

## BRIEF REPORT

## Violence in Jamaica: an analysis of homicides 1998–2002

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The aim of the study was to create a profile of Jamaican homicide victims and to describe the circumstances, motives, and the weapons used in homicide incidents. The authors read the police narratives for all Jamaican homicides 1998–2002 and coded them using a predetermined set of variables. Analyses were conducted to describe victim characteristics, motive, and weapon use. The majority of homicide victims were male (over 89%), and 15–44 years old (80%). The rate of homicide for males age 15–44 years was 121 per 100 000 compared with a rate of 12 per 100 000 for females in the same age group. The main motives for homicide were disputes (29%) and reprisals (30%). Gunshot wounds were the cause of death in 66% of all homicides. Guns were used primarily in reprisals, robbery, and drug/gang related homicides; in half of all dispute related homicides the perpetrator used a knife. Homicides in Jamaica are not primarily gang or robbery related. Rather, they are mainly caused by arguments or reprisals. Homicide has become a common feature of dispute resolution in Jamaica.

Jamaica has a high and rising rate of homicide. In 1970, the homicide rate was 8.1 per 100 000; by 2002, it had risen to 40 per 100 000 people (fig 1). Jamaica now has the world's third highest homicide rate behind South Africa and Colombia.<sup>1</sup> Historically, violence in Jamaica was dominated by rivalry between two political parties which armed young men in their fight for power.<sup>2</sup> Many attribute the current homicide rate to urban poverty, the drug trade, and the illegal importation of firearms.<sup>3–5</sup> A high level of lethal violence reduces tourism, creates economic hardship, and strains an already burdened health system.<sup>6,7</sup>

The goal of the study is to create a profile of the victims of homicide, the recorded motives, and the weapons used. It responds to the 49th Annual World Health Assembly's call to characterize the problem of violence and to promote steps for violence prevention.<sup>8</sup>

## METHODS

Detailed information from 1998–2002 (n = 4873 cases) was obtained from the Jamaican police (data on homicides before 1998 are incomplete). Disaggregated police records are not in the public domain, but were made available to the authors. Police data provided the age and sex of the victims, the motive, and the weapon used. Each homicide also has a brief case narrative, which was read in detail. From the narratives, data on the characteristics of homicides were extracted using a standardized data collection instrument.

Four variables were investigated: victim demographics—that is, age and sex; implement used (gun; knife; machete or ice pick; and other, such as blunt instruments, acid, or rope); and motive for the homicide (dispute; reprisal; robbery; drugs/gang; rape; other, such as mob killing, political, and unknown). Disputes were classified if the victim and

perpetrator were involved in a quarrel/fight at the time of the homicide. Reprisals are revenge killings; underlying causes could be previous robberies, dispute, or drug and gang related activity.

Frequencies were calculated and the data were cross tabulated. Pearson's  $\chi^2$  test was used to determine levels of statistical significance.

## RESULTS

During the five year study period (1998–2002) the Jamaican police reported 4873 homicides. Most of the homicides (76%) occurred in Kingston, the capital city, and surrounding areas. The majority of homicide victims were male (89%) and were between 15 and 44 years of age (80%) (table 1). The mean age of the victims was 32 years with a minimum age of newborn and a maximum age of 90 years. Fewer than 2% of all homicide victims were under the age of 15; among these children, boys and girls had almost equal chances of being victims. At the age of 15, homicide victimization increased rapidly. For 15–44 year olds, the rate of homicide for males was 121 per 100 000—almost 10 times the rate for females. The homicide rate decreased considerably for males aged 45 years and older (61 per 100 000 for males 45–59; 28 per 100 000 for males aged 60+).

