



# Violence, Alcohol Misuse and Mental Health: Gaps in the health system's response

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Violence, alcohol misuse and mental disorders are inextricably linked and are leading contributors to the burden of disease in South Africa, each in their own right but particularly where they overlap to produce a perpetuating cycle of harmful outcomes. South African homicide rates are estimated at more than eight times the global average among males and five times the global average among females. Similarly, South African drinkers rank in the top five riskiest drinkers in the world, with approximately 33% to 40% of drinkers consuming alcohol at risky levels. The South African Stress and Health Survey estimates the lifetime prevalence of mental illness amongst adults to be at 30.3%. This chapter outlines the evidence linking alcohol misuse, mental illness and violence. Access to mental health and substance misuse services in South Africa is low, with evidence suggesting extremely poor rates of detection and a major gap between demand for and supply of treatment services, particularly for substance misuse. Surveillance data, which is necessary to inform and monitor outcomes of relevant evidence-based policies and interventions, is sorely lacking for mental illness and substance abuse. In terms of violence, only mortality data are available, which will likely underestimate violence against women and also carry a significant time lag. Owing to the intersectoral nature of many of the risk factors for violence, alcohol abuse and common mental disorders, many of the related policies, legislation and interventions rely on government departments other than health. This gives rise to numerous opportunities but also to many challenges, which impact on policy development and service delivery.

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## Introduction

Violence, alcohol misuse and mental disorders are inextricably linked and pose a major public health challenge in South Africa (SA), each in their own right but particularly where they overlap to produce a perpetuating cycle of harmful outcomes. These outcomes not only affect health but also create a wide range of socio-economic ills.

Interpersonal violence was ranked second among the leading causes of death and disability in SA in 2000 and accounted for 6.5% of all disability adjusted life years (DALYs).<sup>1</sup> Age-standardised homicide rates, estimated by Norman et al. in 2007, placed SA among the most violent countries in the world, and the chances of dying violently in South Africa were some 30% higher than in the World Health Organization's (WHO) AFRO<sup>a</sup> region,<sup>2</sup> where intentional deaths are more often the result of war and conflict than interpersonal violence.<sup>3</sup> Globally, South African homicide rates were estimated at more than eight times the global average among males and five times the global average among females.<sup>2</sup> The excess burden of male mortality in SA was confirmed by data from the National Injury Mortality Surveillance System (NIMSS), which collects data on injury deaths mainly from urban mortuaries. The data showed that there are more than six male homicides for every female homicide.<sup>4</sup>

Violence is common within the domestic environment and in the community. A nationally representative sample of female homicides in 1999 revealed that approximately half of all women murdered were killed by an intimate partner. At 8.8 per 100 000 population the national intimate partner homicide rate was the highest recorded in the world.<sup>5</sup> Domestic violence also has direct effects on children, with one local study suggesting a high proportion of cases in which young children were injured unintentionally during parental domestic violence.<sup>6</sup> Homicide rates among children in SA aged 0 to 14 years were double the global average in 2000.<sup>2</sup>

Apart from being at risk of abuse or being the victims of violence in the home, South African children are frequently exposed to violence to others in the home and to high levels of community violence.<sup>7</sup> For example, in the Lavender Hill and Steenberg areas in Cape Town, over 70% of a sample of primary school children reported having witnessed violence<sup>8</sup> and another cross-sectional study in Gauteng revealed that more than 50% of children had experienced violence, either as victims or as perpetrators.<sup>9</sup> A study of youth from Khayelitsha in Cape Town, of whom half were selected from a children's home and half from an informal settlement known for high levels of violence, recorded all of the 60 respondents as having witnessed community violence. Of these, 56% had been victims and 45% had witnessed at least one murder. The psychological impact of these experiences manifested in 22% of these children meeting the diagnosis for post-traumatic stress disorder (PTSD), 32% for dysthymia and 7% for major depression.<sup>10</sup>

Mental health disorders, both trauma- and non-trauma related, are also a leading contributor to SA's burden of disease, yet remain largely unseen, as these disorders are not generally reflected in mortality data but result in a major disease burden and load on health facilities. The South African Stress and Health Survey (SASH) conducted between 2002 and 2004 is a nationally representative

household survey, which estimates the prevalence of mental illness amongst adults. The results show a 30.3% lifetime prevalence of any psychiatric disorder.<sup>11</sup> Aside from these data, there is currently no other source of reliable data on the prevalence of mental disorders in SA.<sup>12</sup>

