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Clinicians feel comfortable discussing alcohol but not illicit drug use with young adults with type 1 diabetes: a survey of clinicians

Type 1 diabetes is a common condition of young adulthood, characterized by autoimmune destruction of insulin-producing pancreatic β cells and requiring lifelong administration of insulin [1]. Young adults with type 1 diabetes consume alcohol and recreational drugs at rates similar to their peers [2], however, this use is associated with higher rates of hospitalization and mortality relative to young adults without type 1 diabetes [3,4]. Research has demonstrated that young adults with type 1 diabetes may inconsistently apply a range of harm minimization measures to reduce the risk of substance use, yet rarely discuss these measures with clinicians [5,6]. As recreational drug use becomes more common and with a decrease in regulation for both medicinal and recreational use in many jurisdictions, clinicians are increasingly likely to encounter young adults with type 1 diabetes wishing to discuss the impact of drug use on glycaemic control.

We performed a survey of clinicians regarding their approach to young adults with type 1 diabetes who use alcohol and illicit drugs. The survey, developed by the research team following qualitative work with young adults with type 1 diabetes who use substances [5], aimed to determine screening levels, recognition and advice given by a variety of clinician groups. Clinicians were invited to complete a 15-question online survey via the Australian Diabetes Educators Association (ADEA) newsletter, at a presentation at the Australian Diabetes Congress (ADC) and at a number of presentations to local endocrinology unit meetings in Melbourne, Australia. A total of 79 responses were received from April to October 2018; 14 were from a total circulation of 1412 of the ADEA newsletter, six of a possible 17 responses were received from the ADC presentation and a further 50 of a possible 62 responses were received from the unit meetings. Statistical analysis was performed using STATA/SE Version 14.2. Chi-squared testing was performed to examine associations between age groups, clinician types and screening practices. The study was approved by the St Vincent's Hospital (Melbourne) Human Research Ethics Committee.

Of the 79 respondents, 76% were aged 30–49 years, 67% were women, 96% worked in metropolitan areas and 54% were endocrinologists, 19% were diabetes educators, and 17% were trainees or allied health professionals. Of these respondents, 75% reported that young adults with type 1 diabetes who drank alcohol or used illicit drugs were seen at least monthly in their practice. Reported screening rates were 61% for alcohol and illicit drugs, 13% were for alcohol alone and 7% were for alcohol and, if positive, also for illicit drugs. A total of 20% of clinicians either did not screen or only asked about alcohol and drugs if concerned. There was no association between age or clinician type and reported screening practice. There was substantially more confidence amongst clinicians in advising patients regarding alcohol use than illicit drug use, with 29% feeling confident in advising on both alcohol and illicit drug use, while 56%, felt confident giving advice regarding alcohol use only. The type of advice given to people with type 1 diabetes is shown in Fig. 1 and included 90% of clinicians informing patients of concerns regarding nocturnal hypoglycaemia following alcohol intake.

Commented [MD1]: AUTHOR: Please check amendments to sentence beginning 'Reported screening rates…' are correct.

There was less consistency with regard to general safety advice pertaining to alcohol or drug use, including recommending counting alcoholic drinks and quantity of drugs

consumed, not consuming drugs/alcohol alone, consideration of wearing an identity bracelet, and not mixing substances. Few clinicians informed their patients about using stimulants and risk of hyperglycaemia. This reflects the decreased confidence that respondents felt screening for and providing advice regarding illicit drugs.

The limitations of our survey include the small overall numbers, a low overall response rate with likely responder bias, and involvement of clinicians mostly working in metropolitan areas of Australia. Further research would include determining what specific screening practices were used and whether a specific screening tool for young adults with type 1 diabetes would be beneficial or whether more established tools, such as the AUDIT tool or the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) recommended by the WHO [7,8], could be integrated into routine care. Further research into the metabolic interactions of recreational drugs on blood glucose levels, the role of continuous or flash glucose monitoring, and the most effective harm minimization approaches would increase clinician confidence and allow more specifically tailored advice [9].

Overall, the respondents had a willingness to discuss the impact of substance use on metabolic control with young people with type 1 diabetes. A number of respondents commented on the need to optimize psychosocial support services, which would probably assist in screening rates and referrals for appropriate interventions. Lower levels of screening for drug use are of concern as young adults with type 1 diabetes are unlikely to volunteer this information and, thus, an opportunity for harm minimization and/or referral for more intensive treatment may be easily missed. Overall, as patterns of substance use increasingly include cannabinoids, stimulants, hallucinogens and other currently illicit drugs, it will be important for clinicians to familiarize themselves with potential interactions and appropriate safety advice for young adults with type 1 diabetes.

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Competing interests

None declared.

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FIGURE 1 Clinician advice on alcohol and drug use given to young adults with type 1 diabetes.

Commented [MD2]: TYPESETTER: FIGURE 1 CORRECTIONS:
Please change:
'long acting' to 'long-acting'
'carbohydrate rich' to 'carbohydrate-rich'

Figure 1: Clinician advice on alcohol and drug use to young adults with type 1 diabetes