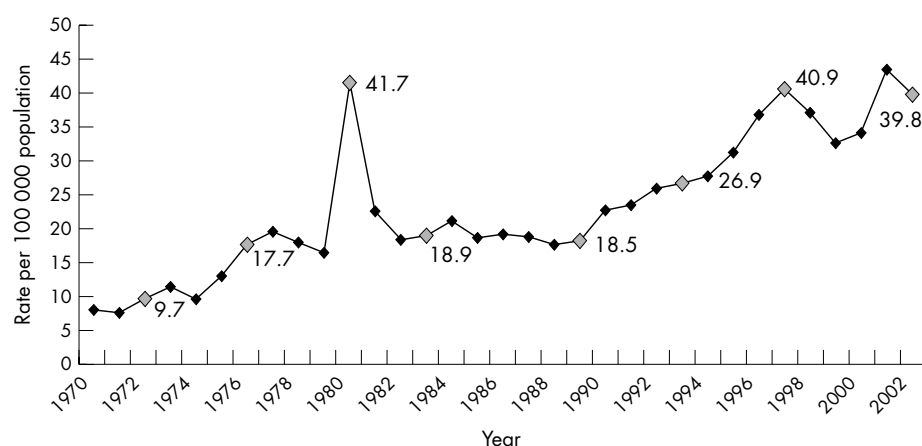
The two main motives of homicide were disputes (29%) and reprisals (30%) (table 2). Drug or gang related activities were the third motive of homicide accounting for 20%, followed by robbery (14%). Disputes were the most common motive for female homicide (43%). Drugs/gangs and robberies accounted for only 20% of all female murders. Thirty females were raped and killed between 1998 and 2002.

For children 0–14 years, the main motive for homicide was dispute, for people aged 15–44 the main motive was reprisal, and for people aged 45 and older the main motive was robbery. Drug and gang activity played a greater role as a motive for homicide of people aged 15–29 than in any other age group but still accounted for only 26% of their homicides. In no age group was the main motive drugs and/or gang activity.

The implements most commonly used in murders were guns (66%), followed by knives (19%), and machetes or ice-picks (6%) (table 3). Guns were overwhelmingly used in gang and drug related homicides (94%), reprisals (86%), and robbery (76%). On the other hand, the knife was used in 48% of dispute related homicides, double the rate of gun use. Of 30 rape homicides, "other" implements were used in 60% whereas the gun was used in only 13%.

Guns were the weapon most often used in all age groups, except for children 0–4 years old. Gun homicide as a percentage of all homicides was highest for victims 15–44 years of age, the age group which accounted for 80% of all homicide victims.

This study has various limitations. First, the data come exclusively from police reports. Currently in Jamaica, the police have the most comprehensive record of reported homicides in the country. The national registry is unable to classify the cause of death for the majority of victims of



**Figure 1** Reported murder rate and election years, 1970–2002.

**Table 1** Percent and rate of homicide by victim sex and age, 1998–2002

Age group	Count	Rate, male*	Rate, female†	Male (%)	Female (%)
0–4	34	2	3	47	53
5–14	58	2	2	55	45
15–29	2233	121	13	90	10
30–44	1688	121	11	91	9
45–59	483	61	7	90	10
≥60	222	28	7	76	24
Unknown	155	–‡	–‡	96	4
All ages	4873	68	8	89	11

\*Rate per 100 000 male population.

†Rate per 100 000 female population.

‡Not calculated.

homicide. Second, fatal shootings by the police are not included in homicide reports and are therefore excluded from this database. These killings are not insubstantial.<sup>9</sup> Third, the data deal only with deaths; non-fatal violence is excluded. The health department has only recently developed a system for collecting data on victims of violence who present at hospital emergency rooms.<sup>10</sup> Finally, motives are sometimes ambiguous; the first author therefore read every case narrative to clarify the reason for the homicide.

## DISCUSSION

Jamaica has had a rapidly rising homicide rate for over 30 years. Over time, Jamaica has developed a culture of violence. The police narratives illustrate how common it has become for someone to be murdered—even in minor disputes

over a cooking pot, cigarettes, or a bingo game. In 2002, there were many more people killed in disputes than were killed in all homicides in 1970.

Reprisal killings perpetuate violence. Many of these are revenge murders for previous murders. A saying in Jamaica is “If you can’t catch Harry, you catch his shirt”. In other words, if you cannot exact retribution against the right person, then hurt the nearest person related to him. This makes retribution easy, increasing the likelihood of continued killings. Reprisal killings accounted for far more deaths in 2002 than all homicides in 1970.

The violence problem in Jamaica is particularly acute in Kingston and other urban areas. A study of high school students in the country capital found that almost 80% had witnessed violence in their communities, and 45% in their homes.<sup>11</sup> A study of 11–12 year olds in Jamaican urban areas found that a quarter had witnessed severe acts of physical violence, 8% had been stabbed, and over one third had had a family member or close friend murdered.<sup>12</sup>

The Jamaican society needs sustainable efforts to support the prevention of violence. This can be done by fostering non-violent approaches to dispute resolution.<sup>13</sup> A national peace education curriculum could be developed and pertinent methods borrowed from projects such as the Hague Appeal for Peace.<sup>14</sup> As homicide victimization increases greatly after adolescence, teaching conflict resolution skills in the schools at an early age would be useful for breaking the cycle of violence.<sup>15</sup> The justice system can also be strengthened and access to conflict mediation services improved.

