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The Female Homicide Victim: Trends in a Metropolitan County from 1969 to 1980

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ABSTRACT: The following paper reviews the case files of the female homicide victims in Cuyahoga County, OH from 1969 through 1980. The victims were most frequently married middle-class women killed by their spouse or boyfriend with a handgun. The event usually followed an altercation and took place in the victims' home. Sexual assault or criminal activity were rarely part of the scenario. The male homicide victims of this time interval were usually killed by an acquaintance or a stranger in a public place, but rarely by their spouse. The female victim's blood alcohol level was significantly lower than her male counterpart's which was between 0.1 and 0.3% (g/100 g).

KEYWORDS: forensic science, demography, homicide

There has been a well publicized increase in homicides over the past two decades. Factors such as poverty, urban disorganization, and increased accessibility to firearms have been cited as being contributory to the problem [1-3]. The homicide trends in Cuyahoga County for the 1960s and early 1970s have been examined previously, however, the differences between male and female homicide victims were not examined at that time in the study. As women proportionately are involved in fewer homicides than men, few studies have characterized the female homicide victim. The following paper will examine the characteristics of female homicide victims over a twelve-year period (1969 through 1980) in Cuyahoga County and compare the male and female victims during this period.

Methods

Cuyahoga County is a county in northeastern Ohio bordering on Lake Erie. The largest city is Cleveland and its population comprises one half of the county population. The county is an urban-industrial base for Ohio with 38 cities, 18 villages, and 4 townships. The coroner's office in the county performs complete autopsies on all violent and unexpected deaths occurring in the county. Complete records (including police reports) of all cases are maintained. The files of all homicides during the twelve-year period 1969 through 1980 were utilized for this paper.

The decennial census figures for the county were used for years 1960 to 1980 population figures. The intervening years for which census data were not available were estimated.

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The age range for the victims included female victims eleven years or older. This lower age limit was selected based on the fact that the average age of menarche in the United States is eleven to twelve years, thus pediatric cases were eliminated. The age, marital status, occupation, modality, assailant, and crime scene information were obtained from the coroner's records. Evaluation of sexual assault occurrence was based on scene information, anatomic evidence of the body, and laboratory evidence of recent sexual activity as noted in the case reports. Evidence as to whether the crime was related to drugs or prostitution was based on the police reports.

Blood ethanol levels are determined in the coroner's office by gas chromatography for all homicide victims who survive less than 24 h. This includes greater than 90% of all homicide victims.

In the following analysis of blood alcohol level differences between male and female victims, statistical significance of differences was tested by a two-tailed *t* test. All differences are evaluated as significant at $P = 0.05$ or less.

Results

General Homicides

Table 1 shows the county population and the homicide rates from 1950 through 1980. The county population increased through 1969, then began to decrease. From the year 1950 to 1967 the homicide rate nearly doubled. Comparing 1950 to 1972, the homicide rate tripled. Despite the declining population, the rate has continued to remain high through the 1970s.

Figure 1 compares the percentage of total homicides for the four gender-race groups disregarding the specific racial population of the county. Nonwhite males comprised 52 to 66% of all homicide victims during the 30-year period. White males comprised 9% of all victims in 1950 and 27% of victims in 1980. By contrast the nonwhite female comprised 15% of victims in 1950 and 10% in 1980. The white female composed 6 to 11% of all homicide victims.

