

Incidence of Stab Injury Related Deaths in Transkei Sub-Region of South Africa (1993-2015)

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Abstract

Background: Sharp instrument injury is a preventable public health problem in South Africa. The Transkei region is not only different geopolitically from the rest of South Africa, but also in terms of injury patterns. It experiences a high rate of injuries, which is generally underestimated and underreported.

Objective: To study the incidence of stab injury related deaths in the Transkei sub-region of South Africa over a period of 23 years (1993-2015).

Method: A record review from 1993 to 2015 was undertaken of 24 419 medico-legal autopsies performed at Mthatha Forensic Pathology Laboratory.

Results: Between 1993 and 2015 autopsies were performed on 26 855 victims of unnatural death, of these, 5 205 (19.38%) were victims of stab injury, which ranked second among all causes of unnatural death in the Transkei sub-region of South Africa.

The average death rate as a result of stab injury was 33.1 per 100 000 of the population annually. Males outnumbered females (ratio 9.7:1). Most stabbings (2118 - 40.92%) occurring in the study period of 23 years were recorded among young adults between 21 and 30 years of age.

Conclusion: The stab injury death rate is increasing in the Transkei sub-region of South Africa. The situation needs urgent intervention to save lives.

Keywords: Stab injury; Sharp penetrating objects; Homicide; Murder.

Introduction

More than 1.3 million people worldwide die each year as a result of violence in all its forms, accounting for 2.5% of global mortality.¹ In 2012 an estimated 475 000 people worldwide were victims of homicide, amounting to an overall rate of 6.7 per 100 000 of the population.² Globally, more than 500 young people are murdered every day.² The South African crime statistics for April to December 2016 show that 14 333 murders were committed, down

from 14 343 in the same period the previous year. The murder rate decreased from 26.1 to 25.6 per 100 000 people.³ The mechanism of homicide in South Africa was 33% firearms, 32% sharp force, 27% blunt force, 3% strangulation, 2% burns, 2.8% other and 0.2% unknown, according to WHO report in its country profile of 2012/13.²

A recent published autopsy report by the author (2017) in this region has shown that there was an incremental increase in unnatural deaths in the Transkei sub-region of South Africa from 1996 to 2015.³ Stab injuries are most frequent cause of homicide deaths in this part of South Africa. The 4 830 (19.47%) victims of stabbing fell prey to the commonest method of murder in this sub-region of Transkei, according to this report.⁴ Stabbing was the number one cause of unnatural deaths among males.⁴

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South Africa's unique political history and resulting social and economic inequalities have been identified as some of the possible factors contributing to the high rate of interpersonal violence.⁵ Several other factors reported to be associated with violent death include poverty, lack of education, unemployment, alcohol abuse, substance abuse and power (male dominance).⁶ The purpose of this study is to determine trends in deaths as a result of the use of sharp-pointed penetrating objects, and to highlight the problem in the Transkei sub-region of South Africa.

Methods

This is a retrospective descriptive study from the autopsy register of Mthatha Forensic Pathology Laboratory. The OR Tambo municipality is the largest and is covered fully by ten police stations. Mhlontlo municipality has four police stations,

Chris Hani municipality two and Mbashe municipality one. The combined population was 400 000 in 1993, but it has been increasing by an average of 3% annually. Data were collected on a sheet of paper designed to record the post-mortem number, year, gender and cause of death. These data were transferred to the Excel computer program and analysed by using the SPSS computer program.

Results

Between 1993 and 2015 autopsies were performed on 26 855 victims of unnatural death. Of these, 5 205 (19.38%) were victims of stab injury, which ranked second (both genders) among the causes of all unnatural deaths in the Transkei sub-region of South Africa (Table 1). It is the number one cause of death among males and ranked fourth among females in terms of unnatural deaths (Table 1).

Table 1: Ranks of percentage of cause death by gender in Transkei sub-region of South Africa by gender (1993 – 2015).

Rank	Males (n=21,027)		Females (n=5,828)		Total (n=26,855)	
	Cause death	n (%)	Cause death	n (%)	Cause death	n (%)
1	Stabbing	4 695 (17.48)	MVA	1 631 (30.45)	MVA	6620(24.65)
2	MVA	4 775 (17.78)	Gunshot	650 (12.13)	Stabbing	5205(19.38)
3	Gunshot	3 246 (12.09)	Poisoning	530 (9.89)	Gunshot	3 947 (14.70)
4	Assault	2 477 (9.22)	Stabbing	454 (8.47)	Assault	2 960 (11.020)
5	Hanging	1 443 (5.37)	Assault	412 (7.69)	Hanging	1 630 (6.07)
6	Drowning	980 (3.65)	Drowning	325 (6.07)	Drowning	1 321 (4.92)
7	Collapse	1 605 (5.98)	Collapse	529 (9.87)	Collapse	2 164 (8.06)
8	Poisoning	621 (2.31)	Burn	266 (4.97)	Poisoning	1 152 (4.29)
9	Burns	468 (1.74)	Lightning	192 (3.580)	Burns	762 (2.84)
10	Fall from height	357 (1.33)	Hanging	187 (3.34)	Fall from height	492 (1.83)
11	Lightning	288 (1.07)	Fall from height	135 (2.52)	Lightning	491 (1.83)
12	Gas suffocation	72 (0.27)	Gas suffocation	29 (0.54)	Gas suffocation	111 (0.41)
	All causes of death	100.0	All causes of death	100.0	All causes of death	100.0

Table 2: Incidence of deaths as result of stab wounds in the Transkei sub-region of South Africa by gender (1993 – 2015).

