**Diabetic Medicine in lock-down**

As I write this month’s editorial, the United Kingdom has been in lock-down for just over six weeks and discussions are now beginning to determine the way to ease the measures that were put in place to slow the spread of Covid-19. The pandemic has affected all our lives to a greater or lesser extent; for some, it has meant bereavement, family crisis or job loss with the inevitable financial consequences. For others, the quarantine has allowed time for relaxation and reflection. We may all be sailing through the same storm but we are not all in the same boat. What is certain is that our lives will change irrevocably beyond the current crisis.

Plato was the first to say that necessity is the mother of invention and diabetes services have seen much innovation over the past few weeks. With the cessation of face-to-face clinics, many clinicians, including me, have started conducting productive remote consultations, using video- or tele-conferencing, aided by modern technology that allows both clinician and person with diabetes to view glucose downloads simultaneously. It will be interesting to see how many people will wish to return to solely face-to-face consultations once normal services resume with all the inconvenience of travel, parking and waiting. My bet is that there will be a move to a hybrid system where some contacts will be remote while others will be in person. I have not yet been able to examine anyone’s feet over the internet! Health systems will need to adapt to accommodate these changes.

When lock-down began, I wondered about the effect on Diabetic Medicine. Would redeployment of clinical academics to the “front-line” mean people had no time to write or review? On the other hand, would furloughed staff have more time to put pen to paper? Looking at our figures, April was a busy time with more submissions than the same month in the two preceding years. In part, this is because we have encouraged submission of Covid-19 papers as it has become clearer that people with diabetes are at higher risk of severe infection and Covid-19 can cause unusual and severe metabolic derangement. Following our editorial last month [1], we have fast-tracked three guideline papers from submission to publication in less than a week to provide up-to-date recommendations for healthcare professionals caring for people with diabetes. Both are now attracting social media attention. The first was a timely update from the South Asian Health Foundation about the management of diabetes for people fasting during Ramadan [2] while the second comes from The UK National Diabetes Inpatient CovidVID Response Group [3]. Supported by Diabetes UK, the Association of British Clinical Diabetologists and NHS England, the group was formed at the end of March to ensure that basic diabetes services are secured and maintained during the epidemic and to provide simple safe diabetes guidelines for use by specialists and non-specialists treating in-patients with Covid-19 infection. The final paper deals with the management of diabetes in care homes, a topic of much discussion [4]. More will follow. We are also starting to receive original research on the implications of the epidemic for people with diabetes; one of the first papers was from the Steno Diabetes Center in Copenhagen that examined the psychological sequelae of Covid-19 and would have fitted well into this month’s issue. Sadly, we are not quite that quick and you will have to wait a little while before it has gone through its production checks!

Qualitative research provides a richness to our understanding of the experiences of people with diabetes by examining the reasons, opinions, and motivations that underlie living with the condition. This month we publish eight papers from around the world that used this methodology. In the first, Dash et al have undertaken a systematic review of qualitative literature on the reasons why children and adolescents with type 1 diabetes participate or not in physical activity [5]. As well as individual characteristics, support from friends, family and teachers were key drivers to increase exercise while the requirement to manage blood glucose during exercise was a major barrier.

The DiRECT study has challenged our view of the management of early type 2 diabetes raising the possibility that weight loss through a low-calorie meal-replacement diet can lead to the remission of type 2 diabetes [6]. Some, however, have questioned how acceptable and feasible such a diet would be in a wider population. Rehackova et al provide insights into this question through their interviews of 18 people who took part in the Counterbalance study, the earlier proof-of-concept study for DiRECT [7]. The participants commented on how they grew in confidence during the trial and how their new health behaviours could affect others around them. They needed to be flexible as they moved from the rigid weight loss phase to weight maintenance. Finally, they described how their self-perception changed during the experience.

While qualitative studies often complement findings from quantitative studies, this is not always the case. In the study of 40 Chinese-Canadian adults with type 2 diabetes, the qualitative findings from semi-structured interviews captured aspects of diabetes distress that contradicted some of the quantitative findings, highlighting how both quantitative and qualitative methodologies contribute unique value [8]. Next up is a paper from the Australian MILES2 study describing how some people with diabetes wished that their healthcare professionals understood more about the challenges of diabetes self-management [9].

