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The Weathering Hypothesis:

Sociocultural and Biological Factors of Postpartum Depression Among Black Women

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Postpartum depression (PPD) is defined by the *Diagnostic and Statistical Manual, Fifth Edition* (2013) under peripartum depression. Peripartum depression refers to Major Depressive Disorder occurring during or in the first four weeks following pregnancy. Skalkidou and colleagues (2012) define PPD as a major depressive episode occurring in the first four weeks after childbirth in which the episode must last two consecutive weeks. Sue and colleagues (2016) defines depression as a mood state that is identified by feelings of sadness, despair, and worthlessness and withdrawal from activities and others. Women with PPD typically have similar symptomology to those with Major Depressive Disorder (Howard et al., 2015).

Pregnancy and the postpartum period have been shown to be periods of heightened susceptibility to depressive episodes (Rich-Edwards, 2006; Ross et al., 2004). PPD is seen across the globe impacting many women and children every year (Liu et al., 2016). In western countries, approximately 10 to 20 percent of women who have had children have experienced PPD. Although there is not a single cause for PPD, it can arise because of biological, psychological, social, and sociocultural causes. In many cases, PPD is induced by a combination of two or more of the above factors.

Black women experience higher rates of PPD than their White counterparts. To date, no one has linked experiences of racism and discrimination, the impacts racism and discrimination have on allostatic load, and the subsequent process of weathering to the elevated levels of PPD in Black women. However, the Weathering Hypothesis can be utilized to explain the higher rates

of PPD seen in Black women via the interactions between sociocultural factors and biological factors.

Outcomes of PPD

PPD can have many negative outcomes on women with PPD and their children. Many instances of PPD begin during pregnancy. Depression beginning in pregnancy may lead to adverse birth outcomes such as low birth weight and preterm birth (Giurgescu et al., 2015). Negative birth outcomes impact an infant's physical and neurological development.

PPD affects mothers and children immensely. A mother with PPD can have severe impairment in her ability to care for her children (Amankwaa, 2003). According to Bina (2008), mothers suffering from PPD may also have thoughts of harming themselves or their children and are less emotionally available to their children resulting in the child having a less secure attachment to their mother. Infants with mothers who have PPD have shown to have developmental delays and behavioral problems in infancy on top of the abnormal attachment behavior that is commonly seen in these infants (Reid & Taylor, 2015).

Mothers with PPD interact with their children in a way that can have long lasting effects on the child. When an infant's mother develops PPD, it impacts that child's motor, cognitive, emotional, and social aspects of development (Stepanikova & Kukla, 2017). Bina (2008) states that the way in which mothers interact with their children in infancy will have an impact on these children later in life.

Biological Factors

When a woman becomes pregnant, biological alterations and adaptations must occur in order to accommodate the growing fetus and the mother. After parturition, the new mother's

body once again undergoes changes to accommodate her needs and the needs of the newborn, such as lactation (Yim et al., 2015). The rapidly changing biological systems in the mother, dramatically impacts the new mother's mental health.

Stress and the Hypoactivation of the HPA Axis

The stress response is linked to the development of PPD. Stress can be defined as an individual's psychological response when the environment is considered to be burdensome beyond what that individual has the resources to handle (Giurgescu et al., 2015). All pregnancies and births are stressful due to the changes that women and their families are required to make in order to accommodate a new child in their home (Walker et al., 2016). These changes often prove disproportionately stressful on women because of the nature of the changes that must take place and the gender roles that exist in the United States. Life stress has shown to be higher in minority groups, such as Black individuals, than in White individuals. Liu and colleagues (2016) found that Black women report three or more life stressors than White individuals most of the time. The higher prevalence of stressful life events in Black women compared to White women may be, in part, responsible for the higher rates of PPD seen in Black women. Stress and negative emotions in the peripartum period has a direct effect on PPD (Ross et al., 2004; Stepanikova & Kukla, 2017).

Stress also impacts the development of PPD because of the activation of the hypothalamic-pituitary-adrenal axis (HPA axis) and its resulting actions on the body. The HPA axis is responsible for controlling the stress response. In a stressful situation, the hypothalamus relays information to the pituitary gland which in turn relays information to the adrenal gland. This information informs the adrenal gland to release hormones into the body (Skalkidou et al., 2012). The HPA axis dictates whether or not a situation is considered to be stressful enough to

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activate the sympathetic nervous system which is known for its involvement in the fight or flight response. The fight or flight response is an adaptive mechanism that allows individuals to respond to life-threatening situations. However, when the sympathetic nervous system is overactivated, it can lead to biological dysregulation.

