A National Survey of Services for Women with Substance Use Issues and Their Children in Canada: Challenges for Knowledge Translation

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Abstract Across cultures, approximately one third of people with drug dependence are women of child-bearing age. There is emerging evidence regarding the effectiveness of integrating pregnancy, parenting, and child development services with addiction services. In 2007, we conducted a national survey of addiction agencies serving women to provide preliminary information on available services. Approximately one half of the program managers reported providing some type of pregnancy-, parenting-, or child-related services, the majority of which were external referrals, and very few agencies provided any services for children under 5 years. These findings indicate a gap in services in Canada. Reliable data on services for women with substance use issues and their children is essential to ensure appropriate resource allocation. Program managers reported preferring to receive practice-related research information through face-to-face contact, information which will be helpful to knowledge translation efforts.

Keywords Women · Substance use · Children · Pregnancy · Services

Across cultures, approximately one third of people with drug dependence are women of child-bearing age (World Health Organization 2008). In Canada, women have lower rates of alcohol and other drug use generally and problematic use specifically (Amhad et al. 2007), however, in the past 15 years, there has been an increase in women's use of substances (Ahmad et al., 2007). Gender can influence reasons for using (e.g., social pressures), pathways to problematic use (e.g., victimization), and the consequences of use (e.g., absence of social supports available to women). In comparison to men, women typically report more complex precursors to substance abuse, more negative health and other consequences, and more difficulties accessing treatment (Dell and Roberts 2005; National Institute on Alcohol Abuse and Alcoholism 2002). In a 2004 United Nations report, women who abused substances were described, in comparison to men, as having fewer resources, being more likely to be living with a partner with a substance use problem,

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experiencing more severe substance problems at the beginning of treatment, and having higher rates of trauma (United Nations Office on Drugs and Crime 2004). In gender-sensitive theoretical models, substance abuse is viewed in the context of women's relationships, including broader relational and multigenerational systems. Women's substance use issues have been described as more "socially embedded" than men's (Saunders et al. 1993). Women entering treatment are more likely than their male counterparts to report relationship problems, social isolation, fewer friends, and having partners who are involved in drugs or alcohol (Comfort and Kaltenbach 2000; Finkelstein 1994; McComish et al. 2003).

Maternal use of alcohol and other drugs can have profound effects on pregnancy outcomes as well as on childhood health and development. Substance use has been found to be associated with low birth weight and premature delivery, neonatal withdrawal syndrome, respiratory distress, infection, physical deformities, and compromised neurobehavioral progress after birth (Curet and His 2002). Children born to women who used substances during pregnancy are at greater risk for impaired physical growth and development, behavioural problems, and learning disabilities (e.g., Covington et al. 2002). Despite efforts to reduce women's substance use during pregnancy, data from two recent large-scale Canadian studies indicate that approximately 20% of newborns have prenatal exposure to alcohol (Tremblay 2003). A conservative estimate of the prevalence of Fetal Alcohol Spectrum Disorder in people under 21 years old in Canada is 24,000 individuals and the annual cost to Canadians is more than \$344 million (Stade et al. 2006).

Research has shown that women who continue to abuse substances after childbirth may experience challenging life circumstances, including severe economic and social problems such as lack of affordable housing and homelessness. In addition, they may have diminished capacity for parenting and difficulties providing stable, nurturing environments for their children (Kelley 1998). Moreover, maternal substance abuse has been associated with child neglect and abuse (Dunn et al. 2002), and substance-abusing women are more likely to be involved with the court system and child protection services (Howell and Chasnoff 1999), factors associated with a host of negative developmental sequalae for children.

