

# Alcohol-related deaths in young people with diabetes



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Adolescence is a notoriously difficult time, and for young people with diabetes it is often a time of poor blood glucose control, leading to acute complications of diabetes such as episodes of ketoacidosis or hypoglycaemia (Burke and Dowling, 2007). It is a time for risk-taking behaviour as adolescents seek to fit in with peers, leading to an increase in exposure to alcohol, drugs and smoking. It is also a time for difficulties in complying with advice, as young people often do not respond to conventional methods of education or support offered by healthcare professionals (Court et al, 2009).

A recent study carried out in Finland (Harjutsalo et al, 2011) examined short- and long-term trends in mortality among individuals with early-onset (aged 0–14 years) and late-onset (aged 15–29 years) type 1 diabetes. They identified 17 306 people with type 1 diabetes who were aged below 30 years between 1970 and 1999, and followed them up for an average of 21 years, up to a maximum of 37 years. An encouraging finding from the research was that survival in the early-onset group improved in individuals most recently diagnosed as having diabetes, and this was explained by a fall in chronic complications of diabetes during the first 20 years of the condition; similar findings have been reported in other countries where there are specialised clinics for young people with diabetes (Donaghue et al, 2009). However, less favourable findings included seeing an increasing trend in short-term and long-term mortality in the late-onset group as a result of a rise in alcohol- and drug-related deaths and acute complications of diabetes; alcohol- and drug-related mortality accounted for up to 39% of these deaths.

A smaller but still significant study carried out in the UK also looked at acute complications and drug misuse in individuals with early- and late-onset diabetes (Feltbower et al, 2008). The authors followed 4246 participants over 8–12 years and concluded that all participants had a 4.7-fold excess mortality risk, with 44% of deaths caused by acute complications. Of these, 16% of deaths related to drug misuse, including

insulin but not alcohol; 71% of these deaths occurred in 20–29-year-olds, suggesting that drug misuse was an emerging trend.

A study by Laing et al (2005), looking at psychosocial and socioeconomic risk factors for premature death, retrospectively followed up individuals from the British Diabetic Association cohort study (Laing et al, 1999) who died before the age of 40 years. It showed no evidence that young people with diabetes had more social problems than the general population; however, if they had social problems and diabetes, this increased the risk of problems with compliance and poor control, leading to an increase in deaths as a result of acute events such as ketoacidosis. Young adults were particularly vulnerable if they lived alone, had a history of drug abuse or had a previous psychiatric disorder.

This shows some worrying trends, particularly in the late-onset group of young people with diabetes, which need to be addressed by healthcare professionals. This is particularly pertinent to DSNs, who have a central role to play both in education and in the transition process as these young people move from paediatric to adult services.

Although in the UK we have the highest number of children and young people with type 1 diabetes in Europe, we have the lowest proportion attaining good blood glucose control, and life expectancy can be reduced by up to 23 years (Department of Health [DH], 2007).

## Structured education programmes

*Making Every Young Person with Diabetes Matter* (DH, 2007) notes that improved management and control in children and young people with diabetes reduces the risks and delays long-term complications. It advises the need for structured education programmes and that transition to adult care needs to be negotiated and planned with the young person if it is to be successful.

A Europe-wide initiative known as the SWEET project aims to attain a good quality of life and limit illness and mortality by optimising standards of care for children and young people with diabetes (Waldron and Allgrove, 2010).

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The authors identified huge differences across Europe in team structure and organisation, access to training for healthcare professionals and access to trained staff for children and young people with diabetes and their families.

Chaney et al (2010) carried out a randomised controlled trial to investigate the effectiveness of a structured education programme for young people aged 13–19 years. They highlighted the importance of education and the challenges of educating young people, as many choose not to participate in education offered because of social commitment; additionally, many tend to develop their own management strategies and do not feel the need for education.

The International Society for Paediatric and Adolescent Diabetes (ISPAD) consensus guidelines on diabetes education (Swift, 2009) advise that education is the keystone to successful self-management and outcomes, but it is important to include psychosocial education in order to improve psychological outcomes. Bertalan and Gregory (2011) also note the importance of addressing factors such as depression and eating disorders to improve control and reduce the risk of complications.

### Drug and alcohol misuse

The UK has the highest level of drug use in Europe (Carson, 2002), and although this is normal experiential behaviour in light of the findings of the Finnish and UK studies around drug and alcohol-related deaths, it is important to ensure young people are given advice and the problem-solving strategies to deal with these areas of management, and it may also be helpful to include peers and colleagues in this advice (Court et al, 2009; Swift, 2009). However, for education to be successful it needs a motivated and enthusiastic team of healthcare professionals and needs to be a repeated and continuous process, including counselling and behaviour-change techniques (Swift, 2009). Carson (2002) found that engaging young people in the development of an information leaflet about drugs and diabetes benefited the young people involved by increasing their self-confidence and skills with an unexpected benefit of improved blood glucose control.

Transition to adult care can be fraught with problems if not handled correctly; young people are lost to the adult service, and without this access and support are more likely to suffer acute

and chronic problems in the future (Feltbower et al, 2008). The *Adolescent Transition Care* document (Royal College of Nursing, 2004) notes the importance of seamless transition for 16–18-year-olds, with a dedicated transition worker having a positive impact on transfer. A survey carried out by Trigwell and Jawad (2010) showed elevated rates of depression in people with diabetes, particularly during transition and transfer to adult services, but there is still a lack of psychological support for these young people.

### Facing challenges

The challenges therefore for both paediatric and adult diabetes teams is to ensure we find ways of engaging these young people, by finding innovative ways to ensure they receive the information and education they require and are supported before, during and after transition to adult services. Building up motivating and trusting relationships, encouraging self-management of their diabetes and helping parents to support these young people leads to better outcomes (Court et al, 2009). This support for family and friends is essential as their attitudes towards these young people influence the degree to which they achieve successful management, and positive support is required by all to maintain best control and reduce the risks of complications (Burke and Dowling, 2007).

Court et al (2009) also suggest that an important part of the healthcare professional's role is being able to screen for and recognise any signs of depression, psychosocial problems or drug taking. If this can be achieved, it may help reduce the alarming trend for deaths from acute complications of diabetes, particularly drug- and alcohol-related problems.

Young people with diabetes constitute a challenging group, and it is important for paediatric and adult services to work together to ensure smooth transition of care and give continued support and education to reduce both acute and chronic complications of diabetes. ■

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