

Tramadol in Africa

Scarcity and Excess of Pain Medication in a Poorly Regulated Market

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This report based is on stakeholder consultation in 7 countries, through a mixed methods approach combining structured interviews with medical professionals and cohorts of non-medical users with the analysis of tramadol samples bought in pharmacies and markets, literature review and observations in markets and health care settings.

A multidisciplinary team conducted field visits in Botswana, Ghana, Nigeria, Namibia, Cote d'Ivoire and Niger between June-October 2018.

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Executive Summary

- West Africa faces two opioid crises: an acute shortage of opioid analgesics in the health care system leading to a great burden of untreated pain; and a profusion of substandard and falsified tramadol medications producing dependence and unrecorded fatalities
- In West Africa the great bulk of tramadol consumed for non-medical purpose is not diverted from health care settings but enters through illicit importation routes and informal distribution channels
- There is no record of non-medical tramadol use in Botswana or Namibia. Neither country has an informal, unregulated market for medicines and pharmaceutical products but good networks of pharmacies
- Weak controls at points of entry and porous border allow for the importation of vast volumes of substandard and falsified medicines including tramadol
- Pharmaco-vigilance systems vary significantly between countries and have the potential to sharply reduce the circulation of nationally controlled medicines
- The availability of international controlled medications like morphine is severely restricted by the regulatory requirements imposed on African health care providers
- Tramadol fills a critical gap in treating pain across Africa. International scheduling will discourage pharmacies from stocking it and remove the last effective, stage 2 pain medication available
- Informal and poorly regulated distribution systems play a key role in providing medication to rural and urban poor – but at the risk of channelling substandard and falsified medicines. Attempts at engaging and formalising this sector seek to rectify this over the mid term
- Tramadol in high potency dosage is popular with physical labourers in urban and rural areas for its performance enhancing qualities. In many cases functional consumption slips into recreational usage and then becomes habitual
- In most countries there is little public information or health advice in media accessible to the rural and urban poor, but there is considerable experience and concern among affected population
- Repressive responses can succeed in creating temporary shortages without eliminating supply. They fall particularly hard on the poor who are often brutalised by law enforcement. They have also proved ineffective in eliminating availability of substances that are internationally controlled and easily detected, such as cannabis

1. Framing Tramadol as a Policy Issue

Tramadol is a synthetic opioid analgesic first marketed by the German company Grünenthal¹ in 1977. It has an approximate half-life of 6 hours and a potency that is estimated to be 1/10 of morphine. It is an efficacious and versatile pain management medication, particularly in situations where paracetamol, NSAIDs and cyclooxygenase (Cox)-II inhibitors provide insufficient analgesia, are not tolerated, or are contra-indicated, and where there is hesitation to use strong opioids. Listed as a 'mild opioid', with an estimated 10th of the potency of morphine, by/in the WHO Pain Relief Ladder, it is used in the treatment of moderate to severe pain. The analgesic effect is multimodal and involves agonist activity at the μ -opioid receptor and adrenergic and serotonergic properties. Dependency potential is low under recommended dosing conditions, but rises with continued use over extended periods (ECDD, 2017). The usual medical dosage is 50 to 100 mg taken every 4 hours, up to 400 mg a day. Slow release tablets are available as well as preparations for parenteral, rectal, sublingual and intranasal administration. Side effects are dosage dependent and variable, but include nausea, constipation, headaches and mood enhancement. Taken in acute doses, tramadol may exhibit a profile of effects similar to opioid agonists and may have abuse liability in certain populations (Duke et al., 2011).

It is the only opioid not to have been included in the international drug control schedules and readily available to medical practice. In Africa this is significant because of the scarcity of powerful stage three analgesic medications like morphine, even in hospital settings. At the same time environmental and lifestyle changes have contributed to the spread of non-communicable diseases and a much-changed disease profile.

In a number of African countries the unauthorised non-medical use of tramadol and other prescription medicines is subject to a lively media debate; has been depicted in popular culture and music; and has become an item on the policy agenda. The regional dimensions of this issue have been discussed at policy oriented high-level meetings, including "The Crisis of Tramadol" at Abuja in August 2018.² There were also dedicated sessions on tramadol trafficking at Africa meetings of the Heads of Narcotics Law Enforcement Agencies (HONLEA).

In 2018 the World Drug Report (WDR), flagship publication of the United Nations Office on Drugs and Crime (UNODC), reported that "the non-medical use of tramadol is of particular concern in Western and Northern Africa" (UN, 2018, 3:26). The findings, summarised in the media statements given by senior officers of the organisation, were relayed by the international media as part of a 'global epidemic' (Guardian),³ or an 'opioid scourge spreading across West Africa... [that] may even be fuelling insurgency' (BBC).⁴ There have also been a number of independent journalistic reports and assessments in news media and professional journals (Deutsche Welle, Lancet).

The problems that are listed include addiction, overdose deaths, crime and a facilitator of terrorism. Tramadol use is said to be putting a strain on public health services. The

¹ This report has been made possible by funding from the pharmaceutical company Grünenthal

² "The Crisis of Tramadol and Other Prescription Medicines in West Africa – a multi-agency workshop convened to identify the challenges and seek solutions to address the problem"

³ <https://www.theguardian.com/global-development/2018/jun/27/misuse-opioids-tramadol-fentanyl-global-epidemic>

⁴ <https://www.bbc.co.uk/news/world-africa-44306086>

policy solutions that are being proposed are for tramadol to be included in the international schedules of controlled drugs created under the 1961 Single Convention on Narcotic Drugs. At the 2017 Commission of Narcotic Drugs, the UN Commission with responsibility for drug control, the Government of Egypt tabled a request inviting “Member states to controlling the use of tramadol by placing it on a list of substances controlled under their national legislation”(CND, 2017). Following this request, the Expert Committee on Drug Dependence of the World Health Organisation (WHO) is now reviewing the substance for ‘abuse potential’ and to assess its medical utility. It will present its non-binding recommendations to the CND before the next meeting in March 2019.

The Egyptian initiative has been supported by some international agencies that are also concerned over the spread of non-medical tramadol use. UNODC, for example, has used the WDR to frame tramadol use as part of a “multi-faceted global opioid crisis (UN, 2018, 3:6). They are advocating a policy process that has become well established in the broader drug control field, with the imposition of tight legal controls that will criminalise the unauthorised distribution and consumption of tramadol. Such a ‘policy displacement’ (CND, 2008) will effectively shift responsibility, powers and resources from the health care sector to the criminal justice system.

It is recognised that the use of repressive measures in the drug policy field does come at considerable cost. The West Africa Commission on Drugs, for instance, notes that the policy “has led to human rights violations, swelling prison populations, significant increases in violent crime” as well as to corruption among law enforcement agencies and the criminal justice institutions. (WACD, 2014:14). A commitment to human rights was pointedly reaffirmed at the United Nations General Assembly Special Session on Drugs 2016 (UN, 2016)

There has also been rising concern over the impact tighter bureaucratic controls on the availability of medicines for health care practitioners and pharmaceutical suppliers are having on availability and access. In recent years there has been increased reporting on the chronic shortage of analgesics and pain medication in many parts of Africa (African Union, 2012; Nejmib, 2018).

Given the high cost of the proposed policy shift towards tighter restrictions on availability a repressive approach against unauthorised distributors and users, it is important for the assumptions on which the call for tramadol scheduling is based to be tested. In particular:

- (I) That Tramadol is diverted from health care settings – the underlying rationale for international restrictions that make access more difficult for health care providers
- (II) International controls will enable national authorities in Africa to manage and control the inflow of tramadol
- (III) Regulatory agencies and health care professions will be able to guarantee the availability of tramadol for medical use

To ensure that decision making is balanced and based on the best possible evidence this consultation was conducted in seven countries in West and Southern Africa.

1.1 Methods Used

The purpose of this multi-location, multi country study is to generate information on the patterns of medical and non-medical use of tramadol in several countries in Western and Southern Africa. These were chosen deliberately to contrast and compare the experience of countries with reportedly high prevalence of non-medical tramadol consumption (Benin, Cote d'Ivoire, Ghana, Niger, Nigeria) with those reporting low levels of non-medical use (Botswana, Namibia).

Information is being collected systematically at different levels to understand:

- (i) the regulatory regime for the manufacture and distribution of tramadol other than for pain medications
- (ii) the use made of tramadol by health care professionals for pain management, and comparisons with other analgesic substances
- (iii) pharmacy distribution for prescription only and over the counter pain medication
- (iv) what knowledge law enforcement had about the channels and distribution networks for illicitly traded tramadol and what action was taken
- (v) the pattern of informal medicine distribution – how medicines become accessible to the urban poor and rural populations
- (vi) the patterns of non-medical use by asking non-medical consumers about their motivation, learn about the setting, the combination with other substances, perceived effect, expectations and attitudes

The project was designed test the propositions that in the research countries

- Stricter international controls will effectively reduce the availability of tramadol for non-medical consumption
- Stricter international controls will not compromise patient welfare because existing systems for distribution and allocation ensure sufficient access and availability

In order to generate data, structured and semi-structured interviews were held with a series of stakeholders with different insights and perspectives on the issue. A tiered approach was therefore taken that sought to capture different perspectives: national control agencies responsible for quality of medicines; industry and professional associations, including pharmacy council and medical association; law enforcement agencies specialising in drug control;

At service delivery level, structured interviews were held with practising medical doctors and pharmacists. In Ghana a focus group was organised with medical staff.

Test purchases of tramadol medication were made in pharmacies, at chemist shops and from street traders, or what in Nigeria are called Proprietary and P Medicine Vendors. Samples were submitted for qualitative analysis.

The most important voice that we sought to capture was that of the actual consumers of tramadol, for both medical and non-medical reasons. We therefore conducted interviews with self-identified tramadol consumers in recreational settings using

privileged access interviewers and chain referral sampling methods. Finding patients proved more difficult, owing in part to the weakness of patient organisations.

Tramadol study: information and data providers	
Tier 1 Governance level	Government agencies responsible for drug regulation, public health, enforcement; professional associations; pharmaceutical industry
Tier 2 Service front line	Health care practitioners, pharmacists and chemist shops, informal sector medicine sellers, civil society organisations
Tier 3 Key target group	Medical and non-medical users of tramadol

Because of the propensity of research to focus on national capitals we also sought to balance our research by conducting interviews in smaller towns and rural areas.

A note on language: We purposefully avoided talking about tramadol ‘abuse’ or ‘misuse’, concurring with Stolten et al (2017) that these terms are disrespectful, pejorative and stigmatising even though they are commonly used by public officials, in academic discourse or in the media. Instead we refer to Non-medical Use and Non – medical Users, even though this is not strictly accurate as there are many instances where people use tramadol to treat pain and fatigue and do so without authorisation or advice from a qualified medical practitioner.

1.2 Government Responses to Tramadol in Different African Countries

In five out of the seven countries visited tramadol is on the list of essential medicines. It is also included in the list of other countries in the region. Not all countries have updated their lists in recent years. In all seven countries tramadol is a prescription-only medication that can only be legally obtained with the authorisation of a qualified medical doctor. In Ghana it was reported that in the past leeway had been given to allow the dispensing of tramadol where appropriate in rural and remote regions.

