

Examining Language in Prenatal Care: Towards Equitable Practices and Racially-Inclusive Healthcare

Background

In the United States, Black women are 2.5 times more likely to die from childbirth than white women (Kung). Historical data further illustrates this disparity from 1940-1960, as nonwhite mothers were more than two times as likely to experience maternal mortality annually than their white counterparts (Grove). Regardless of class or education, infant mortality rates remain twice as high for Black Americans (Rosenthal). These numbers highlight topics of intersectionality, racial disparities in medicine, and shortcomings within the American healthcare system. Black maternal stress directly relates to mortality as well as their children's health, perpetuating long term effects and exacerbating racial health disparities in America. If predicted to deliver early, patients receive prenatal counseling (PNC) from the Newborn Intensive Care Unit (NICU). This service provides the patient and family educational and emotional support, fostering a safe space for families to express concerns or preferences during the delivery process. Parents of preterm infants experience more anxiety, depression, and post-traumatic stress (Aagaard). For pregnant Black women, intersecting identities result in unique sources of stress rooted in historical abuse, contradictory societal pressures, and tropes related to hypersexuality and motherhood originating from slavery (Rosenthal). As a consequence, one can speculate that Black women experience worsened psychological symptoms related to preterm birth.

Since 2022, I have volunteered as a Research Assistant at the University of Washington (UW) in the Department of Pediatrics. My experiences range from reviewing patient charts of pregnant patients, contacting patients to inquire about their prenatal counseling experience, and assisting resident physicians in honing their communication skills via Virtual Standardized Patient (VSP) training sessions. UW pediatric physicians undergo didactic training on prenatal consults emphasizing the use of empathetic language. VSPs offer a low-risk learning environment, providing valuable individualized feedback to both learner and educator. Currently, the VSP in use, named "Vanessa", stands for Virtual Antenatal Encounter and Standardized Simulation Assessment. Since 2021, Vanessa has represented a white identifying patient (Figure 1). This summer, Vanessa will be transformed to depict a Black identifying patient, without changing any other contextual identities (Figure 2).

Objective

To investigate whether race influences empathetic language use during prenatal counseling sessions.

Methodology

Language employed during prenatal counseling between the pediatric residents (physicians in training) and the two different Vanessas will be qualitatively analyzed. Each dialogue will be examined for certain markers of empathy (Table 1). 20 total conversations from ChatScript will be extracted as text files. ChatScript is the natural language engine and dialogue management system that saves all conversations with Vanessa. Half of the conversations will be from the new (Black identifying) Vanessa, with the other half from the old (white identifying) Vanessa.

Indicator N=20 conversations	Example sentences
Babyname	“Doyouhaveanameforyourbaby?”
Asksaboutdailylife	“AreyouoriginallyfromtheSeattlearea?”
Validatesemotion	“Pregnancycanbescary.Howhaveyoubeen feeling up to this point about you and your baby?”
Asksmainconcern	“Doyouhaveanymainconcernsyouwantto talk about today?”
Providesreassurance	“Iamheretolistenandsupportyouinany way I can.”
Encouragesopencommunication	“Beforewestart,isthereanythingspecificon your mind that you want to talk about?”
Offersfurthercounseling	“IfaquestioncomesupafterIleave,feelfree to tell your nurse and they can contact me.”

Table 1. Indicators of empathetic language use and examples.



Figure 1. Virtual Patient Simulator, “Old” Vanessa 2021-2023, White Identifying Patient

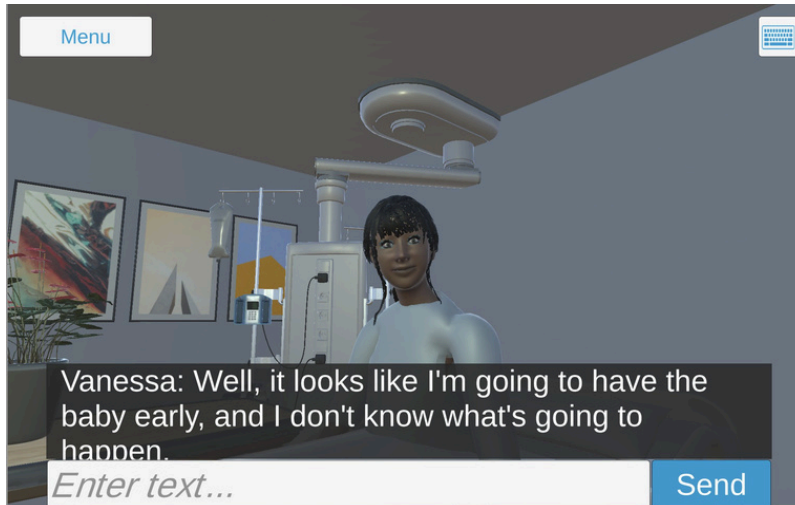


Figure 2. Virtual Patient Simulator, “New” Vanessa 2024, Black Identifying Patient

Anticipated Outcome

Currently, assumptions cannot be made about whether the usage of empathetic language will vary when employing a VSP of a different racial background. However, medical professionals have a role in contributing to racial disparities their patients experience- whether aware of it or not. This research suggests future innovative models for prenatal counseling that actively recognize racial disparities, providing a reflective tool for physicians to assess their own biases.

References

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