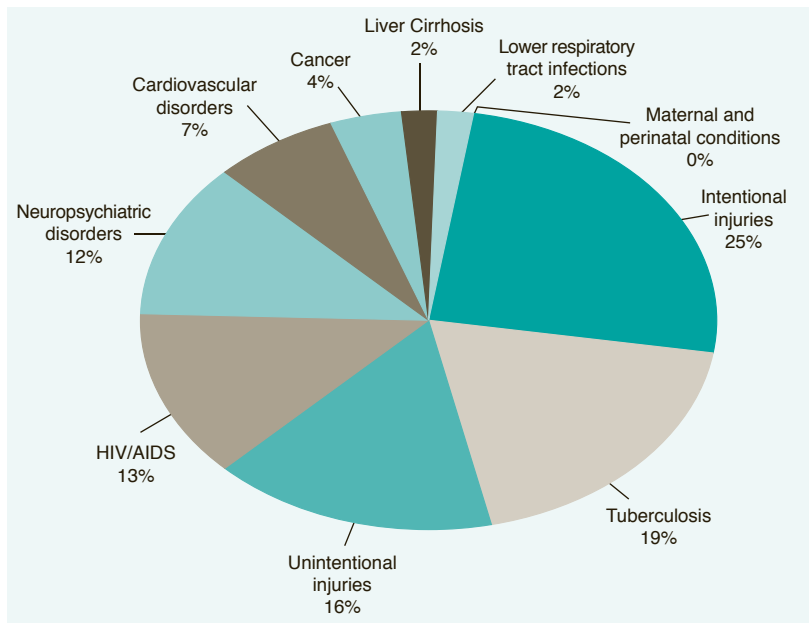
Mental illness results in significantly greater disability than most physical illness and as such accounts for a large proportion of the burden of disease. According to the WHO, 5 of the 10 leading causes of disability, moreover, are classifiable as psychiatric conditions (including depression and alcohol abuse).<sup>12</sup> In terms of future trends, global projections indicate that the situation will worsen, with depression predicted to be the second leading cause of disability worldwide in 2020.<sup>13</sup> The impact of mental health will be grossly underestimated, however, if one excludes the role it plays in physical illness. Mental disorders are associated with substance abuse, smoking, and unsafe sex and, as such, mental illness results in a higher risk for injuries, cardiovascular disorders, and HIV.<sup>14</sup>

The mental health burden is compounded by the burgeoning abuse of substances, in particular alcohol, which is the most widespread drug of abuse in SA.<sup>15</sup> Alcohol abuse is an important risk factor for violence and other mental health problems, as well as a large number of other health conditions. South African drinkers rank in the top five riskiest drinkers in the world, with approximately 33%<sup>16</sup> to 40%<sup>17</sup> of drinkers consuming alcohol at risky levels.<sup>5</sup> Alcohol was found to be the third largest contributing risk factor to death and disability in SA, after unsafe sexual practices and interpersonal violence, both of which are strongly linked with alcohol abuse.<sup>18</sup> Alcohol affects both the consumer and the non-consumer and, as such, SA is also a global leader in terms of alcohol-related harms, with eight times the global average for male homicides and twice the global average for road injury deaths.<sup>2</sup> Alcohol use also imposes sizeable economic costs, which have been estimated at approximately R220 billion per annum.<sup>19</sup>

Substantial data are available on the mechanisms through which alcohol abuse affects drinkers and non-drinkers. Recent analysis on the burden of alcohol-related harm found that intentional injuries (interpersonal violence and suicide) were the leading alcohol-related harm (25% of all harms) as shown in Figure 1. Infectious diseases also feature prominently, with tuberculosis (TB) (19%) and HIV and AIDS (13%) being the largest contributors to this domain. Non-communicable diseases accounted for the remaining alcohol-attributable DALYs, with neuropsychiatric disorders (alcohol use disorders, epilepsy and common mental illnesses) being the single largest component (12%).<sup>20</sup>

a The WHO's African Regional Office (AFRO) represents countries in sub-Saharan Africa.

b Defined as having had at least 60 grams or more of pure alcohol on at least one occasion weekly.

**Figure 1: Estimated alcohol-attributable DALYs, South Africa, 2004**

Source: Obot, 2006.<sup>21</sup>

To reduce alcohol abuse and its harms significantly it is critical for anti-abuse projects to target the major harms caused by alcohol in SA, with prevention of violence, HIV and AIDS, TB, mental illness (including alcohol abuse itself) and road injuries – particularly pedestrian road injuries – taking priority.