Figure 2 breaks the overall homicide rate into rates for the specific population groups: white male, nonwhite male, white female, and nonwhite female. The nonwhite male leads the group for the entire period 1960 to 1980. The nonwhite female rate in contrast falls

TABLE 1—*Homicides, 1950 to 1980.*

Year	Population	Total Homicides	Rate/100 000
1950	1 389 532	83	5.9
1955	1 551 885	82	5.3
1960	1 647 895	102	6.2
1965	1 738 797	129	7.4
1966	1 744 030	166	9.5
1967	1 737 840	186	10.7
1968	1 753 448	210	11.9
1969	1 755 975	314	17.9
1970	1 721 300	307	17.8
1971	1 714 751	320	18.7
1972	1 713 122	361	21.1
1973	1 713 506	324	18.9
1974	1 711 279	357	20.9
1975	1 709 052	346	20.2
1976	1 706 825	299	17.5
1977	1 704 599	298	17.5
1978	1 702 372	266	15.6
1979	1 700 145	321	18.9
1980	1 498 295	307	20.5

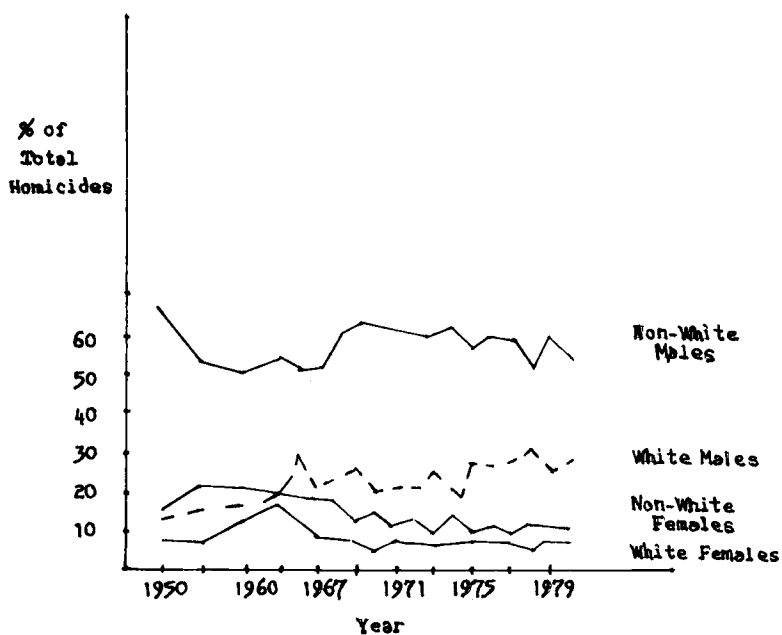


FIG. 1—Homicide victims by race and gender.

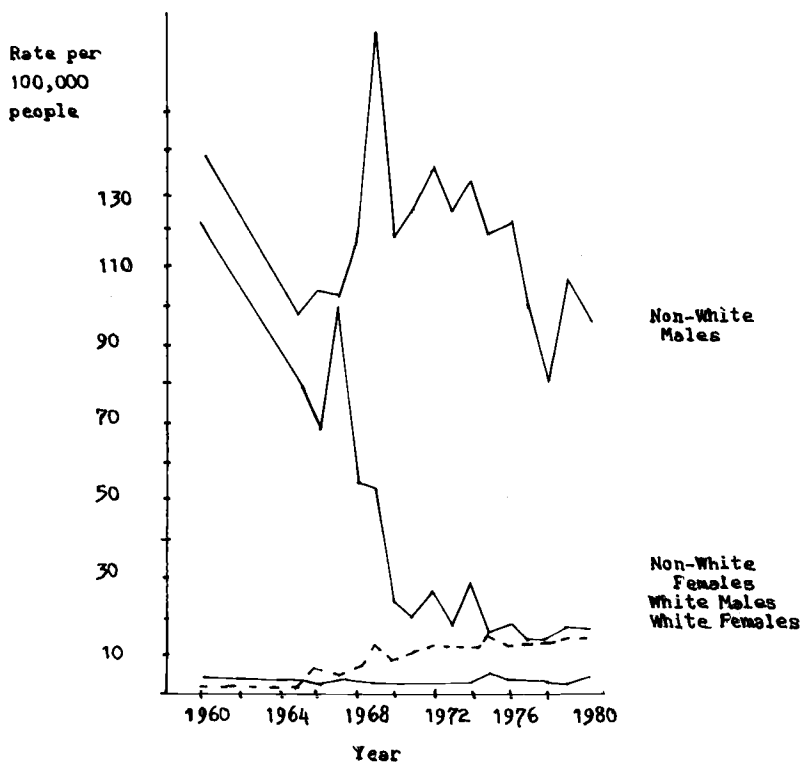


FIG. 2—Homicide rates for race and general groups.

