# Is unemployment a major reason for firearm attacks in rural South Africa?

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### Introduction

In South Africa, firearms are increasingly used in interpersonal and factional violence. In a five year period (1987 - 1992), gunshot wounds of the torso increased by 300% in KwaZulu-Natal.<sup>1</sup> During the same period, King Edward VIII Hospital in Durban recorded a mortality rate for firearmrelated injuries of eight times that for stab wounds and "direct admissions" to the mortuary, three times as common in cases of gunshot wounds compared with stab wounds.<sup>2</sup> In our descriptive study, all cases of firearm attacks seen at the Church of Scotland Hospital and the government mortuary at Tugela Ferry in KwaZulu-Natal between December 1998 and May 1999 were reviewed to find out the reasons for the attacks. All patients treated at the hospital for non-fatal firearm injuries were interviewed using a pre-tested questionnaire and records from the district surgeon and police were examined to identify all fatal firearm injuries.

### Profile of the victims

One hundred and fifty cases of firearm injuries were identified and reviewed. Seventy-four of these people (49,4%)

sustained non-fatal injuries and were all treated at the hospital, while 76 (50,6%) died from their injuries and were taken to the government mortuary. There were 124 male (82,7%) and 26 female (17,3%) victims. Slightly more than half of the victims (79; 52,7%) were between the ages of 20 and 39, and 95 (63,5%) were unemployed. In addition, there was a preponderance of males among the victims with fatal firearm injuries (68 out of 76; 89,5%).

### Reasons for the firearm injuries

The majority of the victims (79,4%) could provide no reasons for the firearm attacks, while only a fifth reported reasons such as car hijack, robbery, interpersonal conflict, taxi violence and attempted suicide (Table I).

The most common causes of death among the fatally injured victims (n = 76) were massive hemorrhage from firearm injury site(s) and brain damage. The authors noted that firearm injuries in this rural setting were predominantly a male phenomenon, with a male to female ratio of 4:1. As a public health issue, the impact of these attacks among males is very striking. The male preponderance might be attributed to a high level of unemployment and increased aggression among males, who are more likely to settle interpersonal conflicts by physical means or by using firearms. 3,4,5,6

Undeterminable, intentional assault and homicide have been shown to be the most frequent reasons associated with firearm attacks in urban areas.<sup>7</sup> In our

Table I: Reasons for firearm injuries

Reasons	Frequency	Percentage
Unknown	119	79,4%
Car hijack	9	6,0%
Robbery	4	2,7%
Interpersonal conflict	14	9,3%
Taxi violence	2	1,3%
Attempted suicide	2	1,3%
Total	150	100%

study, the same could not be said of this rural area, as the majority of victims had no record of the reasons for their attacks. We suspect that the victims with non-fatal injuries were afraid of possible retaliation or reprisal by their assailants and did not report the reasons to the police or doctor when they were seen to. Powell and Tanz noted that families in urban communities with income below the poverty level accounted for a high percentage of assaults.8 It seems that our finding of high unemployment among the victims of firearm attacks might be unique to this rural area of South Africa. In this study, firearm attacks seen at Tugela Ferry were predominant amongst unemployed young men between the ages of 20 and 39. It would be important

for future studies to focus on the relationship between unemployment and firearm attacks in the country. We believe that the provision of employment opportunities will help to reduce the incidence of firearm injuries in this rural area, and possibly also in other parts of the country. This is an example of a social issue that has a direct effect on the public health system.

### References

- Muckart DJJ, Meumann C, Botha JBC. The changing pattern of penetrating torso trauma in KwaZulu-Natal – a clinical and pathological review. SAMJ 1995;85(11):1172-4.
- 2. Muckart DJJ. Trauma the malignant epidemic. *SAMJ* 1991;79:93-5.

- Azmak D, Altun G, Bilgi S, Yilmaz A. Firearm fatalities in Edirne, 1984–1997. Forensic Sci Int 1998;95(3):231 9.
- Elfawal MA, Awad OA. Firearm fatalities in Eastern Saudi Arabia: impact of culture and legislation. Am J Forensic Med Pathol 1997;18(4):391-6.
- Strong RW. Gunshot wounds of Adolescents. Med J Aust 1980;1:113-5.
- Byarugaba J, Kielkowski D. Reflections on trauma and violence-related deaths in Soweto, July 1990-June 1991. SAMJ 1994;84(9):610-4.
- Wigton A. Firearm-related injuries and deaths among children and adolescents in Cape Town 1992–1996. SAMJ 1999;89:407-10.
- 8. Powell EC, Tanz RR. Child and adolescent injury and death from urban firearm assaults: association with age, race, and poverty. *Inj Prev* 1999;5(1):41-7.



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