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A qualitative analysis of stigmatizing language in birth admission clinical notes

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Abstract

The presence of stigmatizing language in the electronic health record (EHR) has been used to measure implicit biases that underlie health inequities. The purpose of this study was to identify the presence of stigmatizing language in the clinical notes of pregnant people during the birth admission. We conducted a qualitative analysis on $N = 1117$ birth admission EHR notes from two urban hospitals in 2017. We identified stigmatizing language categories, such as Disapproval (39.3%), Questioning patient credibility (37.7%), Difficult patient (21.3%), Stereotyping (1.6%), and Unilateral decisions (1.6%) in 61 notes (5.4%). We also defined a new stigmatizing language category indicating Power/privilege. This was present in 37 notes (3.3%) and signaled approval of social status, upholding a hierarchy of bias. The stigmatizing language was most frequently identified in birth admission triage notes (16%) and least frequently in social work initial assessments (13.7%). We found that clinicians from various disciplines recorded stigmatizing language in the medical records of birthing people. This language was used to question birthing people's credibility and convey disapproval of decision-making abilities for themselves or their newborns. We reported a Power/privilege language bias in the inconsistent documentation of traits considered favorable for patient outcomes (e.g., employment status). Future work on stigmatizing language may inform tailored interventions to improve perinatal outcomes for all birthing people and their families.

KEYWORDS

bias, birth, discrimination, electronic health records, health disparities, pregnancy, qualitative research, social stigma

1 | INTRODUCTION

Black birthing people are up to two times more likely to experience severe maternal morbidity (Howell et al., 2020; Wang et al., 2021) and adverse pregnancy outcomes, such as preterm birth and infant mortality, compared to White birthing people (Creanga et al., 2017; Manuck, 2017; Martin et al., 2021; Matoba & Collins, 2017; Shahul et al., 2015). These racial disparities in pregnancy and birth outcomes have remained constant or worsened in recent decades (Joseph et al., 2021; Mathews & Driscoll, 2017), with few clinical

interventions demonstrating progress in closing that gap (Main et al., 2017). Though hospital-level factors and state policies have been implemented to address these disparities, the universally increased risk of poor outcomes faced by Black birthing people in the United States requires new research questions and approaches (Collier & Molina, 2019). Many leaders in the field have called for increased attention in research on the role of racism in pregnancy and birth outcome disparities (Crear-Perry et al., 2021; Hardeman et al., 2021). Implicit biases, racism, and discrimination are major drivers of these inequities that may occur on the interpersonal, institutional, or structural levels (Alhusen et al., 2016; Davis, 2019). Obstetric racism or bias is characterized as beliefs, practices, and abuse perpetrated by medical personnel against Black birthing people (Davis, 2019). Black birthing people's narratives of obstetric racism have been documented in the literature, including experiences of lack of autonomy, poor communication, and feeling unheard (McLemore et al., 2018; Thomas, 2022; Wang et al., 2021).

Quality of care similarly varies by patient race and ethnicity, directly affecting pregnancy-related morbidity outcomes (Bryant et al., 2010). When the bias is present, the number and quality of clinician–patient interactions may decrease (FitzGerald & Hurst, 2017). In obstetric settings, this bias can affect the birthing person and the newborn. For example, racial concordance between clinicians and newborns has been linked to reduced infant mortality (Greenwood et al., 2020). Also, birthing people who experience racism and bias in obstetric settings have reported mistrust of healthcare providers and reduced access to care, contributing to poorer outcomes (Mehra et al., 2020; Wang et al., 2021).

People with other marginalized identities have been less frequently studied in the literature, yet often report dissatisfaction with their birth experience or adverse birth outcomes. For example, studies have shown that people may experience a lower quality of care and increased risk of preterm birth and other adverse birth outcomes because of non-US citizenship (Philipsborn et al., 2021), migration status (Villalonga-Olives et al., 2017), limited English proficiency (Togioka et al., 2022), lesbian, gay, or bisexual sexual orientation (Everett et al., 2019), homelessness (Henriques et al., 2022), and the presence of physical or intellectual disabilities (Hall et al., 2018; Mitra et al., 2020). No studies to date have explicitly examined stigmatizing language use in the electronic health record (EHR) related to these marginalized populations. There is an emerging area of study, however, examining stigmatizing language use in the care of people with substance use disorders (Weiner et al., 2023).

