

Evaluating the impact of Skype appointments in the antenatal clinic & the effect on outcomes in pregnancies affected by gestational diabetes mellitus (GDM)

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Background:

The reported prevalence of gestational diabetes mellitus (GDM) has risen sharply in recent years, owing to changing diagnostic criteria and population demographics⁽¹⁾. Regular outpatient contact is essential in GDM patients, which is limited by a large demand for these services and comparatively limited capacity to fulfil them⁽²⁾. For this reason there has been significant interest in alternatives to the standard outpatient model of care⁽³⁾.

Methods:

This retrospective analysis was comprised of matched groups of patients under the care of an antenatal diabetes service, one treated via weekly Skype appointments with a dietitian and diabetes specialist nurse (DSN) (n=50) and a comparison group treated as per standard practice (n=50). We assessed differences in pregnancy outcomes and time to treatment (or maintenance within blood glucose targets without hypoglycaemic medications) between groups, as well as patient satisfaction with the Skype service.

Results:

A significant difference in time to treatment (TTT) was observed between the Skype intervention and traditional practice. Skype patients had a significantly longer TTT with metformin (30.5 days [IQR 23.75-46] vs. 10.5 days [IQR 4.25-17.75], p=0.001) and significantly longer TTT with insulin (73.14 ± 40.03 days vs. 27.45 ± 18.92 days, p=0.008) than patients in the traditional treatment group. Overall satisfaction with the service was very high. No significant differences were observed between baseline characteristics or pregnancy outcomes between groups.

Discussion:

Skype appointments in the antenatal diabetes clinic can offer significant benefits to both the patient and the healthcare provider. We observed similar pregnancy outcomes and high levels of satisfaction with the service. We also saw significantly extended time to treatment in the Skype group.

Conclusion:

These results highlight the benefits of facilitating regular contact and additional dietetic support in women with GDM. Although video consultations may not be suitable for all patients and all clinical caseloads, our findings suggest that they may be especially suited to patients with GDM. For patients who prefer face-to-face appointments, time and efficiency savings created by Skype could allow for these to occur more easily.

Key Words: Digital Health, Dietitian, Insulin, Metformin

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