Alcohol and Substance Use in People with a Severe Mental Illness Fact Sheet

What is Severe Mental Illness?
The term “severe mental illness” is a frequently used phrase, but is imprecise in its nature. In the generally accepted form, the term has three elements: Diagnosis, Disability and Duration.

- **Diagnosis:** a diagnosis of schizophrenia, bipolar disorder, or other psychotic disorder is usually implied.
- **Disability:** The disorder causes significant disability.
- **Duration:** The disorder has lasted for a significant duration, usually at least two years.

What happens in the general population?

- 1 in 20 adults are estimated to have used an illicit drug at least once in 2010; psychoactive drug use is responsible for 450,000 deaths per year globally, and accounts for 1.5% of the global burden of disease.
- WHO actions, include through co-ordination with other international bodies, the development of standardised programmes for the treatment of drug use disorders, promotion of international standards on drug use prevention, and the identification and management of disorders due to new psychoactive substances.
- The harmful use of alcohol kills 2.5million people annually across the globe.
- WHO actions to reduce the harmful use of alcohol include the development of drink drive policies and countermeasures, acting on the availability of alcohol, the marketing of alcoholic beverages, pricing policies, and reducing the impact of illicit alcohol and informally produced alcohol.

What is the prevalence of the disorder in people with severe mental illness?

- A greater proportion of people with severe mental illness use harmful levels of alcohol than do people without a severe mental illness. Estimates suggest that between 35% and 80% of people with severe mental illness use harmful levels of alcohol.
- Mortality rates for people with severe mental illness and harmful alcohol use is significantly greater than for severe mental illness alone (The alcohol hazard ratio for all-cause mortality in people with severe mental illness is 1.52).
- People with schizophrenia have high rates of substance misuse, alcohol and cannabis.
- People with a severe mental illness are more likely to engage in substance misuse and high risk sexual behaviour. This puts them at risk of Human Immunodeficiency Virus (HIV) infection, Hepatitis C or Hepatitis B.

What are the risk factors for people with severe mental illness?

- Harmful use of alcohol is a risk factor for readmission to psychiatric hospital.
• Long term follow-up of people with comorbid alcohol misuse and psychosis improve when they are provided with access to integrated treatment programmes.
• There is an increased risk of any psychotic outcome in individuals who have ever used cannabis. The effect is dose related, with the greatest risk in those who use cannabis frequently.
• Starting smoking cannabis before the age of 15, increases the risk four-fold of developing psychosis.
• Up to 20% of people with a severe mental illness have been reported to have comorbid Hepatitis C. The global burden of Hepatitis C is estimated at about 3%.
• Amongst people with severe mental illness, HIV has a reported prevalence of 7.8% (compared to 0.4% of people without a severe mental illness).
• People with a severe mental illness are more likely to suffer from Hepatitis B than the general population.

What are the effects of anti-psychotic medication?
• The potential for interactions between anti-psychotic medication and illicit drugs and/or alcohol is significant. This potential interaction is made more complicated by the development of New Psychoactive Drugs – sometimes called “legal highs”.
• Treatment programmes for blood borne viral (BBV) disorders, although changing rapidly, are effective in people with severe mental illness. Some treatments can cause blood dyscrasias, and should be used with caution in those people who are also taking antipsychotic medication such as clozapine, that can also cause blood dyscrasias.

What is the effect of life style choices and social determinants of health - particularly seen in those with a severe mental illness?
• Prevalence of Hepatitis C is higher (up to 40%) for those who are homeless and suffering from a severe mental illness, compared to those who are homeless without a severe mental illness.

What is the effect of multi-morbidity?
• Harmful alcohol use is associated with liver damage, which can affect the metabolism of all medication including antipsychotic medication. Alcoholic liver damage can progress to liver cirrhosis.
• People with substance use disorder are also more likely to suffer from other physical health disorders including respiratory diseases.
• Severe mental illness is a risk marker for acquiring blood borne viral (BBV) infections.
• Co-morbidity of psychosis and BBV infection worsens the prognosis for both conditions.
• A diagnosis of HIV is associated with an increased risk of developing psychosis, but a diagnosis of psychosis is not associated with an increased risk of HIV, unless there is comorbid substance misuse.
• Amongst people with HIV, severe mental illness is 6 times more common than amongst those without HIV.
Recommendations for Clinical Practice:

- In all countries people with severe mental illness should be asked about their consumption of alcohol, and offered appropriate advice to reduce harmful drinking. Advice should also include access to programmes that help to reduce harmful drinking, and access to programmes that support those who are homeless and in need of financial support.

- In all countries people with severe mental illness should be asked about behaviours that put them at risk of acquiring blood borne viral diseases, and where appropriate be offered advice to reduce risk taking behaviour. Advice should include access to programmes that would support individuals to reduce risk taking behaviour, and access to programmes that support those who are homeless and in need of financial support.

- People should be offered blood tests to identify if liver function is normal, in particular, assessing liver damage secondary to alcohol, and blood borne viral diseases. Abnormal results should also be reviewed to assess the possibility of non-alcoholic fatty liver disease, a significant risk in people with metabolic syndrome and severe mental illness.

- In those countries where some at-risk groups are screened for blood borne viral diseases (BBVs), people with severe mental illness should be offered the opportunity to be screened.

- Where available, people with severe mental illness should be offered protection against Hepatitis B by vaccination

- Where available, people with severe mental illness who are HIV/AIDS positive, or Hepatitis C positive should be offered treatment for these viral conditions, in the same way that people who are BBV positive but without severe mental illness, are offered treatment.

- Assess each patient’s beliefs and preferences, and assess levels of health literacy and barriers to care.

- Use interpreters as appropriate for patients with language barriers.

- Patients should have available self-management support from people who are themselves recovering from severe mental illness.

References and Further Reading:

- Public Health Dimension of the world drug problem: A report by the Secretariat of the WHO Executive Board, 140th Session 28 Nov 2016, EB140/29
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- Association between alcohol and substance use disorders and all-cause and cause-specific mortality in schizophrenia, bipolar disorder, and unipolar depression: a nationwide, prospective, register-based study. Hjorthoj C; Ostergaard ML; Benros ME; Toftdahl NG; Erlangsen A; Andersen JT; Nordentoft M.
● Risk factors associated with psychiatric readmission. 
Lorine K; Goenjian H; Kim S; Steinberg AM; Schmidt K; Goenjian AK. 

● Substance use in youth at risk for psychosis 

● Cannabis use and risk of psychotic or affective mental health outcomes: a systematic review 

● Cannabis and mental health: key facts. www.rcpsych.ac.uk


● Determining rates of hepatitis C in a clozapine treated cohort. 
Sockalingam S; Shammi C; Powell V; Barker L; Remington G. Schizophrenia Research. 124(1-3):86-90, 2010 Dec.


● Severe mental illness is a new risk marker for blood-borne viruses and sexually transmitted infections. 

● Prevalence of human immunodeficiency virus, hepatitis b, and hepatitis c among homeless people with co-occurring severe mental illness and substance use disorders. 


