# Depression and suicidal behaviour

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#### Depression

Depression afflicts people of all ages. It has a long historical past and has been described for centuries by poets, philosophers and physicians, and depicted in the works of some of the most creative artists. Depressive disorders are referred to as mood disorders because the predominant feature is a disturbance in mood. They are classified into major depressive disorder, dysthymic disorder, depressive disorder not otherwise specified, bipolar disorders I and II, cyclothymic disorder, bipolar disorder not otherwise specified, mood disorder due to a general medical condition, substance-induced mood disorder and mood disorder not otherwise specified\_. Various psychopathological conditions have been identified as co-morbid or risk factors in the aetiology of suicidal behaviour, especially depression<sup>2-4</sup>. This is also true for South Africa. A recent South African study<sup>5</sup> reported that depression was the most common diagnosis, being present in nearly twothirds (63.9%) of non-fatal suicidal patients seen in a large academic hospital. Some 25 years ago depression was already considered such a major problem in South Africa that a group of experts<sup>6</sup> conceived a national treatment programme.

Depression which may co-occur with medical or psychiatric/psychological disorders may also be brought on by the use of certain medications. Other risk factors for depression include a personal or family history of depressive disorder, prior suicide attempts, substance use, lack of social support, and stressful life events. South African studies<sup>7</sup> have also indicated a high incidence of depression in suicidal school children, findings which are of increasing concern. A sad mood is normally not considered to have passed into a clinical depression at a specific point. Usually it is diagnosed when the patient's depressed mood persists for too long, has become pathological and interferes with the index patient's psychosocial, biovegetative and other functioning.<sup>6,8</sup> Therefore a combination of intensity, severity and duration of the depressive symptoms are significant markers in depression.

#### **Suicidal behaviour**

Severely depressed people often don't have the cognitive or physical capacity required for suicide as they usually tend to have very low energy levels and slowed down functioning. One danger period is an increase in motivation levels as the depression responds to treatment but the patient has not recovered completely.<sup>9</sup>

Depression is commonly found in general practice<sup>10</sup> and an increased likelihood of suicidal behaviour has been found in patients who suffer from potentially life-threatening diseases such as HIV-AIDS and certain cancers, although other diseases have also been specifically associated with suicidal behaviour. These include stroke, juvenile diabetes mellitus, delirium, epilepsy, Parkinson's disease, traumatic brain damage, spinal cord injury, multiple sclerosis, Huntington's disease and amyotrophic lateral sclerosis.<sup>11</sup> Some reports show a 36 times higher risk for suicidal behaviour in HIV-AIDS patients compared to the general population. Our research<sup>12</sup> found a slightly lower risk but also a correlation between HIV testing and suicidal ideation before the test results are known; and an increase in suicidal behaviour in sero-negative partners of HIV-positive patients because of a fear of being infected by partners.

General practice patients often fall into a heterogeneous group that lack the clear-cut symptoms of the various depressed subgroups mentioned. They also are frequently less aware

### themselves that they are depressed and may present with a range of somatic, psychological, social, occupational and other problems. One should, therefore, always be alert to the possibility of depression in a patient seen in general practice or to any possible underlying medical conditions that could be associated with the depression and suicidal behaviour.<sup>8</sup>

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Suicidal behaviour remains a serious problem. In the year 2000; approximately one million people worldwide committed suicide, a figure which is likely to increase to about 1.53 million by 2020.13 There are about 10 to 20 times more non-fatal suicides (attempts) but this could be as high as 40 times more in some regions of the world. These figures represent one death every 40 seconds worldwide and one attempt every three seconds, giving a global rate of 16 per 100, 000 of the population. Globally, between 1950 and 1995 there has been almost a 60% increase in suicides.<sup>13</sup> An increase of up to 48% in Africans has been observed in South Africa in some areas.7

