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Research report

Barriers and facilitators of mental health screening in pregnancy

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ABSTRACT

Background: Access to mental health services during pregnancy is most commonly mobilized through formal mental health screening. However, few studies to date have identified barriers and facilitators that affect pregnant women's responses to mental health screening. The objective was to identify barriers and facilitators that influence pregnant women's responses to the screening process and factors associated with their identification.

Methods: This multi-site, cross-sectional survey recruited pregnant women >16 years of age who spoke/read English in Alberta, Canada. Main outcomes were barriers and facilitators of mental health screening. Descriptive statistics were generated to identify the most common barriers and facilitators and multivariable logistic regression models were conducted to determine factors associated with barriers and facilitators.

Results: Study participation rate was 92% (460/500). Women's most common barriers were: significant others normalizing their emotional difficulties; desiring to handle mental health problems on their own; preferring to discuss feelings with significant others; and not knowing what emotions were 'normal'. Women who identified these barriers were more likely not to have been treated previously for mental illness, were primiparous, and could not be completely honest with their provider. Main facilitators were provider characteristics (sensitive, interested), reassurance that mental healthcare is a part of routine prenatal care, hearing that other women have emotional problems during pregnancy and knowing that help was available.

Limitations: The sample comprised largely Caucasian, well-educated, and partnered women, which limits generalizability of the findings.

Conclusions: Personal and stigma-related barriers influence pregnant women's responses to mental health screening. Efforts to minimize barriers and enhance facilitators should be explored as potential strategies for optimizing prenatal mental health screening.

1. Introduction

With up to 30% of pregnant women experiencing stress, depression, or anxiety, (Grant et al., 2008; Kingston et al., 2012a; Milgrom et al., 2008) mental health problems represent one of the most common morbidities in pregnancy and the leading cause of mortality during the perinatal period in developed nations (Austin et al., 2007). Furthermore, two decades of longitudinal research demonstrates that poor prenatal mental health is associated with adverse neonatal and child outcomes (Kingston and Tough, 2013; Kingston et al., 2012b).

Prenatal mental health screening is the first step in early identification and treatment. Ideally, it involves screening for current symptoms (e.g., depression or anxiety symptoms) as well as an assessment of psychosocial risk factors that place women at

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greater risk for future development of mental health problems (Austin, 2011; Austin and Marce Society Position Statement Advisory Committee, 2014). Given epidemiologic evidence that prenatal anxiety and depression are strong predictors of postpartum mental illness, (Grant et al., 2008; Milgrom et al., 2008) mental health screening and treatment during pregnancy offers an optimal time for early detection and intervention for perinatal mental health problems. Despite recommendations (Austin, 2011; Marce Society Position Statement Advisory Committee 2014; NICE, 2014), mental health screening is not a component of routine prenatal care in most countries. Lack of routine prenatal screening is a major public health concern for four key reasons: (1) in the absence of routine, standardized screening, up to three-quarters of women meeting DSM criteria for anxiety and depression are not identified (Coates et al., 2004; Spitzer et al., 2000) and only 1 in 10 women requiring mental healthcare receives it (Bowen et al., 2012); (2) in qualitative studies, women indicate that they do not initiate discussions with their provider about mental health because of the discomfort and stigma (Byatt et al., 2013); (3) pregnant women are frequently unable to distinguish whether their emotional concerns are part of a normal pregnancy or require attention, and thus are reticent to discuss them with their provider; and (4) without treatment, symptoms of depression and anxiety can continue into the postpartum (Grant et al., 2008) and early parenting periods (Giallo et al., 2015; Woolhouse et al., 2014). Thus, although evidence exists that prenatal interventions are effective at improving prenatal mental health and preventing postpartum depression (Clatworthy, 2012), prenatal mental illness remains under-detected and under-treated (Coates et al., 2004; Spitzer et al., 2000).

