

ADDRESSING CHALLENGES IN ADDICTION TREATMENT AND TRAINING IN AFRICA

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ABSTRACT

Substance use disorder is a major contributor to disability adjusted life year. Globally and especially in Africa there is high treatment gap for substance use disorders (SUDs) and lack of training in addiction psychiatry. This commentary discusses challenges to SUD treatment and training in Africa and offers suggestions to advance the field. Socio-political and health system factors limit the availability of treatment and training of healthcare providers for addiction in Africa. It is essential that governments in Africa prioritise investment in addiction treatment and training to reduce the morbidity and mortality associated with lack of treatment.

Keywords: addiction treatment and training; Africa; addiction psychiatry

INTRODUCTION

Substance use disorders (SUDs) are patterns of symptoms resulting from the use of a substance in spite of the problems associated with their use (UNODC, 2018). Substance use disorder is a major contributor to disability adjusted life year (DALY) which is a combination of disease burden due to premature mortality and (Years of life lost [YLL]) and disease

burden due to disability (years of life lived with disability [YLDs]) (Degenhardt et al., 2018). Findings from the Global burden of disease in 2016, suggested that alcohol use and drug use were responsible for 99.2 million DALYs representing 4.2% of all DALY and 31.8 million DALYs representing 1.3% of all DALY (Degenhardt et al., 2018). Evidence from the 2019 World Drug report indicates a global increase in prevalence from 210 million in 2009

to 271 million in 2017 (World Health Organization, 2019). The global increase in the prevalence of SUDs may be related to the high rates in low- and middle-income countries (LMICs) such as Nigeria and India (Chikezie, Ebuenyi, Allagoa, & Onyeka, 2021; UNODC, 2018). However, data from the World Mental Health Surveys reported that the global lifetime prevalence of alcohol use disorder is 8.6%, and 5.95 in the African region (Glantz et al., 2020). A review on novel psychoactive substances (NPS) suggests that regional and global estimates of SUDs may be an underestimation on account of the non-inclusion of atypical NPS from Africa (Dumbili, Ebuenyi, & Ugoeze, 2021). Also, a study on Mental and substance use disorders in sub-Saharan Africa suggests that increasing population growth in the region will lead to an 'estimated 130% increase in the burden of mental and SUD by 2050, to 45 million YLDs' (Charlson et al., 2014).

SUDs are associated with diverse negative outcomes and are therefore, a top public health priority. A systematic review on substance use and suicidal ideation and behaviour in LMICs found a consistent positive association between substance use and suicidal ideation and behaviour across all substances (Breet, Goldstone, & Bantjes, 2018). Another systematic review on substance use and HIV risk among men who have sex with men in Africa found an association between alcohol use disorder and risky sexual behaviour (Sandfort et al., 2017). A systematic review on comorbid severe mental illness (SMI) and HIV found that 25-60% of persons with SMI had comorbid SUD which complicates treatment adherence and social and health outcomes (Ebuenyi et al., 2018). The global burden and impact of SUDs may be worse in Africa with

few research and addiction treatment options. The aim of this commentary is to highlight challenges to SUD treatment and training in Africa and to offer suggestions to advance the field.

Challenges to SUD treatment and training in Africa

Globally, access to addiction treatment is poor and less than 10% of the people in need of opioid treatment receive it (WHO, 2021). In LMICs, few people with SUDs receive treatment. Some studies have shown that the impact of SUDs is higher in LMICs, and they tend to have fewer treatment options (Degenhardt et al., 2018; Degenhardt et al., 2017), especially in Africa (Kurth et al., 2018). In Nigeria, only about 12% of the 14.3 million persons with SUD ever receive treatment (UNODC, 2018). In Ethiopia, although the prevalence of alcohol use disorder is 13.9% the treatment gap remains as high as 87.0% (Zewdu, Hanlon, Fekadu, Medhin, & Teferra, 2019). The factors responsible for the high treatment gap in Africa are multifactorial and include socio-political and health systems challenges. For instance, substance use stigma limit utilisation of the meagre available care for treatment while lack of political will limits funding of addiction treatment and rehabilitation and research in the area (Dumbili et al., 2021; Kurth et al., 2018).

