**Perceptions, Utilization, and Acceptance of Artificial Intelligence in Diabetes Management: A Survey Study Among Person with Type 2 Diabetes and Diabetes Educators**

**Background & Aim:**

Effective diabetes management requires comprehensive self-care, including diet habit, blood glucose monitoring, and taking medicine. With the rapid advancement of generative artificial intelligence (AI), its applications in diabetes care—such as dietary advice, glucose data analysis, and educational content generation—are expanding. However, real-world evidence on the use, experience, and acceptance of AI among persons and educators remains limited.

**Methods:**

A cross-sectional questionnaire-based survey was conducted among two target populations: 119 persons with type 2 diabetes and 65 diabetes-related healthcare professionals. The questionnaire covered demographics, AI usage experience, application contexts, willingness to adopt AI in practice, and perceived concerns. Data were analysed using descriptive statistics, multiple response item aggregation, and Spearman’s rank correlation.

**Results:**

Among persons, 83.2% had heard of AI, and 19.3% reported daily use, only 4.2% had ever applied AI for diabetes management. Most expected applications included dietary support and glucose tracking. Willingness to adopt AI in future care was moderate to high in over 55 persons. Major concerns included accuracy, data privacy, and usability. Among healthcare professionals, the average age was 45.4 years, with nurses and dietitians comprising the majority. 40% had used AI in diabetes education, mainly for slide creation, data visualization, and patient data analysis. While AI was rated as moderately helpful, only 6 respondents expressed strong willingness to formally integrate AI into their practice. The most cited concerns were data accuracy, patient privacy, and lack of training.

**Discussion/Conclusion:**

Both persons and healthcare professionals demonstrate high awareness but low actual application of AI in diabetes care. Persons emphasize ease of use and clinician oversight, while professionals seek to address accuracy, privacy, and training gaps. Future implementation of AI in clinical diabetes care should adopt phased, population-specific strategies, including pilot projects, guided training, and system integration frameworks to improve readiness and acceptance.