sharply during the period. Rates for white men have more than tripled and have risen to equal that of nonwhite females. White female rates have remained the lowest. The race-adjusted rates for white females are currently one fourth of those for nonwhite females.

The Female Victim

Table 2 summarizes some of the characteristics of the female victims over the twelve-year period. With regards to age, most of the victims were in the 20- to 50-years-old range. The twelve-year mean and range of the yearly number of victims in each category is shown. There was no apparent pattern of variation over the twelve-year period with women in their reproductive years being the most frequent targets. The twelve-year mean of the yearly percentage frequency reflects this as two thirds (67%) of the victims were between 20 to 50.

The marital status pattern is the second grouping seen in this table. Most of the victims fall into the married (M) category. Again there was no apparent change in the marital status pattern over the twelve-year period. The percentage mean frequency reveals that on the average over the period nearly one half of the victims are married and almost one third are single.

The occupations category groups the victims into six sets. The first category is students (S). This number should be similar to the under 20-year-old age grouping. Any difference reflects working adolescents who are not students. The second group homemaker (H) includes victims who were listed as being the major caretakers of their home and family without other occupations. This comprises the second largest grouping of victims over the twelve-year period. In seven of the twelve years this group includes the largest percentage of victims. This grouping reflects a gender bias as it might include women who are technically unemployed while in reality they are homemakers. Obviously an unemployed male is rarely called a homemaker; even though he may perform homemaker tasks, he is termed "unemployed." Unemployed (U) females comprise a very small number of the victims. Their numbers remained constant over the twelve-year period. The next group is unskilled workers (US) and includes domestics, waitresses, clerical workers, and so forth. Naturally a large number of the victims were included in this category as many women in this country have unskilled jobs. There was no apparent variation in the number of women victims who fell into this category.

The blue collar (BC) workers also comprised a large percentage of the women, being third after homemaker in total number. On an average percentage basis, one fifth of the victims yearly are employed in blue collar professions. This category included welders, tool and die specialists, automobile plant workers, secretaries, and nurses aides. This latter category generally reflects a job income between \$10 000 and \$20 000. The abundance of victims with blue collar jobs may reflect the industrial orientation of Cuyahoga County and thus reflect a regional bias.

The last group of white collar workers (WC) includes higher salaried professional women. This group included the smallest total number of women of any occupational grouping. Also the mean yearly percentage was only 10%. This group was remarkable in that no physicians, attorneys, or business executives were homicide victims, although increasing numbers of women are entering these professions. Perhaps the higher salaries engendered by these professions allow these women to avoid certain potentially dangerous situations.

The Crime Situation—Female Victims

Table 3 displays the statistics relating to the scenario in which these homicides occurred. The first category of scene refers to the place where the female victim was found. This usually was also the location where she was murdered. By far, the victim's home outranks all other categories as the crime scene in twelve-year total, yearly mean, and mean percentage frequency. Again, there was no change in the distribution of these numbers over the twelve-year period. The street is the next most frequent location. Although the number of deaths at

TABLE 2—Age, marital status, and occupations of female victims.

