

## The child rape epidemic

### Assessing the incidence at Red Cross Hospital, Cape Town, and establishing the need for a new national protocol

S Cox, G Andrade, D Lungelow, W Schloetelburg, H Rode

**Introduction.** There were 52 733 reported rapes in South Africa in 2003/2004, almost half of them involving children. South Africa is faced with the challenge of developing an appropriate management strategy to foster effective treatment and curtail the incidence of sexual assault. A child sexual assault protocol for the Western Cape exists, but does not address the specialised needs of the child.

**Objective.** We aimed to ascertain the incidence of child rape seen at Red Cross War Memorial Children's Hospital, Cape Town, with emphasis on the circumstances that surround the victimisation of children. We also aimed to demonstrate the need for a new national standard protocol of specialised care for child victims' injuries.

**Method.** A retrospective review of medical records of sexual assault victims from 2003 to 2005.

**Results.** There were 294 patients, 254 females and 40 males.

Victims ranged from 10 months to 13 years in age (mean 5.8 years). The number of cases and severity of injuries increased annually. There were 14 third-degree, 22 second-degree and 91 first-degree injuries. Seventy-nine per cent of assaults were by a perpetrator known to the victim. All but 5 perpetrators were male. Fifty-eight per cent of rapes occurred in the patient's own home or that of a friend or relative.

**Conclusion.** The number and severity of injuries have increased yearly. This shift is consistent with the overall increase in reported sexual assaults. Policy makers must respond to this call. Finalising sexual assault policy, clinical management and evidence collection guidelines and ensuring that they are disseminated and implemented nationally must be prioritised. Educational drives targeting parents and patients with the demonstrated demographics must be established.

*S Afr Med J* 2007; 97: 950-955.

South Africa (SA) has one of the highest numbers of rapes per capita worldwide, with children bearing the brunt of this violence.<sup>1</sup> Over 41% of rapes reported in SA involve children under the age of 18 years, but only 9% of these result in convictions.<sup>2</sup> More disturbing is that over the past decade reported sexual violence against children has increased by 400%.<sup>3</sup> Although numbers vary among different sources, it is suggested that 1 in 4 girls is likely to be raped before she reaches the age of 16 in SA.<sup>3</sup> The Institute of Race Relations reports that there were more than 20 000 child rapes in 2000.<sup>2</sup>

*Department of Paediatric Surgery, Red Cross War Memorial Children's Hospital, Cape Town*

**S Cox**, MB ChB, FCS (SA), Cert Paed Surg

*Visiting pre-med students, University of North Carolina, USA*

**D Lungelow**

**G Andrade**

*Visiting final-year medical student, Medical School Hanover, Germany*

**W Schloetelburg**

*Department of Paediatric Surgery, Red Cross War Memorial Children's Hospital, Cape Town*

**H Rode**, MMed (Surg), FCS (SA), FRCS (ED)

*Corresponding author: S Cox (sharon.cox@uct.ac.za)*

However, these numbers are still under-representative of the number of victims of sexual assault in this country.

Red Cross War Memorial Children's Hospital (RXH) in Cape Town (CT) is one of many medical facilities that treat sexual assault victims up to the age of 13 years. This hospital treats 450 - 500 acute and chronic sexually abused children annually. Victims of acute sexual assault are referred to the trauma unit, where a standard protocol to handle such patients has been developed.

Within this context of crime against vulnerable children, SA is faced with a logistical challenge. A consistent management strategy, which will foster treatment in the short term and curtail the incidence of sexual assaults in the long term, is needed. Management requires the collaborative effort of multiple components of society including government, courts, police, social services, communities and medical professionals. The specific role of the health sector is to ensure diagnosis and treatment in a non-threatening, secure environment.

### Aim

The aim was to ascertain the incidence of child sexual assault seen at RXH and to analyse the data with respect to demographics, presentation, pattern of physical injuries, and environment of assault. In this way we intended to delineate the circumstances that most typically surround the victimisation of children, to enable the authorities to target



educational drives into the community in an attempt to decrease the incidence.

In addition, the study aimed to demonstrate the need for implementation of a national standard protocol of specialised paediatric care for child sexual assault victims, by documenting the increase in child sexual assault and the severity of the injuries.

