Empathy and Racism during Childbirth: Do Medical Professionals Adequately Empathize with the Pain of Women of Color in Labor?

Team members: Averine Sanduku , Nura Alia Hossainzadeh , Nichol Flowers , Brett G Brandom

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Overview:

Intended Audience: Medical professionals and healthcare providers. The written report will be delivered to hospitals and birthing centers to use as a resource as they train their staff.

Aims and Scope of Project: Our team's mission is to investigate the relationship between empathy and race during childbirth. The experience of intense pain is a universal human phenomenon, whether it be the physical agony endured during childbirth or the trauma inflicted during criminal acts, police aggression, or war. Our inquiry seeks to explore potential correlations between race and the level of empathy extended towards individuals in pain. By focusing on childbirth, a universally relatable yet intensely personal event, we aim to shed light on broader societal dynamics of empathy and race. We propose a comprehensive study conducted in hospitals and birthing centers to assess the experiences of women of different racial backgrounds and their perceptions of medical professionals' responsiveness to their pain during labor.

Existing literature underscores the urgent need to address racial disparities in maternal and infant health outcomes in the United States, with broad consensus on the fact that these disparities exist. Black women are at least three times more likely to die due to a pregnancy-related cause when compared to white women,[1] and in 2019, the Centers for Disease Control and Prevention (CDC) reported that per 1000 births, 10.8 Black babies died compared to 4.6 white babies.[2]

While there is much literature on inadequate care of women of color, and particularly Black women, during pregnancy, childbirth, and the postnatal period–with deadly results–our study is different in two ways. Firstly, we focus on the event of childbirth itself, looking closely at women's experiences in the birthing room and gauging the extent to which medical professionals responded sufficiently–and compassionately–to women who were in immediate need of assistance. Empathy–and lack of it–may perhaps become apparent in the moment, when women are in great pain and in need of immediate help.

The second way in which our study differs from the current literature is in its specific interest in empathy and pain. While other studies have focused more generally on forms of mistreatment during childbirth (aggression, medical negligence, stereotyping)[3]--phenomena that may indeed be produced by or associated with lack of empathy–we focus on empathy toward pain specifically, exploring what it

[1] Njoku, Anuli, et al. "Listen to the Whispers before They Become Screams: Addressing Black Maternal Morbidity and Mortality in the United States." Healthcare, vol. 11, no. 3, Feb. 2023, p. 438. doi:10.3390/healthcare11030438.

[2] Zhuang, Jie, et al. "Black Mothers' Birthing Experiences: In Search of Birthing Justice." Ethnicity and Health, vol. 27, no. 2, March 2022, pp. 197-215.

[3] See, for example, Spurlock, Elizabeth J., and Rita H. Pickler, "Birth Experience Among Black Women in the United States: A Qualitative Meta-Synthesis." *Journal of Midwifery & Women's Health* (2024), https://onlinelibrary.wiley.com/doi/abs/10.1111/jmwh.13628 and Vedam, Saraswathi, Kathrin Stoll, Tanya Khemet Taiwo, Nicholas Rubashkin, Melissa Cheyney, Nan Strauss, Monica McLemore et al, "The Giving Voice to Mothers study: inequity and mistreatment during pregnancy and childbirth in the United States," *Reproductive health* 16 (2019): 1-18.https://link.springer.com/article/10.1186/s12978-019-0729-2

would mean to react with sufficient empathy to pain and measuring whether medical professionals did or did not react in this way.

Survey Design: Tailored surveys administered to women who gave birth in Sacramento County will capture quantitative data on women's experiences of pain during childbirth and the responsiveness of medical professionals to their pain.

Interview Design: To enhance our comprehension of the quantitative data gathered, we will engage in semi-structured interviews with both patients and the support persons they've selected.