## Interrelationship between alcohol abuse, violence and mental ill-health

The interrelatedness of violence, mental health and alcohol use is well documented.

### Alcohol misuse and mental health

Alcohol misuse affects mental health in two ways. First, alcohol and other drug use affect mental health via the following biological mechanisms:

- The use of addictive substances may lead to dependence, and this in itself is a mental health outcome.<sup>21</sup>
- The drug has a direct action on the body – for instance, alcohol is a central nervous system depressant, which may contribute to the development of depression.<sup>22</sup>

Secondly, alcohol misuse has a range of health, legal and social outcomes, including contributions to interpersonal violence, death and injury in road traffic accidents, increased levels of risky sexual behaviour, and relationship problems that may also negatively affect mental health.<sup>21</sup> In addition, alcohol misuse may worsen the prognosis for existing mental health disorders.<sup>23</sup>

Studies indicate a bi-directional association between substance misuse and mental illness. A large population-based study in Australia found that 0.5% of the Australian population had both PTSD and a substance use disorder; among those with PTSD, alcohol use disorders were most common (24.1%).<sup>24</sup> Large studies in the United States (US) population indicate that, with regard to

alcohol abuse (not dependence, which is a more severe problem), 12.3% of those who met criteria for alcohol abuse also met criteria for a mood disorder, and 29.1% for an anxiety disorder (of which PTSD was the most common).<sup>22</sup> Percentages were much higher with regard to alcohol dependence: 29.2% had a comorbid<sup>c</sup> mood disorder and 36.9% a comorbid anxiety disorder.<sup>22</sup> Alcohol use disorders also often precede the onset of a depressive disorder, particularly in men.<sup>22</sup> Substance use during pregnancy and during infancy is another risk factor for increasing the burden of disease, as prenatal substance exposure can lead to a range of mental health problems in the infant.<sup>25</sup>

Similar relationships between alcohol and mental disease hold in the local context. The 2004 SASH study of 12-month and lifetime prevalence of mental health disorders found alcohol abuse to be the most prevalent individual lifetime disorder, affecting 11.4% of adult South Africans, with alcohol dependence affecting 2.6%. The comparative figures for other substances of abuse were 3.9% and 0.6% respectively.<sup>15</sup> In a recent study of psychopathology and substance use among high school students in Cape Town, significant associations were found between alcohol use and both PTSD and depression.<sup>26</sup>

The prominent contribution of alcohol to mental illness in SA is reflected in the disease burden, with estimated alcohol-attributable fractions for neuropsychiatric disorders ranging from 11%<sup>20</sup> to 44%.<sup>27</sup>

### Alcohol misuse as a risk factor for violence

With regard to violence, alcohol is an important situational risk factor that can precipitate violence and is associated with all forms of interpersonal violence, as well as suicide.<sup>28</sup> Three meta-analyses of the association between alcohol use and interpersonal violence described by Parry and Dewing in 2006 attribute between 27%

<sup>c</sup> In other words, a mood disorder as well as the pre-existing alcohol dependence condition.

and 47% of intentional injuries directly to the use of alcohol.<sup>29,32</sup> In SA, where per capita consumption among the drinking population is high and binge drinking is rife, particularly among the victims and perpetrators of violence, the contribution of alcohol may be even greater. The South Africa Demographic and Health Survey data suggest that alcohol use significantly increases the risk of being exposed to violence.<sup>33</sup> A study of patients presenting to trauma units in Cape Town, Durban and Port Elizabeth found that, on average, more than half of patients presenting for injuries caused by violence tested positive for alcohol use.<sup>34</sup> The same pattern presents among violence-related fatalities. According to a sentinel study of primarily urban mortuaries across SA, more than half of the victims of fatal violence were alcohol positive and 86 were males.<sup>4</sup>

As well as increasing vulnerability, alcohol has been shown to precipitate aggressive behaviour.<sup>35</sup> Several studies have found a link between alcohol dependence and child abuse,<sup>36,37</sup> and excessive drinking by men is significantly associated with partner violence across different settings.<sup>38</sup> Women who live with heavy drinkers have a far greater risk of physical abuse from their partners.<sup>39,40</sup> Although there continues to be some debate about whether there is direct causality between alcohol consumption and violence, evidence regarding this association is consistently found after taking into account other associated factors.<sup>41-43</sup> In reviewing this evidence, Rehm et al. in 2003 concluded that there is evidence of a causal link between alcohol consumption and interpersonal violence.<sup>44</sup> Some of the confusion may arise from the fact that alcohol has vastly different effects on individuals with different character traits. For example, people with high levels of trait aggression are exponentially more prone to violent behaviour after consuming alcohol than those with low trait aggression.<sup>45,46</sup> In SA, a study of three provinces found that conflict over the male partner's drinking was also a risk factor for intimate partner violence, and more important than his drinking.<sup>47</sup> A 2006 study by Abrahams et al. also found that men who use violence against an intimate partner were more likely to report problematic alcohol use.<sup>48</sup> Reasons for why men who are drunk beat their partners are complex, and it has been suggested that some men use alcohol to gain the courage to beat their partners when inebriated, as this may be socially expected of them.<sup>47</sup> Alcohol is also implicated in the precipitation of and participation in violence and crime.<sup>49</sup>

