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Assessing Perceptions of the Healthcare Community, Perceived Stress, Perceived Racism, Postpartum Depression, and Differences in Income among Black Women

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Abstract

Purpose: The purpose of this study was to assess differences in perceptions of the healthcare community across annual income and perceived stress levels, and the relationship between perceived stress, perceived racism, postpartum depression, and the perceptions of the healthcare community among Black women.

Methods: Two Hundred Nineteen Black mothers participated in this study. To better understand the relationship between the primary variables, Spearman Rho, Correlations, and a Non-Parametric Independent Sample T test were run. Standard, Multiple, and Hierarchical regressions were used to measure the moderating role of perceptions of racism on perceptions of the healthcare community and perceived stress.

Results: Results indicated that higher levels of stress in Black women were related to lower perceptions of the healthcare community, and there was evidence to support perceived racism as a moderator between perceptions of the healthcare community and perceived stress. There were unique differences in perceived racism across income and middle-income individuals reported less perceived racism. Lastly, perceptions of the healthcare community and annual pre-tax income combined were found to be better predictors of postpartum depression than either variable alone.

Conclusion: By understanding these factors as contributors to maternal mortality rates among Black women, it can influence training and professional development for new and existing mental health practitioners.

Keywords: *Healthcare community, Income, Perceived stress, Perceived racism, Postpartum depression*

Introduction

Black mothers are dying at 3 to 4 times the rate of non-Hispanic white mothers [1]. Seven hundred individuals die during pregnancy or in the year after in the United States while Black mothers represent almost 45% of the deaths [2]. The etiology of maternal-related mortality disproportionately affecting Black women is quite complex. Three key issues have been presented to explain this difference in outcomes: 1- Black women are more susceptible to having a pre-existing cardiovascular morbidity; 2- Black women are more likely to experience adverse pregnancy outcomes including a high risk for cardiovascular disease, and; 3- racial bias of providers and perceived racial discrimination of themselves as a patient [3].

As important as maternal mortality is in representing differences in outcomes, maternal morbidity rates may best represent the size of the problem for many women. Koblinsky (2012) defined maternal morbidity as a term that refers to any physical or mental illness or disability related to pregnancy and/or childbirth [4]. Examples of maternal morbidity include, but are not limited to, diabetes, high blood pressure, preeclampsia, blood clots, hemorrhage, and anemia. On average, more than 60,000 women in the United States affected by severe maternal morbidity annually. The rates of morbidity for Black women exceeds that of their white counterparts in 22 of the 25 severe morbidity indicators [2,4]. The Center for Disease Control (CDC) has reduced the original list of indicators to now represent 21 items that correspond to severe maternal morbidity (SMM) [2].

Pieterse et al. (2012) suggest that perceived racial discrimination can occur on multiple levels (interpersonal, institutional, cultural) and can be stressful for Black individuals negatively affecting their mental and physical health. Black individuals, on average, report higher levels of exposure to racism and discrimination than any other marginalized

group [5]. Persistent high levels of stress can cause a deterioration of mental, emotional, and physical health. Persistent high levels of stress have been linked, but are not limited to heart disease, high blood pressure, heart attacks, depression, anxiety, and stroke.

Black individuals deal with racism-related stress daily, and it is very prominent in every aspect of living in the United States and thusly creating grave concern as it pertains to the healthcare system. Black individuals have not been afforded non-racial biased treatment, whether it was for a physical or mental ailment. Researchers previously found that there is a significant racial difference in mistrust of medical care settings for Black individuals. This was due to the Tuskegee Study and from broader personal and historical experiences [6]. Over time, the mistrust of the healthcare community has influenced the Black community to not seek medical attention when needed. Furthermore, it discourages Black mothers from seeking proper prenatal care out of fear of getting racially biased treatment from their nurses and doctors.

Perceptions of the Healthcare Community

One's view of something or someone can influence how they interact with it. Perceptions of the healthcare community are having an impact on how Black women are viewing their quality of healthcare. This is evidenced by a study conducted by Blair and her colleagues (2013) that involved administration of a telephone survey on White and Black patients completing the Primary Care Assessment Survey. The Primary Care Assessment survey assessed the patients' view of the clinicians' interpersonal treatment, communication, trust, and contextual knowledge. They also had a panel of 134 clinicians that completed the explicit/implicit ethnicity/race bias assessments. The findings from this study revealed that clinicians with greater implicit bias were rated lower in patient-centered care by their Black patients as compared to the White patients. Another study conducted by Cuevas and her colleagues (2016) involved focus groups of Black women and men discussing their perceptions of racism in the medical setting, mistrust in medical settings, poor communication from doctors, and race discordance. The findings from this study revealed that Black women perceived higher discrimination than Black men feeling as though their symptoms were being discredited and ignored [7,8].

