

ABCD 2023 winning poster

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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.¹ However, access to and engagement with education is variable, and many healthcare professionals (HCPs) are inadequately equipped to deliver it.^{2,3} Digitisation can democratise high-quality diabetes education at low cost.⁴

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.

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