### Sexual assault protocol at Red Cross Children's Hospital

All patients presenting with a history or examination consistent with sexual assault are admitted to the RXH trauma unit. After history taking and physical examination, HIV prophylaxis, which continues for a month, is administered and the patient is taken to theatre for a detailed examination under anaesthesia (EUA) for full assessment of his or her injuries. Evidence is collected in the form of swabs and samples in a standard South African Police crime kit. Photographic evidence of any injuries is obtained. All injuries are graded and managed according to severity.

When required, pregnancy and antibiotic prophylaxis is administered. All children and their families are assessed by a social worker and are followed up and counselled according to needs. HIV testing is continued monthly for a 3-month period.

The degree of injury is graded according to a system established by a previous analysis of such injuries at the hospital.<sup>4</sup> First-degree abrasions or superficial lacerations involve the vulva, anal margin or perineal skin. Second-degree tears involve the pre-vaginal or transverse perineal muscle but spare the anal sphincters. Third-degree compound lacerations involve the vaginal and anal canals and sphincters. 'Bruising and erythema' and 'Inflammation and discharge' are self-explanatory. Grade 0 is applied where no physical injury was evident at the time of examination, but a strong clinical history or witness indicated a genuine sexual assault.

### Materials and methods

A retrospective review of medical records of sexual assault victims between January 2003 and December 2005 was conducted. The demographics of the patient and parents, characteristics of the perpetrator, and medical consequences of the assault were recorded.

### Results

We could trace information on 294 children. There were 254 females (86%) and 40 males (14%). Victims ranged from 10 months to 13 years in age, with a mean age of 5.8 years (Fig. 1).

The cohorts of 3- and 4-year-olds showed the highest incidence, with 43 and 37 patients respectively. There was 1 victim aged under 1 year. The 13-year-old cohort had the lowest incidence of 4 cases, reflecting the fact that RXH treats patients up to 12 years old. There is no obvious explanation for the peak of 31 9-year-olds.

Fifty-four per cent of children victimised were under 5 years old. Analysis of age distribution by gender indicates that female victims were predominantly aged under 5 while male victims were mostly between 5 and 9 years old (Fig. 2).

The number of sexual assaults increased each year. There were 59 cases in 2003, 91 in 2004, and 144 in 2005.

Of the victims' families, 45% reported having no income, 33% earned between R160 and R2 000 monthly; 13% earned between R2 000 and R4 000 a month and the remaining 8% of families earned more than R4 000 per month. Victims tended to come from a home consisting of 2 dependants and a single parent – 64% came from a single-parent home, and only 28% had parents who were married.

Thirty-four per cent of assaults occurred in the victim's own home, and 24% in another home. In 21% of the cases the location of the assault was reported as unknown, and the rest took place in public places or school (Table I).

The perpetrator's relationship to the victim is depicted in Fig. 3. In all but 5 cases males were the perpetrators of the crime, and in only 21% were the attackers unknown to the victim or family.

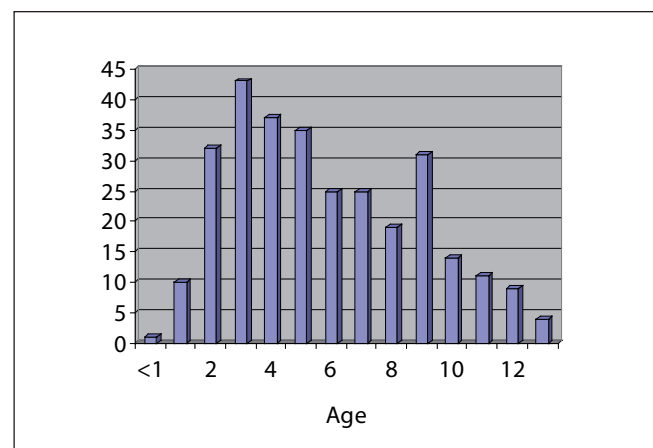


Fig. 1. Age distribution of all patients.