Tramadol on the National Essential Medicines Lists		
Botswana, 2012 <a href="http://www.who.int/selecti
on_medicines/country_list
s/bwa/en/">http://www.who.int/selecti on_medicines/country_list s/bwa/en/	Tramadol+Paraceta mol (37.5+325) mg tablet	Hospital, Cclinic, Health post, Specialist Status: Essential
Cote d'Ivoire <a href="http://apps.who.int/medici
nedocs/documents/s2225
3fr/s22253fr.pdf">http://apps.who.int/medici nedocs/documents/s2225 3fr/s22253fr.pdf	Tramadol 50 mg oral Tramadol 100 mg inj Tramadol 150 oral LP	Hospitals, Health Centres, Rural Health posts

Ghana http://apps.who.int/medicinedocs/documents/s18014en/s18014en.pdf	Tramadol Hydrochloride Injection, 50 mg/ml Tramadol Hydrochloride Capsule, 50 mg	Hospitals, Health care centre with a doctor Not reimbursable by National Health Insurance Authority (NHIA)
Namibia, 2016 http://apps.who.int/medicinedocs/documents/s23017en/s23017en.pdf	Tramadol Hydrochloride 50 mg tablets 50 mg/ml Injection 2 ml	Treatment must be initiated by a Medical Officer, but the preparation can be available at health centres and clinics for follow-up treatment of chronic patients only Status: Necessary
Niger	On the Essential Medicines List	
Nigeria http://www.health.gov.ng/doc/Essential%20Medicine%20List%20(2016)%206th%20Revision.pdf	Capsule: (hydrochloride), 50 mg, 100 mg, Injection: (hydrochloride), 50 mg/mL in 1-mL and 2-mL ampoule, 100 mg/2 mL in 2-mL ampoule	
Source: WHO		

Yet there are considerable differences between the way that the problem is discussed at societal level and how governments have responded to the spread of non-medical use of tramadol as well as of other prescription medicines.

In Ghana different media have been reporting on tramadol use for several years and there is considerable public awareness about the risk attending the unsupervised use of tramadol. Discussions, awareness raising, and trainings are also being held by professional associations, for instance the Ghana Medical Association. The Ghanaian Food and Drug Agency (FDA) is seen as the agency responsible for controlling the quality of medication, ensuring availability and preventing diversion.⁵ In conjunction with the police and the Pharmaceutical Council, the agency has inspected pharmacies, raided chemist shops and arrested unauthorised vendors in markets. As a prescription only medicine, tramadol is sold by pharmacies with a potency of up to 100 mg against a prescription and only when a qualified pharmacist is present. Tramadol continues to be available from unlicensed, informal sector vendors.

In Nigeria tramadol has been the subject of media reports, the topic of professional discussion and even the theme of a popular song.⁶ There has been much publicised action by government agencies like the National Agency for Food and Drug Administration (NAFDAC), the Nigerian Police and the National Drug Law Enforcement

⁵ In one commissioned media review of 27 news articles, including newspaper articles, features, online news portals between June 2016 to May 2018 the FDA was cited 22 times, the most widely cited public agency

⁶ David Jones "hello doctor" <https://naijamusicclub.com.ng/2018/05/14/audio-david-jones-david-hello-doctor-ghana-na-bastard/>

Agency (NDLEA) against illegal shipments and storage centres. There have also been arrests of consumers of tramadol by the police and NDLEA. Pharmacies will only sell against prescriptions but tramadol continues to be available from unlicensed, informal sector vendors.

Informants in Niger learnt about the ban on the unauthorised sale of tramadol on the radio and through informal channels. According to one study there was a good level of awareness about the psychoactive effects of tramadol and there were reportedly regular law enforcement raids on the main market in Niamey leading to significant seizures (Maiga et al, 2013). These could result in shortages that were, however only temporary.

In Benin tramadol is readily sold in pharmacies with no prescription checks as the inspection regime has to all intents and purposes broken down.⁷ Yet, there has been a government crackdown on vendors of medicines in markets. There have also been seizures of warehouses of wholesalers suspected of importing falsified medicines. Tramadol continues to be available from unlicensed, informal sector vendors.

There has been little media reporting in Cote d'Ivoire, with no debate among professionals and pharmacies sell tramadol without prescription. Tramadol continues to be available from unlicensed, informal sector vendors.

In Botswana and Namibia there is no known incidence of non-medical tramadol use, no debate among professionals including law enforcement, and pharmacies are selling tramadol only against prescription. There are no sales by unlicensed, informal sector vendors.

1.3 Controls and Policies on Tramadol in different African Countries

	Prescription required	Prescription requirement enforced	Intervention against unauthorised supply	Intervention against unauthorised consumption	Available on parallel market	
Benin	x		x		x	
Botswana	x	x				
Cote d'Ivoire	x				x	
Ghana	x	x	x	x	x	
Namibia	x	x				
Niger	x	x	x	x	x	
Nigeria	x	x	x	x	x	

We conclude that the availability of tramadol for non-medical use and the dynamics of the informal or parallel tramadol markets are the products of a multiplicity of factors that are often indifferent to government policy and inspection regimes.

⁷ According to Allabie and Nwokike (2014) most pharmacists were "not aware about the existence of pharmaco vigilance center"

To better understand the drivers behind availability and consumption patterns we wanted to look at (i) the health care system (ii) the supply routes (iii) market demand

2. Opioid Crisis 1- Untreated Pain, A Continent in Distress

African countries import and consume very low levels of analgesic medications, especially when compared to developed or even middle-income countries like Barbados. Consumption rates of the most widely used medication, morphine, demonstrates clearly that in Africa pain often goes untreated (AU, 2012; INCB, 2012). This is particularly worrying because of the fast-rising need for palliative care given the high number of HIV infections and the fast growing number of cancer patients across Africa.

The explanations for this striking gap between supply and demand are complex and draw on models from different academic disciplines. One of the explanations provided by healthcare practitioners in the region is ‘opioidphobia’ among medical professionals. The fear of iatrogenically induced addiction is widespread among healthcare professionals and discourages the prescription of opioids. Many African countries are therefore struggling to catch up with establishing palliative care to meet the needs of new cohorts of patients. But as the study confirmed, even healthcare practitioners who want to use morphine are faced with obstacles, shortages and constraints.

Often these derive from the regulatory framework that has been imposed by the international controls on drugs that are deemed to have an ‘abuse liability’. There is a strong argument in the public health literature that the international control system impedes the proportionate supply of analgesics to Africa. This can be complemented with a political economy approach, which explains the mechanisms of control in terms of state capacity (or lack of), and the power relations between African states and international agencies. Then there is a socio-cultural explanation that looks at attitudes towards pain, medical interventions and class relations.

Morphine Consumption, 2015: (mg/capita) as Reported to the International Narcotics Control Board

1	Morphine	Hydro-morphine	Fentanyl	Methadone	Oxycodone	Pethidine
Benin	0.0002		0.0011			0.2068
Botswana	0.6052					0.4169
Burkina Faso	0.0190		0.0002	0.0138		
Cote d'Ivoire	0.0059					
Egypt	0.1251	0.0146	0.0152		0.0076	0.0014
Ghana	0.1163		0.0001			3.5549

Nigeria	0.0141		0.0000			0.0066
France	27.6484	0.1709	1.1246	12.9566	22.3535	0.0348
United Kingdom	22.8571	0.1467	1.2740	31.0654	19.9277	2.4830
Country with the highest consumption	Austria 213.4573	Canada 52.2194	Germany 4.9350	New Zealand 58.0380	US 194.4109	Barbados 26.7676

2.1 International Regulations as an Impediment to Accessing Pain Medication

As importers of the bulk of pharmaceutical products, African countries need to obtain authorisation from the International Narcotic Control Board, which, as custodian of the drug control conventions, monitors consumption of internationally controlled medication. Without such authorisation no reputable trading company is likely to agree to supply an importer. Annually a list of requirements is submitted to the INCB who will question changes. The INCB also conducts country visits to inspect the measures in place at national level to prevent diversion.⁸

It has been argued that the controls have been set up by the “UN international drugs control agencies” because their principal concern has been with preventing diversion into non-medical use (Anderson, 2010; INCB, 2016). Abuse prevention has therefore been a priority over ensuring adequate medicine provision. It is possible that the entire system has an implicit bias, since in developed countries effective systems are in place for ensuring production, distribution and availability of these substances in healthcare settings.

Yet the system is defended by the officials working for the regulatory agencies that are responsible for ensuring the adequate supply of controlled medications. Officers from Ghana and Niger contend that the system itself was not responsible for any shortages.

With regard to morphine the Inspector of services at the Ministry of Public Health in Niger insists that “the problems with the lack of morphine is not the problem of the regulations” but rather a financial problem related to poor management.

The officer responsible for submitting requests to the INCB at the Food and Drug Agency in Ghana said that her department was fast and responsive and would issue permits immediately if there was an emergency.¹ If there were shortages then this was up to health care professionals and importers “to get the systems in place and ensure that the morphine is available.” The shortages, she said, were not a consequence of scheduling “but because of the importers. They assess who they make the most money on”.

⁸ To assist countries in their responsibilities under Article 13 of the Psychotropic Convention, the INCB circulates, each year, an updated list of prohibitions and restrictions on the export and import of substances. This is contained in Part Four of the Annex to the Annual Statistical Form (“green list”).

Her Nigerian counterpart placed responsibility on the poor financial management of the state-run hospitals, who were often unable to pay for medicines in a timely fashion so that suppliers refuse to deliver.²

Yet there is one aspect to the system where regulatory agencies play an important part. Each year countries submit requests for the estimated volume of controlled medicines they are likely to be needing in the coming year. Even the INCB recognises that “many countries still find it difficult to identify their actual requirements of narcotic drugs and psychotropic substances and are therefore unable to provide adequate estimates and assessments or, in some cases, to provide any estimates at all” (INCB, 2012:iv). This points to another manifestation of state weakness: the lack of competence and capacity in fulfilling the technocratic conditions for policy. Popular with international organisations and development agencies, this presentation of the problem is amenable through supportive interventions through technical cooperation.

In Niger the Director of Pharmacy at the Ministry of Public Health in Niamey knows that she could be getting a more accurate estimate by consulting medical practitioners and sending out questionnaires regularly. “But that has never been done and there are only seven staff members in the department.” Therefore, she simply requests the same quota as she did in the previous year with some adjustments.

The Ghanaian FDA is working on improving the consultation with importers and practitioners and has received data from the teaching hospitals with requests for increments. The agency is also sending out letters to all clients asking for stock audits and whether there are any modifications to amount they request. But some traders, so the complaint, are not realistic. One year the importers asked for a quota of 50kg of morphine but then only ordered 5 kg worth. So, the method used for calculating national need is to take the two previous years’ quotas and then add a small percentage to account for population increase.”

The methodology for assessing need is therefore deeply flawed, with no mechanisms for systematically consulting healthcare professionals or taking account of dramatic changes in the disease profile. The process is one of the reasons for the low importation and use of morphine in African healthcare systems. But there are other problems faced by importing agencies that do not come to the attention of the regulators.

