

How data research, modeling, and digital innovation support improved care for people with diabetes in low- and-middle-income countries

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The second national diabetes survey of Pakistan (2016-2017) reported a diabetes prevalence of 26.3%, with an additional 14.4% prevalence for pre-diabetes. The latest International Diabetes Federation (IDF) atlas 2021 estimated that 33 million people are living with diabetes. To combat the rising prevalence of diabetes, the first Pakistan Diabetes leadership forum was held in 2014 to discuss Pakistan's future course. It is remarkable to quote that Baqai Institute of Diabetology & Endocrinology (BIDE) has pioneered several facets of managing diabetes, particularly diabetic foot care and diabetes education. The IDF selected BIDE as one of the eight IDF Centres of Education from across the world (2009 to 2015) and as the IDF centre of excellence for the year 2022-2023.

BIDE has pioneered in establishing multidisciplinary care for foot team and established 115-foot clinics across the country, and have reduced amputation rate by 50%. Additionally, The National Diabetic Foot Advisory Board meets every Wednesday at 9 a.m. to discuss unusual and unresolving diabetic foot ulcer cases.

The Hospital Management System (HMS) of BIDE offers top-to-bottom management of the hospital comprehensive command and control. It oversees and unifies all departments, delivering a seamless and ideal work environment. The development of the Diabetes Registry Of Pakistan-DROP is yet another success, which has been chosen as an exemplary registry from LMICs (by IDF) and is now owned by NIH.

Our key priorities have been patient safety, contentment, and cost-effectiveness, as well as the introduction of novel but reproducible treatments. BIDE in collaboration with Insulin my life provides free insulin and supplies to individuals with type 1 in Pakistan. BIDE has also partnered with Roche and Novo Nordisk to address the challenge of access to diabetes care for children in Pakistan (for changing diabetes in children). The Health Research Advisory board was also established to strengthen the research system in Pakistan.

BIDE has also brought policymakers on board for diabetes prevention and management through MoUs. We believe that prevention programs are essential to contain diabetes, and with the support of Telenor-Pakistan RAPID Score was disseminated among 1 million people. RAPID score enables an individual to assess diabetes risk in 30 secs.

Following the IDF 2020 theme that nurses make a difference, we also have been focused on training nurses and healthcare workers as the preventive leaders of diabetes. To reflect the interests of those affected by or living with diabetes through a global network of members and other stakeholders, Pakistan also encourages community participation in diabetes and has adopted The Blue Circle Voices (BCV) program. On World Diabetes Day 14th November 2022 BIDE launched the Nurses Training Program for NCDs & Diabetes Mellitus, endorsed by the Foundation of European Nurses in Diabetes and supported by PNC president Dr. Shazia Somroo.