Available research evidence and information on addiction treatment is often from high-income countries (HICs) (Breet et al., 2018). Several factors limit access to and use of available treatment for SUDs in Africa. For example, cultural perceptions about SUDs and the stigma experienced by affected persons could limit treatment. A study conducted in Ghana, suggests that socioecological factors such

as culture, religion, policy, and availability of drugs are major limitations to addiction treatment (Kabore et al., 2019). This finding is similar to the findings of a study among Latinos with SUDs in the USA which reported that cultural factors, perceived treatment efficacy, recovery goals, and perceived treatment affect use and acceptance of treatment (Pinedo, Zemore, & Rogers, 2018). Another important factor in the treatment of SUDs is the stigma against patients from addiction treatment providers (Andraka-Christou & Capone, 2018).

Equally important are the challenges in the training of SUD treatment professionals, ranging from low recruitment to a lack of capacity to train those who indicate interest. A study on SUD training in Nigeria suggests that although over 70% of the participants indicated an interest in addiction psychiatry, 47.1% considered their SUD training as inadequate (Chikezie et al., 2021). In addition to the apathy for psychiatry, addiction psychiatry which is a subspecialty of psychiatry attracts even less interest because it is considered non-lucrative and often suffers from a lack of availability of training opportunities (Ebsworth & Foster, 2017; Katschnig, 2010; Renner, Karam-Hage, Levinson, Craig, & Eld, 2009). Also, although addiction medicine is over 20 years in HICs such as USA or UK, it is a recent introduction in most LMICs, especially in Africa (De Jong et al., 2016).

A study on the development and challenges of implementing training in addictions care in South Africa reported the following challenges: lack of capacity to supervise trainees, practice differences in work and training environments, lack of funding for trainees or students, and lack of sub-speciality registration or accreditation (Pasche, Kleintjes, Wilson, Stein, &

Myers, 2015). The need for registration and or accreditation was also identified by a study conducted on the certification of addiction professionals in Africa undertaken in Kenya (Gakunju & Murimi, 2015). A study on university-based academic programs in addiction studies in Africa identified only six universities in Africa that provided eight specific addiction education programs (Lososová, Johnson, Sinkele, Obot, & Miovský, 2021). In order to address the morbidity and mortality associated with SUDs in Africa, it is essential to adopt an integrated approach that prioritises treatment as well as training and workforce development (Pasche et al., 2015).

The way forward

According to Breet et al. (2018) SUD in LMICs is a potentially modifiable risk factor that should be addressed through assessment and management of substance use and also through research evidence. We advocate the following:

- First, policy-level interventions are important to drive investment in addiction treatment centres and services. In Africa, opioid replacement centres are still few and hugely limited by funding and lack of support from national governments (Avert, 2019) Investment and support by government are very essential to develop the field of alcohol and drug rehabilitation in Africa. Also, strengthening the weak alcohol and SUD policy in Africa may reduce the DALY associated with addiction in Africa and pressure on available treatment.
- Second, investment in medical education in addiction is considered useful to improve treatment services (Charlson et al., 2014; De Jong et al., 2016).

Given the low number of psychiatrists globally, ranging from 11.9 per 100,000 population in high-income countries to less than 0.1 in LMICs (World Health Organisation, 2017), and the challenges with recruitment into psychiatry (Ebsworth & Foster, 2017; Katschnig, 2010), it might be a good idea to extend SUD training to doctors in other specialties. SUD patients are also found in general medical and emergency medical settings, so SUD education could be integrated with general training in these settings (Iannucci, Sanders, & Greenfield, 2009; Wood, Samet, & Volkow, 2013). Hence, a combination of “addiction medicine” and “addiction psychiatry” might be a more suitable approach in view of competing priorities and financial and human resources constraints in many African countries.