2.2 Obstacles to Import and Distribution

In Benin, where the same method is used to calculate needs as in Ghana, only CAME, the state owned purchasing company (Centrale d’Achat des Médicaments Essentiels) and the Central Hospital, CENASHI (Centre National Hospitalier Universitaire) are authorised to import morphine. According to the licensing authority DPMED (Direction de la Pharmacie, des Médicaments et des Explorations Diagnostiques) this is a satisfactory arrangement and there is no awareness of shortages or hold ups, though no assessment has been made.³

In Niger however, the Director of Pharmacy says that “morphine is very difficult to order” because “there is too much control”. When an application arrives at her office she will turn it around in 14 days. “but it can take 2 months, just from the supplier.”⁴

Difficulties are also experienced by the Botswana counterpart, the Central Medicine Store, that is responsible for supplying hospitals and clinics. They are struggling in finding someone to supply them with the required amount. “Last time we were asking for 5kg, well below what we need, but even then we could not get it.” They are now working with Palliative Care Association of Uganda⁹ to set up a production plant for morphine syrup.⁵

The national agency works in parallel to private sector importers and wholesalers, who need to obtain a permit from the Medicines Regulation Authority (BMRA). The process is expected to take up to 4 weeks for an import permit with a validity of 3 months. Since the domestic market is so small medical wholesalers in Botswana and Namibia respectively buy the bulk of their supplies from large pharmaceutical companies in South Africa. Once they have placed an order the South African supplier in turn has to apply to the South African Health Products Regulatory Authority (SAHPRA) for an export license, a process that may take between 4-8 weeks. By the time the export permit has been received, the medicines are in place and the order is ready for dispatch the import permit from the Botswana authorities may have expired, meaning a new permit has to be applied for. On other occasions the South African supplier is unable to obtain the required quantity of the medicine and sends only a portion of the requested amount, or not all the items that were requested and paid for in an order for multiple medicines. In either case, the Botswanan importer has to start the process anew.

For companies in Namibia who were relying on permits from a second country (South Africa) further complications arise when mistakes or inaccuracies were made on the application forms by either their own procurement department or the authorities of the importing country. With everything going smoothly and to plan they are looking at a turnaround period of 3 months. But one of the reported risks is that products may be coming close to their sell by date and will have to be returned as retail pharmacies would not want to risk carrying products with a short shelf life. In each case the wholesaler will have to commence the process again. These complications explain in part the vagaries in importation and the gap between requested allocation and actual imports. In 2016 Botswana requested 16 kg of morphine, but in the event only 1.2kg were delivered.⁶

Further difficulties can arise when regulatory agencies change their working pattern, as when SAHPRA for instance decided not to process any export requests during December, or when personal views impacted on permit processing. An importer in Namibia reported challenging an official from the South African Health PRA about the long delays in issuing of permits: “and she said ‘but the people are just getting addicted.’”

Supplies can be cut because of accidents or wilful destruction. In Ghana the Central Medical Stores burnt down in 2015 destroying large quantities of drugs and medical equipment. A number of people were charged with arson, presumably in order to hide evidence of theft from the warehouse.

The work of the regulatory agencies can also be subject to political pressures which then have a bearing on their relations with the private sector. In Nigeria the screening

⁹ A charity that has pioneered palliative care in Uganda, the highest ranking African on the Economists’ ‘Quality of Death’ index. It provides training to health care professionals across the continent

of a BBC investigation into codeine and tramadol use prompted a sharp government response, including national scheduling.¹⁰ Since then import companies have come under pressure from NAFDAC and NDLEA. A senior manager from a large importer said: “they are coming here every day to check asking and ask for confirmation.” Meeting those demands was taking up a good portion of management time and was perceived as coming close to harassment. If pharmacists now want to order tramadol from the wholesaler they need to send details of their license together with other documentation. According to the wholesaler “pharmacists worry about having to record and store the information who they sell the medication too. So they have simply stopped ordering.”⁷

2.3 The Impact of Regulatory Requirements on Pharmacists

This is a response to administrative requirements reported from across the continent. In Ghana, the pharmacist is a “custodian of medicines, not a charity”. Pharmacists are running a business and to be sustainable they need to keep an eye on overheads, explains the Secretary of the Pharmaceutical Society of Ghana. The effort that is involved in the handling of controlled substances, including prescription checks against the name of the prescribing doctor and the stamp from medical practice, clinic or hospital, storing of the prescription, entry into book or software, and the physical security precautions such as locked cupboards, regular stock checks and protection against robberies, is discouraging many pharmacists from stocking the products.

But this is not the only reason. One pharmacist in Accra said “we have not stocked morphine for years. We had a customer but because of the scarcity he went somewhere else. The reason for the scarcity was with the wholesaler.”⁸

In Namibia, this high level of control explains why morphine is unavailable from pharmacies. ‘We hardly see morphine. No pharmacist wants to see it because of the regulation around it. pharmacists hate the paper work.’ And “If tramadol were scheduled then pharmacists would definitely stay away from it.”⁹

Equally in Botswana many pharmacists are reluctant to stock habit forming drugs “because once you keep them the DRU requires you to keep a register that records the prescription of the patients and the doctors who prescribe them and how many tablets. This is a bit laborious and some of them decide this is too much, they don’t want to be accountable. So if the DRU comes and you have 10 units missing and you can’t account you have a big problem.”¹⁰

¹⁰ The BBC itself is boasting on its website: “After a BBC investigation in April showed the extent of codeine addiction in Nigeria, the production of codeine-based cough syrup was banned in Nigeria. But codeine is not the only opioid scourge spreading across West Africa. Another painkiller, Tramadol, is fuelling widespread addiction - and as the BBC’s Stephanie Hegarty found out, it may even be fuelling insurgency in the north-east.” Posted 01/06/2018 <https://www.bbc.co.uk/news/world-africa-44306086>

2.4 Morphine Availability in Clinical Settings – A Manufactured Shortage

In medical practice the shortage of effective pain medication is felt acutely. The chief pharmacist at one of the teaching hospitals in Accra, Ghana, says: “It is not easy to get morphine since we have to deal with the FDA and with the supplier. We were supposed to be receiving the last delivery in September but we only got it in April and there are a lot of checks.”

In response to these difficulties medical practice adapts: “it means we only use minimal amounts of it and we have to plan.”¹¹ Medical doctors in another Accra hospital say that morphine is used during operations but “it is not easy to access even in a hospital context.” And there are times when it is simply unavailable, though “at the moment there is a good supply.”¹² But across large parts of the country “we have an under-served population, without health centres, no pharmacy shops, medical doctors to prescribe so people will turn to suppliers who can provide for their needs.”¹³

The difficulties caused by tight regulations impact on the way that doctors prescribe. The head of oncology and palliative care in Benue state, Nigeria, explains that there are a number of private hospitals in this state of about 4.3 million people, none of which stock morphine because it is too much work. The only place where you can access it is in the federal hospitals which in turn are supplied by the Federal Medical Centre. But the bureaucracy is difficult, with each hospital using their own prescription form meaning that a patient has to come “to my hospital to get a prescription. For a long time I was the only morphine prescriber which meant that I could not travel.”¹⁴

Even then health care provision is hardly continuous, because in Nigeria medical doctors organised into the National Association of Resident Doctors (NARD) and other health sector professionals are frequently on strike. Patients have no choice but to resort to informal, parallel and illicit markets.

While strikes do not plague health care provision in Niger the irregular supply of medications means healthcare providers have to improvise. According to the Chief Pharmacist of the Hospital in Niamey “it is not easy to get morphine”. There are only two wholesalers and often “they look all over town and cannot find any”,¹⁵ so that operations proceed without the use of morphine or equivalent. In one recent case of a gallbladder operation for example the surgeon requested tramadol instead. With the hospital pharmacy poorly stocked patients arrive at hospital with their own, independently purchased medicines, including analgesics obtained from the ‘parallel market’.

In Nigeria it is at least theoretically possible to purchase morphine at pharmacies, though in reality only a few in Abuja and Lagos will stock any. In Benin, Cote d’Ivoire, Ghana or Niger this is not possible because internationally controlled substances can only be obtained from hospital settings. The state run medical service in Niamey therefore implicitly factors in the functioning of a parallel market.

3. Opioid Crisis 2 – The Proliferation of Substandard and Falsified Tramadol in West Africa

Seizures of significant shipments of tramadol in West Africa have been reported over recent years by international organisations. In 2017 the INCB reported that: “Trafficking in and abuse of substances not under international control remains a serious concern in a number of African countries. The available data suggest that the non-medical use of tramadol, a synthetic opioid analgesic, is growing, as evidenced by seizures in Central, North and West Africa” (INCB, 2017).

In 2014 the third largest seizure globally was one of 7.3 tonnes reported by Niger (WCO, 2015), a country well integrated into the trading and trafficking networks linking the northern Mediterranean with the Sahel, which according to analysts consists almost entirely of illicit trade (Shaw and Reitano, 2014). In 2015 tramadol constituted the third most commonly seized ‘psychotropic substance’ after MDMA and Methamphetamine, “with 2,050 individual seizures, representing 18.1% of all seizures” (WCO, 2016).

The 2018 World Drug Report, the UNODC flagship publication and journal of record for the international drug control community, dedicated an entire section on tramadol as yet another dimension of the ‘global opioid crises’. At the March 2018 meeting of the Commission on Narcotic Drugs, UNODC organised a side event on tramadol. The Ghanaian Food and Drugs Agency gave a presentation on inter alia the crime and gang problems that were attributed to tramadol.

In addition press statements by senior figures in the international control system warn of a number of threats to public health and safety. Yury Fedotov, executive director of the UN Office on Drugs and Crime, used the occasion of the launch of the 2018 World Drug Report to raise the alarm on tramadol use in Africa warning that “the impact on vulnerable populations is cause for serious concern, putting pressure on already strained health care systems.” A different aspect is raised by Pierre Lapauze the head of the UNODC regional office in Dakar, Senegal: terrorist groups derive substantial income from the trade in tramadol.¹¹

In Nigeria, the National Agency for Food and Drug Administration and Control (NAFDAC) has issued alerts on the risks of tramadol use for young people. The NAFDAC website provides regular updates of seizures of illicit tramadol cargos and arrests of traffickers. Ghana’s Health Minister Kwaku Agyeman-Manu has warned that “tramadol is addictive, acts as stimulant and can produce a feeling of intense euphoria comparable to heroin even at a single dose of 75mg”.

3.1 Diversion from Pharmacies

In Ghana tramadol is on the list of essential medicines because of its effective analgesic properties and low abuse potential. There is some local production from imported ingredients by local manufacturers Letap Pharmaceuticals Limited, New Global Pharmaceuticals Limited, and Entrance Pharmaceuticals Limited while a further 7 companies import tablets, capsules and injectable solution. Standard preparations are tablets of a dosage of 50 mg and 100 mg, the latter for use in hospital settings.

¹¹ BBC, Trafficking of pills used by suicide bombers soars in Sahel. 12/12/2017

The daily dose per patient is capped at 400 mg in line with international medical standards. Import volumes appear modest, with the exception of 2015.

Annual Imports of tramadol		
YEAR	PRODUCTS	QUANTITY
2014	TRAMADOL HCl POWDER	200kg
2015	TRAMADOL HCl POWDER	2000 kg
2016	TRAMADOL HCl POWDER	200 kg
2017	TRAMADOL	60 kg

Source: Ghana Food and Drugs Authority

Over recent years there has been considerable media pressure on what are widely regarded as the responsible authorities, the Ghanaian Food and Drug Agency (FDA) and the Narcotics Control Board (NACOB), to explain why nationally controlled drugs are getting so widely available. Tramadol has been a prescription-only medicine since 2013 yet appears to be widely available in the open market. The FDA explains that “some pharmacies are selling without prescription”.¹⁶ The Narcotics Control Board also assumes that pharmacies are a source of supply: “they just sell it without checking for prescriptions.”¹⁷

Over recent years there have been widely reported actions taken by different agencies: the FDA, the Pharmacy Council, different law enforcement agencies, to curtail the unauthorised sale of tramadol. The Pharmacy Council of Ghana has taken disciplinary action against pharmacies that are selling inappropriately, though with only 34 staff it is stretched.¹⁸ In Tamale in Northern Ghana, for example, there is only one inspector, so he works in conjunction with the chair of the Pharmaceutical Society for the Northern Region. Inspecting pharmacies, chemist shops and village traders comes at a risk because when “you walk in they will draw a knife at you”.¹⁹

The Pharmaceutical Association issued a health alert to its members on 20 September 2017 warning about people “walking into pharmacists and asking for tramadol over the counter”. It has also addressed the issue at its Annual General Meeting. Raids by interagency teams lead by the FDA on unauthorised traders in markets have been widely publicised. The impact of these combined efforts have been reported in a newspaper story.¹² In Ghana, at least, it has become difficult to obtain tramadol without prescription from licensed pharmacists.

