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The Influence of the COVID-19 Pandemic on At-Risk Populations Experiencing Stress and Family Violence: The Importance of An Action Model.

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Introduction

This paper attempts to show how experiences with the COVID-19 pandemic have contributed to stress and related family violence in at-risk or vulnerable populations (e.g., primarily in families of color) using a prescribed directional social epidemiological model called the Action Model for Reducing Racial and Ethnic Health Disparities (AMFRREHD) (Livingston, 2004).

The intent of this paper is very ambitious as it attempts to show how the COVID-19 pandemic, within the last few years, has had an unequal and devastating impact on families of color. While the many affects between the COVID-19 pandemic on families of color are varied, this paper attempts to discuss and explain its impact on family violence within these families of color (African Americans, Hispanics, and Indigenous People). For example, information will be presented about how the COVID-19 pandemic has exasperated the stressful experiences of parents and children in these families that contributes to a variety of violent activities and a host of other selected outcomes (e.g., anxiety, depression, cognitive declines) within the families. The enormity of the task requires a directional and schematic model to identify the root causes of the problem, thereby creating a better understanding and designing intervention and policy recommendations to reduce the COVID-19 pandemic-family violence relationship.

A modified version (to suit the parameters involved) of the AMFRREHD was created to better frame and understand the complex series of events at macro societal levels, through meso of community levels, and ending up with micro of individual-like experiences. To achieve this very important objective, after relationship statements are made that are related to the designated parameters of the Action Model, a notation is made of the lettered parameters illustrated in the model. The paper concludes with a summary of the narrative presented, some policy suggestions, and some resources to be utilized to improve the lives and living experiences of at-risk individuals for stress, COVID-19, and family violence.

The Impact of COVID-19 on At-Risk Black and Latino Communities

Coronavirus disease 2019 (COVID-19) is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Huang et al., 2020). The coronavirus (COVID-19) pandemic has revealed deep-seated inequities in health care for communities of color and amplifies social and economic factors that contribute to poor health outcomes. The Affordable Care Act (ACA) helped narrow some disparities in health coverage, access, and utilization, but groups of color continue to fare worse compared to Whites across many of these measures as well as across measures of health status. (Artiga & Orgera, 2019). Recent news reports indicate that the pandemic disproportionately impacts communities of color, compounding longstanding racial disparities. As of April 15, 2020, case data from CDC show that in COVID-19 cases where race was specified, Blacks, who comprise 13% of the total U.S. population (Doumas et al., 2020), make up 30% of

COVID-19 cases; Latinos, who make up 18% of the population (Doumas et al., 2020), account for 17% of COVID-19 cases (Artiga & Orgera, 2019; CDC, 2020).

According to the CDC (2020), communities of color are at increased risk for experiencing serious illness if they become infected with coronavirus due to higher rates of certain underlying health conditions compared to Whites. Older individuals; immunocompromised people (e.g., those with poorly controlled HIV/AIDS or undergoing cancer treatment), and individuals with underlying health conditions, such as diabetes, heart disease, and asthma and lung disease; have a greater risk of becoming severely ill if infected with coronavirus.

An Overview of Typical Kinds of Violence in the Family Context

Although violence in families varies a great deal, there are some basic patterns that reveal themselves. This paper argues that at-risk populations were more likely to see an uptick in these acts and the ensuing stress that comes with this experience during the COVID-19 pandemic.

Forms of victimization usually include physical abuse, psychological or emotional abuse, sexual abuse, neglect, and exposure to intimate partner violence (Higgins & McCabe, 2001). Self-report surveys reveal worldwide estimations of prevalence rates of 22.6% for physical abuse, 36.3% for emotional abuse, 7.6% among boys and 18% among girls for sexual abuse, 16.3% for physical neglect, and 18.4% for emotional neglect (Stoltenborgh et al., 2015).

Regarding childhood exposure to intimate partner violence, the data available are still limited (Latzman et al., 2017); however, it is estimated that between 133 million and 275 million children are exposed to this kind of violence each year (Pinheiro, 2006). Despite the gaps in the recording of child victimization experiences (Saini et al., 2019), these high rates of violence and exposure to family violence reveal that interpersonal violence against children constitutes a serious global social and (public) health problem (WHO, 2013).

Marital Rape

It is estimate that between 10 and 14% of married women experience rape in their marital relationships at least once (Russell, 1990). Based on findings from one of the largest studies on violence against women in the United States, it is estimated that 7.7 million women have been raped by their intimate partners (Mahoney et al., 2001). Rape by one's intimate partner may be one of the most common types of sexual assault. Women who are battered by their partners may be at particularly high risk for sexual violence (Mahoney et al., 2001; UN Women, 2020). Research also indicates that women who are separated or divorced from their partners are also frequently at high risk for sexual violence (DeKeseredy et al., 2005).

Elder Abuse

It is estimated that approximately 1 to 2 million Americans age 65 or older have been abused or neglected by the very people they entrust with their care and protection

(National Center on Elder Abuse, 2005). The National Center on Elder Abuse distinguishes between the following seven types of elder abuse:

- *Physical abuse*. Use of physical force that may result in bodily injury, physical pain, or impairment.
- *Sexual abuse*. Non-consensual sexual contact of any kind with an elderly person.
- *Emotional abuse*. Infliction of anguish, pain, or distress through verbal or non-verbal acts.
- *Financial/material exploitation*. Illegal or improper use of an elder's funds, property, or assets.
- *Neglect*. Refusal, or failure, to fulfill any part of a person's obligations or duties to an elderly person.
- *Abandonment*. Desertion of an elderly person by an individual who has physical custody of the elder or by a person who has assumed responsibility for providing care to the elder.
- *Self-neglect*. Behaviors of an elderly person that threaten the elder's health or safety (National Center on Elder Abuse, 2005).

Some of the Most Common Types of Child Abuse

Child abuse occurs when a child under the age of 18 is mistreated or neglected by an adult, resulting in harm, the potential for harm, or the threat of imminent harm. The adult may be a relative, caregiver, stepparent, religious figure, coach, or babysitter, though the majority of perpetrators are parents of the child (CDC, 2021). In the United States, children experience abuse or neglect at a rate of 8.9 per 1,000. Child abuse is considered an adverse childhood experience (ACE) that can have long-term impacts on an individual's health and well-being (Child Welfare Information Gateway, 2019).

Child abuse can occur in a single instance or in several instances, but it falls within four main categories: emotional abuse, sexual abuse, neglect and physical abuse (CDC, 2021).

Emotional Abuse. Also called verbal abuse, is persistent, non-physical abuse that makes a child believe they are unwanted, unloved, worthless, or only valuable in meeting their perpetrator's needs (Ammerman & Hersen, 1991).

Sexual Abuse. By law, children cannot consent to sexual acts of any kind. Any sexual activity that occurs between an adult and a minor is considered sexual abuse. In more than 90% of child sexual abuse cases, the child or family knows the perpetrator. Any sexually exploitative act conducted by an adult to a child or in the presence of a child is considered abuse. A perpetrator does not have to touch a child to abuse them sexually (Bureau of Justice Statistics, 2000).

Neglect. This form of abuse occurs in 61% of child abuse cases. It is the most common form of child maltreatment in the United States. Child neglect occurs when a parent or caregiver fails to provide food, shelter, clothing, medical care, or supervision to maintain or protect the child's health, safety, and well-being, resulting in harm or the threat of harm (Children's Bureau, 2019).

Physical Abuse. This represents an act of harm committed against a child that results in injury is physical abuse, even if unintentional. This type of abuse can cause physical and mental health problems in adulthood and is a common cause of child morbidity and mortality (Christian Committee on Child Abuse and Neglect, 2015).

Types of physical abuse include the following:

- Severely shaking a baby, also known as Shaken Baby Syndrome (SBS)
- Hitting or beating a child with a fist or object
- Burning the child with hot water, a cigarette, or an iron
- Kicking
- Tying a child up
- Depriving a child of air or holding them underwater (MedlinePlus, 2022).

Abusive Head Injuries in Children.

Physical abusive injuries remain one of the most visible injuries for children. Although various traumatic head and brain injuries have been reported as a result of infants and children being abused, perhaps the most important type is Shaken Baby Syndrome, which is a subset of Abusive Head Trauma (AHT). Injuries induced by shaking and those caused by blunt trauma have the potential to result in death or permanent neurologic disability, including static encephalopathy, mental retardation, cerebral palsy, cortical blindness, seizure disorders, and learning disabilities (Christian & Block, 2009). It was reported by Starling et al., (2004) that shaking was the most commonly reported mechanism of injury described in a series of AHT cases in which perpetrators admitted abuse (68% of 81 cases). In addition, blunt impact trauma or impact combined with shaking can result in infant head injuries (Feldman et al., 2001). In severe and fatal cases, concomitant cervical spine injury can sometimes be found (Brenan et al., 2009).