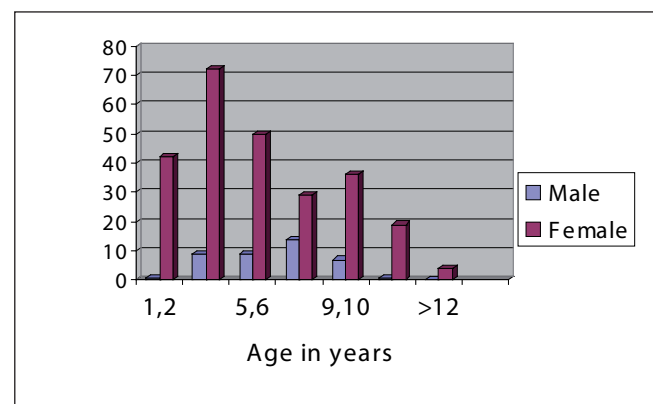


Fig. 2. Age distribution by gender.



The time between assault and presentation to the hospital was recorded for 165 patients (56%). The average was 7.6 hours after injury; 138 patients (83%) were seen within 12 hours of assault, and 21 (13%) patients within 12 - 24 hours. Six victims had a delay in presentation of more than a day; 4 presented after 2 days and 1 after 4 days. In the second- and third-degree injuries there was an average time delay of 9.8 hours (1 - 48 hours), and all these wounds were contaminated with faeces.

Two hundred and twenty-six (77%) victims demonstrated perineal injuries, while in the others there was no evidence of perineal trauma but a history consistent with, or witnessed sexual assault. Thirty-one children (10.5%) had inflammation and discharge; 68 (23%) had bruising and erythema; and 127 (43%) had more severe lacerations. The majority of these lacerations, 91 (31%) were first-degree injuries, 22 patients (7.5%) had second-degree injuries, and 14 (5%) had third-degree injuries. In most cases it was not possible to assess the presence and degree of injury in the unsedated or unanaesthetised patient accurately. Some major injuries had little evidence externally.

Colostomies were needed in 12 of the cases under review. At this stage all patients who underwent a colostomy have had it closed, and follow-up ranging from 3 months to 1 year shows them all to be continent of flatus and faeces.

**Table I. Location of victimisation**

Location	Frequency	Percentage
Own home inside	74	25
Other home inside	55	19
Own home outside	27	9
Other home outside	16	5
Other	31	11
Public place	18	6
School	12	4
Unknown*	61	21
Total	294	100

\* Victims too young or unwilling to provide information.

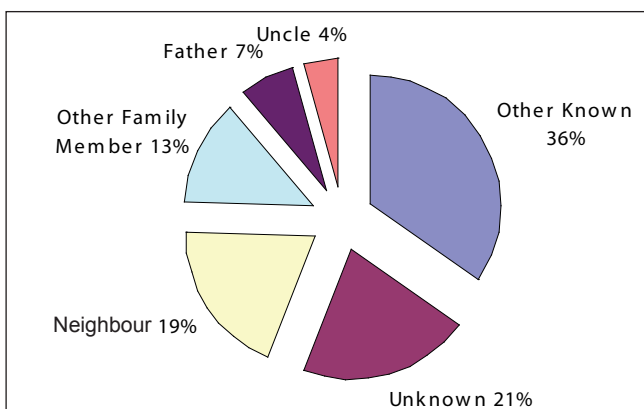


Fig. 3. Perpetrator's relationship with victim.

All second- and third-degree injuries were in females. As yet no patient has contracted HIV as a result of the assault. Fig. 4 indicates both an increase in numbers and severity of injury annually.

Follow-up information on prosecution of the perpetrator of the assault is not available as the results of court proceedings are not fed back to the social work department. Personal communication with a Senior State Advocate in the National Prosecuting Authority, Sexual Offences and Community Affairs Sector revealed that the average time from laying a charge to verdict is 8 - 12 months, while 2001 figures show that the percentage of sexual offenders prosecuted where the victim is a child is 26% (unpublished data).

## Discussion

Child rape is a severe problem. In 1999 there were 221 072 sexual offences against persons under 17 (this figure includes offences such as pornography and indecent exposure). This in a context of a nation-wide average of 83.5 rapes and attempted rapes per 100 000 of the South African population.<sup>5</sup> According to the latest report by the South African Police, there were 54 926 cases of rape in 2005/6 financial year, with the nation-wide average 117.1 per 100 000 population.<sup>6</sup> Children are the victims of 41% of all rapes and attempted rapes reported in the country. Over 15% of all reported victims of rape are children under 11, and another 26% children aged 12 - 17.<sup>2</sup>

Our data focus on children under the age of 13 who have been referred to RXH due to acute assault. There are 7 rape response clinics in the Cape Metropole that treat sexually assaulted children. RXH sees patients with severe injuries needing operative intervention referred from these institutions, and also has its own drainage area. It is assumed that a large number of victims are not referred to RXH or are not reported at all. The number of children subjected to acute sexual abuse in and around CT is therefore likely to be significantly higher than our data suggest.

