



SUICIDE

INTRODUCTION

- Suicide is among the ten leading causes of death in most countries for which information is available, and there are some indications that the rate is increasing.
- Suicide has been defined as an act with a fatal outcome, deliberately initiated and performed in the knowledge or expectation of its fatal outcome.
- People who take their lives do so in a number of different ways. In England and Wales, according to the Office for National Statistics in 2008, hanging was the most commonly used method for suicide by men (53%), followed by drug overdose (16%), self-poisoning by car exhaust fumes, drowning, and jumping. The commonest methods for women were drug overdose (36%), hanging (34%), and drowning, { in Iraq, burning}.



THE EPIDEMIOLOGY OF SUICIDE

- Accurate statistics about suicide are difficult to obtain because information about the exact cause of a sudden death is not always available.
- Suicide rates have changed in several ways since the beginning of the last century. Recorded rates for both men and women fell during each of the two world wars.
- There were also two periods during which rates increased. The first, during 1932 and 1933, was a time of economic depression and high unemployment. However, the second period, between the late 1950s and the early 1960s, was not.



- Suicide is about three times as common in men as in women. The highest rates of suicide in both men and women are in the elderly. Suicide rates are lower among the married than among those who have never been married, and increase progressively through widowers, widows, and the divorced. Rates are higher in the unemployed.
- Rates are particularly high in certain professions. The rate in veterinary surgeons is four times the expected rate and in pharmacists and farmers it is double the expected rate . Suicide rates are also higher in doctors, particularly female doctors.



THE CAUSES OF SUICIDE

Individual psychiatric and medical factors

- The most consistent finding of studies of individual factors is that the large majority of those who die from suicide have some form of mental disorder at the time of death. The most frequent conditions include the following:
 - • *Personality disorder*. This is diagnosed in up to almost 50% of people who commit suicide, according to some surveys .
 - • *Mood disorder*. About 6% of individuals who have a mood disorder will die by suicide. Depressed patients who die by suicide are more likely than other depressed patients to have a past history of self-harm and to have experienced a sense of hopelessness.



- • *Alcohol misuse*. Follow-Up studies of patients dependent on alcohol show a continuing risk of suicide, with a lifetime risk of 7%
- • *Drug misuse*. This is relatively common among those who die by suicide, particularly in the young
- • *Schizophrenia*. The suicide rate is increased among young men early in the course of the disorder, particularly when there have been relapses, when there are depressive symptoms, and when the illness has turned previous academic success into failure. The lifetime risk of suicide in this group has been estimated to be 5% .



□ **Social factors**

- Rates are lower at times of war and revolution, and increased during periods of both marked .economic prosperity and economic depression
- More recent studies have repeatedly demonstrated that areas with *high unemployment, poverty, divorce, and social fragmentation* have higher rates of suicide..



❑ **Biological factors**

- ❑ A family history of suicide is associated with suicide, and

adoption studies indicate that this mechanism is genetic

- ❑ Suicidal behaviour has been linked to decreased activity of brain 5-HT { 5-Hydroxy Tryptamine or serotonin} pathways. Markers of 5-HT function, such as cerebrospinal fluid (CSF) 5-HIAA {5-hydroxyindolacetic acid} and the density of 5-HT transporter sites, are lowered in suicide victims.

- ❑ The association between underactivity of 5-HT pathways

and suicidal behaviour appears to extend across diagnostic boundaries, and may be related to increased impulsivity and aggression in those with low brain 5-HT function



ASSESSMENT OF RISK

- Factors that point to greater risk include the following:
 - • marked hopelessness
 - • a history of *previous suicide attempts*: around 40-60% of those who die by suicide have made a previous attempt
 - • social isolation
 - • older age
 - • *depressive disorder*, especially with severe mood change with insomnia, anorexia, and weight loss
 - • *alcohol dependence*, specially with physical complications or severe social damage
 - • drug dependence
 - • *schizophrenia*, especially among young men with recurrent severe illness, depression, intellectual deterioration, or a history of a previous suicide attempt
 - • chronic painful illness
 - • epilepsy
 - • abnormal personality •



THE MANAGEMENT OF SUICIDAL PATIENTS

- The first step is to decide whether the patient should be admitted to hospital or treated as an outpatient or day patient. This decision depends on the intensity of the suicidal intention, the severity of any associated psychiatric illness, and the availability of social support outside hospital.
- The management of patients who have been identified as being at risk of suicide but do not require admission involves continuing assessment of the suicidal risk, and agreed plans for appropriate treatment and support.
If medication is required—for example, to treat a depressive disorder, the drug that is least dangerous in overdose should be chosen.



▣ **Management in hospital**

- ▣ The obvious first requirement is to prevent patients from harming themselves. These arrangements require adequate staffing and a safe ward environment, removing potentially dangerous personal possessions such as razors and belts.
- ▣ If the risk is high, special nursing arrangements may be needed to ensure that the patient is never alone.



SUICIDE PREVENTION

- 1-Better and more accessible psychiatric services, *Long-term medication and Prescribing less toxic antidepressants*. Selective serotonin reuptake inhibitors (SSRIs) are less toxic in overdose than tricyclic antidepressants. On the other hand, SSRIs have been reported to cause the emergence or worsening of suicidal ideas in young people, possibly because they can cause agitation and insomnia initially.
- 2-Reducing the availability of methods of suicide like *Detoxification of gas, Detoxification of car exhaust fumes, Restricting amounts of analgesics and Removing and preventing access to hazards*.



- ▣ *3-Social policy.* Given the repeatedly demonstrated association between unemployment and suicide, it has been argued that policies aimed at reducing rates of unemployment may help to reduce the rate of suicide.
- ▣ *4-Public education.* Campaigns to educate the public about mental illness and its treatment have included outreach to schools, which has involved teaching about solving problems and seeking help when distressed. The value of such approaches is uncertain.