Traditional research approaches examining biases have included qualitative interviews with patients and healthcare providers and surveys of explicit and implicit biases (Chambers et al., 2022; Wren Serbin & Donnelly, 2016). Recently, newer approaches measuring implicit bias have focused on using stigmatizing language in the EHR (Beach et al., 2021; Sun et al., 2022). Stigmatizing language has been defined as language that communicates unintended meanings that can perpetuate socially constructed power dynamics and result in bias (Shattell, 2009). Stigmatizing language may include questioning the patient's credibility, using quotations to convey disbelief in the patient's words, and using judgmental words (Beach et al., 2021). Stigmatizing language written in the EHR may reflect provider bias and stereotypes (Goddu et al., 2018). It has also been hypothesized that using stigmatizing language in the EHR may contribute to transmitting negative attitudes between providers (Sun et al., 2022). No studies on the presence of stigmatizing language in the EHR have been conducted in obstetric settings, representing an important gap in the literature.

As a first step in understanding stigmatizing language in this clinical context, we conducted a qualitative descriptive analysis of EHR notes from birth admission at two urban hospitals to identify the presence of stigmatizing language. The purpose of this qualitative study was to identify the presence of stigmatizing language in the clinical notes of pregnant people during the birth admission.

2 | METHODS

We used a qualitative descriptive methodology (Kim et al., 2017; Sandelowski, 2010) to provide a comprehensive summary of stigmatizing language in clinician documentation through a theoretical sampling of clinical notes (Coyne, 1997), multiple data sources (note types and clinicians), cyclic directed deductive and inductive content analysis of clinical notes (Hsieh & Shannon, 2005), and condensation of data into thematic representations. Specifically, we examined stigmatizing language in two ways: (1) a priori categories derived from previous literature and (2) a review of clinical notes to identify new categories based on our qualitative thematic findings. The Institutional Review Board at Columbia University approved this study (IRB# AAAT9870). Written informed consent was not obtained from participants as this was a secondary analysis of existing EHR data.

2.1 | Data collection

Our research team included clinicians, scientists, and students with expertise in qualitative research methodology, data science and extraction of data from the EHR, patient safety/quality in obstetrics, and public health, emergency, and primary care nursing. We abstracted clinical notes from EHRs at the birth admission for all birthing people in 2017 at two urban hospitals in the Northeastern United States. We randomly selected a sample of at least 100 notes from each note type based on frequency (only note types with at least 100 notes were included), domain expertise determination after manual inspection, and research team consensus. We extracted medical record number, time of documentation, note type, admission date and time, discharge date and time, and free-text clinical notes. We excluded note types that did not contain any narrative clinical text with assessments or impressions of patients (e.g., brief generic statements about pre-, intra-, or postoperation, medications, procedures, transfer, and structured screening). This resulted in a sample of ~8000 clinical notes from 18 note types that potentially had stigmatizing language.

2.2 | Qualitative data analysis

Next, we conducted two phases of data annotations. Phase 1 comprised exploratory annotation. The extracted data were imported into Microsoft Excel. The free-text notes were cleaned (i.e., removal of HyperText Markup Language tags for improved readability), and one annotator manually checked to ensure good readability before analysis. Next, we created an initial thematic codebook of negative language categories based on a priori literature by Park et al. (2021), including Questioning patient credibility, Disapproval, Stereotyping, Difficult patient, and Unilateral decisions (Table 1). We also defined the themes in a codebook and established boundaries for code application as described above and in accordance with methodological recommendations (MacQueen et al., 1998). Notes were examined in groups of 200, and only note types with identified stigmatizing language categories were included in the subsequent annotations. In phase 2, notes were reannotated to conduct purposeful annotation. In this phase, specific note types were annotated until saturation was achieved. Saturation occurred at 1117 notes as no new themes emerged from the data.

Four independent annotators coded the data. Each note was randomly assigned to two annotators. Memos related to codes and coded segments were documented to keep track of the developments in the data analysis. The annotators met weekly to discuss findings and discrepancies in the themes or coding until a consensus was reached.