Studies have described barriers to 'help-seeking' (e.g., treatment engagement) among pregnant and postpartum women who screen positive for depression symptoms (Byatt et al., 2012; Kim et al., 2010; Sword et al., 2008). However, evidence regarding women's responses to prenatal mental health screening as distinctive from 'help-seeking' is limited. One qualitative study of responses to mental health screening among pregnant women (Rollans et al., 2013) reported that some women identified routine screening as intrusive and others who had experienced previous trauma found 're-living' past events uncomfortable (Rollans et al., 2013). Another study from the Netherlands among 236 socioeconomically deprived pregnant women reported that 21% of women declined mental health screening that was offered during routine obstetric care (Quispel et al., 2014). However, few studies have quantified the barriers to prenatal mental health screening (Quispel et al., 2014) in order to understand the extent of their impact on women's responses to screening, or identified the major facilitators that could optimize the screening process and outcomes. Thus, we were interested in identifying the major personal (e.g., demographics; honesty) and system-related (e.g., type of provider; privacy) factors that influence women's responses to the screening process. This knowledge is necessary in order to optimize early identification of mental health problems through screening.

This research was part of a larger cross-sectional study in Alberta, Canada that aimed to describe pregnant women's views and responses to prenatal mental health screening, including acceptability of screening, perceived barriers and facilitators, harms and benefits, and preferences for methods of screening. Results related to women's acceptability and preferences for methods of screening have been published (Kingston, in press). The specific objective of this study was to determine the personal and system-related barriers and facilitators that influence pregnant women's responses to provider-initiated mental health screening and factors associated with their identification.

2. Methods

2.1. Study design, setting and inclusion/exclusion criteria

This study was a cross-sectional descriptive survey of pregnant women in Alberta, Canada. Pregnant women were included if they were >16 years of age and could speak and read English. Women were consecutively recruited between May and November, 2013 from each prenatal class offered during that period at both community-based hospitals in Edmonton, Alberta and from five maternity clinics in urban ($n=3$) and rural ($n=2$) settings. The prenatal classes attracted women from a variety of care providers. The majority of women attending prenatal classes at community hospitals deliver at those sites, which together have an annual birth volume of over 9500 (2012–13). Care at the maternity clinics is provided by family physicians and two of the five maternity clinics conduct mental health screening during the initial prenatal visit. The remaining three maternity clinics did not offer screening as a component of prenatal care.

2.2. Sample size estimation

Sample size estimation for the overall study was based on a comparison of barriers and facilitators among sub-groups of women and the generation of multivariable models. We anticipated small to moderate effect sizes of the association between various independent variables and outcomes. Based on an 80% power and a significance level of $p<.05$ to detect even small associations ($f^2=.10$), this study is adequately powered to detect significant associations between independent factors and outcomes in multivariable models with 20 or fewer variables (minimum requirement: $N=226$).

2.3. Procedures

Women were invited by prenatal class instructors and clinic staff to complete the self-report questionnaire (*Barriers and Facilitators of Mental Health Screening Questionnaire)* on a computer tablet before their class or while waiting for their prenatal visit. They read the study information letter on the tablet and those who agreed to participate completed the electronic consent. Access to the survey was granted after participants completed consent. Once women submitted the completed 10-min survey, data were automatically encrypted and transmitted to a secure database on a server hosted by the Faculty of Medicine (University of Alberta). Data transfer and security was managed by the Women's and Children's Health Research Institute (University of Alberta). Following recruitment and data collection, all data were transferred to the Health Research Data Repository at the University for storage and analysis. Approval was granted by the University of Alberta Research Ethics Board.

2.4. Data source: questionnaire description and development

The *Barriers and Facilitators of Mental Health Screening Questionnaire* was designed to identify women's responses to mental health screening during pregnancy, as well as facilitators and barriers to screening. Sixty-three closed-ended questions elicited self-reported information. Main sections of the questionnaire included: (1) demographics, mental health and pregnancy history (12 items); (2) whether, how, and by whom women were screened for mental health concerns (5 items); (3) level of comfort and honesty with the screening process or, if not screened, how they would respond to screening (3 items); (4) response to screening (9 items, harms and benefits); (5) comfort level with 7 methods of screening (e.g., face to face, computer, telephone); (6) barriers to