Intimate Partner Violence (IPV) and Traumatic Brain Injury (TBI)

According to the World Health Organization (Violence Against Women Prevalence Estimates, 2018), an estimated 1 in 7 women experienced physical and/or sexual violence from an intimate partner or husband in the past 12 months (13% of all women aged 15–49). These numbers do not reflect the impact of the COVID-19 pandemic, which has increased risk factors for violence against women (Violence Against Women Prevalence Estimates, 2018).

Intimate Partner Violence affects millions of people in the United States each year. Data from CDC's National Intimate Partner and Sexual Violence Survey (NISVS) indicate the following:

- About 1 in 4 women and nearly 1 in 10 men have experienced contact sexual violence, physical violence, and/or stalking by an intimate partner during their lifetime and reported some form of IPV-related impact.
- Over 43 million women and 38 million men have experienced psychological aggression by an intimate partner in their lifetime (Smith et al., 2018).

It has been reported (Masferrer et al., 2000; Corrigan, 2001) that Traumatic Brain Injury or TBI impacts energy, decision-making, the ability to plan and function effectively, and financial independence. In these situations, leaving a domestic abuse situation becomes impossible. Even if some women leave, few physicians or social workers are trained to recognize TBI symptoms. Intimate Partner Violence or IPV, refers to actions committed by a spouse or intimate partner, which can be physical, sexual, or psychological in nature, and can result in significant emotional and bodily harm (WHO, 2021).

IPV was prevalent before the COVID-19 pandemic, with up to 1 in 3 women experiencing it over their lifetime (UN Women, 2020). As public health restrictions remain, violence rates rise, creating a "shadow pandemic" leaving women vulnerable to an overlooked consequence of IPV—brain injury (BI). More than 90% of physical IPV altercations focus on hits to the head, face, and neck and/or strangulation (Sheridan a & Nash, 2007). These reports indicate that IPV, which in many cases can lead to TBI, has increased substantially under the COVID-19 pandemic. This paper reasons that stress is a major outcome of the COVID-19 pandemic on families, therefore resulting in the subsequent outcomes of SBS, IPV and TRI.

The Importance of Using the Modified Action Model for Explaining Racial and Ethnic Health Disparities, the Stress-Family Violence, and COVID-19 Pandemic Relationships

The Action Model for Reducing Racial and Ethnic Health Disparities, or AMFRREHD, is used as a guide to better understand and illustrate the complex series of designated relational factors involved. These factors relate to a complex stress-COVID-19 relationship in the context of family violence, especially among people of color. What is the background associated with the AMFRREHD (Action Model) in this discussion? Basically, the AMFRREHD was designed to streamline and better understand the complex array of factors and conditions that flow from wider macro societal realities, through meso community factors, all of which collectively explain micro experiences in individuals. Ultimately, this complex array of conditions can offer reasonable etiological explanations for a variety of health-specific outcomes, especially in Black, Brown and other minority communities of color. This being the case, it is reasoned that intervention programs and strategies can be implemented to address the etiologic significance of the interconnected parameters identified in the AMFRREHD. See Livingston (2004) for a

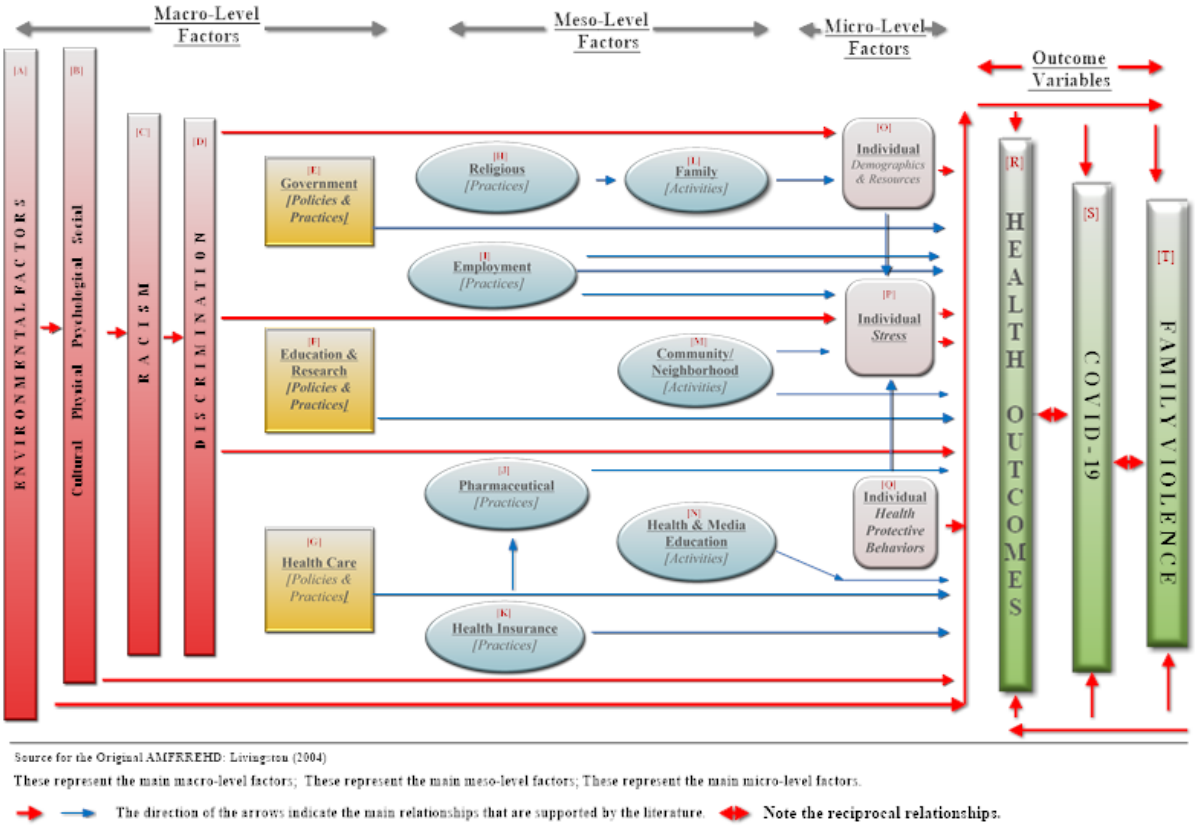
more thorough history of the AMFRREHD, which was, in part, derived from a more structural Environment-Institution-Individual (or E-I-I) Model (see Livingston and Carter, 1994) associated with the Health Field Concept (or HFC). For greater details on the HFC, see Laframboise, 1973 and Canada Department of National Health and Welfare (1974).

A review of the literature indicates that the Action Model, which will be modified to suit this paper, is a process-oriented model that illustrates the interaction pattern of a variety of conditions, i.e., at the macro-level (environmental conditions, racism, discrimination, government polices education research and health care policies and practices), meso-level (the practices associated with religion, employment, pharmaceuticals and health insurance), and the micro-level (the activities associated with families, communities/neighborhoods, health education, demographics stress and health protective behaviors).

As seen and illustrated in Figure 1 via the heavy bold (red) and lighter bold (blue) arrows, there are various macro and meso-levels, both direct and indirect interactions that influence the micro-level factors, including stress, the COVID-19 pandemic, and the possibility of family violence. In short, the derived and modified Action Model seen in Figure 1, depict, for example, how racism (Figure 1: C) and discrimination (Figure 1: D) begin the vicious cycle to better understand how stress (Figure 1: P), along with poor employment experiences (Figure 1: I), lack of health insurance (Figure 1: K), and poor family experiences (Figure 1: L) can contribute our better understanding of the stress-COVID-family violence relationship (Figure 1: P. R, S & T).

It is important to understand the following sequence of events in the paper. To show the relevance of the selected parameters in the model seen in Figure 1, the majority of the relational statements presented toward the meso-level, micro-level, and the major outcome conditions (e.g., Health, COVID-19 and Family Violence) are accompanied by the relevant letters (A through T) associated with the parameters implicated in Figure 1. It is reasoned that in these specific depictions, the Action Model will not only serve as a complement to the narratives presented, but also be seen as targeted strategies for interventions to ultimately help reduce family violence in the future.

