

Diabetes app's impact on glycemetic control in a tertiary centre

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ABSTRACT

Introduction: There is growing evidence that digital technology interventions can improve the effectiveness of self-care management for diabetes patients. However, the clinical impact in the local setting is unsure. The study aimed to describe the use of the Health2Sync app in glycemetic control among diabetes patients in our centre. **Methods:** All adult diabetes patients under the endocrine clinic Hospital Putrajaya follow-up who used the Health2Sync app for at least 6 months from January 2022 till January 2023 were included. They were then stratified into 2 groups (active and non-active user) based on their level of use of Health2Sync in the first 3 months and 6 months. As the baseline blood glucose level of each patient was different, we calculated the percentage rate of change in HbA1c level, generated using formula $(\text{HbA1c value} - \text{baseline HbA1c}) / \text{baseline HbA1c}$, to assess the improvement in glycemetic status. **Results:** There were 102 users with a mean age of 45 (SD: 14.65). About half were men (51%), 83 (81.4%) had type 2 diabetes mellitus and the majority (71.6%) were on both oral hypoglycaemic agents and insulin. The mean baseline HbA1c was 9.9 (SD: 2.69). After 3 months of use, the mean percentage reduction of HbA1c from baseline in active and non-active users was 9.8% and 4.1%, respectively. After 6 months of use, the mean percentage reduction of HbA1c from baseline in active and non-active users was 18.6% and 6.2%, respectively. **Conclusion:** The percentage reduction of HbA1c among active users is greater than among non-active users. Active user of the diabetes management app has better glycemetic control.