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Mass Murder in Ghana: Offenders, Victims and Incident Characteristics

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Abstract

Mass murder refers to a homicide episode in which four or more persons are killed concurrently, in one or two locations, within a twenty-four-hour period. As a phenomenon, mass murder has not been adequately studied in non-Western societies, partly because of the limited number of incidents occurring there. Consequently, very little is known about the extent and characteristics of mass murders that occur in these societies. This article helps fill this void in the literature by focusing on mass murder offenses that occurred in Ghana, West Africa. Diligent and systematic manual and computer searches of Ghanaian print and electronic media yielded six mass murders during 1990-2016. A content analysis was conducted of all available reports surrounding these cases to identify the socio-demographic characteristics of offenders, victims, offense characteristics (weapon, spatial, temporal aspects) and possible motives for the crime. The findings included the following: mass murder was a rare crime in Ghana; perpetrators were typically male and employed machetes, firearms, poisons and acid to kill their victims; offenders and victims archetypally shared a primary relationship as family members.

Keywords: Mass murder; Multicide; Ghana; Mass murderer; Homicide; Familicide; Mass killings

Introduction

In recent years, the crime of mass murder has been the subject of considerable discourse in both the scholarly and popular presses [1-16]. Much of this literature has been published on incidents, offenders and victims in the United States where it is estimated that approximately 20 to 27 mass murders occur annually [4,6,17] and, to only a limited extent, Canada [18] the United Kingdom [19] and Australia [3,12]. Despite the extensive information that has accumulated on the subject, some scholars [6,13] have questioned the accuracy of some of the extant information, asserting that a sizeable amount of extant information on mass murder is not based on systematic research. The implication is that mass murder is cloaked in myths and misconceptions [6,13]. Consequently, there is a need for continued systematic research into the subject to debunk those fallacies and misinformation.

Also, conspicuously missing from the extant literature is research on mass murder in most of the other countries in the non-Western world. Thus, very little is known about the extent and nature of mass murder in these societies with the result that there are gaps in our understanding of mass murder as a phenomenon. As recently as 2014, Hilal et al., [20] called for a "global perspective on mass murder" (p.83) to deal with the current lopsided nature of mass murder scholarship. To help fill this longstanding vacuum in the mass murder literature and contribute to knowledge about this tragic, yet, vital social issue, the current study focused on mass murder incidents that occurred in Ghana, a West African country, during the 27-year period spanning January 1, 1990 and December 31, 2016. Among the issues examined were the age, sex and socioeconomic characteristics of all victims and offenders involved in the event, temporal aspects of the killings, number of victims, victim-offender relationships, weapons used, geographic location (rural versus urban) and spatial location (private

versus public setting) of the homicides. The study also examined the circumstances, triggering events, and offenders' motivations, as well as the outcome and final resolution of the cases. For example, was the perpetrator arrested at the crime scene? Did the case end because of the perpetrator's suicide? What were the criminal justice outcomes? It is envisaged that this study will expand our current understanding of mass murder and foster a better understanding of homicide as a form of human behavior.

Justification for Research

A study of mass murders in Ghana is essential for at least two reasons. First, no other research to date has examined this issue. Second, it contributes to the scant extant literature on mass murders in non-western societies e.g. China [20], providing additional information about the extent, nature, causes and consequences of this tragic phenomenon. The inclusion of the Ghanaian data adds a new dimension to the explanations, analysis and understanding of multiple-victim homicides. Researchers will henceforth be able to compare mass murders in Ghana with mass murders in other jurisdictions of the world. Second, information emanating from this analysis can be used by Ghanaian law enforcement authorities to design programs to respond to and prevent future incidents. Findings from mass murder research in the United States and other western societies may have limited applicability to the Ghanaian setting.

Review of the Literature

The vast bulk of the literature on mass murder has focused on incidents committed in the United States [4,10,15]. Only recently has the phenomenon been the subject of study in other societies, including Canada [18], China [20] and Australia [12].

By definition, mass murder is a multiple-victim homicide that occurs over a relatively brief period (i.e., minutes or hours) in one or two locations. This means that the perpetrator kills multiple victims,

unlike single-victim homicides where a single victim is slain. In criminological lingo, multiple-victim homicides are known as multicides [1,4]. A major issue that has dogged mass murder research is the lack of consensus among scholars over the minimum number of fatalities required for an incident to qualify as mass murder [4,13,14,16,19-21]. Suggestions have varied from two to four or more victims. Also, while some scholars include the suicide death or fatal police shooting of the perpetrator among the minimum or total number of fatalities, other scholars do not [21]. Disagreement also exists over the maximum number of hours that must lapse between when the fatalities start and when they cease. Also, there are variations in the number of locations as well as geographic range where the killings must occur to meet the requirements of a mass murder.