Cortisol is one of the hormones that is released by the adrenal gland during a stressful situation that plays a role in the fight or flight response. However, cortisol also plays a large role in the regulation of other bodily systems and functions such as glucose metabolism, heart rate, and blood pressure (*Hormone Health Network*, 2018). Elevated levels of cortisol within the body leads to bodily dysregulation. The bodily changes that occur because of the activation of the sympathetic nervous system and the increase in cortisol within the body can lead to alterations in bodily systems, including those that indicate mental health.

During the last trimester of pregnancy, 28 weeks pregnant to parturition, alterations begin in the HPA axis including an increase in cortisol levels. Cortisol levels reaches its peak during the last months of pregnancy at levels that are about three times higher than basal cortisol levels of women who are not pregnant (Skalkidou et al., 2012). This leads to the HPA axis to decrease its responsiveness to cortisol resulting in the hypoactivation of the HPA axis. The hypoactivation of the HPA axis occurs as an adaptive measure so that the body is not continually responding to the elevated levels of cortisol. Women with PPD commonly experience a hypoactivation of their HPA axis (Skalkidou et al., 2012).

Endocrine Disruptions

The perinatal period causes large changes within the endocrine system as the body prepares for parturition and nursing. In a healthy, adult woman, the endocrine alterations that pregnant women undergo would be considered unhealthy (Skalkidou et al., 2012). Particularly,

there is a large decrease in the reproductive hormones estradiol and progesterone, that has been linked to PPD in women who are in the postpartum period. Reproductive hormones are responsible for a wide range of bodily function. Studies have also found a decrease in estrogen receptor sensitivity, leading to a decrease in activation of the reproductive hormone system.

During pregnancy, reproductive hormone levels increase at a rate that is not comparable to any other biological event a woman undergoes (e.g. menstruation or menopause). After the birth of the child, women experience a large decrease in estradiol and progesterone as their body's return to equilibrium. Both estrogen and progesterone play a role in the regulation of depressed moods. Withdrawal from estradiol, fluctuations in the level of estradiol, and sustained low levels of estradiol are all linked to depressive mood states (Yim et al., 2015). Because the women withdraw from estradiol and progesterone during the postpartum state, there is an increased vulnerability to the development of PPD.

Cortisol's Impact on the Endocrine System. The increase in cortisol levels within the body also has an impact on the endocrine system. Butler (2018) found that the changes in levels of estradiol and cortisol within the postpartum period result in estradiol and cortisol circadian rhythms to become altered. A circadian rhythm is a cycle that lasts about 24 hours that dictates bodily functions. The alteration of the circadian rhythms manifests itself by altering the time of day in which an individual will experience the peak levels and lowest levels of the two hormones, resulting in the decoupling of the estradiol and cortisol phases inducing the misalignment of estradiol and cortisol's circadian rhythms.

Cortisol levels also impact progesterone levels within the postpartum period. When cortisol levels increase, progesterone levels decrease because the two hormones are derived from the same biological precursors. When an individual is under stress, the body will prioritize the

production of cortisol in order for the body to handle the stress that the individual is experiencing (Yim et al., 2015). The stress involved in pregnancy and parenting causes the decrease in progesterone levels and the increase in cortisol levels in the postpartum period.

Alterations in Serotonin

Progesterone is thought to be protective against depression because of it modulating effects on serotonergic activity (Yim et al., 2015). The decrease in progesterone levels after parturition directly impact serotonergic activity. Serotonergic activity involves the hormone serotonin which is a neurotransmitter that has many functions throughout the body, including bone health, blood clotting, and mood regulation. When serotonin levels are disrupted, there are negative consequences on an individual's physical and mental health.

Major Depressive Disorder has been linked with abnormalities in serotonin levels. Skalikdou and colleagues (2012) state that they believe that genetic variation in the serotonin transporter gene may be the cause of the abnormal levels of serotonin. Because serotonin is said to play a large part in Major Depressive Disorder, they hypothesized that serotonin also plays a major role in the development of PPD as well. In their study, they found that for many women, the postpartum period is marked by a deficit in serotonergic activity. Specifically, women who have been diagnosed with PPD have lower platelet levels of serotonin, and they have altered serotonin binding sites.