The highest fatal suicide rates have moved from the elderly towards younger people. Currently 53% of suicides are committed by people in the 5-44 years age group and most fall in the 35-44 year age group. This applies to both males and females. This "ungreying" phenomenon has resulted in suicide being among the top five causes of death in the younger age groups, globally speaking. Male to female suicide rates range from about 3:1 to almost 4:1. Rural China is an exception, where on average; the female rates are 1.3 times higher than that of males.<sup>7, 13</sup>

Suicidal behaviour in South Africa is equally inordinately high. Past (Apartheid-era) data on the real dimension of the burden of suicidal behaviour in certain South African communities generally recorded a bias because of under-reporting, especially in black South Africans. This places limitations on interpreting clinical and epidemiological trends and complicates an accurate analysis of suicide rates in Africa and South Africa. However, general trend analyses are possible.<sup>7</sup>

The overall South African suicide rate in 1990 was 17.2 per 100 000 of the population, which is higher than the global average of 16 per 100 000. However, in South Africa current rates in some groups are higher, depending on when and where the sampling was done and which ethnic group was surveyed.<sup>7</sup> The current South African ratio of fatal versus non-fatal suicides are thought to be 1:20 or higher, which is comparable to the global ratios.<sup>7</sup> The average age in South Africa for fatal suicides is about 36 years. This is consistent with the global situation of a shift from the elderly towards younger people. A mean age of 25 years for nonfatal suicidal behaviour in general hospital samples has been reported. Patients as young as 6 years make attempts and some as young as 10 years old have committed suicide. More than 40% of fatal suicides occur over weekends, especially on Sundays. Figures tend to increase towards the end of the year. Nearly five times more males than females commit suicide in South Africa. 7, 14

Studies<sup>7, 14</sup> show that in South African general hospitals between 10% and 12% of all patients referred to psychological/psychiatric services present with non-fatal suicides, and that suicide accounts for about 8%-10% of all nonnatural deaths. If one considers the most recent 10% figure of non-natural South African deaths being fatal suicides, it can be estimated that up to 8 000 people die of suicide annually. This virtually constitutes one suicide, and about 20 to 40 suicide attempts every hour.<sup>7</sup>

#### **Methods of choice**

In South Africa, hanging is one of the most frequently employed methods in fatal suicidal behaviour. This is followed by shooting, poisoning, overdosing, gassing and burning. A variety of other methods include the use of sharp objects, asphyxia, electrocutions, drowning and fenestration (jumping off high areas). Common in non-fatal suicidal behaviour is overdose with medication (often with over-the-counter analgesics and prescription available only medications like benzodiazepines and anti-depressants), ingestion of household poisons and cleaning agents and self-injury such as self-cutting.<sup>7</sup>

Usually the method of choice is influenced by factors such as: accessibility of method; knowledge or lack of the lethality of the method; experience and familiarity with the method; symbolism and cultural influences; and a suicidal person's state of mind and level of intent at the time. When suicidal behaviour fails, repeated attempts can result in a choice of more severe and more lethal methods in an attempt to secure help if the original nonfatal suicidal behaviour did not have the desired effect on significant others on whom it was supposed to impact (commonly referred to as "a cry for help"). These patients are therefore, at high risk.7

### Common risk factors in suicidal behaviour

Suicidal behaviour is a complex phenomenon that cannot be readily attributed to any single cause as it involves intricate interactions between psychological, social, cultural and biological variables. As such, it is a process, although specific risk factors and critical aetiological considerations have been identified.<sup>2-4</sup>

Our work7 shows associated risk factors to include family psychopathology (such as a history of family members' suicidal behaviour, substance abuse and other psychological disorders), academic problems in young people, exposure to family violence, a family history of suicidal behaviour, fundamentalism and fanatical belief systems, child abuse, bereavement, interpersonal problems (especially marital, partner-relational, family problems), financial problems, inordinate stress, psychological disorders (especially depression), personality disorders, a history of sexual abuse, prior suicidal behaviour, and substance abuse (especially alcohol abuse). It is not that well-known in South Africa that reading impairment (which is associated with one of the most prominently investigated learning disabilities internationally) can be a comorbid factor in suicidal behaviour, especially in young people in whom it has been associated with certain psychopathological disorders.<sup>7</sup>