	Age				Marital Status					Occupation ^a				
	11 to 20	20 to 50	Over 50	S	M	W	D	S	H	U	US	BC	WC	
12-year total	78	415	124	180	265	60	90	59	132	45	138	128	31	
Mean No.	6 to 5	34.5	10.3	15.0	22.1	5.0	7.5	4.9	11	3.8	11.5	10.6	2.6	
Range	2 to 10	27 to 44	6 to 18	7 to 21	17 to 32	2 to 13	2 to 13	2 to 8	9 to 23	2 to 8	7 to 19	1 to 16	2 to 11	
Mean %	10 to 7	67.7	20.0	29.3	45.3	14.8	14.8	10.3	29.5	7.5	22	20.5	10	

^aS = student, H = homemaker, U = unemployed, US = unskilled labor, BC = blue collar worker, and WC = white collar worker.

TABLE 3—*Crime scene and situations of female victims.*

	Scene						Sexual Assault	Criminal Relations
	Home	Car	Restaurant	Store	Street	Other		
12-year total	359	21	34	14	126	63	54	27
Mean No.	29.9	1.8	2.8	1.2	10.5	5.3	4.5	2.3
Range	24 to 37	0 to 4	0 to 6	0 to 4	4 to 24	3 to 10	1 to 9	0 to 4
Mean %	58.5	3.6	5.3	2.3	19.3	9.9	...	...

home was fairly constant, the street deaths fluctuated over the twelve-year period without obvious pattern. In 1975 the number of street deaths was 24 versus 25 home deaths, while in 1976 the number of street deaths was 5 and the number of home deaths was 29. Death in the other locations was infrequent as seen from the table.

The second item in the table concerns evidence of sexual assault on the victim. The criteria that were used in determining this were explained previously. Sexually related homicides are uncommon tragedies varying from one to nine cases per year. No pattern in variation was noted.

The last category refers to the relationship of the homicide to the victim's criminal activities (prostitution, drugs). Again, the methods of determination of this were stated previously. Police investigation revealed only 27 cases to be of this nature over the twelve-year period. Thus most female homicide victims do not appear to engage routinely in criminal activity.

Female Homicide Victims—Modality

Table 4 displays the modality used by the assailant against the female victims over the twelve-year period. The most frequent instrument used is the rifled firearm, more specifically the handgun. Rifles are infrequently used. When the weapon was available for confiscation it was most frequently a .38 caliber revolver. Despite the continued popularity of handguns as homicide instruments their frequency of use as the lethal weapon against female homicide victims fell from 66% (1969) and 56% (1976) to 45% (1980). Blunt impact is the next most frequent modality. No changing trends in the use of this instrumentality were apparent and its frequency of use varied from 7 to 25%. Asphyxial deaths (ligature strangulation, manual strangulation) have remained a popular lethal modality varying from 2 to 15% of the total modalities. Edged instrumentalities are slightly less popular varying from 15% (1975) to 0% (1979). Shotgun fatalities are relatively uncommon, but in every year from 1970 to 1980, three to six fatalities occurred with this modality. Arson related deaths are uncommon in adults, limited mainly to the elderly. The "other" category included drowning, bomb injuries, and "collapse during a robbery" as modalities of homicide.

Examination of the male homicide victim statistics in Cuyahoga County revealed interesting comparisons to the female victims with respect to modality. A uniform percentage frequency of firearm (handgun) deaths occurred over the twelve-year period varying from 76 to 88% of the lethal modalities. Blunt force and edged instruments were the next most frequent modalities each causing from 6 to 12% of the yearly fatalities. Asphyxial deaths were rare varying from 0 to 2% yearly.

Blood Ethanol Levels—Male and Female

Table 5 displays the data relating to blood ethanol concentration in male and female homicide victims. As expected, the absolute twelve-year totals and mean yearly values are greater for male than female victims as the total number of male homicides is greater than

TABLE 4—Modality in female homicides.

	Blunt Impact	Arson	Rifled Firearms	Shotguns	Edged Instruments	Asphyxia	Other
12-year total	79	11	353	40	58	72	6
Mean No.	5.6	...	29.4	3.3	4.8	6.0	...
Range	4 to 12	0 to 5	23 to 42	0 to 6	0 to 8	1 to 10	0.6
Mean %	14.1	...	55.3	5.3	8.9	11.1	...

