

# Education and training for people working with and caring for those with diabetes

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**The growing need for healthcare workers to be given education and training in diabetes care, along with the focus on improving self-management of the condition, prompted The Open University to launch 'Diabetes Care', a 20-week, first-level course, in 2005. The course was designed to meet the needs of lay people as well as those wishing to undertake a nationally accredited programme of study. It was immediately oversubscribed and continues to be extremely popular. The course model is being replicated in the design of two additional courses in preparation, 'Understanding Cardiovascular Diseases' and 'Managing Obesity'.**

Individuals living with diabetes rely heavily on their own skills as well as those of a range of primary and secondary healthcare professionals to manage the condition. Given the rising prevalence of diabetes, there is a greater demand for healthcare workers, at all levels, with the knowledge and skills required to support the individual with diabetes. At the same time, and as the link between self-care and poor outcomes in diabetes has become apparent, Government recommendations are beginning to focus on the importance promoting the acquisition of skills for diabetes self-management<sup>1</sup>.

Workforce development initiatives in recent years have led to the creation of a new role, the diabetes care technician<sup>2,3</sup>, to support qualified healthcare professionals in the delivery of diabetes care. However, in view of the increasing emphasis on delivery of diabetes care in general practice, it is clear that diabetes education and training is required at all levels of healthcare if the needs of those with the condition are to be met.

Vocational or flexible training pathways are one means of providing diabetes education and training for both healthcare professionals and for individuals who need to learn self-management of the condition. The Open University, a leader in the field of distance learning, recognised that there was a lack of educational and training materials in this area and in 2005 launched a new first-level course in diabetes entitled 'Diabetes Care' (SK120). The 20-week course was designed to meet the needs of lay people with diabetes or those caring for someone with diabetes as well as health and social care workers who wished to undertake a nationally accredited programme of study. The workload includes reading and engaging with course materials, online discussions with other

students, and writing an assignment and an end-of-course essay.

The views of healthcare professionals in the field, as well as those of service users, were taken into account during the production of the main course material, a textbook entitled *Living With Diabetes*<sup>4</sup>. It is based on a series of case studies that bring to life the issues being discussed.

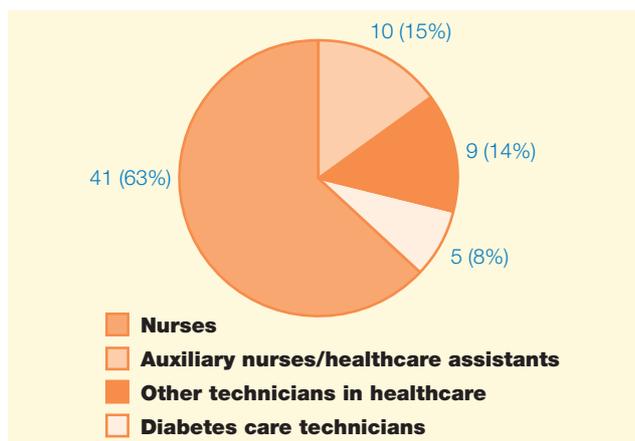
Healthcare professionals and other experts in the field were commissioned to write particular sections of the main text, which were then brought together to form a coherent book by the academic team at The Open University. Learning activities and 'in-text questions' throughout the book help readers develop and consolidate their learning. Given the high proportion of people with diabetes from the Asian community in the UK, the case studies sought to illustrate issues specific to minority ethnic health and wellbeing (Box 1).

A 'pilot' presentation of the course, partly funded by the Norfolk, Suffolk and Cambridgeshire Strategic Health Authority (SHA) and the Bedfordshire and Hertfordshire SHA, commenced in 2004 and 14 students, who were healthcare workers, lay people with diabetes or diabetes carers undertook to work through the course materials. All of the students provided ongoing feedback on each week's teaching to enable the course team to develop and improve the course materials in readiness for its first presentation. The students also attended a two-day event designed to both consolidate their learning (including preparation for assessment work) and provide further critical feedback to the course team.

## Box 1. Extracts from two case studies<sup>4</sup>

'Mrs Antoniou is 52 and cannot remember a time when she has not had a problem with her weight. She has tried everything, all sorts of diets and exercise. Lately she has been feeling very tired, so when her health centre held a Women's Health Day one weekend she decided to go along. She met with the nurse who asked her to provide a urine sample. This showed that glucose was present so a capillary blood glucose test was taken. Mrs Antoniou's blood glucose level was 13.2mmol/l so the nurse asked her to wait to see the doctor.'

