

First year in a virtual clinic for adults with type 1 diabetes: Patient-reported measures, satisfaction, and glucose control

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Background

Lack of availability and access to a multidisciplinary team with the required knowledge and skills to treat type 1 diabetes effectively using new technologies is recognized as a key limitation to achieving disease balance and management among adults in Israel. The virtual clinic for adults with type 1 diabetes, established in 2019 at the Sheba Medical Center, is designed to address this issue using a hybrid model. The clinic has a multi-professional team, focuses on remote medicine, and provides patient access to the team beyond visits.

Aim

To assess the effect of the transition to medical follow-up in the virtual clinic on the patient experience, confidence in self-care, self-management behavior, and glycemic balance.

Methodology

Seventy of the first 92 patients in the virtual clinic participated in the study. Data was collected at baseline, at 6 months, and at 12 months. Participants completed surveys on their satisfaction with diabetes care (**DTSQ**), diabetes self-management ability (**DSMQ**), confidence in diabetes self-management (**CIDS**), satisfaction with key clinic characteristics. Blood glucose level (**HbA1c**) was documented.

Results

- ✓ There was a significant increase in patient satisfaction with treatment (**DTSQ**) from baseline to 6 months and to 12 months ($p < 0.001$).
- ✓ There was an increase over time in participants' perception of their ability to self-manage their diabetes (**DSMQ**) following their 1st clinic visit ($p < 0.001$).
- ✓ No significant changes were found in participants' confidence in diabetes self-management (**CIDS**) across time points.
- ✓ Participants' glucose levels (**HbA1c**) improved from baseline to 6 months and to 12 months ($p < 0.001$).

Compared to patients' satisfaction with treatment in their previous clinic, a significant reduction was found in:

- Number of times they were physically required to visit the clinic;
- Clinic team availability (doctor, nurse, etc.) improved beyond regular hours;
- Variety of ways to be in contact with the team and costs associated with clinic visits (e.g., travel and absence from work).

Conclusion

Treatment in a virtual clinic can improve type 1 diabetes patients' subjective and objective outcomes.

Recommendation

Expanding the possibilities of virtual health services for adults with type 1 diabetes is needed to improve outcomes.

