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Racial Disparities in Femicide and Intimate Partner Homicide: An Analysis of Cases in Georgia from 2006 to 2009

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An abstract of

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University

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Abstract

Racial Disparities in Femicide and Intimate Partner Homicide: An Analysis of Cases in Georgia from 2006 to 2009

By Susannah Fulling

Women in the United States face the greatest threat of homicide of any high income country now estimated to be a five times greater. Homicide of women is commonly a very extreme outcome of a much larger Public Health issue: intimate partner violence. African American women have been found to be at increased risk of femicide and intimate partner femicide (IPF) and the aim of this study is to highlight this disparity in Georgia. Using police and coroner reports homicides of African American and white victims ages 15 and above in Georgia were analyzed. Rates of femicide, IPF, and disparity were calculated for each Public Health District. Domestic violence services were mapped and the number of women per bed in each district was calculated. Chi-Square tests and logistic regression were used to determine differences in case characteristics Femicide, intimate partner homicide, and disparity rates were found to vary across Georgia. Rates of femicide and IPF among African American women were found to be consistently higher. Domestic violence services were also found to be unevenly distributed among the districts and a positive correlation between higher femicide rates and a higher number of women per bed was found. Case characteristics were found to be significantly different between white and African American cases however race was not found to be a significant predictor of IPF. Areas of the state that were found to have the higher rates of femicide and IPF were districts with rural areas and extremely populated urban centers. This may indicate these types of areas increase the risk of femicide and IPF. The unequal distribution of domestic violence services across the state had moderate effect on the overall femicide rate, which indicates other systems are working to create these disparities.

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Introduction

Definition and Public Health Significance

Violence can have a major impact on individuals as well as communities leaving permanent physical and emotional trauma for surviving victims and eroding communities of their safety, services, and economic stability. Violence occurs across all age groups and races with the potential to affect any person, which creates a unique challenge for Public Health initiatives and prevention. Homicide or "death resulting from the intentional use of force or power, threatened or actual, against another person, group, or community" is the 15th leading cause of death among Americans equaling to more than 15,000 people (5.5 per 100,000) killed in the United States each year (CDC Homicide Factsheet, 2011, NVDRS, 2008).

Although the rate of male homicide tends to be 3 to 4 times higher than female homicide, the circumstances of female victimization are unique (MMWR, CDC, 2011). In 2001, 3.3 women per 100,000 died due to homicide in the United States (NCHS, 2003). Nationally African American women have a higher incidence of homicide with 7.5 women per 100,000 women being killed each year compared to 2.5 per 100,000 of white non-Hispanic women (National Vital Statistics Report, CDC, 2003). Sixty four percent of offenders of female homicide were known to the victim including such individuals as family members, intimate partners, or acquaintances (Bureau of Justice, 2011). In 1998, 72% of all intimate partner homicides were perpetrated against female victims. Overall intimate partner homicides comprise about 30% of all female homicides and only 4% of male homicides illustrating the stark difference in gender homicide trends (Bureau of Justice, 2011). One of the most common risk factors for intimate partner

homicide is a history of intimate partner violence, which can have far reaching effects physically and emotionally on victims.

Intimate Partner Violence (IPV) is defined by the Centers for Disease Control and Prevention as "a single episode of violence or ongoing battery between current or former spouses or dating partners". Behaviors that are considered to be IPV are physical violence such as hitting, kicking, or using other types of physical force in an attempt to hurt a partner; sexual violence, or forcing a partner to take part in a sexual act without consent; threats of physical or sexual violence with words, gestures, weapons or other means; as well as emotional abuse, which can include threatening a partner with harm to his or her body, possessions, or loved ones, or degrading the partner's self worth. In many cases, several different types of intimate partner violence behaviors may occur in conjunction, which can leave lasting negative physical and mental health issues for both the victim and perpetrator (CDC IPV Factsheet, 2011). In the most extreme of cases, these violent, manipulative, and emotional relationships can lead one partner to kill the other in self-defense or out of anger and jealousy.

IPV continues to be a major public health concern in the United States. Each year, approximately 4.8 million women report intimate partner related assaults and rapes (CDC IPV Factsheet, 2011. With that many reported cases, it is believed that 25% to 54% of women will experience some form of intimate partner violence in their lifetimes. From these experiences, a large majority of women will have negative physical as well as mental health outcomes that will need short- and long-term treatment due to the stress, fear, and physical trauma from their intimate relationships (Bradley, 2005).

For women, the most common physical health issue associated with IPV is trauma and injury (Campbell, 2002). Clinicians on average classify 11 to 30% of female emergency room injuries as battery. Physical abuse can also cause chronic health problems like back pain, headaches, and central nervous system symptoms such as fainting and seizures. This has been attributed to the fear and anxiety associated with repeated physical abuse. Chronic stress for women in abusive relationships can cause higher rates of gastrointestinal symptoms and disorders such as loss of appetite or eating disorders as well as irritable bowel syndrome. Sexual abuse brings another myriad of physical complications such as higher rates of sexually transmitted diseases, vaginal bleeding or infection, pelvic pain, urinary tract infections, and fibroids. Continuous gynecological complications are one of the largest differences in physical health between battered and non-battered women (Campbell, 2002). It has been shown that victims of spouse-abuse are three times more likely to have a gynecological problem than other women

Physical complications are not the only negative health outcomes associated with intimate partner violence, and may not be the most severe and long lasting. Depression, suicidal ideation and post-traumatic stress disorder have all been linked with exposure to intimate partner violence (Campbell, 2002). These mental health issues have been shown to have the greatest impact on a women's self esteem, and other constructs associated with self-efficacy (Bradley, 2005). Insomnia, social dysfunction, and anxiety are other mental disorders that have been linked to intimate partner violence (Campbell, 2002). An increased level of mental disorders in battered women may also increase their likelihood of substance abuse, which puts them at risk for the negative health outcomes related to

this behavior. Post-traumatic stress disorder (PTSD) has been found to be a risk factor for substance abuse and Campbell 2002 has speculated that women suffering from post-traumatic stress disorder due to an abusive relationship may use substances to cope or calm the symptoms of this mental health issue (Bradley 2005, Campbell 2002).

Both the physical and mental traumas resulting from experience with IPV can lead them to adopt negative coping behaviors, such as overdose or addiction. These, in turn, can increase their risk for additional severe physical and emotional traumas resulting from the coping behaviors. With their high burden of negative health outcomes, victims of IPV have an elevated need for treatment for both their physical and emotional scars.

Barriers Preventing Women from Leaving Violent Relationships

On average a woman attempts to leave her abusive relationship five times before successfully and permanently leaving her partner (Williams-Campbell, 2002). There are many physical and emotions factors contributing to why a woman may feel staying with her partner is best for her well being as well as that of her children. Or her abusive relationship may have isolated her so much, leaving her partner and staying safe may seem impossible. Barriers may by physical, such as a lack of access to transportation to a shelter or relative's house, or emotional, such as reduced self-confidence or feeling a lack of self worth, or monetary, she may need his income for basic necessities. Cultural or religious values of the community may also affect a women's perspective on leaving her husband or raising her children without a father. Many unique and different societal and personal factors weigh into a woman's decision to stay or leave her relationship, which

can put her in danger of being seriously injured, or in the most extreme cases, killed (Grigsby, 1997).

African American Women and IPV

Although previous studies have indicated the prevalence of IPV is equally distributed across races, socio-economic status, and geographic region, homicides caused by intimate partner violence have been found to be disproportionately accruing in African American communities (Baumgartner, 2011). Battered African American women have a unique set of cultural and spiritual beliefs that can often lead them to silence, submission, and continued victimization when faced with intimate partner violence (Nash, 2005, Bent-Goodley, 2004). One of the significant stresses on black women to stay with their partners through abuse is the stigma in the community attached to reporting or leaving a partner. Also, although many believe that racism has mostly been eliminated in our culture, African American women are challenged by it daily in their intimate relationships, community, and culture (Nash, 2005, Bent-Goodley, 2004). There is qualitative literature to suggest that racism plays a significant role in the intimate relationships of African American women and how they find support from institutions. Both of these factors may contribute to an increased rate of homicides among African American victims of IPV (Nash, 2005, Bent-Goodley, 2004).

Theoretical Framework

Social Ecological Theory seeks to explain how society, community, interpersonal relationships, and individual factors create the context in which a person lives (Glanz, 2008). A person's behavior is embedded in how these multiple layers build onto one another to create the experiences and reactions an individual has to a specific behavior.

The layers, shown in figure one, include the larger societal and cultural values and beliefs (Macrosystem) and political policies (Exosystem), which cause the most over-arching effects; the community where the individual can find organizational support systems or barriers (Mesosystem); interpersonal relationships such as friends and family (Microsystem); and the individual, where personality and personal experience interact with these other levels to ultimately direct behavior (Glanz, 2008). A major conclusion of Social Ecological Theory is that behavior change cannot only exist at one of these levels, but must permeate all to be successful. When environments, policies, social norms, social support systems, and the people that make up our daily lives promote healthy decisions, individuals, in turn, are better motivated to make more healthy choices as well (Glanz, 2008).

Social Ecological Theory has been shown to be an effective tool in understanding and predicting violence (Heise, 1998). The theory has the ability to frame the complexity of the issue, as well as to expand on the competing forces in individuals' lives that may lead them to abuse their partners or allow an intimate partner to abuse them. The delicate interplay between the different levels is intimate to the individual, but certain themes across all systems have been identified through previous research to predict or increase the level of intimate partner violence (Heise, 1998). Macrosystemic themes include males being identified as the primary providers for the family and women as the support system, and the value of personal privacy within the culture. An important exosystem theme is unemployment among men in specific populations. At the individual level, a personal history with violence, e.g., child abuse or witnessing a parent's abuse, affects how the individual views the place of violence within the home.

Purpose

Guided by Social Ecological Theory, major aims of this study were to determine the incidence rate of overall femicide and homicide by an intimate partner in Georgia, identify the public health districts in which the incidence rates are highest and lowest and identify the public health districts in which the disparity in proportion of African American female homicides compared to the proportion of white female homicides is highest and lowest. The research hypotheses are as follows:

H1: Health Districts of Georgia with the highest overall femicide and intimate partner femicide (IPF) rates differ from those areas with the lowest IPF rates with respect to services available for intimate partner violence.