Perceptions of the Healthcare Community and Income

The intersectionality of income and race has shown to have an impact on the quality of care you may receive and your perception of your quality of healthcare. This is evidenced by a study conducted by Oliha and her colleagues (2020), which involved in-depth interviews of low-income Black women. Black women in this study reported receiving less than satisfactory patient care. The findings from this study attributed their less than satisfactory patient care to three significant themes: 1) perceived discrimination based on race, 2) perceived discrimination based on socioeconomic status, and 3) stereotypical assumptions (i.e., drug-seeking or having an STD) (Oliha et. al., 2020). Another study conducted by Berry and Colleagues (2009) examined the effects of race on cancer outcomes by performing a retrospective study. The methodology involved analyzing the cancer registry, billing, and medical records for Black and White patients diagnosed with Stage 4 cancer between the years of 2000 and 2005. The findings from this study revealed that even after controlling for insurance, income, and disease severity, Black patients were receiving lower quality care [9,10].

A pivotal survey was conducted by the Commonwealth Fund in 2001 to assess the quality of healthcare based on race. The study was conducted using a sample size of 1,037 Americans that identify as Black or Black out of a total sample size of 6,722 [11]. Results from this survey provided evidence of racial disparities economically and in the quality of healthcare.

Income and access make a difference on your quality of healthcare or whether you end up receiving healthcare at all. This is evidenced by a survey conducted by Collins and Colleagues (2001). The results revealed that 59% of Black individuals were less likely to have job-based insurance and were more likely to rely on public programs. The survey also revealed that 50% of Black individuals reported annual income at or near poverty levels as compared to 30% of White individuals. Furthermore, regular doctor access was assessed as consistent access to a doctor that knows of your health status and that addresses all your concerns. It was found that 28% of Black individuals reported not having a regular doctor and cite emergency rooms, "nowhere", and clinics as usual sources of care as compared to 9% of white individuals. This previous evidence suggests that income does not protect a Black woman from the risk of dying from pregnancy complications. It is a racial systematic issue that needs to be considered [11].

Perceived Stress and Postpartum Depression

The interaction of perceived stress and postpartum depression has an impact on the mothers' postpartum experience, which can be detrimental for the mother and the baby. This is evidenced by a study conducted by Sidor and his colleagues (2011) that involved assessing Black non-clinical mother-infant dyads at psychosocial risk. The psychosocial risks they focused on included poverty, alcohol or drug abuse, and lack of social support. The findings from this study suggested that mothers that reported higher postpartum depression reported higher perceptions of parenting stress. Another study conducted by Suárez-Rico and his colleagues (2021) involved collecting data on postpartum Mexican mothers between August and September 2020. The purpose of this study specifically was to look at the perceived stress accumulated from COVID-19 by a postpartum mother. The findings from this study revealed that depression, anxiety, and perceived stress was higher during the COVID-19 pandemic lockdown for Mexican postpartum mothers than previously reported in literature [12,13].

Postpartum depression also known as perinatal depression is a mood disorder that can affect women during and after childbirth. Symptoms include anxiety, feelings of extreme sadness, and fatigue that can make it difficult for them to carry out daily tasks, including caring for themselves and others. Previous research suggests that postpartum depression is caused by an integration of environmental and genetic factors. Some environmental factors could be experiences of past trauma, while genetic factors can be a family history of depression.

Previous studies have measured postpartum depression by using the tool known as the Edinburgh Postnatal Depression Scale, which screens women for psychological distress. The prevalence of depression and anxiety for women during pregnancy was 16 percent and 19 percent after pregnancy. Halbreich and Karkun (2006) conducted a comprehensive review of depression attributing the

cultural differences in young women reporting and understanding depression. Perinatal depression is another form of depression that constitutes being depressed during pregnancy. The risk for suicidality is significantly elevated among depressed women in the perinatal period and has been found to be the second leading cause of death in the depressed population of pregnant women [14-16].

Perceived Racism and Postpartum Depression

The relationship of perceived racism and postpartum depression is important to look at given that systemic racism is constantly negatively impacting Black women and mothers. This is evidenced by a study conducted by Stepanikova & Kukla (2017), which involved collecting survey data mid-pregnancy and at 6 months postpartum on Black mothers with low and high education. The findings revealed that Black mothers with low education perceived higher racism and discrimination, which was in turn associated with higher odds of postpartum depression. Another study by Rosenthal and colleagues (2015) involved examining changes across pregnancy and postpartum as it relates to perceived discrimination for Black and Hispanic mothers [18]. The findings revealed that according to the age of the mother, perceived discrimination increased and decreased between trimesters and strongly predicted anxiety and depression among Black and Hispanic mothers that reported food insecurity [17,18].