Anticipated Impact: By examining the dynamics of empathy and race during childbirth, this study seeks to enhance training programs for medical staff to improve cultural competency, empathy, and communication skills, particularly when interacting with women of color during labor and delivery. More generally, this study will hopefully be a call to action for hospitals to review their policies and procedures related to patient care, in the context of childbirth, to ensure they are inclusive, respectful, and responsive to the needs of women of color. In particular, this study may encourage hospitals to establish mechanisms for monitoring patient experiences and feedback, including specific metrics related to empathy and responsiveness.

Research Question:

Main Research Question: Does race impact how empathetically medical professionals respond to expressions of pain by a woman in labor?

Sub-questions:

How do women perceive how well medical professionals–both doctors and nurses–responded to their expressions of pain during labor, and how is this correlated with the race of the woman?

How do labor support people (partners, relatives, friends in the birthing room) perceive how well medical professionals responded to expressions of pain by the woman during labor, and how is this correlated with the race of the woman?

From the point of view of medical professionals: how can a professional discern the degrees and types of pain felt by a woman in labor, and how must they respond? In other words, how have they been trained to discern and respond to the pain of a woman in labor?

Definitions:

Empathy: Our conceptualization of empathy is as an expression of concern for and a will to respond and alleviate the discomfort and pain felt by another person. In our context, medical professionals exhibit empathy by doing the following:

- Seeking to understand the level, type, and degree of pain felt by a woman when a woman alerts the professional to this pain.
- Acknowledging this pain
- Expressing sympathy for this pain, verbally and/or nonverbally
- Attempting to verbally soothe the woman or offer words of comfort and encouragement
- Offering advice on how to alleviate this pain–perhaps by changing positions or practicing breathing techniques

- Offering a full and appropriate range of pain medication to the woman
- In some cases, offering physical alleviation of pain through massages and other forms of touch

Expressions of pain: Labor is overall a painful process, but expressions of pain are meant to alert others to moments when a woman feels this pain more acutely, is finding it difficult to tolerate the pain, and/or experiences a change in the type or degree of pain that she feels.

Study Design:

Our study will employ a convergent mixed method design approach to explore whether race is associated with the amount of empathy exhibited towards a person in pain in Sacramento County. Specifically, we will compare the care provided to women of color experiencing pain during labor and delivery with that provided to women from other racial and ethnic groups.

Quantitative Method:

1. **Patient Satisfaction Survey** - Collects data from systematically designed questions to document patient satisfaction regarding communication quality, responsiveness of the care team, and pain management during labor & delivery.

2. **Support Person's Survey** - Collects data from systematically designed questions to document support person's observations of interactions between the patient and the healthcare team including any perceived disparities in care and communication. (The support person is selected by the patient and is present for most of the L&D process.)

Qualitative Method:

To deepen our understanding of the quantitative data collected, we will conduct semi-structured interviews with both patients and their chosen support person. These discussions aim to capture detailed insights into their care experiences, with a focus on how attentively and responsively pain management was handled.

By integrating the quantitative data with personal accounts, this method enables us to deeply investigate the ways empathy is both felt and shown in healthcare.

Setting & Participants: Surveys and interviews will be conducted in person to facilitate direct communication and detailed data collection. However, recognizing the challenges associated with balancing life with a newborn, participants will be given the option to request virtual participation. This flexibility ensures that all participants can engage in the study at their convenience while maintaining the integrity of the data collected.

Participants will include:

- Women who have given birth within previous 2 weeks
- Support person (of the above)
- Healthcare providers (to understand processes & protocol)

Data:

Who we will survey and interview: We will generate our own data by surveying and interviewing women soon after childbirth. We will recruit both pregnant women and women who have recently given birth. When we recruit pregnant women, we will ask them whether we can survey and interview them after they give birth, and when we recruit women who have recently given birth, we will ask whether we can survey and interview them within two weeks of the birth of their baby. The surveys can be completed online or in person, and the interviews can take place either in person in their homes (or another place they prefer) or virtually over a video call.