'Mrs Shah aged 38 years is 28 weeks into her 4th pregnancy. During her 3rd pregnancy she developed gestational diabetes. She needed insulin to control her blood glucose levels along with a change in diet. After the pregnancy she was very worried about developing diabetes as both her parents had had diabetes. She continued on her new diet. She now weighs 75kg compared with 110kg at the same stage during her last pregnancy. She has just had an oral glucose tolerance to test to look for diabetes. The test was normal and she is delighted.'



**Fig 1.** Healthcare workers enrolled in the first presentation (2005) of SK120, 'Diabetes Care', by occupational category

The course gives students who successfully pass both their ongoing and end-of-course assessments a total of 15 CATS (Credit Accumulation and Transfer Scheme) points at Higher Education Level One (Scottish Credit and Qualifications Framework (SCQF) Level 7), which they can then use, if they so wish, as part of their ongoing studies at The Open University. CATS points are standardised throughout the UK to indicate the level of a course in terms of knowledge, skills or competence required. They are transferable between institutions and can be used as academic credit for other programmes of study, including degree courses.

SK120, 'Diabetes Care', was launched in September 2005 and was oversubscribed almost immediately, to such an extent that plans for a second presentation of the course in the same academic year had to be put into place. Although it was a first-level course, and despite the lack of any specific entry requirements, students fully engaged with the course materials, which consisted of a DVD-ROM, a CD-ROM and a course book. They also found that they could fully integrate the material into a series of online learning experiences, supported by their tutor.

An 'exit' survey yielded employment information for 203 of the 382 students who registered for the first presentation of SK120, 'Diabetes Care'. Of these 203 students, 65 were in occupations involving health or social care (Fig 1). There were a wide variety of other occupations represented, suggesting that most of the individuals in this group were likely to have diabetes or a close family member with the condition.

A key part of the course was the use of online discussions, which took place either together as a whole or in tutor groups across the UK and were moderated by the course team chair. As is usual practice at The Open University, each tutor was responsible for communicating with his or her students via the online discussion system, and used this medium to post examples of good practice and suggestions for face-to-face tutorials. One very surprising finding was how vibrant the online discussion groups became in such a short time. Even after systematic housekeeping, there were well over 1,500 messages left in one discussion forum alone.

### Student feedback

Analysis of the feedback from students on the first presentation of the course suggested that the content and structure of the course had been pitched at precisely the right level. Feedback was almost entirely positive, with concern expressed only by students with little or no computer and internet experience, particularly those over 60 years of age.

### Conclusions

'Diabetes Care' is currently in its third presentation, and remains fully subscribed. Given the positive reception it has received so far, and the high numbers of individuals registering for it in the future, the course looks set to continue to be a success. The model is being replicated in other courses that are currently in preparation, including 'Understanding Cardiovascular Diseases' and 'Managing Obesity'. The success of 'Diabetes Care' in attracting students from both the health and social care sector and the wider public may be attributed to the fact that it deals with a condition that not only has a high prevalence (with over 2 million diagnosed diabetes sufferers in the UK) but is also a matter of mounting concern within the Department of Health, the NHS and the wider public health workforce because of the resources needed for its treatment, care and prevention. Globally, there are now more than 240 million people with diabetes, and this is set to rise to 380 million by 2017. These concerns are reflected in World Diabetes Day (14 November 2007) and the push for a United Nations resolution on diabetes. With the exception of HIV/AIDS, diabetes is the only long-term condition that is receiving this degree of attention on a worldwide basis.

### References

1. Department of Health. *National Service Framework for Diabetes: Delivery strategy*. London: Department of Health, 2003.
2. Department of Health. *Delivering the HR in the NHS Plan 2004*. London: Department of Health, 2004.
3. Department of Health. *Workforce Matters – A guide to role redesign in diabetes care*. London: Department of Health, 2002.
4. The Open University. *Living with Diabetes*. Milton Keynes: The Open University, 2005.

### Websites

The Open University: [www.open.ac.uk](http://www.open.ac.uk)  
 Sample unit from SK120, 'Diabetes Care': <http://openlearn.open.ac.uk/course/view.php?id=2651>

### Key points

- There is substantial and growing demand for education and training in diabetes and its self-management, as evidenced by the ongoing popularity of the 'Diabetes Care' (SK120) course offered by The Open University
- SK120 is a 20-week, entry-level course providing 15 CATS points that has been offered since September 2005
- It is based on a series of case studies presented via a DVD-ROM, a CD-ROM, a course book and online discussion forums
- The model is being replicated in the preparation of two further courses focusing on cardiovascular disease and the management of obesity