

The Relationship between Anxiety/Depression, Electronic Health, and Doctor Visiting Decisions among People with Diabetes



Background

Despite the increasing prevalence of diabetes, the increasing prevalence of anxiety/depression and the increasing use of electronic health (eHealth), little is known about the associations between these increasing trends. Our objective was to study whether the use of eHealth and self-reported anxiety/depression might change patients' doctor-visiting decisions, and in particular regarding the Use of Out-of-hours (OOH) services.

Methods

We used e-mail survey data collected in 2018 from members of The Norwegian Diabetes Association (18 to 89 years). Using logistic regressions, we studied patients' internet-triggered changes in decisions regarding doctor visits, and whether these were associated with self-reported anxiety/depression. In particular, we studied associations between anxiety/depression, the use of eHealth, and the use of OOH services. Analyses were adjusted for gender, age, education, and self-rated health.

Results

We used two samples, one consisting of 523 people diagnosed with type 1 diabetes (T1D), and one consisting of 895 people diagnosed with T1D or type 2 diabetes (T2D). In the sample of 523 people with T1D, 26.7% had visited OOH services once or more during the previous year. The use of OOH services was positively associated with self-reported anxiety/depression (odds ratio [OR] 4.53, CI 1.43-14.32) and with the use of apps (OR 1.73, CI 1.05-2.85). Those who had felt anxious based on information from the internet, more likely visited OOH services compared with those who had not felt anxious (OR 2.38, CI 1.50-3.78). In the sample of 895 people with T1D or T2D, 75.4% had never made an internet-triggered change of decision in any direction regarding visiting a doctor, whereas 16.4% had decided to visit and 17.3% had decided not to visit. The probability of changing decisions decreased with higher age and increased with the severity of self-reported anxiety/depression. Those with severe anxiety/depression were 3 times more likely to make an internet-triggered change of doctor-visiting decision, compared to those with no anxiety/depression.

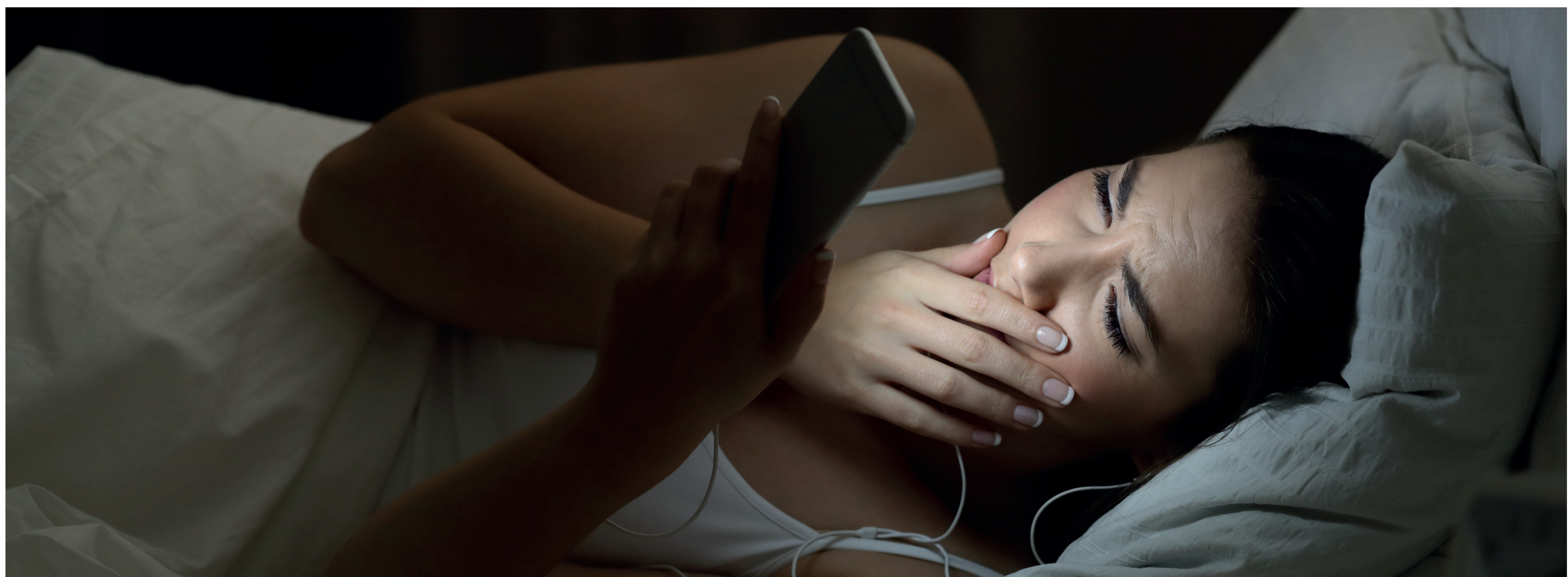


Illustration photo: Colourbox.

Conclusion

Our findings suggest that using eHealth has a significant impact on doctor visiting decisions among people with diabetes, especially among young people and people with anxiety/depression. The use of OOH services was positively associated with the use of apps and with self-reported anxiety/depression. Our findings suggest that ensuring high quality of apps and internet information is important, and that information should be tailored to a wide variety of users, in particular regarding age and mental health. More research is needed to further explore the relations between anxiety/depression, the use of eHealth, and the use of provider-based health care services.