TABLE 5—Male and female homicide victims blood ethanol.

	Blood Ethanol, 0.01 to 0.1%		Blood Ethanol, 0.1 to 0.2%		Blood Ethanol, 0.2 to 0.3%		Blood Ethanol, 0.3 to 0.45%	
	Male	Female	Male	Female	Male	Female	Male	Female
12-year total	360	53	504	54	395	48	221	21
Mean No.	30.0	4.4	42.0	4.5	32.9	4.0	18.4	1.8
Mean %	12.8	9.8	17.9	9.5	14.1	8.8	7.5	3.5

female homicides. The mean of the percentage frequencies also are greater for male victims at all concentrations. Using the two-tailed *t* test the difference between the percentage means between male and female victims is significant between 0.1 and 0.3% at the 0.5% level. The difference is not statistically significant at the blood ethanol levels 0.01 to 0.1% and 0.3 to 0.45%.

Homicide Assailants—Male and Female

Tables 6 and 7 show the assailant identities for male and female homicide victims. The tables are divided into two groups: crimes committed at the victim's home and crimes committed in a public place. The tables are then subdivided into three categories: homicides related to an argument, homicides related to commission of a felony (rape, robbery, assault), and "other" unprovoked homicides (gang wars, psychotic-type killers).

Examination of Table 6 reveals the largest assailant category for females is the spouse/boyfriend amounting to 28 to 44% of the yearly female deaths at home (mean percentage 33.8%). The male spouse rarely kills the female in a public place (4 to 9% female homicides). The next most frequent assailant was the felon, who usually killed in a public place (5 to 23% of homicides). Less often the felon killed the victim at her home (4 to 24% of homicides). Murder by an acquaintance at home is nearly as common as the public felony-related homicide with the percentage frequency of the former varying from 2 to 22%. Homicide by a relative at home or in a public place is even less common. Five women were killed during commission of a felony over the twelve-year period by police or public citizens.

The "other" category of obviously unprovoked homicides remained stable in the victim's home but increased in public places (5% in 1969, 15% in 1975, and 18% in 1980). This fact supports the increasing problem of public crime.

Examination of Table 7 reveals that the most frequent assailant of male homicide victims acts in a public place and fits in the "other" category. This category has increased steadily since 1969 at which time the percentage frequency was 15% to 1980 when the frequency was 35%. The next most common assailant is an acquaintance who kills most often after an argument in a public place (usually a bar), next most often at home. The percentages in these categories have shown a slight decrease over the twelve-year period (25 to 14%). Homicide by a spouse occurs much less commonly in the male victim either at home (5 to 14%) or

TABLE 6—Assailants of female homicide victims.^a

	Home										Public Place						
	Argument					Felony					Argument					Felony	
	S	R	A	O	P	F	O	Other	S	R	A	O	P	F	O		
12-year total	216	32	65	0	0	60	0	20	47	1	32	5	1	102	4	57	
Mean No.	18.0	2.6	5.4	0	0	5.0	0	1.6	3.9	...	2.6	...	...	8.5	...	4.8
Range	13 to 23	0 to 4	1 to 12	0	0	1 to 9	0	0 to 4	2 to 6	...	0 to 5	...	...	1 to 14	...	2 to 9
Mean %	33.8	5.2	10.3	0	0	9.8	0	3.0	6.8	...	1.3	...	...	12.4	...	9.3

^aS = spouse/boyfriend, R = relative, A = acquaintance, O = other, P = police, and F = felon.