Figure 1: Modified Action Model for Reducing Racial and Ethnic Health Disparities (AMFRREHD)



The Social Epidemiology of COVID-19 and Related Contributing Co-Morbidity and Co-Mortality Factors

The COVID-19 pandemic's impact in the United States has exposed long-standing inequities by race, ethnicity, and income (Johns Hopkins Coronavirus Resource Center, 2021). It has been stated that one of the most disturbing aspects of the coronavirus (COVID-19) pandemic in the United States is the disproportionate harm that it has caused to historically marginalized groups. For example, Black, Hispanic, and Asian people have substantially higher rates of infection, hospitalization, and death compared to White people (CDC, 2020; Rubin-Miller et al., 2020).

Persons with low education, low income, or low occupational prestige have the highest rates of morbidity, disability, mortality, psychological distress, and mental disorder compared to those in more advantaged socioeconomic positions (House, 2002). As seen from Figure 1: D, discrimination is the main derivative of the macro-level factors that set up a cascading series of potentially life-threatening relationships and outcomes that end with the major outcomes – poor health, COVID-19, and family violence (Figure 1: R, S, & T). It is important to note that, "Discrimination refers to unfair or unjust treatment by others on the basis of one's gender, race-ethnicity, age, social class, sexual orientation, body weight, or other status characteristics." (Throits, 2010). *See* Figure1: O.

According to an analysis by the Kaiser Family Foundation and the Epic Health Research Network based on data from the Epic health record system for 7 million Black patients, 5.1 million Hispanic patients, 1.4 million Asian patients, and 34.1 million White patients, as of July 20, 2020, the hospitalization rates and death rates per 10,000, respectively, were 24.6 and 5.6 for Black patients, 30.4 and 5.6 for Hispanic patients, 15.9 and 4.3 for Asian patients, and 7.4 and 2.3 for White patients (KFF, 2019; Rubin-Miller, et al., 2020). Indigenous People also have been disproportionately affected by COVID-19 (CDC, 2020) (see Figure 1: G, O, R & S*).*

A variety of poor social and economic outcomes experienced by minority communities perpetuate poor racial and ethnic health outcomes regarding COVID-19. Most of these major conditions are presented in Figure 1 and will be alluded to here. For example, given that the unemployment and uninsured rates for African Americans are higher than average, their access to healthcare facilities is significantly disabling and probably results in under detection of less serious cases (Gaffney & McCormick, 2017) (see Figure 1: C, D, I, J & K).

Another significant factor, which is not frequently discussed, has to do with the historical legacy and fear in the African American community. There is a relatively higher mistrust by African Americans of the healthcare system (Musa et al., 2009). Limited access combined with the mistrust at the healthcare system might result in significant delays in seeking assistance and increased mortality rates in African Americans (Doumas et al., 2020) (see Figure 1: A-D, G, I-K, O, & R-S*).*

Co-Morbidity, Co-Mortality and Contributing Conditions

It is a fact that in the United States, racial and ethnic minority status is inextricably associated with lower socioeconomic status. Black, Hispanic, and Indigenous People in the United States are more likely to live in crowded conditions, in multigenerational households, and have jobs that cannot be performed remotely, such as transit workers, grocery store clerks, nursing aides, construction workers, and household workers. These groups are more likely to travel on public transportation due to lack of having their own vehicle. Even for persons who can shelter at home, many persons with low incomes live with an essential worker and have a higher likelihood of exposure to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection (McCormack et al., 2020).

Current analysis shows that diabetes, hypertension, cardiovascular diseases (CVDs), smoking, and chronic obstructive pulmonary disease (COPD) are among the most prevalent underlying diseases in patients hospitalized with COVID-19 (see Figure 1: O & R). Populations at higher risk for COVID-19 are more likely to become ill, need critical care including mechanical ventilation, and die of the disease (Jordan, Adab, & Cheng, 2020). African American adults have the highest prevalence of hypertension in the US, affecting 40.8% of men and 41.5% of women, in contrast to significantly lower rates in non-Hispanic Whites (NHW), and non-Hispanic Asians (NHA) (Laurencin & McClinton, 2020; WHO, 2013).

The health inequities in the U.S. that impact minority communities were well in place prior to the COVID-19 pandemic. These inequities have become more evident in some cities and states. In Chicago, African Americans make up 30% of the population,

yet they represent 50% of COVID-19 cases and approximately 70% of COVID-19 deaths, most of which are concentrated in small numbers of the most vulnerable communities (Pratt et al., 2021). In the states of Louisiana and Michigan, African Americans are impacted disproportionately by COVID-19 deaths (Reis et al., 2020): African Americans represent 32.2% and 14%, respectively, and account for 70.5% and 40% of COVID-19 deaths, respectively (Associated Press, 2020).

Racial and ethnic disparities in the prevalence of type 2 diabetes (T2D) among adult minority populations have been documented (McBean, Li, Gilbertson & Collins, 2004). COVID-19 patients with diabetes are at increased risk of having adverse clinical complications, including death (Klonoff & Umpierrez, 2020). Globally, a disproportionate burden of chronic obstructive pulmonary disease (COPD) is present among minority communities due to low socioeconomic status, differences in health behaviors, occupational and social environmental exposures, prenatal and childhood exposures, respiratory tract infections, and tobacco use. Social determinants of health, including economic stability, education, access to health care, and environment, play a critical role in establishing health equity that will reduce disparity-related respiratory diseases, such as COPD, during a lifespan (Zhao et al., 2020).

Some Specific Factors that Contribute to Increased Vulnerability for COVID-19 for At-Risk Racial and Ethnic Minorities

The COVID-19 pandemic has brought social and racial injustice and inequity to the forefront of public health. It has highlighted that health equity is still not a reality, as COVID-19 has unequally affected many racial and ethnic minority groups, putting them more at risk of getting sick and dying (Stokes et.al., 2020).

Five important factors affect health equity that put racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19. All five factors are present in Figure 1.

1) **Discrimination** (Figure 1: D): Unfortunately, discrimination exists in systems meant to protect well-being or health. Examples of such systems include health care, housing, education, criminal justice, and finance. Discrimination, which includes racism, can lead to chronic and toxic stress, and shapes social and economic factors that put some people from racial and ethnic minority groups at increased risk for COVID-19 (Simons et al., 2018).
2) **Healthcare access and use** (Figure 1: G & K): People from some racial and ethnic minority groups face multiple barriers to accessing health care. One such important issue is the lack of insurance (Smedley et al., 2003) and a variety of others, such as transportation, childcare, or ability to take time off from work can make it hard to go to the doctor.

3) **Occupation** (Figure 1: O): People in racial and ethnic minority groups often work in essential settings, such as healthcare facilities, farms, factories, grocery stores, and public transportation (US Bureau of Labor Statistics, 2019). Working in these settings can lead to more chances of exposure to COVID-19.
4) **Educational, income, and wealth gaps** (Figure 1: I & O**)**: Overall, people from some racial and ethnic minority groups have less access to high-quality education. Without a high-quality education, people face greater challenges in getting jobs that offer options for minimizing exposure to COVID-19 (Foundation, 2006; Annie Casey Foundation, 2006).

> In his Executive Order on Supporting the Reopening and Continuing Operation of Schools and Early Childhood Education Providers, President Biden expressed our nation's commitment to students across the country: "Every student in America deserves a high-quality education in a safe environment." (Executive Order, 7215, 2021). Yet, this promise of a safe, high-quality education was already out of reach for many students long before the COVID-19 pandemic and could slip further away if we do not act collectively and with attention to equal opportunity for all students (Executive Order, 7216, 2021).
>
> Although the pandemic's effects will be studied for many years to come, we know from early studies that for many students, the educational gaps that existed before the pandemic—in access, opportunities, achievement, and outcomes—are widening. And we can see already that many of these impacts are falling disproportionately on students who went into the pandemic with the greatest educational needs and fewest opportunities—many of them from historically marginalized and underserved groups. These disparities can be a cause for great concern, especially when they interfere with a student's opportunity to learn, grow, and contribute to our nation's future (Office for Civil Rights, 2014).

5) **Housing** (Figure 1: M): Living in crowded conditions can make it very difficult to isolate when you are or may be sick. A higher percentage of people from racial and ethnic minority groups live in crowded housing as compared to non-Hispanic White people and therefore may be more likely to be exposed to COVID-19 (Akintobi, 2020).