A common biological substrate underlying the propensity for suicide associated with violence, aggression, impulsivity and stress has also been identified.<sup>3-4,7</sup> Further, neurological findings show a correlation between altered serotonergic activity and suicidal behaviour (both fatal and non-fatal); a genetic role; abnormalities in the serotonergic (5-hydroxytryptamine, 5-HT) system and in other neurotransmitter systems, such as the noradrenergic. dopaminergic, GABAergic and glutamatergic systems; and hyperactivity of the hypothalamic-pituitary-adrenal avis

Additional factors in South African society with a potential to affect suicidal behaviour are socio-economic difficulties including high unemployment levels and the high prevalence rates of violence and trauma.<sup>7</sup> Also, the role of dysfunctional perceptions in stress arousal associated with suicidal behaviour has been well-documented <sup>7</sup>

#### **Management and Prevention**

Because they usually have ongoing contact with patients, family practitioners can play a critical role in the treatment of depression and prevention and management of suicidal behaviour. An astute diagnosis of any underlying psychopathology such as depression and its appropriate treatment (including medication and where necessary hospitalisation) is a sine qua non.<sup>8</sup>

Depressive symptoms are often under diagnosed and under treated, despite the high prevalence of the disease. Once diagnosed, depression can virtually always be effectively treated.

Medication or psychotherapy or a combination of both are usually indicated bearing in mind that patients respond differently to treatment.<sup>8</sup> In depressed patients who are suicidal and who appear intractable to treatment, electroconvulsive therapy can be considered.<sup>4</sup> Anti-depressants are broadly classified into tricyclics (TCAs), non-tricyclics, first-generation monoamine oxidase inhibitors (MAOIs), second-generation monoamine oxidase inhibitors- reversible (RIMAs), selective serotonin re-uptake inhibitors (SSRIs), selective noradrenaline and serotonin re-uptake inhibitors (SNRIs), and others. The aim of treatment should not merely

be to achieve a response (usually within 6 to 12 weeks). Following remission of the depressive symptomology (usually 4 to 9 months) maintenance treatment for one year or more should continue in order to prevent a relapse or reoccurrence of the depression. If the symptoms return and are severe enough to meet the syndromal criteria within six months of remission, this could be regarded as a relapse of the current depressive episode.<sup>8</sup>

Psychotherapy is an important treatment option. It is a generic term that covers a spectrum of psychological methods, and is distinguishable from broader interventions that may be psychotherapeutic such as stress management techniques, exercise or life style changes. The goals of psychotherapy include: amelioration of depression and suicidal symptoms, reestablishing a pre-morbid level of functioning, eliminating or reducing the patient's psychological suffering, resolving obstacles imposed on the patient by the depressive and suicidal symptoms.8 The doctor-patient relationship is the nucleus of the psychotherapy process.<sup>6</sup>

Decisions regarding psychotherapy and anti-depressant medication are guided by several considerations. Usually the specific somatic, cyclothymic and neurovegetative symptoms of depression respond primarily to biomedical treatments. On the other hand, the interpersonal, social and cognitive symptoms primarily require psychotherapeutic as well as other nonbiomedical interventions such as social support and lifestyle changes. In addition, once the acute symptoms have responded to appropriate medication, further psychotherapeutic exploration may be required. Areas to consider are trigger factors support systems, coping mechanisms, and feelings of low selfesteem. A key link between depression, suicidal ideation and suicidal behaviour is the construct of hopelessness.<sup>7-8</sup>