Mass murder is recognized in the literature as a relatively rare crime [3,4,9,10,12,15,17,19,20]. Unlike single-victim homicides which constitute the vast bulk of homicide events in all jurisdictions, and for which several may occur annually in a particular jurisdiction, mass murder is an extremely rare crime. In the United States, mass murder has been estimated to represent approximately 0.1% of all homicide incidents and 0.7% of homicide fatalities that occur in the country each year. It is further estimated that mass murder incidents produce an average of 5.2 fatalities per incident [4]. In 2015, an estimated 15,192 homicides occurred in the United States [22]. Computationally, only 15 of these were mass murder incidents and 86 fatalities resulted. For Australia, McPhedran [12] identified only 14 incidents of mass shootings during the period spanning 1964-2014. The literature suggests that mass murder, particularly those involving mass shootings, are particularly rare outside the United States [12].

Given the large victim count in mass murders, the phenomenon tends to generate considerable media attention [10,23]. Incidents of mass murder are unvaryingly covered on the front pages of national newspapers, on television, radio, and internet news websites. Another reason for the vast publicity mass murders generates is the excessive violence and brutality with which the crime is typically perpetrated. Criminologists use the term overkill to describe violence far excessive than what is required to accomplish a killing. Another feature of mass murder is that it is remembered for a long time—partly because of the large body count coupled with the excessive violence with which the crime is perpetrated [12].

The vast bulk of the mass murder literature has focused on examining the correlates and causes of mass murder. Mass murder literature shows that mass murder is a masculine crime [4,6,9,15,20,21]. In the United States, males are overwhelmingly the perpetrators, typically accounting for over 95% of all mass murders occurring in the country in each year [6]. In their analysis of the demographic characteristics of United States mass shooters during 1976-2011, Fox and DeLateur [6] found 95.8% of the perpetrators to be male. A similar finding was noted by Hilal et al. [20] in their study of mass murders that occurred in China during 2000-2001. Here only 7 (4.2%) out of a sample of 165 mass murders were perpetrated by females; concurrently males accounted for 95.8% of the sample.

Regarding age, perpetrators of mass murders tend to be older than the perpetrators of single-victim homicides [4,6,20]. While single victim homicide offenders in the United States average 20-24 years old, mass murder offenders are typically in their 30s or 40s [24]. Nearly 43% of mass shooters in the United States during 1976-2011 were aged 30 to 49 years and 81.2% were aged 20-49 years old [6]. Hilal and associates [20] observed from their study of mass murder in China that 70% of perpetrators were aged 40 years or below. Some mass murder scholars have examined the social class background of mass murderers. According to Stone [15], "mass murderers usually come from workingclass backgrounds" (p.82).

The literature suggests that most mass murderers act alone in the perpetration of their crimes. Only in very rare cases are mass murders committed by a gang or team of offenders [11,20,25]. Nearly 67% (66.7%) of mass murderers in 2014, Hilal et al. [20] sample of Chinese mass murderers acted alone in their commission of mass murder.

Regarding victim-offender relationships in mass murders, the literature indicates that mass murderers most commonly kill people they know or are acquainted with [4,8]. In most cases, this involves a male head of household slaying his wife and children [4,20]. Consequently, the most common victims of mass killers are family members [10]. The term familicide has been coined to describe homicide events involving multiple victims who are all related to the killer. The strong personal relationship that typically exists between the assailant and his victims makes it highly likely/probable/almost guarantees that in the United States, mass murder would be an intraracial crime [4].

It has been noted that mass murders are typically premeditated or methodically-planned acts, rather than spontaneous acts of fury [9,10,15]. According to Stone [15], "Most mass murders are planned well in advance of the outburst, usually as acts of revenge or retribution for perceived slights and wrongs" (p. 51). The planning can span several days, weeks, or months. The high degree of planning associated with mass murders is unlike single-victim homicides, which are more likely to be spontaneous or impulsive acts [26]. Mass murderers use the planning phase to amass weapons, develop effective ambush tactics, as well as select their targeted victims [7].

In the United States., most (about 67%) mass murders are committed with a firearm [4,10,11]. Liem & Reichelmann [11] observed from their analysis of 238 United States multiple-victim family homicides occurring during 2000-2009 that "virtually all familicides were committed with a firearm," concluding that "The availability of guns in a conflict-ridden home environment can quickly change a heated argument into a deadly confrontation" (p.55). In China, the modus operandi and weapon of choice in mass murder is stabbing with a knife [20]. In their study of 165 mass killings in China, Hilal et al. [20], found that 57% were committed with a knife; only 5.5% were committed with a firearm. The researchers attributed the low firearm usage to severe restrictions by the Chinese government on the ownership, possession and manufacture of firearms [20]. In the United States, the greater incidence of mass murders and the frequent use of firearms in multiple homicides has been attributed in part, to the easy availability of high-powered and semiautomatic weaponry in the society [1,15].