The research team attempted to make test purchases in 10 different registered pharmacies without any success. In each instance they were told by a registered pharmacist that without a prescription this was not possible. Interviews conducted at 8 pharmacies in Accra showed a similar process in place. Prescription only medications were kept in a locked cupboard and only handled with the qualified pharmacist present. One pharmacist explained the process: “We require a valid prescription. The validity is determined by stamp signature. A valid prescription can be determined also by looking

¹² The story published Joy newspaper on 07/06/2018 portrays the protagonist as an educated and financially independent international traveller who, having been introduced to tramadol by a stranger in a foreign country finds himself ‘hooked’ and tries to buy it for entirely non-medical reasons when back in Accra. The pharmacist, ‘fortunately’ holds the line and refuses to sell without prescription

at the dose, the date of the prescription, the number of days prescribed.” Supervisors or pharmacy owners could check on the process as prescriptions were kept on file for a period of two years.

The system of internal and external checks proved a disincentive to pharmacists for selling tramadol to patients presenting without a prescription. Only three out of 10 pharmacists interviewed said that they would use their professional discretion to sell tramadol to a patient who was in obvious pain and unable to attend hospital. But these concessions were closely conditioned. “I would only sell one or two tablets to cover them until they can get to hospital” or “only a compound medication called Dorita with a low dosage of tramadol 35 mg combined with 75 mg paracetamol”.

One pharmacist said that if a client presented with obvious pain and looked respectable he would use his professional discretion and prescribe a low dose compound (37 mg tramadol /paracetamol). The response of most was captured by one informant who said, “If they come to us directly with an acute pain we don’t give them opioids and if it doesn’t get better we refer them to hospitals”.

What lends credibility to these statements is a closer look at the risk/reward ratio. Pharmacies caught in breach of good practice have been penalised, with fines, confiscations, temporary closures and court costs. In turn, the income made from the sale of tramadol is risible. Of the 8 pharmacists interviewed in Accra not one said that they amounted to more than 1% of turnover. Moreover, for pain patients there were alternatives such as paracetamol or NSAIDS. Once coherent action had been taken by the FDA supported by a public awareness campaign the number of people walking in to make unauthorised purchases had fallen.

The data collected by the FDA itself points away from the pharmacy sector as the source of origin of tramadol in recreational and non-medical markets. Of the 524,191 tramadol preparations seized over 400,000 were of a potency in excess of what is used in medical practice. It suggests that these were not produced by legitimate pharmaceutical company and were probably never intended for use the health care sector.

Analysis of tramadol seizures 2017		
Strength	Quantities	Remarks
100 mg	830 capsules	About 85% of products seized where manufactured in India 13.5% had no manufacturers details on them
50 mg	7,190 capsules	
200 mg	93,160 capsules	
225 mg	97, 900 v	
120 mg	210,400 capsules	
50 mg/ml	1 vial	
100 mg/ml	3,000 vials	
total	524,191 caps and 3001 vials	

Source: FDA presentation at Ghana Medical Association, 24/06/2018

Interviews with 61 non-medical users in different parts of Accra also confirmed that the majority (41) obtained their tramadol from hawkers or people selling illicit substances. Even respondents who identified ‘pharmacies’, was referring to chemist shops and over the counter medicine sellers. Registered pharmacies were hardly figuring at all.

3.2 Nigeria

Data from Nigeria show an interesting contrast between the sourcing strategies of non-medical consumers. In Lagos only 7 % (8) of respondents reported ever buying tramadol from pharmacies or 'Patent and Proprietary Medicines' shops. This owes much to the far higher level of scrutiny that is applied in Lagos and Abuja, the former and current capital. Federal agencies are based here and carry out checks.

As one Abuja based PPMV related: "There was an instance NDLEA disguised and came to my shop and met my wife and asked for tramadol and she told them we don't sell controlled drugs. They were impressed and told her they are NDLEA. Ordinarily those who come with prescription, we check it, if it is within our scope, we dispense, if not we refer to a pharmacy."²⁰

The authorities may not always be working with such an easy touch. "Sometimes the Pharmacy Council, together with NAFDAC and the police raid a pharmacy first and ask questions later. They will ask you to come to the office and explain how you got the tramadol. But when the community sees police officer on the premises they will boycott the pharmacy."²¹

In Imo state on the other hand, with a much sparser representation of control agencies and far fewer inspections and raids, the number of people who reported buying their tramadol from pharmacies and PPMVs was much higher, with 19/30 purchasing their tramadol from there.

The authorities are aware of the magnitude of the problem. "The approved quota for tramadol is 6,000 kg but 91,000 kg is in circulation in Nigeria. A lot of it is coming from illegal routes. There is no good synergy between the agencies - NAFDAC, NDLEA, CUSTOMS - but we are working to strengthen the synergy."²²

3.3 Benin and Cote d'Ivoire

In both Benin and Core d'Ivoire tramadol is a prescription only medicine. Yet in both Cotonou and Abidjan it was possible to purchase tramadol without prescription with ease. There were considerable difference in the markets however. In Cotonou a series of raids had been launched in 2018 against informal and unregulated sellers of medicines. Purchasing tramadol was possible but required contacts. In Roxi market in Abidjan on the other hand, tramadol was openly sold.

The pharmaco vigilance by different agencies is shaping the conduct of medical suppliers.

3.4 Reviewing the Evidence

The test purchases made outside of pharmacies in Ghana and Benin further confirm that the bulk of the tramadol medicines that are traded in West Africa do not come out of the formal pharmacy sector. The experience from Ghana and Nigeria demonstrates, furthermore, that combined efforts by regulatory agencies, pharmacy associations, law enforcement, media and civil society can effectively shape the pattern of sales from registered pharmacies and outlets.

It is not the regulated and formal health sector that is responsible for the bulk of tramadol sold without prescription for non-medical consumption. The main source of supply is found in the unregulated medicine sectors where the majority of the population obtain their medicine.

4. African Health Care Systems and the Unregulated Informal Sector

The contrast between the high level of non-medical tramadol use in West Africa and the complete absence of that phenomenon in the two southern African countries is striking. Namibia and Botswana are sparsely populated middle-income countries, with relatively well functioning public health care services that cover a substantial part of the population. There is also a network of registered pharmacies that covers even the larger villages. In both countries the majority of people obtain their medicines from commercial pharmacies or government run clinics.

	Number of doctors per 1000 people (2010)	Average Life expectancy (both sexes) 2016	World Life Expectancy ranking
Benin	0.06	60	162
Botswana	0.34	66.8	137
Burkina Faso	0.05	60.37	163
Cote d'Ivoire	0.14	53.58	179
Ghana	0.1	62.74	153
Namibia	0.37	64	136
Niger	0.02	60.6	155
Nigeria	0.4	53.43	177
Togo	0.05	60.23	163

Source: World Bank, Health, Nutrition and Population Statistics and WHO

In West Africa a very different situation obtains. It is estimated that of the 5,000 or so licensed pharmacies in Nigeria, 40% are located in the city of Lagos.²³ All across West Africa pharmacies are concentrated in the urban areas, usually in the prosperous residential or business area where they are close to their customers.

In Accra, Ghana, pharmacies in the modern shopping malls offer a range of goods, a quality of service and a dedicated professionalism that matches European standards. But these are not representative of what is available to the majority of the population. "Pharmacies are not charities" as the Secretary of the Pharmaceutical Society of Ghana explained, they need to be financially viable and sustainable.²⁴ Tightly packed shanty towns that account for much of West Africa's urban space and the rural areas may have medical needs, but not the wealth to attract commercial pharmacists.

The less privileged therefore contract the services of a wide range of traditional, spiritual and informal practitioners. A recent study of two urban communities in Accra maps "one polyclinic, two private clinics, six private pharmacies, three chemical shops, fourteen churches, eight mosques and twenty-seven traditional shrines. Of the sixty-one facilities and services, only one is government owned (de-Graft Aikins et al.,

2014a). Each of these providers works to specific diagnostic principles, employs different therapeutic techniques and prescribes different sets of medication.

For the majority of the population, medications are obtained from informal sector vendors selling in market places, out of stationery shops or even hawking medicines in the street. In Benin, for instance, informal sector vendors are distinguished between “grossists” or wholesalers, who will openly sell at fixed places in the market, and “detaillants” or retailers. Some work from a fixed stall, others are ambulant, often head-loading a small range of product that may stretch from cosmetics to prescription only medication.

Attitudes towards these vendors vary. The incoming government in Benin has instructed law enforcement to close down informal medicine vendors and has led raids into the markets. In Cote d’Ivoire custom officials voiced concern over the sale of medicines by ‘illiterates’ and the Police have taken action against street vendors at bus terminals. Police are reporting that falsified medicines like tramadol, diazepam, codeine are being targeted at school children, but only have anecdotal evidence to support this claim. There is also concern about sales by wholesalers to unauthorised informal market vendors.²⁵

4.1 Regulating the Informal Sector

These unauthorised vendors are a reality. The head of the drug control police in Niamey says that in Niger 70% of the population depend on the unregulated market and the supply of counterfeit medicine.²⁶

There is also a recognition that these unregulated informal sector vendors provide an essential service. The point is made by a representative of a vendor association that “there are barely four pharmacies in the entire Jigawa State¹³ so PPMVs are needed.”²⁷

In Nigeria the Pharmacy Council of Nigeria and the National Association of Patent and Proprietary Medicines re trying to raise the status and conditions of informal sector medicine vendors and works closely with the authorities. Vendors have to operate with a license and the requirements to obtain one are being lifted. Up until recently the ability to read and write was sufficient but now applicants must have completed secondary school.

The task of bringing order into a “chaotic” situation is formidable. The system was sorely neglected during the long years under the military government when the regulation of PPMVs was assigned to Local Government Areas. The authority was returned to the PCN in 2003 but was immediately challenged. Court injunctions stopped the agency from working until 2013, but since then there have been strenuous attempts to introduce order. Since the tramadol ban was enforced 5000 shops have been closed, 90% of them PPMV shops and 10% pharmacies.²⁸

A similar debate on qualifications for owners of “chemist shops” or “over the counter medicine shops” is going on in Ghana, where the Pharmacy Council is considering raising the requirements for chemist/Over the Counter shop licensees from high school

¹³ A state in northern Nigeria with 4,310,000 inhabitants.

certificate to that of a pharmacist technician. Yet this comes with risks, as it may push some established shops out of business and open further opportunities for hawkers.

In both countries the function of these shops is circumscribed in that they are not able to sell prescription medicine. And yet, allowance is made in remote areas where there are no alternatives for the population.