H2: Health Districts of Georgia with the greatest disparities in overall femicide and IPF rates between African American women and white women will differ from those areas with the least disparities with respect to services available for intimate partner violence.

H3: Intimate Partner Femicides (IPF) will differ in case characteristics compared to non- IPF cases.

H4: African American victims will differ in IPF and femicide case characteristics compared to white victims.

Background and Review of the Literature

Femicide in the U.S

Homicide is often considered a male dominated issue in the United States however 3.3 per 100,000 women are killed in the U.S each year. Women in the U.S have

the highest risk of homicide of any high-income country with an estimated 5 times greater risk than other counties combined. (Hemingway, 2002). The level of violence against women in a society has been linked to cultural norms as well as certain behaviors such as gun ownership. Countries with more household gun ownership have higher rates of violence against females. This trend has been found at the state level in the United States as well indicating states with higher firearm availability have higher rates of female homicide victimization (Hemingway. 2002). Culturally, societies that speak out against violence against women and illustrate their intolerance for violence have lower rates of femicide (Heise, 1998). Those that use words and images to degrade women and continue to allow patriarchal customs to dominate societal norms have higher rates of female victimization (Johnson, 1995).

Female homicide victimization in the United States is unique to male victimization. The differences lie in the case characteristics and the breakdown of perpetrators. Only 13% of female victims are killed by strangers, leaving the vast majority of perpetrators as someone the victim knows (Hemingway, 2002). Men on the other hand have different trends in victimization with only 4% of perpetrators being intimate partners (Bureau of Justice, 2011). Disparities in female victimization have also been identified with social economic status and economic instability. Women who are unemployed and living in an impoverished area are at much higher risk for homicide (MMWR, CDC, 2011). African American women have been found to be at increased risk of victimization during adulthood, which has been linked with and increased level of intimate partner violence and homicide (MMWR, CDC, 2011). Homicide is an extreme

outcome of a more prevalent public health problem, interpersonal violence, and for women, homicide victimization will most likely come from the home.

Intimate Partner Homicide among U.S Females

In 2007, 2,340 deaths were a result of intimate partner violence with 70% of victims being women (CDC IPV Factsheet, 2011). Although socially the United States continues to make strides towards gender equality, the number of homicides of women by men continues to rise. In 2009, 1,818 females were murdered by males in the United States with a rate of 1.25 per 100,000. In 93% of cases the victim knew her perpetrator when police could identify a suspect. Of those cases, 63% of the victims were wives, common-law wives, ex-wives, or girlfriends of the perpetrator. In most circumstances the homicide was preceded by an argument between the victim and perpetrator, which lead the violent act to occur (VPC, 2009).

In 2009 Georgia was found to have the 6th highest rate of men killing women in the United States (1.80 per 100,00), which is 55% higher than the national average (VPC, 2009) Of the 90 female victims killed, 49 were African American and 41 were white or of another race. The average age of the victims was 39 years of age however 10% of the homicides were among females less than 18 years of age (VPC, 2009) For 93% of the women who were killed, the perpetrator was someone they knew. Of those women who knew their perpetrator, 57% were an intimate partner (VPC, 2009) This data indicates African American women account for 54% of the women killed in Georgia in 2009 and approximately 60% of those deaths were caused by an intimate partner. However as of 2010, African Americans only account for 30.5% of Georgia's population indicating a health disparity exists, meaning intimate partner homicide is occurring more frequently in

the African American community in Georgia than communities of other races (U.S Census, 2009).

Women in the United States are most often killed by an intimate partner or someone they know. Although murders of married women by their spouse are decreasing, intimate partner homicide is continuing to increase (Puzone, 2000). Previous studies have indicated that certain circumstances put women at increased risk of homicide such as separation from the abusive partner, isolation, and a history of domestic violence. Abusive behavior is understood as a power differential in a relationship, where one partner holds the power over the other (Grigsby, 1997). Mental and physical abuse is how the perpetrating partner controls and maintains their power over the other such as making their partner feel worthless or scared to leave. When the victim shifts the power in the relationship by leaving or making a change in their life that allows them more power in the relationship the abusive partner feels they have to go to the extreme to regain that power. That is when the violence may heighten which may ultimately lead to death (Grigsby, 1997). Other factors that have been shown to be associated with increased intimate partner homicide are neighborhood disadvantage, poverty, unemployment and low education. These factors can significantly stress relationships that exacerbate discord between partners and this continuing stress can cause violence to occur (Madkour 2010) The Economic Cost of Intimate Partner Violence

Utilization of health care by women who are exposed to IPV is estimated to be between 1.5 to 4 times greater than women without exposure (Rivara, 2007). With 25 to 54% of women experiencing some form of IPV in their lifetimes, the overall health care costs associated with this public health issues equal approximately 4.1 billion dollars of

direct medical and mental health care (Coker, 2004). Annually, domestic violence has been estimated to cause 1.5 million women to seek care for rape from an intimate partner; 500,000 women to seek care for injuries sustained during an assault by an intimate partner; 21,000 hospitalizations; 99,800 days of hospitalization; 28,700 emergency room visits; and 39,900 visits to a physician (Coker, 2004). The medical costs to treat abused women annually exceed \$44 million dollars. The average cost of medical care for a woman who has been severely injured by an intimate partner is \$19,845 (Coker, 2004). Increased utilization of medical care does not end once a women is no longer experiencing IPV. Due to the nature of IPV, chronic physical, as well as emotional, health issues cause women to continue to seek an increased amount of care, even after the relationship is over (Rivara, 2007, Coker, 2004). These health care costs are not just incurred by the individual; for many, Medicaid or public assistance will pay these medical expenses. By detecting IPV early, Medicaid could save \$1,000 annually per IPV case (Coker, 2004).

Health care is not the only economic area where IPV has a major impact. In the United States, corporations annually lose \$3 to \$5 billion dollars due to a loss in productivity of the work force due to IPV. Annually, abused women, on average, lose approximately 8 million days of paid work, resulting in a loss of an estimated \$728 million (Reeves, 2003). Due to the premature mortality of a proportion of these women, an additional estimated \$893 million in lifetime earnings is lost (Reeves, 2003). The monetary losses for U.S companies due to IPV are staggering and, when combined with health care spending, this issue is costing the U.S a tremendous amount.

Common Barriers Preventing Women From Leaving an Abusive Relationship

Many cultures, including that of the United States, are centered on a patriarchal system, which affects how women construct their identity and measure their self worth in society. This socialization occurs from a very early age and creates the fabric from which women's world-views are created. Women are socialized to believe their self worth is intimately linked to their relationship status and their identity can only be defined through a relationship (Grigsby, 1997). They may feel unconfident or worthless if they are not in a relationship or may come to believe supporting their husbands in every aspect is their duty to their families. By leaving her partner a woman may be breaking family or religious values that have been engrained in her way of thinking since childhood. This creates a difficult situation for women because, culturally, they are taught their identity is dependent on the success of their relationship and their ability to fulfill socially prescribed roles in the family unit. Leaving their partners would go against these values.

Another major social barrier for women leaving a relationship is a lack of social support in their communities. Many women in abusive relationships suffer from social isolation forced on them by their partners. Therefore, they may be unaware of the services in their communities that can assist them in leaving. In many cases, the batterer becomes the main source of information on the subject for his trapped partner. He may tell her things like no-one will believe he is abusing her, or if she tells anyone her children will be taken away. (Grigsby, 1997) This misinformation keeps women isolated, alone, and from seeking help in their communities. Communication with her loved ones may be cut off by her partner, which will leave her feeling she has no support system or no-one to turn to for help. In the most extreme cases of social isolation, the batterer may

even physically prevent the woman from leaving by locking her up in a room or accompanying her wherever she goes at all times (Grigsby, 1997). With this constant supervision, she may be prevented from creating any meaningful connections with others in her community, which is another way the partner keeps her cut off socially. Women who report they have good social support systems of family and friends also have fewer negative health outcomes associated with the exposure to intimate partner violence. A woman may be more inclined to leave her relationship and use the resources available to her if she knows she will have a network of people to support her (Campbell, 2003).

Geographic isolation from resources can create a physical barrier for women. Transportation, especially in rural communities, is a major issue for women seeking help. The nearest shelter may be across the county, and even if it is in the same city, it may not be accessible by public transportation (Grigsby, 1997). It has been shown that, in many areas of the United States, services for victims are more often in affluent areas or communities with more resources demonstrating the distribution of services is more dependent on the characteristics of the women who are utilizing the services and not on those who are being victimized (Hertling, 2010). Therefore, many of the common barriers keeping women from accessing domestic violence services are also preventing those services from becoming available in their community. Funding for of such services is through federal grants to states on the basis of population, and is most often awarded to existing programs. Nationally, 32% of shelters are located in rural areas compared to 66% that are located in urban centers (Hertling 2010). As a result programs that continue to receive funding are those that are well established, and most likely in a more affluent

areas where women are more likely to utilize the services. As a consequence, women who are socially or physically isolated will continue to struggle to find services.

Access to money can also influence whether or not a woman feels she can leave her relationship. Attorney services, transportation, household deposits, and buying all of the basic necessities to start a new home are among all the costs associated with leaving a relationship. If the victim has children, this creates an even higher burden and more complex issues for the fleeing partner. If the abuser is the biological parent of the children, he may use a custody battle, something he knows is difficult and expensive, to manipulate his partner into coming back. He may prevent his partner from working so she does not have a means of making her own money. There are major expenses associated with leaving a partner, and if a woman does not have access to the money she needs, she may continue to stay with her abusive partner.

Past experiences with the police department or criminal justice system may also influence how much help a woman seeks for dealing with her injuries and safety from IPV. In many states, there is no policy that requires the police to arrest and detain a man that is suspected of domestic violence. Even when a woman calls the police, they might only offer her advice, such as suggesting that she buy a gun or walk the abuser around the block to calm him down (Grigsby, 1997). In some cases, the police may arrest both the victim and perpetrator. This occurs most often when a women has been strangled and shows minimal signs of trauma until later, compared with the man who is covered with scratches and bruises from the woman's attempt at self defense. (Grigsby,1997) If the victim continually calls the police and the perpetrator is never punished for his abuse, he may start to feel his abuse in justified, socially accepted, and there is no negative

outcome of his actions. This lack of assistance from the police department may lead women to feel that other services provided would not be helpful either, which may keep them from accessing resources in their community.