Dietary Behaviors

Even after a woman gives birth, their diet can impact their child. The main way this occurs is through breastfeeding, if a woman chooses to do so. Dietary behaviors can also have an impact on the woman (Walker et al., 2016). Previous research has shown that having a diet low in nutrition can lead to depression and/or eating disorders due to weight gain. Changes in

diet can dramatically affect women who are in the postpartum period. Postpartum women may excessively diet to lose the weight they gained while pregnant, or they may eat unhealthily for a number of reasons. Three of these reasons may be a decrease in the amount of time the woman has to make food, not being able to afford healthy food options, or lack of partner support. This is especially true for Black women because they are disproportionately affected by partner absence (Holst, 2018). Without a partner, support, time, and money are all limited resources making it difficult to justify buying more expensive foods simply to be healthy.

The Racial Discrepancy

As mentioned earlier, approximately 10 to 20 percent of women in westernized countries report experiencing PPD after the birth of a child. However, Black women in the United States are experiencing PPD at a prevalence rate of 30 percent. Giurgescu and colleagues (2015) hypothesized that the increased rates for Black women is due to the chronic disadvantage that is associated with being a member of a minority group.

Reid and Taylor (2015) state that although there is some evidence that supports the fact that racial and ethnic minorities are more likely to experience PPD, there is also some research that Black individuals have a lower lifetime prevalence of depression when compared with their White counterparts. They go on to explain that minority groups are less likely to report PPD than White women for multiple reasons.

Bodnar-Deren and colleagues (2017) state that although Black women do not report their PPD, they still experience PPD at higher rates than White individuals. They suggest that, for Black women, the stigma of having a mental illness is higher than it is for White women. The researchers also call attention to the fact that mistrust in the medical field, due to lack of

representation, historically being taken advantage of, and not being listened to and decrease in access to resources among Black women may lead to the lower rates of reported PPD.

Sociocultural Factors

Sociocultural factors are the impacts that society and culture have on an individual.

Social Disadvantage

Social disadvantage can lead to the development of PPD due to the fact that it is chronic in nature. Social disadvantage refers to placing an individual in an unfavorable position within society because of their race or ethnicity with no regard given to an individual's unique qualities (*Legal Information Institute*, 2016). Chronic social disadvantage is a detriment to an individual's overall health (Walker et al., 2016). Therefore, women who experience chronic social disadvantage have an increased risk of developing PPD. Chronic social disadvantage disproportionately affects minority groups, including Black women, due to marginalization. Marginalization can be defined as placing an individual in a powerless or low position within society (*Merriam-Webster Dictionary*). Reid and Taylor (2015) suggest that these findings may be as a result of the stress involved in living and coping with chronic disadvantage.

Chronic social disadvantage disproportionately affects minority groups because of systemic racism and because minority groups experience social and economic adversity more often than the majority group (Liu et al., 2016). In many cases, perceived adversity leads to more negative life experiences. Black individuals, in particular, experience elevated levels of negative life events leading to inflated levels of depressive symptoms than their White counterparts. Therefore, social disadvantage can at least partially explain why Black women suffer from PPD at higher rates than White women.

Stepanikova and Kukla (2017) found that White individuals with a higher SES have lower rates of depression. This finding did not generalize to Black individuals. Socioeconomic advantage did not buffer the negative effects that discrimination had on the development of PPD in Black women.

Discrimination. Discrimination during anytime in an individual's life has been linked to depression, anxiety, and overall poor health. The perinatal period is an especially vulnerable time for women, therefore increasing the risk of health concerns, including PPD, during this time. Stepanikova and Kukla (2017) found that Black women who reported experiencing discrimination are 2.43 times more likely to suffer from PPD. This finding suggests that discrimination is a major risk factor for PPD in Black women.

Stereotypes. Like discrimination, stereotypes play a large role in the development of PPD among Black women. Many Black women have been shown to internalize stereotypes regarding their role within society. These women are required to live up to unrealistic expectations set forth for them by past generations and media representations (Amankwaa, 2003). Black women are stereotypically said to be superwomen. Many of the women in this study have said that their mothers and grandmothers seemed to live up to the superwoman stereotype, and when they themselves could not live up to the stereotypes, they reported experiencing feelings of failure. Amankwaa (2003) noticed that there specifically seemed to be a disconnect between the woman's real self and ideal self-arising from the standard set by past mothers.

Environment. One major social factor that impacts PPD is the environment in which the women live. Giurgescu and colleagues (2015) conducted a study on pregnant women's' neighborhood environment and how that impacts the development of PPD. The existence of

disorder, both physical and social, and higher levels of crime in a neighborhood is related to an increase in depressive symptomology in the peripartum period. Neighborhood disorder and crime disproportionately affect Black women, due to systemic racism, impacting the higher rates of PPD found in Black women.

