJ, Arcury TA. COVID-19 Pandemic Among Immigrant Latinx Farmworker and Non-farmworker Families: A Rural—Urban Comparison of Economic, Educational, Healthcare, and Immigration Concerns. New Solutions: A Journal of Environmental and Occupational Health Policy [Internet]. 2021;31(1):30–47. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/33557699/">https://pubmed.ncbi.nlm.nih.gov/33557699/</a>.
- 9. Zhang M, Gurung A, Anglewicz P, Yun K. COVID-19 and Immigrant Essential Workers: Bhutanese and Burmese Refugees in the United States. Public Health Reports. 2021;136(1):117–23.
- 10. Morales J, Glantz N, Larez A, Bevier W, Conneely M, Fan L, et al. Understanding the impact of five major determinants of health (genetics, biology, behavior, psychology, society/environment) on type 2 diabetes in U.S. Hispanic/Latino families: Mil Familias A cohort study. BMC Endocrine Disorders. 2020 Jan 6;20(1).
- 11. Raghavan R. Caring for Undocumented Immigrants With Kidney Disease. American Journal of Kidney Diseases [Internet]. 2018;71(4):488–94. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/29198642/">https://pubmed.ncbi.nlm.nih.gov/29198642/</a>.
- 12. Hynie M. The Social Determinants of Refugee Mental Health in the Post-Migration Context: A Critical Review. The Canadian Journal of Psychiatry [Internet]. 2018;63(5):297–303. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/29202665/">https://pubmed.ncbi.nlm.nih.gov/29202665/</a>.
- 13. del Pino S, Sánchez-Montoya SB, Guzmán JM, Mújica OJ, Gómez-Salgado J, Ruiz-Frutos C. Health Inequalities amongst People of African Descent in the Americas, 2005–2017: A Systematic Review of the Literature. International Journal of Environmental Research and Public Health [Internet]. 2019;16(18):3302. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/31500391/">https://pubmed.ncbi.nlm.nih.gov/31500391/</a>.
- 14. Mishori R, Aleinikoff S, Davis DM. Primary Care for Refugees: Challenges and Opportunities. American Family Physician. 2017;96(2):112–20.

