PROJECT NAME: *Kalamazoo County MI Healthy Babies-Healthy Start*

TITLE OF REPORT: *Patient & Provider Factors that Increase Disclosure of Psychosocial Problems*

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Section I: Introduction

Many psychosocial factors impact overall health. Domestic violence, mental illness, and substance abuse are leading risks that present substantial health burden, especially during pregnancy. Medical providers are perfectly positioned to identify, refer and administer treatment. As a result, medical guidelines recommend screening, referral and treatment for these psychosocial issues. Unfortunately, there are many barriers that exist and hinder disclosure of important risk factors. Both patients and providers face multiple barriers to disclosure. For patients, these can include mistrust with the provider,[1] lack of access to health care,[2] a fear for their own safety and concerns about child protective services involvement. For providers, these may include discomfort asking appropriate questions, concern about responding in the event of a disclosure and fear that they may be unequipped with the resources to address the unique needs of each patient[3].

Studies have shown comfort and trust play an integral role in patient provider disclosure. A 2015 study evaluated the link between patient treatment beliefs and patient-provider relationships by gender, race, and current depression[1]. The study consisted of 227 Black and White patients with symptoms of depression that were randomly placed into either a quantitative survey or qualitative interview. Comfort was a common theme within the study and said to be a key element in the provider-patient relationship. The qualitative study indicated that patients may use openness as a strategy to feel comfortable in relating their experience, which may be a precursor to patient-provider relationships and shared decision making. While there is a lack of literature examining the relationship between demographics and disclosure, there is strong evidence documenting the heavy health burden carried by low income populations;[4] suggesting that patient-provider relationship is particularly impactful.

[1] King PAL, Cederbaum JA, Kurzban S, Norton T, Palmer SC, Coyne JC. Role of patient treatment beliefs and provider characteristics in establishing patient-provider relationships. *Family Practice*. 2015;32(2):224-231. doi:10.1093/fampra/cmu085

[2] Fleegler EW, Lieu TA, Wise PH, Muret-Wagstaff S. Families Health-Related Social Problems and Missed Referral Opportunities. *Pediatrics*. 2007;119(6). doi:10.1542/peds.2006-1505

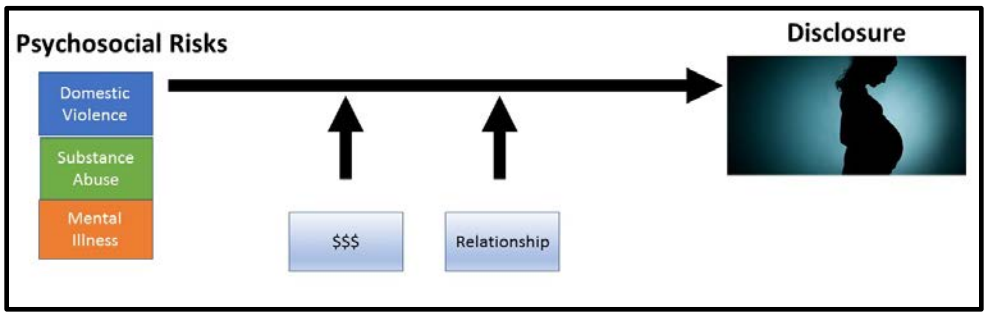
[3] Feder GS. Women Exposed to Intimate Partner Violence. *Archives of Internal Medicine*. 2006;166(1):22. doi:10.1001/archinte.166.1.22

[4] Schultz, William M, et al. "Socioeconomic Status and Cardiovascular Outcomes." Circulation, vol. 137, no. 20, 15 May 2018.

The purpose of this study was to examine patient-provider relationships and its association with psychosocial risk disclosure. Specifically, researchers set out:

1. to describe rates of disclosure to providers, and
2. to determine if disclosure varied by (a) demographics or (b) patient-provider relationship.

Figure 1.

