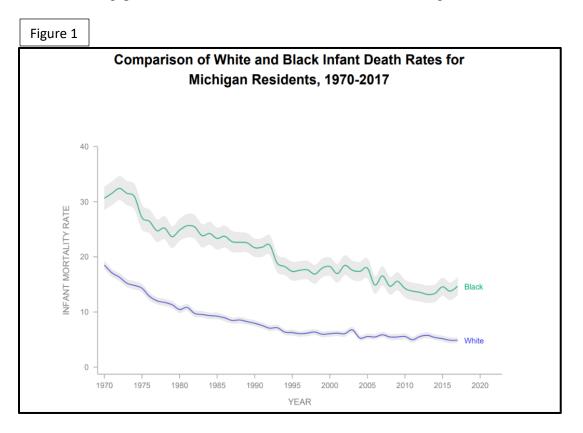
PROJECT NAME: Kalamazoo County MI Healthy Babies-Healthy Start

TITLE OF REPORT: Patient-provider communication in the Kalamazoo mom's health experiences survey study

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Section I: Introduction

Infant health is often an indicator to overall population health. There are documented disparities that exist between certain populations. For example, African American women are at an increased risk of experiencing adverse birth outcomes compared to white women.¹ Figure one below illustrates the gap between white and black infant deaths in Michigan.



¹ Bryant, A., Worjoloh, A., Caughey, A., & Washington, A. (2010). Racial/ethnic disparities in obstetric outcomes and care: prevalence and determinants. *American Journal Of Obstetrics And Gynecology*, 202(4), 335-343. doi:10.1016/j.ajog.2009.10.864

The figure below compares U.S. Statistics to Kalamazoo statistics and display the health disparities that exsist by race. In Kalamazoo MI, Black infants die at rates 3.2 times higher than White infants.²

Outcome	U.S.	Kalamazoo
Birth rate	62/1,000 ^{3,4}	55.2/1,000 ^{3,4}
Infant mortality rate	5.9/1,000 ^{3,4}	5.5/1,000 3,4
Black infant mortality rate	11.2 ⁵	12.6 ²
White infant mortality rate	4.9 ⁵	3.9 ²

Studies have examined several factors that can contribute to this grave disparity. Patientprovider communication and dismissive treatment is cited as a common experience that can influence these birth outcomes. In Kalamazoo County specifically, patient-provider miscommunication is described in Fetal Infant Mortality Review (FIMR) interviews with families. The purpose of this study was to evaluate post-partum patients' communication with their healthcare providers.

Section II: Process

<u>Methods</u>

Design. This was a prospective cross-sectional study utilizing thirty-minute telephone interviews 2-4 months after delivery and abstracted medical records. Postpartum mothers were recruited from of two Kalamazoo, MI hospitals between January and September of 2017.

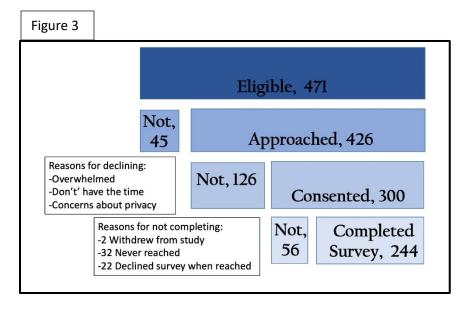
³ Martin JA, Hamilton BE, Osterman MJK. Births in the United States, 2017. *NCHS Data Brief No. 318.* US Department of Health and Human Services, Centers for Disease Control and Prevention. National Center for Health Statistics. August 2018. ⁴ Michigan Department of Community Health. *Birth Statistics by Race.* Accessed 12/29/2-18.

² Radford G, Myers L. *Michigan Infant Death Statistics; January 1 through December 31, 2016.* Michigan Department of Community Health, Division for Vital Records and Health Statistics. Lansing MI. March, 2018.

https://www.mdch.state.mi.us/osr/natality/RegionRatesObject.asp?Char=208&Row=MICOUNTYDET&Col=RACE&Stat=F&Avera ge=A&TableType=G&RowGroup=REGION&COLGROUP=RACE_FIXED

⁵ Ely DM, Driscoll AK, Mathews MS. Infant Mortality by Age at Death in the United States, 2016. *NCHS Data Brief No. 326.* US Department of Health and Human Services, Centers for Disease Control and Prevention. National Center for Health Statistics. November 2018.

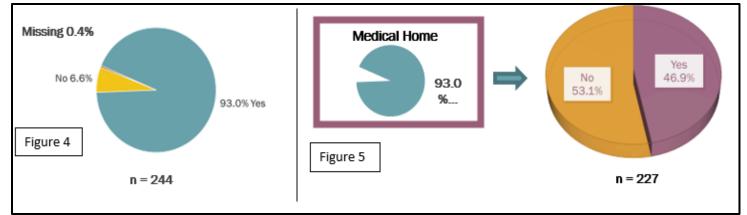
Sample Figure 3, illustrates the recruitment process and results. In total, there were 471 eligible women. Of the 471 eligible women, 426 were approached however, 2 withdrew from study, 32 were never reached, and 22 declined the survey when they were reached. The final study sample was comprised of 244 women who represented a diverse demographic group, i.e. race, age, SES, etc. Additionally, the study population consisted of race distributions similar to county population.