Research findings suggest that integrated treatment programs (those that include on-site pregnancy-, parenting-, and child-related services with addiction services) are associated with positive outcomes for maternal substance abuse, maternal physical and mental health, parenting, birth weight, child development, and child behaviour (e.g., Ashley et al. 2003; Motz et al. 2006; Niccols and Sword 2005). In a meta-analysis, Milligan et al. (2009) found that women stayed in integrated programs significantly longer than conventional (non-integrated) addictions programs. Length of stay is considered one of the best predictors of treatment effectiveness as it is correlated with many important outcomes (e.g., reduced drug use, criminality, and unemployment and improved pregnancy and neonatal outcomes) (Clark 2001; Hubbard et al. 2003; Luchansky et al. 2000). Accordingly, researchers, clinicians, and policy makers recommend that addictions programs address women's physical, social, and mental health needs, as well as children's needs through parenting programs, child care, and other child-centred services (Coalescing on Women and Substance Use 2007; Howell and Chasnoff 1999; Women's Service Strategy Work Group 2005).

In Canada, traditionally there have been separate service delivery systems for substance use treatment, social services, and children's services. Although intervention can benefit women and their offspring, women with substance use issues have difficulty using conventional systems of care. Services are not accessed for a number of reasons: fear of



losing custody of children, fear of forced treatment or criminal prosecution, lack of treatment readiness, coexisting mental illness, guilt, denial or embarrassment regarding their substance use, and lack of transportation or child care (Corrarino et al. 2000). System-related issues also present barriers to care. Negative attitudes of health care providers and responses that stigmatize women can deter them from accessing care (Carter 2002).

In some jurisdictions, addictions programs designed to address the complex needs of women with substance use issues and their children have been emerging, but information about the availability of such treatments in Canadian addictions agencies is limited. Information that is available suggests that specialized services for women with substance use issues who are pregnant or parenting in Canada vary along a continuum from fully integrated (i.e., including child development and parenting services with addiction services) to non-integrated (available, but separate, services) to limited (some services exist, but not others) to nonexistent (no services available).

The paucity of current information regarding pregnancy, parenting, and child development services in Canadian addictions agencies serving women presents challenges to appropriate resource allocation and knowledge translation efforts. This type of information also does not appear to be available for any other country, at least in literature published in English. Moreover, researchers and stakeholders have identified deficiencies in information on decision-maker preferences for receiving and using research evidence (Lavis et al. 2003). To inform policy and knowledge translation efforts, we conducted a national survey of addiction agencies serving women with substance use issues regarding their treatment services and their preferences for receiving research information.

Method

This study was approved by the McMaster University Research Ethics Board. Informed consent was obtained from the study participants. To develop a comprehensive list of all of the Canadian treatment facilities for women with substance use issues, we solicited information from the Canadian Centre for Substance Abuse National Directory of Drug and Alcohol Abuse Treatment Programs and conducted a Google search of Canadian websites using the search terms "women," "addiction or substance," and "treatment." We called programs to confirm that they served women with substance use issues and to obtain program manager (or equivalent) contact information.

The on-line survey included questions regarding services (e.g., "Does your agency provide any services specifically related to pregnancy or parenting?") and preferences for receiving research information (e.g., "Please indicate your preferences for receiving information relevant to your clinical work, including research findings, by ranking the following information sharing strategies from '1' most preferred to '10' least preferred."). The survey was conducted from August to September 2007. The program manager (or equivalent) of each program provided the information for our survey.

Results

We identified and contacted 460 agencies by phone. Of these 460 agencies, 28 did not provide services for women with substance use issues, 27 were duplicates or satellite sites, 26 listed phone numbers that were not in service or incorrect, and 92 did not reply. Therefore, we obtained email addresses of 287 program managers. We received survey



responses from 163 (57%) of the 287 program managers across Canada (see Fig. 1 for the number of agencies per province and Fig. 2 for addiction services provided).

Results indicated that only 87 of the 163 agencies (53%) provided any pregnancy-, parenting-, or child-related services. Most of the agencies providing pregnancy-, parenting, or child-related services were in British Columbia and Ontario. These two provinces have the largest populations in Canada (Statistics Canada, no date). While 52% of the agencies provided some type of pregnancy-or parenting-related services, and 46% provided child-related services, the majority of these pregnancy, parenting, or child-related services were external referrals (see Figs. 3 and 4). Few agencies provided on-site prenatal health care, childcare, early learning programs, or child development assessments. Many of the agencies did not provide any services at all for children under 5 years old (see Fig. 5). In terms of preferences for receiving research information, program managers who completed the survey indicated that they preferred to receive practice-related research information via (in order of preference from most preferred) workshops, meetings with experts, journal articles, and treatment manuals (see Fig. 6).