Basic therapeutic listening and (cognitive) counselling skills can be utilised by most general practitioners). In addition to a supportive approach and empathetic listening, cognitive behavioural strategies (changing the patient's negative perceptions, thoughts and suicidal behaviour by using cognitive restructuring) can have a significant effect on depression and suicidal behaviour.<sup>4,8,15</sup> A specific aim is to psychologically empower the patient. It reduces patient vulnerability by preventing minor mood disturbances from precipitating major negative cognitive changes. This involves correcting misperceptions, prevention of negative thinking and emotions and changing dysfunctional attitudes and misattributions, based on biased information processing. 8,15 Effective treatment requires a clearer understanding of the mechanisms of the suicidal process and the characteristics of the patient who engages in suicidal behaviour.<sup>4,8</sup> Specific cognitive mechanisms involving poor problem solving skills (especially interpersonal problem solving) and hopelessness in suicidal behaviour should be modified. The patient should be encouraged to recognise existing strengths and resources and how to utilise them effectively,<sup>4,8</sup> A problem solving mode of thinking should be taught to replace a problem creating mode of thinking. Psycho-educational counselling for both

the patient and family is a valuable tool to educate them about depression and suicidal behaviour. For the suicidal patient, generally death is not the attraction. Escape from unbearable psychological anguish is what the patient wants. Helping a patient to achieve this relief can prevent a suicide.

#### **REFERENCES:**

- American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders. DSM-IV-TR. Text Revised. Washington DC: American Psychiatric Association 2000
- Bertelote JM, Fleischman A, De Leo D, Wasserman D. Psychiatric diagnoses and suicide: Revisiting the evidence. *Crisis* 2004; 147-155
- Hawton K & Van Heeringen K (Eds.). The International Handbook of Suicide and Attempted Suicide. Chichester: Wiley. 2000
- Suicide. Chichester: Wiley. 2000
   Wasserman D. (Ed). Suicide. An Unnecessary Death. London: Martin Dunitz. 2001
- Schlebusch L, Vawda N, & Bosch B A. Suicidal behavior in black South Africans. *Crisis* 2003; 24-28.
- Schlebusch L (Ed.). A Basic Guide to the Diagnosis and Treatment of Depression. Johannesburg: Ciba-Ceigy 1990
- Schlebusch L. Current perspectives on suicidal behaviour in South Africa. In Suffla S Van Niekerk A (Eds). Crime, Violence and Injury Prevention in South Africa. Cape Town: Medical Research Council-University of South Africa 2004; 88-113
   Lasich AJ. Schlebusch L. Depressive disorders.
- Lasich AJ, Schlebusch L. Depressive disorders. Disease Review. Pretoria: MIMS 1999; 623-628.
   Schlebusch L, Luiz HA, Bosch, BA & Levin A. On suicide in South African general hospital psychiatric inpatient unit. South African Journal of Psychology.
- 1986; 15-20.
  10. Cassimjee MH & Pillay BJ. Suicidal behaviour in family practice: A pilot study. In L Schlebusch (Ed.). Suicidal behaviour 4. Proceedings of the fourth southern African conference on suicidology. Durban: Department of Medically Applied Psychology, Faculty of Medicine, University of Natal 2000; 49-55
- Lönnquist, J. Physical illness and suicide. In Wassernam D (Ed). Suicide An Unnecessary Death. London: Martin Dunitz 2001; 93-98.
   Schlebusch L, Noor Mohamed SB. Suicidal
- Schlebusch L, Noor Mohamed SB. Suicidal behaviour in cancer and HIV-AIDS patients in South Africa. 10<sup>th</sup> European Symposuim on Suicide and Suicidal Behaviour, Copenhagen, Denmark 2004
- Bertelote JM. Suicide in the world: an epidemiology overview. In Wassernam D (Ed.). Suicide An Unnecessary Death. London: Martin Dunitz 2001; 3-10.
- Matzopoulos R. A Profile of Fatal Injuries in South Africa. Third Annual Report of the National Injury Mortality Surveillance System. Cape: Town Medical Research Council- University of South Africa 2002
   Schlebusch L. Mind Shift. Stress Management
  - and Your Health. Pietermaritzburg: University of Natal Press 2000



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