With the increasing number of women seeking help from shelters' services each year due to domestic violence, the number of beds available has not increased, but stayed constant (Hertling, 2010). Therefore shelters can have waiting lists or even restrictions on who can use their services. Some shelters will not accept women who are HIV-positive, drug users, or mentally ill (Grigsby, 1997) As noted before, many women in abusive relationships have an increased risk of STDs, mental illness, and substance abuse, due to their exposure to IPV. These restrictions may result in many women being turned away. Thus, even if a woman has access to enough money to leave and transportation to a shelter she still may not be able to find assistance because there may not be enough beds, or she may be turned away for health outcomes that are highly associated with the exposure to IPV. The policies of shelters and the discrimination against certain women may keep the women who need help the most from getting domestic violence services.

Social Ecological Theory

Within the Social Ecological Theory, the Macrosystem consists of the overarching beliefs and values of the culture. Pressures like racism, sexism, or very strictly defined gender roles, as an example, may influence how an individual views her situation and ultimately can affect her thought processes and decision-making (Glanz, 2008). Within one culture, specific populations may have different experiences and histories with these societal beliefs. Understanding how these cultural values affect a

person's world-view is important to uncovering one causal pathway to specific behaviors that contribute to a specific health outcome (Glanz, 2008).

The Exosystem is comprised of governmental policies, the educational system, law enforcement, religious systems, and other bodies that create and enforce the laws and morals of the culture. Different areas of a state or city may have different laws that affect the built, as well as the emotional, environment for the people who are living there. These laws may not be different across neighborhoods, or counties, but the enforcement of laws may vary (Glanz, 2008). Because of this, communities or individuals may feel that they must work outside the laws to feel safe. Or, an individual may find that certain policies are barriers, keeping them from seeking the services and assistance they need (Grana, 2001). These variations in the exosystem across states, counties, and neighborhoods, are another layer in the causal pathway to geographic or population-based trends in health outcomes.

The Mesosystem is the larger community in which an individual lives. This includes such systems as neighborhoods, workplaces, schools, and religious communities. In this layer of the Social Ecological Theory, organizational support and barriers are explored. Such factors as neighborhood poverty can impact whether certain resources are available in communities, and this can affect whether an individual feels she is getting the support and services she needs. On the other hand, community organizations such as churches, mosques, and synagogues, may provide the neighborhood with a support system and a place to build community. Contained within the Mesosystem, is the Microsystem, which is made up of the interpersonal relationships that create the organizations and systems within the Mesosystem (Glanz, 2008). This

includes such people as family, friends, co-workers, neighbors and community members. These relationships tend create a very important support system for individuals and can help them navigate difficult decisions or provide the help they need to change an unhealthy behavior. However as has been demonstrated in other levels, these intrapersonal relationships may also create pain, and barriers to healthy behaviors.

The central figure within the Social Ecological Theory is the individual. Personality, as well as personal history, can have a major impact on an individual's thought processes and behaviors (Glanz, 2008). Health disparities are created because certain populations have more barriers across all systems, which creates a context where healthy decision making is not the priority or is made much more difficult. Each layer, including the individual, can provide support, as well as barriers to healthy decision making. The difficulty lies in unraveling this complex picture to see which stressors are most critical in the causal pathway to a specific health outcome. By defining these levels, and working to understand how they interact, the Social Ecological Theory helps to focus a sometimes blurry and messy picture.

Social Ecological Theory and Intimate Partner Violence

A macro-systemic value that has been identified as an important factor in intimate partner violence is men being considered the primary providers for the family and women as the support system with roles such as taking care of the children and home. Cultures that stress this gender divide are found to have increased levels of violence against women. The more dependent women are on their husbands for financial support the more difficult it is for women to leave an abusive relationship and the easier it is men to have control over women's decisions (Heise, 1998). This male dominance over financial

resources (micro-systemic) fits into the societal value that women are the property of men and their purpose is the support their husband as well as the concept that if she does not meet her husband's expectations he has the right to show his dissatisfaction through violence (Heise, 1998).

Another macro-systemic value that is correlated with an increased level of violence against women in society is the value of personal privacy within culture. The more a community feels a shared responsibility to step in when a woman is being abused by her husband the less violence there is against women in the community overall (Heise, 1998). When culturally, an individual feels shame, embarrassment, and the need to keep their family issues private, the easier it is for one individual to exert control over another. Therefore intimate partner violence within the family is more convenient for the controlling partner and therefore more likely to occur. In communities that decide intimate partner violence will not be tolerated and enforcement and accountability is maintained through shared values intimate partner violence is less prevalent (Heise, 1998).

Unemployment among men in specific populations (exosystemic) has also been sighted as a major predictor of intimate partner violence within relationships. When men cannot meet the societal standards of masculinity by providing for their families, they may feel as though they have to define their manliness in other ways (macrosystemic) (Heise, 1998, Grana, 2001). The cultural definition and societal beliefs of hypermasculinity has been shown to be a major predictive factor of rape and violence against women within a society. When hyper-masculinity is reinforced through the larger social customs, men feel as though they must show their masculinity through toughness, control

over others, and physical violence. Not only does this construct affect physical violence against women but also sexual violence. When sexual access to women is a critical component of self worth among males and a sign of increased masculinity, men are more likely to force women to have sex with them to feel as though they are meeting those culturally defined standards (Heise, 1998).

The issue of unemployment also leads to neighborhood poverty, which affects the number and quality of resources for support within that community. Previous research has indicated that community resources play a significant role in the likelihood of a service provision in one's community (Grana, 2001). For women who are faced with intimate partner violence, domestic violence shelters, advocacy agencies, and programs are critical for helping women leave an abusive relationship as well as keeping them safe after separation. Research has found that in the United States domestic violence services are found most often in affluent communities with a major collage or university in the county (Hertling, 2010). Services in areas such as these continue to get funding because the process is biased toward existing programs. The inequality is so great that only 20% of counties in the lowest income decile of income have a domestic violence program compared to 66% of counties with the highest income (Tiefenthaler, 2005), Generally research has shown that counties that are rural, have a higher percentage of less educated, relatively poor, and minorities are less likely to have domestic violence programs (Tiefenthaler, 2005).

A history of child abuse or witnessing a parent's abuse has been sighted as a major risk factor for being abusive or abused in adulthood. Personal history with violence affects how the individual views its place within their home. This is an example of how

individual experience can interplay with other factors to put someone at increased risk of abuse or perpetrating violence. Young males' witnessing a father figure abusing a mother may shape their personal beliefs that violence is an acceptable way to get what they wants from intimate partners (Heise, 1998). Often, once a male child is old enough, the father will use the child to accomplish some of his controlling behaviors such as asking him to spy on his mother or even help him keep the mother isolated and out of contact with others in the community (Grigsby 1997). By witnessing and sometimes becoming intimately involved, children grow to expect a certain level of violence in their intimate relationships or may in the process be traumatized by a particularly violent event.

Alcohol or drug abuse is a personal decision that can exacerbate the issue of intimate partner violence. The use of alcohol has been found to increase marital discord, which can lead to more incidents of violence among couples. Intimate partner violence concurrently has been shown to be a risk factor for drug and alcohol abuse (Heise, 1998). The abuse may lead an individual to seek coping mechanism to handle the stress, however once the individual chooses to abuse alcohol or drugs this may help them alleviate some of the stress for a short time but increase the level of violence that occurs in their relationship (Heise, 1998). These personal decisions on how to cope with stress can affect an individual's interpersonal relationships and this interplay can increase an individuals' risk of being violent or a victim of a violent event.

African American Women's Experiences with Intimate Partner Violence

Racism and the historical mistreatment of Black Americans in the United States has been identified by African American women in previous qualitative studies to have a major impact on their intimate relationships with African American men. This history

still plays a significant role in how black women view the issue of intimate partner violence as well as influences the degree to which black women trust and seek out the help of social services such as law enforcement and domestic violence shelters. From previous studies African American women believe abuse and beatings should be differentiated in the definition of intimate partner violence (Bent-Goodley, 2004). Traditionally intimate partner violence definitions assume beatings to be a part of abuse whereas black women view abuse as less serious with behaviors such as name calling, shoving, and slapping where as beatings are increased violence to the point where bones are broken or a hospital stay is needed (Bent-Goodley, 2004). Black women tend to stay in abusive relationships longer than women of other races with an average of at least five attempts to leave their abusive partner before they are successful (Williams-Campbell, 2002). This puts them at increased risk for violence and the additive physical and mental health outcomes that are associated with long-term abuse. This unique separation of abuse and beatings may point to the level of behavior to which African American women will comfortably put up with from their partner. Abuse may be an accepted part of a relationship for many black women but once the violence escalates to beatings they begin to feel there is an issue.

Women in the black community feel a unique pressure to protect the social image of their partner by their own community (Nash, 2005). They will withstand abuse and not report it to police because they fear these behaviors will reflect poorly on their overall community as well as the image of African American men as a whole. In the past African American men were seen as aggressive, overly sexual, violent, and dangerous to society (Hampton, 2003). By admitting that their men are physically and sexually abusing them

they are confirming those negative views of African American men. They feel a certain loyalty to their race to protect its positive social image in larger society because of the history of negative stereotypes associated with the African Americans (Bent-Goodley, 2004, Hampton, 2003).

Not only do African American women feel a responsibility to protect black men's social image but their masculinity as well. Because of the high unemployment among black men, they have less ability to control women financial, which has historically been the most common form of mens' power over women. Manhood in Western culture is most often associated with employment, economic independence, and the ability to provide for one's family. With African American women becoming more and more economically independent and black men continuing to lack these resources they have become frustrated and feel victimized by society. This has lead black men to redefine the meaning of manhood as well as finding alternative ways to dominate their wives or girlfriends (Bent-Goodley 2004, Nash 2005). In many cases the new definition is hypermasculinized, meaning more value is placed on physical power, sexual access to women, and aggressiveness (Hampton 2003). Due to this discrimination in the work force, black women do not want to be another source of domination in the lives of their partners therefore in many instances they will withstand abuse. With men feeling victimized, they may feel their wives or girlfriends are constantly critiquing their inadequacies as a husband, boyfriend, or father (Hampton, 2003). This could lead to strife and disagreements in the relationship, which is associated with preceding physical, verbal or sexual incidents.

Men have not only redefined their own values and beliefs about what manhood is but have associated black women with many of the negative stereotypes that stem from racism in history (Hampton, 2003). Because of their lack of employment and access to monetary resources, they rationalize their physical and sexual power over women based on the stereotype that black women are hypersexual, have an attitude, and are stubborn. Therefore to control their intimate partners they are required to use physical force and this is accepted among African American men (Hampton 2003).