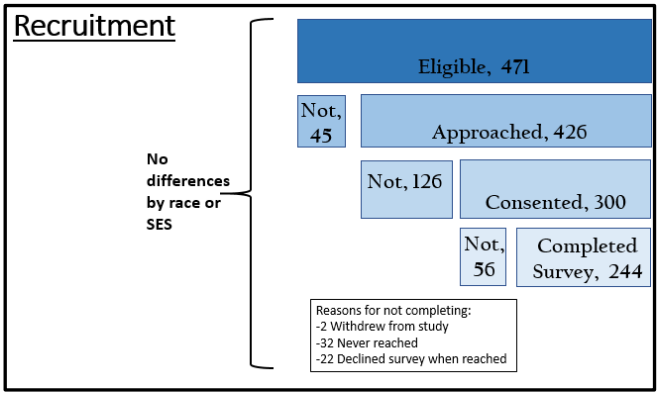


Section II: Process

Methods

Design. This was a prospective cross-sectional study, that utilized medical record reviews and telephone surveys conducted two months after delivery as its data collection methods. Study participants were recruited from the postpartum floors of two Kalamazoo, MI hospitals from January to September 2017.

Figure 2. Recruitment



Sample Figure 2, illustrates the recruitment process and results. During this time, there were 471 eligible women and 426 of them were approached to be a part of the study. Of the women who were approached, 2 withdrew from study, 32 were never reached, and 22 declined the survey when they were reached. The final study sample consisted of 244 women representing county maternal population across age, insurance, race and marital status demographics. Obstetrically, study women were similar to the county maternal population in the proportion with first pregnancies (primagravida) and with single gestation. However, study women had significantly higher rates of prior preterm deliveries and were significantly more likely to have initiated care in the first trimester.

Measures. The figure below details the measurement instruments used for each psychosocial problem.

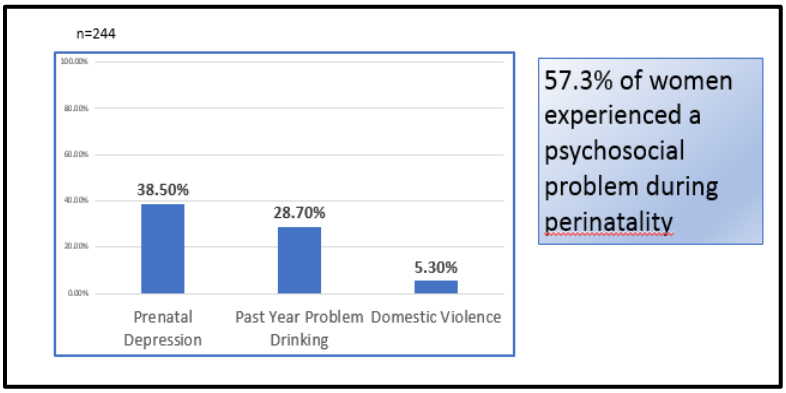
Figure 3. Measurement Tools

Psychosocial Risk Factor	Measuring Tool Used	
Domestic Violence	HITS Domestic Violence Screener, E-HITS	→ Prenatal HITS 7+
Substance Abuse	NIDA Quick Screen, 5 items	→ Prenatal Alcohol
Depression	MI_PRAMS 2012-2015 (CDC Pregnancy Risk Assessment Monitoring System)	→ Prenatal Depression

For statistical analysis, Pearson Chi Square, Logistic regression, α<.05 was used.

Section III: Findings/Discussion

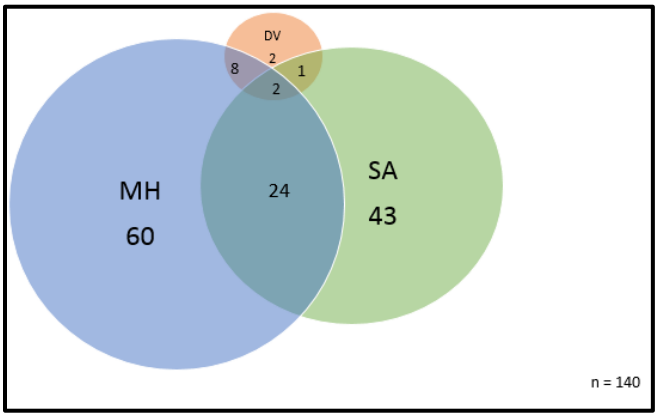
Figure 4. Prevalence



Prevalence. Figure 4 shows the prevalence of each psychosocial factor within the study sample. In total, 57.3% (140 of 244) of women screened positive for one or more problems: 38.5% prenatal depression (MH), 28.7% past-year problem drinking (SA), 5.3% DV.