## Violence as a risk factor for alcohol misuse and mental illness

A considerable body of global evidence associates experiences of violence or abuse with the development of mental health problems, and several studies from SA demonstrate similar findings.<sup>50</sup> Such violence might include partner violence, child abuse, or interpersonal violence more generally, and all are associated with disorders that include depression, suicidal tendencies, substance abuse, PTSD and other anxiety disorders.<sup>44,51-62</sup>

Although causality is difficult to establish because of the ethical issues in conducting longitudinal studies and experimental studies (including randomised controlled trials) in this area, a consideration of the evidence using Bradford Hill criteria<sup>d</sup> supports a causal relationship.<sup>51,63,64</sup>

- Prevalence rates are higher among women experiencing domestic violence than among the general population (*biological gradient*).
- Exposure to violence and PTSD symptoms appear to follow a dose-response relationship; i.e. the greater the exposure, the more and/or the more severe the symptoms (*biological gradient*).
- Odds ratios calculated in studies where comparison groups are used are high, ranging from 3.55 to 3.80 in studies of depression, suicidality and PTSD, and from 5.56 to 5.62 in studies of substance misuse (*strength of association*).
- The magnitude of associations is consistently observed across different populations (*consistency and coherence*).
- Depression tends to remit once domestic violence ceases (*temporality*).

South African studies are mostly cross-sectional, but demonstrate both high rates of exposure to a range of violence and the same associated mental health problems as identified above in diverse population groups.<sup>65-78</sup> Children's Court Inquiry data from the Western Cape suggest that in 2005 at least 9% of children in the Western Cape experienced severe maltreatment.<sup>79</sup> This can perpetuate a cycle of violence, alcohol abuse and mental health problems, as exposure to intimate partner violence as a child contributes to violent behaviour in adults.<sup>80</sup>

A recent study in a Cape Town day hospital showed that 94% of participants had experienced at least one traumatic event in their lifetimes, and that 19.9% had current PTSD, with depression, panic-disorder and somatisation disorder with frequent co-morbidities. While many people are resilient in their exposure to traumatic incidents, such exposure can result in high rates of PTSD, depression, anxiety, substance misuse, and somatic symptoms.<sup>81</sup> Although at present no studies exist within the healthcare services to suggest rates of PTSD among children, representative studies of children's exposure to violence in Cape Town suggest that children show similarly high rates of PTSD to those of adults.<sup>74,82</sup>

Violence may also impact on common mental disorders, including substance misuse, through two other mechanisms: social disorganisation and fear of crime. High levels of crime and violence in a community are an indicator of social disorganisation, which refers to a disruption in the social structure of a community so that its ability to realise common values and exert social control over members is weakened.<sup>83,84</sup> Most of the evidence in this area is from high-income countries and is based on cross-sectional studies, but it amounts to a weight of evidence which suggests that neighbourhood social disorganisation plays a role in parenting, mental health and violence. For instance, neighbourhood social cohesion (the opposite of social disorganisation) has been found to buffer the link between hostile parenting and children's externalising problems, including violence.<sup>85</sup> Mothers' perceptions of poor neighbourhood quality have been found to be related to children's social skills and often mediate through greater supervision and limitation of activities in worse neighbourhoods.<sup>86</sup> Mothers in unsafe neighbourhoods have also been found to be more likely to be depressed and to use inconsistent discipline.<sup>87</sup> Communities high in social disorganisation are also likely to be high in child maltreatment.<sup>88,89</sup> Poverty is not the deciding factor: qualitative data from the US suggest that social

<sup>d</sup> The Bradford Hill criteria are a set of nine factors that are used to provide evidence of causality. These are: strength of association; temporality; consistency; theoretical plausibility; coherence; specificity in the causes; dose response relationships; experimental evidence; and analogy.