- 15. Kronick R. Mental Health of Refugees and Asylum Seekers: Assessment and Intervention. Vol. 63, Canadian Journal of Psychiatry. SAGE Publications Inc.; 2018. p. 290–6.
- 16. Rosenthal T. Immigration and Acculturation: Impact on Health and Well-Being of Immigrants. Current Hypertension Reports. 2018;20(8):70.
- 17. Ojeda VD, Magana C, Burgos JL, Vargas-Ojeda AC. Deported Men's and Father's Perspective: The Impacts of Family Separation on Children and Families in the U.S. Frontiers in Psychiatry [Internet]. 2020;11:148. Available from: <a href="https://www.frontiersin.org/articles/10.3389/fpsyt.2020.00148/full">https://www.frontiersin.org/articles/10.3389/fpsyt.2020.00148/full</a>.
- 18. Anderson FM, Hatch SL, Comacchio C, Howard LM. Prevalence and risk of mental disorders in the perinatal period among migrant women: a systematic review and meta-analysis. Archives of women's mental health. 2017;20(3):449–62.
- 19. Sekkarie MA, Abdel-Rahman EM. Cultural Challenges in the Care of Refugees with End-Stage Renal Disease: What Western Nephrologists Should Know. Nephron. 2017;137(2):85–90.
- 20. Aldridge RW, Nellums LB, Bartlett S, Barr AL, Patel P, Burns R, et al. Global patterns of mortality in international migrants: a systematic review and meta-analysis. The Lancet [Internet]. 2018;392(10164):2553–66. Available from: https://pubmed.ncbi.nlm.nih.gov/30528484/.
- 21. Mora Vicarioli R, Leon-Salas A, Castro Granados A, Lizano-Barrantes C. Alfabetización en salud y necesidades para el etiquetado de medicamentos identificadas en población indígena de Alto Telire del Área de Salud Talamanca, Costa Rica. Población y Salud en Mesoamérica. 2021 Jan 1.
- 22. Morris T, Gomez A, Naiman-Sessions M, Morton CH. Paradox lost on the U.S.-Mexico border: U.S. Latinas and cesarean rates. BMC Pregnancy and Childbirth [Internet]. 2018;18(1):82. Available from: <a href="https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-018-1701-9">https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-018-1701-9</a>.
- 23. Wang E, Glazer KB, Howell EA, Janevic TM. Social Determinants of Pregnancy-Related Mortality and Morbidity in the United States: A Systematic Review. Obstetrics and Gynecology [Internet]. 2020;135(4):896–915. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/32168209/">https://pubmed.ncbi.nlm.nih.gov/32168209/</a>.
- 24. Gagnon M, Kansal N, Goel R, Gastaldo D. Immigration Status as the Foundational Determinant of Health for People Without Status in Canada: A Scoping Review. J Immigrant Minority Health. 2022 Aug;24(4):1029–44.
- 25. Garcini LM, Nguyen K, Lucas-Marinelli A, Moreno O, Cruz PL. "No one left behind": A social determinant of health lens to the wellbeing of undocumented immigrants. Current Opinion in Psychology. 2022 Oct;47:101455.
- 26. Danaher F, Blackwell R, Jasrasaria R, Bosson R. Collateral Damage: Increasing Risks to Children in a Hostile Immigration Policy Environment. Curr Pediatr Rep. 2022 Nov 19;10(4):260–5.
- 27. Abrams EM, Greenhawt M, Shaker M, Pinto AD, Sinha I, Singer A. The COVID-19 pandemic. Annals of Allergy, Asthma & Immunology. 2022 Jan;128(1):19–25.
- 28. Ahmed D, Benavente P, Diaz E. Food Insecurity among International Migrants during the COVID-19 Pandemic: A Scoping Review. IJERPH. 2023 Mar 27;20(7):5273.
- 29. Thorndike AN, Gardner CD, Kendrick KB, Seligman HK, Yaroch AL, Gomes AV, et al. Strengthening US Food Policies and Programs to Promote Equity in Nutrition Security: A Policy Statement From the American Heart Association. Circulation [Internet]. 2022 Jun 14 [cited 2023 May 13];145(24). Available from: https://www.ahajournals.org/doi/10.1161/CIR.000000000001072

- 30. Berggreen-Clausen A, Hseing Pha S, Mölsted Alvesson H, Andersson A, Daivadanam M. Food environment interactions after migration: a scoping review on low- and middle-income country immigrants in high-income countries. Public Health Nutr. 2022 Jan;25(1):136–58.
- 31. Nur HA, Atoloye AT, Wengreen H, Archuleta M, Savoie-Roskos MR, Wille C, et al. A Scoping Review and Assessing the Evidence for Nutrition Education Delivery Strategies for Refugees in High-Income Countries. Advances in Nutrition. 2021 Nov;12(6):2508–24.
- 32. Mora DC, Quandt SA, Chen H, Arcury TA. Associations of Poor Housing with Mental Health Among North Carolina Latino Migrant Farmworkers. Journal of Agromedicine. 2016;21(4):327–34.
- 33. Dawson AZ, Walker RJ, Gregory C, Egede LE. Quantifying direct effects of social determinants of health on systolic blood pressure in United States adult immigrants. Journal of Behavioral Medicine. 2021 Jun 1;44(3):345–54.
- 34. Marcos M, Mera G. Migración, vivienda y desigualdades urbanas: condiciones socio-habitacionales de los migrantes regionales en Buenos Aires. Revista INVI. 2018;33(92):53–86.

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# HEALTH AND MIGRATION

MAPPING OF SCIENTIFIC LITERATURE

MARCH 2023

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