As seen in the diagram below, a notable number of women experienced multiple, overlapping problems (Figure 5). Among the 140 women who reported at least one problem, 25% (35) reported having multiple problems. Among the thirty-five, thirty-three had two problems and two had all three problems. Women who reported domestic violence were significantly more likely to have multiple psychosocial risks.

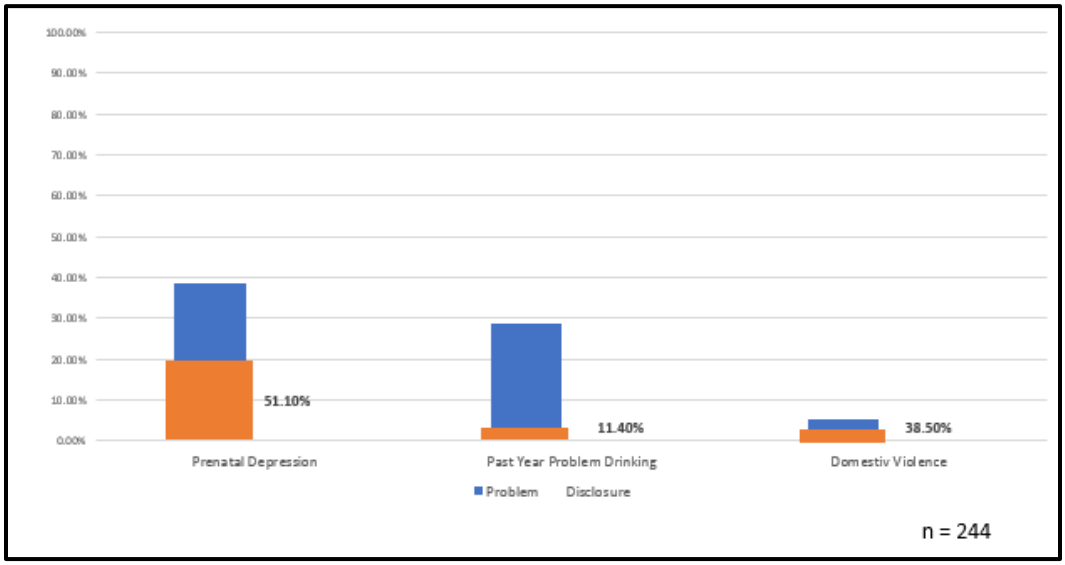
Figure 5. Overlap



Most (42.8%) had a single problem. Of those 140 women with at least one psychosocial problem, 82 disclosed having a problem (58.6%). So of the total study sample, 33.6%.

Disclosure. The study found that the rate at which patients disclosed psychosocial risk varied by the type of risk. In the chart below, the blue bar illustrates each problem's prevalence (as reported in Figure 4), and the orange bar shows the rate of disclosure (Figure 6). Among the women with prenatal depression, 51.1% disclosed their condition. The rate of disclosure among women with drinking as a problem, was 11.4.% and 38.5% for women experiencing domestic violence disclosed.