The risk of not engaging with the sector is that they become vectors for fake and falsified medicines. In rural Ghana “peddlers” were reported to be travelling on motorbikes with backpacks full of medications. Some only sell tramadol but others also sell antibiotics, both falsified and legitimate ones in illegitimate circuits. When the supplies are finished the drugstore owners call them to restock. This is one of way in which falsified, adulterated, counterfeit and substandard medicines slip into the medical supply chain.

But there are also linkages between these poorly regulated vendors and wholesalers that require better scrutiny. One informant recalls that ““I was in a wholesalers recently and saw a chemist shop owner enter to order a long list of medicines including morphine. The girl just typed in the names and prepared the bill, so he paid and left.”²⁹

In Nigeria the National Association of Patent and Proprietary Medicines runs training and advises members to buy drugs from registered pharmaceutical outlets/pharmacies, and to keep receipts so that pharmaceutical suppliers can be traced. Since PPMVs are at the mercy of the suppliers they are strongly advised not to buy from the big open markets at from Sabon Gari market in Kano, Head Bridge in Onitsha or Idumota in Lagos.

“A big-time dealer in Onitsha market may be buying in bulk for 30 million naira, they are big time dealers, so their price is cheaper than smaller retailers that buy lesser quantities like 2 million naira. The big dealers make more profit and attract more customers. When you go there, there are people that are more inclined to sell fake drugs and drugs that are commonly sold as fake are drugs that are used frequently. In these places (the open drug markets), it is difficult to know when you are buying fake drugs, very difficult to tell the fake from the original. The receipt given to you in those open markets cannot be traced and this means that if you discover you bought fake, you may not find anyone to hold responsible.”³⁰

Across West Africa, the unregulated market for medications is the main source of tramadol used for non-medical use. Much of that tramadol is falsified. Many other falsified medications are also entering into circulation through these outlets. Yet, repression itself is not a solution because the population depends on these markets. Engaging and upskilling vendors and improving the regulator system is the way forward.

4.2 Tramadol in Medical Practice

In hospitals across the region tramadol had a definite place in pain management as it was the only available medication for dealing with medium to intense pain, though the actual level of use varied considerably. In one Accra hospital a surgeon said that “we use morphine for operation but use tramadol after, it comes in combination with paracetamol and we have a pill that is combined. For our patients it is the second line of pain relief and scheduling would be a challenge for us.”³¹

It has had an important role in managing post-operative pain, where it “really was very good. Especially in the first three days, when you have moderate to severe pains you want to have analgesic that have no counter indications to oral medications. Personally I prefer combination drugs because of the synergistic action – so I might use Dorita, Paracetamol and 35 mg of tramadol.”³²

Most, but not all, medical doctors interviewed in Ghana indicated that it was used in the absence of stronger opioids. But there was a wide range of other conditions, including neuropathic, nociceptive and lower back pain, cancer and HIV, for which tramadol was used.

Advantages of tramadol were that it was significantly more potent than NSAIDs and paracetamol, yet without the negative side effects on the gastrointestinal system. Doctors at the provincial hospital in the small town of Gonja, in the north of Ghana, doctors liked prescribing tramadol because it was a good pain management agent that could be taken orally and made a good and effective take home pack. Yet they found that they were not able to prescribe it in the quantities they wanted because the regional medical store did not deliver the requested quantities on the grounds that the medication was needed elsewhere.³³ Since tramadol was not covered by health insurance patients were less likely to use it as they would have to pay for it. While ibuprofen and paracetamol were covered.³⁴

In Tamale a practitioner explained tramadol was widely used for osteoarthritic pain, which was 80% of the case load. But it had a particular importance for patients presenting with sickle cell, who sometimes suffered from such intense joint pain they were unable to stand up. As there was no pethidine in tablet form, and pethidine was too short lasting, when these episodes can last for up to 48 hours, they like to give tramadol. Patients come in pain and are treated as outpatients. ‘With NSAIDS you waste your time so you give them tramadol 50 mg. Because of the danger with addiction you keep it to the lowest dosage for the shortest period of time.’³⁵

Most practitioners thought it was an essential medicine, cheap, easy to use and unlikely to lead to abuse.

While these views about the importance of tramadol for managing these conditions and the low abuse potential were echoed by hospital-based health care practitioners in Cote d’Ivoire and Nigeria, the Namibian research opened the problematic situation of cancer patients. These only receive morphine from the state but for that need to attend a hospital. They were theoretically entitled to receive Tramacet, but in reality it was rarely available because of budget constraints.

The medicine is available, however, for holders of motor insurance policies that pay into the Motor Vehicle Accident Fund.¹⁴ The fund provides motor accident victims with tramacet including 150 and 200 mg slow release.

Not all practitioners prescribe tramadol happily. One says that patients are referred to him by orthopaedic surgeons and they are on tramadol scripts. He takes them off quickly, since it should only be used during the acute phase and “the other

¹⁴ The Motor Vehicle Accident Fund was established in 1991, in terms of Act 30 of 1990, to compensate people injured in motor vehicle crashes or the dependents of people killed in such crashes. It is funded through the fuel levy provided by the Ministry of Mines and Energy

medications we have are no worse.” Other medical practitioners are worried about the different manifestations of misuse, including dependence but also seizures and cardiac arrest, though these patients do not show up in the state run medical system.

4.3 Opioid Phobia and Palliative Care

In all countries there was much concern over the prescription of any opioid medication leading to addiction. One senior doctor in Ghana reported that there were many practitioners who therefore hesitated to prescribe any opiate even when the patient needs it. “We have people with sickle cell disease and people are in acute pain and they don’t get it prescribed – and they rather blame the patient exaggerating pain – giving paracetamol or even placebo – given them water to see if patient is malingering.”³⁶

The reluctance was even more pronounced in remote areas, where practitioners, nurses and midwives would shy away from using morphine. “Prescription patterns are a habit and people follow their mentors or the institutions where they trained and go in line with that. So they will reserve morphine for terminally ill and chronic conditions or very acute cases, where it is sparingly used. Pethidine was more widely prescribed, so young doctors are very unlikely to prescribe morphine.³⁷ here was clearly a case for further medical education and an illustration that medical practitioners are not always well informed and need to be trained to understand that the non-authorised use of controlled pharmaceuticals or of illicit drugs does not equate with ‘addiction’.

The anxiety over addiction is shared by many patients, according to a Botswanan doctor who had anaesthesiology and became specialised in this pain field. “Patients often ask ‘am I going to get addicted’ when I prescribe opioids.” They are also warned by the pharmacists when they take these medications over time.

“In Botswana tramadol is a fairly new drug so many pharmacists and prescribers do not know what it is. One patient complained about being poisoned when he obtained tramadol from the pharmacy.”³⁸

Interest in palliative care is still low among medical practitioners and systems are not prepared. For instance, in Namibia cancer patients are dispensed morphine in the hospital but get take home rations for two weeks after which they have to come back. Owing to the logistical difficulties and costs many cancer patients have moved onto hospital wards simply to be treated for pain. The Ministry of Health is aware of this misuse of resources and reviewing the situation.³⁹

While palliative units are growing and there is training both by national specialists and international palliative care teams, there is still a long way to go. The head of a regulatory agency in a West African country said that people were used to suffering the pain, thought that this was their fate and were not expecting to be given relief.

This was not a view shared by farmers interviewed in the village of Sor, in northern Ghana. One farmer reported being stung by a scorpion when working in the field. He was advised to get tramadol, which he bought from a village shop and found that it helped with the pain.

5. Non-Medical Tramadol Use

Media reports have emphasised the relationship between tramadol use and physical labour. In contrast to the consumption of other psychoactive substances, for example alcohol or crack cocaine, the initial motivation for taking tramadol is to enhance performance in the workplace.

During consultation it was often reported in different places that the users of tramadol increase their output and thereby serve as role models for others. In Cotonou an informant said that: “Only last week we were commenting on a labourer who worked without becoming tired, so we approached him to ask about his secret. He confided in us saying that he took tramadol in the morning before leaving his house”.⁴⁰

5.1 Tramadol in Rural Areas

Farmers in northern Ghana were also saying that “people take it so that they can work harder and then others see it and admire them”, and of course emulate. Tramadol is not the only substance used to boost energy. Another substance that is widely stocked in all village shops is Quick Action, a compound of Caffeine, Ephedrine and Paracetamol. Though tramadol is more powerful it has to be taken with caution. “But not everybody can take it. They break down and vomit.” He also makes a clear distinction between functional and recreational use. “There are others who mix tramadol with energy drink and they get hyped and then they misbehave. They don’t respect you and don’t feel shy so they do whatever they want. It’s not good.”⁴¹

The impact varies from one individual to the next. In Cotonou one informant recounts his experience with bemusement. “I used tramadol once on advice of a friend in the village. We were farming, and he added that I should drink at least 25 litres of water. I followed the advice, taking a lot of water with me on my bike. I worked from 8 in the morning to 6 in the evening without a break, sweating as if someone had poured water over me. I worked like crazy but I never used it again because I thought it would kill me. I have never drunk as much water in my life. Fortunately I had eaten garri¹⁵ before taking otherwise, I could not even eat that day. I had bought two pills in my village at around 50 CFA.”

An added explanation for the popularity of tramadol and other painkillers among farmers comes from the changes in farming practices. Communal farming has become rare and farming in any case is not a popular choice among the young. The labour is more arduous when performed alone, and farmers are under considerable pressures because of uncertain market conditions and indebtedness to the suppliers of seeds, pesticides and fertilizer. With the drift of young people into the towns and other occupations people carry on farming into old age, performing physically demanding tasks like that not long ago would have been performed by young men or youth. This extension of the working life has seen an increase in the number of people suffering from muscular skeletal conditions, particularly back pain.

¹⁵ Hausa word that is now widely used in West Africa to describe flour grains from cassava, guinea corn or maize.

So many of the purchases of analgesics like tramadol that are made without a doctor's prescription in rural areas do have medical purpose. The medication is used because people are in pain, working long hours in difficult conditions with limited access to health services.

The efforts that Ghana is making in extending health services to the rural areas should be acknowledged. Yet, resources are limited, provisions are patchy and the social gulf between farmers and health professionals is wide. Many rural people, as well as the urban poor, are intimidated not just by the physical reality of the hospital itself but also the medical professionals working there. Observations in wards and waiting rooms around Africa confirm that there is room for improvement in 'customer service'. Patients do not always get the respect that they deserve, and many may feel that the processes within the health system are complicated and opaque and the entire experience humiliating. The informal and unregulated sector of village stalls, chemist shops and hawkers by contrast is far more accessible both logistically and culturally. The providers operate at a level that patients may understand and feel comfortable with. Patient confidence and trust are intangible factors that health systems find hard to measure, yet need to build into service provision.

5.2 Tramadol in the Cities

It is in the cities however where tramadol use is most wide spread and where the concerns have arisen. But here too the entry route into consumption is often work related. Of the 95 informants interviewed in Lagos and Imo, Nigeria, 70 (72.2%) said that they had used tramadol so that they could work better. Of these 66 (68.0%) found that it was effective. Over half the sample, 55, were manual workers and 7 more were drivers.

Two important locales for consumption are markets and what in Nigeria are called 'motor parks' – a term used here collectively for bus and taxi stops and motor bike 'ranks'. This is due to several factors, one of which is the absence of a public sphere and of public spaces in the sense of parks, public buildings or facilities, town squares and so on, where people can gather. The second is that since the majority of West Africans are working in the informal sector the boundaries between work and leisure are fluid. The work is at the same time insecure and episodic, physically demanding and poorly paid. Porters in the market are making a living by carrying, hauling or pushing loads of up to 70 kg. The work is exhausting and, in all probability, highly deleterious to their health. The use of medication is well entrenched among market workers, primarily for easing pain.