Concerning the geographic location of mass murders, available research suggests that rural settings exceed urban locales as locations for mass murders. Where information on geographic location was provided, it was observed that nearly 79% of Chinese mass murders studied by Hilal and others [20] occurred in rural areas and small towns. Relatedly, scholars have also routinely examined the specific location of mass murder incidents [4]. In the United States, researchers estimate that about 50% of mass murders occur within or near the victims' residence while the other 50% occur in public venues, including shopping malls, movie theaters, schools, restaurants, and workplaces. Notably, eighty-one percent (81%) of Chinese mass murders studied by Hilal and associates [20] occurred in "a private setting as opposed to a public space" (p.95).

What motivates some people to kill in mass? Perpetrator mental illness has been identified as a factor in the commission of mass murder. In a 2016 publication focusing on a study of United States mass murderers, Taylor [16] reports that 30% of offenders in the study "were identified as having a confirmed or suspected mental illness" (p. 18). Duwe's [4] study of mass murders occurring in the United States during 1900-1999 yielded a comparable figure of mentally ill perpetrators—28% of offenders had symptoms of mental illness or had been diagnosed with a mental illness. Also, seven out of the 14 mass shooters who committed mass shooting incidents in Australia during 1964-2014 were found to have "had a history of confirmed or probable/possible mental illness" [12]. While some mental illness has been found in some mass murderers, the observed mental disorders generally are such disorders as depression and anxiety rather than more severe conditions as psychosis.

The actions of mass murderers are also often triggered by "acute and chronic life strains such as rejection (including romantic rejection like relationship breakdown, social rejection by peers, and workplace rejection such as being fired" [12]. According to Levin [10], "mass murderers "tend to suffer from chronic frustration and depression and also experience some catastrophic loss" such as the loss of employment. Many mass murderers are also believed to "have a problem with anger management and conflict" [1]. According to Levin and DeLateur [10], mass murderers "tend to share several psychological and behavioral characteristics, including depression, resentment, social isolation, the tendency to externalize blame, fascination with graphically violent entertainment, and a keen interest in weaponry."

Some analysts have suggested the possibility of a "contagion effect" or "copycat pattern" in the occurrence of mass murder. That is, a mass murder may inspire another act of mass murder in another jurisdiction, particularly if the original act received substantial publicity and intense media coverage [3]. The spate of school yard shooting incidents in the United States that occurred during the 1990s is often cited as evidence of this process of contagion in mass murder.

Many researchers have focused attention on the perpetrators' motivation for committing mass murder. In the process, they developed a classification of mass murderer types in categories based on characteristics of the offenders, their victims and their offenses [5,8]. To illustrate, Fox and Levin [5] have classified mass murderers into five categories based on offender motivation—"power, revenge, loyalty, profit and terror" (p.18-25).

Power-motivated mass murderers tend to kill certain pre-selected categories of victims in a purported desire to promote, further, or achieve some cause. Mass murderers who kill homeless persons, prostitutes and other socially stigmatized, discredited or marginalized persons in their mission to expunge the world of "filth" or "evil" archetypally fit this category.

The mass murderer who is motivated by revenge felt somehow wronged by his murder victims; he therefore commits the crime to pay back or even the score. This type of mass killer may also kill all or any person affiliated with the source of his grievance in what has been described as "murder by proxy." The husband who kills his estranged wife and her children, the jilted man who kills his love interest and all her children, and the employee who feels aggrieved by the termination of his employment and kills his supervisor and other co-workers fit this category of motivation.

A mass murderer whose multiple homicidal actions were motivated by loyalty was the one who killed his victims because he/she felt that by killing them, he would be saving them from some current or future misfortune. A terminally ill mother who kills her four dependent children and then herself so that they would be reunited in heaven fits this category of offender.

As can be inferred from the name, a profit-motivated mass murderer is instrumentally oriented in his crime, killing to achieve some goal-oriented desire. An armed robber who kills several potential witnesses who might otherwise live to testify against him in court fits this category of offender.

Terror-motivated mass slayings are designed to communicate a threatening, terror-striking message to persons who would potentially act in a certain way against them; the multiple slayings are designed to convey the message: go ahead and act a certain way and you would suffer a similar fate.

Research shows that mass murderers are most often motivated by some sort of revenge [4]. They kill to get even with those persons or individuals whom they perceive to be responsible for their miseries [10]. Some mass killers are motivated to kill for profit. In their study of mass murders in China, Hilal et al. [20], found revenge to be the dominant motivation, followed by profit, together accounting for 91% of the sample of mass murders studied.

Scholars who study mass murderers often examine or explore the backgrounds of mass murderers or perpetrators of mass murder. In terms of criminal history, the typical mass murderer in the United States does not have a prior criminal record [6]. However, in a study of 14 mass shooting events that occurred in Australia during 1964-2014, McPhedran [12] found six (43%) of the 14 offenders to have "had a history of violence and/or other criminal activities" (p.12).

