



## Community assault – the cost of rough justice

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**To the Editor:** Violent crime pervades South Africa, with murder, rape and serious assault directly affecting around 1 in 50 people per annum.<sup>1</sup> Approximately 21% of the South African population resides in KwaZulu-Natal province, which has some of the country's highest rates of poverty and violent crime.<sup>2</sup> Law enforcement in such areas is challenging and, as a result, some 40% of households are dissatisfied by the level of policing in their communities.<sup>3</sup>

Unpunished criminals and an inadequate justice system have led communities to resort to their own form of retribution.<sup>4</sup> Severe beatings, termed community assault (CA), are administered by members of the local community when alleged criminals are caught. This practice is intended to inflict serious injury rather than to kill, and to serve as punishment upon the alleged perpetrator and as a warning to potential offenders. This alternative to the conventional justice system has been applied in 4 - 6% of all crimes committed in South Africa.<sup>3</sup>

We highlight the inhuman practices that occur as a result of the failing South African criminal justice system, and we further quantify the range of serious injuries that are sustained secondarily to CA and reinforce the importance of early medical intervention.

### Materials and methods

Data were prospectively collected on all CA patients presenting at Ngwelezane Hospital (NGW), a tertiary referral centre for northern KwaZulu-Natal, between October 2006 and January 2007. All patients were managed in accordance with advanced trauma life support (ATLS) principles. Details regarding the mechanism and time of assault were collected. Routine blood investigations, chest radiographs and urinalysis were carried out as standard. Further investigations were performed as clinically indicated. Patient progress and any necessary interventions were noted. The primary end-point of the study was the injuries received. Secondary end-points included time from injury to arrival at NGW and final patient outcome.

### Results

Data on 19 consecutive patients were collected (Fig. 1); 94.7% were males aged 14 - 48 years (mean 27.1 years); 9 (47.4%) were referrals from rural hospitals, and 10 (52.6%) presented directly to our unit. The average time from injury to presentation at NGW was 4.8 hours (range 0.5 - 13) for those presenting directly, and 49.1 hours (10 - 168) for those referred from smaller rural hospitals.

Significant morbidity was experienced by 16 (84.2%) patients, with 3 (15.9%) subsequent deaths; 7 (36.8%) developed renal dysfunction secondary to rhabdomyolysis, 3 (42.9%) of these progressed to acute renal failure requiring haemodialysis, with 1 resulting mortality. All patients in this subgroup were referrals from other hospitals and arrived at NGW 13 or more hours after assault. All patients with renal impairment presenting to NGW within 13 hours of assault resolved with conservative treatment. Four (22.2%) patients required exploratory laparotomy; 3 had a perforated jejunum (15.8%). Of these, 2 presenting at 10 and 71 hours survived, 1 presenting at 120 hours died of multi-organ failure. The fourth patient required a splenectomy for an unstable grade III splenic injury.

### Discussion

This series demonstrates the significant morbidity and mortality associated with CA, a mechanism of injury that should not be underestimated. We observed that patients often

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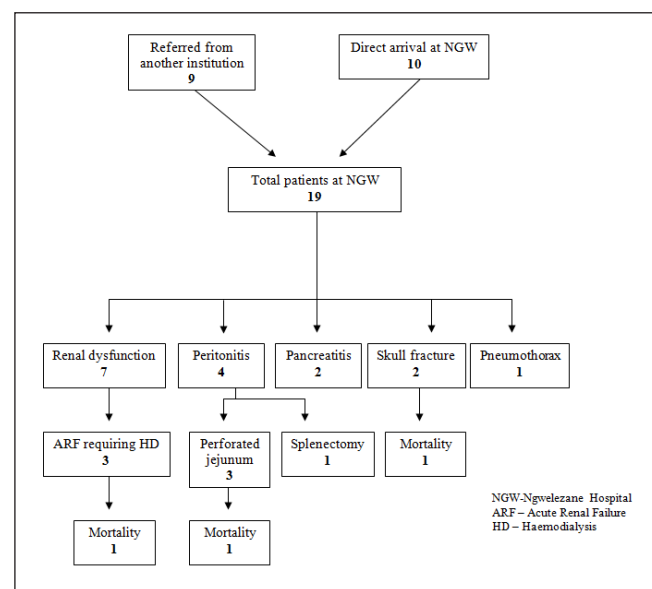


Fig. 1. Flowchart of patients.



had been severely beaten with implements such as a sjambok – a robust whip traditionally made from hippopotamus or rhinoceros hide.