These factors and others are associated with more COVID-19 cases, hospitalizations, and deaths in areas where racial and ethnic minority groups live, learn, work, play, and worship (Kim & Bostwick, 2020). They have also contributed to higher rates of some medical conditions that increase one's risk of severe illness from COVID-19. In addition, community strategies to slow the spread of COVID-19 might cause unintentional harm, such as lost wages, reduced access to services, and increased stress, for some racial and ethnic minority groups (Webb et al., 2020).

Understanding the Stress-Family Violence Relationship in the COVID-19 Pandemic and the Importance of Resiliency

Information to Know about the Stress-Health Relationship with Implications for Minorities

The literature on cumulative advantage/disadvantage studies of health outcomes (House, 2002), although not specifically addressing disadvantaged minority subgroups, has three very important contributions to the stress-health relationship seen in Figure 1: P-R. First, differences in physical and mental health by educational level and household income widen significantly with age (see Figure 1: O). Second, health deteriorates earlier and more rapidly over time among those with less education and income (see Figure 1: O & R). Third, the magnitude of the health disparity between Blacks and Whites is greatest among individuals with the least educational advantages and attainment—race and years of schooling interact to further disadvantage African Americans relative to Whites (Walsemann et al., 2008).

According to Throits (1995, 2011), a basic implication that flows from research on stress and health is that broadening access to health care (see Figure 1, G, J & K) is fundamental to understanding effective health policy. Furthermore, the promotion of individual-, meso-, and macro-level changes that reduce stress exposure, foster empowerment, and enhance social integration are important inclusions in future health policy decisions.

As seen in Figure 1: Q, health protective behaviors can affect individuals' (e.g., African Americans) level of stress, hopefully in a positive way. According to Thoits (2010), personal and social assets are important in a protective manner. Three of these assets have emerged in sociological work as particularly efficacious stress-buffers (Thoits, 2010). These include a sense of control or mastery over life, high self-esteem, and social support. All three of these resources positively influence individuals' abilities to cope with stressful demands. Mastery and self-esteem encourage active attempts at problem-solving, and perceived social support, especially perceived emotional support, diminishes stress-induced psychological distress and physiological arousal (Uchino, 2005). Lower status, disadvantaged group members (women, minorities, unmarried persons, working class, and poor individuals) generally have lower levels of these coping resources (Thoits 1995; Turner & Marino 1994; Turner, 2009), which means that they are more at risk of developing ill health and mental health problems (see Figure 1: O, P, & Q).

The Importance of Resiliency

Resilience as currently understood is a dynamic, multidimensional construct that incorporates the bidirectional interaction between individuals and their environments within contexts (family, peer, school and community, and society) (American Psychological Association, Task Force on Resilience and Strength in Black Children and Adolescents (2008). At the individual level, resilience was regarded as purely internal with some researchers arguing that those who adjusted well to severe stressors possessed certain characteristics such as high self-esteem, intelligence, and independence (Herrenkohl et al., 1994; Herrenkohl et al., 2008). However, extensive research on resilience has found that not all resources commonly associated with resilience generate

a positive response to adversity (Phasha, 2010), because resilience changes over time and varies between individuals (Dass-Brailsford, 2005).

Resilient people learn from their experiences and heal from painful wounds. They take charge of their lives, living fully and loving well. Building upon their experience of adversity, they become stronger, more effective people. The experience of adversity is the privilege of all families; however, Black (non-Hispanic African American) families have an abundance of social determinants, such as stress, racism, discrimination, and social exclusion, that create adversity at all social economic levels (Williams et al., 2010) (see Figure 1: C, D, L. P and Q). The application of resilience theory to Black families requires that we consider both the adversity confronting them as individual families and as members of a racial minority and the qualities by which many can thrive and prosper in spite of the adversity (Hollingsworth, 2013). Additionally, any protocol used to strengthen Black family resilience must first understand the indigenous skills Black families employ to overcome circumstances (Walsh, 2003; Hill, 1999). Collectively, family resilience factors create the foundation for a field-practiced approach that supports Black families with culturally sensitive interventions designed to enhance family functioning.

Family Violence, COVID-19 and Stress Among Minorities

Children from historically disadvantaged groups (racial minorities, lower socioeconomic status [SES]) may be particularly susceptible to mental health consequences during the COVID-19 pandemic (Bhogal et al., 2021). Stress and compromised parenting often place children at risk of abuse and neglect. Child maltreatment has generally been viewed as a highly individualistic problem by focusing on stressors and parenting behaviors that impact individual families. However, because of the global pandemic, families across the world are experiencing a new range of stressors that threaten their health, safety, and economic well-being (Brown et al., 2020).

In 2019, approximately 51 million U.S. adults over 18 reported a mental illness, and 7.7% reported a past-year substance use disorder (Center for Behavioral Health Statistics and Quality, 2020). Although reported prevalence estimates of certain mental disorders, substance use, or substance use disorders are not generally higher among racial and ethnic minority groups, persons in these groups are often less likely to receive treatment services (Center for Behavioral Health Statistics and Quality, 2020). Persistent systemic social inequities and discrimination related to living conditions and work environments, which contribute to disparities in underlying medical conditions, can further compound health problems faced by members of racial and ethnic minority groups during the COVID-19 pandemic and worsen stress and associated mental health concerns (Millet, et al., 2020; Kim & Bostwick, 2020) (see Figure 1: C, D, L, N, O, P, R and S).

Food insufficiency was reported three times more frequently by Blacks and two times more frequently by Hispanics than by Whites (Coleman-Jensen et al., 2021). Additionally, stigma, including harassment and discrimination, combined with social or structural determinants of health, such as inadequate access to safe housing, healthy food, transportation, and health care, can increase the risk for chronic stress among persons in racial and ethnic minority groups and potentially affect their mental and physical health, including contributing to poor outcomes from COVID-19 (Kim & Bostwick,

2020; CDC Foundation, 2020; Czeisler et al., 2020) (see Figure 1: C, D, O, P, Q, R and S).

These reported experiences have important identifiable relational information, especially for minority families and children, as seen in Figure 1: C, D, K, L, O, P, R, and T). Reporting and schematizing these empirical relationships in Figure 1 allows for a variety of intervention strategies and programs to reduce the COVID-19-stress relationship and the likelihood of and family violence ensuing in minority communities.

While the literature is relatively sparse about the direct relationship between stress, COVID-19, and family violence, which was mentioned before, there is emerging evidence that all three fundamental concepts are related. This relationship is especially relevant for minorities, especially African Americans. To focus more specifically on African Americans is very important given that when compared to other racial groups, African Americans have a disproportionately higher rate of contracting and dying from COVID-19 (McCormack et al., 2020; Chaney, 2020) (see Figure 1: A, B, C, D, O, P, R, S, & T).

Although the public health benefits of social distancing, isolation, and quarantines (Brooks et al., 2020) are well-established and are essential for reducing the risk of transmitting COVID-19, there are probable consequences for these practices when considering the impact of violence in the home (Humphreys et al., 2020). *See Figure 1: N, Q, R & S*. At the micro level (see Figure 1), children's own stress and uncertainty about the pandemic may add to the tension felt by their parents (Pereda & Diaz-Faes, 2020) *(*see Figure 1: P).

Overall, stressed parents are more likely to respond to their children's anxious behaviors or demands in aggressive or abusive ways. Initial research has shown that the situation caused by the COVID-19 crisis is highly demanding and challenging for parents and significantly increases their global levels of stress (Brown et al., 2020). Previous research has also confirmed that a high-stress home environment is often a major predictor of physical abuse and neglect of children (Patwardhan et al., 2017) (see Figure 1: P, S & T).

Children's exposure to intimate partner violence (IPV), whether directly witnessed or overheard, is harmful and may lead to posttraumatic stress disorder and other serious emotional and behavioral problems (Vu et al., 2016). Furthermore, intimate partner violence and child abuse often occur simultaneously, and it is likely that children will experience increased risk for maltreatment when isolated at home. Under typical (i.e., non-pandemic) circumstances, rates of child maltreatment are alarming. In the United States, 1 in 8 children have confirmed maltreatment by child protective services (CPS) in their lifetime (Wildeman et al., 2014; Herrenkohl et al., 2013). That said, because of these events, the recurrence of maltreatment is high among at-risk children (Kim & Drake, 2019). Coupled with parental anxiety and stress about financial, logistic, and existential concerns, these interactions are likely a recipe for temper outbursts and verbal and physical abuse (see Figure 1: P, S, & T*)*. Young children are the most vulnerable to abuse, with the highest abuse related fatalities among those less than 12 months old (U.S. Department of Health and Human Child Maltreatment, 2018; WHO, 2018; Stoltenborgh et al., 2015).