Another identified feature of mass murder is the phenomenon of leakage [17,27]. Meloy and O'Toole [27] define leakage as "the communication to a third party of an intent to do harm to a target" (p. 3). It is believed that mass murderers often leak information about their crime to others, days, weeks, or even months before launching an attack. These pre-event warnings or leaks may be conveyed through "subtle threats, innuendos, diary entries, doodling or videotapes" [27].

Research shows that mass murderers are usually apprehended at the crime scene [10]. Some perpetrators turn themselves in to the authorities. Still, some others take their own lives or are killed by the police at, or near the scene of the crime [8,15]. In the United States, mass murderers are said to be five times more likely than other homicide perpetrators to die by suicide although familicidal killers are more likely than felony-related mass murderers to kill themselves [4]. Stone [15] reports from his analysis of United States data that "about one half of them [mass murderers] either commit suicide or are killed by the police as the finale to their rampage" (p.52).

In the United States, policy proposals to control the incidence of mass murder have included the enactment of tougher firearm legislation to limit and control public access to firearms, placing a ban on assault weapons and proposals to avert workplace and school violence [4]. In sum, previous research has identified the major characteristics of mass murder. Much of this information, however, is based on United States data [10]. It is unclear if, and to what extent mass murders in other societies are similar or different. The current research aims to analyze the characteristics of mass murders in one country, Ghana, to help answer this question.

Ghana: The Research Setting

Ghana, a West-African country, has an estimated population of 28 million. About 50% live in rural communities of less than 5,000 people. Official crime figures show that murder rates per 100,000 population in Ghana during 2004-2008 were as follows: 2.14 in 2004, 1.76 in 2005, 1,85 in 2006, 1.75 in 2007, 1.84 in 2008, 1.79 in 2009 and 1,72 in 2010. Multiple-homicides—serial murder mass murder, and spree murders are extremely rare. The country has stringent regulations on the sale and possession of firearms. Strict and aggressive enforcement of gun laws by the security agencies has operated to ensure that gun availability and access is kept to a minimum. In recent years however, the illegal manufacture of small arms by local blacksmiths and illegal smuggling of arms from war-torn neighboring countries have led to increasing proliferation of weapons among citizens.

Research Methods and Data Sources

The data for this analysis came from Ghanaian print and electronic news media-newspapers, magazines and internet news websites. In Ghana, newspaper reports of crime have been utilized to study several types of homicide and suicide phenomena due to the lack of adequate, dependable or reliable official data [28-30]. For this research, all major Ghanaian print and electronic news databases spanning 2010 to 2016 were searched for mass homicide incidents. Once a mass murder incident was identified, information was collected on the sociodemographic characteristics of offenders and victims, the relationship between offender and victims, the time and place of occurrence of the killings, the modus operandi and type of weapon used, as well as the motivation or triggering events. For ethical reasons, the study did not record the names of victims or offenders, despite their availability in media reports.

The use of mass media sources (e.g. newspapers) to study mass murder is not novel or unusual. Indeed, it has been a useful methodology due to the scarcity, undependability or unavailability of official data sets on the phenomenon. Numerous researchers [4,8,9,11,13,20] have utilized data obtained from newspaper surveillance exclusively, or as supplementary data, to study mass murder. Indeed, the use of newspaper surveillance methodology for

acquiring mass murder information is particularly necessary for a country such as a Ghana where police record keeping of crime data is erratic, unreliable, or plainly nonexistent. Mass media sources provide an excellent alternative or supplementary data source [31-33].

Although some researchers have expressed reservations about the capacity of newspapers to accurately capture homicide incidents [34], there are several factors that render the mass media-derived data used for this study dependable. First, homicide is relatively rare in Ghana. Rarer still are multiple-victim homicides. Given the exceptional rarity of such incidents, they are regarded as particularly newsworthy. Indeed, when a multiple-victim homicide or homicide with two or more victims occurs, it is the rule, rather than the exception, to find every major media outlet in the country giving ample, front-page coverage to the story. Given the markedly elevated level of public interest in the crime, various media agencies go to great lengths to report the details of the crime. Investigative crime reporters conduct extensive investigations, often interviewing relatives, friends, acquaintances, witnesses, neighbors, landlords, employers, and other associates of the decedents. The media reports concurrently and almost invariably include excerpts of interviews with law enforcement authorities about investigations into the crime. Medical and public health practitioners, including forensic pathologists and psychiatrists are also interviewed for their insights. These efforts culminate in the publication of significant details of the crime, often much more extensive than is available in official law enforcement records [28-30]. News of multiple-victim homicides typically trigger feature-length articles in national newspapers and internet websites.