We recognize, of course, that the immediate postpartum period is often a tiring and vulnerable time for women, so even if we recruit a woman during pregnancy, we will confirm that the women are still interested in participating after they give birth.

We will also survey and interview individuals who accompanied women in the birthing room and witnessed all or most of the birth. These are "support" people, such as partners, parents, or close friends. We anticipate getting contact information for the support person from the woman we have recruited.

We will make note of the subjects who did not have a support person, since perhaps the presence of a support person during labor could impact the results that we see. Perhaps medical staff are more likely to act appropriately when someone else is present. When doing our analysis, we can study whether there was a difference in responses between women who had and did not have a support person. In addition, even if a woman had more than one support person, we will limit our study to one of them, so that the experiences of women with multiple support people aren't disproportionately represented in the data.

Finally, as mentioned, we will interview medical professionals, asking them to describe standard protocols for recognizing, understanding, and responding to pain, so that we have a better understanding of what the medical standards are and how professionals in the birthing rooms of women we have studied may have deviated, adhered to, or gone above and beyond these standards.

Data content: The surveys and interviews will include questions about how medical staff responded to their expressions of pain during labor. The surveys will ask women to provide a rating 1-5 for each of the questions, and the interviews will be open-ended. Thus, the surveys will offer a quantitative measure of the laboring mother's perception of empathy exhibited by medical professionals, and the interviews a qualitative measure. In addition to asking about empathy, the surveys and interviews ask the subjects about their labor experience overall, apart from interactions with the medical staff (i.e., did they deliver the baby in the way they wanted to–C-section or vaginal, did their support person play the role they expected them to, did the labor go longer than they expected it to) so we can study whether there is any association between having a bad or good birth experience and perceptions of empathy exhibited by medical staff.

Operationalization: To operationalize our measurement of empathetic actions and expressions, the surveys will ask respondents to provide ratings concerning:

- How their labor experience was overall, apart from interactions with medical staff
- How their experience with medical staff was overall
- The extent to which the medical staff endeavored to understand the respondent's pain, asking them questions

- How helpful the staff was in suggesting ways to alleviate this pain
- How quickly the medical staff responded to requests for pain medication or information about pain medication available.
- Whether they felt comforted and soothed by the medical staff, emotionally
- Whether they were comforted and soothed by the medical staff, physically
- Whether they felt the medical staff recognized that they felt pain

Interviews will ask questions on the same topics but allow interviewees to respond freely. For example:

- How was your labor experience overall? How did medical professionals impact your experience? How was your experience apart from your interactions with medical professionals?
- Did the medical staff recognize that you were feeling pain?
- Do you feel like the medical staff tried to understand what you were feeling? If so, how did they do that? If not, how could they have done that?
- Did the medical staff present options to alleviate or lessen your pain (i.e. shifting positions, breathing techniques)?
- Did the medical staff give you information about the pain medication available to you? Did you feel like they described all of your options in a way that was understandable to you?
- Did you ask for pain medication? If so, did they grant your request, and how quickly did they respond?
- Was the medical staff comforting to you? If so, how did they comfort you? If not, how could they have been more comforting?
- Did the medical staff attempt to comfort you physically, by, perhaps, providing massages?

The interviewer may ask his/her own unscripted follow-up questions, when s/he thinks it is necessary for an interviewee to elaborate on a given answer or feels that he/she has heard a new or interesting concept expressed by the interviewee.

Surveys and interviews may both be revised as we move forward with data collection, since we may find that the/interviewees describe ways of being treated empathetically or not empathetically that aren't addressed by the questions we've written. So we can write new questions, on both the surveys and interviews, to measure this aspect of empathetic/unempathetic treatment.

Sample:

To recruit participants, we will engage pregnant people and people who have recently given birth (within 2 weeks of their labor) through various organizations that provide support for these people in Sacramento County. In addition, we will reach out to people who are pregnant and people who have just given birth through existing Facebook groups. To help ensure our data includes women of multiple socioeconomic backgrounds, we will include an equal number of organizations that offer paid services and organizations that offer free services. We will also leverage Census data to ensure we are sensitive to selecting organizations in socioeconomically and racially diverse areas. A sample of the kinds of organizations we seek to work with can be found below.