Confounding this male attitude towards black women is the perceived imbalance of men to women in the black community. With a high majority of men incarcerated, when a black woman finds a partner she feels compelled to hold onto any partner she has no matter how they treat her (Adimora, 2000). There are many public health issues associated with this perceived imbalance of gender such as increased sexual risk behaviors and concurrent partners, which can increase the spread of sexually transmitted disease. In regard to the issue of intimate partner violence, this communal attitude pressures women to accept the mistreatment from men due to the fact they might not find another partner (Bent-Goodley, 2004). If they risk leaving an abusive partner they may find themselves in a worse situation with their next partner so the mentality of African American women is just deal with the wrong doings of their current partner because this might be the best they can get (Adimora, 2000). Another additive effect of this perceived imbalance is of males to females in the African American community are women feeling pressure to stay with their partner for their male children. They believe a male figure in the child's life is important for their future success and therefore will stay with a partner to protect the success of their male children (Bent-Goodley, 2004).

African American women do not just experience the effects of racism in their interpersonal relationships but also through institutions such as the police department and Domestic Violence shelters. A negative personal experience with the police department may create a feeling in mistrust between the community and the Police. African American women are more often arrested when Police are called to a domestic disturbance than women than other races. Often when abuse occurs, the victim and perpetrator are hard to distinguish before both are covered in injuries (Martin, 1997). The bruising of strangulation, a common form of abuse, does not usually show until later and unless a law enforcement officer is well trained they may not notice this. Because African American women are commonly arrested along with their partner, they may not call the Police when an incident occurs for fear they will be taking in as well. This poses an issue because many incidents of abuse among the African American community go unreported and protection of these women is going unnoticed. Domestic Violence shelters have also been reported to turn away African American women because they do not sound distressed or scared enough when they call or show up for help (Hampton, 2003, Nash, 2005). This confounds on African American's distrust of social services and possible explains why African American turn less to Domestic Violence shelters and more to family and friends for protection and escape from their abusive partners.

<u>Methodology</u>

Subjects

The data used for this study were abstracted from the Georgia Violent Death Reporting System, a state-wide data set that records information about the victim and investigation of every violent death that occurs in the state of Georgia. For this study all

violent deaths of females ages 15 and above recorded in the Georgia Violent Death Reporting System from 2006 to 2009 were included in the analysis.

<u>Measures</u>

Intimate Partner Homicide. Cases were classified as intimate partner homicide based on the information in the reports provided by the Police Department or Coroner/Medical Examiners on the suspect. If a suspect was identified as a current or past partner in one of the two case reports then the case was deemed an intimate partner homicide.

Intimate Partner Homicide Rate. This rate will be calculated from the number of intimate partner homicides of women over the age of 15 in each health district divided by the female population over the age of 15 of that health district determined by the 2010 census.

Public Health District- Public Health Districts were used as a grouping variable because of the large number of counties throughout Georgia. Each county's population acquired from the 2010 census of women age 15 and above was added together to create the overall district population. The population of both African American and White women were added together separately to calculate femicide and IPV rates for each race.

Race and Age. The age and race of the victim was determined by the Police and Coroners/Medical Examiners narratives, which provided demographic information on the victim.

Nature of Relationship. Relationship types included boyfriend, husband, exboyfriend, ex husband, girlfriend, family member, friend, law enforcement, stranger, roommate, caretaker, and other. If there was no information on the suspect or if the

relationship between the victim and suspect was not clearly defined in the reports the cases could not be classified as an intimate partner homicide and the suspect and relationship status was classified as unknown.

History of Domestic Violence. Included in the analysis was whether or not the Police reported a history of domestic violence among partners. Often Police have knowledge of being called to homes frequently for domestic disturbances and will note that in the report. Sometimes Police will also have knowledge of whether or not the female victim has applied or received a temporary protective order (T.P.O) against a current or past partner. This also indicates a history of domestic violence in the home because to receive a T.P.O the victim has to show proof of abuse. This variable was of interest to explore the difference in access to T.P.Os among African American women compared to women of other races.

Case Characteristics

The circumstances or events leading up to the incident were coded into seven separate variables to capture what common occurrences take place before death, such as the presence of drugs and alcohol on the scene, or a suspected drug related crime.

Substance use. The toxicology screen of the victim was taken into account as evidence of the role drugs and alcohol played in the incident that unfolded as well as Police notation of the scene.

Victim's Behavior. Police perception of the scene was noted for suspicion the victim was a prostitute or the incident occurred due to the victim's behavior.

Robbery. Police perception of the scene was also noted if contents in the home were missing, suggesting that a robbery had taken place.

Emotional Cause. Proposed emotional reasons for the violent death, such as jealousy on the part of the suspect, e.g., suspicion their partner was cheating were included in this category. Also, noted was if a major shift in the relationship had occurred, such as the victim had moved out of the house and in with family or friends. Most commonly the police reported an argument had occurred prior to the incident, with no details about the subject of the disagreement; this was noted, as well.

History of Jail Time of the Suspect. Prior offenses of the proposed suspect noted in the Police Reports were reported.

Victim Pregnant/Newborn Baby. The pregnancy status or the evidence of a new born baby noted by the Medical Examiner/Coroner or the Police was reported.

Victim was a Bystander to Another Crime. If the victim appeared to Police to be an bystander to another crime or not involved

Number of Females Over Age 15 killed in each incident was also recorded. This number of victims is noted in the police as well as the coroner/medical examiner's narratives.

Method of Death. The method in which the victim was killed included firearms, stabbing, blunt force trauma, strangulation, arson, neglect, drug overdose, and assisted suicide.

Procedures

The cases used in this study were accessed at the Georgia Department of Public Health. Since the inception of the Georgia Violent Death Reporting System (GVDRS), The Georgia Department of Public Health and the Centers of Disease Control and Prevention have partnered with local Police Departments and Coroners/Medical

Examiners to track vital information from each violent incident. Police incidents reports, recorded when police first arrive on scene are included as well as the Coroner/Medical Examiners reports detailing the injuries and cause of death of the victim. Abstractors from the Department of Public Health use the information from these reports to create a dataset that includes demographic information of the victim, causes of death, and the circumstances surrounding the death such as where it occurred, possible suspects, and the events that directly preceded the death.

The dataset for this study was composed of the Police and Coroner/Medical Examiner reports for all female homicide victims ages 15 and above from 2006 to 2009 collected through the GVDRS. All names, addresses, and other identifying information were removed to ensure to protect the privacy of the victims and their families. However the county information and case number were retained to match the report information with the dataset for coding and analysis. Each case was read for themes and a codebook was created. The variables were chosen based on frequency in the Police and Coroner/Medical Examiner's reports. Many of the variables were coded as either present of not present in the report. For those that had more classifications, they were assigned a number in the order they appeared in the cases. The cases were read by a second reader to determine inter-rater reliability if designated themes and coding were accurate and coded without bias.

For analysis of the data Chi-Square tests will be used to explore the significant differences in reporting between African American women and women of other races. All dichotomous variables designated during coding (present/not present) will not be recoded. Variables with more than two values, such as age, will be dichotomized into

younger and older victims. A logistical regression will be used to determine the variables that are considered significant predictors for femicide and intimate partner homicides.

Femicide and IPF rates were calculated for each Public Health District by dividing the number of homicide cases by the population of women ages 15 and older based on 2010 census data. The rate of femcide and IPF will be reported per 100,000 women for African Americans, whites, and the overall rate for each district. From this information a ranking order will be created for overall femicide and IPF to illustrate the areas of Georgia that have a much higher incidence of violence against women.

The Domestic Violence Services currently available in Georgia will be mapped by Public Health District and the number of women per bed will be calculated using the population calculations from the 2010 census. A correlation analysis will be used to explore the relationship between femicide and IPF rates of each district with the number of women per bed.

Results

Sample Characteristics

From 2006 to 2009 four hundred and seventy four cases of femicide of White and African American women age 15 and older were identified in Georgia. African American victims constituted 271 (57.2%) of those cases. The average age of victimization was 39.6 years with the minimum age of 16 and the maximum age of 92. Two hundred and thirty-three cases (47%) could be identified as an intimate partner homicide with # (13%) of the 474 cases noted by Police or Coroner/Medical Examiner as having a history of domestic violence. The average age of these victims was 37.8 years. The most common perpetrators identified were husbands, accounting for 91 cases (19.2%), followed by

boyfriends, accounting for 84 cases (17.7%). However, in 212 (44.7%) of the 474 cases the relationship between the victim and perpetrator was unknown and in # (31.9%) of the 474 cases no suspect could be identified. The most frequent method of death was firearms, which accounted for # (58.3%) of the femicides.

African American Victims

Of the 271 African American femicide victims, 130 (48%) were identified as an intimate partner homicide and # (14%) of cases had a reported history of domestic violence. The average age of African American female victims was 34.5 years 3 years younger than the overall sample average. The most common perpetrator among African American female victims were boyfriends accounting for 21.4% with husbands as the second highest with 14.8%. In 48.3 % of cases a relationship status was not identified between perpetrator and victim leaving a large majority of cases with an unknown suspect.

White Victims

Two hundred and three cases with white victims occurred during the four-year time period. Of those cases, 93 or 45.8% could be identified as intimate partner homicides and 11.3% of cases had a documented history of domestic violence. The average age of victimization for white women was 45.4 years of age creating an 11-year difference between the average age of African American victims and white victims. For white women the most frequent perpetrators were husbands accounting for 25% of the suspects with boyfriends as the second largest group of suspects at 12.8%. In 40% of cases a relationship status between the victim and perpetrator was not identified leaving a large number of cases without a suspect as well.

Femicide and IPF in the Public Health Districts

The level to which women are killed across the state is different depending on the Public Health District. Using the 2010 census data a population for each district was calculated as well as a rate of femicide per 100,000 women was reported. Also the difference in homicide rates between White women and African American women for each district was calculated indicating that in many districts there is a much higher rate of African American women being killed. Table 1 summarizes these results. From these results a ranking of the districts with the highest rates of femicide as well as the highest disparity was created.