Results

Multicide or multiple-homicide events with four or more victims is a statistically rare event in Ghana. A careful, diligent search of various Ghanaian mass media from 1990 to 2016 yielded only six (6) cases. The six mass murderers killed a total of 26 people. Five of the six perpetrators perished at or near the crime scene—four by their own suicides and one through vigilante action. Thus, in all 31 people lost their lives. Each case garnered considerable media coverage. In Ghana, given that even single-victim homicides garner considerable media attention, it is expected that cases with four or more victims would generate extensive public attention and media coverage. The major findings of the research are displayed in Tables 1 and Table 2 below.

Case#	Date	Offender's Sex	Offender's Age	No. of Victims	Killing Method	Location	Time	How Case Resolved
1	2/19/2016	М	35	7	Hack with Machete	Assin Akrofuom	8 p.m.	Offender Lynched
2	1/5/2010	F	31	6	Poison	Gomoa Nyanyano	Daytime	Offender Suicided
3	2/18/2015	М	34	5	Poison	Jaway Anlo near Half Assini	Daytime	Offender Arrested
4	7/25/2016	М	32	4	Firearm	Tema	4 p.m.	Offender Suicided
5	4/25/2015	М	35	5	Firearm	Mayera	6:30 a.m.	Offender Suicide
6	12/03/2015	М	50	5	Acid	Koforidua	Nighttime	Offender Suicided

Table 1: Offender Attributes and Selected Features of the Crime

Case	Incident Location	Location	Victim's Ages in Years/Deceased Perpetrator's Age in Parenthesis	Offender's Mental Illness
1	Private Residence	Rural	(35), 2, 10,	Yes
2	Private Residence	Rural	1, 4, 6, 9, 11, (31)	Yes
3	Private Residence	Rural	2, 3, 3, 6, 28	No
			3 months; 19 months;	Probably
4	Private Residence	Urban	62, (32)	Wife says mentally ill
5	Private Residence	Rural	72, 60, 65, 63 (35)	Yes
6	Private Residence	Urban	7, 13, 15, 40, (50)	No

Table 2: Victim characteristics, offender attributes and selected features of crime.

It is notable that the homicide event in each of the cases examined occurred within a twenty-four-hour period. As are noted in the case descriptions, it took between a few minutes to an hour in each case for the slayings to be completed. Each of the six cases was carried out by a single perpetrator, acting alone. The data show that in Ghana, as elsewhere, mass murder is a largely masculine crime; male perpetrators outnumbered female perpetrators by 5 to 1; five (83.3%) of the perpetrators were male; one was female. The assailants were aged 31, 32, 34, 35, 35 and 50-years-old respectively, with a mean age of 36.2 years and a median age of 34.5 years.

Concerning modus operandi or the method of offense perpetration, two (33.3%) perpetrators used firearms, two other offenders (33.3%) used poison, one offender (16.7%) used acid while the remaining offender used a machete to hack the victims to death. One of the assailants who used a firearm in the perpetration of the murders was a police officer who used his officially-issued service weapon to perpetrate the acts. Geographically, 5 out of the 6 cases occurred in rural areas. In terms of location, it is notable that all six homicide events occurred in or near the family home.

In 4 (67%) out of the 6 cases, there were obvious signs of premeditation. In Case 2, the filicidal mother took time to obtain the bleach detergent which she used to kill the children; after the crime, she placed a telephone call to the husband to come and collect the deceased children. In Case 4, the perpetrator purchased the rodenticide for the purpose of poisoning his intended victims. He then broke into the home of the ex-girlfriend while she was away. In Case 5, the police officer offender waited until issuance of his official weapon; he then traveled to the home of his estranged wife where he committed the mayhem. In Case 6, the perpetrator purchased the acid with the intention of using it to kill his wife and children.

The current study used media reports as data to examine the motives of mass killers and the circumstances surrounding their crimes. Three out of the six assailants had a history of confirmed or suspected mental illness. For example, in Case 1, the assailant was widely described as a "mad man" and a chronic user of marijuana. The female assailant in Case 2 who committed filicide-suicide had a long history of diagnosed mental illness, hospitalization for mental illness and suicidal behavior. In Case 5, the wife of the assailant told the media that her police officer husband's disposition had changed in the weeks prior to the murders; according to her, the husband made statements that did not make sense.

Three out of the 6 cases were revenge-motivated. Two perpetrators were motivated by revenge against an estranged intimate partner. The perpetrator in Case 6 responded violently to a threat of divorce. The mass killer in Case 5 suspected his wife of infidelity and of conspiring with her mother to use maleficent witchcraft power to stymie his progress in life. In Case 4, the mass killer sought revenge on an exgirlfriend who broke off a relationship with him, then married another man in their small fishing community.

Regarding resolution of the cases, four (67%) of the six mass murderers committed suicide at the scene of the crime. One mass murderer (Case 1) was apprehended by the public and lynched for his crime while the another (Case 4) was apprehended by police investigators. Dispositional outcome for this case was not available at the time of this writing.