One porter interviewed at Roxi market in Abidjan, Cote d'Ivoire says that he takes medication regularly taking advice from the stall holder who to all intents and purposes provides diagnosis and prescription. He cannot say the name of the medication but points to a box of paracetamol at his regular stall.⁴² This is part of a pattern. Paracetamol is sold widely across Africa, in pharmacies, urban markets and village stalls.

Tramadol is of course more effective and particularly in the high potency versions has the potential of giving a sense of well-being or euphoria. These multiple initial benefits, both utilitarian and pleasurable, can seduce users into patterns of use that carry different risks. Motorbike taxi drivers interviewed in Cotonou observed: "it is not good, because your work hard and you don't rest, but the body needs to rest." The energy

and sense of power that is enjoyed after use can make people manic. “When I took it in my coffee I went out to repair my bike, then washed my clothes, then cleaned the house and afterwards started running around the house because I did not want to stop.”

This kind of use carries consequences not just for the consumer. “People who drink it go on long journeys for a lower fare. This brings down prices for all of us.” But it also raises the risk of traffic accidents.

But there is a strong likelihood that people will carry on using tramadol for recreational purpose. The patterns is fluid, as people find that the use of tramadol has multiple benefits, from boosting social confidence, to enhancing their sex lives by delaying ejaculation. Used with energy drinks it provides a cost effective alternative to alcohol. As one informant pointed out it is even cheaper than cannabis, an unexpected manifestation of imports produced with economies of scale displacing local craft production.

In time however side effects set in, including the loss of appetite, mood swings, headaches and sweating. Many informants also reported difficulties in stopping use, including other somatic effects such as restlessness, itchiness and inability to sleep, fatigue and vomiting. A minority (10/58) of interviewed in Accra reported a sense of well being.

Table 4: Side Effects (58 responses) ¹⁶	
loss of appetite	37
mood swings	33
headaches	27
Sweating	25
Fever	13
seizures/fits	4
constipation	3
Other**	29

** drowsiness, vomiting, sleeplessness, fatigue, itchiness, restlessness.

Nobody had sought professional help, but several reported that they had ceased using tramadol altogether. With regard to mood swings an interesting divergence emerged between the group of informants reporting tramadol and alcohol combinations (70%) and those reporting alcohol use only (37%). A chi-squared test of association shows that this is significant the 1.5% level (Table 16).

After longer periods of abstinence informants reported phenomenon that correspond with symptoms known from opiate withdrawal, including craving, weakness, and good feeling being what they felt the next day after taking the drug.

¹⁶ Many reported more than one side effect

Table 5: long term side effects (55 responses)						
Craving	fatigue	feeling good	feeling ill	itchy	tired	weak
19	1	14	8	11	1	1

5.3 Sociological Factors that have a Bearing on Non-Medical Tramadol Consumption

For outsiders, including the research team, this was a difficult challenge. Across West Africa the social stratification, is dynamic and self-reinforcing. Everywhere, but particularly around so called ‘growth poles sections of the population enjoy rising standards of living. In the capital cities members of the fast-rising middle class can benefit from good levels of education, and participate through social media in global trends and developments. Travel abroad for study or work is a possibility and an objective that inspires many.

But a large section of the population has only reaped partial benefit from economic growth and social developments. They are also more exposed to the consequences of these developments, such as the environmental degradation in both rural and urban settings but is marked everywhere by pollution and the destruction of ecological resources – be this in timber for construction and fuel, to fish stocks, to land for farming. Tied to these processes has been the intensifying social inequality as income levels and standards of living are pulling apart. For the majority of the population the sense of deprivation is increasing.

Moreover, many of the social mechanisms that provided social welfare functions are waning. The solidarity and the social cohesion that was once established through ethnicity is dissipating as contemporary Africans are trading tribal affiliation for a national identity and group loyalty for individualism. A further trend most marked in, but by no means confined to the aspiring middle class, is reduction in the complexity and size of families, with the emergence of nuclear structures.

The widening social distance between middle classes, established in the formal sector, with high levels of education and international connections on the one hand, and the deprived urban communities, finds expression in suspicion and anxieties particular around the very present topic of crime. The assumed drugs / crime nexus, so familiar to western policy discourses, and well critiqued, has echoes in West Africa. Situating the phenomenon of property crime within an analysis of social inequality, the absence of opportunity and law enforcement incompetence or even collusion, are problems that are difficult to correct without a transfer of resources. Hence the attraction of external explanatory variables such as ‘tramadol abuse’ to account for poverty, crime and poor health.

The growing social distance between the social classes who due to the decline of ‘traditional’ social institutions have little contact, contributes to a hardening of attitudes and policy makers. It is widely assumed among elite members that harsh measures are needed to force the poor into line. One assumption is that the poor, with low levels of education and close to the breadline do not behave responsibly. This creates a climate where repressive measures against stigmatised minorities can enjoy broad based support. Ironically, this goes hand in hand with a low view of the probity and competence of law enforcement.

Changing family and tribal structures also impact on the care of the elderly. African societies are still marked by gerontocratic structures and respect for elders is deep seated. Yet, with smaller families, urban living, the dissolution of community taking care of the aged is becoming problematic. Further, an increasing number of this large cohort of ageing people are suffering from a range of non communicable diseases, often lifestyle related, but always with a need of care that formal, regulated health service providers are struggling to meet.

A further consequence of social change processes has been the dislocation of traditional governance structures by the state, which is particularly significant in regards to young people, or youth. Outside of school, young people across West Africa, receive little support or investment. The cultural expectations that youth should show respect are not reciprocated by providing benefits or opportunities. There are no formal activities and the public sphere is minimal.

For youth of all classes there is then very little to do and experimentation with drugs provides an attractive form of entertainment. In Nigeria consumption patterns reflect social differentiation or class structures. Older school children may be using tramadol because it is easy to hide and there is no smell or other physical traces. But once they leave and go to university they use other substances. To avoid parental scrutiny groups of young men will club together to rent a hotel room for their parties. High stigmatization of all drug use, coupled with the zero tolerance policy of private universities, has created a class of dropouts and rejects who engage in self destructive patterns of drug consumption. The social status of their family shields them from law enforcement, but also blocks opportunities for social reintegration.

Important for our purpose is the attitude to tramadol. “Tramadol is a poor man’s drug. Its so cheap, its even cheaper than cannabis.”⁴³ Among the patients who were in residence at the centre, cocaine was the most popular, combined with alcohol, cannabis and tramadol “as a backup”.

Yet the search for altered states cuts across all classes and reflects the general dilemma of a generation with chronic underemployment and a sheer lack of opportunities. When leaving Tamale in the north of Ghana the driver told me about a bicycle repair man who noticed a sharp increase in demand for puncture kits among the young Fulani boys. Then he realised that instead of patching up their bicycle tires they were sniffing the glue down in the push. He later learnt that they liked it because it sent them ‘wild’.

5.4 Law Enforcement and the Trade in Falsified Medicines

By triangulating data from interviews with non-medical consumers, test purchases and reports from official sources (Ghana FDA, Niger seizure reports) it becomes clear that at least a sizeable portion and possibly the bulk of the tramadol circulating in West Africa is adulterated, substandard, or falsely labelled and of a strength that is not used in medical practice. One of the explanation provided by law enforcement and medical staff alike is ‘porous borders’. There are different aspects to this. Large stretches of interstate borders across the ECOWAS region are only poorly controlled. Border communities often depend on easy passage, but this also creates an opportunity for

traffickers. Once a substance has entered the region it can pass easily from one country to another across a myriad of informal crossing points.

Yet this may not even be necessary. The Economic Community of West Africa States has lifted restrictions on the internal movement of goods and people making it easier for contraband and illicit cargo to be traverse the region. Efforts to control the flow of illicit cargo are hampered further by deeply entrenched corruption. In most countries in the region remuneration for law enforcement and security agencies is so low that the abuse of public office for personal gain is factored into the system.

In recent years international development partners have been training inter-agency units and strengthening defences at key points of entry, particularly sea and air ports. Teams in the ports of Cotonou, Lome and Tema, are working with support including intelligence from US and UK law enforcement agency. Some large scale seizures have resulted from this cooperation.

Yet, the focus of these operations is clearly on illicit drugs, particularly cocaine, which is reportedly trafficked across West Africa in significant quantities. Seizures of illicit and falsified pharmaceuticals are usually a by-product of such searches. Moreover, the rudimentary testing equipment available to the officers of the Container /control Programme, Aircop or Seacop are at best capable of indicative testing for cocaine, heroin and other key illicit drugs. They are not capable of giving a precise result of adulteration levels or potency of licit medication.

Because of these constrains incoming medications is only very rarely submitted to chemical assay. At best imports are checked against paper work submitted by the importer. Since even the interagency teams do not have the skills of a qualified pharmacist they can only undertake a superficial scrutiny.

There is furthermore the question of capacity. In Cotonou for example, the UNODC supported interagency unit has a theoretical capacity of checking 1% of all incoming containers. In all modern container-ports the sheer volume of trade poses a challenge for control units.

These factors combine to facilitate the inflow illicitly produced tramadol as well that of all manner of substandard, counterfeit and falsified medicines. It enables traffickers to hide illicit products under false packaging and even bogus product names.

The consequences of this trade are, accounting for tens of thousands of fatalities across Africa, according to WHO, yet the resources invested by national authorities and international partners are risible when compared to the fight against controlled drugs. In most West African jurisdictions, the trade in falsified medicines is considered an intellectual property crime, to which financial penalties or at best short prison sentences are applied. According to one European police officer working in Dakar there is no incentive for West African law enforcement.

These factors create an environment of low risk and high reward which has attracted new, and as yet poorly understood trafficking operations. Most law enforcement agencies believe that there is clear specialisation. Organisations involved in trafficking cocaine do not diversify into medicines. This is replicated at street level, where most peddlers of tramadol do not carry illicit substances.

A final point for consideration is the fragility of state controls in the neighbouring countries. Critical here is Libya where the state has collapsed providing traffickers of all stripes with an open port. It is reported that very large quantities of all sorts of pharmaceutical are flowing south across the Sahara into West African markets.

With these many points of entry, the onus falls on law enforcement to track the flow upstream. Yet police in West Africa are notorious for focusing their efforts on seizing at points of entry and arresting consumers or petty peddlers. There is limited capacity and interest in broadening investigations into the people controlling the trade. Yet the need is recognised, and international donors are supporting joint investigations between West African and Latin American law enforcement into cocaine trafficking. This is a model that can also be extended to investigating falsified medicine medicines.

Further efforts also have to be made to stop the trade at source. Instead of taking a substance specific approach, this should become generic. Large pharmaceutical producers, but particularly India, should, according to the head of NACOB, be engaged in constructive engagement to better control the export of falsified medicines.

6. Moving forward - Redefine the Problem - From Drug of Abuse to Falsified Medicine

Diversion from health care settings and formal sector providers is not the source of the tramadol related problems in West Africa. A closer analysis of the seizure data, the surveys of consumers, market visits and test purchases and consultation with key informants all confirm that the bulk of tramadol that is used non-medically is substandard and falsified. It is illicit at every point in the chain – production, export from the producer country, usually India, import into West Africa, distribution and retail sale.