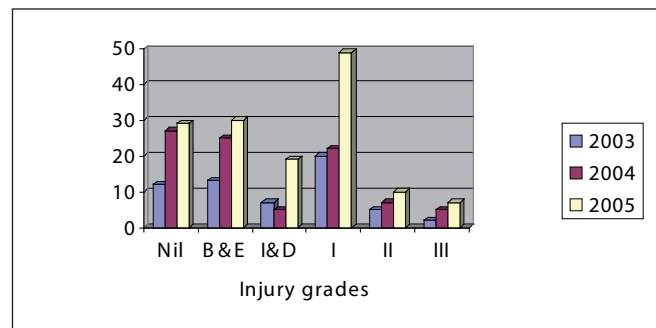


Fig. 4. Injury grade by year (Nil = grade 0, B&E = bruising and erythema, I&D = inflammation and discharge, Injury grades I, II, III = as in text).



The results depicted in this study are shocking. We wish to use the information gathered to put forward two points for discussion: (i) to inform the authorities and the public about the circumstances that promote victimisation of these children, in order to allow law makers and the community to develop strategies of prevention and improve timeous prosecution and sentencing of perpetrators; and (ii) to discuss the inadequacies of the current protocol for the management of child sexual assault, and make suggestions to policy makers to alter it.

### What the administration and public need to know

Child rape occurs frequently in our community, with the incidence escalating annually. This calls for immediate public awareness. With HIV and increasing disintegration of the family fabric there is a high potential for the prevalence of sexual abuse, as well as the variety and severity of sequelae, to increase.<sup>7</sup>

Over the past 14 years, the number of sexual assault victims treated at RXH has consistently increased. Two RXH sexual assault studies, in 1978 - 1989 and 1991 - 1999,<sup>4,8</sup> used a similar method of record review and comparison of these results documents the increases. Our figures confirm an annual increase from 59 to 91 to 144 over the study period 2003 - 2005. Not only the numbers but the severity of the injuries have increased (Fig. 4).

The shift is consistent with the recent increases in reported sexual assaults in the CT metropolitan area and in SA. Seven rape response clinics within the metropole provided informal data on the number of childhood victims treated at their facility monthly. At the time of discussion, 5 clinics revealed an increase in the number of patients presenting with sexual assault over the previous 3 months. At 3 of these clinics the number of childhood victims exceeded the number of adults seen. The authors will be following this data up in an attempt to get more formal statistics from these clinics, which we will publish in a follow-up article.

In this study female victims outnumbered male victims by 6 to 1. This correlates with the previous report from RXH, which found that 86% of victims were female.<sup>4</sup> Female victims are younger than males by about a year and are from lower-income families. The average income of families of female victims is R853 while for male victims it is R1 712. If this sample is representative of the whole population, it would indicate that females younger than 5 years old coming from poorer households are at higher risk of becoming rape victims. Any educational campaign trying to address this problem would need to inform and educate mothers and primary care providers of the extra care and vigilance that they need to provide to these younger girls.

As demonstrated by several other studies,<sup>9-11</sup> our results show that in most cases children are assaulted by someone they know. Records show that 24% of perpetrators are family

members, and among these fathers and uncles are most common. A high proportion of perpetrators (55%) are known to the family. This coincides with the 2004/2005 report released by the SAP, which stated that in the past 5 years, 83% of perpetrators of sexual abuse were known to their victims.<sup>6</sup> In our study most victims came from single-parent families, suggesting that these children are more likely to be left alone with neighbours and friends while their parents work, placing them at a higher risk of assault.

The delayed presentation noted in so many cases can be attributed to various factors. It may be an indication of poor transportation services and availability, especially after hours when public transport is not available and alternative transport costs are high, of the hidden nature of the injury, and of the fact that children are often afraid to tell anyone about the incident. Many children are first examined at their local clinic before referral to RXH, thus delaying management. In addition, it has been claimed that delayed presentation can be due to reluctance on the part of many families, women, or girls to report rape and prosecute the rapist. If a woman's husband is raping children in the household, she may indeed be reluctant to go to the police if he is the only source of income.<sup>3</sup> Together with intimidation, victimisation, bribes and lack of sound evidence this may be a factor contributing to the meagre number of persecuted assailants quoted by the SAP.