Case Summaries

Case 1

In this case, a 35-year-old male offender, described in the reports as an "ex-convict," and "a suspected drug user," killed his mother, father, brother, cousin and two neighbors in the mass murder event. According to the media accounts, the assailant had spent two years in prison for larceny prior to the mass murder incident. Upon his release from prison, he asked his parents to provide him with a piece of arable land to pursue farming. The parents obliged. For two years, the defendant lived on the land as a farmer. He occasionally paid visits to his parents at their house. Around 7:30 p.m. on the day of the attack, he armed himself with two sharp machetes and went to his parents' home. Without any provocation, he used the machetes to decapitate his parents and then butchered a brother and a visiting cousin to death. He then proceeded next door to lethally assault his parents' landlord and the landlord's son who lived in another part of the house. Following the fatal attacks, the perpetrator fled to his farm. Having learned about the perpetrator's mass murder, residents in the community reacted by apprehending, beating, and then killing the assailant. Several media reports carried graphic pictures of the gory crime scene. The assailant was also described in media stories as "mentally deranged," "mentally unstable," and "a mad man." ("Mad Man Murders Parents, Four Others," 2016) [35].

Case 2

This was a case of multiple-victim maternal filicide-suicide. A 33year-old mother with a history of psychiatric disorders and repetitive suicidal behavior, killed all five of her young children through poisoning and then committed suicide through ingestion of the same poison. The victims were three boys and two girls. They were aged, 11, 9, 6, 4, and 1 years-old. The assailant and the father of the children had lived in a cohabiting relationship during the birth of the children. The assailant developed a full-blown mental illness during the relationship. She had a history of hospitalization for depression and schizophrenia. The couple also guarreled incessantly over maintenance of the home and the children, with the father accusing the mother of dereliction of responsibilities. The quarrels contributed to the breakup of the relationship as the assailant regularly called police to lodge complaint of physical abuse. The man obtained full custody of the children and at the time of the murders, was living with a girlfriend and the children. The assailant felt embittered by the turn of events and often picked quarrels with the girlfriend. She also complained about her children being maltreated by the woman. In the three years after the relationship termination, the assailant had been hospitalized on three separate occasions at two different psychiatric facilities. A day prior to the maternal filicides, the assailant arrived at her former boyfriend's house to visit her children. She brought cupcakes and fruit juices for the children. At about 5:00 p.m., the father left the children in the care of their mother to go and see off some visiting guests. Upon his return, he discovered that the mother had departed the home with the children. A few hours later, he received a telephone call from the mother's sister alerting him that she had returned home with the children. The man was not alarmed and allowed the mother to keep the children. Witnesses confirmed seeing the children and their mother coming and going from her apartment for two consecutive days. On the third day, the mother called the father to come and collect the children. When he arrived, he found the apartment locked. He peered through the window and saw the children lying on a bed in the room. He broke into the apartment and found that all the children were dead. Each child had been given a lethal dose of a liquid bleach, locally known as parazone. The chemical had been mixed with bread and then fed to the children. The mother had placed each child on the bed after poisoning them. Pictures of the crime scene taken by photojournalists and published alongside the filicide-suicide news stories showed the children's nude bodies had been neatly arranged, side-by-side, in order of chronological age, on a bed in the assailant's bedroom.

A day later, the mother was discovered in a semi-conscious state in an abandoned vehicle in a private automobile workshop. Police crime investigators found a purse lying beside her. The purse contained an unfilled prescription for a pharmacy. She was holding a small pocket notebook she used as a diary. The dairy chronicled some of her frustrations. The suicide note read: "I was born in 1977... I am alone in this world, God why, God why ... I don't have a mother or father, who am I ... Georgina [name of assailant] with three boys and two girls ... My people deserted me ... God give me hope ... forgive me and my children, Nana, Kwaku, Angel, Kofi, Esi [names of the children] ... What a painful world. God have mercy on me and my children ... Why, Kojo my husband ... Kojo, I do love you and will never forget

Psychiatric information reported by the media showed that the assailant was suicidal and had made three previous attempts to kill herself. On one occasion, following a mental crisis, she reportedly lay in the middle of a road adjacent to her house with one of her children, beckoning a car to run over them. The assailant had three encounters with psychiatric officials in the twelve months preceding the filicidessuicide. She presented at the psychiatric hospital on August 5, 2009 and was discharged on August 24. She was admitted to the hospital again on August 27 but absconded from the hospital on September 2. She presented again at the hospital on October 11 and was discharged on October 12. She was scheduled to report again one month later for psychiatric review but did not keep the appointment. The psychiatrist's report noted that during her last visit to the hospital, she repeatedly mentioned the name of her former boyfriend, also expressing a desire to be reunited with him and her children. She also mentioned the name of a co-tenant whom she accused of not paying electricity bills or performing household tasks.

