

Gunshot injuries in Calabar, Nigeria: an indication of increasing societal violence and police brutality

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Abstract:

Background: Gunshot injuries were rare in Calabar before the Nigerian civil war. This has changed in subsequent years and has reached a near epidemic proportion in the last three years. These are caused by civil violence, police brutality and armed robberies.

Objective: To evaluate the incidence, pattern and causes of gunshot injuries in this region and draw the attention of Nigerians and the Government to the above problems for a possible solution.

Methodology: Records of patients admitted into the University of Calabar Teaching Hospital (UCTH) with gunshot wounds between April 2002 and May 2004 were extracted. Parameters analyzed included patients' biodata, sources of injury, anatomical site (s) of injury, modalities of treatment and the outcome

Result: There were 51 injuries in 49 patients as follows: The lower limbs 25 (51%), upper limbs 6 (12.4%), upper limbs/ chest 2 (4.1%), chest 4 (8.2%), abdomen 7 (14.1%) and head/neck 5 (10.2%). Male/female ratio was 48:1. Twenty-four (49%) sustained their injuries from either accidental discharge or deliberate shooting by the police while armed robbers wounded 10 (20.4%) and cultists, 2 (4.1%). Two patients had amputations and mortality was 8.2%.

Conclusion/recommendations: The police should be cautious with guns; they and the Government should be alert to the menace of robbery, political violence, cultism and communal clashes. Good Governance, creation of employment, eradication of corruption and political violence may help.

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Introduction

In Nigeria gunshot injury from any source was a rarity in any hospital/ community before the Nigerian civil war.^{1,2} Soon after that, gunshot injuries from armed robberies became occasional clinical presentations. In UCTH only 10 cases were recorded between 1980 and 1985. By then Calabar was a secluded town with only one entry/ exit route and a reliable police check at this entrance/ exit. Robbers rarely dare such a city. Inhabitants were culturally homogenous and lived harmoniously until the era of urbanization. Religious violence which is a major cause in the Northern part of the country is not the trend in this region. Forty-nine cases seen in two years is an indication that civil society has increasingly become violent, a matter not helped by the police with their frequent "accidental discharges". It reveals the state of insecurity in the sub region. The study aims at adding Calabar experience to scientific literature as it relates to other statistics from other parts of Nigeria and West Africa and to draw the attention of policy makers for possible solution.^{2,3,4,5,6}

Patients and method

Records of patients admitted into the University of Calabar Teaching Hospital with gunshot wounds between April 2002 and May 2004 were extracted. Parameters analyzed included patients' biodata, sources and anatomical site(s) of injury, modalities of treatment and the outcome.

Soft tissue injuries were debrided and dressed with natural honey and allowed to heal by second intention. Definitive treatments included external fixation, skin grafting, and laparotomy with anastomosis or colostomies. Some had amputations, thoracostomies and chest tube drainage. Honey was preferred because its efficacy has been proven in our centre.^{7,8}

Antibiotics were used according to sensitivity. Extraction of pellets was not a priority except those located at dangerous sites and those accessible during debridement.^{1,9,10}

Result

Fifty-four patients had gunshot injuries out of 5428 admissions during this period (about 1 in every 100 admissions). Forty-nine patients were included in the study because five files had incomplete information. The male/ female ratio was 48:1. The missile velocities/type of weapon was not documented. The mean interval between

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injury and arrival at hospital was 96.3 hours (range 4-120 hours)

The mean age of patients was 32.7 years (range 10-60) and 38 patients (77.6%) were within the age range of 21-40 years. Accidental discharges from police guns accounted for 24(49%), robbers caused 10(20.4%) and Six (12.2%) by unidentified persons; these were during Nigerian national elections in 2003. Four (8.2 %) were caused by Communal clashes, 2 (4.1%) by hunters, 2 (4.1%) by soldiers and 1 (2.0%) by students (cult).