	Af	rican America	n		White		Total		Femicide	Rate ¹	Disparity	
	Deaths	Population	Rate ¹	Deaths	Population	Rate ¹	Deaths	Population	Rate ¹	Rank	Difference	Rank
Northwest (1-1)	5	16,945	29.51	16	217,901	7.34	21	234,846	8.94	15 th	22.17	3 rd
North Georgia (1-2)	0	6,318	0.00	8	150,592	5.31	8	156910	5.10	18 th	(-5.31)	18 th
North (2)	2	12,380	16.16	12	212,723	5.64	14	225,103	10.52	14 th	10.52	13 th
Cobb-Douglas (3-1)	12	79,582	15.08	11	207,730	5.30	23	287,312	8.01	16 th	9.78	14 th
Fulton (3-2)	59	180,803	32.63	17	167,924	10.12	76	348,727	27.80	2 nd	22.51	2 nd
Clayton (3-3)	20	64,962	37.80	6	22.635	26.51	26	87,597	29.70	188	11.29	188
East Metro (3-4)	18	83,419	21.60	15	211,494	7.09	33	294,913	11.19	13 th	14.51	8th
DeKalb (3-5)	39	169,980	23.00	3	101,075	3.00	42	271,055	15.50	9 th	20.00	4 th
LaGrange (4)	7	66,844	10.47	12	213,576	5.62	19	280,420	6.78	17 th	4.85	16 th
South Central (5-1)	5	17,203	29.10	5	39,449	12.66	19	56,702	17.63	6®	16.44	6 th
North Central (5-2)	19	80,733	23.53	15	122,801	12.30	34	202,814	16.80	7 th	11.23	12 th

19	67,342	28.21	13	102,979	12.62	32	170,322	18.79	410	15.59	7 th
12	65,406	18.22	10	75,616	13.22	22	141,022	15.60	8 th	5.00	15 th
10	29,722	33.65	3	41,199	7.28	13	70,921	18.33	5 th	26.37	1 st
17	63,054	18.93	10	79,544	12.57	27	142,608	18.93	3 rd	14.43	9th
15	71,186	21.07	10	142,427	7.02	25	213,613	11.70	12 th	14.05	10th
5	31,024	16.12	15	102,292	14.66	20	133,316	15.00	10 th	1.46	17 th
9	33.304	27.02	14	144,494	9.70	23	144,798	12.93	11 th	17.32	5 th
	12 10 17 15	12 65,406 10 29,722 17 63,054 15 71,186 5 31,024	12 65,406 18.22 10 29,722 33.65 17 63,054 18.93 15 71,186 21.07 5 31,024 16.12	12 65,406 18.22 10 10 29,722 33.65 3 17 63,054 18.93 10 15 71,186 21.07 10 5 31,024 16.12 15	12 65,406 18.22 10 75,616 10 29,722 33.65 3 41,199 17 63,054 18.93 10 79,544 15 71,186 21.07 10 142,427 5 31,024 16.12 15 102,292	12 65,406 18.22 10 75,616 13.22 10 29,722 33.65 3 41,199 7.28 17 63,054 18.93 10 79,544 12.57 15 71,186 21.07 10 142,427 7.02 5 31,024 16.12 15 102,292 14.66	12 65,406 18.22 10 75,616 13.22 22 10 29,722 33.65 3 41,199 7.28 13 17 63,054 18.93 10 79,544 12.57 27 15 71,186 21.07 10 142,427 7.02 25 5 31,024 16.12 15 102,292 14.66 20	12 65,406 18.22 10 75,616 13.22 22 141,022 10 29,722 33.65 3 41,199 7.28 13 70,921 17 63,054 18.93 10 79,544 12.57 27 142,608 15 71,186 21.07 10 142,427 7.02 25 213,613 5 31,024 16.12 15 102,292 14.66 20 133,316	12 65,406 18.22 10 75,616 13.22 22 141,022 15.60 10 29,722 33.65 3 41,199 7.28 13 70,921 18.33 17 63,054 18.93 10 79,544 12.57 27 142,608 18.93 15 71,186 21.07 10 142,427 7.02 25 213,613 11.70 5 31,024 16.12 15 102,292 14.66 20 133,316 15.00	12 65,406 18.22 10 75,616 13.22 22 141,022 15.60 8th 10 29,722 33.65 3 41,199 7.28 13 70,921 18.33 5th 17 63,054 18.93 10 79,544 12.57 27 142,608 18.93 3th 15 71,186 21.07 10 142,427 7.02 25 213,613 11.70 12th 5 31,024 16.12 15 102,292 14.66 20 133,316 15.00 10th	12 65,406 18.22 10 75,616 13.22 22 141,022 15.60 8th 5.00 10 29,722 33.65 3 41,199 7.28 13 70,921 18.33 5th 26.37 17 63,054 18.93 10 79,544 12.57 27 142,608 18.93 3td 14.43 15 71,186 21.07 10 142,427 7.02 25 213,613 11.70 12th 14.05 5 31,024 16.12 15 102,292 14.66 20 133,316 15.00 10th 1.46

Table 1 Femicide Rates per 100,000 and Rankings by Georgia Health District

¹Rate per 100,000 population

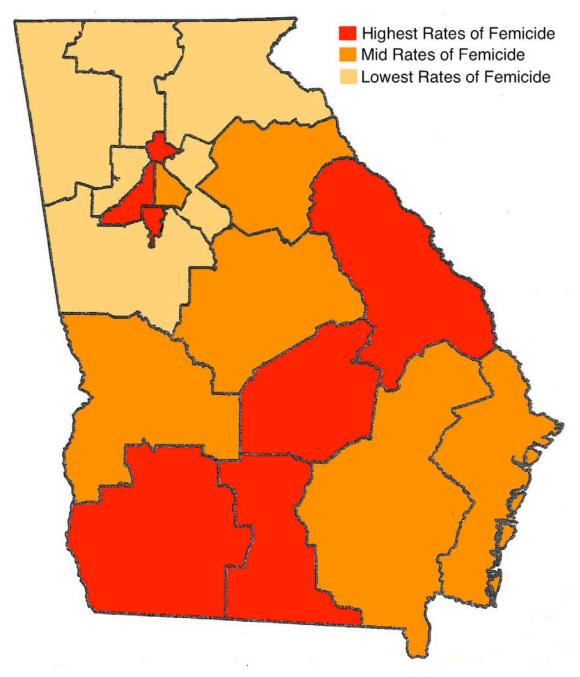


Figure 1: Highlights the areas Public Health Districts that have the highest. mid, and lowest femicide rates in Georgia.

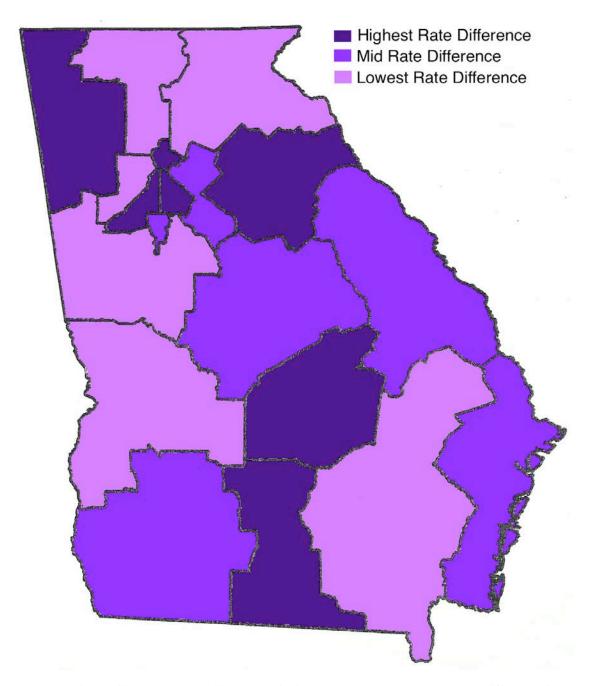


Figure 2: This map illustrates the Public Health Districts that have the greatest and least differences in rate of femicide between African American women and white (or greatest disparity).

As already stated 47% of the overall cases between 2004 and 2009 were reported as perpetrated by an intimate partner. Therefore similarly to femicide, intimate partner

femicide (IPF) has varying levels of rates across the state. Table 2 summarizes the number of deaths perpetrated by an intimate partner by race and district as well as the overall rate of IPF for each districts. Each district is also given a ranking, indicated in the table, in regards to the rate in which women are killed by intimate partners and the areas with the highest and lowest disparity of IPF between African American and white women.

	Af	rican America	n		White			Total		IPF	Rate ¹	Disparity
	Deaths	Population	Rate ¹	Deaths	Population	Rate ¹	Deaths	Population	Rate ¹	Rank	Difference	Rank
Northwest (1-1)	2	16,945	11.80	7	217,901	3.21	9	234,846	3.83	14 th	8.59	7 th
North Georgia (1-2)	0	6,318	0.00	6	150,592	3.98	6	156,910	3.82	16 th	(-3.98)	18 th
North (2)	0	12,380	0.00	5	212,723	2.35	5	225,103	2.22	18 th	(-2.35)	17 th
Cobb-Douglas (3-1)	5	79,582	6.28	6	207,730	2.89	11	287,312	3.83	14 th	3.39	13 th
Fulton (3-2)	20	180,803	11.06	7	167,924	4.17	27	348,727	7.74	9 th	6.89	9th
Clayton (3-3)	11	64,962	16.93	3	22.635	13.25	14	87,597	15.98	1 st	3.68	12 th
East Metro (3-4)	8	83,419	9.59	6	211,494	2.84	14	294,913	4.75	13 th	6.75	10 th
DeKalb (3-5)	19	169,980	11.18	1	101,075	0.99	20	271,055	7.38	11 th	10.19	6 th
LaGrange (4)	3	66,844	4.49	4	213,576	1.87	7	280,420	2.50	17 th	2.62	14%
South Central (5-1)	4	17,203	23.25	3	39,449	7.60	7	56,702	12.35	3 rd	15.65	2 nd
North Central (5-2)	10	80,733	12.39	8	122,801	6.51	18	202,814	8.88	6 th	5.88	11 th