Discussion

There is little information on available services for women with substance use issues and their children and program managers' preferences for receiving practice-related research evidence. The present study offers preliminary estimates that can be used to inform policy efforts to ensure equitable resource allocation, service accessibility, and service availability, as well as knowledge exchange efforts.

The findings suggest that approximately half of the addictions agencies in Canada do not provide pregnancy-, parenting-, or child-related services, with very few providing services for children under 5 years. On-site pregnancy, parenting, and early child development services are

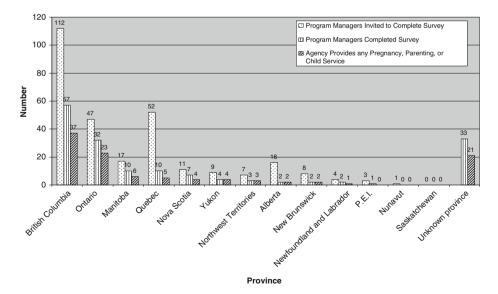


Fig. 1 Agencies by Province (N)



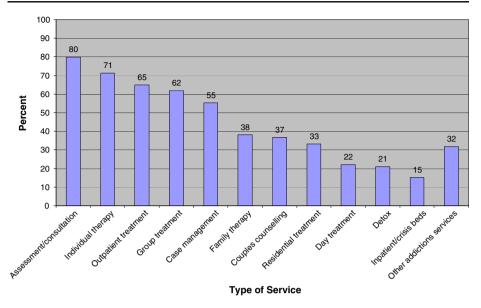


Fig. 2 Addiction services (%) offered by agencies (N=163)

important, as they are associated with improved birth, parenting, and child outcomes among women with substance use issues and their children (Ashley, et al. 2003; Motz et al. 2006; Niccols and Sword 2005). Thus, this survey identifies an important gap in services.

Most program managers reported referring children with identified needs to other agencies. Although this strategy may seem appropriate, especially given that addiction agencies may not have staff with child development expertise, the likelihood of women with substance use issues following up on external referrals is very low (Shulman et al. 2000). For example, Shulman et al. (2000) found that, while only 10% of mothers in

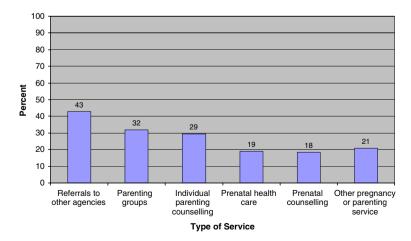


Fig. 3 Pregnancy and parenting services (%) offered by agencies (N=163)



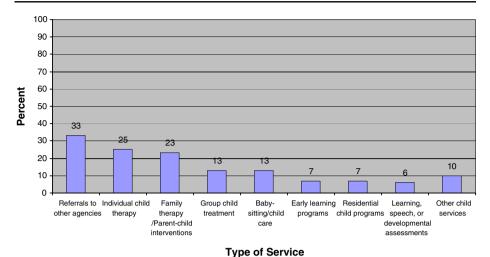
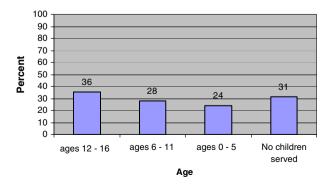


Fig. 4 Child services (%) offered by agencies (N=163)

treatment for substance abuse followed up with referrals for child development evaluations off site, 85% completed child development evaluations when they were offered on site.

