

NEW SYSTEMS OF CARE FOR HYPERTENSION

Tactics to improve Chronic Disease Care in forcibly displaced migrant populations

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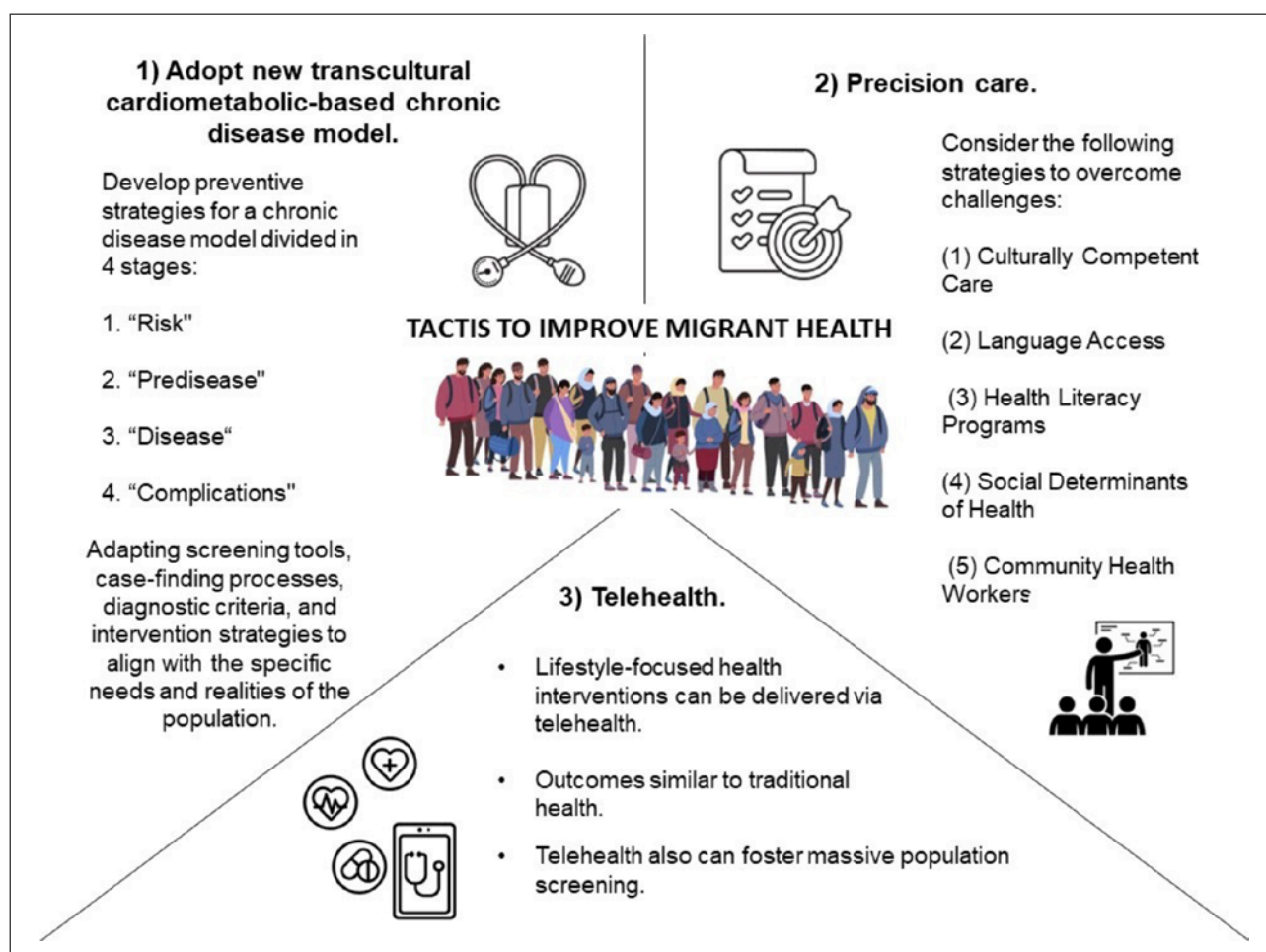
Introduction

The global migrant population is heterogeneous regarding vulnerability, medical needs, and access to quality health care. Migrants who are forcibly displaced due to conflict, persecution, or environmental disasters (e.g., refugees, asylum seekers, and undocumented persons) increased in an unprecedented fashion from 153 million in 1990, to nearly 272 million in 2019.¹ Currently, the forcibly displaced migrant (FDM) population tends to be more affected by chronic diseases, such as type 2 diabetes (T2D), hypertension, cardiovascular disease, and cancer, than infectious diseases.² In a recent meta-analysis, the pooled incidence of cardiovascular disease in refugees from Syria and Libya to Europe was 1.71 (95% CI: 1.03, 2.83) times higher compared with non-refugee counterparts. In the U.S., FDM's had a higher prevalence of chronic conditions than the general population, particularly T2D and hypertension.³ Various factors can promote negative health outcomes in migrants: the interruption of medical treatment and preventive care during the migratory route and post-resettlement; stressful situations, racism, and xenophobia; hostile environment policies; living in

refugee camps; and trauma-related mental health problems.⁴ The management of these conditions is challenged by several barriers, including limited access to quality healthcare and linguistic/cultural barriers experienced by patients and healthcare professionals.⁵

A healthcare system infrastructure is necessary that can manage complex chronic disease scenarios including multimorbidity preventive care approaches;⁶ continuity of care in humanitarian crisis settings; community-based management, engagement, and outreach; and health promotion. Migrants also face difficulties accessing quality healthcare⁷ which represents an enormous challenge for governments and the healthcare systems of the country of destination.⁸ In this article, we recognize the critical issues surrounding chronic disease care in migrants and propose three tactics to address this situation.