- Third, investment in research on how to address SUD in Africa is vital (Dumbili et al., 2021). The investment in research must aim to address the low interest in addiction psychiatry among psychiatry resident doctors. This can be done by increasing funding and evolving mechanisms to monitor training such as the use of the Addiction Training Scale (ATS) or other related scales in other countries to evaluate the level of preparedness and to identify training needs (Chikezie et al., 2021; Sattar, Madison, Markert, Bhatia, & Petty, 2004). Also, there should be periodic assessment and re-evaluation of existing training programmes to see if anything needs to change
- Fourth, investment in public education and information on SUDs to reduce the cultural and social challenges that limit the use of available treatment and thus reduce the stigma associated with SUDs.

CONCLUSION

Substance use disorders are a major cause of morbidity and mortality worldwide and especially in Africa with huge health systems and social welfare challenges. The interrelatedness of the SUDs with other health conditions means that investment in SUD treatment and management may reduce the impact of these health conditions in addition to SUD itself. Also, the return on investment in addiction treatment and training will improve the well-being of affected persons and their families. These investments in SUD treatment and training must start now in order to reduce the DALY associated with the lack of treatment in Africa.

REFERENCES

- Andraka-Christou, B., & Capone, M. J. (2018). A qualitative study comparing physician-reported barriers to treating addiction using buprenorphine and extended-release naltrexone in US office-based practices. *International Journal of Drug Policy*, 54, 9-17.
- Avert. (2019). Opioid substitution therapy (OST) for HIV prevention. Retrieved from <https://www.avert.org/professionals/hiv-programming/prevention/opioid-substitution-therapy>. Retrieved October 2021 <https://www.avert.org/professionals/hiv-programming/prevention/opioid-substitution-therapy>
- Breet, E., Goldstone, D., & Bantjes, J. (2018). Substance use and suicidal ideation and behaviour in low-and middle-income countries: a systematic review. *BMC Public Health*, 18(1), 1-18.

- Charlson, F. J., Diminic, S., Lund, C., Degenhardt, L., & Whiteford, H. A. (2014). Mental and substance use disorders in sub-Saharan Africa: predictions of epidemiological changes and mental health workforce requirements for the next 40 years. *PLoS ONE*, *9*(10), e110208.
- Chikezie, E. U., Ebuonyi, I. D., Allagoa, E. L. P., & Onyeka, I. N. (2021). Perception of Substance Use Disorder Training: a Survey of General Psychiatry Residents in Nigeria. *Academic Psychiatry*, *45*(3), 360-365.
- De Jong, C. A., Goodair, C., Crome, I., Joku-bonis, D., El-Guebaly, N., Dom, G., . . . Welle-Strand, G. K. (2016). Focus: The Aging Brain: Substance Misuse Education for Physicians: Why Older People are Important. *The Yale journal of biology and medicine*, *89*(1), 97.
- Degenhardt, L., Charlson, F., Ferrari, A., Santomauro, D., Erskine, H., Mantilla-Herrera, A., . . . Griswold, M. (2018). The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Psychiatry*, *5*(12), 987-1012.
- Degenhardt, L., Glantz, M., Evans-Lacko, S., Sadikova, E., Sampson, N., Thornicroft, G., . . . Helena Andrade, L. (2017). Estimating treatment coverage for people with substance use disorders: an analysis of data from the World Mental Health Surveys. *World Psychiatry*, *16*(3), 299-307.
- Dumbili, E. W., Ebuonyi, I. D., & Ugoeze, K. C. (2021). New Psychoactive Substances in Nigeria: A Call for More Research in Africa. *Emerging Trends in Drugs, Addictions, and Health*, 100008.
- Ebsworth, S. J., & Foster, J. L. (2017). Public perceptions of mental health professionals: stigma by association? *Journal of Mental Health*, *26*(5), 431-441.
- Ebuonyi, I., Taylor, C., O'Flynn, D., Matthew Prina, A., Passchier, R., & Mayston, R. (2018). The Impact of comorbid severe mental illness and HIV upon mental and physical health and social outcomes: a systematic review. *AIDS care*, 1-9. doi:10.1080/09540121.2018.1510110
- Gakunju, R. M., & Murimi, G. (2015). Certification of addiction professionals in Africa: an overview of the process in Kenya. *International Journal of Prevention and Treatment of Substance Use Disorders*.
- Glantz, M. D., Bharat, C., Degenhardt, L., Sampson, N. A., Scott, K. M., Lim, C. C., . . . Cardoso, G. (2020). The epidemiology of alcohol use disorders cross-nationally: Findings from the World Mental Health Surveys. *Addictive Behaviors*, *102*, 106128.
- Iannucci, R., Sanders, K., & Greenfield, S. F. (2009). A 4-year curriculum on substance use disorders for psychiatry residents. *Academic Psychiatry*, *33*(1), 60-66.
- Kabore, A., Afriyie-Gyawu, E., Awuah, J., Hansen, A., Walker, A., Hester, M., . . . Meda, N. (2019). Social ecological factors affecting substance abuse in Ghana (West Africa) using photovoice. *The Pan African medical journal*, *34*.
- Katschnig, H. (2010). Are psychiatrists an endangered species? Observations on internal and external challenges to the profession. *World Psychiatry*, *9*(1), 21.
- Kurth, A. E., Cherutich, P., Conover, R., Chhun, N., Bruce, R. D., & Lambdin, B. H. (2018). The opioid epidemic in Africa