Given that women with substance use issues who are pregnant or parenting have additional needs (e.g., prenatal, parenting, childcare needs) that may not be met in traditional addiction services or even in women-specific treatment programs (Howell and Chasnoff 1999; National Treatment Strategy Working Group, 2008; Women's Service Strategy Work Group 2005), a 2004 United Nations report concluded that "[e]ngaging and retaining pregnant and parenting women in treatment requires collaboration between the substance abuse treatment sectors, prenatal care, and child welfare...Ideally, services should be accessed through a single site" (United Nations Office on Drugs and Crime 2004, p. 3). Integrated treatment programs have primarily taken two forms: residential and outpatient. Integrated residential programs or "therapeutic communities," such as the several hundred developed in the United States, offer long-term (15–18 months) treatment services to women and their children (e.g., Coletti et al. 1995; Graham et al. 1997). Integrated outpatient treatment programs use the "one-stop shop" model in which addiction, prenatal,

Fig. 5 Age of children (%) served (*N*=163)





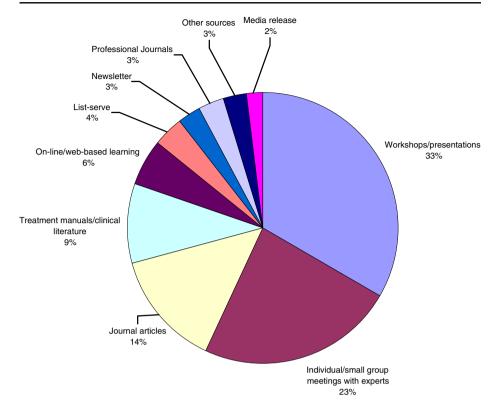


Fig. 6 Program managers' preferences for receiving clinically-relevant research evidence (% ranked first)

parenting, and child services are provided on-site through collaborative service arrangements (e.g., Benoit et al. 2003; Motz et al. 2006; Niccols and Sword 2005).

Our survey also indicated that program managers' preference for obtaining practice-related research findings was primarily through face-to-face contact (i.e., workshops and meetings with experts). These findings are consistent with knowledge translation and exchange research in other areas of health care showing that traditional passive strategies (e.g., publications in peer-reviewed journals, pamphlets) used alone are relatively ineffective, whereas interactive strategies involving face-to-face contact show promising results (Davis et al. 1992; Dobbins et al. 2005; Grol and Grimshaw 2003; Oxman et al. 1995).

There are several limitations to our study. First, we do not have complete data on all agencies serving women with substance use issues in Canada. We do not know if those who responded were representative of the complete group of agencies, however most provinces and territories were represented. Second, we do not have information on the impact of culture on the findings (e.g., there may be different services available in Aboriginal communities than in other communities). Thirdly, respondents were program managers, so we do not have information on preferences for receiving research evidence from clinicians, executive directors, or policy makers.

Future research comprehensively assessing service availability would be helpful to the development of appropriate policy and resource allocation. Moreover, given the deficiencies in the knowledge base regarding important knowledge translation and exchange variables, more comprehensive qualitative and quantitative information on



preferences and capacity for receiving and using research evidence from multiple types of stakeholders and decision-makers in the addiction sector is recommended (cf. Lavis et al. 2003). Regarding the research evidence that is to be translated, ongoing meta-analytic research on studies of integrated programs is ongoing, with attempts to address specific questions about potential moderating factors, such as program, client, and study variables (Niccols et al. 2007). Preliminary results suggest a clear need for more research on treatment for women with substance abuse issues and their children involving prospective studies with randomized designs, large samples, and full descriptions of the target population and the intervention program.

Conclusions

Ours is the first national study of services for women with substance use issues and their children in Canada. It documents the need for pregnancy, parenting, and child development services in many addictions agencies to better meet the complex needs of this population, and program managers' preferences for receiving practice-related research evidence through face-to-face contact.

The next step in our program of research is to develop and evaluate a knowledge exchange strategy to improve services for women with substance use issues and their children in Canada. As evidence on the effectiveness of integrated programs accumulates, this field presents a unique opportunity to shorten the typically long and winding road from evidence to practice by developing a comprehensive plan spanning the full knowledge translation and exchange continuum, with meaningful involvement of stakeholders in the process (Majumdar et al. 2004). This work ultimately has the potential to enhance service delivery thereby improving the health of a vulnerable, marginalized population of women and children who are at high risk for poor outcomes.

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