Case 3

In this case, the mass murderer was a 35-year-old professional hunter. He was described in media reports surrounding the crime as "a psychiatric patient." He had been discharged from a psychiatric hospital just two days before the mayhem. On the day of the multicide, he went on a murderous spree, lethally shooting and killing his father and two other members of his extended family. A fourth victim who was not related to the assailant, was hospitalized in critical condition. Following the assaults, the assailant committed suicide by turning the gun on himself. According to the facts of the case, a day prior to the deadly rampage, the assailant was heard and seen in the community shouting" "I will kill, I will kill." People ignored the threats as the assailant was known to be a mentally ill person who confined himself to pursuing his professional hunting business. At 6:00 a.m. on the day of the homicide, he approached his father, who was dressed for going to a funeral, and shot him dead. He then went around the small rural community shooting at anyone whom he encountered. By the time the shooting ceased, three people were dead and several others had sustained gunshot injuries. People in the area fled and went into hiding, returning only after his suicide had been announced. Following the killings, police warned citizens not to hesitate to report anyone making threats of murder. It was reported that the assailant did not bear his father nor any of the victims a grudge and no one could fathom why he committed the acts ("Man Kills," 2015).

Case 4

This case occurred in February 2015 in a small fishing village along the southern coast of Ghana. In this case, a woman's threat to withdraw from an intimate relationship was the trigger for the murder of five people. The perpetrator was a 34-year-old fisherman. The victims were his former girlfriend aged 26-years-old and four children—three boys and one girl, ranging in age from 2 to 6 years old. Two of the children were the deceased woman's biological children from a previous marriage, one was her niece and the other child was a neighborhood child who was a friend of her children. According to the facts of the case, the perpetrator and the 26-year-old fish vendor were involved in a two-year cohabiting relationship. The woman told police prior to her death that their two-year relationship produced no children. Also, the perpetrator had reneged on a customary requirement to pay a brideprice to formally seal their relationship. The woman further told police that during their two-year relationship, the perpetrator "did not provide proper care and maintenance [to her and her children] but he was very aggressive in his demands for sex." Following the breakup, the woman relocated to a new apartment with her children. A few months later, she married another man in the community. The assailant harbored resentment towards the woman for ending the relationship.

At about 4:00 am on the day of the homicides, while the woman was away from home, the perpetrator sneaked into the apartment and laced food she had prepared for herself and her family with rodenticide. Oblivious to the poison, she served the food to the children and herself when she returned from work that day. Attending physicians confirmed that the rodenticide was far more lethal and killed faster than DDT once it entered the blood stream. Public reaction to the offense was shock and horror. Confronted by police, the perpetrator admitted to the offense and was arrested. A search of his home led to the discovery of the unused portion of the poisonous chemical. During interviews with police, the assailant said he "could not stand the humiliation handed to him by the woman and her friends who, he claimed, composed a song to tease him" about the relationship breakup (Aklorbortu, 2015; "Man Poisons Girlfriend, 4 Kids," 2015; "Man Remanded for Poisoning," 2015) [36].

There is unambiguous evidence of premeditation as the perpetrator made plans towards the killing-purchase of the rodenticide and sneaking into the house of the estranged woman. His apparent motivation was anger and revenge. He wanted to get back at the woman for breaking off the relationship. In his mind, the children, whom he saw as an extension of her, also needed to be eliminated.

Case 5

A 32-year-old active-duty police officer killed his 62-year-old mother-in-law and his two biological children aged 19 months and 3 months respectively; he then turned the gun on himself at the scene of the crime, all killings happening within the space of a few minutes. It is unknown whether the perpetrator was mentally sound or unsound at the time of the crime. Just weeks before the murder, he had accused his wife of marital infidelity and denied paternity of their two children. He had also accused his wife and mother-in-law of being maleficent witches who had used their witchcraft to stymie his progress in life. Following accusations of infidelity and witchcraft imputation, the perpetrator regularly assaulted his wife physically, even threatening her with murder on several occasions. This prompted the wife to report the matter to the Domestic Violence and Victim Support Unit (DOVVSU), a Unit of the Ghana Police Force. DOVVSU is tasked with the investigation, apprehension and prosecution of offenses relating to the victimization of children, women and men in domestic situations. Following further deterioration in the relationship between the couple, DOVVSU advised the wife to relocate from the marital home. She complied and relocated with the children but the assailant managed to trace them to their new abode.

The case had the essential ingredients of premeditation. The assailant was assigned to the Rapid Deployment Force, a division of the Ghana Police Force. On the day of the murders, the perpetrator was scheduled for evening guard duty with the police unit. Instead, he chose the day to do the mayhem. At the police armory that afternoon, he signed and collected an AK 47 rifle, a weapon he was to use for his evening duty. But, rather than go to work, he went to his wife and his children's new home and fatally shot his mother-in-law and children and then himself. The wife was not home at the time. Details of the murders showed that upon entering the house, he found the motherin-law bathing the younger child. He shot and killed them. He then went to a bedroom where the older boy was sleeping. He shot and killed him and then shot himself in the chest while still donning his police uniform with a helmet.