Falsified tramadol has not been brought to international attention because it is causing the greatest harm, but because it is an opioid, which brings it into the purview of national and international bureaucracies mandated to control ‘drugs of abuse’. The notion of ‘abuse’ is the key determinant used to propose measures of control, not any assessment of the scale of harms or considerations of effective response.

Yet according to WHO large quantities of medications are falsified. This is confirmed by experts on the ground. According to the head of the national laboratory, 70% of medicines in Niger are falsified.⁴⁴ The consequences of this have been masked by compounding factors relating to poverty, poor sanitation and the lack of formal medical care. The human costs in terms of people dying because medicines bought in good faith were inert or ineffective for treating conditions like malaria, diarrhoeal diseases and lower respiratory tract infections are rarely counted in rural areas or among the urban poor.

Action urgently needs to be taken to reduce the flow of falsified antibiotics and anti-malarials as well as of falsified opioids. The problem in the trade of falsified and substandard medicines is global and requires collective responses. With the Medicrime Convention an appropriate international instrument is now in place to help coordinate international efforts.

6.1 Recognising the Magnitude

In most West African countries the legislation against trading in falsified medicine remains weak. It is often regarded as a minor misdemeanour with low penalties. These conditions have attracted the attention of traffickers who are running lucrative operations with minimal risk. Legislation needs to be strengthened to reflect the gravity of the crime and provide a deterrent.

Coordinated policing such as the Interpol led operation Heera (June, 2017), involving law enforcement and regulatory agencies from Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Nigeria and Togo, need to be undertaken regularly. Moreover, the focus has to be on dismantling supply chains. This invariably involve close cooperation with counterparts in India and China. Possibly, such an initiative could build on contacts established by NAFDAC through their pre-export control system in China (Klantschnig, 2014)

6.2 Regional Cooperation

Programmes for co-operation and harmonisation have been launched at different platforms, for instance EOCWAS and UEMOA, but not gained any traction. In all likelihood regional cooperation needs to be combined with linkages to international partners. Donor countries can share their own experience (European Medical Agency) and technical competence when assisting West Africa in, inter alia, improving information systems on the flow of licit / illicit medicines. This is particularly important in view of the growing intra-ECOWAS trade. It should facilitate the speedy processing of licit pharmaceutical shipments and improve detection capacities for illicit ones. Cooperation between regulatory bodies will further raise effectiveness of border checks and market surveillance. There is also an opportunity for harmonising medicine registration to speed up this process; to facilitate urgent responses in accordance with need; and to remove bureaucratic hurdles and costs for nascent pharmaceutical producers.

Regulatory agencies are also faced with a challenge that is rarely considered at the onset of international cooperation: how to dispose of seized produce. In Niamey boxes of seized medicines are piling high in the courtyard of police stations. In Abidjan packs of medicine are filling up a room at police headquarters. International cooperation is needed to help agencies dispose safely of seized product.

6.3 Controlling Points of Entry

The asymmetry between the difficulty of the terrain and the available resources are often cited to explain the availability of contraband across West Africa. Yet, the bulk of pharmaceutical import arrives through the commercial ports where teams are already in place to search cargoes. Step by step improvements can be made to these teams, including linking them to databases for medicines so that the bar codes of imports can be checked. It should also be considered to add pharmacists to the team so that pharmaceutical imports can be inspected more thoroughly.

6.4 Pharmacovigilance

Experience across the region shows clearly that targeted interventions are effective in shaping the market. In Niger the introduction of management software combined with inspection visits have effectively discouraged pharmacies from selling tramadol without prescriptions.

The Ghanaian FDA working with the Pharmacy Council, police and NACOB have effectively reduced the availability of tramadol in market places around the country. These sustained inter-agency campaigns have proven effective even in remote and rural regions.

A clear contrast comes from Nigeria where pharmacies in Abuja and Lagos are under much closer scrutiny than in the smaller town of Imo.

In Benin, where there are no pharmacy inspections, tramadol is sold readily over the counter without prescription required. But even here non-medical users will buy from the market where the substandard and falsified products are much cheaper.

6.5 Regulation of the Informal Sector

It is through informal sector of PPMVs, chemist shops, market traders, hawkers that prescription medicines and falsified and substandard medicines are getting into the market. The work of the Pharmacy Councils in Nigeria and Ghana working in cooperation with regulatory agencies and law enforcement are showcases of constructive engagement. It is possible to build up capacity and strengthen controls that prevent the sale of substandard and falsified products as well as prescription medicines.

In West Africa the informal sector plays an essential role in providing large sections of the population with medical product. Repressive approaches can only dislocate the supply and harm both suppliers and patients. Constructive engagement is far more promising in achieving sustainable change in the long term.

6.6 Outreach, Health Promotion and Rehabilitation

Interventions in the market can create shortages, but they will be temporary if not accompanied by outreach and information. The formal health care providers and regulators are not always engaging with the rural and urban poor as effectively as they could.

Few of the informants in Ghana and Nigeria had received much information about tramadol or other opioid medications from official sources before the introduction of controls. In Nigeria in particular these were enforced suddenly and brutally without explanations given.

Senior officials in many countries can have a dismissive attitude towards the poor, often dismissed as 'illiterates'. Yet, possibly because of the education gap, outreach work is needed to inform and educate on the risks and hazards of using prescription only (and other) medication.

Outside of psychiatric wards, there are no rehabilitation facilities in most West African countries. Against the fast moving change in consumption patterns this needs to be rectified. Already there are examples from Nigeria of CSO run rehabilitation centres with outreach work. These can be run at relatively low cost, and be strengthened with self help groups. These services should be expanded with support from the donor community and made available to opioid users.

6.7 Anticipated Consequence of Scheduling and Controls

Support for international controls gets little support from the health care professionals consulted. According to the senior pharmacist at the Central Medical Stores in Windhoek there are all manner of concerns over the quality of medications and gaps in the surveillance of private sector hospitals. But when it comes to prescription medications she is “in favour of scheduling at national level”.⁴⁵

Medical professionals, it would appear from discussions with the Ghana Medical Association, were not included in the discussion on whether international scheduling is in the interests of Ghanaian healthcare provision. Even law enforcement is divided, with the head of Narcotics Control Board (NACOB), for instance highly sceptical that scheduling tramadol would solve the problem and is concerned about the consequences for patients who need analgesics: “we are already accused of under-using opiates, of leaving people to suffer in pain”. Instead of scheduling, “the FDA should lead the crusade with a clear policy that makes an estimate of our requirements, then allocates a quota to our manufactures and importers. Then it should designate a single point of entry. That would allow us to easily identify any other import at any border and seize it.”⁴⁶

It is not clear if any of the West African countries that are represented on the Commission of Narcotic Drugs – Burkina Faso, Cameroon, Côte d'Ivoire and Mauretania - are consulting all domestic stakeholders before deciding on which way to vote on proposals. There are also no efforts to coordinate this at regional level or use the offices of the ECOWAS Commission Secretariat which does have a unit with responsibility for drug issues. The only regional effort to confer on the issue was at a UNODC organised conference held in Abuja in August 2018, in which regulatory agencies and law enforcement were predominantly represented.

In the absence of medical practitioners, not to speak about patient groups, the requirements of healthcare are liable to be not duly considered in the by most African countries – Uganda being a notable exception – demonstrates the obstacles thrown up by the control conventions. As our research has established, the obstacles along the supply chain and the requirements imposed on pharmacists have serious implications for the provision of tramadol.

In Ghana, the Pharmacy Association head speculated that ‘the truth is, once a substance is controlled people will no longer import it because they are not losing much and a lot of work is involved’.⁴⁷ The need to account for each tablet, the security provision, the paperwork and the anxiety are strong disincentives to pharmacists, particularly when they can sell stage 1 pain medications as an alternative. Since people in pain are desperate and liable to avail themselves of the alternative there is no commercial loss.

The tight controls on tramadol in Botswana mean that pharmacists have never noted an issue with “addiction or abuse”. But many pharmacists will not stock “habit forming drugs, because once you keep them the DRU requires you to keep a register that records the prescription of the patients and the doctors and how many tablets. So if the DRU comes and you have 10 units missing and you cant account you have a big problem.

So this is a bit laborious. Some of them [pharmacists] decide this is too much, they don’t want to be accountable.

“We need to increase access, if we go down the regulation route where we make it even more difficult, in Botswana we are not managing pain properly if you look at the figures, this will not enhance patient wellbeing. It should not be controlled, it should in fact be de-escalated.”

In Nigeria, according to Head of the Pain & Palliative Medicine Dept.at the Federal Medical centre Abeokuta, Ogun State the consequence of controls are that “pharmacists are more reluctant to stock a product for when paperwork and risk is involved, doctors are less likely to prescribe, and importers now face problems of reporting, registration and availability”.⁴⁸

The prospect of tramadol vanishing from registered pharmacies and the formal health sector will further boost the circulation in informal and less regulated markets. Patients will be pushed towards purchasing substandard and falsified products or indeterminate and possible much higher potency. This will lend a further financial stimulus to the illicit market.

It will also criminalise pain patients whose quest for a remedy to ease their pain will be treated as a crime. It is important to recall that in some West African countries law enforcement has been described as both violent and often motivated by pecuniary concerns (Nelson, 2018).

The costs of scheduling tramadol are therefore going to be felt mainly by the urban and rural poor, who will be deprived of the most accessible and effective analgesic for tackling medium to severe pain, and they will be victimized by law enforcement and the courts for engaging in illicit drug use.

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Annexe 2: List of Stakeholders Consulted

Accra and Tamale, Ghana		
21/06	Dr Mary Opare	Ghana Palliative Care
	Mrs Olivia	Food and Drugs Authority FDA
	Kwame Pepra Boaitey	Ghana Pharmaceutical Association
	Mr John	Prime Pharmacy
22/06		The Mall
	T Samuel Adzah	Medipoint Pharmacy
	Ms Odoni	Worldview Pharmacy
23/06	Dr Yorke	President Ghana Medical Association – Consultant Physician
	Dr. Amah Nkansah	Deputy Director of Pharmacy, Korle-Bu Teaching Hospital sankans@yahoo.com
24/06	Dr Mary Ayram Ashino	Public Health Specialist and Medical Director of a regional hospital Ho, Volta region
25/06		Medical Doctors Focus Group Legon Hospital
		Lexbeta Pharmacy, Zongo
		Pharmaceutic whole salers, Randy Pharmacy, Zongo
	Dr C Amenuveve	Director of University of Ghana Health Services
	Mr Francis Torkornoo	Executive Secretary
	Felicia Wuaku	Commander of CCU NACOB
		CSO meeting
	Daniel Amaning Danquah	Pharmacy Council, Deputy Registrar
	Dr Nelson Agboadoh,	Specialised surgeon West Gonja district general hospital
	Dr. Anthony Ayambiri	Resident obstetrics and gynaecology West Gonja district general hospital
	Benedict Amamkwa	Surgical unit, University of Ghana Regional Hospital of East Legon benedictamamkwa@yahoo.com
	Pascal	Community Nurse, Sor
	Edmund Manteaw Ayeh	Pharmacist, Tamle
	Dr Malik	Clinical pharmacist specialist, Chairman of Pharmaceutical Society of Ghana, northern region

Cotonou and Porto Novo, Benin		
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Annexe 3: Civil Society Consultation Tramadol Abuse



Civil Society Consultation Tramadol Abuse

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Date: 19 June 2018

Venue: WACSI Secretariat – East Legon GHANA

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Annexe 4: Test Results

- Only three out of 11 test samples had no impurities/additional compounds. Out of these three, no tablet contains tramadol in the strength as indicated (all lower).
- Six of the 11 samples contain tramadol in quantities above 200 mg per single tablet.
- One of the 11 samples only contain 1.51 mg (!!) tramadol, but a large amount of unknown substances could be identified.
- 4 of the 11 samples contain remarkable impurities (above 5 %).