Central Figure: Tactics to improve migrant chronic disease care.



Tactics

Tactic 1. Adopt a new transcultural cardiometabolic-based chronic disease model.

The complex interplay of biological and social determinants of health in vulnerable migrant populations necessitates a suitable pathophysiological model for optimal care. The transcultural cardiometabolic-based chronic disease (tCMBCD) model offers a three-dimensional framework.⁹⁻¹¹ The first dimension involves the progression of chronic disease, consisting of four stages: 1. "risk," 2. "pre-disease," 3. "disease," and 4. "complications." These stages are amenable to various preventive strategies. The second dimension incorporates primary (genetics, environment, behavior) and secondary/metabolic drivers. These driver-based chronic diseases (driver-BCD) are abnormal adiposity (Adiposity-BCD or ABCD) dysglycemia (Dysglycemia-BCD or DBCD), hypertension (Hypertension-BCD or HBCD),

dyslipidemia (Lipid-BCD or LBCD), and residual factors like inflammation. These drivers culminate in cardiovascular disease. The third dimension considers the application of social determinants of health and cultural factors to each cell in the "stage x driver" matrix to enhance precision in clinical interventions aimed at preventing CMBCD progression.

Interventions primarily target early stages (e.g., stages 1 and 2) and focus on lifestyle changes. The goal is to mitigate the development and progression of tCMBCD stages, with a focus on physiological, economic, and quality of life metrics. When applying the tCMBCD model to forcibly displaced migrants, cultural aspects from both the countries of origin and destination must be considered and a transculturalization process should be implemented to include the unique biological and social determinants inherent to the target population.^{4,12,13} This entails adapting

screening tools, case-finding processes, diagnostic criteria, and intervention strategies to align with the specific needs and realities of the population.^{9,14}

Tactic 2. Precision care. Transcultural adaptations of clinical practice guidelines (CPG) and evidence-based interventions to migrant populations.¹²

To effectively assist FDM, cultural aspects from both their countries of origin and destination must be considered. Begin by addressing the immediate needs of the most vulnerable individuals by continuing their medical care from their place of origin. Innovative prevention strategies should be tailored to the patient's health literacy including their understanding of disease symptoms and complications, beliefs, and how illness affects healthcare outcomes. Compared to the native population, refugees often face challenges in self-care and monitoring the progression of disease. Additionally, this population tends to have poor dietary habits and physical activity, and lower socioeconomic status and education levels, which negatively impact their chronic disease outcomes.¹⁵

To address these challenges some factors should be considered: **(1) Culturally Competent Care:** Healthcare providers should be trained to understand and respect the cultural norms, beliefs, and values of the migrant population to enhance trust and patient-provider communication; **(2) Language Access:** Healthcare facilities should ensure access to interpreters and translated materials to facilitate effective communication; **(3) Health Literacy Programs:** Migrant populations often have limited health literacy, making it essential to provide educational programs tailored to their needs; **(4) Social Determinants of Health:** migrants are often vulnerable to social issues, such as housing, employment, and access to healthy food. It is necessary to develop policies that promote social equity to enhance the care of FDM; **(5) Community Health Workers:** Employing community health workers from the same cultural background can bridge gaps in healthcare delivery and help educate, navigate the healthcare system, and provide social support for FDM.¹⁶

Tactic 3. Telehealth.

In a recent review, we explored the role of telehealth in enhancing the cardiometabolic health

of migrants, particularly focusing on lifestyle interventions for hypertension and dysglycemia.⁴ Telehealth effectively treats chronic metabolic conditions like hypertension¹⁷ with outcomes similar to traditional healthcare. Lifestyle-focused health interventions can be delivered via telehealth and have been shown to reduce cardiometabolic risk, T2D, hypertension, and high cholesterol.¹⁸ Schrauben et al,¹⁹ used a dietary app-supported telecounseling approach, resulting in decreased sodium intake (-638 mg/day, $P < 0.001$), systolic blood pressure (-5.7 mm Hg, $P = 0.02$), and diastolic blood pressure (-4.1 mm Hg, $P = 0.01$).¹⁹ Moreover, other studies found telehealth to be as effective as in-person visits for weight loss and glycemic control.²⁰ Riza et al²¹ applied an electronic algorithm to enhance healthcare for migrants, highlighting the need for mental health support, vaccination advice, weight control, and dental care.²¹ Thus, culturally adapted telehealth services can benefit migrant populations by improving healthcare and reducing the burden of chronic diseases.

Telehealth also can foster massive population screening. Recently, we participated in a campaign that got a Guinness World Record attempt to gather the most T2D screening forms in one week. A total of 47,267 individuals from 21 Latin American and Caribbean countries were screened using the Finnish Diabetes Risk Score (FINDRISC) applied via telehealth and we found 35% of subjects at high risk of T2D. This project highlighted how screening tools can be easily implemented with eHealth technology across social networks to detect individuals at risk.²²

Conclusion

Improving cardiometabolic care in migrant populations requires a multifaceted approach that, if framed within the cardiometabolic-based chronic disease model, can address not only medical care but also the social, cultural, and lifestyle determinants of health. Transcultural adaptations and culturally competent care, language access, health literacy, community engagement, and policy changes are all essential components of a comprehensive strategy to reduce health disparities. Telehealth demonstrates outcomes comparable to those of traditional health care and offers an excellent opportunity to improve

the healthcare of difficult-to-reach populations such as FDMs. By implementing these tactics, healthcare systems, and policymakers can work toward more equitable cardiometabolic care for all.

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