The current study assessed the differences in perceptions of the healthcare community across annual income and perceived stress levels, and the relationship between perceived stress, perceived racism, postpartum depression, and the perceptions of the healthcare community among Black women. With the minimal amount of information on this topic there is a need for further research on maternal mortality and solutions as it pertains to Black Women and the role of perceived discrimination. The following research questions were explored (1) Are there differences in perceptions of the healthcare community for women that report high levels of stress and those that report low levels of stress? (2) Do the perceptions of racism moderate the relationship between Black women's perceptions of the healthcare community and stress and (3) Are there differences in the perceptions of the medical health care community for Black women across income level? (4) Does the combination or combined influence of perceptions of the healthcare community and income predict postpartum depression than either variable alone?

Methods

Research Design

To understand the differences in perceptions of the healthcare community across annual income, and the relationship between perceived stress, perceived racism, & postpartum depression among Black women, survey methodology was used. Twenty percent of data were randomly reentered. Frequency and distributions were run to ensure data is in acceptable data ranges. Non-Parametric Independent Sample T-tests were run to investigate differences in the perceptions of the healthcare community across stress and income. Spearman Rho correlations were run to investigate relationships between primary variables. Standard, Multiple, and Hierarchical regressions were run to investigate the moderating role of perceived racism and combined influence of perceptions of the healthcare community and annual pre-tax income.

Participants

Two-Hundred Nineteen Black mothers were recruited for the present study and solicited through agencies that provide services to expecting mothers in the Triangle Area. Black mothers were also solicited via online platforms such as Facebook, Instagram, and Tiktok. The only requirements or exclusions were that all participants must be at least 18 years of age or older, had a baby within the last two years, and identify as Black or of African descent. Finally, Cohen's (1992) power analysis determined that for results to be significant at the .05 alpha level, and using a medium effect size, the present study needed a total of at least 85 participants to assess perceptions of the healthcare community, perceived stress, perceived racism, and postpartum depression. However, given that regression analysis needed to be performed, 200 was needed according to Fidell [19,20].

Regarding the participants in this study, 9.6% were 18-25 years old, 20.5% were 25-30 years old, 32.9% were 30-35 years old, and 37% were 35 years of age or older. In terms of their level of education, 6.4% of the participants were continuing education students, 1.4% non-degree seeking, .5% undergraduate freshmen, 2.3% sophomore, 3.7% junior, 6.4% senior, 42.5% Bachelor's, 10% Master's/Doctoral, and 19.6% Associate's. 95.9% of the participants reported being enrolled full-time in school. 33.8% of the participants in the study reported being married.

In terms of socioeconomic status, 2.7% reported having an income of $15,000 or less, 34.7% reported having an income of $45,001-$60,000, and 5.5% reported making approximately over $100,000 a year. Regarding children, 74.5% of the participants reported having 3 children or less, while 6.4% of participants reported having a total of five or more children. Regarding children that were given birth to within the last five years, 89.4% of the participants reported having 1-2 children, while 1.9% of the participants reported having a total of four or more children. In terms of prenatal care, 95% of the participants reported having received it, while 5% reported not receiving prenatal care.

Regarding mental health counseling during or after pregnancy, 22.9% of the participants reported having received counseling, while an average of 89% of participants reported not receiving counseling and 92.2% of the participants reported experiencing financial difficulties, while 7.8% reported experiencing no financial difficulties. Roughly 90.9% of the participants reported being the primary caregiver of their children. Fifty point two percent of the participants reported having 3-4 family members or friends that help raise the child, while 33.8% of the participants reported having 4 or more family members or friends that help.

Forty-five-point two percent of the participants reported that they have sometimes seen media coverage regarding maternal health, while 7.8% of the participants reported that they have very often seen media coverage regarding maternal health. Thirty-nine point three percent of the participants reported that they have sometimes heard family or friends discuss maternal health, while 11.4% of the participants reported that they have very often heard family or friends discuss maternal health. Thirty point six percent of the participants reported having attended maternal health support groups sometimes, while 19.2% of the participants reported having attended maternal health support groups very often (Table 1).

Table 1: Descriptive Statistics for Participants' Demographic Information.

