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Provision of Chronic Disease Preventive Care in Community Substance Use Services: Client and Clinician Report

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ABSTRACT

Introduction: People with substance use problems have a higher prevalence of modifiable health risk behaviors. Routine clinician provision of preventive care may be effective in reducing such health behaviors. This study aimed to examine clinician provision of preventive care to clients of community substance use treatment services.
Methods: A cross-sectional survey was undertaken with 386 clients and 54 clinicians of community substance use treatment services in one health district in New South Wales, Australia. Client- and clinician-reported provision of three elements of care (assessment, brief advice and referral) for three health risk behaviors (tobacco smoking, insufficient fruit and/or vegetable consumption and insufficient physical activity) was assessed, with associations with client characteristics examined.
Results: Provision was highest for tobacco smoking assessment (90% client reported, 87% clinician reported) and brief advice (79% client reported, 80% clinician reported) and lowest for fruit and vegetable consumption (assessment 23%, brief advice 25%). Few clients reported being offered a referral (<10%). Assessment of physical activity and brief advice for all behaviors was higher for clients residing in rural/remote areas.
Conclusion: Assessment and brief advice were provided to the majority of clients for smoking, but sub-optimally for the other behaviors. Further investigation of barriers to the provision of preventive care within substance use treatment settings is required, particularly for referral to ongoing support.

1. Introduction

People with substance use problems experience a life expectancy up to 20 to 23 years less than the general population (Chang et al., 2011; Lawrence, Hancock, & Kisely, 2013; Nordentoft et al., 2013) due largely to preventable chronic diseases such as heart disease, respiratory disease and cancer (Alba, Samet, & Saitz, 2004; Hurt et al., 1996; Islam, Taylor, Smyth, & Day, 2013; Lawrence et al., 2013; Stenbacka, Leifman, & Romelsjo, 2010). Modifiable health risk behaviors such as tobacco smoking, insufficient nutrition and insufficient physical activity are key determinants for chronic disease (Australian Institute of Health and Welfare, 2005; World Health Organization, 2002, 2011). The prevalence of health risk behaviors is higher for people with substance use problems compared to the general population in Australia and elsewhere (Baca & Yahne, 2009; Barbadoro et al., 2011; Kalman, 1998; Kelly et al., 2012; Prochaska, Delucchi, & Hall, 2004; Prochaska et al., 2014).

Routine clinician-delivered preventive care is an effective approach to reduce health risk behaviors among clients of general health care settings (Hillsdon, Foster, & Thorogood, 2005; Rees, Dyakova, Ward, Thorogood, & Brunner, 2013; Rice, Hartmann-Boyce, & Stead, 2013; Rigotti, Munafo, & Stead, 2007), and clinical practice guidelines recommend that such care be provided (Glasgow, Goldstein, Ockene, & Pronk, 2004; Ministry of Health, 2007; The Royal Australian College of General Practitioners, 2009). Substance use treatment services also provide an opportunity for preventive care delivery (Baker, Callister, Kelly, & Kypri, 2012; Bowman & Walsh, 2003; Walsh, Bowman, Tzelepis, & Lecathelinais, 2005). Such services reach a variety of people seeking treatment for substance use, and often involves multiple episodes of treatment, delivered by

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multidisciplinary teams, and regular monitoring (National Institute on Drug Abuse, 2012; New South Wales Health, 2007).

A literature search undertaken by the authors identified seven studies regarding the extent to which substance use services provide preventive care; all of which focused on tobacco smoking only (Currie, Nesbitt, Wood, & Lawson, 2003; Hahn, Warnick, & Plemmons, 1999; Joseph, Nelson, Nugent, & Willenbring, 2003; Olsen, Alford, Horton, & Saitz, 2005; Richter, Choi, McCool, Harris, & Ahluwalia, 2004; Rothrauff & Eby, 2011; Walsh et al., 2005) and only one was undertaken in Australia (Walsh et al., 2005). The prevalence of smoking status assessment reported ranged from 44–88% (Hahn et al., 1999; Olsen et al., 2005; Richter et al., 2004; Rothrauff & Eby, 2011), the prevalence of brief advice ranged from 31–73% (Currie et al., 2003; Hahn et al., 1999; Joseph et al., 2003; Olsen et al., 2005; Richter et al., 2004; Rothrauff & Eby, 2011; Walsh et al., 2005), and the prevalence of referral to further support ranged from 10–54% (Currie et al., 2003; Hahn et al., 1999; Richter et al., 2004; Rothrauff & Eby, 2011). One study used both client and clinician self-report data (Olsen et al., 2005), one used client report only (Joseph et al., 2003) and five used clinician report only (Currie et al., 2003; Hahn et al., 1999; Richter et al., 2004; Rothrauff & Eby, 2011; Walsh et al., 2005). The reported prevalence of preventive care was higher for clinician report compared to client report, however as only one study reported both, further examination of clinician and client report is warranted.