### Guidelines for the management of child sexual assault

The average age of RXH sexual assault patients is 5.8 years. Most victims are pre-pubescent and are unable to cope with both the physical treatment issues and psychological implications of the assault and the examination, making management complex.

In younger patients the vagina and perineal body is smaller than in sexually mature patients and oestrogen levels are lower, so tissues lack elasticity. Children are therefore likely to experience more severe injuries than sexually mature adults. Although not statistically significant, our data indicate more significant injuries in the younger age group. To respond to this trend, acute sexual assault victims should be seen at clinics with paediatric anaesthetic and surgical facilities.

Many young children are unable to understand the need for examination and documentation of injuries. Younger children cannot give verbal testimony, and conviction of perpetrators therefore depends on a clear chain of medical and forensic evidence.<sup>1,5</sup> There are legal requirements for evidence collection and a SAP crime kit and J88 form has to be completed.

Crime kit collection involves an 11-step process including anal and genital examination and swabbing, plucking of hairs from various parts of the victim's body, and collecting nail scrapings and blood specimens.<sup>1</sup> In addition, at RXH medical photographs are taken of injuries. The examination procedures



are intrusive, invasive, and can potentially re-traumatise a child. However, examination is essential to the investigative and treatment process. The initial examination and data collection is crucial as it could be argued in court that any examination, especially done under unsatisfactory conditions, could influence the accuracy of collected evidence. This is especially true for the severely injured child.

The reader is urged to consult the Western Cape Department of Health's Circular H2/2006 entitled 'Paediatric Case Management Guidelines: Updated management of child abuse'. These management guidelines were drawn up by a team of paediatricians and interested parties representing the local government and both University of Cape Town and Stellenbosch University academic hospital complexes. There was no paediatric surgeon or gynaecologist on this panel of 24 people. While the authors fully acknowledge that the document is comprehensive and appropriate in most aspects, we would like to point out that the section on medical examination of the sexually abused child provides what this unit feels are inadequate suggestions for assessment and accurate documentation of perineal injuries.

### Examples of these suggestions include:

- 'A small child is best examined sitting on the mother's lap, back to the mother, with the mother holding the legs' – we believe that accurate examination and determination of the extent of the injury cannot be performed under these circumstances. At times we were astonished at how inaccurate the external appearance was with respect to findings on EUA.
- 'Expose female genitalia by gentle lateral traction on the buttocks or labia majora. It is very easy to create a mucosal tear at the fourchette in little girls' – so if the child is struggling, and a tear is present, did the perpetrator or the examiner cause it?
- 'Examination under anaesthetic is only necessary with severe trauma and obvious vaginal bleeding' – this unit has documented injuries caused by foreign object insertion into the vagina resulting in tears to the vaginal vault, and after initial cleaning there was no external blood. In addition we have seen posterior vaginal vault tears with prolapsing bowel with little or no evidence of the magnitude of the injury on external examination.

Since the District Surgeon system has been abolished,<sup>1</sup> sexually assaulted children are being examined at the 7 response centres by community service medical officers, who often have no training in evidence collection and injury documentation. Doctors at some of the clinics have told us that such cases have been the first time they have examined a female child's genital area. As this is entirely anecdotal, we will be performing a questionnaire-based survey of all medical practitioners performing these examinations at the rape

response centres, the results of which will be published in a follow-up article.

EUA is a humane option to prevent examination-related trauma, and the potential of psychologically reliving an assault. The American Academy of Pediatrics is also of the opinion that examination of a rape victim can be as traumatic as the original assault, if not more so.<sup>12</sup>

RXH's extensive experience in the management of sexual assault has led to the development of the protocol outlined above, which addresses the aforementioned psychological and physical treatment issues. The two elements of anaesthesia and additional surgical procedures included in this protocol are currently not available at most CT rape centres owing to lack of expertise. The possible consequences of examination without anaesthesia in this group are poor evidence collection, further injury, under-estimation of injuries, and psychological stress. Ultimately EUA allows for a more thorough and therefore more effective investigation, and allows for injuries to be treated immediately while reducing the risk of complications.