disorganisation can be separated from poverty and that it is social disorganisation that affects parenting.<sup>90</sup>

Very little evidence from SA is available in this area. However, a longitudinal study of a birth cohort of South African children in 1999 investigated the effects of both personal experience of violence and the experience of living with high levels of community violence. Maternal distress was associated both with family violence and with community danger, and distressed mothers were more likely to have distressed children. Ambient community violence was associated with children having attention problems, aggression and symptoms of anxiety and depression. Findings were similar regardless of economic advantage or disadvantage.<sup>65</sup>

A body of evidence also exists for the association between fear of crime and the prevalence of common mental disorders<sup>91-93</sup> (positive association) and self-rated health<sup>93</sup> (negative association) but most of these data are taken from cross-sectional studies and, while confounders were adequately adjusted for, it is impossible to establish temporality. It seems reasonable to postulate a bidirectional association between mental illness and fear of crime.<sup>92</sup> The effect of fear of crime on mental illness is thought to occur via two mechanisms: first, the negative impact on affect and, second, by creating "time-space inequality", which refers to a restriction of movement in terms of time (e.g. not going out after dark) and/or space (avoiding certain areas). This restriction limits social engagement, participation and access to social support.<sup>92</sup>

## Gaps in health services

Given the strong interdependence of mental illness, alcohol abuse and violence, provision of mental health services for children and adults is a critical part of primary-, secondary- and tertiary prevention of both alcohol misuse and violence. Access to mental health services in SA is low, with inpatient staff/bed ratios for SA's nine provinces ranging from 0.20 to 0.59, much lower than in high-income countries.<sup>94</sup> Rates of detection for mental health disorders are poor. For example, Carey et al. found that despite high rates of psychopathology detected by researchers, primary care clinicians had not identified any of the traumatic events or psychopathology present in an urban, Xhosa-speaking primary care population in Cape Town.<sup>95</sup> This is particularly concerning, as primary care is the most likely route patients will use to access the mental health system. Other problems in the health system include: a lack of implementation of policies and programmes for decentralisation and integration of services into general health systems; and the low priority given to mental health services with associated minimal resource allocation.<sup>96</sup>

In terms of post-traumatic mental illnesses, interventions immediately after a traumatic experience can either prevent the development of later symptoms or prevent existing symptoms from becoming chronic.<sup>97</sup> Since many patients present to the healthcare system with physical injuries after experiencing a traumatic event, those involved in injury care (for instance, in emergency rooms and orthopaedic and plastic-surgery clinics) should be equipped to screen patients for post-traumatic mental health symptoms, and to make appropriate referrals as necessary.<sup>97,98</sup> In addition, healthcare providers should be made aware that patients presenting with adverse mental health symptoms or unexplained physical symptoms may have experienced trauma.

The detection and appropriate management of substance abuse and dependence in general medical services also needs urgent review. International research indicates that between 50% and 90% of primary health care workers fail to recognise substance abuse in their outpatient population.<sup>99</sup> The availability of quick, highly sensitive and specific tools to detect substance abuse indicates that the problem lies with the training and supervision of healthcare workers.<sup>99</sup> The lack of addictionologists precludes ongoing training and assessment of service provision. Inadequate screening for substance abuse is also likely to be related to the lack of treatment services; overloaded health workers are unlikely to screen for a condition for which there is no available treatment.

In terms of access to treatment for substance abuse, including alcohol abuse, demand outweighs supply. Access is hampered by unequal geographical distribution and fragmented administration through both the welfare and health sectors, which have led to a lack of integration of mental health and substance abuse services. In particular, access to services by black South Africans is hampered by logistical, cultural and knowledge-related barriers.<sup>100</sup>

In terms of a health response to violence, the Burden of Disease Reduction Project commissioned by the Provincial Government of the Western Cape in 2006, which included violence and injuries as well as mental health among the key focal areas for prevention, provides several useful precedents. There are also several opportunities within the current health service to support violence prevention; for example:

- integrating injury prevention activities into the health service, such as motivational interviewing for patients presenting with alcohol-related injuries; and
- improving referral to tertiary services that specialise in rehabilitative services.

The National Health Department is well positioned to support violence prevention undertaken by external agencies outside the health sector by providing outcome information to target prevention activities on groups at risk in high-risk areas and at high-risk times. Furthermore, an evidence-informed research approach has applicability and relevance for effective and cost-effective injury prevention. The Western Cape Provincial Transversal Management System has constituted several inter-departmental working groups, including an injury prevention working group, which has been tasked by the Provincial Cabinet to develop a provincial violence prevention policy to guide the development and implementation of evidence-informed and upstream prevention strategies.