Our strategy for engaging participants at cooperating sites consists of distributing fliers, requesting speaking time during groups and classes, and asking support staff to provide information about our study to their clientele. We will also engage potential participants on Facebook via community posts. Once a pregnant subject has been recruited, we will request their permission to reach out to their support people,

and ask those support people if they would like to be recruited for the study. In exchange for their participation, participants will receive financial compensation, to mitigate non-response bias. We will tailor our messaging to attract women who have both positive and negative experiences by acknowledging labor and delivery can be a positive or negative experience–or combination of both–and we are interested in hearing about all experiences. To balance the needs of informed consent against the minimization of potential bias, when recruiting people we will inform them we intend to survey and interview them after labor about their interaction with medical staff during labor. However, we will avoid references to potentially racially motivated behavior, exhibited empathy, or responses to expressions of pain.

Because we are interested in comparing the experiences of white and non-white people, we will recruit an approximately equal number of both white and non-white pregnant people per category of socioeconomic background under study. We will adopt a saturation strategy for sample size selection, in which we select organizations and recruit pregnant people until new themes no longer reveal themselves.

Organizations to learn more about and potentially contact include:

- The Root (paid service): fitness center, yoga studio, childbirth education center (www.sacroot.com)
- Kaiser Permanente Childbirth Classes (paid service): hospital-organized birthing classes (www.kp.org)
- Sacramento Life Center (free and lost cost): pregnancy classes, limited medical care, resources (www.saclife.org)
- Black Infant Health Program (free, Sacramento County program): resources for new mothers who are African American (https://dhs.saccounty.gov/PUB/Pages/Black-Infant-Health-Program/SP-Black-Infant-Health-Program.aspx)
- Just Between Moms Support Group (paid): mental health services for new mothers (www.happywithbaby.com)
- Birth and Beyond Family Resource Center(free, non-profit): resources and classes for pregnant women and new parents, in nine locations (https://lafcc.org/families-individuals-2/)
- Comprehensive Perinatal Services Program (free, state government Medi-Cal benefit): includes clinics and community resource centers to assist pregnant women and new mothers, funded by this state program (https://www.cdph.ca.gov/Programs/CFH/DMCAH/CPSP/Pages/default.aspx)

Hypotheses:

In our study, we test the null hypothesis that there is no association between race and empathetic actions and expressions by medical staff during childbirth, as reported by both the woman who gave birth and her support person. Based on previous studies that more generally have found a correlation between race and (mis)treatment during labor, the alternative hypothesis is that women of color and their support people will perceive less empathy from the medical staff, perhaps indicating that lack of empathy underlies mistreatment. Underlying this hypothesis is the idea that fundamentally, medical professionals are often less able to identify with women of color as human beings who feel pain in the much the same way as they feel pain. Racism creates a perception that women of color feel pain differently, and less. As a result, medical professionals do not respond appropriately when women of color express pain during childbirth, where an appropriate reaction might have been inspired by an appreciation of the humanity of a woman in labor, and the equal capacity of all humans to feel pain.

Variables:

Our research approach yields both quantitative and qualitative data. Our qualitative approach will primarily yield common themes present in the responses of the participants. The data will be reviewed multiple times, and the response of each participant will be chunked into multiple topics, with a label associated with each topic. Once all the responses have their set of topics, we will compare the topics between all of the participants, grouping similar topics together so as to leave us with a small set of categories, or codes. We will then associate each chunk of data with the associated code. The structure of our survey suggests some predetermined codes, such as efforts from staff to understand the participant's pain, efforts from staff to alleviate pain, and efforts from staff to comfort and soothe the participant. We expect additional codes to appear as we analyze the data.

Our quantitative data comes from the survey responses. The survey answers are on a 1-5 scale, and each response to each question constitutes a variable.

