A Critical Realist exploration of factors influencing engagement in diabetes prevention programs

Background

A large proportion of the global population are at a high risk of developing Type 2 Diabetes Mellitus (T2DM), with over 352 million adults estimated to have prediabetes. People who are diagnosed with prediabetes are at an increased risk of developing T2DM, with 5-10% of people with prediabetes progressing to T2DM per year.

Preventive programs that involve lifestyle modifications such as losing weight, increasing physical activity levels and eating a healthy diet can reduce the likelihood of developing T2DM. However, preventive programs are underutilised due to a range of social, physical and environmental barriers.

The aim of the current study was to explore the knowledge and attitudes of people with prediabetes about their condition and their perceptions of factors that influence engagement in diabetes prevention programs. It is envisaged that the findings from this research will inform the development of locally tailored strategies and recommendations to increase engagement in preventive health programs.

Methods

Using a qualitative approach with a critical realist methodology, semi-structured interviews were conducted with 20 participants with prediabetes from Northern NSW Local Health District in 2021. Interviews were audio-recorded, transcribed verbatim and coded in Microsoft Excel. The Social-Ecological Model (SEM) was used as a framework to interpret and action the study findings.

Results

Factors that empowered participants and facilitated a desire to engage in preventive programs included knowledge about prediabetes, a high level of social support, trusting and supportive relationships with health professionals and a strong desire not to progress to diabetes.

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Britney was a Health Promotion Officer within the Northern NSW Health Promotion team. As a 2020 RRCBP candidate, she completed a qualitative study to better understand factors that influenced engagement with diabetes prevention programs for people with prediabetes.

Britney hopes the promising findings will improve service access and delivery across NSW Health facilities.

Barriers to program engagement included low health literacy levels, limited support, negative experiences with health services and social and physical constraints. The factors that influenced engagement with preventive health programs were mapped to an intrapersonal, interpersonal, organisational, community and policy level which highlighted the complex nature of behaviour change and the influence of underlying mechanisms.

Conclusion

Engagement in diabetes prevention programs depended on individual agency factors and structural barriers that stemmed from an intrapersonal, interpersonal, organisational, community and policy level. Understanding the perceptions of people with prediabetes will inform strategies to overcome multi-level barriers to preventive health program engagement in rural settings.

Further research is needed to better understand prediabetes diagnosis and management from a healthcare professional perspective.

Interviews will be conducted with health professionals who diagnose and manage people with prediabetes. Based on the findings from this current study, the interviews will aim to explore the relationship between people with prediabetes and health professionals, the diagnosis process, referral pathways and management approaches and health professionals' understanding and perspectives of prediabetes.

Keywords

Prediabetes, preventive programs, barriers and enablers.