Treatment for type 2 diabetes in elder people involves an array of self-care behaviors, including exercise, weight loss on indication, medications like hypoglycemic agents and/or insulin, monitoring of BG levels, reductions of cardiovascular risks, such as high blood pressure, smoking, and high blood lipids. In the past few years, the focus of treatment for medical diseases has changed due to the advancement of data science and new integration of medical internet of things (IoTs), mobile applications and information and communications technology (ICT). Continuous blood glucose monitoring (CGM) and the developing technologies of artificial pancreas (AP) have become new opportunities that empower doctors and patients in the treatment of diabetes and avoidance of complications like hypoglycemia.

For such complex self-care skills and evolving knowledge to support long-term diabetic management, Artificial intelligence (AI) has drawn much attention in solving this problem and its applications to diabetes research are rapidly growing. AI-powered tools have the potential to provide real-time and actionable feedback to patients by analyzing a spectrum of data simultaneously, including the patient’s life pattern, health behaviors, mental and environmental factors and the exponential growth of digitalized data from AP and/or CGM. Equally important, the ethical and legal risks of AI need to be carefully examined in the ongoing researches.

References

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