We pursued a hybrid qualitative approach of inductive and deductive coding and theme development (Fereday & Muir-Cochrane, 2006). Specifically, we conducted human annotation with the ontology developed in a previous study that included five categories of stigmatizing language in clinical notes (deductive approach) (Park et al., 2021). Throughout the annotation process, the applicability and fit of the five categories were discussed between the annotators, the study team, and physician collaborators. Categories were refined, added (inductive approach), or merged if deemed appropriate via discussions. Our deductive approach began with previously defined themes (Park et al., 2021), including Questioning patient credibility, Disapproval, Stereotyping, Difficult patients, and Unilateral decisions. These categories are also presented in Table 1, along with corresponding inclusion criteria and examples. These themes were included as we expected to replicate previous studies documenting stigmatizing language in EHRs (Park et al., 2021).

We applied these categories when statements appeared unjustified based on the clinical note (showing bias) or when quotation marks were used to indicate disbelief in a patient's words. Notes that included objective assessments to support a patient's statement, clinically relevant statements about a patient's culture, and reports of pain related to labor and birth were not flagged as stigmatizing language. We also coded instances of stigmatizing language that pointed out social and behavioral risks or mentioned approval of the patient's socioeconomic status or demographic characteristics initially as "Other."

2.3 | Rigor of data collection and analysis

We used multiple strategies to enhance the trustworthiness of our findings (Guba, 1981). We assessed our final themes to confirm that the findings did not contradict each other (i.e., structural corroboration). To improve transferability (Guba, 1981), we report detailed demographic descriptions of our sample and study site and sampled the clinical notes purposively to represent clinician documentation from various disciplines. To achieve dependability or consistency in the findings (Guba, 1981), we used and updated the created codebook throughout the project and created an audit trail documenting all data collection and analytic decisions made throughout the study. Demographic information, such as gender, age, race, and ethnicity, was extracted after coding to reduce the bias in data analysis. Finally, to promote confirmability and reduce bias (Guba, 1981), the annotators practiced reflexivity to identify their impact on the data. Data are not available as clinical notes are protected health information.

3 | RESULTS

A total of 1117 notes were included in the final analyses, and they were written by physicians (58.1%), nutrition services (14.0%), nurses (13.9%), and social workers (13.7%). There were seven note types included in the final analyses: obstetric triage note, obstetric admission note, obstetric postpartum note, anesthesia resident note, initial nutrition assessment, social work initial assessment, and miscellaneous nursing note. Most notes were written on patients who identified as female (98.6%), with few identifying as male (1.3%). Patient race and ethnicity were determined from two separate fields in the medical record. Most patients declined to identify with a particular race (40.2%) or identified as White (34.6%), Black (12.5%), Asian or Pacific Islander (6.4%), or Other (6.1%). Patient ethnicity was similarly frequently reported as unknown or declined to answer (44.1%), followed by Hispanic (30.1%) and non-Hispanic (25.6%).

In addition to five previous categories of stigmatizing language, we identified two new categories. These new categories include "Assessment of social and behavioral risks" and "Power/privilege language use" (see Table 1 for examples). Instances of language were not mutually exclusive, as there was more than one category identified in a given note or instance of stigmatizing or Power/privilege language.

3.1 | Categories of stigmatizing language with examples

Overall, there were 61 notes with stigmatizing language (5.4%) fitting a priori categories. We found evidence of stigmatizing language in notes from each of the following categories: Questioning patient

TABLE 1 Thematic codebook and examples of stigmatizing and power/privilege language by category.