Reviewing key Department of Health policy documents at a national level, such as the Human Resources for Health Strategy,<sup>101</sup> the Primary Health Care Re-engineering Strategy<sup>102</sup> and the National Health Insurance Green Paper,<sup>103</sup> it is clear that violence and mental illness, including alcohol, are recognised by the Department of Health as major contributors to the burden of disease. However, service strategies to address these burdens appear vague, and integration between alcohol abuse, trauma and mental health services is not apparent. Mental health is identified as an important area for investment in human resources<sup>e</sup> and mention is also made of the provision of psychosocial support as part of the re-engineering of primary health care. Services to address alcohol abuse and services to address violence are only mentioned by name under school health services.

e Personal Communication: Crick Lund, November 2, 2012.

## Available surveillance

Collecting surveillance data is a critical component in identifying and effectively managing any public health problem. First, the practice of monitoring provides useful data with which to influence policy development and helps to determine the outcomes, effectiveness and efficiency of intervention programmes. Without such data, decision makers do not have the information they need for policy design or resource allocation.<sup>104</sup> Second, a good monitoring system allows decision makers to determine whether a programme was actually implemented; whether it was implemented in the manner originally intended; and, if not, how this may have influenced effectiveness. Despite the massive burden of disease caused by alcohol abuse, violence, trauma and mental health problems, surveillance data on these critical public health concerns are sorely lacking.

In terms of alcohol abuse, population prevalence data are reliant on occasional cross-sectional studies, namely the Demographic and Health Surveys conducted in 1998 and 2003 and the single SASH study conducted between 2002 and 2004. Data on the prevalence of alcohol abuse among trauma ward clients or clients attending any level of state health facilities are also not routinely collected.

Morbidity data on adult and child mental disorders are similarly lacking. A review of available mental health data sources in the Western Cape in 2006, for example, found that health services do not collect routine data on common mental disorders or child and adolescent mental illnesses.<sup>12</sup> The only surveillance data available are suicide mortality rates collected by the National Injury Mortality Surveillance System (NIMSS). Suicide mortality is clearly a poor proxy measure for mental illness, as only a small fraction of those with mental health problems attempt suicide and an even smaller proportion complete suicide. Again, the single SASH study has provided the only measure of population prevalence of mental disorders and this study excluded people under the age of 18.

Data on violence are relatively more readily available, but remain largely confined to homicide data. The NIMSS and its provincial equivalents, the Provincial Mortality Surveillance systems (PIMSS), are currently the primary sources of data arising from the health sector that can be used for violence-prevention action and policy. However, homicide deaths are likely to represent only the tip of the iceberg of violence. Violence may not result in a physical injury at all and – even where it does – the injury may not result in death. As a proxy measure, it is also not clear whether the injury profile of non-fatal injuries is in any way similar to that of fatal injuries (indeed, a pilot study demonstrates that there are significant differences).<sup>105</sup> The use of the data for monitoring the need for and success of interventions is also limited by current delays in the availability of these data (the most recent report being from 2009), the lack of detailed information about injury location and the small number of cases. A major advantage of the data system is that blood alcohol levels are tested in a proportion of cases, which is helpful in providing data on alcohol-related homicide.

A commonly used alternative data source for violence is the crime statistics of the South African Police Service (SAPS). However, there are several significant drawbacks to these data: there is a significant time lag in the availability of data, which are only available annually as summary statistics. The crime categories do not correlate well

with definitions or categories of injuries or trauma, as they measure only alleged crime reported to the police and not actual crime. The measurement of actual crime is only possible after a lengthy judicial process. It is likely that a large proportion of violence is not reported (particularly rape and domestic violence) and a strong possibility of reporting bias exists (given that a reduction in rates of violence and/or traffic injuries is used as a measure of effective police performance).

## Intersectoral confluences and conflicts

Owing to the intersectoral nature of many of the risk factors for violence, alcohol abuse and common mental disorders, many of the related policies, legislation and interventions rely on government departments other than health. This gives rise to opportunities but also to many challenges, which impact on policy development and on service delivery.

Despite the fact that alcohol disorders are internationally defined as psychiatric disorders and despite high levels of comorbidity of alcohol problems and mental illness, in SA these two overlapping areas are addressed by different government departments (the departments of social development and health respectively). The lack of integration of alcohol misuse- and mental health services results in a paucity of services that offer treatment for both substance and other mental disorders.<sup>106</sup> As such, the efficacy of treatment of both mental- and substance disorders is seriously compromised.

