ABOUTOpen Diabetology

AboutOpen | 2023; 10: 34
ISSN 2465-2628 | DOI: 10.33393/ao.2023.2577

EDITORIAL

Open Access

The modern diabetes management: a jump into the future for better care

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Diabetes is a growing global health emergency that affects millions of people worldwide. Despite the significant advancements made in diabetic care over the past several decades, many people with diabetes still face numerous challenges in managing their condition. In recent years, new technologies and drugs have emerged that offer more effective and safer options for the management of diabetes. Advances in continuous glucose monitoring and insulin delivery systems, as well as the development of non-invasive glucose monitoring technologies and personalized medicine, have greatly improved the quality of life for people with diabetes. However, access to these new technologies and drugs remains a significant challenge for many people, particularly those in low- and middle-income countries. Additionally, the high cost of diabetes care, the burden of chronic complications, and the limited availability of specialized healthcare professionals remain major barriers to effective diabetes management. Despite these challenges, the field of diabetes care is rapidly advancing, and there is great hope for the future. The development of new drugs, as well as the ongoing research into beta cell regeneration and preservation, hold great promise for the future of diabetes care.

Future perspectives include the development of more accurate artificial pancreas systems, non-invasive glucose monitoring technologies (e.g., optical or transdermal glucose monitoring systems), and new drugs for the treatment of type 2 diabetes. Advances in genetic research are expected to lead to a greater understanding of the underlying causes of diabetes, and allow for more individualized treatment plans. The use of telemedicine is expected to increase, allowing for remote monitoring and management of diabetes, reducing the need for in-person visits. The continued development of mobile health technologies is expected to improve patient engagement and support self-management of diabetes. Additionally, the use of big data and machine learning algorithms may help healthcare providers to better predict and manage the progression of diabetes. Furthermore, gene therapy and regenerative medicine hold promise for the development of cure for diabetes in the future.

Current developments in pharmacological research applied to type 2 diabetes offer important food for thought and considerable potential for the near future. In fact, new therapeutic classes are available that are able to act favorably not only on the main metabolic parameters but also on the cardiovascular and renal systems. New weekly basal insulins are already in an advanced stage of study and will likely represent the future of insulin therapy. Multi-injection insulin therapy will be enriched by the possibility of using some technological devices such as smart pens, devices capable of offering greater adherence to therapy and greater clinical advantages. Furthermore, numerous pharmacological molecules are being developed, which we will see available on the market in the coming years.

Efforts to improve access to care and reduce disparities in diabetes care are expected to continue, particularly in low- and middle-income countries. Overall, the goal of future developments in diabetes care is to improve quality of life for people with diabetes and to prevent the development of diabetes-related complications.

In order to allow healthcare professionals to choose the best treatments to be allocated to patients most in need of specific therapies, it is necessary to follow the indications provided by the clinical guidelines in force in the individual national realities. Only thanks to treatment pathways capable of eliminating the application heterogeneity of what the best scientific evidence offers us will we be able to act to improve the clinical and humanistic outcomes of patients suffering from diabetes.

The production of scientific contents of adequate elegance and relevance has personally represented an essential prerogative for the publishing activity. This renewed section of AboutOpen aims to evaluate for publication contributions that will have originality and that will be able to constitute innovative and modern research trends for the treatment of diabetes. All authors are welcome to submit contributions relating to all the various types of diabetes, being able to deepen some relevant aspects concerning the areas of prevention, diagnosis, and treatment. Furthermore, specific insights into psychosocial and economic aspects will be welcome. Additionally, scientific contributions from drug or medical device companies are welcome, especially in the case of new products developed and recently introduced to the market. Finally, scientific societies and patient associations will also be able to present significant articles. The perspective of modern diabetes management is exciting, a jump into the next future for better care is awaited.

Received: February 20, 2023
Accepted: February 21, 2023
Published online: February 28, 2023

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