10	67,342	14.85	4	102,979	3.88	14	170,322	8.22	7 th	10.97	41
6	65,406	9.17	5	75,616	6.61	11	141,022	7.80	8 th	2.56	15 th
7	29,722	23.55	3	41,199	7.28	10	70,921	14.10	2 nd	16.27	1 st
10	63,054	15.86	4	79,544	5.03	14	142,608	9.82	4 th	10.83	5 th
8	71,186	11.24	4	142,427	2.81	12	213,613	5.62	12 th	8.43	8th
3	31,024	9.67	10	102,292	9.78	13	133,316	9.75	5 th	(-0.11)	16 th
6	33,304	18.02	5	144,494	3.46	11	144,798	7.60	10 th	14.56	3 rd
	6 7 10 8	6 65,406 7 29,722 10 63,054 8 71,186 3 31,024	6 65,406 9.17 7 29,722 23.55 10 63,054 15.86 8 71,186 11.24 3 31,024 9.67	6 65,406 9.17 5 7 29,722 23.55 3 10 63,054 15.86 4 8 71,186 11.24 4 3 31,024 9.67 10	6 65,406 9.17 5 75,616 7 29,722 23.55 3 41,199 10 63,054 15.86 4 79,544 8 71,186 11.24 4 142,427 3 31,024 9.67 10 102,292	6 65,406 9.17 5 75,616 6.61 7 29,722 23.55 3 41,199 7.28 10 63,054 15.86 4 79,544 5.03 8 71,186 11.24 4 142,427 2.81 3 31,024 9.67 10 102,292 9.78	6 65,406 9.17 5 75,616 6.61 11 7 29,722 23.55 3 41,199 7.28 10 10 63,054 15.86 4 79,544 5.03 14 8 71,186 11.24 4 142,427 2.81 12 3 31,024 9.67 10 102,292 9.78 13	6 65,406 9.17 5 75,616 6.61 11 141,022 7 29,722 23.55 3 41,199 7.28 10 70,921 10 63,054 15.86 4 79,544 5.03 14 142,608 8 71,186 11.24 4 142,427 2.81 12 213,613 3 31,024 9.67 10 102,292 9.78 13 133,316	6 65,406 9.17 5 75,616 6.61 11 141,022 7.80 7 29,722 23.55 3 41,199 7.28 10 70,921 14.10 10 63,054 15.86 4 79,544 5.03 14 142,608 9.82 8 71,186 11.24 4 142,427 2.81 12 213,613 5.62 3 31,024 9.67 10 102,292 9.78 13 133,316 9.75	6 65,406 9.17 5 75,616 6.61 11 141,022 7.80 8th 7 29,722 23.55 3 41,199 7.28 10 70,921 14.10 2nd 10 63,054 15.86 4 79,544 5.03 14 142,608 9.82 4th 8 71,186 11.24 4 142,427 2.81 12 213,613 5.62 12th 3 31,024 9.67 10 102,292 9.78 13 133,316 9.75 5th	6 65,406 9.17 5 75,616 6.61 11 141,022 7.80 8th 2.56 7 29,722 23.55 3 41,199 7.28 10 70,921 14.10 2nd 16.27 10 63,054 15.86 4 79,544 5.03 14 142,608 9.82 4th 10.83 8 71,186 11.24 4 142,427 2.81 12 213,613 5.62 12th 8.43 3 31,024 9.67 10 102,292 9.78 13 133,316 9.75 5th (-0.11)

Table 2: Intimate Partner Femicide Rates per 100,000 and Rankings by Georgia Health District

¹Rate per 100,000 population

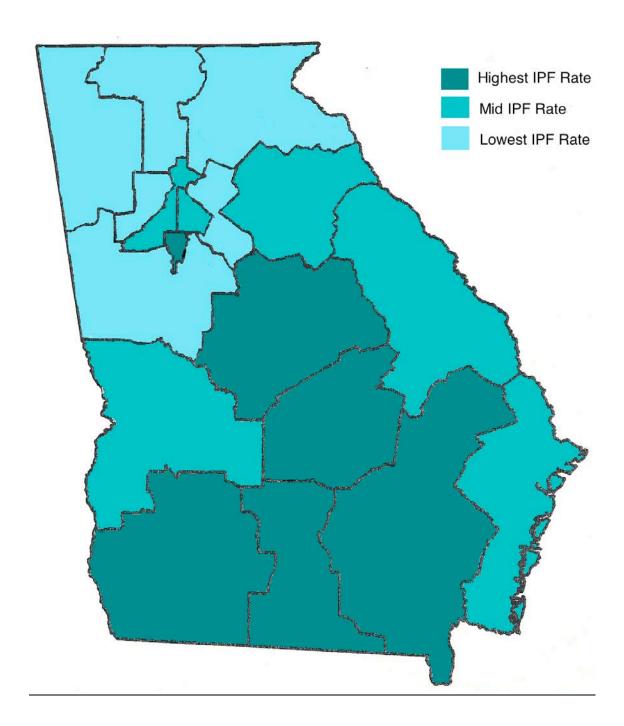


Figure 3: This figure illustrates the Public Health Districts with the highest, mid, and lowest rates of intimate partner homicide in Georgia.

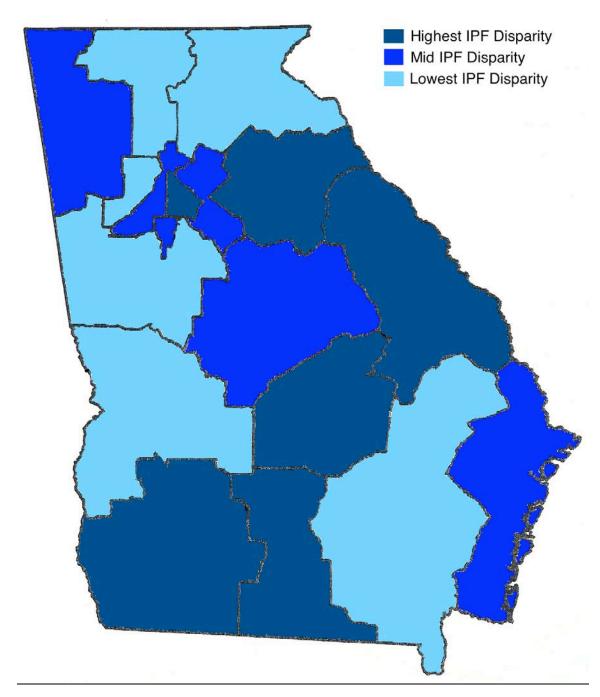


Figure 4: This map illustrates the Public Health Districts with the highest, mid, and lowest disparity in regards to African American IPF compared to White IPF.

<u>Domestic Violence Services in Georgia</u>

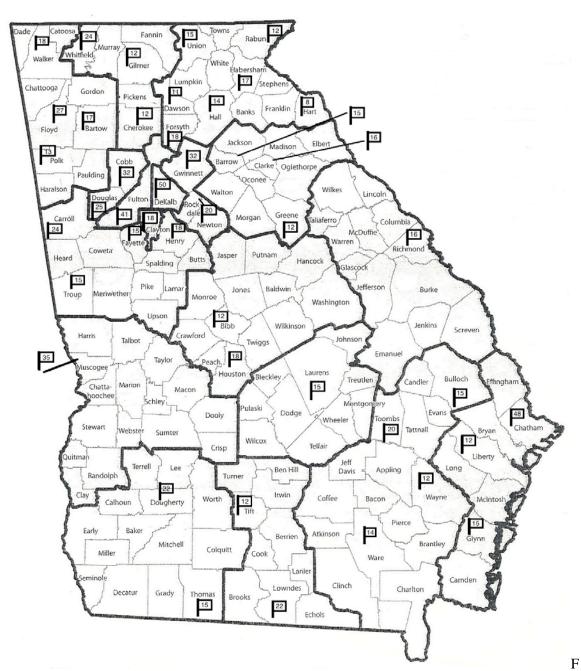
Georgia is made up of 159 counties that are divided to make the 18 Public Health Districts. Across the state of Georgia there are 45 shelters with a total of 854 beds available for women and families. These beds serve the almost 3.5 million women living in Georgia ages 15 and above equally to 4,094 women for every 1 bed available in the state. Figure 3 illustrates the spread of Domestic Services throughout the state as well as the number of beds at each shelter and Table 2 shows the results by each district.

Public Health District	Female	Number of	Women per Bed
	Population	Beds	
Northwest	234,846	75	3,131
North Georgia	156,910	48	3,269
North	225,103	95	2,370
Cobb-Douglas	287,312	57	5,041
Fulton	348,727	41	8,749
Clayton	87,597	18	4,867
East Metro	294,913	52	5,671
DeKalb	271,055	50	5,421
LaGrange	280,420	72	3,894
South Central	56,702	15	3,780

North Central	202,814	30	6,760
East Central	170,322	16	10,645
West Central	141,022	35	4,029
South	70,921	34	2,085
Southwest	142,608	37	3,864
Coastal	213,613	75	2,848
Southeast	133,316	61	2,186
Northeast	177,798	43	4,135
1			

Table 3: This table illustrates the female population ages 15 and above for each Public Health District as well as the number of beds total and the number of women served by each bed in the District.

A moderate correlation, 0.453 (p=0.05) was found between the numbers of women per bed in each Public health district and the rate of femicide. The higher the number of women per bed, the higher the femicide rate. Interestingly this trend did not continue among IPF cases or among those districts with the highest disparities.



igure 4: This map illustrates where each Domestic Violence Shelter is located as well as how many beds—each shelter offers.

A correlation analysis indicated the number of homicides in a Public Health

Distrtics is positively correlated with the number of women served per each bed in the

domestic violence shelters. Therefore the more women competing for bed space in the

district the more female homicides cases occur.

Analysis of Case Characteristics

Another area of interest was to look at the case characteristics to understand in more detail what events lead up to a death occurring. Three levels of Chi-Square Analysis was performed to indicate the differences between IPF cases versus non IPF cases as well as the differences in case characteristics among African American IPF cases and white IPF cases. Analysis was also performed on all cases to see if there were any differences between races for all femicides. Table 4 summarizes the chi-square test and the resulting p values for each variable tested to explore the differences between IPF cases versus non-IPF cases.