TABLE 7—Assailants of male homicide victims.^a

	Home												Public Place														
	Argument						Felony						Argument						Felony								
	S	R	A	O	P	Other	S	R	A	O	P	Other	S	R	A	O	P	F	O	S	R	A	O	P	F	O	
12-year total	171	119	492	43	22	80	55	438	36	26	558	265	196	159	727	293	19.4	13.2	60.5	19.4	13.2	60.5	5 to 27	35 to 92	6.2	5.5	22.8
Mean No.	14.2	9.9	41.0	3.6	...	6.6	...	36.5	...	...	46.5	22.0	16.3	13.2	60.5	19.4	13.2	60.5	5 to 27	35 to 92	6.2	5.5	22.8	6.2	5.5	22.8	
Range	13 to 37	4 to 16	28 to 67	0 to 9	...	1 to 9	...	13 to 70	...	...	24 to 68	7 to 38	2 to 14	0 to 27	35 to 92	5 to 27	35 to 92	6.2	5.5	22.8	5 to 27	35 to 92	6.2	5.5	22.8		
Mean %	9.8	3.6	18.9	...	...	3.0	...	13.8	...	...	17.1	8.2	2.8	2.8	22.8	6.2	5.5	22.8	6.2	5.5	22.8	6.2	5.5	22.8	6.2	5.5	22.8

^aS = spouse/griffriend, R = relative, A = acquaintance, O = other, P = police, and F = felon.

in a public place (0 to 4%). With regards to felony-related crime, a greater percentage of men are killed while committing felonies than are women, but a smaller percentage are fatal victims of felony crimes. Again, homicide by a relative is uncommon.

Discussion

Cuyahoga County is an industrial-urban county typical of many northeastern regions in the United States. Despite the declining population, the homicide rate has remained fairly stable through the 1970s.

According to the previously cited data, the typical female homicide victim is an adult female in her reproductive years. Approximately one third to one half of the victims are white. She is usually married, either a housewife or unskilled worker, and is rarely involved in criminal activities. Most frequently she is killed at home with a handgun by her spouse during an argument. She is also frequently murdered by blunt force injury. The next most frequent scenario is murder of the victim during commission of a felony in a public place. "Unprovoked" homicides in public places are increasing but comprise an average frequency of less than 10% of female homicides. Sexual assault is rarely associated with the homicide. The female victim's blood ethanol level is only significantly lower than her male counterpart's between 0.1 and 0.3%. Between 2 and 12% of the assailants were female.

By contrast, the male victim is nearly always nonwhite, usually murdered with a handgun, and most frequently murdered in a public place by an unprovoked attack or by an acquaintance following an argument in a public place. In this county men are killed by their spouses on the average less than 10% of the time.

The difference in victim patterns between the two genders are striking and amazingly constant over the twelve-year period. Despite the movement of American women out of the home and into the job market they have maintained "female" victim patterns. This is particularly striking when comparing racial groups. Although nonwhite males continue to comprise the vast majority of homicide victims, nonwhite female homicide rates have fallen to approach those of white female, suggesting gender-related factors may be more important than racial ones. The homicide rate and total percentage of white males has also risen above that of nonwhite females.

The fact that most women are murdered by their spouse or boyfriend suggests interpersonal relations between the sexes may play an important role in these acts. Wolfgang coined the term "victim-precipitated homicides" to describe those cases where the victim actively provokes the attack [4]. In this study men are infrequently killed by their wives, but more frequently by acquaintances. Again a personal relationship is implied. This is not to suggest that the homicide victims are to blame for their deaths, merely that alterations in certain behavior patterns may have prevented volatile situations from arising that led to the homicide. When noting that more husbands kill their wives than wives kill husbands, the difference is reflected in absolute numbers and percentages. These figures reflect only fatal abuse statistics, and say nothing about nonfatal abuse between spouses. The man's greater physical strength may help to explain the higher female death rate.

The scenario of the typical homicide occurring in a severely deprived, decaying urban environment is not applicable to female victims in this county. The typical female victim resided in a middle-class type environment. Although unemployment is a problem in the county, the mood of chronic despair seen in poverty ravaged housing project communities was not apparent in the majority of cases of the female victims. This suggests that interpersonal factors played a greater role in causing many of these deaths than did economic ones.

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