One example of an integrative approach at a national level was the establishment of an Inter-Ministerial Committee (IMC) on Combating Substance Abuse in 2010, which comprised the Departments of Social Development, Correctional Services, Health, Basic Education, Higher Education, Science and Technology, Economic Development, Transport, Trade and Industry and the SAPS.<sup>107</sup> One outcome has been the development of a substance abuse health sector plan, which aims to institutionalise the screening and management of substance abuse at selected health programmes, including trauma units. The plan also aims to capacitate health workers to better detect and manage substance abuse.<sup>108</sup> The 2nd Biennial Anti-Substance Abuse Summit in 2011, which evolved from the IMC, specifies several relevant resolutions, such as:

- the harmonisation of all laws and policies to facilitate effective governance of alcohol, including production, sales, distribution, marketing, consumption and taxation and the implementation of a continuum of care; and
- a public health approach that provides for prevention, early detection, treatment, rehabilitation and after care services.

However, these are but two of the 34 resolutions that were adopted and only the first of these has progressed as a focal area for implementation in the Anti-Substance Abuse Programme of Action for 2011 to 2016.<sup>107</sup>

In terms of mental health policy, the Minister of Health held a mental health summit in April 2012, attended by more than 400 mental health stakeholders from a range of sectors.<sup>e</sup> A new mental health policy is currently being drafted and a national action plan for mental health has been developed. Reviewing the draft policy, it appears that early childhood development, maternal mental



health, adolescents and HIV clients are major focus groups for interventions.<sup>108</sup> By contrast, there is no specific mention of trauma or substance abuse settings as key focal areas for mental health promotion and prevention and, in general, budget commitments remain vague. The policy refers to the importance of intersectoral integration of services, but no details of the nature and focus of such integration are provided.

Although the Anti-Substance Abuse Programme of Action and the Mental Health Summit specify a broad range of departmental role players, it should be recognised that the structure of government encourages a silo-based- rather than an intersectoral approach.<sup>109</sup> The transversal approach as adopted in the Western Cape, for example, is laudable, but its viability remains to be seen. In terms of reducing alcohol abuse and alcohol-related harm, the evidence demonstrates very clearly that the most effective way to achieve this is to reduce access to alcohol, through, for example, limiting the trading hours and number of liquor outlets.<sup>110</sup> In SA, the responsibility for developing this legislation has rested nationally with the Department of Trade and Industry (dti) and provincially with the provincial departments of economic development and tourism (DEDAT), which have economic development, rather than public health, as a primary goal. In developing liquor legislation, while the dti and DEDAT have consulted other departments, the final mandate and decision-making powers have rested outside of the social sector. In September 2011, the dti partnered with the liquor industry to host a workshop on educational/informational interventions (for example, road shows) targeted at adolescents, despite adolescents not being a major risk group and a limited evidence base for the proposed interventions. In the same year, several provincial DEDAT partnered with South African Breweries on their Responsible Trader Programme, which has been shown to increase alcohol sales, turnover and profit while evidence for a reduction in alcohol abuse remains absent.<sup>19,111</sup> These examples highlight the conflicts of interest within government to reduce alcohol abuse and demonstrate how these conflicts impact on which interventions are funded and undertaken by government.

A silo-based approach similarly undermines violence prevention. The criminal justice sector is considered as the custodian of safety, whereas the international experience of successful intervention suggests that an intersectoral response that encompasses primary-, secondary- and tertiary prevention is preferable. The security focus is also evident through increased spending on private security systems and personnel and increased quotas of national and metropolitan police officers, which is out of kilter with where costs accrue. For example, Alda and Cuesta in 2010 provided a comprehensive estimate of the cost of crime in SA using accounting methodology, in which health costs alone accounted for one quarter of the aggregated cost of crime estimate of US\$ 22.1 billion in 2007, or 7.8% of Gross Domestic Product (GDP).<sup>112</sup> Yet the health service response too is reactive and largely confined to the treatment and immediate emergency response to violence. A more primary preventive approach would include addressing, for example, substance abuse and other mental health disorders.

Similarly, legislation about domestic violence that supports social services, such as the Domestic Violence Act (Act 116 of 1998) and the Children's Amendment Act (Act 30884 of 2007), focuses predominantly on the tertiary response and rehabilitative needs of survivors. Across all sectors negligible investment is made in primary

prevention to address the upstream antecedents of violence, such as public infrastructure, access to services, and unemployment.