Year	Estimated population	Females (n=483)	Females (per 100 000)	Males (n=4715)	Males (per 100 000)	Total (n=5198)	Total (per 100 000)
1993	400 000	17	4.3	151	37.8	168	41.75
1994	412 000	12	2.9	100	24.3	112	27.2
1995	424 360	11	2.6	93	21.9	104	24.5
1996	439 091	12	2.7	100	22.8	112	25.5
1997	452 264	11	2.4	105	23.2	116	25.6
1998	465 832	14	3.0	118	25.3	132	28.3
1999	479 807	14	2.9	126	26.3	140	29.2
2000	494 201	23	4.7	117	23.7	140	28.3
2001	509 027	11	2.2	106	20.8	117	23.0
2002	524 298	12	2.3	128	24.4	140	26.7
2003	540 027	18	3.3	136	25.2	154	28.5
2004	556 227	11	2.0	143	25.7	154	27.7
2005	720 304	26	3.6	185	25.7	211	29.3

2006	741 913	39	5.3	224	30.2	263	35.4
2007	764 171	29	3.8	274	35.9	303	39.7
2008	787 096	29	3.7	265	33.7	294	37.4
2009	810 708	15	1.9	265	32.7	280	34.5
2010	835 030	37	4.4	305	36.5	342	41.0
2011	860 081	21	2.4	337	39.2	358	41.6
2012	885 883	20	2.3	348	39.3	368	41.5
2013	912 460	42	4.6	339	37.2	381	41.8
2014	939 833	27	2.9	339	36.1	366	38.9
2015	968 028	27	2.8	400	41.3	427	44.1
Average	648 810	21	3.2	204.5	30.0	225.3	33.1

Table 3. Age distribution among victims of stab injury in the Transkei sub-region of South Africa (1993-2015).

Age group	No. of males (%)	No. of females (%)	Total No. (%)
1-10	36 (0.69)	9(0.17)	45(0.86)
11-20	1180(21.41)	111(2.14)	1219(23.55)
21-30	2004(38.72)	114(2.20)	2118(40.92)
31-40	847(16.36)	77(1.48)	924(17.85)
41-50	362(6.99)	66(1.27)	428(8.27)
51-60	180(3.47)	53(1.02)	233(4.50)
61-70	103(1.99)	35(0.67)	138(2.66)
71-80	52(1)	22(0.42)	74(1.42)
>=81	5(0.09)	10(0.19)	15(0.28)
Total	4692 (90.66)	483(9.33)	5175 (100)

The average death rate related to stab injury was 33.1 per 100 000 of the population per year (Table 2). The highest number (44.1 per 100 000) occurred in 2015 and the lowest (23/100 000) in 2001 (Table 2). There has been an increasing trend in death as a result of stab injury from 2005 (29.3/100 000) to 2015 (44.1/100 000) (Table 2). Males outnumbered females at a ratio of 9.7: 1 (Table 2). The highest percentage (40.92%) of stab wound related deaths were occurred among young adults between the ages of 21 and 30 (Table 3). The lowest number of deaths were recorded in the extreme age groups, i.e. under the age of 10 (0.86%) and above the age of 80 years (0.28%) (Table 3).

Discussion

People became free politically but poverty in general has not declined since 1994.⁷ The five most common causes of unnatural death in this region identified in this study lead to more than three-fourths (75.82%) of all unnatural deaths in the Transkei sub-region of South Africa (Table 1). They are motor vehicle accidents (24.65%), stab injury (19.38%), gunshot wounds (14.70%), assault (11.02%) and hanging (6.07%).⁴ These are violent forms of death that are considered most painful deaths, yet they are preventable. Stab injury is the commonest method of committing murder in this region, and ranked

number one among males over a period of 23 years (1993-2015) (Table 1). About one-fifth (19.47%) of people suffering non-natural deaths were killed by a sharp penetrating object such as a knife (Table 1). There is tradition in the Xhosa culture that a knife is given as a gift from a family member soon after the initiation ceremony. Historically, in the olden days, Xhosa people used to fight with sticks, but knives are now misused as a weapon of murder. The murder rate by knife injury alone in this region is 33.1/100 000 of the population annually (Table 2), which is higher than all combined methods (knife, gun, and blunt force) in South Africa, i.e. 31.1/100 000 annually in South Africa.²