The coronavirus pandemic also has spawned widespread mental health problems. Recent coronavirus survey data from the U.S. Census Bureau show that 41% of U.S. adults reported symptoms for anxiety (e.g., feeling nervous and/or tense), depressive disorders (e.g., feelings of sadness, tearfulness, emptiness and/or hopelessness), compared to 11% in 2019. They also found that Black and Latino people, as well as women, were more likely to report symptoms of anxiety and depressive disorders (NCHS, 2021; U.S. Bureau of Labor Statistics, 2019). Financial worries and other sources of stress, such as the social isolation many have experienced, are known to contribute to poor mental health (Lewis, 2020). Once again, this ensuing and complex web of relationships is more easily illustrated and understood in the Action Model *(*see Figure 1: D, O, P, Q, R, S & T.*)*

Suggested, Recommendations, Needed Policy Changes, Interventions, Resources and Conclusion

As discussed throughout the paper, without having an Action Model, as the modified AMFRREHD seen in Figure 1, the task of better understanding the complex interplay of factors from the macro-level, through the meso-level to the micro-levels becomes extremely daunting. It is reasoned that without the specific directions shown under each section of the paper, indicating the interplay between most of the major parameters in the Action Model (see Figure 1), it would have proved more difficult to understand. Additionally, it would have been more difficult to follow the complex array of interacting factors that are reasoned to influence the major outcomes of the paper. Therefore, any attempt to better understand the complex array of direct and reciprocal relationships involving stress, COVID-19, and family violence should utilize the Action (and process-oriented) Model seen and aptly illustrated and referenced in Figure 1. Additionally, the carefully drawn parameters, with directional indicators (where some may be bi-directional), which are sequentially labelled, will facilitate possible intervention strategies to minimize the stress-health-COVID-family violence relationship in any future policy-oriented and public health and related exercises.

Recommendations to Follow for Child Abuse

In a published report in Pediatrics, from the American Academy of Pediatrics entitled “Abusive Head Trauma in Infants and Children (Christian & Block, 2009), the following recommendations were made to better understand, evaluate and prevent child abuse in families. These recommendations are very important given the COVID-19 pandemic contribution to stress and the rise in Shaken Baby Syndrome (SBS) and other traumatic brain (TBI) injuries in children discussed before.

1. Pediatricians should be alert to the signs, symptoms, and head injury patterns associated with Abusive Head Trauma (AHT).
2. Pediatricians should know how to begin a thorough and objective medical evaluation of infants and children who present for medical care with signs and symptoms of potential AHT. Consultants in radiology, ophthalmology, neurosurgery, and other subspecialties are important partners in the medical evaluation and can assist in interpreting data and reaching a diagnosis.

3. Pediatricians should consider consulting a subspecialist in the field of child abuse pediatrics to ensure that the medical evaluation of the patient has been completed and that the diagnosis is accurate.
4. Pediatricians should use the term “abusive head trauma” rather than a term that implies a single injury mechanism, such as Shaken Baby Syndrome, in their diagnosis and medical communications.
5. Pediatricians should continue to educate parents and caregivers about safe approaches to calming and coping with crying infants and the dangers of shaking, striking, or impacting an infant's head.

Needed Policy Changes and Interventions Needed at All Levels

As was mentioned in the paper, the task at hand is both complex and daunting and will require changes and major institutional efforts (see Figure 1: A-D, E-G, H-N, & O-Q), hence the major (but surmountable) challenges to be faced ahead. For example, from a government perspective (see Figure 1: E-G), certain policy efforts are needed to offset the inequalities, which are more pronounced during a health care crisis, such as the current COVID-19 pandemic. Addressing these inequities will require a government-appointed race/inequity task force that is designed to implement pre-determined standards of care in minority communities at an early stage in a medical crisis. In addition, special provisions should be made for essential workers (e.g., African American and Latinos). Many of these vulnerable population groups are currently underserved, inadequately equipped with protective devices (against COVID-19 exposure) and are poorly compensated for the vital services they perform on a daily basis (see Figure 1: I, J, K, L, O, P, O, R - T).

Some future directions in policy-relevant stress management have been suggested. For example, although meso-level approaches to altering the stress-generating contexts of individuals’ lives hold real promise, more research is needed to trace the effects of neighborhood disadvantage to residents’ (e.g., disadvantaged African Americans) personal experiences of chronic strains, social isolation, and lack of control (Aneshensel, 2009) (see Figure 1: M, P & Q).

Alcendor (2020) suggested that the longstanding health disparities, such as diabetes, hypertension, CVD (cardiovascular disease), and pulmonary disease among minority populations (primarily Black and Latino) in the U.S. may serve to predispose these communities to the SARS-CoV-2 infection and increased risk for clinically severe COVID-19. Furthermore, the underlying social determinants (e.g., low socioeconomic levels and substandard health care) of health and standards of care in minority communities (see Figure 1: F, I, & O) must be improved to end these disparities. However, such major improvements will require changes in governmental policy and a long-term commitment to minority communities. These changed policies should include early interventions and prevention strategies to reduce or eliminate major healthy disparities on the way to achieving health equity. As discussed earlier in the paper, such changes will positively impact improvements in overall health, reductions in contracting COVID-19, and, in turn, reductions in related family violence (see Figure 1: A, B, C-F O, & P-T).

As was mentioned before, during the pandemic, Black and Latino people, women, and people with lower incomes have faced significantly greater hardships than other groups in the U.S. This has occurred even as Black and Latino people comprise a disproportionately large share of the essential workers critical to the functioning and reopening of the economy (McNicholas & Poydock, 2020). Based on existing evidence, and from a more empirical perspective, the Commonwealth Fund survey indicates that large numbers of Black and Latino adults, as well as people with low income, are struggling to pay for basic necessities and experiencing mental health concerns related to COVID-19. Such findings call for greater investments in the economic security of these disproportionately affected groups, including rent relief, nutrition assistance programs, and expanded access to behavioral health care (Bauer et al., 2020) (see Figure 1: E, G, I, O, R, S and T).

Stress Management Relief

Given that stress plays a very important role in minority (and other racial and ethnic) populations, these at-risk populations are best advised to learn more about stress, thereby improving their overall health and potentially reducing their risk of contracting COVID-19, which in turn can contribute to activities associated with family violence (see Figure 1: M -T.)

A very popular and easy-to-read resource to manage stress is a publication put out by WHO called “Doing What Matters in Times of Stress: An Illustrated Guide” (WHO, 2020).

Some Suggested Resources for Dealing with Family Violence During COVID-19 Pandemic

During the COVID-19 pandemic, relationships within families, as well as minority and vulnerable children in particular in these families, are at greater risk of experiencing stress and a variety of health and behavioral outcomes. As stated by Ragavan and Randell (2020), **“**We know that stress and conflict happen in relationships. This can sometimes include emotional, physical, sexual and financial abuse or controlling behaviors. Some parents are reporting more violence in their relationships because of COVID-19 pandemic. Children may be experiencing more stress during these tense times, too.” These authors offered some protective information for at-risk individuals.

1) Tips on how to support your child,
2) Tips on taking care of yourself,
3) Being aware of resources and safety information, and
4) Remembering that you are not alone in these stressful situations.

Because children experience domestic violence in many ways, it is important to know what some of these varied experiences are to intervene and address these important and pressing issues.

One organization that has done a great deal to educate about how domestic violence affects children is The National Child Traumatic Stress Network (or NCTSN). According to NCTSN (2014), children experience domestic violence in many ways. For

example, some children live with the fear that the harm given to one parent may be the same punishment they will receive one day. While some children may find their own coping strategies and do not exhibit any obvious signs of stress, other children may become depressed, skip school, become anxious and get involved in drugs.

Policy Options to Support IPV Providers and Survivors

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law (Moss et al., 2020), marking the third and largest major legislative initiative to address COVID-19 to date. The CARES Act contains a number of health-related provisions focused on the outbreak in the United States, including paid sick leave, insurance coverage of coronavirus testing, nutrition assistance, and other programs and efforts. It also includes support for the global response. Additionally, the Act also builds on the existing Family Violence and Prevention Services Act (or FVPSA) and provides $2 million for the National DV Hotline. It also awards $45 million to FVPSA formula grants, including for prevention efforts among Indigenous People and state DV coalitions.

Another federally-funded supportive legislation (116th Congress, 2020) is the pandemic and relief legislation called the Heroes Act. This Act proposes to add $100 million for VAWA (Violence Against Women Act) programs, such as transitional housing, which is expected to rise in demand as communities begin reopening. FVPSA programs would get an additional $50 million, $2 million of which will go to the National DV hotline. It would also authorize up to $100 million to community-based organizations to assist low-income women and survivors of domestic violence to protect their financial assets in the event of divorce from an abusive spouse.

