

Novel Therapeutic Approaches in Diabetes Management

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Abstract

Type 1 diabetes, a prevalent health issue, poses significant challenges for healthcare systems worldwide. Traditional treatment methods often fail to effectively manage the disease, emphasizing the need for innovative therapeutic strategies. This article explores four promising approaches: gene therapy, stem cell therapy, artificial pancreas, and immunomodulators, while also assessing the general population's awareness and understanding of these advanced diabetes treatments. A survey involving 101 participants, the majority of whom were medical students, was conducted to evaluate their knowledge and perceptions of novel therapies. The findings underscore the importance of targeted educational programs and enhanced communication between healthcare professionals and the public, including medical students, to bridge the knowledge gap in emerging therapies. Continuous research and development in these domains are crucial for achieving long-term blood sugar control and minimizing the impact of diabetes on individuals and healthcare systems globally. By addressing these needs and expectations, healthcare professionals, researchers, and policymakers can work together to develop and implement effective strategies that can significantly improve the lives of individuals living with diabetes and contribute to the global effort to tackle this pervasive health issue.

Keyword

Type 1 diabetes, Innovative therapeutic strategies, Advanced diabetes treatments, Hypoglycemia management