Three variables were found to be significantly different between the white cases and black cases of femicide. The age of victimization between African American victims and white victims was found to be significantly different ($\chi^2 = 43.21 \text{ p=0.00}$) African American victims tend to be much younger than white victims. More white women are going through a transition or life change such as a divorce or in the process of losing their house when the homcide occurs. This variable was significantly higher in white women ($\chi^2 = 4.70 \text{ p=0.03}$). Arguments preceding the incident were found to be significantly higher for African American women than white women ($\chi^2 = 9.22 \text{ p=0.002}$)

From the analysis comparing IPF cases to non-IPF cases, age, race, alcohol, and multiple female victims are not significantly different in IPF cases compared to non-IPF cases. A history of domestic violence is significantly higher in IPF cases as is a history of jail time for the suspect. Emotional states such as jealousy or an argument occurring before the incident are significantly higher in IPF cases. Also the frequency of life changes such as divorce, foreclosure on a home, or the beginning of a separation period are significantly associated with IPF cases. Drugs were found to be more highly associated with non-IPV homicides. A case resulting in more than one female victim is not significantly higher in IPF cases than non-IPF cases. Firearms have been found to be the primary weapon for most homicides but are used significantly more in IPF cases than non-IPF cases.

	# of Non- IPF	# of IPF	Chi-	P-
	Cases	Cases	Square	Value
History of Domestic Violence	6	55	52.245	0.00
Drugs	61	22	17.040	0.00
Method of Death	132	145	7.515	0.006
Jealousy	1	25	27.414	0.00
Life Change	4	53	58.879	0.00
Argument	22	82	54.080	0.00
History of Jail Time	1	11	9.839	0.002

Table 4: Summarizes the Chi-Square results comparing IPV cases versus non-IPV cases There a total number of 251 Non- IPF cases compared to 223 IPF cases.

Comparing the differences between IPF cases among African American victims and white victims three variables were found to be significantly different. African American women were found to be significantly younger than white women ($\chi^2 = 25.38$

p=0.00). More white women were going through a transition or life change when the homicide occurred (χ^2 =6.35 p=0.009). The breakdown of the relationship status of the perpetrators was significantly different between African American and white women (χ^2 = 12.001 p=0.002). Husbands were more often the perpetrators of white female victims were as boyfriends were the most frequent perpetrator for black women. Variables such as alcohol, drugs, method of death, history of jail time, multiple female victims, pregnancy status, and arguments were not significantly different between African American IPV cases and White IPV cases (p > 0.05)

From these Chi-Square analyses variables were chosen to run in a logistic regression to see if race when controlling for other variables is a predictor of intimate partner homicide. The variables controlled for were history of domestic violence, drugs, alcohol, age, jealousy, life change, argument, history of jail time, method of death and pregnancy. Table 3 summarizes the results from the Logistic Regression and Race was found not to be a significant predictor of Intimate Partner Homicide.

	AOR	95% CI	(B)	DF	P Value
Alcohol	1.034	0.62 - 1.74	0.389	1	0.254
Hx of DV	13.37	5.67 -31.76	2.531	1	0.000
Drugs	0.33	0.20 - 0.55	-1.026	1	0.002
Jealousy	35.57	4.24- 235.00	0.942	1	0.042
Life Change	19.26	6.84 – 54.19	2.778	1	0.000
Argument	6.05	3.62 – 10.13	1.774	1	0.000
Jail Time	12.97	1.66 - 101.30	2.294	1	0.044
Pregnancy	1.36	0.41 - 4.52	-0.447	1	.585

Age	0.76	0.53 – 1.09	-3.34	1	0.174
Method of Death	1.68	1.16 – 2.43	0.569	1	0.019
Race	1.10	0.75 – 1.57	-0.106	1	0.688

Table 5: Summarizes the Logistic Regression Results.

Discussion

Violence is a significant issue in the United States that affects individuals across all races and age groups. This creates a unique challenge when creating prevention initiatives and culturally appropriate mediation for those who have faced violence. The aim of this study was to look at overall femicide, as well as intimate partner homicide in Georgia, and identify unique trends and case characteristics in the hope of understanding violence against women in the context of the state of Georgia. A secondary aim of this study was to highlight the disproportionate burden of African American female homicides and IPF in Georgia and discuss the unique challenges that face African American women in regards to intimate partner violence. This information, integrated with the observations of the case characteristics and previous studies, may aid in understanding why this disparity exists.

Femicide and IPF Rates

The femicide rate varies in Georgia, depending on the health district, putting some women at increased risk of homicide depending on where they live. The central and southern districts of the state have much higher femicide rates than northern areas of the state. This trend continues amongst the intimate partner homicides as well. Many of the central and southern districts are very rural and, overall, have less population than in the northern districts, excluding the health districts in the metro Atlanta area. This may

suggest that women who are geographically isolated are at greater risk in Georgia than those who live in populated areas of the state.

Women living in rural areas may have more difficulty accessing services, resources, or the social support they need to escape their abusive partner. Women who are geographically isolated are easier targets to separate, emotionally, because the perpetrator has the potential to create greater distances physically and emotionally to the social support systems or resources she may need, like family and friends. Geographic isolation can also promote a culture of unknowing privacy among community members (Grigsby 1997). A next-door neighbor may be miles away, which makes it harder for people in the community to know abuse is occurring between partners. One major factor in the moderation and prevention of abuse is the community's intolerance of such behavior. If community members demonstrate their unwillingness to let abuse occur, then violence against women has been shown to decrease; however, if the community is unaware the behavior is occurring, community members have no opportunity to step in on behalf of the victim (Browning 2002). The perpetrator then has greater opportunity to manipulate his partner into believing that no one in the community would believe her claims, which further isolates her (Grigsby 1997). Many areas in Georgia have the potential to isolate women geographically and, subsequently, emotionally.

At the same time, elevated femicide and IPF rates also emerge in areas of the state that are extremely populated, such as the metro-Atlanta area. Women in these areas face different challenges than those who are geographically isolated, but the results are the same. Women may have to compete with other women for access to the services they need, which cannot keep up with the demand. In addition, urban areas are said to be more

socially disorganized than rural areas, indicating the bonds at the community level are weaker; this creates a culture of indifference to violence (Browning, 2004, Madkour, 2010). Community level efficacy and a norm of nonintervention have been linked with increases in homicides as well as intimate partner femicide and non-lethal violence against women (Browning 2002). Also, urban areas are associated with areas of concentrated disadvantage such as high poverty rates and unemployment. This is said to increase the economic stresses on individuals, creating a relationship environment that is prone to disagreements and marital discord. These community and personal level factors could all lead to higher femicide and IPF rates in the overly populated urban areas (Browning, 2004, Madkour, 2010).

Disparity in Femcide and IPF Rates

The secondary aim of this study was to note the higher burden of homicide and IPF in the African American communities of Georgia. In 17 of the 18 health districts, African American women are being killed at a significantly higher rate than white women. This rate difference can be upwards of three times greater for African American women than white women, indicating they are a vulnerable population. This trend is present in the IPF rates as well, with 15 of the 18 districts indicating a higher IPF rate among African American women. The differences in rate indicate that in certain areas of Georgia, African American women are at extreme risk for femcide overall, as well as by an intimate partner.

Domestic Violence Services

Through the mapping of Domestic Violence Services across the state it is clear that some of the disparities in femicide and IPF rates are directly related to the number of

services available for women in the area in which they live. In many of the Central and Southern Districts, one shelter will be available for women across 16 counties. As a result, women must compete with thousands for a place to stay, compounding the fact the woman may have to travel a large distance to get to the shelter. Services are clustered where the population is higher; in such places, the frequency of homicides may be greater however the rate (i.e., number of deaths per the population) is lower. In the East Central District, there is only one shelter that serves over 10,000 women per bed. These calculations do not take into account women with children under the age of 15, or male victims seeking services. Therefore this calculation under-estimates the number of people competing in this district for services and not enough individuals facing this issue are getting the support and help they need. A positive correlation was found between the overall femicide rate and the number of women per bed in each district, indicating the more women competing for a bed in the domestic violence shelters the higher the overall femicide rate is in that district. With estimates as high as 50% of women experiencing some form on intimate partner violence in their lifetime, the services available in Georgia currently cannot hope to serve the number of women that need assistance (CDC IPV Factsheet 2011).

Case Characteristics

A tertiary aim of this study was to look at the characteristics and details surrounding the cases in the Police and Coroner/Medical Examiners reports, to further understand the circumstances that lead to occurrence of homicide. For overall femicides African American victims' case characteristics were compared to white victims as well as

IPF to non-IPF cases, and the differences in case characteristics between African American and white female victims of intimate partner femicide.

For overall femicide, age of victimization and an argument directly preceding the incident were significantly higher in African American cases compared to cases where the victims were white. African American victims were, on average, 11 years younger than white victims. This may indicate that African American women are exposed to extreme violence at an earlier age, and the mental stresses associated with early exposure to violence may be a significant issue among this population. White victims had a much higher incidence of major life changes occurring in their lives at the time of homicide, such as going through a separation or divorce or a foreclosure on their home, indicating that stress may play a major role in homicide among white individuals whereas African American individuals most often use violence when an argument or conflict arises. This may indicate that individuals in the white community are more willing to discuss the details of their lives with the Police however African American communities may be less forthcoming and report an argument but not the details of what was occurring to safe guard their communities social image (Bent- Goodley 2004, Hampton, 2003 Nash, 2005)

Systematically, IPF cases have different case characteristics associated with them. Many of these characteristics are commonly linked as risk factors for intimate partner homicide in previous studies such as a history of domestic violence, jail time for the perpetrator, tumultuous relationship issues such as jealousy and constant arguments, and going through a life change such as a separation or divorce (Campbell 2003). The time period when a woman separates from her abusive partner is notoriously a very dangerous time for the victim because her partner is trying to regain his control over the situation

and reassert his power over her (Grigsby 1997). This leads to escalated violence. Many times, this escalating violence leads to someone being killed and, in some instances, both partners. Therefore, those women who continue to stay in an abusive relationship and are exposed to continuous violence are a high risk for homicide because their partner is always pushing the limits of his power and those who have recently separated and have shown their partner they are taking control of their lives are also at risk (Grigsby 1997). The ultimate goal of mediating exposure to intimate partner violence is to help women leave the relationship and stay safe, as well as help her gain access to the services and resources she needs to move forward with her life. This is why access to Domestic Violence Services and advocates are extremely important for women who are facing a violent partner. As seen, many women in Georgia currently are unable to obtain those services due to inability to reach the services. Services are more likely to be found in affluent areas where there are more resources and more individuals utilizing these services. Unfortunately, funding continues to be given to these same services that show high level of traffic and effective programs that are supporting women to leave their abusive relationships, and are in more affluent areas (Hertling, 2003). Furthermore, the insufficiency of beds to serve the demand for the services may not make her feel welcome or treat her according to her cultural norms.

