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Impact of Long-Term Doula Services on Maternal and Fetal Health Outcomes in Women Experiencing Addiction

Saloni Parikh, Mariel Becker**, Meghan
Gannon*

Introduction & Objectives

- Doula Care has been shown to improve maternal and infant health outcomes across vulnerable populations (Kozhimannil et al. 2013)
 - Higher breastfeeding initiation rates across all ethnicities/races in women with doula services (Kozhimannil et al. 2013)
 - Non-doula assisted mother 4x more likely to have low birth weight babies than doula-assisted mothers (Gruber et al. 2013)
 - Doula-assisted care had 80-90% lower odds of nonindicated c-sections (Kozhimannil et al. 2014)
 - Lower rates of preterm birth (Thomas et al. 2017)

Table 2. Breastfeeding Initiation in Study Sample by Race/Ethnicity

Race/ethnicity	Breastfeeding Initiation	
	Minnesota Medicaid Recipients with Doula Support (Everyday Miracles) (n = 1069)	Minnesota Medicaid Births (Minnesota PRAMS) (n = 51,721 ^a)
	% (95% CI)	% (95% CI)
White	98.2 (95.6-100.0)	78.7 (74.5-82.4)
African American	92.7 (87.8-97.7)	70.3 (64.5-75.5)
African descent	99.5 (98.8-100.0)	95.2 (82.4-98.8)
Hispanic	99.2 (98.4-100.0)	92.0 (85.5-95.8)
Asian	86.4 (77.4-95.4)	NR
Native American	NR	66.1 (59.3-72.2)
Other	NR	76.4 (61.4-86.9)
Total	97.9 (97.0-98.7)	80.8 (78.0-83.3)

Introduction & Objective

- While doula services have been shown to improve maternal & fetal health outcomes in underserved women, current literature **does not** explore the impact of doula services in **pregnant women experiencing addiction**.
- Policy/System gaps:
 - Medicaid coverage of doula-services for all women, including those experiencing addiction
 - Financial, social, and emotional benefits: triple aim framework
- Significance of exploring doula-services in women in treatment for addiction:
 - Impactful method of providing continuous, psychosocial support to a population that frequently goes without it
 - Method to reduce inequities in maternal & fetal health outcomes that this vulnerable population experiences

Inquiry Question

Aims:

Assess the impact of long-term doula care on maternal and fetal health outcomes in women experiencing addiction

Inquiry question:

How does long-term (prenatal, perinatal, and postpartum) doula care compare to lack of doula care in health outcomes for women experiencing addiction? What role does psychosocial support, provided by a doula, play in the lives of pregnant women experiencing addiction?

Methods

Target Population:
Pregnant women experiencing addiction

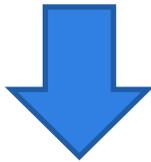
Stakeholders
Doula, community of pregnant women and women experiencing addiction, MATER at Thomas Jefferson University, City of Philadelphia

- **Study Design:**
 - Retrospective and prospective collection of maternal and infant birth data, focus group data, & survey data from 100 women who are in treatment at MATER for a substance use disorder
 - 50 utilizing doula care services as part of the City of Philadelphia's Community Doula Program
 - 50 without doula care services

Methods

Maternal & Infant Chart Data Abstraction: Mariel & Saloni
EPDS, PSI, PSS, Social Connectedness and Assurances Scale:
Dr. Gannon

Data abstraction: standardized paper abstraction to ensure consistency & reduce error in data collection



Collection Methods

- Quantitative data will be entered into a SPSS database
- Qualitative data will be entered into the Nvivo statistical program



Analyses: Performed using IBM SPSS, Nvivo

- Continuous variables: means/standard deviations
- Categorical variables: frequency/percentages
- T and chi-square tests, logistic regression models to identify differences in outcome between women receiving doula care and women who do not

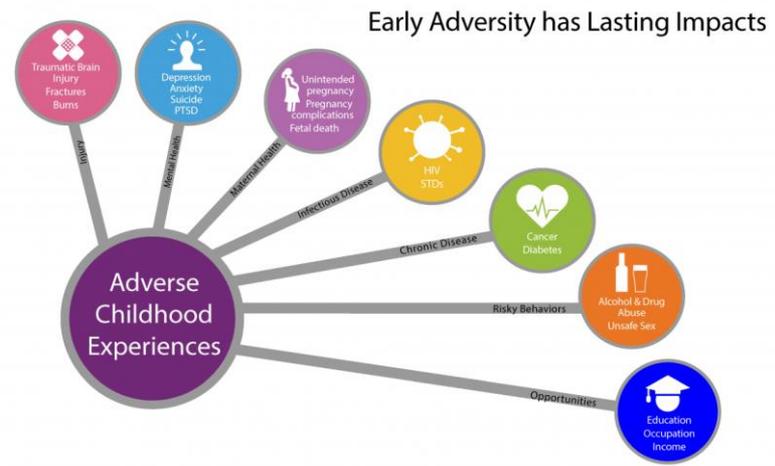
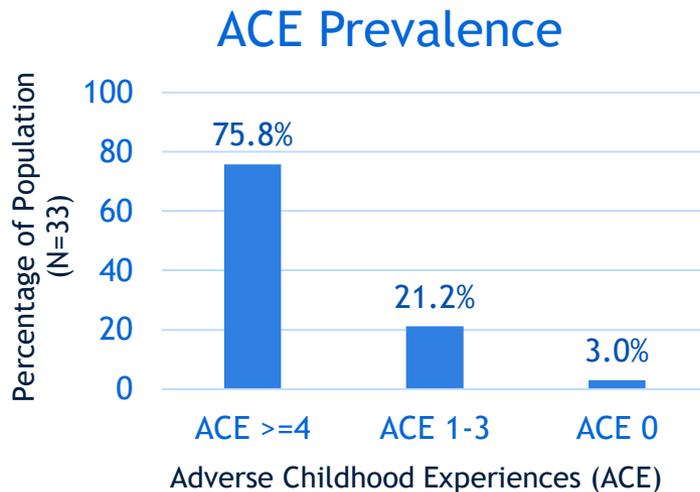
Dr. Gannon, Saloni, Mariel: Entering and coding qualitative data in Nvivo