Variable	Mean	SD	n	%
Age			219	**100**
18-25			21	9.6
25-30			45	20.5
30-35			72	32.9
35 or Older			81	37
Race/Ethnicity				
African			15	6.8
Black American			104	47.5
Afro-Black Caribbean			48	21.9
Afro-Black Latin X			38	17.4
Afro Latino			14	6.4
Region				
Northeast			19	8.7
Southwest			47	21.6
West			52	23.9
Southeast			63	28.9
Midwest			37	17
Missing			1	
Enrollment Status				
Part-Time			9	4.1
Full-Time			209	95.9
Missing			1	
Education				
High-School Diploma/GED			16	7.3
Freshman			1	.5
Sophomore			5	2.3
Junior			8	3.7
Senior			14	6.4
Bachelor's Degree			93	42.5
Continuing Education Student			14	6.4
Masters/Doctoral/Professional			22	10
Non-Degree Seeking			3	1.4
Associates degree			43	19.6
Marital Status				
Single			13	5.9
In a Relationship			81	37
Married			74	33.8
Separated			25	11.4
Divorced			20	9.1
Widowed			6	2.7
Annual Income				
$15,000 or less			6	2.7
$15,001 - $30,000			19	8.7
$30,001 - $45,000			45	20.5
$45,000 - $60,000			76	34.7
$60,001 - $80,000			50	22.8
$80,000 - $100,000			11	5
Over $100,000			12	5.5
Number of Children				
1			24	11
2			56	25.6
3			83	37.9
4			42	19.2
5+			14	6.4
Number of Children in the last Five years				
1			119	54.8
2			75	34.6
3			19	8.8
4			3	1.4
5+			1	.5
Missing			2	
Prenatal Care During Pregnancy				
No			11	5
Yes			208	95
Pregnancy Complications				
No			19	8.7
Yes			199	91.3
Missing			1	
Mental Health Services During Pregnancy				
No			196	88.1
Yes			26	11.9
Missing			1	
Mental Health Services After Pregnancy				
No			195	89
Yes			24	11
Financial Difficulties During Pregnancy				
No			17	7.8
Yes			201	92.2
Missing			1	
Average Work Hours/ Week				
5 hours or less			8	3.7
5-10 hours			16	7.3
10-15 hours			102	46.6
15+ hours			93	42.6
Number of Jobs				
None			4	1.8
One			83	38.1
Two			95	43.6
Three			32	14.7
More than Three			4	1.8
Missing			1	
Primary Caregiver				
No			20	9.1
Yes			199	90.9
Number of Family/Friends That Help				
1-2			35	16
3-4			110	50.2
4+			74	33.8
Media on Maternal Health				
Very Often			17	7.8
Often			86	39.3
Sometimes			99	45.2
Not at All			17	7.8
Maternal Health discussed. By Family/Friends				
Very Often			25	11.4
Often			72	32.9
Sometimes			86	39.3
Not at All			36	16.4
Maternal Health Support Groups				
Very Often			42	19.2
Often			47	21.5
Sometimes			67	30.6
Not at All			63	28.8
N=219				

Measures

Demographics

Demographic information was collected by asking the participants to indicate their age, race or ethnicity, region of the U.S. in which they were born, current or previous enrollment status in school, highest level of education received, marital status, annual pre-tax income, number of children, number of children they had within the last five years, whether they received prenatal care during pregnancy, whether they experienced pregnancy complications, whether they received counseling during or after pregnancy, whether they experienced financial difficulties during pregnancy, how many hours a week they work, how many jobs they hold, whether they are the primary caregiver, and number of family or friends that help with child caring. The questionnaire also assessed aspects of the individual's awareness about maternal health outcomes and if they have attended maternal health support groups for women of color.

Perceptions of the Healthcare community

The Discrimination in Medical Settings Scale

In 1997, David Williams and his colleagues cultivated a scale known as the Everyday Discrimination Scale (EDS) [21]. This widely utilized and measure of self-reported discrimination was adapted and modified into the DMS. The Discrimination in Medical Settings Scale is a 7-item 5-point Likert scale (1-never, 2-rarely, 3-sometimes, 4-most of the time, 5-always) used to assess discrimination in medical settings. Some examples of items are as follows: 1) You are treated with less respect than other people. 2) A doctor or nurse is not listening to what you were saying. 3) A doctor or nurse acts as if he or she thinks you are not smart. 4) The doctor or nurse acts as if he or she is afraid of you. This measure was found to be of good internal reliability; Cronbach's alpha for the 7-item scale was 0.89 or higher. This measure also expanded upon the previous measures of discrimination and provided more focus on defining experiences of discrimination in healthcare settings.

Perceived Stress

Perceived Stress Scale

In 1983, Sheldon Cohen and his colleagues cultivated a scale known as the Perceived Stress Scale (PSS) [22]. This is the most widely used psychological instrument for measuring the perception of stress within the last 30 days. The Perceived Stress Scale (PSS) is a 10-item 4-point Likert scale (0-never, 1-almost never, 2-once in a while, 3-often, 4-very often). Some examples of items are as follows: 1) In the last month, how often have you felt that things were going your way? 2) In the last month, how often have you found that you could not cope with all the things that you had to do? 3) In the last month, how often have you felt nervous and stressed? 4) In the last month, how often have you felt that you were on top of things? This measure was found to be of good internal reliability; Cronbach's alpha for the 10-item scale was 0.70 or higher. This measure also expanded upon the previous measures of stress.

Perceived Racism

The Perceived Racism Scale.