Firearms are the main weapon chosen by perpetrators in all acts of violence, including non- IPF homicide. However, in regard to intimate partner femicide, firearms were used at a significantly higher rate than in other homicides. An implication of these findings is that firearms play a critical role in violence, and have devastating effects in the home when they are used against an intimate partner. Policy changes that include

intimate partner violence as a consideration in gun laws may alleviate some of the violence that takes place in Georgia between partners. Also a previous jail sentence for the perpetrator was a significant predictor of intimate partner femicide. Currently in Georgia if someone is convicted of domestic violence they are required to take a rehabilitation class such as anger management or a batter's intervention course. This finding may suggest these rehabilitation programs are ineffective. Those men that are coming out of jail are more likely to commit an intimate partner femicide. This may also suggest that the environment within jail is not conducive to rehabilitation but leads to more violent behaviors. His time in jail may actually reinforce his negative behaviors because within jail violent behaviors are used to enforce power over other prisoners or to gain respect. He may feel these behaviors are still appropriate to use within his intimate relationships outside or

Although race was not found to be a significant predictor of intimate partner femicide, there were significant differences between the case characteristics of white and African American victims in IPF cases. African American victims were significantly younger than white victims. The profile of their perpetrators was different, with a higher percentage being boyfriends than any other perpetrator. Significantly more white victims were going through a transition in their life at time of death, such as a separation or divorce. These differences may indicate why, in some areas of Georgia, African American women are more vulnerable to femicide and IPF. The age at which you are exposed to violence can play a major role in your risk of exposure to violence in the future (Campbell, 2003). The earlier individuals are exposed to violence, the more likely they are to find violent relationships in adulthood. Maturity may also play a role in an

individual's ability to handle issues in an intimate relationship, especially if violence is involved (Heise, 1998). The difference in relationship status may also be an indication of stresses acting on African American women, as racism has shaped their cultural attitudes towards men. African American women may feel pressure to stay with their boyfriend through the violence because they have been conditioned by their society and their communities to protect their men from negative stereotypes (Hampton, 2003). Also, in certain areas where violent crime is common, a perceived imbalance of men in the community may exist, forcing African American women to feel they do not have a large number or quality of men to choose from, so they stay with their partner (Adimora, 2001). These same forces have also acted on the African American men, as well. They may feel they cannot support their girlfriends financially, so they may choose other ways to exert their masculinity, such as physical power and sexual aggression and also the attitude of not committing to one woman (Hampton, 2003).

White victims were significantly more likely to be going through a transition in their lives, such as a separation or a divorce, at the time of homicide. This is a notoriously dangerous time for women leaving their abusive partners, however, it indicates that white women are more likely to take that first step of separation from their partner (Grigsby 1997). Although we are documenting women who were unable to stay safe from their intimate partner after leaving, this may also indicate that white women have the ability and resources to take that first step of getting out of their abusive relationship and some of those who do leave are successfully escaping. Or this may again indicate that individuals in the African American communities are less likely to report to Police the

intimate details of their relationships due to distrust and the need to protect their communities social image.

Limitations

The data used in this study were obtained from the initial field reports of the Police Officers arriving first on scene. Their field notes were a major limitation in this study because they did not provide the level of depth required to fully understand the circumstances that lead to the homicide. These field notes are handed over to investigators, who then build the case against the perpetrator and strive to fully understand the motives and emotions that led someone to murder. The number one aim for Police and the Coroner/Medical Examiner is to obtain the information they need to arrest a guilty individual. This information, at times, did not contain the detail needed to get an accurate picture, which may have led to an under-reporting of intimate partner femicide within the data set. Another consideration is that Police are not fully trusted in many communities so the reports may have be un-detailed because individuals were not willing to report certain aspects of the incident, which may effect the quality of the data. Another limitation of these field notes was the bias of the Police Officers present. From their experience on the job, or through their own personal biases, they may write something in their notes that may have been biased towards a certain race. These biases may have also played a part in the under-reporting of IPF within the data set increasing the number of white women who were reported as killed by an intimate partner and deflating the number of black women.

The collection of the data played a major role in the accuracy and quality of the information available for this study. During 2007, the Georgia Violent Death Reporting

System was not collecting field reports from the police department. Therefore, in that year, no data was available from this source, which severely affected the quality of the information that could be collected from the cases occurring. Also data was abstracted from the cases using a codebook created by the Centers for Disease Control and Prevention. They have a very narrow definition of IPF where a police call for a domestic disturbance has to be made at least 24 hours in advance for it to be deemed an IPF. Although for this study that definition was changed to fit the IPF criteria, it still affected how other variables were abstracted and the overall data set was put together.

Conclusion

Although race was not found to be a significant predictor of intimate partner homicide among the cases from 2004 to 2009, common trends were established that indicated the areas of Georgia that struggle most with femicide and IPF, as well as the areas that have the largest disparity in femicide and IPF rates between white and African American women. This study also illustrates the differences among the case characteristics between IPF and non-IPF cases, as well as between cases with African American and white victims. For future studies, researcher may find more accurate and a fuller picture among the investigative paperwork from police departments. Gaining access to this information will be critical to getting a more accurate number of the intimate partner homicides that have occurred in Georgia and to fully understanding what leads partners to kill their loved ones. Police and the Corner/Medical Examiners have the unique responsibility of telling the story of women who are killed. The Georgia Violent Death Reporting System needs to find an easy way for Police to fill in these details, such as a check-list that would capture the information that is needed to understand how

violence escalates to homicide. Future studies could also focus on what makes certain areas of Georgia more vulnerable to femicide and IPF such as genie coefficients or the availability of resources. Or if higher rates of femicide and IPF are associated with a higher level or rural decline and those areas with greater economic growth have lower rates. Femicide and Intimate Partner Homicide create a unique challenge for prevention because violence permeates so many levels of individuals' lives and it will take change at every level to stop this significant public health issue.

References

- 1. Adimora, Adaora A. et al. Social Context of Sexual Relationships among Rural African Americans. *Sexually Transmitted Diseases*. 2001: 28 (2). pp. 69-76.
- 2. Baumgartner, Eduardo Azziz et al. Rates of Femicide in Women of Different Races, Ethnicities, and Places of Birth: Massachusetts, 1993-2007. *Journal of Interpersonal Violence*. 2011: 26 (5) pp. 1077-1090.
- 3. Bent-Goodley, Tricia B. Perceptions of Domestic Violence: a Dialogue with African American women. *Health and Social Work*. 2004: 29 (4). pp. 307-316.
- 4. Bradley, Rebekah, Ann C. Swartz and Nadine J. Kaslow. Posttraumatic Stress Disorder Symptoms among Low-Income African American with a History of Intimate Partner Violence and Suicidal Behaviors: Self-esteem, Social Support, and Religious Coping. *Journal of Traumatic Stress*. 2005: 18 (6). pp 685-696
- 5. Campbell, Jacquelyn C. Health Consequences of Intimate Partner Violence. *Violence Against Women*. 2002: 359. Pp 1331-1336.
- 6. Campbell, Jacqueline C. Risk Factors for Femicide in Abusive Relationships: Results from a Multisite Case Control Study. *American Journal of Public Health*. 2003: 93 (7) 1089-1097.
- 7. Campbell, Doris Williams et al. Intimate Partner Violence in African American Women. *Online Journal of Issues in Nursing*. 2002: 7 (1). pp 1-20.
- 8. Centers for Disease Control and Prevention. *Understanding Intimate Partner Violence*. Available at http://www.cdc.gov/ViolencePrevention/pub/IPV_factsheet.html. Accessed July 1st 2011. Updated December 14th 2011.
- 9. Coker, Ann L. et al. Physical Partner Violence and Medicaid Utilization and Expenditures. *Public Health Reports*. 2004: 19. pp. 557-567.
- 10. Glanz, Karen et al (eds). *Health Behavior and Health Education: Theory, Research, and Practice.* 4th ed. San Francisco. John Willey and Sons Inc; 2008.
- 11. Grana, Sheryl J. Sociostructural Considerations in Domestic Femicide. *Journal of Family Violence*. 2001: 16 (4). pp. 421- 438.
- 12. Grigsby, Nancy and Brenda R. Hartman. The Barriers Model: An Integrated Strategy for Intervention with Battered Women. 1997: 4. pp. 31-43.
- 13. Hampton, Robert, William Oliver, and Lucia Magarian. Domestic Violence in the African American Community: An Analysis of Social and Structural Factors.

- Violence Against Women. 2003: 9 (5). pp. 533-557.
- 14. Heise, Lori L. Violence Against Women; An Integrated Ecological Framework. *Violence Against Women.* 1998: 4(3) pp. 262-290.
- 15. Hertling, Andrea, and Haiyan Zhang. Domestic Violence, Poverty, and Social Services: Does Location Matter? *Social Science Quarterly*. 2010: 91 (5). pp. 1144-1163
- 16. Madkour, Aubrey Spriggs. Area Disadvantage and Intimate Partner Homicide: An Ecological Analysis of North Carolina Counties, 2004-2009. Violence Vict. 2010: 25 (3). 363-377.
- 17. Martin, Margaret E. Double the Trouble: Duel Arrest in Family Violence. *Journal of Family Violence*. 1997: 12 (2). pp. 137-159.
- 18. Nash, Shondrah Tarrezz. Through Black Eyes: African American Women's Constructions of their Experiences with Intimate Male Partner Violence. *Violence Against Women*. 2005: 11 (11). pp. 1420-1440.
- 19. Puzone, Carol A. et al. National Trends in Intimate Partner Homicide: United States, 1976-1995. *Violence Against Women*. 2000: 6. pp. 409-426.
- Reeves, Carol and Anne M. O'Leary-Kelly. The Effects and Costs of Intimate Partner Violence for Work Organizations. *Journal of Interpersonal Violence*. 2007: 22 (3). pp 327-344.
- 21. Rivara, Frederick P et al. Healthcare Utilization and Costs for Women with a History of Intimate Partner Violence. *American Journal of Preventative Medicine*. 2007: 32 (2). pp.89-96.
- 22. Tiefenthaler, Jill, Amy Farmer, and Amandine Sambira. Services and Intimate Partner Violence in the United States: a Country-Level Analysis. *Journal of Marriage and Family*. 2005: 67. pp. 656-578
- 23. Violence Policy Center. When Men Murder Women: An Analysis of 2009 Homicide Data.
 Available at. Accessed July 21st 2011. Updated September 2011.