The case attracted enormous publicity and was the focus of several media reports, including videoclips where the wife talked to reporters

about the incident. Some media reports described the murders as "dastardly," "a barbaric killing spree." In interviews with the media, the wife told reporters that she thought her husband was driven to commit the murders by some hidden "spiritual forces." She reiterated that it would have been impossible for her husband to commit the murders if he had been sane. She said she noticed changes in her husband some months prior to the murders. According to her statement to investigators and to the press, his utterances had changed and some things he said appeared senseless. She further indicated that she had audio recordings of certain irrational things her husband had uttered. This convinced her that her husband was mentally unbalanced and something was goading him to act abnormally. Amid the publicity surrounding the case, several citizens called on the police service authorities to establish a unit in the force to provide mental health services for police personnel battling mental illness ("Policeman Who Killed," 2016; "The Inside Story," 2016; "Wife of Police Officer," 2016)

Case 6

This was a case of familicide-suicide. A 50-year-old man killed his wife, aged 40 years old, and their three children aged 17, 13 and 7 years. He then killed himself. According to the facts of the case, the 50year-old man returned to Ghana after a four-year stay in Germany as an immigrant. He came home empty-handed. His wife took a loan from a bank and purchased a car for him to operate as a taxi. He later conspired with the driver of the taxi to collect documents covering the car from his wife, ostensibly to sell it. The wife complained regularly to friends that her husband beat her frequently, accusing her often of having extramarital affairs with other men. He reportedly denied paternity of one of their four children. The wife asked for a divorce but the assailant threatened her with death if she divorced him. Planning for the murder, the perpetrator bought a quantity of corrosive acid. At home, he stabbed the wife to death and then poured acid on her and their two sons. He hit the head of the 17-year-old daughter against a wall; when she became unconscious, he poured acid on her. He then drank a quantity of the acid, killing himself instantly ("Horror in K'Dua," 2015) [38].

Discussion and Conclusion

This study represents the first ever study conducted on mass murder in Ghana. It adds to the extant literature on the phenomenon, particularly coming from a jurisdiction which has currently not featured in studies of mass murders. The primary objective of the study was to describe the victims, offenders and incident attributes of mass murders in Ghana. A careful search of both the Ghanaian print and electronic media yielded only six cases over a 27-year period, using the definition of four or more homicide victims killed simultaneously in a single homicide event.

Several of the characteristics of mass murder identified in mass murder research in the United Studies were present in this Ghanaian case study. First, as in the United States, mass murder is an extremely rare crime. Second, the vast majority of the perpetrators were male. Third, a significantly large number of perpetrators were mentally ill or showed signs of mental illness. Fourth, private locations typically the residences of the victims-were the most common setting for Ghanaian mass murders. Fifth, a sizeable percentage (67%) of the assailants committed suicide following the perpetration of mass murder. Sixth, a significantly large proportion (5 out of 6 or 83.3%) occurred in the context of family killings where the assailant killed all or a number of family members.

There were also some major dissimilarities between Ghanaian mass murders and mass murders in the United States and other western societies. First, is the role of firearms in the perpetration of mass homicides in Ghana. Although firearms were employed by two mass murderers in the perpetration of their crimes, firearms were not the predominant modus operandi. In one of the only 2 instances where firearms were used, the assailant was an on-duty police officer who had been issued an official weapon only a few minutes before the murder. The other assailant who used a firearm was a hunter by profession who had regular access to firearms. The relatively limited use of firearms in the perpetration of mass murder probably stems, in part, from official government restrictions on the ownership, possession and use of

The finding that two-thirds out of the six cases were triggered by perpetrator mental illness merits additional comment. It means there is a need for the expansion of mental health delivery services to cover all in need of serious mental health care. In Ghana at present, there is a paucity of all categories of mental health resources—psychiatrists, psychiatric nurses, psychologists, and psychotropic medication for the treatment of mental illness. It is estimated that at present, only 2-3% of patients eligible for mental health care receive such services [39]. People suffering from psychological or mental health problems must be treated and monitored.

One possible methodological limitation of the study is the exclusive reliance on reports found in Ghanaian media. Though media data were adequate for the study, future research should endeavor to combine police data with media-reported information. Though difficult to obtain, they could be a useful supplement to media sourced data. In conclusion, it is vital for criminologists and other behavioral scientists to expand mass murder research to encompass all countries and jurisdictions where the crime of mass murder has occurred. Systematic analysis of the who, where, when, how and why of mass murder incidents will undoubtedly ensure a more complete understanding of this rare but consequential type of crime.

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