Women who live in disadvantaged neighborhoods may also lack the social support required to buffer the negative effects their environment can have on their mental health. When a woman does not have enough social support, they are more likely to suffer from PPD and depressive symptomology increases within these individuals (Giurgescu et al., 2015; Walker et al., 2016).

In most cases, women identified their partner as their main supporter. When a woman was a single mother, it increased the risk for her to develop PPD. Amankwaa (2003) also found that being unhappy or discontent in one's marriage led to lower spousal support, again increasing the likelihood of PPD. Lack of a partner is most common in minority women (Holst, 2018). The lack of a partner could be part of the disproportionately high levels of PPD displayed by Black women.

Socialization

Women also identified that the way in which they were socialized had an impact on their PPD. Within Amankwaa's (2003) study, it was found that many Black women believed that PPD was a White woman's mental illness. They believed that they could not get PPD. Because of this, many Black women did not know that their symptoms were indicative of PPD, and many times they did not recognize their feelings and behaviors as signs of PPD. These misconceptions led to women denying their PPD and uncertainty about receiving treatment. Many of the women in the study also stated that they had been socialized to be a strong Black woman, and to deal

with whatever life throws at them (Amankwaa, 2003). They were taught to do this without thoughts of their physical or mental health, further supporting the negative role gender and racial socialization can play on the development of PPD.

Black women are also commonly socialized to keep secrets. Keeping secrets was a theme identified by Amankwaa (2003). Historically, slavery forced Black individuals to learn to keep their opinions, emotions, and struggles to themselves in order to survive. Because of the race-consciousness of society today, Black individuals are still socialized to keep to themselves in order to perpetuate the repression of a group of people. Because Black women are socialized to keep to themselves, they will not reach out for help when and if they need it.

Symptomology

Sociocultural factors not only impact the onset of PPD, but it also affects how the disorder is displayed. The DSM-5 (2013) describes a depressive episode as having a depressed mood most or all the days of at least a two-week period, less interest in activities, weight gain or weight loss, insomnia, hypersomnia, cognitive delays, decreased energy, or thoughts of death. The above symptoms must cause the individual distress that significantly interferes with their daily routine. However, the symptoms listed in the DSM-5 (2013) does not take into account cultural variation. Instead it provides a biased diagnosis centered around White, western culture which is problematic because culture plays a large role in the symptomology an individual displays. Amankwaa (2003) found that Black women and White women in the United States experience PPD differently. Because Black women may experience depression different than the way in which the DSM-5 (2013) describes it, Black women's PPD may go unrecognized and untreated (Cooper et al., 2001).

Resiliency

Although sociocultural factors can have a negative impact on an individual's mental health, sociocultural factors can also have a positive influence on an individual's mental health. Resiliency factors provided by an individual's sociocultural identity can provide protective factors against mental illness, and they can be used in the treatment of mental illness.

Spirituality and Religion. For many Black individuals, psychological well-being is positively correlated with religious involvement/spirituality. Therefore, it can be said that religion and spirituality are very important to many Black individuals and may aid in the treatment process. Research has shown that Black women rate the importance of religion and spirituality to play a more significant role in their treatment of depression than did White women (Cooper et al., 2001). Many Black women were also more invested in the idea of spiritual counseling rather than traditional counseling or antidepressants. In the long run, they believed spiritual counseling would help them more than taking medication prescribed to them by a doctor, who, in many cases, they did not trust (Bodnar-Deren et al., 2017). Amankwaa (2003) noted that even if the women received medical treatment, they stated that spiritual counseling and their religion helped them cope more than professional medical care, once again noting the mistrust that many Black women have towards medical professionals.

One common theme that arouse in the literature regarding religion and spirituality is the importance of prayer. In fact, prayer is in the top ten most important aspects of treating depression identified by Black women. Many Black women felt that prayer allowed for better coping skills and an increase in their well-being (Cooper et al., 2001). Prayer is so important to Black women that Amaknwaa (2003) found that every participant in their study used the word prayer when speaking about their recovery from PPD at least once.

Partner Support. Another major protective factor against the development of PPD was live-in partner support. Black individuals often sport the claim that interpersonal relationships and social networks are very important to them and their well-being (Liu et al., 2016). Having a live-in partner not only protected against the development of PPD but also helped individuals with PPD cope (Reid & Taylor, 2015). Having a live-in partner provides support to the new mother. The partner is also there to help care for the child and complete household tasks as needed. Having a partner also suggests that there may be another income, so financial strains may not affect these women as intensely as if they were trying to work and care for a newborn on their own (Rich-Edwards et al., 2006).