In addition to the varying prevalence of care reported within a particular healthcare setting, it has been suggested that preventive care may be preferentially provided to specific patient groups. For example, studies in general community health care settings have reported that the following client characteristics may be associated with lower provision of preventive care: younger age (Pollak, Yarnall, Rimer, Lipkus, & Lyna, 2002), lower socioeconomic status (Laws et al., 2009), and initial consultation (compared to follow-up consultation) (Laws et al., 2009). No studies have reported whether the provision of preventive care in substance use treatment settings is associated with client characteristics.

Given the limitations of the existing evidence, a study was undertaken to assess the prevalence of recommended elements of preventive care (assessment, brief advice and referral/follow-up) for three chronic disease health risk behaviors (tobacco smoking, insufficient fruit and/or vegetable consumption, and insufficient physical activity) as reported by clients of and clinicians in community substance use treatment services. Additionally, the study assessed client characteristics associated with the provision of such care.

2. Methods

2.1. Design and setting

Cross-sectional surveys of both clients and clinicians of community substance use services in one local health district in New South Wales (NSW), Australia were undertaken. The district includes 19 community-based substance use services, providing approximately 96,000 appointments each year. Ethics approval was granted by the Hunter New England and the University of Newcastle Human Research Ethics Committees (No. 09/06/17/4.03, No. H-2010-1116).

2.1.1. Substance use treatment services

Fifteen services that were eligible for data collection included substance use counseling, ambulatory withdrawal, methadone and buprenorphine maintenance and court diversion programs. Services are typically co-located with other community based government health services. Services included single site specific services in larger metropolitan areas as well as multi-purpose services in rural areas. Hospital based services or residential treatment services were not included in the study. Inpatient or intake-only services, and services that primarily saw clients under the age of 18, or only provided care to clients in a group setting were ineligible.

2.2. Participants and recruitment

2.2.1. Clients

Clients attending any of the 15 community substance use services were eligible for participation if they were: over 18 years of age, had a face-to-face appointment within the previous two weeks, and had not been identified as inappropriate for contact by their clinician (e.g. placed the client at risk).

Each week, for six months, 45 clients attending the substance use services were randomly selected from the electronic medical record system. Selected clients were mailed an information letter and, two weeks later, telephoned by a trained interviewer to confirm further eligibility criteria (i.e. physically and mentally capable of completing a telephone survey). If eligible, the interviewer conducted the survey at that time or arranged a later date.

2.2.2. Clinicians

All clinicians (e.g. psychologists, counselors, nurses, case workers) of the eligible services were able to participate in the study if they had seen at least one new client in the past two months, and primarily provided care to clients over the age of 18. Clinicians were identified using the electronic medical record system and mailed an information letter describing the study. Two weeks later, clinicians were telephoned by a trained interviewer to confirm eligibility and arrange participation in the survey.

2.3. Data collection procedures

The client survey was conducted from May to October 2012 and the clinician survey was conducted from October to November 2012, utilizing computer assisted telephone interviews (CATIs).

2.4. Measures

2.4.1. Client demographic and health risk behavior characteristics

Age, gender, postcode, and number of substance use service appointments in the previous 12 months were obtained from the clients' electronic medical records. During the CATI, clients were asked their: employment status, marital status, and highest level of education attainment. Aboriginal and/or Torres Strait Islander status was obtained from both the clients' electronic medical record and the CATI.

Clients were asked to report, for the month prior to seeing the service: whether they were a smoker of any tobacco products (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991), how many serves of fruit they usually consumed each day (Australian Bureau of Statistics, 1997), how many serves of vegetables they usually consumed each day (Australian Bureau of Statistics, 1997) and how many days a week they usually undertook 30 minutes or more of physical activity (Marshall, Hunt, & Jenkins, 2008). Following Australian national guidelines (Department of Health and Aged Care, 1999; Ministerial Council on Drug Strategy, 2004; National Health and Medical Research Council, 2013) clients were defined as being 'at risk' if they: smoked any tobacco products (Ministerial Council on Drug Strategy, 2004), consumed less than two serves of fruit per day, consumed less than five serves of vegetables per day (National Health and Medical Research Council, 2013), or participated in less than 30 minutes of physical activity at least five times a week (Department of Health and Aged Care, 1999).

2.4.2. Clinician demographic and professional characteristics

Clinicians were asked to report their age, Aboriginal and/or Torres Strait Islander status, years working in community health, their current employment status (full time, part-time, casual) and discipline type (nurse, counselor, psychologist, case worker, Aboriginal health officer).