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Disclosure during prenatal mental health screening

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ABSTRACT

Background: While women and healthcare providers have generally viewed perinatal mental health screening favorably, some qualitative studies suggest that some women intentionally decide not to reveal their symptoms during screening.
Purpose: The purpose of this study was to describe women's reported willingness to disclose mental health concerns during screening and factors associated with this.
Methods: This cross-sectional study included pregnant women who were >16 years of age and could speak/read English. Women were recruited from five maternity clinics and two community hospitals in Alberta, Canada (May–December, 2013). Eligible women completed the online *Barriers and Facilitators of Mental Health Screening Questionnaire* on recruitment. The primary outcome for this analysis was women's level of honesty about mental health concerns (*completely* vs *somewhat/not at all honest*) during screening. Analyses included descriptive statistics and multivariable logistic regressions to identify factors associated with honesty.
Results: Participation rate was 92% (460/500). Seventy-nine percent of women indicated that they could be 'completely honest' during screening. Women who feared their provider would view them as bad mothers were less likely to be honest. We found a significant association between 'less anonymous' modes of screening and honesty.
Limitations: Over eighty percent of women in this study were well-educated, partnered, Caucasian women. As such, generalizability of the study findings may be limited.
Conclusions: Most women indicated they could be honest during screening. Stigma-related factors and screening mode influenced women's willingness to disclose. Strategies to reduce stigma during screening are warranted to enhance early detection of prenatal mental illness.

1. Background

Depression and anxiety are among the most common pregnancy-related complications (Grant et al., 2008; Kingston et al., 2012; Milgrom et al., 2008). Historically, prenatal depression and anxiety were thought to be self-limiting; however recent evidence suggests otherwise. Two longitudinal birth cohorts in Australia (Giallo et al., 2015; Woolhouse et al., 2014) and France (van der Waerden et al., 2015) describe strikingly similar patterns whereby 30–40% of pregnant women experienced persistent depressive symptoms of moderate and high severity from pregnancy to 4–5 years postpartum. Other studies are clear that the longer depression remains untreated, the less favorable the treatment outcomes (Ghio et al., 2014). Thus, early detection through formal screening has potential to increase access to treatment and improve maternal and child outcomes (Yawn et al., 2012).

A major focus of perinatal screening research is improving the

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accuracy of screening tools (i.e., capacity to maximize detection of true positives and negatives). However, optimal tool performance – and thus early detection of mental health problems – relies upon a woman responding accurately. Three qualitative studies on screening for prenatal and postpartum depression have described women's intentional decisions not to reveal their symptoms during screening (Chew-Graham et al., 2009; Rollans et al., 2013; Shakespeare et al., 2003). Thus, the specific objective of this study was to describe women's reported willingness to disclose mental health concerns during screening and factors associated with this.

2. Methods

This cross-sectional study included pregnant women who were >16 years of age and could speak/read English. Women were consecutively recruited from five maternity clinics or prenatal classes at two community-based hospitals in Alberta, Canada (data collected May–December 2013). Eligible women completed the online *Barriers and Facilitators of Mental Health Screening Questionnaire* on recruitment. This questionnaire and its development have been described previously (Kingston et al., 2015). Briefly, it comprised sixty-three questions addressing topics related to barriers and facilitators of screening, preferences for mode of screening, perceived harms and benefits, and ability to disclose during screening. Findings related to women's preferences for screening (Kingston et al., 2015) and barriers and facilitators of screening (Kingston et al., in preparation) have been reported previously. Ethics approval was granted by the University of Alberta Research Ethics Board.

3. Statistical analysis

The primary outcome for this analysis was how honest women felt they could be about mental health concerns (*completely* vs *somewhat/not at all honest*) during provider-initiated inquiry or formal mental health screening. Women responded to the question, '*How honest could you be about your mood if your provider asked or had you fill out a questionnaire about how you were feeling*?' with options of *completely honest*, *somewhat honest*, or *not honest at all*.

Descriptive statistics were generated and univariable analyses were conducted to estimate unadjusted odds ratios as a preliminary step to building multivariable models. Variables associated with outcomes at $p < .20$ met inclusion criteria for entry to multivariable regressions with statistical significance set at $p < .05$ for final models. Adjusted odds ratios and 95% confidence intervals were calculated. Analyses were conducted from January to November 2014 using SPSS version 21 (SPSS IBM, New York, U.S.A). Missing data (<1%) were minimized by electronic data capture with required responses.

4. Results

The study participation rate was 92% (460/500). Half of the sample was recruited from maternity clinics and half from prenatal classes, with no significant variation in demographic characteristics across sites. Most women were Caucasian, >25 ($M=29$; SD=4.37) years old, and had annual household incomes >$40,000 (Cdn) (Table 1). The mean gestational age was 30 (SD=5.21) weeks.

Seventy-nine percent of women indicated they would be *completely* honest with their providers during screening while 21% could be *somewhat* honest (Table 1). In final multivariable models, we aimed to identify the most important predictors of disclosure of mental health concerns, including barriers and facilitators of disclosure and method of screening. We found that demographic factors, provider-type, and mental health history were unrelated to women's ability to disclose (Table 2). In terms of facilitators, women who needed an explanation about why some sensitive questions were asked were more likely to be honest in their responses to screening. The only barrier associated with honesty was that women who worried about being seen as a bad mother if they revealed mental health concerns were less likely to be honest.

We found that women's comfort with the method of screening was associated with their ability to be honest. However, this was limited to the less anonymous methods of inquiry where women who were comfortable with self-initiating a discussion about mental health concerns with their provider and with nurse-led telephone screening were more likely to be completely honest in disclosing mental health concerns (versus those somewhat

Table 1
Sample demographics and level of honesty during mental health screening among pregnant women who participated in the Barriers and Facilitators of Mental Health Screening Questionnaire in Alberta, Canada ($N=460$).

Variables	N	%
Maternal age at time of interview		
≤25 years	380	82.8
≤24 years	79	17.2
Maternal highest level of education completed		
Some or completed post-secondary	382	83.2
≤High school	77	16.8
Annual household income		
<$40,000	58	12.6
≥$40,000	401	87.4
Marital status		
Married/common-law	436	95.0
Other (single, divorced, widowed)	23	5.0
Ethnicity		
Non-Caucasian[a]	86	18.7
Caucasian	373	81.3
Born in Canada		
Yes	393	85.6
No	66	14.4
Been pregnant before		
Yes	163	35.5
No	296	64.5
Diagnosed previously with depression, anxiety, or any other kind of emotion concern by a healthcare provider[b]		
Yes	109	23.7
No	350	76.3
Diagnosed with depression or had depressive symptoms		
Yes	109	23.7
No, never diagnosed, nor experienced symptoms	218	47.5
No, never diagnosed, yes experienced symptoms	132	28.8
Treated for depression, anxiety, or any emotional concern		
Yes	136	29.6
No	324	70.4
Most care in pregnancy provided by…		
Obstetrician	247	53.7
Family doctor	187	40.7
Other (midwife, nurse)	26	5.7
Health care provider asked about how I was doing emotionally/coping		
Yes	238	51.7
No	222	48.3
Level of honesty if provider asked about mood		
Completely honest	363	78.9
Somewhat honest	96	20.9
Not honest at all	1	.2

[a] Non-Caucasian status included options of Aboriginal, Arab/West Asian, Black, Chinese, Filipino, Japanese, Korean, South Asian, Latin American, South East Asian, Other.
[b] Missing data ($n=1$).