Theme	Definition	Criteria for inclusion	Exclusion criteria	Examples
Questioning patient credibility	Disbelief in the patient's report of their current history or physical status	Statements suggesting disbelief of patient's reports, such as using quotations	Objective assessments (e.g., laboratory results) to support the patient's statement	– Reports "no time to get depressed with 4 kids" – SW [Social Worker] is uncertain as to whether the patient was answering SW's questions truthfully
Disapproval	Patient behaviors are not in line with healthcare provider's expectations	Statements expressing disapproval of patient reasoning or self-care	Objective statements noting that a patient has decided not to receive treatment (e.g., patient declines)	– Postpartum birth control method- patient states that she prefers to use condoms and will continue to readdress – The writer asked if the patient wanted to see the lactation consultant again and the patient refused
Stereotyping	Comments that indicate health behaviors or actions are occurring due to the patient's race or ethnicity	Statements that convey an opinion about a patient based on preconceived ideas about their culture may be unjustified	Clinically relevant statements about a patient's culture (e.g., the patient does not accept blood products because they are Jehovah's witness)	– When the SW intern asked where the baby will be sleeping upon arrival home. The father of the baby states that the baby will sleep in their bed. SW intern discussed that although this may be cultural, it is important for the baby to have his own bed
Difficult patient	Nonadherence with the plan of care, refusal of referrals or services	Statements portraying the patient as difficult	Patient report of pain related to labor and birth	– The patient once again advised about the warning signs and symptoms of epidural hematoma
Unilateral decisions	Language that supports the clinician's authority over the patient	Statements emphasizing the clinician's authority over the patient	Statements conveying recommended actions based on clinical judgment	– The patient was educated on infant safety and instructed to place an infant in the crib at the bedside
Assess social and behavioral risks	Notes in the chart that document assessment of social risk factors for poor pregnancy outcomes, such as alcohol, tobacco, drug use, and domestic violence	Statements indicating assessment of social and behavioral risks	Statements from structured assessments	– Patient denies depression, anxiety, marijuana/illicit drug use, and DV – She does not use drugs or smoke but drinks 6× week
Power/privilege language	Power/privilege statements describe a patient's psychological and social state	Statements with power/privilege description of the patient's psychological and social state	Documentation indicating a power/privilege clinical assessment	– The patient was easy to engage; the thought process was logical and linear – The patient reports having a nurturing 8-year marriage with [name of partner], who works as a financial analyst

credibility (*n* = 23 clinical notes; 2% of all notes), Disapproval (*n* = 24; 2.1%), Stereotyping (*n* = 1; 0.01%), Unilateral decisions (*n* = 1; 0.01%), Difficult patient (*n* = 13; 1.1%), and Assessing social and behavior risks (*n* = 97; 8.6% of notes). There were 37 notes with Power/privilege language (3.3%).

The percentage of stigmatizing language identified by category is summarized in Figure 1. The stigmatizing language categories most frequently identified included disapproval (39.3%), Questioning patient credibility (37.7%), Difficult patient (21.3%), Stereotyping (1.6%), and Unilateral decisions (1.6%). We also noted that stigmatizing language was most frequently identified in obstetric triage notes (16.0%) and least frequently in social work initial assessments (13.7%) (Figure 2). Below, we describe each category of stigmatizing language and provide specific examples from clinical notes.

3.1.1 | Questioning patient credibility

We found several language patterns suggesting or outright stating disbelief in the patient's words. Examples ranged from contradictory descriptions of a birthing person's educational achievement, "patient dropped out of school in the 8th grade (other report states 7th grade)," to using quotations to describe a family member's report that the birthing person's previous baby was "born dead." Another clinician indicated that the patient "did not know she was pregnant until she was six months."

3.1.2 | Disapproval

This theme refers to patient behaviors that are not in line with the clinician's expectations. One clinician documented the following

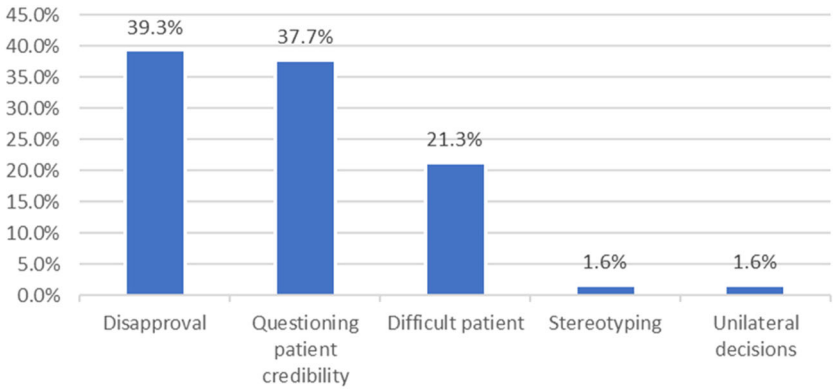

FIGURE 1 Percentage of stigmatizing language identified in obstetric notes by category (*n* = 61).

