Digitising diabetes education for a safer Ramadan: design, delivery and evaluation of massive open online courses in Ramadan-focused diabetes education

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Background: Ramadan-focused diabetes education is critical to facilitate safer Ramadan fasting amongst Muslim people with diabetes. However, access to and engagement with education is variable, and many healthcare professionals (HCPs) are inadequately equipped to deliver it. Digitisation can democratise high-quality diabetes education at low cost.

Methods: Two Ramadan-focused massive open online course (MOOCs) were developed and delivered for Ramadan 2023: one for HCPs in English, and another for people with diabetes in English, Arabic and Malay. A user-centred iterative design process was adopted, informed by a 2022 pilot MOOC. The MOOCs featured interactive elements, videos, patient stories and live multilingual Q&A sessions. Delivered between 7th March and 24th April 2023, promotion occurred through diabetes organisations and health authorities. Evaluation included platform usage analysis and mixed-methods evaluation of user surveys.

Results: A total of 1,531 users registered for the platform from more than 50 countries; 809 started a course (549 HCPs MOOC; 260 patients MOOC) and 387 completed a course. HCPs worked in mostly (60%) non-diabetes specialist roles, 55% identified as Muslim and most self-reported high baseline levels of diabetes and Ramadan awareness. Users found the course to be informative and useful. In the HCP MOOC, users reported improved post-MOOC Ramadan awareness, associated diabetes knowledge and ability to manage diabetes during Ramadan (p<0.01).

Discussion: We demonstrate the potential of MOOCs to deliver culturally tailored, high-quality, low-cost, multilingual Ramadan-focused diabetes education to HCPs and people with diabetes. Evaluation demonstrated MOOCs to be useful and educational among a diverse cohort of worldwide learners.

References

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