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## EDITORIAL

### The Rise of Tramadol Abuse as Omicron Variant Plateaus

The first edition of the WAJM for the year 2022 contains notably engaging original research and case reports from diverse fields of medicine and surgery. The beginning of the year affords vast opportunities for new possibilities in research and consolidation of existing works.

This editorial focuses on two main issues – a silently rising pandemic of huge magnitude – the opioid use pandemic, and the current state of the Omicron Variant of Concern in the COVID-19 pandemic. There is currently a global surge in inappropriate opioid use despite pre-existing and new laws to clamp down on the use of prescription-only drugs for recreational purposes. This is becoming a major threat to public health with its attendant consequences. Globally, about 36.3 million people suffered from drug use disorders in 2019 with about half a million deaths due to drug use.<sup>1</sup> Opioids accounted for 76% of deaths from drug use disorders with over 30% of these deaths caused by overdose.<sup>2</sup> Mortality from opioid overdose increased by 120% between 2010 and 2018 in the United States of America (USA).<sup>1,2</sup> Opioids, include heroin, morphine, codeine, fentanyl, methadone, tramadol or other similar substances.<sup>2</sup>

Africa is experiencing a boom of opioid use as tramadol abuse is rising precipitously. It is in use in many West African countries as a recreational drug, ranking next to cannabis, the most popular globally.<sup>3</sup> Studies have shown the opioid crisis in Africa with tramadol found to be the most abused opioid in Egypt.<sup>3</sup> In Ghana, Saapiire, *et al* found the prevalence of tramadol use to be 36.2%<sup>4</sup> while as many as 91.9% of 111 motorcycle taxi drivers were on daily tramadol in Lome, Togo.<sup>5</sup> Prevalence as high as 53.4% has been reported by Duru, *et al* in Owerri, South-West, Nigeria<sup>6</sup> while 85.2% was found in Kano, North-West, Nigeria by Yunusa, *et al*.<sup>7</sup> Adelekan, *et al* found the rate of tramadol use to be 18.5% among 994 university students in Nigeria,<sup>8</sup> while Ibrahim, *et al* found a prevalence of 54.4%

amongst 237 drug users attending the addiction clinic, in North-East, Nigeria.<sup>9</sup> Data from the Nigerian Epidemiological Network on Drug Use (NENDU), revealed that 71 per cent of opioid consumers in the country in 2015 were using tramadol pills or capsules,<sup>10</sup> while about 4.6 million people were found to be abusing opioids (tramadol, codeine, morphine) in 2017.<sup>11</sup>

Tramadol is a centrally acting analgesic with opioid agonist properties. It is a synthetic 4-phenyl piperidine analogue of codeine with inhibitory effects on norepinephrine (NA) and serotonin reuptake. It is often prescribed in the management of moderate to severe acute and chronic pain and was initially thought to have minimal addictive potentials when compared to other opioid analgesics.<sup>12</sup> However, recent studies have found evidence in the contrary.<sup>13–16</sup>

The widespread abuse of tramadol may be linked to its easy accessibility, availability, and affordability.<sup>4</sup> Other factors implicated include peer influence, abuse of other substances, parental neglect, unemployment, informal drug markets, self-medication practices, psychological, physiological and environment factors.<sup>4,17</sup> Most people who abuse tramadol also abused other opioids (codeine, morphine, etc) and substances such as alcohol, cannabis, and rohypnol, amongst others.<sup>4</sup> Reasons for use include the euphoric effects, to enhance work and sexual performance, and to relieve anxiety and stress.

The impact of tramadol misuse and opioid abuse cuts across all sectors of the society. Of importance is the short-term and long-term effects on the individual ranging from addiction, dependence, seizures, hallucination, confusion, hypertension, respiratory depression and failure, liver and kidney disease, serotonin syndrome, mental illness, amongst others.<sup>3–6,17</sup> One of these effects, Tramadol-Induced Acute Seizures, was reported by Obayi, *et al*<sup>18</sup> in 2019 and this was also highlighted in a case series by Fawale, *et al* in this edition.

Tramadol dependence accounts for a considerable burden of indirect costs for

health care, reduced long-term economic productivity, as most addicts are between 15–64 years, increased prevalence of car crashes, drug-related violence, child and sexual abuse, medication overdoses and untimely death.<sup>4,7</sup> The impact also goes beyond the individual misusing the medications and poses significant threats to the lives and safety of non-drug users.<sup>17</sup> These has resulted in increased morbidity and mortality.<sup>4,17</sup>

Consequent to the opioid crises in West Africa, there has been improvement in national and regional regulations and controls on pharmaceutical supply chains in West Africa. This is being done without restricting access to legitimate medical use of the drugs.<sup>17,19</sup> Large quantities of tramadol have been seized in the African region accounting for about 87% of the world's seizure of pharmaceutical opioids.<sup>17</sup> The largest annual seizures reported by national authorities occurred in Nigeria, with about 54 tons seized in 2016, 92 tons in 2017 and 22 tons in 2018.<sup>19</sup> About 44 tons of tramadol were seized in Côte d'Ivoire in 2018 while in 2019, the Republic of Benin seized 59 tons of tramadol.<sup>19</sup> Of note was the fact that the shipments of tramadol seized contained higher dosages relative to the approved medical dose of 50mg and 100mg. Many of the tramadol pills had dosages of 120mg, 200mg, 225mg and as high as 250mg, making them more potent and dangerous to the health of users.<sup>19</sup>

While seizing these drugs is a good measure, it is not enough because crime syndicates have mastered the art of trafficking these drugs, through false documentation at seaports, cargo flights, couriers and postal parcels.<sup>18</sup> There is therefore need for a multidimensional approach towards curbing the use of tramadol especially in Sub-Saharan Africa. Intense efforts must continue across all sectors, both private and public, to ensure massive reduction in tramadol and opioid abuse through nationwide campaigns, strict import and export regulations, effective land border control, and restriction of prescription-only medications.<sup>16</sup> Rehabilita-

tion programmes, though expensive, must also be instituted to manage those adversely affected, wean them off these medications and reintegrate them back into the society.<sup>17,19</sup>

The fourth wave of COVID-19, driven by the Omicron variant, has gradually plateaued making it the shortest-lived surge since the outbreak of the pandemic.<sup>20</sup> Globally, over 142 countries have detected the Omicron variant including 30 countries in Africa. Most of these countries are recording a decline, and Southern Africa which had the highest number of cases in Africa has experienced a 14% decrease in the first two weeks of the year.<sup>20</sup> This was also experienced in most parts of East and Central Africa. However, North Africa and West Africa are still having a surge in the number of cases especially in countries like Cape Verde, Ghana and Nigeria, amongst others.<sup>20,21</sup>

Despite the high infectivity rates, hospitalisations have remained low globally and this has been attributed to vaccination, including booster doses, prior immunity from natural infection, and improved treatment options, which has resulted in less severe outcomes from subsequent infection with the Omicron variant.<sup>21</sup> The fast spread of this variant puts a burden on healthcare facilities, even though the variant is considered less severe compared to earlier variants.<sup>21,22</sup> Though it has been found that two doses of vaccine might not protect against infection with the Omicron variant, booster doses have been found to offer increased protection and should be encouraged in order to reduce the spread of disease.<sup>22,23</sup> As the Omicron variant plateaus, we must continue to take precautionary measures and ensure high levels of infection prevention control, and preparedness in the event of emergence of new strains.

I want to acknowledge the contributions of Dr. Arawomo to this editorial.

**Prof. G. E. Erhabor**  
**Editor-In-Chief**

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