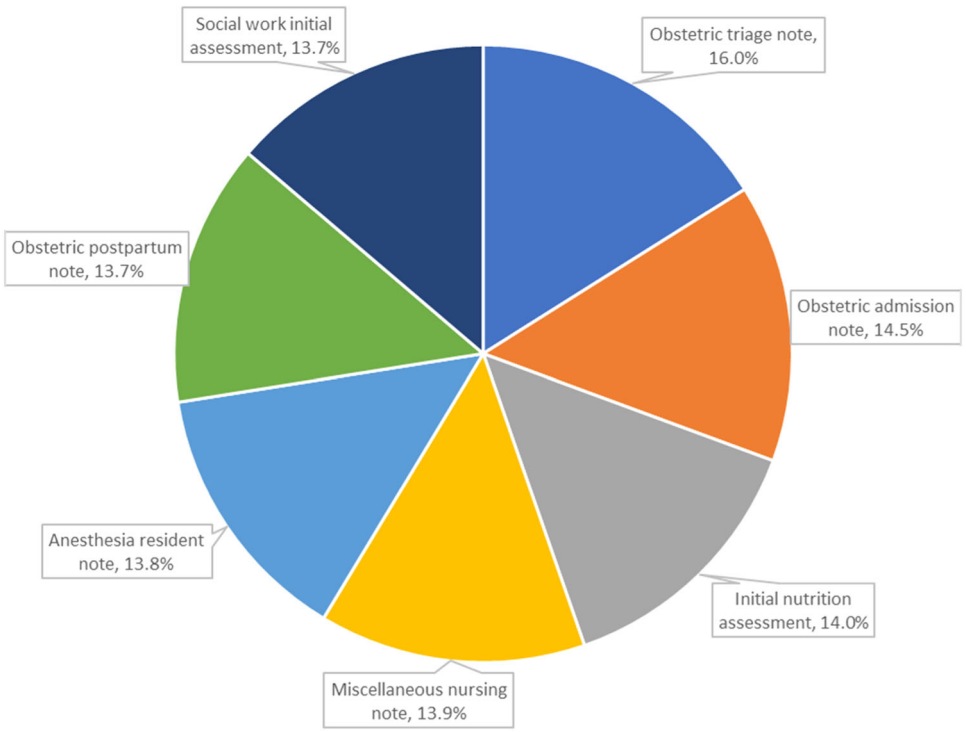

FIGURE 2 Stigmatizing language identified by note type.

regarding the birthing person's postpartum birth control method, "patient states she prefers to use condoms- will continue to readdress." Other common instances of language indicating disapproval included the patient refusing medical interventions or referrals, such as "Explained all risk factors including life threatening heart attack, patient verbalized understanding but still refused blood transfusion" and "writer asked if patient wanted to see the lactation consultant again and patient refused."

3.1.3 | Stereotyping

Comments that indicated health behaviors or actions that occurred due to the patient's race or ethnicity were also found in EHR notes. One example of this category of stigmatizing language was found when the clinician asked "where the baby will be sleeping upon arrival home and the FOB [father of baby] states that the baby will sleep in their bed. [the clinician] discussed that although this may be cultural it is important for baby to have his own bed."

3.1.4 | Difficult patient

This category was defined as nonadherence with the plan of care or refusal of referrals or services. Common examples of stigmatizing language from this category included noncompliance or complaints of pain. One clinician noted "patient once again advised about the warning signs and symptoms of epidural hematoma," and another, "patient sent here for history of noncompliance with plan for closer monitoring and optimization of blood sugar control."

3.1.5 | Unilateral decisions

A patriarchal approach to telling patients how to do things based on clinician beliefs or culture was another theme that emerged from a review of birth admission notes. One example of this was patient education and how to care for the birthing patient's infant: "patient educated on infant safety and instructed to place infant in crib at bedside." Though the evidence-based content of the message of this note is indisputable, we are not able to infer the quality or content of the patient–clinician interaction. The use of the word "instructed" resulted in the note being coded as potentially stigmatizing.