In 1996, Mcneily and her colleagues cultivated a scale known as the Perceived Racism Scale (PRS) [23]. This scale was created to assess the experiences of white racism against Blacks in multiple domains including employment and public domains. The Perceived Racism Scale (PSS) is a 14-item 4-point Likert scale (0-never, 1-rarely, 2-sometimes, 3- fairly often, 4-very often). Some examples of items are as follows: 1) How often in the past year have you had difficulty getting a loan because you are Black? 2) How often during your life have waiters and waitresses ignored you and served whites first? 3) How often in the past year have people "talked down" to you because you are Black? 4) How often in the past year have you experienced being followed, stopped, or arrested by White police more than others because of your race? This measure was found to be of good internal reliability; Cronbach's alpha for the 14-item Likert scale was 0.70 or higher. This measure also expanded upon the previous measures of racism.

This scale was adapted to be appropriate for use in a cohort of Black mothers that have had a baby within the last two years. The Adapted Perceived Racism Scale (PSS) is a 12-item 5-point Likert scale (1-never, 2-less than once a year, 3-a few times a year, 4- about a few times a month, 5-once a week or more). Some examples of items are as follows: 1) How often have you been made to feel intimidated or less intelligent by doctors or nurses? 2) How often have you had a doctor or nurse make minimal eye contact with you or don't give you a thorough physical examination? 3) How often do you feel that you have had to work twice as hard to explain your symptoms to a doctor for them to take you seriously? 4) How often do you feel that you are ignored or not taken seriously by doctors or nurses? This measure was found to be of good internal reliability; Cronbach's alpha for the 12-item scale was 0.925. This measure also expanded upon the previous measures of racism.

Postpartum Depression

The Edinburgh Postnatal Depression Scale

In 1987, Cox and colleagues developed this scale to assist health professionals in detecting mothers that are suffering from postpartum Depression [24]. Postpartum is defined as a prolonged "blues" that can begin for the mother within a week after delivery of the baby. The Edinburgh Postnatal Depression Scale (EDPS) is a 10-item 3-point Likert scale (0-yes, all of the time, 1-yes, most of the time, 2-no, not very often, 3-no, not at all). Some examples of items are as follows: 1) I have felt miserable or sad.2) I have been so unhappy that I have been crying. 3) The thought of harming myself has occurred to me. 4) I have been so unhappy that I have had difficulty sleeping.

Procedures

To assess the differences in perceptions of the healthcare community across annual income, and the relationship between perceived stress, perceived racism, and postpartum depression, the present researcher submitted the study to the NCCU Institutional Review Board for approval. After receiving approval, the researcher contacted maternal health agency directors to gain permission

to solicit participation from their mothers. The researcher also solicited participation from social media platforms such as Facebook, Instagram, and TikTok. The data was collected via an online survey on Qualtrics where the participants first completed a consent from, the demographic measure, and then completed the Discrimination in Medical Settings Scale, Perceived Stress Scale, The Perceived Racism Scale (Adapted), and The Edinburgh Postnatal Depression Scale to examine the variables. Participants were provided with a list of local mental health resources at the end of the survey [14-21].

Results

Data analysis was conducted using the SPSS 29.0 software. Frequency distributions were run to ensure that the data was within normative ranges. Spearman Rho correlations were calculated to examine the primary variables and demographic variables. Multiple and hierarchical regressions were utilized next to view to what extent perceived racism is a moderator for perceptions of the medical health community and perceived stress. As well as the combined influence of perceptions of the healthcare community and annual pre-tax income as predictors of postpartum depression. Median scores were created for each scale (see Table 2).

Preliminary Analysis

In order to understand differences in the healthcare community across income, and the relationship between perceived stress, perceived racism, and postpartum depression among Black women Spearman Rho correlations were run. Spearman Rho correlations to assess the relationship between primary variables. The results revealed that there was a significant positive relationship between perceptions of the healthcare community and perceived stress (r_s=.75, p≤0.001). Perceptions of the healthcare community was related to perceived racism (r_s=.67, p≤0.001). Perceived racism was related to perceived stress (r_s=.68, p≤0.001). Perceived stress and postnatal depression were negatively associated and not significant, however, it was approaching (r_s=-.13, p=.06). Perceived stress and postnatal depression were negatively related (r_s=-.14, p≤0.05). The Annual Pre-Tax Income was not significantly related to any of the primary variables (Tables 2 and 3).

Table 2: Psychometric Properties (Medians and Ranges for Primary Variables).

Variables	***Mdn***	***IQR***
Perceived Stress (PSS)	29	14-40
Perceived Racism in Medical Settings (PRS)	49	12-60
Postpartum Depression (PND)	14	4-37
Perceptions of the Medical Health Care Community (DMS)	26	7-35

Table 3: Correlation Results for Primary Variables

Variables	**API**	**PND**	**DMS**	**PSS**	**PRS**
Annual Pre-Tax Income (API)	___				
Postpartum Depression (PND)	-.017	___			
Discrimination in Medical Settings (DMS)	-.028	-.110	___		
Perceived Stress (PSS)	.026	-.141*	.752**	___	
Perceived Racism (PRS)	.017	-.130	.671**	.675**	

p≤.05* p≤.01** p≤.001***

Hypothesis 1: Differences in Perceptions of the Healthcare Community Across Levels of Stress

To assess differences in perceptions of the Healthcare community across levels of stress, a Mann Whitney U Test was run. The Mann Whitney U Test indicated that negative perceptions of the healthcare community were greater for individuals that reported higher levels of stress (*Mdn*=29) than those that had lower levels of stress (*Mdn*=21) (See Table 4a) that reported high levels of perceived stress (*U*=10638.5, p≤0.05) (see Table 4b).