Young males in urban areas are particularly at risk of homicide victimization. Increasing protective factors for boys is vital.<sup>16</sup> Programs geared at young males could lead to more

**Table 2** Motive for homicide by victim sex and age, 1998–2002

	Count	Dispute (%)	Reprisal (%)	Robbery (%)	Drugs/gang (%)	Rape (%)	Other (%)	Total (%)
Victim sex*								
Male	4350	27	31	14	22	0	6	100
Female	522	43	27	11	9	5	1	100
Victim age (years)								
0–4	34	65	21	–†	9	3	3	100
5–14	58	43	21	3	17	14	2	100
15–29	2233	29	34	6	26	–†	5	100
30–44	1688	28	30	16	19	–†	6	100
45–59	483	28	23	34	11	–†	4	100
≥60	222	31	17	41	4	2	6	100
Total	4873	29	30	14	20	1	6	100

\*The sex of one victim is unknown.

†Less than 1%.

**Table 3** Motive, victim sex, age, and weapon used in homicides, 1998–2002

	Gun (%)	Knife (%)	Machete or Ice-pick (%)	Other weapon (%)	Total (%)
Motive					
Dispute	22	48	14	16	100
Reprisal	86	7	3	4	100
Robbery	76	13	2	9	100
Drugs/gang	94	3	1	2	100
Rape	13	27	0	60	100
Other	60	13	9	18	100
Victim sex					
Male	68	19	5	8	100
Female	48	25	7	20	100
Victim age (years)					
0–4	27	6	8	59	100
5–14	41	24	8	27	100
15–29	70	19	5	6	100
30–44	68	19	6	7	100
45–59	56	21	9	14	100
≥60	41	22	13	24	100
Unknown	63	19	3	15	100
Total (%)	66	19	6	9	100

positive social behavior and lower the risk of involvement in violence.<sup>17</sup>

Jamaica also needs help in limiting gun trafficking. Two thirds of Jamaican homicides are gun homicides and firearm availability increases the risk of homicides.<sup>18</sup> The Jamaican government needs to find non-violent strategies for reducing access to illegal firearms.

Finally, timely and accurate data on violence are useful to inform policies and interventions.<sup>19</sup> A comprehensive violence injury surveillance system that links data among health departments, vital records registries, and the police needs to be developed. Tools for this can be borrowed from the CDC/WHO Injury Surveillance guidelines or the National Violent Death Reporting System in the United States.<sup>20 21</sup>

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## Key points

- In Jamaica, there is a higher risk for being killed because of a dispute or reprisal than robbery or drug/gang activity.
- Males between 15–44 years are at high risk for being victims of homicide.
- The gun is the main weapon used in homicides, but the knife is used in nearly half of all dispute related homicides.
- Violence has become the norm for dispute resolution and Jamaica has developed a “culture of violence”.
- Strategies for promoting a culture of peace are needed in Jamaica.

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## LACUNAE .....

### **Beware! Exploding trousers**

**T**he peculiar case of Richard Buckley's exploding trousers was among the subjects that inspired the 2005 Ig Nobel prize winners. The "Igs" are awarded for science that "first makes you laugh, then makes you think," and "cannot and should not be reproduced." A New Zealander was awarded the Agricultural History Award for describing the health hazards of sodium chlorate, which, in 1931, caused an outbreak of exploding trousers among farmers in rural New Zealand (*Agricultural History* 2004;78:346-60). Mr Buckley, who wasn't wearing his trousers when they exploded, witnessed a string of detonations in his pants after he had hung them to dry in front of a fire. Other men were unfortunately occupying their trousers at the time of immolation. The mystery of the exploding breeches was solved when it was learned that the farmers used sodium chlorate, which becomes violently explosive when combined with organic fibres, such as cotton or wool, as a herbicide to kill ragwort weed. (Excerpt from Jeanne Lenzer, Mr Buckley's exploding trousers and other scientific observations. *BMJ* 2005;**331**:865. Contributed by Ian Scott)