3.1.6 | Assessment of social and behavioral risks

This category was created to represent notes in the chart that documented the assessment of risk factors for poor pregnancy outcomes, such as alcohol, tobacco, drug use, and domestic violence. The presence of documentation pointing out substance use screening in some but not all notes resulted in its presence being coded as potentially stigmatizing, as this screening was likely universally documented in templates or flowsheets. The presence of its mention in clinical notes may signal increased attention to screening in this particular patient. We also noted uneven documentation of social and behavioral risks for patients in the birth admission (e.g., not all people admitted for the birth had a note documenting drug and alcohol use). These included statements such as "patient denies depression, anxiety, marijuana/illicit drug use and D[omestic] V[iolence]" and "patient denies any domestic violence or ACS [child protective services] involvement." We identified several instances where perceived risk factors were not universally applied to patient descriptions. One example of this was a note stating "patient is a 32 year old Dominican unmarried unemployed female," while other notes did not summarize demographics in the same way.

3.1.7 | Power/privilege language

We included a Power/privilege language category as it became clear while conducting qualitative analyses that a Power/privilege bias may have been present, and it applied to patients based on race, ethnicity, or socioeconomic status. Examples of such language included "patient reports having a nurturing 8-year marriage with [name redacted] who works as a financial analyst" and "patient was well dressed in comfortable clothes and was appropriate all around." These examples were in contrast to other notes that pointed out patients' unmarried status or reluctance to speak to clinicians about their plans after going home.

4 | DISCUSSION

In this qualitative study, we described and categorized stigmatizing language use in the EHR notes of birthing people. We found that clinicians from various disciplines recorded stigmatizing language in the EHRs of birthing people. This language was used to question birthing people's credibility and convey disapproval of decision-making abilities for themselves or their newborns. We also reported Power/privilege language bias in the inconsistent documentation of social risk factors and traits considered favorable for patient outcomes (e.g., employment status). Our findings were in line with previously reported stigmatizing language categories in other healthcare settings outside of birth admission (Park et al., 2021).

This study replicated and expanded on previous work (Park et al., 2021) that documented both negative and Power/privilege language in the EHR notes. The identification of stigmatizing language categories, such as unilateral decisions, is based on individual notes that do not convey the nuance of the clinical encounter. For example, it is difficult to ascertain whether the word "instructed" on safe sleep can be interpreted as a stigmatizing language (i.e., "Unilateral decisions") or if a discussion between the clinician and the birthing patient on safe sleep practices took place. This initial work must be expanded on and replicated to better understand these nuances. We also recognize the sensitive nature of

examining EHR notes for stigmatizing language, as the purpose of the EHR is to collect information for billing and document patient care in often stressful and low-resource environments. Notwithstanding, a previous study of EHR notes identified potentially stigmatizing language in an Emergency Department setting, signaling a potential way to explain and address racial and ethnic health disparities (Landau et al., 2022).

We also report that the inclusion of screening for social risk factors represents a new category worthy of further examination in future studies. Power/privilege language biases documented in the medical record may represent cultural and societal values that show preferential treatment for birthing patients based on demographics such as marital status, socioeconomic status, sexual orientation or gender identity, and age. Including social risk factor screening in medical documentation for patients subjectively determined to be at risk may reflect implicit biases that could influence health outcomes. In the context of pregnancy and birth settings, this potential for documentation of bias is especially relevant, as Black children are more likely to be referred for evaluation by child protective services than White children (Maloney et al., 2017), and prenatal toxicology testing may be applied differentially based on race (Nguemeni Tiako & Sweeney, 2022).

The medical literature and the lay media have highlighted how not hearing or believing Black birthing people contributes to poor perinatal outcomes (McLemore et al., 2018; Thomas, 2022; Wang et al., 2021). The presence of stigmatizing language, including Power/privilege language, in the EHR may influence other clinicians' perceptions of patients before they physically interact with the patients and thus affect patient care. Further, if birthing patients review their EHR notes, trust in their healthcare providers to care for them during pregnancy and birth may diminish in the presence of this language. This may contribute to poorer outcomes and reduced follow-up with the healthcare system in the postpartum period, potentially affecting both the birthing patient and the newborn.