## Conclusions and recommendations

Several key conclusions can be drawn from the preceding situational analysis relating to health systems, health services and surveillance. It should also be recognised that while the recommendations made here may be adopted as stand-alone interventions, every effort should be made to adopt an integrated approach in high-risk areas. Since the most vulnerable groups are those that experience multiple dimensions of poverty or deprivation, multifaceted interventions are likely to be the most effective.

### Health services

The health service gaps identified relate primarily to a lack of recognition and prioritisation of the multi-directional links between violence, mental illness and alcohol misuse. Not recognising or prioritising these links results in a lack of data, policies and interventions that could address these problems in a sufficiently integrated manner. It also results in inadequate resource allocation. This gap is also evident at the clinical level, where mental illness, trauma or substance misuse is not adequately detected or managed. Clearly, it is important to train staff in services where they encounter trauma victims to screen for and provide management of substance misuse and mental illness. Detection and management of mental illness and substance misuse in other high-risk groups, including adolescents and perpetrators of violence, also need dramatic improvement.

An exhaustive review of evidence-informed interventions, which addressed these interlinked areas, was conducted for the Western Cape Burden of Disease project in 2007.<sup>113</sup> The review highlighted some of the interventions necessary to achieve these goals. Health service recommendations included the recruitment and training of primary care workers and other health workers in screening and brief interventions for substance abuse and dependence; and the integration of mental health services into general medical services (with adequate provision for human resources, training, facilities, protocols and information management). The review also recommended expanding the budgetary allocation and provision of mental health and substance abuse services across all levels of care. Regarding staff, the review recommended appointing relevant specialists and sub-specialists (addictionologists, public health specialists, trauma specialists); providing dedicated mental health professionals and resources to maternal and trauma services; and increasing the number of trauma-competent mental health staff in general health services. Improving the staff competency and providing more focused services would involve training mental health professionals in substance misuse; introducing trauma-focused psychotherapy and pharmacotherapy; and developing postgraduate training programmes in trauma and substance misuse.

The review also identified important interventions that extend beyond health services. These included multifaceted community development interventions, the development of adequate referral networks for traumatised people across sectors, and evaluation of and support for non-governmental organisations currently filling the gaps in services, e.g. Child Welfare, Rape Crisis, FAMSA, and Lifeline.

## Surveillance

The institutionalisation of injury mortality surveillance within the health service, as undertaken in the Western Cape, is an important first step to ensure an informed prevention response to both violence and mental health.<sup>114</sup> However, the lack of detailed information about injury locations and the relatively few recorded deaths limit the utility to prioritising and monitoring interventions at a neighbourhood level. Further consideration needs to be given to how these data can be integrated with data from secondary and tertiary facilities and with data from emergency medical services. Where possible, mortality surveillance should be supported by cross-sectional studies of non-fatal cases, or at least sentinel surveillance in high-risk areas. In addition, given that most trauma patients may be under the influence of alcohol, it would be worth investing in rapid alcohol tests, such as breathalysers, so that emergency centres can facilitate the collection of data on alcohol-related trauma and to provide appropriate referral or rehabilitation.<sup>34,105</sup> Similarly, including screening and detection of mental illness in this client base would provide at least some data on mental health morbidity in this high-risk group and facilitate access to mental health services for these clients.

Sentinel site surveillance should be considered as a means of obtaining regular data on the prevalence of common mental health disorders, including substance misuse disorders and child and adolescent mental health problems, particularly in high-risk settings and geographical areas. High-risk settings could include health settings (such as HIV, TB, family planning, maternal and chronic disease settings), and those falling under other sectors, such as police stations, courts and social services.

Ideally, at least some of the surveillance data should include data on violence and mental health problems, including substance use disorders, collected from the same cohort. In this way, common risk factors and groups at risk for multiple health outcomes can be easily identified and the impact of integrated interventions measured.

## Building an effective intersectoral response

This chapter calls for the improved integration of mental health-, trauma- and substance abuse- services both within the health sector and among other relevant sectors. The establishment of an interministerial committee, much like the one that was convened to address substance abuse specifically, might also provide a platform for these three public health priorities to be addressed simultaneously. Creating an effective mechanism and avoiding devolution into departmental silos will require high-level oversight and accountability. The tensions that may manifest between the social and economic clusters, such as have been evident in the regulation of liquor, suggest that this oversight would preferably be accorded to Cabinet. Similar oversight is required to facilitate primary prevention and to address the numerous upstream factors that have an impact on a wide range of health conditions and the social circumstances that undermine health and wellness more generally.



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