

**LETTER**

# Use of MyDesmond digital education programme to support self-management in people with type 2 diabetes during the COVID-19 pandemic

The pandemic has presented unique challenges for people with type 2 diabetes, who comprise a high-risk group for severe COVID-19 infection.<sup>1-3</sup> There has been increased emphasis on the importance of self-care activities for people with type 2 diabetes to optimise their diabetes management; however, this has proven difficult because of restrictions due to lockdown and reduced face-to-face diabetes education.<sup>4</sup> Nevertheless, the pandemic has also presented people with type 2 diabetes and their healthcare teams with an opportunity to innovate and move quickly towards increasingly digitalised care, to continue supporting people with type 2 diabetes from their own homes.

MyDesmond is an online programme to support people with type 2 diabetes with their self-management.<sup>5</sup> It is accessible on the NHS Apps Library and incorporates content from the NICE endorsed face-to-face DESMOND programme.<sup>6,7</sup> MyDesmond is due to be rolled out in Australia at the end of 2020, based on a recent pilot evaluation, which showed a significant improvement in health outcomes, including diabetes empowerment and diabetes-related distress.<sup>5,7,8</sup> This theory-based digital programme adopts evidence-based strategies to optimise learning and engagement while allowing people with type 2 diabetes to progress through the educational content at their own pace. Other features of MyDesmond include discussion forums, booster sessions, goal setting features, monitoring steps, 'Ask the Expert', step challenges, health trackers and a buddy system to tailor self-management strategies and promote behaviour change.

During the pandemic, MyDesmond was made freely available across the United Kingdom and uptake increased by 400% in a month with a current total of 10,000 registered users. We therefore undertook an online survey in August with registered users to ascertain satisfaction and usefulness of the MyDesmond programme, and to understand what aspects of self-care activities the COVID-19 pandemic had impacted. This survey was available for 1 week.

Of those who responded ( $n = 803$ ), the majority had been diagnosed with type 2 diabetes in the last year (55%), 28% had been living with type 2 diabetes for 1–5 years and 17% for more than 10 years. Experience of MyDesmond also varied with 21% having used the programme for <1 month, 51% for 1–6 months and 28% for >6 months.

Users accessed MyDesmond on computers and smartphones, and the majority found the content sufficiently detailed (83%), providing clear and concise information (92%). A further 85% agreed the programme was easy to use, 83% enjoyed using the programme and 83% would recommend the programme to others.

In addition, 81% reported that the programme helped them to better understand their condition, and the educational material were considered the most helpful aspect of the programme. The interactivity incorporated was considered to be engaging by 79% of the respondents. Sixty-seven per cent said they had improved their diet, 59% became more active because of the programme and 39% felt the programme helped them to better manage stress.

In terms of how the pandemic and lockdown period affected self-management behaviours, compared to pre-lockdown, 24% reported eating more than usual, 37% were less active than usual and 35% felt more anxious or depressed, with 30% sleeping less than usual. Overall, 19% felt less confident in self-managing their diabetes during the lockdown period, which further highlights the added burden of stress impacting diabetes management during the pandemic [Gupta 2020]. Users continued to access diabetes care services during the lockdown period, with 24% having attended a face-to-face appointment or received face-to-face treatment (12%), 8% had a video consultation, whereas 50% had a telephone consultation with a healthcare professional. Overall, 58% embraced a digital consultation and 81% were satisfied with the care received, demonstrating high accessibility and satisfaction. However, for a minority, 20% reported reducing prescription orders and medication intake, and a further 15% had avoided seeking expert advice or medical care during the pandemic. This highlights the added fear and anxiety experienced due to local restrictions, and emphasises the strong need to consider and address these negative emotions in digital self-management programmes.

Overall, these findings suggest that MyDesmond provided a positive experience for people with type 2 diabetes to encourage lifestyle and self-care activities. Self-management was an increased challenge during the pandemic, and reported changes in lifestyle behaviours were concerning, given the increased risk of COVID-19 infection with suboptimally

controlled diabetes. The decline of wellness and self-care activities, however, is likely anticipated given the restrictions on access to facilities and public spaces.<sup>4,9</sup>

This high satisfaction and uptake for a digital self-management programme further supports NHS England's aim to enhance digitalisation of care, and combines the added benefits including efficiency and increased convenience to use by people with type 2 diabetes<sup>10</sup> with the overall aim of improving diabetes care. We anticipate that even after the lockdown period, people with type 2 diabetes will continue to use digital platforms to support their self-management activities in the long term and this is an essential focus to reduce the risk not only from diabetes-related complications but also from COVID-19 infection.

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