Hypothesis 2: Perceptions of Racism as a Moderator between Perceptions of the Healthcare Community and Stress

In the first regression analysis, perceptions of racism were examined as a moderator between the perceptions of the healthcare community and perceived stress. The first regression model accounted for 49% of the variance (R^2=.49., F (1,218)=, p≤0.001). Independently, perceived racism was associated with perceived stress among Black women (b=.70, p≤0.001). The results of the second regression model explained that these combined variables accounted for 62% of the variance (R^2=.617, F (2,218)=, p≤0.001) and perceptions of the healthcare community was associated with perceived stress in Black women (b=.53, p≤0.001). In the third model of the regression analysis, the interaction term (perceptions of the healthcare community x perceived racism) was entered into the model to determine the possibility of moderation. The model was significant and accounted for 63% of the variance (R^2=.63, F (3,218)=, p≤0.001), and there was evidence for moderation (ΔR^2=.009, ΔF=4.95). Independent Samples Non-Parametric Mann Whitney U Tests were run and individuals who were high in perceived stress (Mdn=52) reported significantly more racism than individuals that were low in perceived stress (Mdn=43) (U=10077.5, p≤0.001)) (Table 5).

Table 4a: Statistics: Perceptions of the Medical HealthCare.

Community across levels of Stress	
Stress Group	DMS
1 Median	21
2 Median	29

Table 4b: Independent -Samples Mann-Whitney U.

Stress Group	
1 (n=219)	2 (n=219)
Perceptions of the Medical HealthCare Community (DMS) 67.79	Mean Rank Z-Value 152.60 -9.921

Table 5: Moderator Analysis: Perceived Racism and Perceptions of the Medical Health Care Community on Perceived Stress.

	β	p	R^2	ΔR^2
Model 1 Perceived Racism (PRS)	.70	.001***	.49	.49
Model 2 Perceptions of the Medical Health Care Community (DMS)	.53	.001***	.62	.13
Model 3 PRS x DMS	.49	.001***	.63	.01

*p≤ .05, **p≤.01, ***p≤.001

Hypothesis 3: Perceptions of the Healthcare Community and Income

To assess mean differences in the perceptions of the healthcare community, a One-Way ANOVA was run. Results of the ANOVA indicated that there was significant mean difference in perceptions across income $F(6, 218)=6.79$, $p\leq0.001$) (Table 6). Post Hoc analysis using Tukey and Bonferroni indicated that individuals that made $45,000-$60,0000 reported more favorable views of the healthcare community than those who made $30,000 and less and individuals who made over $100,000.

Hypothesis 4: Perceptions of the Healthcare Community and Annual Pre-Tax Income as Predictors Postpartum Depression

The fourth hypothesis predicted that Perceptions of the Healthcare community and Annual Pre-Tax Income combined will be better predictors of Postpartum Depression than either variable alone. Standard and multiple regressions were run. Independently, perceptions of the healthcare community accounted for 3% of the variance in postpartum depression among Black women $F(1, 218)=5.52$, $p\leq0.05$) (See Table 7) and was a significant negative predictor of postpartum depression among Black women ($b=-.16$, $p\leq0.05$). Independently, annual pre-tax income accounted for less than 1% of the variance in postpartum depression among Black women $F(1,218)=.25$, $p=ns$ and was not significantly associated with postpartum depression ($b=.03$, $p=ns$). Combined in the regression model, perceptions of the healthcare community and annual pre-tax income accounted for 3% of the variance and the model was approaching significance $F(2, 218)=2.962$, $p\leq0.054$ (See Table 7). Thus, hypothesis 4 was not supported but approaching significance.

Discussion

Findings

The current study was conducted to better understand differences and relationships in perceptions of the healthcare community, annual pre-tax income, perceived stress, perceived racism, and postpartum depression. In doing so, we hoped to provide detailed results about the relationships between these variables while also pinning down potential underlying factors. Research on perceptions of the healthcare community, annual pre-tax income, perceived stress, perceived racism, and postpartum depression among Black women has been largely qualitative. The current study sought to assess the relationship between perceptions of the healthcare community, annual pre-tax income, perceived stress, perceived racism, and postpartum depression.

Table 6: One-Way ANOVA: Perceptions of the Medical Health Care Community across Income.

Source	df	SS	MS	F	p	N
Between Groups	6	1369.321	228.220	6.79	<.001***	218
Within Groups	212	7129.237	33.628			218
Total	218	8498.557				

p< .05* p< .01** p< .001***

Table 7: Predictors of Postpartum Depression.