Methods

- Data Collection (N=33) ongoing and enrollment through June
- Main Predictors & Outcomes: Psychosocial Support
 - ACE (Adverse Childhood Experiences)
 - Social Connectedness and Assurances Scale Data
 - Interview data

Results

- ACE ≥ 4 in 75.8% of women enrolled in study
 - ACE ≥ 4 associated with significant downstream health implications; the more ACEs, the more risk for negative outcomes (CDC-Kaiser ACE Study)
 - Evidence of a vulnerable population more likely to develop substance use disorders and have complicated pregnancies \rightarrow doula intervention to provide trauma-informed, holistic care



<https://www.cdc.gov/violenceprevention/aces/about.html>

Results

- Social Connectedness and Social Assurances Scale Preliminary Data
 - After working with a doula
 - Social connectedness appears higher while social assurances appear lower
 - Requires further collection and investigation
- Preliminary qualitative interview data
 - Provided resources/answered questions
 - Non-judgmental support of mom
 - Served as a health advocate and liaison for mom during labor and delivery
 - All would like to continue their relationship with doula
 - Positive continuous support emotionally and socially

	Social Connectedness	Social Assurances
Normal	32.27 ± 7.42	38.85 ± 8.09
Study (N=33)	39.3 ± 4.54	24 ± 6.88

Conclusions

- Positive psychosocial impact of continuous doula care in a vulnerable population experiencing a great deal of stigma → increased quality of patient-centered care, improved health outcomes, and potential reduced costs
- Minnesota and Oregon: only two states that have passed targeted legislation to obtain Medicaid reimbursement for doula services (prenatal, labor, postpartum)
 - Studies in these states → potential to achieve cost savings through avoidance of c-sections while simultaneously improving maternal and infant health outcomes (Medicaid and Private Insurance Coverage of Doula Care)
 - Reduction of maternal and infant health disparities
- Preliminary data on ACE and Social Connectedness → effectiveness of doula Intervention in this vulnerable population and need for further policy work for inclusion under Medicaid

Conclusions

Limitations:

- Limited by ongoing data collection and incomplete follow-up due to longitudinal nature of project

Scope & Next Steps:

- Qualitative coding and analysis through March → Maternal Perceptions of Receipt of Doula Care Services
- Summer 2021: Analyses on larger data sets regarding impact of doula engagement on:
 - Recovery retention
 - Maternal and infant outcomes
 - Maternal child dyad relationships
 - ACE Scores, trauma-informed care with doula interventions?

Disclosures & Acknowledgments

- None
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References

- Kozhimannil KB, Attanasio LB, Hardeman RR, Obrien M. Doula Care Supports Near-Universal Breastfeeding Initiation among Diverse, Low-Income Women. *Journal of Midwifery & Womens Health*. 2013;58(4):378-382. doi:10.1111/jmwh.12065.
- Gruber KJ, Cupito SH, Dobson CF. Impact of doulas on healthy birth outcomes. *J Perinat Educ*. 2013;22(1):49-58. doi:10.1891/1058-1243.22.1.49
- Kozhimannil KB, Attanasio LB, Jou J, Joarnt LK, Johnson PJ, Gjerdingen DK. Potential benefits of increased access to doula support during childbirth. *Am J Manag Care*. 2014;20(8):e340-e352. Published 2014 Aug 1.
- Thomas M-P, Ammann G, Brazier E, Noyes P, Maybank A. Doula Services Within a Healthy Start Program: Increasing Access for an Underserved Population. *Maternal and Child Health Journal*. 2017;21(S1):59-64. doi:10.1007/s10995-017-2402-0.
- <https://www.cdc.gov/violenceprevention/aces/about.html>
- <https://www.nationalpartnership.org/our-work/resources/health-care/maternity/overdue-medicaid-and-private-insurance-coverage-of-doula-care-to-strengthen-maternal-and-infant-health-issue-brief.pdf>



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