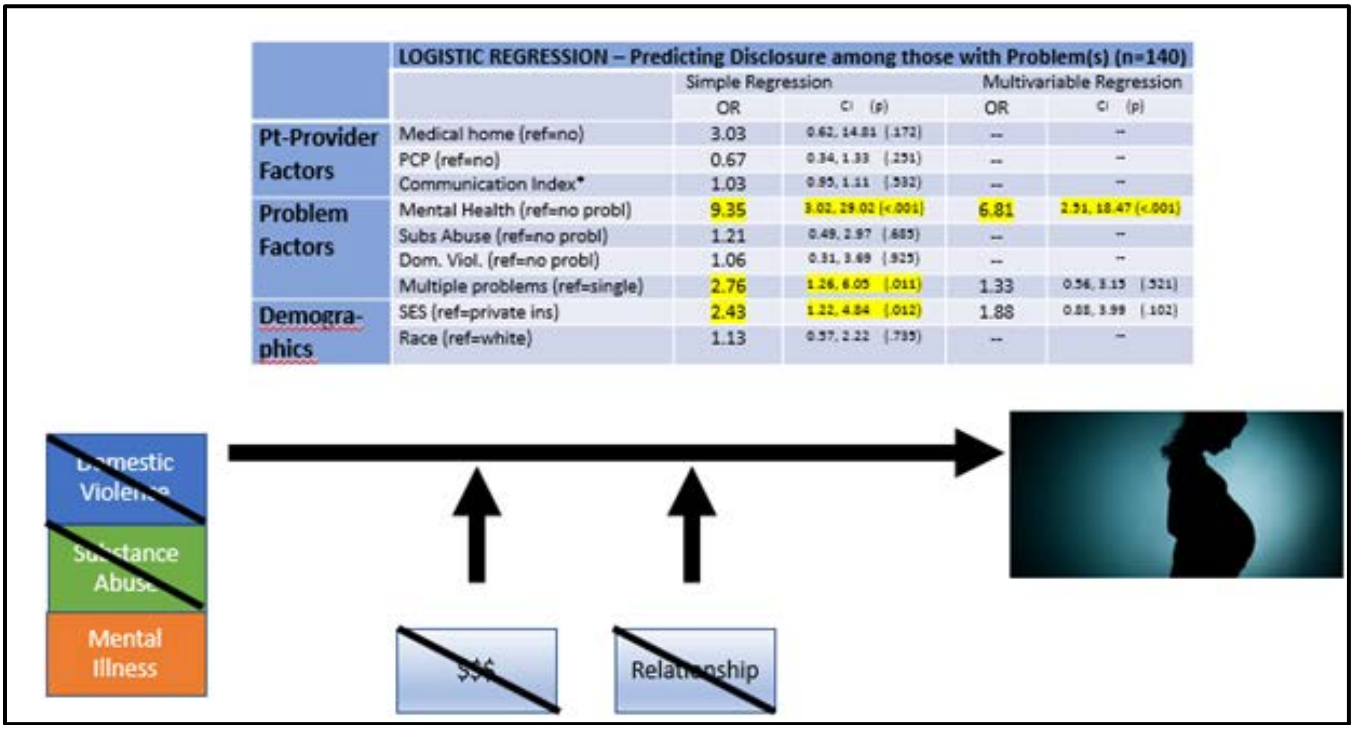
Figure 6. Disclosure



**Blue is problem, orange is disclosure

Predictors of Disclosure. Statistical analysis of the relationship between each predictor and the outcome of disclosure (Figure 6, Simple regression modelling), found that provider factors (provider relationship/communication, medical home, whether had a primary care provider) were not significantly associated with disclosure. Factors that were associated included the type of problem, the number of problems, and women's socioeconomic status. When these factors were put into a multivariable analysis, only type of problem remained significant. Women who were depressed were 6.8 times more likely to disclose than women who had other psychosocial problems (SA and DV).

Figure 7. Overall Results



Discussion

Psychosocial problems are common among pregnant women and present notable health burdens. Disclosure was not common. A patients circumstances, like having multiple problems or a lower income matter more than provider characteristics when examining disclosure. This study shows the need for future studies to examine patient and provider barriers to disclosure of important health information. Depression and other psychosocial issues are often redflags. Although this study may shed light on the dynamics of patient-provider relationships and its impact on disclosure, it is not without limitations. Problem measures were self-reported and run the risk of information bias. Additionally, there may have been gaps between information being asked or disclosed and actually being documented.

Section IV: Conclusion and Recommendations

Psychosocial health issues impact overall health in different capacities. Action can be taken to better encourage disclosure of these issues. We recommend implementation of policies and programs that aim toward improving cultural competencies among providers and education among maternal populations. Findings here can serve as a stepping stone for women with multiple, complex psychosocial problems. Consideration should be given to replace the medical "diagnose-treat" approach with a "resource-first" approach to social problems.