	β	p	R^2
Model 1 Perceptions of the Medical Health Care Community (DMS)	-.157	.020*	.025
Model 2 Annual Pre-Tax Income	-.034	.620	.001
Model 3 DMS + Income	-.204	.001***	.018

*p< .05, **p<.01, ***p<.001.

We found a statistically significant difference in perceptions of the healthcare community between participants reporting high versus low perceived stress. This finding is consistent with prior literature examining healthcare mistrust, discrimination, and stress among Black women. Previous studies have shown that negative healthcare experiences and perceived discrimination are associated with increased psychological distress and stress-related outcomes [18-25]. For example, Cuevas and colleagues have documented that African American adults who report greater mistrust in healthcare institutions also report poorer psychological outcomes, including heightened stress and negative emotional responses related to healthcare encounters. Qualitative and quantitative studies by Cuevas and colleagues further indicate that experiences of discrimination, poor communication, and lack of respect in medical settings contribute to diminished trust and increased stress among Black patients [8,25]. These experiences are frequently framed as discrimination-related stressors rather than isolated interpersonal events. Related work has also demonstrated that medical mistrust and perceived discrimination are associated with adverse mental health outcomes among Black patients, including anxiety and depressive symptoms. Studies using established measures of physician mistrust and institutional medical mistrust have shown that discriminatory healthcare experiences contribute to stress and disengagement from care [26,27].

We found evidence of a moderation effect; women that were low on the PRS reported higher stress and those that were high in PRS reported less stress. Black women who had higher perceptions of racism reported higher levels of stress, whereas Black women that had lower perceptions of racism reported lower levels of stress. These findings are consistent with previous research by Suárez-Rico and his colleagues (2021) involved collecting data on postpartum Mexican mothers between August and September 2020 [13]. The purpose of this study specifically was to look at the perceived stress accumulated from COVID-19 by a postpartum mother. The findings from this study revealed that depression, anxiety, and perceived stress was higher during the COVID-19 pandemic lockdown for Mexican postpartum mothers than previously reported in literature.

We also found that there was a statistically significant mean difference in perceptions of the healthcare community across incomes. More specifically, we found that lower and higher income Black mothers reported less favorable views of the healthcare community than the middle-class income Black mothers. These findings could indicate that lower income women have a perceptual bias or potentially received subpar levels of care. Middle-class income women have insurance and certain expectations along with a certain level of education about the

prenatal process. High income women have insurance, have the money to pay for prenatal health experts, and may live with a heightened awareness of racism. and the resources to pay for experts.

We lastly found that perceptions of the healthcare community accounted for more of the variability in postpartum depression than annual pre-tax income as an independent predictor. These findings are consistent with previous research while adding more information to the literature about Black women [28].

Conclusions

The purpose of this study was to assess differences in perceptions of the healthcare community across annual income, and the relationship between perceived stress, perceived racism, and postpartum depression. The results from this study give distinctive insight into Black women's pregnancy and birthing experience, as well as how varying factors such as annual pre-tax income and social support, can act as potential buffers for postpartum depressive symptomatology. Future research is warranted given maternal and mental health challenges among the population and continued systematic racism and negative perceptions of the healthcare community.

Future studies investigating the relationship between perceptions of the healthcare community, perceived stress, perceived racism, and postpartum depression may benefit greatly from more extensive participant solicitation techniques via the internet (i.e., snowballing, purposive sampling) and in-person data collection in maternal health agencies. It is imperative that the researcher takes time to build relationships (i.e., volunteering, participating in different events or activities, etc.) with the maternal health agencies before soliciting participants. It is also imperative that future research focus on empowering Black women, through programmatic activities, to be aware of and then effectively manage the morbidities that are most associated with poor clinical maternal outcomes [29].