Survivors of sexual violence should preferably be seen at centres that have the capacity to manage all their needs in a holistic manner. 'The specialist centre would be equipped to provide a one-stop service in terms of the survivors' health, policing, judiciary, welfare and psychological needs.'<sup>1</sup> Any such facility should fulfil the management ideals of physical care, prophylactic measures, psychological management and treatment and collection of medico-legal evidence.<sup>13</sup> For children, the only facility that can meet these needs is one that has paediatric specialists, anaesthetists and equipment. Either capability to provide holistic care should be extended to all rape crisis centres, or a comprehensive, effective referral system to a single dedicated unit needs to be in place.

Perhaps it is time to encourage nursing staff to become qualified sexual assault nurse examiners (a 1-year university-based course) within the proposed unit, so that they can perform most of the examination, management, evidence collection and follow-up of these patients and refer the severe injuries appropriately.

### Conclusion

Community education programmes must be expanded and appropriately targeted to the high-risk populations delineated in this study. Legislative changes need to be made to ensure child-friendly court proceedings, speed up the prosecution of offenders and ensure harsh deterrent sentencing for rapists.

Forensic evidence collection must be standardised and should be performed by knowledgeable medical professionals in a child-friendly, safe environment, without causing further psychological harm to parent or child. Suggestions include the development of a single centralised facility in each of the major cities, with facilities for EUA, prophylaxis, and physical,



psychological and social management. The administration should encourage the education of sexual assault nurse examiners trained in all aspects of care and follow-up of the sexually assaulted child.

The findings of this report largely deal with the physical injuries of sexual assaults and their immediate and short-term management. The implications with regard to long-term psychological as well as functional sexual and obstetric outcomes have yet to be determined. We would, however, recommend that a caesarean section be considered for all victims of second- and third-degree injuries.

As stated in 2002, 'medical practitioners cannot stand idly by and merely treat these horrendous injuries; concerted action is needed to halt this abhorrent crime'.<sup>5</sup> For the above changes to be implemented, government needs to allocate more resources to medical, policing and social services.

#### References

1. Martin LJ. Forensic evidence collection for sexual assault: a South African perspective. *Int J Gynaecol Obstet* 2002; 78: Suppl 1, S105-110.
2. Nothing New in Child Rape. 12 December 2001. <http://www.sairr.org.za/wsc/pstory.htm?storyID=242> (last accessed February 2007).
3. Meier E. Child rape in South Africa. *Pediatr Nurs* 2002; 28(5): 532-534.
4. Van As AB, Withers M, du Toit N, Millar AJ, Rode H. Child rape – patterns of injury, management and outcome. *S Afr Med J* 2001; 91(12): 1035-1038.
5. Pitcher G, Bowley D. Infant rape in South Africa. *Lancet* 2002; 359: 274-275.
6. South African Police Service Department of Safety and Security. 2006. [www.saps.gov.za/statistics/reports/crimestats/2006/crime\\_stats.htm](http://www.saps.gov.za/statistics/reports/crimestats/2006/crime_stats.htm) (last accessed February 2007).
7. Lema VM. Sexual abuse of minors: emerging medical and social problem in Malawi. *East Afr Med J* 1997; 74: 743-746.
8. Jones LW, Bass DH. Perineal injuries in children. *Br J Surg* 1991; 78: 1105-1107.
9. Clements PT, Speck PM, Crane PA, Faulkner MJ. Issues and dynamics of sexually assaulted adolescents and their families. *Int J Ment Health Nurs* 2004; 13(4): 267-274.
10. Kaplan DW, Feinstein RA, Fisher MM, et al. Care of the adolescent sexual assault victim. *Pediatrics* 2001; 107: 1476-1479.
11. Lalor K. Child sexual abuse in sub-Saharan Africa: a literature review. *Child Abuse Negl* 2004; 28(4): 439-460.
12. American Academy of Pediatrics Committee on Adolescence. Rape and the adolescent. *Pediatrics* 1988; 81(4): 595-597.
13. Herjanic B, Wilbois RP. Sexual abuse of children. Detection and management. *JAMA* 1978; 239(4): 331-333.

Accepted 16 July 2007.