Sociocultural Impact on Biological Factors

The discrimination and marginalization that black women undergo on a daily basis leads Black women to experiencing minority stress. Minority stress can be defined as the stress experienced by members of a minority group that is unique to minority group members. Individuals within the majority cannot experience minority stress. Black women experience more stress on a daily basis than their white counterparts because they experience everyday life stressors, but they also experience minority stressors in addition to everyday life stress. This stress results from Black women worrying about their minority status and how society will react to their minority status.

Because black women experience more stress on a daily basis, Black women have an increase activation of their nervous system, which causes an increase in the production of the hormone cortisol. The increase in cortisol causes bodily dysregulation. Over extended periods of time elevated levels of cortisol and bodily dysregulation leads to the premature aging of Black

women, also known as the Weathering Hypothesis. The Weathering Hypothesis in turn leads to the higher prevalence rates of PPD among Black women when compared to white women.

The Weathering Hypothesis

The Weathering Hypothesis postulates that Black individuals experience earlier health deterioration than White individuals as a result of marginalization (Geronimus et al., 2006; Foster, Hagan, & Brooks-Gunn, 2008). The weathering hypothesis is functional because of allostatic load which refers to the body's reaction to repeated experiences of stress. Allostatic load is calculated through the use of biomarkers. A biomarker is a substance within the body that indicates whether or not there is dysregulation in the body. The most commonly used biomarkers are blood pressure, cholesterol, and the amount of sugar within one's blood. The lower an individual's allostatic load score is, the healthier the individual is said to be. Therefore, high allostatic load scores are indicative of bodily dysregulation.

On the cellular level, constantly coping with stress can adversely impact one's health.

Black individuals constantly cope with the stress of living in a race-conscious society in which they are stigmatized and disadvantaged. The accumulation of stress on a Black individual causes a disproportionate decline in health resulting in early morbidity and mortality and higher allostatic load scores in Black individuals when compared to their White counterparts.

High allostatic load scores are correlated with older age. Because Black individuals have higher allostatic load scores than White individuals, it can be said that Black individuals' physiological age is older than their chronological age. In a study conducted by Geronimus and colleagues (2006), Black individuals also have significantly higher allostatic load scores than White individuals. Geronimus and colleagues (2006) found that White individuals between the

ages of 35 and 44 have an average allostatic load score of 2.37 while Black individuals within the same age range have an average allostatic load scores of 2.96.

Black women had especially high scores which may be attributed to their intersecting minority identities as both a woman and a Black individual. Geronimus and colleagues (2006) found that Black men between the age of 35 and 44 have an average allostatic load score of 2.92 while Black women within the same age range have an average allostatic load score of 3.00. By the time a Black woman is 45, she is 50 % more likely to have a high allostatic load score. By age 64, more than 80 % of Black women in the study had a high allostatic load score. When compared to their White counterparts, by the age of 64, White women only reached levels of 60%.

Geronimus and colleagues (2006) also found that the socioeconomic status (SES) of an individual did not account for the differences in allostatic load scores that were observed between the Black and White individuals in their study. They claim that Black individuals who were considered nonpoor were more likely to have a high allostatic load score than White individuals who were considered poor.

The Weathering Hypothesis's Impact on PPD

As mentioned previously, older chronological age is associated with higher allostatic load. Women who have children at a late age are more likely to develop PPD due to birth complications and the physical toll of childbearing. Birth complications are more common among older mothers (Muraca & Joseph, 2014). Birth complications can make having a child more stressful for older mothers. Another reason why older mothers may develop PPD more often is because of the physical toll that childbearing has on a woman's body. A younger mother

may be able to bounce back from delivery faster than a woman who is older because it may take more time for an older woman's biological systems to return to their basal levels.

Black women, like older women, have high allostatic load scores. Therefore, black women are more likely to develop PPD after the birth of a child for the same reasons that older women are more likely to develop PPD, birth complications and the toll childbearing takes on the body. However, this does not mean that Black women are having children later than their White counterparts. Instead, Black women are physiologically or internally older than White women their same age.