In this paper, we describe stigmatizing language use in the EHR for birthing people and suggest that its presence upholds social hierarchies and bias, potentially causing harm. Clinicians may not be aware that they are using stigmatizing language in EHR notes, as this is an emerging area of research. To build awareness, clinicians must assess their own biases through reading, learning, and self-assessment. Many resources exist to support this awareness-building (Every Mother Counts, 2023). This process is arguably easier to implement at the training stage when educating students in nursing and other clinical professions. Students in the early stages of developing an understanding of their clinical roles and responsibilities can be engaged in conversations about how they want to operate in a society still burdened by racism and marginalization at all levels. This can begin by incorporating antiracism education into curricula and introducing the need for each individual to conduct self-assessments of their values, beliefs, and biases and how these affect the quality of care they provide. Students should be taught that it is their responsibility to continue this ongoing process of self-assessment, growth, and learning throughout their careers and that this responsibility must be continuously interrogated and updated. Ongoing continuing education for practicing clinicians may also be useful in addressing implicit biases in institutions, though they must be modeled by leaders as seasoned clinical experts may be less open to questioning how personal beliefs influence patient care. Ideally, these conversations would expand to include institutional leaders who create the culture and working environment where clinicians are practicing as well.

We also consider the plight of clinicians who are now faced with the question of how to avoid stigmatizing language use in EHR documentation. First, one must consider the primary purpose of clinical documentation, which is ostensibly to record the care that was provided, to facilitate communication between clinicians, and for billing purposes. Social and behavioral risk factors associated with poor outcomes for pregnant people and newborns are relevant to intrapartum care and arguably should be documented in the EHR. However, documentation of social factors does not prevent poor outcomes, nor does an alert of social risks necessarily predict them. This documentation ideally should be done to provide referral and support for the birthing person and family.

The question then arises of how to document risk factors in a nonstigmatizing manner. One suggestion is to document demographic data primarily using flowsheets or checkboxes, especially if these are completed universally for all patients. These types of data collection mechanisms could be made even more equitable and inclusive by adding information about other marginalized identities such as sexual orientation, gender identity, disability status, and so forth. This would also provide important and needed data for research using EHRs, where other research-based data sets are lacking. However, narrative notes may be necessary to supplement these checkboxes in certain circumstances, and clinicians should not avoid notes where they are relevant. For example, if the marital status is documented in a flowsheet, recording this information again in a narrative note is probably not necessary and may introduce stigma or negative feelings about a patient when read by a subsequent clinician or the patient themselves. On the other hand, narrative documentation about a patient's gender identity may be very important to the patient and healthcare team in terms of making the patient feel respected and cared for, as well as recognizing any special clinical or medical considerations that may be associated with the care of a trans patient, for example.

Second, alternatives to stigmatizing language in documentation also exist. Quotations, for example, are often used and have been traditionally taught in the health professions to convey the patient's voice. Indeed, there is a place for their use; however, clinicians should be sensitive to the application of quotations when used to point out stereotypes or judgments about patient knowledge, behavior, or beliefs. Additionally, the use of words such as the patient “refuses” or “claims” may indicate disapproval or doubt as to the patient's veracity and credibility in their interactions with the healthcare team. As clinicians caring for people in one of the most vulnerable and important moments in their lives, we must always strive to respect patient autonomy and decision-making, as well as their right to self-determination.

Third, institutions and hospitals may approach labor and birth care from a place of preventing disease and death instead of

promoting health and wellness. We do not dispute that both of these goals are imperative; however, the approach to achieving them is equally if not more important. This distinction may be visible in the way newly admitted patients are required to wear hospital gowns instead of their own clothing, restricted from eating or drinking, and placed on continuous fetal monitoring, limiting their mobility. Where possible, institutions should implement and follow evidence-based guidelines that promote patient autonomy and well-being. Institutions may benefit from such self-examination and assessment, as there may be room to improve the behaviors and policies that communicate respect for patient preferences and autonomy while still providing excellent clinical care. Changes in the philosophy of birthing care and who holds the locus of control may be necessary to reduce implicit biases internalized by clinicians and then documented in EHR notes.