Despite the recognition that pre-conception care improves pregnancy outcomes in women with diabetes, many women do not attend. Forde et al explored some of the reasons why this may be the case in women with type 2 diabetes. There was a lack of awareness of the need for pre-conception care but also systemic issues prevented healthcare professionals, particularly in primary care, from routinely engaging women with type 2 diabetes in meaningful conversations about preparation for pregnancy [10].

Providing timely feedback is one technique for behaviour change. Hirst et al discuss how people with diabetes and clinicians find point-of-care HbA1c testing more convenient than usual testing with the added benefit that sharing the results instantly help people to understand how lifestyle behaviours could affect their diabetes [11].

Last, but not least, come two papers, which examined the perspective of healthcare professionals on closed-loop systems. The first paper explores clinicians’ views of the potential benefits for people with diabetes while recognising the need for new training and support to gain the most from the new technology [12]. In the second paper, Lawton et al describes how health professionals could hold prejudicial and erroneous views about who would benefit most from a closed-loop system [13]. Clinical experience often changed their views as they observed people using the closed-loop system in ways they had not anticipated.

This issue of Diabetic Medicine clearly illustrates how qualitative research can bring novel insights into diabetes and why this type of research is crucial for people with diabetes and healthcare professionals worldwide. We still do not know how the Covid-19 pandemic will affect the lives of people with diabetes, whether infected or not, and I anticipate reading qualitative studies on this topic over the coming months.

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References

1. Ma RCW, Holt RIG. COVID-19 and diabetes. Diabet Med. 2020;37:723-5.

2. Hanif S, Ali SN, Hassanein M, Khunti K, Hanif W. Managing People with Diabetes Fasting for Ramadan During the COVID-19 Pandemic: A South Asian Health Foundation Update. Diabet Med. 2020. Apr 25. doi: 10.1111/dme.14312.

3. Rayman G, Lumb A, Kennon B, Cottrell C, Nagi D, Page E, et al. Guidelines for the management of diabetes services and patients during the COVID-19 pandemic. Diabet Med. 2020. May 4. doi: 10.1111/dme.14316

4. Sinclair A, Dhatariya K, Burr O, Nagi D, Higgins K, Hopkins D, et al. Guidelines for the management of diabetes in care homes during the Covid-19 pandemic. Diabet Med. 2020. May 5. doi: 10.1111/dme.14317

5. Dash K, Goyder EC, Quirk H. A qualitative synthesis of the perceived factors that affect participation in physical activity among children and adolescents with type 1 diabetes. Diabet Med. 2020. DME14299

6. Taylor R, Valabhji J, Aveyard P, Paul D. Prevention and reversal of Type 2 diabetes: highlights from a symposium at the 2019 Diabetes UK Annual Professional Conference. Diabet Med. 2019;36:359-65.

7. Rehackova L, Araujo-Soares V, Steven S, Adamson AJ, Taylor R, Sniehotta FF. Behaviour change during dietary Type 2 diabetes remission: a longitudinal qualitative evaluation of an intervention using a very low energy diet. Diabet Med. 2020. DME14066

8. Xia A, Yau KW, Tang TS. When qualitative data contradict quantitative data: diabetes distress in the Chinese-Canadian community. Diabet Med. 2020. DME14129

9. Litterbach E, Holmes-Truscott E, Pouwer F, Speight J, Hendrieckx C. 'I wish my health professionals understood that it's not just all about your HbA1c !'. Qualitative responses from the second Diabetes MILES - Australia (MILES-2) study. Diabet Med. 2020. DME14199

10. Forde R, Collin J, Brackenridge A, Chamley M, Hunt K, Forbes A. A qualitative study exploring the factors that influence the uptake of pre-pregnancy care among women with Type 2 diabetes. Diabet Med. 2020. DME14040

11. Hirst JA, Farmer AJ, Williams V. How point-of-care HbA1c testing changes the behaviour of people with diabetes and clinicians - a qualitative study. Diabet Med. 2020. DME14219

12. Farrington C, Murphy HR, Hovorka R. A qualitative study of clinician attitudes towards closed-loop systems in mainstream diabetes care in England. Diabet Med. 2020. DME14235

13. Lawton J, Kimbell B, Rankin D, Ashcroft NL, Varghese L, Allen JM, et al. Health professionals' views about who would benefit from using a closed-loop system: a qualitative study. Diabet Med. 2020. DME14252