Conclusion

As stated at the onset of the paper, this was an ambitious attempt to present a logical argument showing how the influence of the COVID-19 pandemic played a very important role in contribution to at-risk populations experiencing stress and, subsequently, reported increased incidences of family violence. As illustrated and reported, the challenges associated with any attempt to demonstrate how a variety of complex and interacting etiologic factors and conditions that reside at the macro-levels, meso-levels, and micro-levels of society could explain the main outcomes of health, COVID-19 experiences, and family violence required the process-oriented AMFRREHD action model.

The AMFRREHD Model allowed the reader, as well as others, to better understand the flow of the complex relationships that are involved. Additionally, and perhaps more importantly, it provides an action-oriented framework to guide future researchers, policy analysts, community workers, family counselors and others to intervene and establish best practices and strategies to better understand and address the fundamental and complex COVID-19-stress-family violence relationship in minority and at-risk communities.

References

Akintobi, T. H. (2020). Community Engagement of African Americans in the Era of COVID-19: Considerations, Challenges, Implications, and Recommendations for Public Health. *Preventing Chronic Disease*, *17*, 200-255. https://doi.org/10.5888/pcd17.200255

Alcendor, D. J. (2020). Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. *Journal of Clinical Medicine*, *9*(8), 2442. https://doi.org/10.3390/jcm9082442

Aneshensel, C. S. (2009). Toward Explaining Mental Health Disparities. *Journal of Health and Social Behavior*, *50*(4), 377–394. https://doi.org/10.1177/002214650905000401

Annie Casey Foundation. (2006). *Why Equal Opportunity is Important*. Annie Casey Foundation. https://assets.aecf.org/m/resourcedoc/aecf-racemattersEDUCATION-2006.pdf

American Psychological Association, Task Force on Resilience and Strength in Black Children and Adolescents. (2008). Resilience in African American children and adolescents: A vision for optimal development. Washington, DC: Author. Retrieved from http://www.apa.org/pi/cyf/resilience.html (1-24-22)

Ammerman, R. T., & Hersen, M. (1991). Case Studies in Family Violence (Softcover reprint of the original 1st ed. 1991 ed.). Springer.

Artiga, S., & Orgera, K. (2019). Key Facts on Health and Health Care by Race and Ethnicity. In *https://files.kff.org/attachment/Chart-Pack-Key-Facts-on-Health-and-Health-Care-by-Race-and-Ethnicity*.

Associated Press. (2020). *Louisiana Data: Virus Hits Blacks, People With Hypertension*. US News & World Report; U.S. News & World Report. https://www.usnews.com/news/best-states/louisiana/articles/2020-04-07/louisiana-data-virus-hits-blacks-people-with-hypertension?context=amp

Bauer, L., Pitts, A., Ruffini, K., & Schanzenbach, D. (2020). The Effect of Pandemic-EBT on Measures of Food Hardship. Brookings Institution, July 30, 2020. https://www.brookings.edu/research/ the-effect-of-pandemic-ebt-on-measures-of-food-hardship/

Bhogal, A., Borg, B., Jovanovic, T., & Marusak, H. A. (2021). Are the kids really alright? Impact of COVID-19 on mental health in a majority Black American sample of schoolchildren. *Psychiatry Research*, *304*, 114-146. https://doi.org/10.1016/j.psychres.2021.114146

Brennan, L., Rubin, D.M., Christian, C.W., Duhaime, A.C., Mirchandani, H.G., Rorke-Adams, L.B. (2009). Neck injuries in young pediatric homicide victims. *J Neurosurg Pediatr.,3(3)*:232–239.

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, *395* (10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8

Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse & Neglect*, *110*, 104699. https://doi.org/10.1016/j.chiabu.2020.104699

Bureau of Justice Statistics (2000). Sexual Assault of Young Children as Reported to Law Enforcement: Victim Incident and Offender Characteristics. NCJ Number 182990. https://bjs.ojp.gov/library/publications/sexual-assault-young-children-reported-law-enforcement-victim-incident-and

Canada Department Of National Health and Welfare. (1974). *A new perspective on the health of Canadians = Nouvelle perspective de la santé des canadiens: a working document*. Minister Of Supply and Services Canada.

Centers for Disease Control and Prevention, (2020). “People Who Are at Higher Risk for Severe Illness,” April 2, 2020, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html.

CDC Foundation (2020). How right now. Finding what helps. Atlanta, GA: CDC Foundation; 2020. https://howrightnow.orgexternal icon

Center for Behavioral Health Statistics and Quality. Results from the 2019 National Survey on Drug Use and Health: detailed tables. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality; 2020. https://www.samhsa.gov/data/report/2019-nsduh-detailed-tablesexternal icon. Accessed 1-24-2022.

Centers for Disease Control and Prevention. (2020, February 11). *Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/COVID-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html

Centers for Disease Control and Prevention (2021). Preventing child abuse & neglect.

Reviewed March 15, 2021.

Chaney, C. (2020). Family Stress and Coping Among African Americans in the Age of COVID-19. *Journal of Comparative Family Studies*, *51*(3-4), e5134003. https://doi.org/10.3138/jcfs.51, 3-4, 254-273.

Children's Bureau (2019). Child Maltreatment. https://www.acf.hhs.gov/cb/report/child-maltreatment-2019

Child Welfare Information Gateway (2019). Child Maltreatment: Summary of Key Findings.

Christian, CW., & Block, R. (2009). Abusive Head Trauma in Infants and Children. Pediatrics, *123(5),* 1409-1411.

Christian, Committee on Child Abuse and Neglect (2015). The Evaluation of Suspected Child Physical Abuse. Pediatrics. 2015;135(5):e1337–e1354. (2015). Pediatrics, 136(3), 583. https://doi.org/10.1542/peds.2015-2010

Corrigan, J.D., Wolfe, M., Mysiw, J.W., et al., (2001). Early identification of mild traumatic brain injury in female victims of domestic violence. *Clinical Journal of Women's Health,1*,184-90. Online at: http://www.sciencedirect.com/science/article/pii/S0002937803003582

Czeisler, M.É., Lane, R.I., Petrosky, E., et al. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24–30. *MMWR Morb Mortal Wkly Rep, 69,*1049–57.

Dass-Brailsford, P. (2005). Exploring resiliency: Academic achievement among disadvantaged Black youth in South Africa. *South African Journal of Psychology*, *35, 3,* 574–591. doi: 10.1177/008124630503500311

DeKeseredy, W., Schwartz, M., & Fagan, D. (2005). ‘‘Separation/Divorce Sexual Assault in Rural Ohio: Women’s Views of Male Peer Support.’’ Unpublished Manuscript.

Doumas, M., Patoulias, D., Katsimardou, A., Stavropoulos, K., Imprialos, K., & Karagiannis, A. (2020). COVID19 and increased mortality in African Americans: socioeconomic differences or does the renin angiotensin system also contribute? Journal of Human Hypertension, 34(11), 764–767. https://doi.org/10.1038/s41371-020-0380-y

Exec. Order No. 14000, 86 Fed. Reg. 7,215 (2021) Exec. Order No. 14000, 86 *Fed. Reg. 7*,216 (Jan. 26, 2021)

Feldman, K.W., Bethel, R., Shugerman, R.P., Grossman. D.C., Grady, M.S., & Ellenbogen, R.G. (2001). The cause of infant and toddler subdural hemorrhage: a prospective study. *Pediatrics, 108(3),* 636–646.

Foundation, the A. E. C. (2006, December 6). *Race Matters: Racial Equity Impact Analysis*. The Annie E. Casey Foundation. https://www.aecf.org/resources/race-matters-racial-equity-impact-analysis

Gaffney, A., & McCormick, D. (2017). The affordable care act: implications for health-care equity. *Lancet, 389*,1442–52.

Herrenkohl, E., Herrenkohl, R., & Egolf, B. (1994). ‘Resilient early school-age children from maltreating homes: Outcomes in late adolescence. *American Journal of* Orthopsychiatry, 64, 2, 301–309. doi: 10.1037/h0079517

Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Moylan, C. A. (2008). Intersection of Child Abuse and Children’s Exposure to Domestic Violence.

Trauma, Violence, & Abuse, *9*(2), 84–99. https://doi.org/10.1177/1524838008314797

Herrenkohl, T.I., Hong, S., Klika, J.B., Herrenkohl, R.C., & Russo, M.J. (2013). Developmental impacts of child abuse and neglect related to adult mental health, substance use, and physical health. *Journal of Family Violence*, 28(2), 191-199.