Finally, the documentation of stigmatizing language in the EHR of birthing people may reflect an underlying implicit bias due to larger societal issues. Often, the social determinants of health that negatively impact pregnancy, such as violence, poverty, inadequate access to prenatal care, and food insecurity, are not the fault of the pregnant individual. Instead, these risk factors reflect policy choices on a systemic level. Comprehensive legislation to improve the social and healthcare landscape for the most vulnerable birthing people has been proposed, such as the Black Maternal Health Momnibus (United States House of Representatives Black Maternal Health Caucus, 2021). Professional organizations such as the Association of Women's Health, Obstetric, and Neonatal Nurses, the American College of Obstetricians and Gynecologists (ACOG), and the American Heart Association have made recommendations regarding racism and bias in maternity care settings (ACOG, 2023; Mehta et al., 2021; The Association of Women's Health, 2021). Recommendations from these organizations span the social, institutional, stakeholder, and regulatory levels to improve the health and living conditions for pregnant and parenting people and families.

4.1 | Study strengths and limitations

Our study has several strengths. The research team that examined the EHR notes for language use consisted of clinicians, scientists, and natural language processing/data science experts. Though not all of our team were content area experts, the diversity of clinical backgrounds may have been a strength as the perception of bias may be more important than the clinical context in consideration of stigmatizing language. Many instances where the stigmatizing language was identified depended more on the context of the words used than the actual words themselves. As mentioned above, nursing clinical education has traditionally instructed students to document using direct quotations, reflecting a practice that in itself is not a bad practice. However, when quotations are used to discredit a patient's history or clinical presentation, their use may become problematic.

This is the first study to examine stigmatizing language use in birth admission EHR notes. This study lays the foundation for future work examining correlations between stigmatizing and power/privileged language use and clinical outcomes. As language often represents the cultural values of an institution, future work may provide institutions with valuable data to guide discussion and tailor interventions for improving obstetric care and outcomes.

Our study also had limitations. This study examined patient records at two hospitals in a large city in the Northeast, which may limit generalizability. We also studied EHR notes from one year (2017), which may not represent current documentation practices as secular trends such as the 2020 COVID-19 pandemic and racial reckoning in the United States resulted in an increase in racism and bias awareness and training in academic and hospital settings (Chandler et al., 2022; Knox et al., 2021; Mavis et al., 2022; Royce et al., 2023). Data were not available on clinician demographics such as race or ethnicity, which may influence the use of stigmatizing language. It was beyond the scope of this study to conduct analyses by clinical discipline to provide specific feedback to those clinicians, nor were we able to determine differences in stigmatizing language use by patient race or ethnicity. It was similarly beyond the scope of this study to examine correlations between stigmatizing language use and marginalized patient identities or patient outcomes. We also recognize that the prevalence of note writing differs based on clinical discipline and institutional policy. For example, at our institutions, nurses document mostly using structured or checkbox entries, resulting in many fewer notes than physicians. In addition, demographic information was only available at the note-level for patients, limiting our ability to understand more about how many clinicians wrote notes with stigmatizing language and unit-level characteristics, which may have influenced documentation practices. Future work should examine important factors, such as clinical shifts, staffing ratios, and other characteristics. Our analysis was limited in that it included a small random sample of birth admission notes. Some of the notes that were flagged as potentially stigmatizing may instead reflect commonly used template language and should be further examined. We conducted this study with a focus on notes on the birthing patient. Additional research in this area should match records for the birthing patient and newborn to include pediatric notes to fully capture all potential stigmatizing language for the dyad. Finally, future research using the EHR should include analyses including lesbian, gay, bisexual, and transgender (LGBT) pregnant people who may be at increased risk of poorer outcomes (Everett et al., 2019). LGBT birthing people are often excluded from perinatal research, and the lack of inclusion of sexual orientation and gender identity fields for all pregnant people in EHR clinical notes limits the ability of both researchers and clinicians to identify areas for improvement.

5 | CONCLUSION

In summary, we present our qualitative study findings demonstrating themes of stigmatizing language (including Power/privilege language) in the EHR notes during the birth admission. In this study, we explore the potential for stigmatizing language present in EHR notes to collect foundational data that will inform future studies and not place

blame. The differential application of stigmatizing language use may reflect implicit biases contributing to inequities in care and pregnancy outcomes; however, more research should be carried out to examine these potential associations. Further, future work on stigmatizing language in medical documentation may inform interventions for clinicians, clinical units, and institutions to examine how language represents stated values to improve care and perinatal outcomes for all birthing people and their families.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Materials and analysis codes for this study are not available.

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