Injuries affected 51 sites in 49 patients as follows: Lower limbs 25 (51%), upper limbs 6 (12.4%), upper limbs and chest 2 (4.1%), chest 4 (8.2%), abdomen 7(14.1%) and head and neck 5(10.2%). Two patients had penetrating brain injuries. These and two others with chest and arm injuries died, giving a mortality of 8.2%. On the whole, chest and upper limb injuries constituted 6 (11.8%) and 8 (15.7%) of the sites of injuries respectively.

Treatment included resuscitation/supportive measures, wound debridement and external fixation in 9 patients, wound debridement and daily dressing with or without skin grafting in 15, laparotomy and primary closure of gut perforations in 9, exploratory laparotomy, primary closure of gut perforations and splenectomy in one. Others included colostomy, tube thoracostomy and lower limb amputations.^{2,11,12.}

Diagram 1: Age range of patients

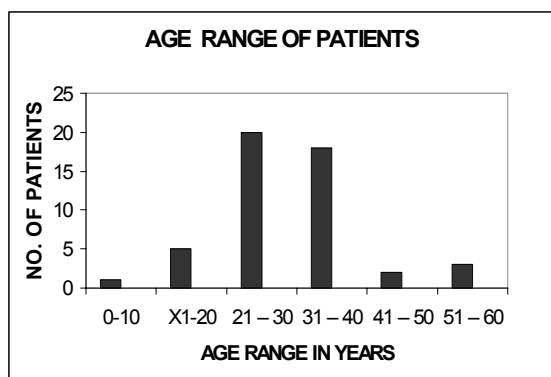


Table 1: Sites of injuries

Anatomical site	Injury	%
Lower limbs	25	51
Upper limbs	6	12.4
Chest	4	8.2
Abdomen	7	14.1
upper limbs /chest	2	4.1
Head/necck	5	10.2
Total	49	100

Discussion

Gunshot injuries before the 1990s were rare problems in UCTH, Calabar and Nigeria in general. Between 1980 and 1985 only ten patients had such injuries all arising from communal skirmishes and accidental injuries from hunters. This study confirms a rising incidence as reported by other researchers in the sub region.^{1,2,4.}

Since the onset of democracy, there has been a rising tide of violence among civilians. Our incidence of 1 gunshot injury per 100 admissions is lower than that of Lagos, Onitsha and Kaduna and other west African countries but higher than that of Benin City.^{1,2,3,7} In Lagos, Adesanya et al noted a ten fold incidence while Ohanaka recorded annual prevalence of seven.^{1,3} This study showed an average of 24 gunshot injuries annually. The trend that many innocent persons were injured by police is disturbing; indicating a problem in the relationship between the police and civilians. The young male (21-40yrs) preponderance in our series agrees with other researches in the sub region.^{1,2,3,4,6} They represent the active group that partake in violent activities in all societies and is confirmed by the involvement of only one female in this series.

Many lower limb injuries were from police, indicating a desire to immobilize victims while injuries from robbers, communal skirmishes and cultists involved the head, neck, chest and abdomen indicating a desire to kill. This study shows that Accidental discharges from police is a leading cause as opposed to Religious crises and armed robberies reported in other series.^{2,4,5,6}

Religious violence, is a common cause in the Northern part of Nigeria while robbery and political violence are common in the south.^{2,4,5} The 8.2% mortalities recorded were from head and chest injuries.^{1,2} This was higher than Ohanaka's 3.9%.^{1,4,8} This may be due to primary organ damage and late presentation to hospital. Average interval of presentation to hospital was 96.3 hours; many arrived with systemic infections/shock.

Conclusion

The study showed a rising tide of violence in a once peaceful city. The police should be careful with guns and friendlier with the citizens that they are employed to protect.¹ The high rate of police "accidental discharges" may indicate poor training that may need a review by their commanders. Government should be alert to the sources of weapons for robbery, political violence, cultism and communal clashes. The above observations could form a base for partnership between researchers and policy makers. There is a need for prospective studies which may be more accurate.

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