Higgins, D. J., & McCabe, M. P. (2001). Multiple forms of child abuse and neglect: adult retrospective reports. *Aggression and Violent Behavior*, *6*(6), 547–578. https://doi.org/10.1016/s1359-1789(00)00030-6

Hill, R. B. (1999). The Strengths of African American families: Twenty-Five Years Later. New York, NY: University Press of America.

Hollingsworth, L. D. (2013). Resilience in Black Families. In D. Becvar (Ed.), Handbook of Family Resilience (pp. 229–243). New York, NY: Springer.

House, J. S. (2002). Understanding social factors and inequalities in health: 20th century progress and 21st century prospects. *Journal of Health and Social Behavior*, *43*(2), 125–142. https://pubmed.ncbi.nlm.nih.gov/12096695/

Huang, C., Wang, Y., & Li, X. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, *395*(10223), 497–506. https://doi.org/10.1016/s0140-6736(20)30183-5

Humphreys, K. L., Myint, M. T., & Zeanah, C. H. (2020). Increased Risk for Family Violence During the COVID-19 Pandemic. *Pediatrics*, *146(1),* e20200982. https://doi.org/10.1542/peds.2020-0982

Coleman-Jensen, A., Rabbitt, M.P.,Gregory, C.A., & Singh, A. (2021. Household Food Security in the United States in 2020, ERR-298, U.S. Department of Agriculture,

Economic Research Service.

Johns Hopkins Coronavirus Resource Center. *COVID-19 Map - Johns Hopkins Coronavirus Resource Center*. (2021).. https://coronavirus.jhu.edu/map.html

Jordan, R. E., Adab, P., & Cheng, K. K. (2020). COVID-19: risk factors for severe disease and death. *BMJ*, m1198. https://doi.org/10.1136/bmj.m1198

Kaiser Family Foundation (2019, November 12). *Key Facts on Health and Health Care by Race and Ethnicity – Health Status – 8878-02*. KFF. https://www.kff.org/report-section/key-facts-on-health-and-health-care-by-race-and-ethnicity-health-status/780. https://doi.org/doi:10.17226/12875

Kim, H., & Drake, B. (2019). Cumulative Prevalence of Onset and Recurrence of Child Maltreatment Reports. *Journal of the American Academy of Child & Adolescent Psychiatry*, *58*(12), 1175–1183. https://doi.org/10.1016/j.jaac.2019.02.015

Kim, S. J., & Bostwick, W. (2020). Social Vulnerability and Racial Inequality in COVID-19 Deaths in Chicago. *Health Education & Behavior*, *47*(4), 109019812092967. https://doi.org/10.1177/1090198120929677

Kim, S.J., Bostwick, W. (2020). Social vulnerability and racial inequality in COVID-19 deaths in Chicago. *Health Educ Behav, 47,* 509–13.

Klonoff, D. C., & Umpierrez, G. E. (2020). COVID-19 in patients with diabetes: risk factors that increase morbidity. *Metabolism*, 154224. https://doi.org/10.1016/j.metabol.2020.154224

Laframboise, H. L. (1973). Health policy: Breaking the problem down in more manageable segments. *Canadian Medical Association Journal*, *108*, 388–393.

Latzman, N. E., Vivolo-Kantor, A. M., Clinton-Sherrod, A. M., Casanueva, C., & Carr, C. (2017). Children's exposure to intimate partner violence: A systematic review of measurement strategies. *Aggression and Violent Behavior*, *37*, 220–235. https://doi.org/10.1016/j.avb.2017.10.009

Laurencin, C. T., & McClinton, A. (2020). The COVID-19 Pandemic: a Call to Action to Identify and Address Racial and Ethnic Disparities. Journal of racial and ethnic health disparities, 7(3), 398–402. https://doi.org/10.1007/s40615-020-00756-0

Lewis, C. (2020, April 8). How the COVID-19 pandemic could increase social isolation, and how providers and policymakers can keep us connected. *To the Point*. https://www.commonwealthfund.org/blog/2020/how-COVID-19-pandemic-could-increase-social-isolation-and-how-providers-and-policymakers

Livingston, I., & Carter, J. (1994). Social status, stress and health: Black Americans at risk. In I.L. (Ed.), *Handbook of Black American Health: The mosaic of conditions, issues, policies and prospects* (pp. 398–417). Greenwood Publishing.

Livingston, I.L., & Carter, J.J. (2004). Eliminating racial and ethnic disparities in health: A framework for action. In I.L. Livingston (Eds.), The Praeger handbook of Black American health (pp. 835-861). Praeger Handbook of Black American Health, Praeger, Westport, Connecticut.

Mahoney, P., Williams, L., & West, C. (2001). ‘‘Violence against Women by Intimate Relationship Partners.’’ In Sourcebook on Violence against Women, edited by Claire Renzetti, Jeffrey Edleson, and Raquel Kennedy Bergen. Thousand Oaks, CA: Sage, 2001, pp. 143–178.

Masferrer, R., Masferrer, M., Prendergast, V. (2000). Grading Scale for Cerebral

Concussions, *Barrow Quarterly, 16(1).* https://www.barrowneuro.org/for-physicians-researchers/education/grand-rounds-publications-media/barrow-quarterly/volume-16-no-1-2000/grading-scale-for-cerebral-concussions. Accessed 1-13-22.

McBean, A. M., Li, S., Gilbertson, D. T., & Collins, A. J. (2004). Differences in Diabetes Prevalence, Incidence, and Mortality Among the Elderly of Four Racial/Ethnic Groups: Whites, Blacks, Hispanics, and Asians. *Diabetes Care*, *27*(10), 2317–2324. https://doi.org/10.2337/diacare.27.10.2317

McCormack, G., Avery, C., Spitzer, A. K.-L., & Chandra, A. (2020). Economic Vulnerability of Households With Essential Workers. *JAMA*, *324*(4), 388. https://doi.org/10.1001/jama.2020.11366

McNicholas, C., & Poydock, M. (2020, May 19). Who Are Essential Workers? A Comprehensive Look at Their Wages, Demographics, and Unionization Rates. *Working Economics Blog, Economic Policy Institute*.

Medline Plus (2022). Physical Abuse, National Library of Medicine. https://medlineplus.gov/ency/article/001552.htm (February 18, 2022).

Millett, G.A., Jones, A.T., Benkeser, D., et al. (2020). Assessing differential impacts of COVID-19 on black communities. *Ann Epidemiol, 47,* 37-44.

Moss, K., Wexler, A., Dawson, L., Long, M., Kates, J., Cubanski, J., Musumeci, M.et al. (2020). The Coronavirus Aid, Relief, and Economic Security Act: Summary of Key Health Provisions. KFF, Published: April 9, 2020. https://www.kff.org/coronavirus-covid-19/issue-brief/the-coronavirus-aid-relief-and-economic-security-act-summary-of-key-health-provisions/

Musa, D., Schulz, R., Harris, R., Silverman, M., & Thomas, S.B. (2009). Trust in the health care system and the use of preventive health services by older black and white adults. American Journal of Public Health, 99:1293–1299.

National Center for Health Statistics *(2021). Mental Health - Household Pulse Survey - COVID-19*. https://www.cdc.gov/nchs/COVID19/pulse/mental-health.htm

National Center on Elder Abuse (2005). Elder abuse prevalence and incidence. Washington, DC: National Center on Elder Abuse.