The accused often hide in the bush for many hours after the assault, and also lack the community support necessary to allow them to seek medical attention. Failure to identify serious injuries in small rural hospitals, and the time required for subsequent inter-hospital transfer to an appropriate facility, may further delay appropriate life-saving intervention.

Any delay in the initiation of aggressive fluid resuscitation in patients with rhabdomyolysis leads to an increased incidence of acute renal failure (ARF) and a rise in mortality.<sup>5</sup> ARF was common in our patients and reflected the severity of the beating. A longer time from injury to presentation at NGW resulted in a corresponding increase of ARF and subsequent requirement for haemodialysis.

Jejunal perforations were common in our series, compared with other reports.<sup>6</sup> Although numbers were small, we found a delay in laparotomy correlated with a longer hospital stay and increased mortality, in keeping with the literature.<sup>7</sup>

In a country with inadequate policing and an overloaded judicial system, communities find it more expedient to take criminal matters into their own hands. Until such rural

populations feel suitably supported, they will continue to implement this flawed and dubious form of retribution. Medical practitioners must recognise CA as being life-threatening and treat patients aggressively. Given the complex patterns of the injuries observed, patients should be managed in a setting with the appropriate facilities. For this reason, we suggest that rural hospitals should have a low threshold for transferring patients to regional centres.

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## From 'playstation thumb' to 'cellphone thumb': The new epidemic in teenagers

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**To the Editor:** Repetitive strain injury (RSI) is a painful condition that can sometimes result in substantial disability. RSI often affects the neck, the back and particularly the arms and hands, as a result of soft-tissue injury from repeated movement.

RSI is found primarily in adults who perform repeated movements such as those involved in typing or playing musical instruments. It is commonly named according to the

part of the body affected, e.g. tennis elbow, Rubick's wrist and playstation thumb.

In 2004, I studied<sup>1</sup> the effect that playstation games had on the prevalence of RSI in children. In the 2004 study, 37.5% of the pre-teens surveyed played playstation. At that time, it appeared that this condition had the potential to become an epidemic in children, but changes in technology over the last 4 years have resulted in a different course. With increasing age, time spent on playstation decreases rapidly. In teenagers at two high schools in Durban, only 5.6% of the people surveyed regularly play. However, 318 of the 320 teenagers interviewed use mxit or similar communication text message forums on their cellular phones. There has been a substantial increase in the amount of time teenagers spend on their cellular phones sending text messages, thereby potentially affecting the prevalence of RSI in this group.

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**Table I. Use of cellphone chat forums and the prevalence of symptoms of RSI in teenagers at two high schools in Durban, South Africa**

Grade	Girls			Boys		
	Play playstation regularly	Use cellular chat forums	Symptoms present	Play playstation regularly	Use cellular chat forums	Symptoms present
8	1	40	19	3	40	24
9	1	39	20	6	40	21
10	4	39	21	0	40	18
11	1	40	24	2	40	20
Total	7	158	84	11	160	83

For this study a total of 320 students in Grades 8 - 11 were interviewed, 80 teenagers in each grade. This included the same population interviewed in the 2004 study, now in high school. This study comprised questions asking how often, if at all, they played playstation, as well as how often they visited chat forums on their cellular phones. I also enquired whether they had any of the primary and secondary symptoms of RSI.

In the survey, students were asked if they experienced pain or tingling in their neck, hands and/or back, symptoms typical of the primary stages of RSI. In addition they were asked if they had blisters on their fingers, a secondary symptom. Of the 320 interviewed, 167 (52.2%) had at least one of the primary symptoms (Table I); of those, 150 (46.9% of the whole group) had both symptoms. In addition 125 (39.1%) of those interviewed reported blisters on their fingers after engaging in the cellular phone messaging.

The thumb is the least dexterous of all our fingers and is not suited to the repetitive movements required to type on

a cellular phone keypad. This is why computer keyboards only require the thumb to be used for the spacebar. The rapid increase in the use of cellular phones for communicating with text messages is leading to an increase in RSI in teenagers. 'Cellphone thumb' is somewhat different from 'Blackberry thumb' because it involves multiple thumb presses, usually with one thumb, to obtain most letters of the alphabet on a 12-button keypad. The availability of low-cost text messages through mxit over the last few years has increased 'typing' on 12-button keypads and has created the RSI problem 'cellphone thumb' in teenagers.

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