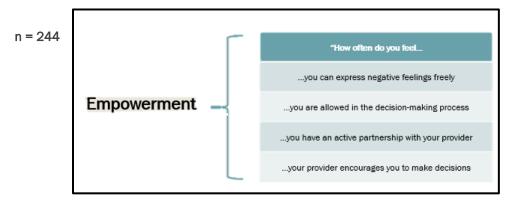
Measures. Survey questions utilized validated measures of medical home, patient-provider communication, empowerment and respect. Pearson Chi Square analysis was completed using SPSS.

Section III: Findings/Discussion

Results. Study participants were asked questions in regard to what they consider their "medical home". When asked, "Is there a particular doctor's office, health center, or other place that you usually go to if you are sick or need advice about your health?" 93% of the sample population responded yes, while 6.6% responded no. The 93% who responded yes were then asked, "Is there a particular doctor or other healthcare person that you consider your primary doctor (your main doctor)?" and 53.1% responded no, 46.9% responded yes. The figures below represent these findings.

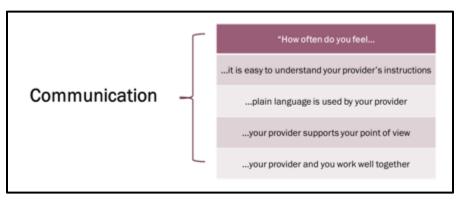


Researchers then inquired about provider relationship, specifically the feeling of empowerment, communication and integration. In regard to empowerment, study participants were asked a series of questions, "How often do you feel; you can express negative feelings freely, you are allowed in the decision-making process, you have an active partnership with your provider, and your provider encourages you to make decisions?"



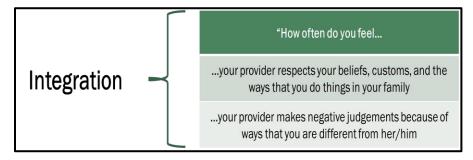
By race, more whites felt they could express negative feelings freely. The feeling that you can express negative feelings freely, and are allowed in the decision-making process was better for those who were privately insured. Feelings that you can express negative feelings freely, and have an active provider-partnership was better for those with a primary care physician that those within out one.

To examine patient provider communication, study participants were asked "How often do you feel; it is easy to understand your provider's instructions, plain language is used by your provider, your provider supports your point of view, and your provider and you work well together?"



By race, the feeling that plain language was used was better for people of color. When asked how often you feel your provider and you work well together, feelings were better for those who had private insurance. Feelings for all communication questions asked were better for participants that had a PCP than for those without.

In regard to examining integration, participants were asked, "How often do you feel; your provider respects your beliefs, customs, and the ways that you do things in your family, and your provider makes negative judgements because of ways that you are different from her/him?"



For race and insurance type, data did not show that feelings were better for a particular group. However, when asked, "How often do you feel your provider respects your beliefs, customs, and the ways that you do things in your family", results showed feelings were better for those who had a PCP compared to those without.

Discussion. Improving patient-provider communication can be an important tool to improve overall population health. The findings of this study are important in that they it examines specific areas, empowerment, communication, integration, needed to improve provider communication and patient health. Strengths of this study can be found in the sample size, participation, and demographics which were representative of Kalamazoo's overall demographics. This study utilized validated assessment tools as well as quality assurance measures.

Consideration however, must be given to the limitations of the study. In examining provider communication, researchers surveyed only one side of the communication line. The survey was conducted 2-4 months after patient's experience which my impact event recollection and participant response. Since the questions were targeted to certain factors, results may not be representative of participant's full clinical experience. Although validated tools were used, the chosen scales may not have measured the important aspects of provider communication.

More work and research that focuses on provider communication is needed. Patient expectations are widely cited as a predictor of patient satisfaction ^{6,7,8} which contributes to patient experience and health outcomes. Future research aiming to improve on continuity of care can address pertinent questions such as, "Does having a primary provider facilitate discussion of patient expectations, and Do patient expectations vary by race and income?"

⁶ Ledford CJ, e. (2019). Influence of Provider Communication on Women's Delivery Expectations and Birth Experience Appraisal: A Qualitative Study. - PubMed - NCBI . Ncbi.nlm.nih.gov. Retrieved 26 March 2019, from

https://www.ncbi.nlm.nih.gov/pubmed/27472789

⁷ JO, S. (2019). Patient satisfaction: Implications and predictors of success. - PubMed - NCBI . Ncbi.nlm.nih.gov. Retrieved 26 March 2019, from https://www.ncbi.nlm.nih.gov/pubmed/23677370

⁸ Sitzia, J., & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. Social Science & Medicine, 45(12), 1829-1843. doi:10.1016/s0277-9536(97)00128-7

Section IV: Conclusion & Recommendations

With this studies findings and consideration to similar study findings, researchers recommend implementation of community survey tools to assess certain community needs. This tool will be in the form of a community voice panel that is a "series of focus groups conducted among women in the "Mom's Health Experiences Study" and from the community". The community voice panel goal will be to examine thematic variations by race and income in terms of: (1) Women's expectations and experiences of prenatal care and (2) Women's expectations of healthcare provider.