NCTSN (2014) https://www.nctsn.org/sites/default/files/resources/children_domestic_violence_affect_children.pdf. Accessed January 21, 2022. https://www.kff.org/global-health-policy/issue-brief/the-coronavirus-aid-relief-and-economic-security-act-summary-of-key-health-provisions/

Office for Civil Rights (2014), Dear Colleague Letter: Resource Comparability (Oct. 1, 2014), https://www2.ed.gov/about/offices/list/ocr/letters/colleague-resourcecomp-201410.pdf; cf. 34 C.F.R. § 100.3(b)(2)

Patwardhan, I., Hurley, K. D., Thompson, R. W., Mason, W. A., & Ringle, J. L. (2017). Child maltreatment as a function of cumulative family risk: Findings from the intensive family preservation program. *Child Abuse & Neglect*, *70*, 92–99. https://doi.org/10.1016/j.chiabu.2017.06.010

Pereda, N., & Díaz-Faes, D. A. (2020). Family violence against children in the wake of COVID-19 pandemic: a review of current perspectives and risk factors. *Child and Adolescent Psychiatry and Mental Health*, *14*(1). https://doi.org/10.1186/s13034-020-00347-1

Phasha, T.N. (2010). Educational resilience among African survivors of child sexual abuse in South Africa. Journal of Black Studies, 40, 6, 1234–1253, doi: 10.1177/0021934708327693

Pinheiro, P. S. (2006). Violence against children: a global report. *Ciência & Saúde Coletiva*, *11*(2), 453–460. https://doi.org/10.1590/s1413-81232006000200022

Pratt, C. R., Nausheen Husain, Christy Gutowski, Stacy St Clair, Gregory. (2021). *Chicago's coronavirus disparity: Black Chicagoans are dying at nearly six times the rate of white residents, data show*. Chicagotribune.com. https://www.chicagotribune.com/coronavirus/ct-coronavirus-chicago-coronavirus-deaths-demographics-lightfoot-20200406-77nlylhiavgjzb2wa4ckivh7mu-story.html (accessed on 15 September 2021).

Ragavan, M., and Randell, K (2020). Stress and Violence at Home During the Pandemic.https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Stress-and-Violence-at-Home-During-the-Pandemic.aspx. Accessed January 21, 2022

Reis, T., Andrew, B.T., & Williams, V. (2020, April 7). The coronavirus is infecting and killing black Americans at an alarmingly high rate. *The Washington Post*. https://www.washingtonpost.com/nation/2020/04/07/coronavirus-is-infecting-killing-black-americans-an-alarmingly-high-rate-post-analysis-shows/?arc404=true

Russell, D. (1990). Rape in Marriage (Revised, Expanded ed.). Indiana University Press.

Rubin-Miller, L., Alban, C., Sep 16, S. S. P., & 2020. (2020, September 16). *COVID-19 Racial Disparities in Testing, Infection, Hospitalization, and Death: Analysis of Epic Patient Data*. KFF. https://www.kff.org/coronavirus-COVID-19/issue-brief/COVID-19-racial-disparities-testing-infection-hospitalization-death-analysis-epic-patient-data/

Saini, S. M., Hoffmann, C. R., Pantelis, C., Everall, I. P., & Bousman, C. A. (2019). Systematic review and critical appraisal of child abuse measurement instruments. *Psychiatry Research*, *272*, 106–113. https://doi.org/10.1016/j.psychres.2018.12.068

Sheridan, D.J., Nash, K.R.(2007). Acute injury patterns of intimate partner violence victims. *Trauma Violence Abuse, 8(3),*281-289. doi:10.1177/1524838007303504

Simons, R. L., Lei, M.-K., Beach, S. R. H., Barr, A. B., Simons, L. G., Gibbons, F. X., & Philibert, R. A. (2018). Discrimination, segregation, and chronic inflammation: Testing the weathering explanation for the poor health of Black Americans. *Developmental Psychology*, *54*(10), 1993–2006. https://doi.org/10.1037/dev0000511

Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.) (2003). Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Institute of Medicine. Washington (DC), National Academies Press.

Smith, S.G., Zhang, X., Basile, K.C., Merrick, M.T., Wang, J., Kresnow, M., & Chen, J. (2018). The National Intimate Partner and Sexual Violence Survey (NISVS): 2015 Data Brief—Updated Release. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Starling, S.P., Patel, S., Burke, B.L., Sirotnak, A.P., Stronks, S., Rosquist, P. (2004). Analysis of perpetrator admissions to inflicted traumatic brain injury in children. *Arch Pediatr Adolesc Med,158(5),* 454–458.

Stokes, E. K., Zambrano, L. D., Anderson, K. N., Marder, E. P., Raz, K. M., El Burai Felix, S., Tie, Y., & Fullerton, K. E. (2020). Coronavirus Disease 2019 Case Surveillance — United States, January 22–May 30, 2020. *MMWR. Morbidity and Mortality Weekly Report*, *69*(24), 759–765. https://doi.org/10.15585/mmwr.mm6924e2

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., and van IJzendoorn, M. H. (2015) The Prevalence of Child Maltreatment across the Globe: Review of a Series of Meta-Analyses, Child Abuse Rev., 24, 37– 50, doi: 10.1002/car.2353.

Throits, P.A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, 35,* 53–79.

Thoits, P. A. (2010). Stress and Health: Major Findings and Policy Implications. *Journal of Health and Social* Behavior, 51(1_suppl), S41–S53. https://doi.org/10.1177/0022146510383499

Thoits, P. A. (2011). Stress, coping, and social support processes: where are we? What next? *Journal of Health and Social Behavior*, *Spec No*. https://pubmed.ncbi.nlm.nih.gov/7560850/

Turner, R. J. (2009). Understanding Health Disparities: The Promise of the Stress Process Model. *Advances in the Conceptualization of the Stress Process*, 3–21. https://doi.org/10.1007/978-1-4419-1021-9_1

Turner, R. J., & Marino, F. (1994). Social Support and Social Structure: A Descriptive Epidemiology. *Journal of Health and Social Behavior*, *35*(3), 193. https://doi.org/10.2307/2137276,

UN Women (2020). COVID-19 and ending violence against women and girls. United Nations Entity for Gender Equality and the Empowerment of Women (UN Women). EVAW COVID-19 briefs website. Published 2020. Accessed June 28, 2021. https://www.unwomen.org/en/digital-library/publications/2020/04/issue-brief-covid-19-and-ending-violence-against-women-and-girls.

U.S. Bureau of Labor Statistics. (2019, October 9). *Labor Force Characteristics by Race and ethnicity, 2018 : BLS Reports: U.S. Bureau of Labor Statistics*. Bls.gov. https://www.bls.gov/opub/reports/race-and-ethnicity/2018/home.htm

U.S. Department of Health & Human Services. *Child Maltreatment 2018*. https://www.acf.hhs.gov/cb/report/child-maltreatment-2018

Uchino, B. (2005). Social Support and Physical Health: Understanding the Health Consequences of Relationships. *American Journal of Epidemiology*, *161*(3), 297–298. https://doi.org/10.1093/aje/kwi036

Violence Against Women Prevalence Estimates, 2018. WHO: Geneva, March 9, 2021. https://www.who.int/publications/i/item/9789240022256

Vu, N. L., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2016). Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. *Clinical Psychology Review*, *46*, 25–33. https://doi.org/10.1016/j.cpr.2016.04.003

Walsemann, K. M., Geronimus, A. T., & Gee, G. C. (2008). Accumulating Disadvantage Over the Life Course. *Research on Aging*, *30*(2), 169–199. https://doi.org/10.1177/0164027507311149

Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process, 42(1),* 1–18.doi:10.1111/j.1545-5300.2003.00001.x

Webb, H. M., Napoles, A. M., & Perez-Stable, E. J. (2020). COVID-19 and Racial/Ethnic Disparities. *JAMA*, *323*(24), 2466–2476.

Wildeman, C., Emanuel, N., Leventhal, J. M., Putnam-Hornstein, E., Waldfogel, J., & Lee, H. (2014). The Prevalence of Confirmed Maltreatment Among US Children, 2004 to 2011. *JAMA Pediatrics*, *168*(8), 706. https://doi.org/10.1001/jamapediatrics.2014.410

Williams, D. R., Marks, J., & Leavell, J. P. (2010). Race and mental health: Patterns and challenges. InT. L. Scheid & T. N. Brown (Eds.), A Handbook for the study of mental health (pp. 268–290). New York, NY: Cambridge University Press.

World Health Organization. (2013, June 25). *A global brief on hypertension : silent killer, global public health crisis: World Health Day 2013*. Who.int; World Health Organization. https://www.who.int/publications/i/item/a-global-brief-on-hypertension-silent-killer-global-public-health-crisis-world-health-day-2013

World Health Organization. (2018). European status report on preventing child maltreatment (2018). *World Health Organization International*. https://doi.org/https://www.euro.who.int/en/publications/abstracts/european-status-report-on-preventing-child-maltreatment-2018

World Health Organization (2020). Doing What Matters in Times of Stress: An Illustrated

Guide. WHO, April 26, 2020. www.psyssa.com/who-what-matters-in-times-of-stress/

World Health Organization (2021). Violence Against Women. World Health Organization.

Zhao, Q., Meng, M., Kumar, R., Wu, Y., Huang, J., Lian, N., Deng, Y., & Lin, S. (2020). The impact of COPD and smoking history on the severity of COVID-19: A systemic review and meta-analysis. Journal of Medical Virology. https://doi.org/10.1002/jmv.25889