Data Analysis:

In accordance with our primary goal of comparing the experiences of white women with those of women of color, we will compare patterns in codes of the data between the two groups of people. We will accomplish this per code by counting the frequency with which that code appears in responses for white women and women of color separately. For example, we can compare the rate at which white women report being soothed by staff during labor with the rate reported by women of color. For codes that may encode a range of experiences, such as the effort made by the staff to understand the woman's pain, a comparison of the severity of responses between white women and women of color will be made.

These comparisons cannot be made in a vacuum, and will be compared to previous findings in the literature to either confirm or divert from their findings. We will develop parallel narrative passages detailing our findings and illustrating the differences in experiences (if detected) between white women and women of color.

To ensure the validity of our results, we will adopt the following strategies:

1. Triangulation: We will collect multiple sources of data, including not only surveys and interviews of the mothers, but also of the support people. The convergence of narratives across these channels will provide greater validity to the results.
2. Member checking: participants will review themes and findings to ensure they align with their experiences.
3. Preventing discrepant information: To better capture the complexities of real life, it is important we give voice to the participants whose experiences run counter to the findings of our study. Besides adding credibility, this also adds necessary texture to the results and can open up more refined follow up questions.
4. Peer debriefing: An associate not directly involved in the research project will act as a peer reviewer to ensure the account resonates with people other than the researchers.
5. Compare with survey results: the survey results should track closely with the uncovered themes. Any divergences require resolution; for example, regenerating codes and checking again the results are consistent with the survey results.

Potential Risks:

In conducting surveys and interviews on the birthing experience of mothers without collecting medical records, the risks related to HIPPA and medical record confidentiality are significantly reduced[6]. However, there are still relevant considerations to ensure the validity, stakeholder expectations, and ethical conduct of the study.

To maintain scientific validity, rigorous sampling techniques will be employed to ensure a diverse and representative sample of mothers, while standardized survey instruments and interview protocols will gather comprehensive and reliable data. Stakeholder expectations, including concerns about confidentiality and ethical conduct, should be addressed through clear communication of the study's purpose, voluntary participation, and informed consent procedures. Protocols for maintaining confidentiality and anonymity in data collection, analysis, and dissemination are essential to protect participants' privacy.[6] By addressing these considerations and implementing appropriate safeguards, the study will proceed while maintaining credibility, integrity, and ethical conduct in research on empathy and racism during childbirth.

Deliverables:

Research Report:

Description: Upon completion of the study, a detailed report of the analyses and findings will be compiled and distributed to stakeholders. The report will present both quantitative and qualitative insights collected from the surveys and semi-structured interviews.

Distribution Method: The report will be distributed to all stakeholders by email to ensure timely and accessible dissemination of the findings.

Timeline: The final report will be delivered no later than 90 days following the close of the study. The conclusion of the study will be determined by the achievement of the representative sample, as outlined previously.

References:

[1] Zhuang, Jie, et al. "Black Mothers' Birthing Experiences: In Search of Birthing Justice." Ethnicity and Health, vol. 27, no. 2, March 2022, pp. 197-215.

[2] "Sacramento County Pregnancy Resource Guide," https://dhs.saccounty.gov/PUB/Documents/Maternal-Child-Adolescent-Health/GD-2020PregnancyResourceGuide.pdf

[3]Njoku, Anuli, et al. "Listen to the Whispers before They Become Screams: Addressing Black Maternal Morbidity and Mortality in the United States." Healthcare, vol. 11, no. 3, Feb. 2023, p. 438. doi:10.3390/healthcare11030438.

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[6]"Health Insurance Portability and Accountability Act." U.S. Department of Health & Human Services, www.hhs.gov/hipaa/index.html.

Statements of Contribution:

Averine: Overview, and Potential Risks
Nichol: Study Design & Deliverables
Nura: Research questions, Data, Hypotheses
Brett: Sample, Variables, Data Analysis