Death as a result of stab wounds were common on the streets of Mthatha in the study period. The rate of stab injury death was 41.75 per 100 000 of the population in 1993, which came down to 27.2 per 100 000 in 1994 (Table 2). This was a remarkable achievement soon after the apartheid period ended. This decrease developed confidence in the minds of residents regarding law and order. Almost the same level of fatalities by knife continued till 2002 (Table 2). However, the stabbing death rate picked up rapidly from 28.5 per 100 000 (2003) to 44.1 per 100 000 (2015), and stabbing deaths increased one and a half times in a period of 12 years (Table 2). This increase of one and a half times (x1.54) in the death rate as a result of stab injury probably

occurred because gun control was enforced in 2002. Murder by gun was replaced by murder by knife. The death rate as a result of firearms has declined drastically; it reduced by almost half in this period. The Firearms Control Act was enforced in 2000 and became effective in 2002, which has saved thousands of lives in the rest of South Africa,⁸ but Transkeian South Africans just changed the method of murder; instead of using firearms, they started using knives and stabbing people to death.⁹

Most (90.7%) victims of stab injury in this region in this study were male (Table 2). At least nine male deaths by stabbing occur for every one female death (ratio 9.7:1) in this sub-region (Table 2). A recent (2015) study carried out in South Africa showed that the male-to-female ratio was 7:1.9 Xhosa women are resilient to non-natural death in comparison to Xhosa men. The rate of stabbing death among females is consistently and significantly low. The trend of stabbing decreased from 4.3 deaths per 100 000 of the population in 1993 to 2.8 deaths per 100 000 in 2015 (Table 2). The trend of stabbing deaths has been increasing among males, and almost doubled in 15 years (2001–2015). It rose from 20.8 per 100 000 of the population in 2001 to 41.3 per 100 000 in 2015 (Table 2).

Poverty is severe in the former Bantustans, such as the Transkei region. Seventy-three percent of the rural people in the Eastern Cape were living on less than R300 per month in 2005/2006 and more than half of them on less than R220 per month.⁷ South Africa had the worst income inequality and the highest rate of homicide of 63 countries studied.¹⁰ Over one third of South Africa's population is unemployed.¹¹ Eighty-four percent of the population of former Bantustans were either unemployed or 'not economically active', meaning permanently unemployed, in 2006/07.⁷ The situation is undoubtedly bleaker now than in 2006/07, after the 2008/09 global recession.⁷ A study carried out by Wilkinson et al (1998) has shown that high unemployment, in particular male youth unemployment, was the most consistent correlate of homicide.¹²

The incidence of stabbing is exceedingly high among young males in this study. More than two-thirds (64.47%) of victims were between the ages of 11 and 30 in this study (Table 3). Most victims of stabbing (60.13%) were male (Table 3). More than one-fifth (21.41%) were children under the age of 20 years, and slightly less than two-fifths (38.72%) were young adults between 21 and 30 years of age (Table 3). A dominant feature of violence in South Africa is the disproportionate role of young men

as perpetrators and victims. This confirms the findings of other studies that the highest homicide rates are seen in men aged between 15 and 29 years of age.⁶ Surprisingly, 45 (0.86%) of those stabbed to death in this study were children under the age of 10 years (Table 3). Alcohol is a contributing factor in a high number of stabbings in this region, as alcohol consumption is very common among young people. A study carried out by the author in the Transkei sub-region showed that about half (49.5%) of traumatic deaths were related to alcohol in the Transkei region.¹³ Alcohol consumption rates in South Africa are the highest in the world and continue to rise.¹⁴ South Africa is a hard-drinking country. It is reckoned that we consume in excess of 5 billion litres of alcohol annually.¹⁵

More than 17 million people in South Africa are dealing with depression, substance abuse, anxiety, bipolar disorder and schizophrenia.¹⁶ Stab wounds could be managed successfully in hospital, unlike firearm wounds, as a sharp implement causes less damage than a firearm. A hospital-based study carried out by the author (2004) showed that 12% of pre-hospital deaths were preventable in the Transkei sub-region of South Africa.¹⁷ The heavy burden of HIV infection in this region probably contributes to death as a result of trauma, since resources required for the care of trauma patients are used for the prevention and treatment of HIV/AIDS.¹⁸

Conclusion

The incidence of stab injury related death increased in the Transkei sub-region of South Africa in the study period of 23 years (1993 to 2015). Predominantly males were victims of these deaths. More than three-fourths (82.32%) were in the 11–40-year age group. To deal with the problem, a reduction in poverty and unemployment is urgently required, along with strengthening of the education system so that young people can complete their education. Psychological services in the community to support victims and their families are important if the culture of crime is to be changed.

Ethical Issues

The author has ethical permission for collecting data and publication (approved project No. 4114/1999) from the Ethical Committee of the University of Transkei, South Africa.

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