Summary

PPD affects approximately 10 to 20 percent of postpartum women in westernized countries, however Black women experience PPD at higher rates than this, at 30 percent. Currently research does not connect the Weathering Hypothesis to PPD. Through the use of the Weathering Hypothesis, it can be seen that sociocultural factors, discrimination and marginalization, have an impact on biological systems including those that dictate mental health. These biological alterations lead to the development of PPD. Because Black women experience increased levels of stress resulting in increased bodily dysregulation, and in turn, elevated rates of PPD. However, sociocultural factors can also lead to higher resiliency among Black individuals and unique treatment options for Black individuals.

Discussion

Implications

Treatment Options. Using an individual's sociocultural factors could be a beneficial tool for practitioners as it may provide insight as to what protective factors may exist within an

individual. Some medications may be prescribed for the treatment of PPD, but these must be prescribed with caution due to the popularity of breastfeeding. Breastfeeding is a time in which chemicals in the mother's body can be transferred over to the infant. This will impact the infant's growth and development, and in some cases may cause brain abnormalities to occur. Because of this, non-pharmacological treatments are preferred for women in the postpartum period (Howard et al., 2015).

The use of religion and spirituality may have a positive impact on Black women who are being treated for PPD (Cooper et al., 2001). Encouraging Black women to seek support at their place of worship, whether that be from congregation members or religious leaders, may have a positive impact on a Black woman's coping process. Another similar option would be having Black women have scheduled praying time where they pray alone or in a group (Amankwaa, 2003). Allowing Black women to include their religious/spiritual side into their PPD treatment may allow them to cope more effectively through social support and through a decrease in self-blame.

Peer support-based programs may also help Black women who do not have a live-in partner or partner support. One particular program is peer-based and involves support from a network of women over the phone (Howard et al., 2015). Programs like this are especially important to consider for Black women with PPD because minority women are less likely than their White counterparts to have a partner and are more likely to be single mothers (Holst, 2018). If the woman has a partner, therapy sessions involving the woman and her partner may be beneficial because it allows the woman to communicate what she needs from her partner, but also allows the partner to communicate what they are capable of providing. Partner-based

therapy sessions also allow for time to discuss the relationship between the two individuals rather than solely focusing on the infant, strengthening the relationship and communication skills.

Limitations

One major limitation in this line of research is the exclusion of PPD from the *DSM-5* (2013). Because PPD is listed under major depressive disorder with peripartum onset, research on PPD is limited. The absence of PPD from the *DSM-5* (2013) may lead to low funding for PPD, so there is limited research on PPD. Therefore, PPD does not receive an adequate amount of attention which may result in negative outcomes for mothers with PPD and their children such as thoughts of harm and abnormal attachment behavior, respectively.

Another limitation of the research is the inclusion of all Black women living within the United States within the studies. A few of the studies did not specify if their population was strictly United States born Black women or if their studies included Black women who had emigrated from other countries. This is problematic because Black women from Africa or the Caribbean do not experience the same levels of minority stress. They do not experience the same levels of minority stress as Black women born within the United States because women who have emigrated did not spend their formative years in a country where they were the minority. Black women who have emigrated to the United States have also spent less time in the country, therefore they have experienced less minority stress.

Future Research

Future research should focus on other groups of minority women and their experiences with PPD. Specifically, research should focus on the factors within a woman's culture that may be protective factors against the development of PPD, and those that predispose that individual to the development of PPD. Using the information gathered on individual cultures, research can be

done on treatment methods specific to cultural values using the protective factors found within that culture.

Future research should also focus on the link between other mental illnesses and the Weathering Hypothesis. This is especially true for biologically based illnesses because sociocultural factors, such as racism and discrimination, have an impact on an individual's biological systems. Understanding exactly how sociocultural factors impact the biological factors within mental illnesses may lead to a more diverse range of treatment options.

Conclusion

Black women experience PPD at higher prevalence rates than White women. This discrepancy can be explained through the Weathering Hypothesis which postulates that Black individuals experience earlier health deterioration when compared to their White counterparts due to marginalization (Geronimus et al., 2006). Utilizing the Weathering Hypothesis, sociocultural factors such as discrimination and marginalization lead to Black women experiencing higher levels of stress stemming from their minority status, minority stress.

Minority stress leads to higher levels of overall stress in Black women. Having higher levels of stress leads to more bodily dysregulations which is indicative of premature aging. Similar to older women, Black individuals experience more birth complications and pregnancy takes a larger toll on their body. Black women experience these complications at higher rates because of the premature aging Black women experience. Premature aging and birth complications seen within Black women lead to the higher rates of PPD that Black women experience.

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