

A Realist Review of Influences of Community-Based Interventions on Noncommunicable Disease Risk Behaviors

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Abstract : Introduction: Smoking, alcohol misuse, unhealthy diet, and physical inactivity are the primary drivers of noncommunicable diseases (NCD), including cardiovascular diseases, cancers, respiratory diseases, and diabetes, worldwide. Collectively, these diseases are the leading cause of all global deaths, most of which are premature, affecting people between 30 and 70 years. Empirical evidence suggests that these risk behaviors can be modified by community-based interventions (CBI). However, there is little insight into the mechanisms and contextual factors of successful community interventions that impact risk behaviours for chronic diseases. This study examined “Under what circumstances, for whom, and how, do community-based interventions modify smoking, alcohol use, unhealthy diet, and physical inactivity among adults”. Adopting the Capability (C), Opportunity (O), Motivation (M), Behavior (B) (COM-B) framework for behaviour change, it sought to: (1) identify the mechanisms through which CBIs could reduce tobacco use and alcohol consumption and increase physical activity and the consumption of healthy diets and (2) examine the contextual factors that trigger the impact of these mechanisms on these risk behaviours among adults. Methods: Pawson’s realist review method was used to examine the literature. Empirical evidence and theoretical understanding were combined to develop a realist program theory that explains how CBIs influence NCD risk behaviours. Documents published between 2002 and 2020 were systematically searched in five electronic databases (CINAHL, Cochrane Library, Medline, ProQuest Central, and PsycINFO). They were included if they reported on community-based interventions aimed at cardiovascular diseases, cancers, respiratory diseases, and diabetes in a global context; and had an outcome targeted at smoking, alcohol, physical activity, and diet. Findings: Twenty-nine scientific documents were retrieved and included in the review. Over half of them (n = 18; 62%) focused on three of the four risk behaviours investigated in this review. The review identified four mechanisms: capability, opportunity, motivation, and social support that are likely to change the dietary and physical activity behaviours in adults given certain contexts. There were weak explanations of how the identified mechanisms could likely change smoking and alcohol consumption habits. In addition, eight contextual factors that may affect how these mechanisms impact physical activity and dietary behaviours were identified: suitability to work and family obligations, risk status awareness, socioeconomic status, literacy level, perceived need, availability and access to resources, culture, and group format. Conclusion: The findings suggest that CBIs are likely to improve the physical activity and dietary habits of adults if the intervention function seeks to educate, incentivize, change the environment, and model the right behaviours. The review applies and advances theory, realist research, and the design and implementation of community-based interventions for NCD prevention.

Keywords : community-based interventions, noncommunicable disease, realist program theory, risk behaviors

Conference Title : ICBC 2022 : International Conference on Behaviour Change

Conference Location : Barcelona, Spain

Conference Dates : December 15-16, 2022