# Editorial
# Substance use in anaesthesia practitioners in South Africa

The mental health of medical professionals has garnered increasing attention in recent years. Areas of concern have included the increase in suicide, burnout and the prevalence of common mental disorders such as anxiety, depression and substance use. Most research has been conducted in high-income countries with less data from low- and middle-income countries such as South Africa. Given that South African doctors face unique personal and professional challenges, further investigation into mental disorders, including substance use, is warranted.

In South Africa common mental disorders have a lifetime prevalence of 30% among the general population with anxiety disorders (15,8%), substance use disorders (13,3%) and mood disorders (9,8%) being the most prevalent.[1] The cumulative occurrence of substances used included alcohol (38,7%), tobacco (30%), cannabis (8,4%) and other drugs (2,4%).[2] Little is known about common mental disorders among South African doctors, although attempts are being made to address these gaps. For example, a recent study found that medical interns at a large tertiary academic hospital had higher prevalence rates of depression (40,7%) than the general population.[3] It is possible that this trend may be present for other common mental disorders among South African doctors, including substance use and substance use disorders.

Substance use among doctors is an area of concern, as it carries risk of harm to patients, practitioners and healthcare systems.[4] However, not all medical specialities hold equal prevalence rates. From the international literature, anaesthesia practitioners appear to have higher prevalence rates of substance use disorders than other medical specialists.[5]

"*The prevalence of substance use in anaesthesia practitioners in South Africa*" is an important contribution to our understanding of substance use prevalence amongst anaesthesia practitioners in South Africa.[6] It is the first study conducted that examines substance use amongst doctors in South Africa. Understanding prevalence of substance use and substance use disorders is an important first step in planning potential interventions.[6] This study was a cross sectional analysis of anaesthesia practitioners and was conducted using the self-administered Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)[6]. The results revealed that the lifetime prevalence rates of substances used, but not necessarily misused, were alcohol (92,8%), tobacco (42,3%), cannabis (34,7%) and sedatives (34,4%)[6]. The only comparator is the 2009 South African Stress and Health Study (SASH study) which demonstrated lifetime prevalence rates of substance use of alcohol (38,7%), tobacco (30%), cannabis (8,4%) and other drugs (2%)[2]. Comparison of the SASH study data with the data from this study investigating substance use prevalence among anaesthesia practitioners in South Africa suggests that prevalence of use for alcohol, tobacco, cannabis and sedatives is higher among anaesthesia practitioners than the general population. However, the SASH study was conducted over 10 years ago with a much larger sample size. Therefore, a more recent comparator is needed. Most substance use was low risk in this study.[6] However, moderate risk use was present for alcohol, sedatives, tobacco and amphetamines.[6] High-risk use was present for alcohol in only 1% of cases in this study.[6] Of interest was that higher rates of opioid use has been reported in the international literature[4,7,8,9] whereas in this study lifetime prevalence of opioid use was 3,4%. Further research is necessary to understand this difference. Another important factor to consider was the low rate of participation in this study of only 20% of practitioners; it could be speculated that persons with more severe substance use self-selected not to participate.[6]

The medical profession may be rewarding but it places significant demand and stress on doctors.[10,11] According to international data, doctors, including anaesthesia practitioners, are at an increased risk of mental disorders including substance use to a variety of factors.[11] General risk factors include genetic risk, early life adversity, interpersonal conflicts and other co-morbid illnesses.[11] However, within the medical profession, risk is compounded by personality traits of obsessiveness, perfectionism, drive and competitiveness.[11] Anaesthetic practitioners face significant additional stressors including easy access to medications and the work-related physical, psychological and mental stresses of ongoing perioperative care of patients.[12] These can include long, gruelling hours, increasing workloads, significant service pressures, professional competitiveness and poor work-life balance.[10] The combination of these stressors poses significant mental burden on doctors including emotions such as guilt and a sense of failure.[10] It may be difficult for doctors to recognise these warning signs or to access assistance, thus leading to the development of anxiety, depression, substance use and even suicide.[11] Stigma plays a significant role in deterring help-seeking behaviour.[10,11] Further research is needed to understand risk factors specific to South African practitioners.

Substance use among anaesthesia practitioners poses significant risk to the practitioner, the patient and the health system.[12] Multiple international studies have explored individual risk and these can include increased mortality rates among anaesthesia practitioners due to multiple factors including suicide. Co-morbid common mental disorders and socio-occupational dysfunction are both a consequence and a risk factors for substance use.[7] Other concerns related to functioning within the workplace include absenteeism, conflict with colleagues and an inability to function optimally.[7] These lead to increased risk to patients and place practitioners at risk of adverse events, litigation and loss of relevant registrations and employment.[12]

A comprehensive approach is needed to address substance use.[12] This would include individual and environmental approaches.[10] Individual approaches include screening, possible brief interventions and referrals to appropriate levels of treatment. Screening may take the form of routine screening for all concerned practitioners or those who present with any changes in behaviour and practice.[12] Specific interventions studied have included individual and group interventions of a wide variety of modalities and have yielded mixed results.[9] Potential barriers to engagement in treatment for doctors with common mental disorders

including substance use disorders would be significant shame and stigma.[10]

The environments that anaesthesia practitioners work in need to be carefully scrutinised.[12] Environmental changes such as rescheduling work hours, reducing workloads, modifying working conditions and collegial support are of utmost importance in improving mental health and decreasing substance use within the anaesthesia profession.[10,12]

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