- and its impact. *Current addiction reports*, 5(4), 428-453.
- Lososová, A., Johnson, K. A., Sinkele, W., Obot, I. S., & Miovský, M. (2021). Overview of university-based academic programs in addiction studies in Africa. *Journal of Substance Use*, 26(1), 102-106.
- Pasche, S., Kleintjes, S., Wilson, D., Stein, D. J., & Myers, B. (2015). Improving addiction care in South Africa: Development and challenges to implementing training in addictions care at the University of Cape Town. *International Journal of Mental Health and Addiction*, 13(3), 322-332.
- Pinedo, M., Zemore, S., & Rogers, S. (2018). Understanding barriers to specialty substance abuse treatment among Latinos. *Journal of Substance Abuse Treatment*, 94, 1-8.
- Renner, J. A., Karam-Hage, M., Levinson, M., Craig, T., & Eld, B. (2009). What do psychiatric residents think of addiction psychiatry as a career? *Academic Psychiatry*, 33(2), 139-142.
- Sandfort, T. G., Knox, J. R., Alcala, C., El-Bassel, N., Kuo, I., & Smith, L. R. (2017). Substance use and HIV risk among men who have sex with men in Africa: a systematic review. *Journal of acquired immune deficiency syndromes (1999)*, 76(2), e34.
- Sattar, S. P., Madison, J., Markert, R. J., Bhatia, S. C., & Petty, F. (2004). Addiction training scale: pilot study of a self-report evaluation tool for psychiatry residents. *Academic Psychiatry*, 28(3), 204-208.
- UNODC. (2018). *Drug Use in Nigeria 2018*. Retrieved from Vienna: https://www.unodc.org/documents/data-and-analysis/statistics/Drugs/Drug_Use_Survey_Nigeria_2019_BOOK.pdf
- WHO. (2021). *Opioid overdose*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/opioid-overdose>
- Wood, E., Samet, J. H., & Volkow, N. D. (2013). Physician education in addiction medicine. *JAMA*, 310(16), 1673-1674.
- World Health Organisation. (2017). *Mental health atlas 2017*. Retrieved from Geneva:
- World Health Organization. (2019). World Drug Report 2019. *United Nations Office on Drugs Crime*(978), 92.
- Zewdu, S., Hanlon, C., Fekadu, A., Medhin, G., & Teferra, S. (2019). Treatment gap, help-seeking, stigma and magnitude of alcohol use disorder in rural Ethiopia. *Substance abuse treatment, prevention, and policy*, 14(1), 1-10.