References

1. Novoa C, Taylor J (2018) Exploring African Americans' high maternal and infant death rates. *Center for American Progress*. Available from: https://www.americanprogress.org/issues/early-childhood/reports/2018/02/01/445576/exploring-African-Americans-high-maternal-infant-death-rates
2. *Centers for Disease Control and Prevention* (2021) Working Together to Reduce Black Maternal Mortality.
3. Lister RL, Drake W, Scott BH, Graves C (2019) Black Maternal Mortality-The Elephant in the Room. *World J Gynecol Womens Health* 3(1): 10.33552/wjgwh.2019.03.000555. [crossref]
4. Koblinsky M, Chowdhury ME, Moran A, Ronsmans C (2012) Maternal morbidity and disability and their consequences: neglected agenda in maternal health. *J Health Popul Nutr* 30(2): 124-130. [crossref]
5. Pieterse AL, Todd NR, Neville HA, Carter RT (2012) Perceived racism and mental health among Black American adults: a meta-analytic review. *J Couns Psychol* 59(1): 1-9. [crossref]
6. Brandon DT, Isaac LA, LaVeist TA (2005) The legacy of Tuskegee and trust in medical care: is Tuskegee responsible for race differences in mistrust of medical care? *J Natl Med Assoc* 97(7): 951-956. [crossref]
7. Blair IV, Steiner JF, Fairclough DL, et al. (2013) Clinicians' implicit ethnic/racial bias and perceptions of care among Black and Latino patients. *Ann Fam Med* 11(1): 43-52. [crossref]
8. Cuevas AG, O'Brien K, Saha S (2016) African American experiences in healthcare: "I always feel like I'm getting skipped over". *Health Psychol* 35(9): 987-995. [crossref]
9. Okoro ON, Hillman LA, Cernasev A (2020) "*We get double slammed!*": Healthcare experiences of perceived discrimination among low-income African-American women. *Womens Health (Lond)* 16: 1745506520953348. [crossref]
10. Berry J, Caplan L, Davis S, et al. (2010) A black-white comparison of the quality of stage-specific colon cancer treatment. *Cancer* 116(3): 713-722. [crossref]
11. Collins KS, Tenney K, Hughes DL (2002) Quality of health care for African Americans: findings from the Commonwealth Fund 2001 health care quality survey. New York, NY: *The Commonwealth Fund*
12. Sidor A, Kunz E, Schweyer D, Eickhorst A, Cierpka M (2011) Links between maternal postpartum depressive symptoms, maternal distress, infant gender and sensitivity in a high-risk population. *Child Adolesc Psychiatry Ment Health* 5(1): 7. [crossref]
13. Suárez-Rico BV, Estrada-Gutierrez G, Sánchez-Martínez M, et al. (2021) Prevalence of Depression, Anxiety, and Perceived Stress in Postpartum Mexican Women during the COVID-19 Lockdown. *Int J Environ Res Public Health* 18(9): 4627. [crossref]
14. Fisher J, Cabral de Mello M, Patel V, et al. (2012) Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bull World Health Organ* 90(2): 139G-149G. [crossref]
15. Halbreich U, Karkun S (2006) Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *J Affect Disord* 91(2-3): 97-111. [crossref]
16. Lindahl V, Pearson JL, Colpe L (2005) Prevalence of suicidality during pregnancy and the postpartum. *Arch Womens Ment Health* 8(2): 77-87. [crossref]
17. Stepanikova I, Kukla L (2017) Is Perceived Discrimination in Pregnancy Prospectively Linked to Postpartum Depression? Exploring the Role of Education. *Matern Child Health J* 21(8): 1669-1677. [crossref]
18. Rosenthal L, Earnshaw VA, Lewis TT, et al. (2015) Changes in Experiences With Discrimination Across Pregnancy and Postpartum: Age Differences and Consequences for Mental Health. *American Journal of Public Health* 105(4): 686-693. [crossref]
19. Cohen J (1992) A power primer. *Psychol Bull*. 1992 112(1): 155-159. [crossref]
20. Tabachnick BG, Fidell LS (2007) Using multivariate statistics. 5th ed. New York, NY: Pearson Education.
21. Williams DR, Yu Y, Jackson JS, Anderson NB (1997) Racial differences in physical and mental health: Socio-economic status, stress and discrimination. *J Health Psychol* 2(3): 335-351. [crossref]
22. Cohen S, Kamarck T, Mermelstein R (1983) A global measure of perceived stress. *J Health Soc Behav* 24(4): 385-396. [crossref]
23. McNeilly MD, Anderson NB, Armstead CA, et al. (1996) The perceived racism scale: a multidimensional assessment of the experience of white racism among African Americans. *Ethn Dis* 6(1-2): 154-166. [crossref]
24. Cox JL, Holden JM, Sagovsky R (1987) Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry* 150: 782-786. [crossref]
25. Cuevas AG, O'Brien K (2019) Racial centrality may be linked to mistrust in healthcare institutions for African Americans. *J Health Psychol* 24(14): 2022-2030. [crossref]
26. LaVeist TA, Isaac LA, Williams KP (2009) Mistrust of health care organizations is associated with underutilization of health services. *Health Serv Res* 44(6): 2093-2105. [crossref]
27. Bazargan M, Cobb S, Assari S (2021) Discrimination and Medical Mistrust in a Racially and Ethnically Diverse Sample of California Adults. *Ann Fam Med* 19(1): 4-15. [crossref]
28. Hansotte, E, Payne, S. I, Babich, S. M (2017) Positive postpartum depression screening practices and subsequent mental health treatment for low-income women in Western countries: a systematic literature review. *Public Health Reviews*, *38*(3) [crossref]
29. Collins-McNeil J, Edwards CL, Batch BC, Benbow D, McDougald CS, et al. (2012) A culturally targeted self-management program for African Americans with type 2 diabetes mellitus. *Can J Nurs Res* 44(4): 126-141. [crossref]

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