

Authors

May Sudhinaraset
University of California, Los Angeles

Amanda Landrian
University of California, Los Angeles

Sun Yu Cotter
University of California Global Health Institute

Patience Afulani
University of California, San Francisco

Staff

Ginger Golub
Country Director, Kenya

Original Research

ajph.org

Person-centered maternity care and postnatal health: associations with maternal and newborn health outcomes

Check for updates

May Sudhinaraset, PhD; Amanda Landrian, MPH, PhD; Ginger M. Golub, MPH; Sun Y. Cotter, MPH; Patience A. Afulani, MChB, MPH, PhD

BACKGROUND: Limited evidence exists on how women's experiences of care, specifically person-centered maternity care during childbirth, influence maternal and newborn health outcomes.

OBJECTIVE: This study aimed to examine the associations between person-centered maternity care and maternal and newborn health outcomes.

STUDY DESIGN: Longitudinal data were collected with 1014 women who completed baseline at a health facility and followed up at 2 weeks and 10 weeks after birth. A validated 30-item person-centered maternity care scale was administered to postpartum women within 48 hours after childbirth. The person-centered maternity care scale has 3 subscales: dignity and respect, communication and autonomy, and supportive care. Bivariate and multivariable log Poisson regressions were used to examine the relationship between person-centered maternity care and reported maternal complications, newborn complications, postpartum depression, postpartum family planning uptake, exclusive breastfeeding, and newborn immunizations.

RESULTS: Controlling for demographic characteristics, women with high total person-centered maternity care score at baseline had significantly lower risk of reporting maternal complications (adjusted relative risk, 0.63; 95% confidence interval, 0.42–0.95), screening positive for depression (adjusted relative risk, 0.55; 95% confidence interval, 0.38–0.81), and reporting newborn complications (adjusted relative risk, 0.74; 95% confidence interval, 0.56–0.97), respectively, than women with low total person-centered maternity care scores. Women with high scores on the supportive care subscale had significantly lower risk of reporting maternal and newborn complications than women with low scores on these subscales (adjusted relative risk, 0.52 [95% confidence interval, 0.42–0.65] and 0.74 [95% confidence interval, 0.60–0.91], respectively). Significant associations were found between all 3 subscale scores and screening positive for depression. Women with high total person-centered maternity care scores were also more likely to adopt a family planning method than those with low scores (adjusted relative risk, 1.25; 95% confidence interval, 1.02–1.53). In particular, women with high scores on the communication and autonomy subscale had significantly higher odds of adopting a family planning method than women with low scores (plus odds, 1.15; 95% confidence interval, 1.08–1.23).

CONCLUSION: Improving person-centered maternity care may improve maternal and newborn health outcomes. Specifically, improving supportive care may decrease the risk of maternal and newborn complications, whereas improving communication and autonomy may increase postpartum family planning uptake.

Key words: Kenya, maternity care, maternal complications, maternal health, newborn complications, newborn immunizations, person-centered maternity care, postpartum depression, postpartum family planning, quality of care, respectful maternity care, women's experiences of care

Introduction

Preventable maternal and newborn mortality and morbidity remain an urgent global health issue. In Kenya, the maternal mortality ratio (MMR) of 362

deaths per 100,000 live births¹ is significantly higher than the UN's goal to reduce global MMR to fewer than 70 per 100,000 live births.² Kenya's neonatal mortality rate of 22 deaths per 1000

live births is also much higher than global standards.² Despite concerted efforts being made by the Government of Kenya to improve maternal and neonatal health, maternal and neonatal

From the Department of Community Health Sciences, University of California, Los Angeles, Los Angeles, CA (Dr Sudhinaraset and Landrian); Innovations for Poverty Action, Nairobi, Kenya (Dr Golub); University of California Global Health Institute, San Francisco, CA (Dr Cotter); Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA (Dr Afulani).

All research activities were conducted in Nairobi, and Nairobi Counties in Kenya.

The authors report no conflict of interest.

This research was conducted with the generous support of the Bill and Melinda Gates Foundation and the David and Lucile Packard Foundation. Neither entity had any role in the study design, data collection, analysis or interpretation, or preparation and submission of the manuscript.

Corresponding author: May Sudhinaraset, PhD, msudhinaraset@ucla.edu.

2020-07-16/2020-08

© 2021 IP published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

<https://doi.org/10.1016/j.ajph.2021.03.009>

2021 | AJPH Global Reports | 1

Person-centered maternity care and postnatal health: Associations with maternal and newborn health outcomes

BACKGROUND: Limited evidence exists on how women's experiences of care, specifically person-centered maternity care during childbirth, influence maternal and newborn health

outcomes.

OBJECTIVE: This study aimed to examine the associations between person-centered maternity care and maternal and newborn health outcomes.

STUDY DESIGN: Longitudinal data were collected with 1014 women who completed baseline at a health facility and followed up at 2 weeks and 10 weeks after birth. A validated 30-item person-centered maternity care scale was administered to postpartum women within 48 hours after childbirth. The person-centered maternity care scale has 3 subscales: dignity and respect, communication and autonomy, and supportive care. Bivariate and multivariable log Poisson regressions were used to examine the relationship between person-centered maternity care and reported maternal complications, newborn complications, postpartum depression, postpartum family planning uptake, exclusive breastfeeding, and newborn immunizations.

RESULTS: Controlling for demographic characteristics, women with high total person-centered maternity care score at baseline had significantly lower risk of reporting maternal complications (adjusted relative risk, 0.63; 95% confidence interval, 0.42–0.95), screening positive for depression (adjusted relative risk, 0.55; 95% confidence interval, 0.38–0.81), and reporting newborn complications (adjusted relative risk, 0.74; 95% confidence interval, 0.56–0.97), respectively, than women with low total person-centered maternity care scores. Women with high scores on the supportive care subscale had significantly lower risk of reporting maternal and newborn complications than women with low scores on these subscales (adjusted relative risk, 0.52 [95% confidence interval, 0.42–0.65] and 0.74 [95% confidence interval, 0.60–0.91], respectively). Significant associations were found between all 3 subscale scores and screening positive for depression. Women with high total person-centered maternity care scores were also more likely to adopt a family planning method than those with low scores (adjusted relative risk, 1.25; 95% confidence interval, 1.02–1.52). In particular, women with high scores on the communication and autonomy subscale had significantly higher odds of adopting a family planning method than women with low scores (risk ratio, 1.15; 95% confidence interval, 1.08–1.23).

CONCLUSION: Improving person-centered maternity care may improve maternal and newborn health outcomes. Specifically, improving supportive care may decrease the risk of maternal and newborn complications, whereas improving communication and autonomy may increase postpartum family planning uptake.

May 06, 2021