Annexe 5: Opioid / Opiate Importations

Opioid imports Botswana 2016 and 2017						
Drug	Estimates		Total permits issued		Stats	
	2016	2017	2016	2017	2016	2017
Alfentanil	9g	9g	0.002kg	3.3g	1.5 mg	2.55g
Codeine	18kg	18 kg	24.6kg	10.7ss kg	429.24 g	6.15kg
Dihydro-codeine		1kg				
Etorphine	20g	20g	1.8g	4.0572g	2.9302g	4.0572g
Fentanyl	7g	7g	324g	3.7g	0.4mg	3.32g
Hydro-morphone		1kg				
Morphine	10kg	10kg	12.15 kg	15.46kg	1.368kg	12.56kg
Oxycodone	400g	400g				
Pethidine	40kg	40kg	1.1049kg	9.6kg	943g	5.36kg
Sufentanil	3g	3g		0.0143		0.009g
Tilidine	300g	300g	30.14g			

Source: Botswana

Opioid imports Botswana 2018 (first 6 months)	
Drug	Quantity ordered
Morphine	0.8244
Codeine	8.255kg
Pethidine	10.231kg

Source Botswana

Country	Product name	Manufacturer	Lot	Expiry Date	labelled claim [98 -102%]	Assay determined	Impurities [% area]	Additional results (LC-MS; GC-MS)	Conclusion
	Tramadol Caps 120 mg	Sintex	TU197M417E321		120 [117,6 - 122,4 mg]			no impurities detected	complies to label (content not tested)
	Super Tramadol; Royal -x 225 225 mg tablet		SR746M517E420		225 [220,5 - 229,5 mg]			no impurities detected	complies to label (content not tested)
	Tramadol Capsules 50 mg				50 [49,0 -51,0 mg]	47,29 mg	no impurities detected	no impurities detected	complies to label
	Tramadol 225 mg				225 [220,5 - 229,5 mg]	122,26 mg	no impurities detected	no impurities detected	low content (50% of labelled claim)
	Tablets 225 mg				225 [220,5 - 229,5 mg]	219,72 mg	2 impurities detected (RRT-1.47: 2.27% RRT-4.75: 1.04%)	Impurities identified as: Methyl paraben Propyl paraben	complies to label
	Tramadol				225 [220,5 - 229,5 mg]	222,73 mg	2 impurities detected (RRT-1.47: 8.37% RRT-4.76: 2.91%)	Impurities identified as: Methyl paraben Propyl paraben	complies to label
	Tramadol Tablets 225 mg				225 [220,5 - 229,5 mg]	227,02 mg	2 impurities detected (RRT-1.47: 2.37% RRT-4.76: 1.00%)	Impurities identified as: Methyl paraben Propyl paraben	complies to label

Country	Product name	Manufacturer	Lot	Expiry Date	labelled claim [98 -102%]	Assay determined	Impurities [% area]	Additional results (LC-MS; GC-MS)	Conclusion
	Tramadol Tablets 225 mg				225 [220,5 - 229,5 mg]	83,05 mg	no impurities detected	no impurities detected	low content (37% of labelled claim)
	Tramadol Tablets				-	226,38 mg	2 impurities detected (RRT-1.47: 2.36% RRT-4.76: 1.04%)	Impurities identified as: Methyl paraben Propyl paraben	complies to label
	Tramadol Tablets 225 mg				225 [220,5 - 229,5 mg]	227,9 mg	2 impurities detected (Verun.D(o- Desmethyl): 1.45% RRT-1.47: 2.21%)	Impurities identified as: O-Desmethyl tramadol Methyl paraben	complies to label
	Tramadol 225 mg				225 [220,5 - 229,5 mg]	108,54 mg	2 impurities detected (RRT-1.44: 5.10% RRT-4.65: 0.80%)	Main impurity identified as: Methyl paraben	low content (48% of labelled claim)
	Flunit 1 mg				-	1,51 mg	Traces of tramadol and other impurities detected	Flunitrazepam identified as main component; traces of tramadol detected (abrasion from tramal tablett stored in the same bag)	Flunit tablet (+ abrasion of tramadol tablet)

Country	Product name	Manufacturer	Lot	Expiry Date	labelled claim [98 -102%]	Assay determined	Impurities [% area]	Additional results (LC-MS; GC-MS)	Conclusion
	Tramadol Tablets 225 mg				225 [220,5 - 229,5 mg]	225,86 mg	2 impurities detected (RRT-1.47: 8.70% RRT-4.76: 3.01%)	Impurities identified as: Methyl paraben Propyl paraben	complies to label
	Dolora 200 mg Tramadol	Sandoz	Lot GJ3812	Oct-20	200 [196 - 204 mg]				
	Febrex-TM 37,5 Tramadol 325 Paracetamol	Indoco	FBG1E71	janv-19	37,5 [36,75 - 38,25 mg]				
	Tramadis 50	Medis	17G0003	janv-20	50 [49,0 -51,0 mg]				
	Tramadol Denk 50	Denk	20836	juil-20	50 [49,0 -51,0 mg]				

Annexe 6: Media Analysis on Tramadol Reportage

A brief analysis of the various narratives constructed in the media in relation to tramadol reportage

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1. Introduction

Media reportage on drugs and substance abuse in Ghana dates back several years. While it is not a new phenomenon, significant media attention has focused on tramadol abuse in recent times, sparking a national conversation. This has gained nationwide interest, as the media is awash with anecdotes of the extent to which citizens abuse the drug for varied reasons. Along with this upsurge in the reportage of tramadol use, comes the growing concern for a nuanced discussion leading to a holistic solution rather than superficial discussions that lack depth and rigor.

It has been established in previous research that societal behaviour and attitudes can strikingly be impacted by the very nature of how news and information is framed in the media. Unlike in previous years, public discourse and opinion is no longer shaped by only the traditional sources of media. Digital media now plays a significant role in disseminating information and shaping public discourse including tramadol abuse.

What remains unclear however, is how the issues surrounding tramadol is reported in the media? What kinds of narratives have been constructed in the media regarding the use, abuse and regulation of tramadol? What are the sentiments being expressed? It is in light of these pertinent questions that this report attempts to provide a clearer picture of how news on tramadol are presented in the media by way of a media analysis.

2. Methods

The paper adopted the method of examining thematic content and contextual framing of tramadol reportage in a number of media outlets in Ghana. Content was analysed according to predetermined themes in a systematic and replicable manner.

The following questions were addressed in the report:

1. What styles and tone were adopted for the news reports on tramadol?
2. Which voices were represented in the media reports regarding tramadol?
3. What are the characteristics of tramadol users?
 - a. *Who are using the drug?*
 - b. *What are they using it for?*
 - c. *Where do the users get the drug from?*
 - d. *What other drugs do tramadol users engage in?*
4. What frames and narratives were constructed in the news regarding tramadol?

Thematic analysis was carried out using the steps as follows:

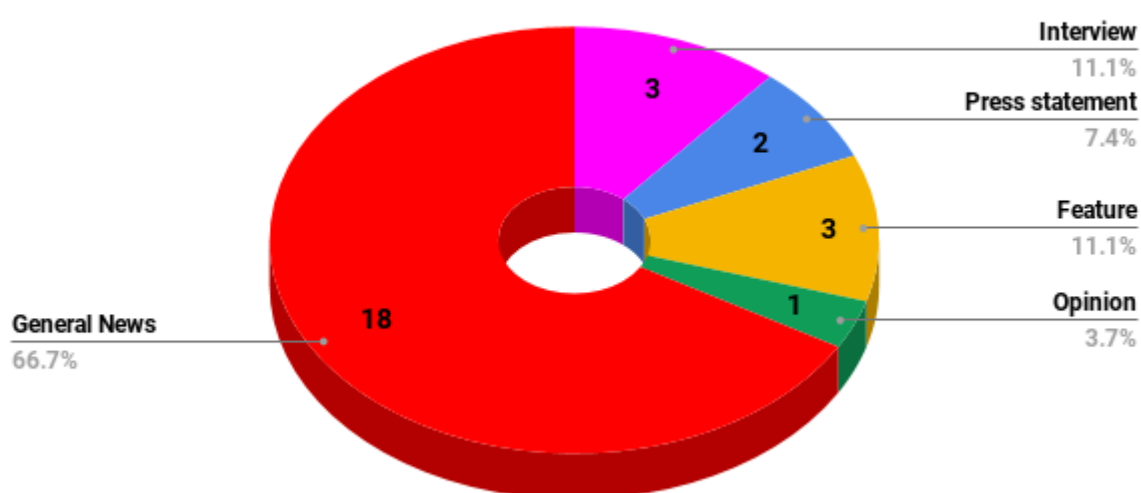
1. Review of 27 news articles, including newspaper articles, features, online news portals spanning between June 2016 to May 2018.
2. Five (5) broad themes and categorizations within each theme were developed to facilitate the review.
3. All 27 articles were reviewed and relevant themes within each article were identified.
4. A second round of reading was done to confirm the appropriateness of the themes developed.
5. A third and final reading was done to establish the frames behind each news article.
6. Where possible, quotes, charts and tables were provided to facilitate the analysis

3. Results

The analysis of the texts contained in the news reports are presented in this section according to the objectives.

The style of the news reports on tramadol were analysed to determine the structure of the news, which gives an indication of how the content was produced. The report style was analysed in the following categories: features, general news, interview, editorial and commentary/opinion of a writer unaffiliated to a media house. Fig 1 below describes the style of the various news reports analysed.

Fig. 1: Count of "What is the style of the news article?"

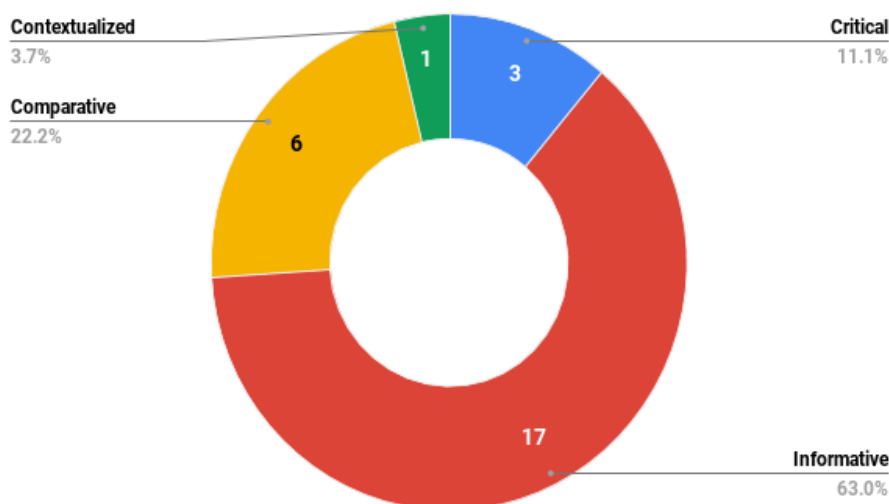


The results of the analysis clearly show general news (18), which emphasizes facts of recent events as the most common style adopted by the media houses in reporting tramadol related news. Features, unlike general news stories are longer and more reflective in nature. Three (3) of such features were found together with interviews (3) and press statements (2) as a reporting style adopted by the media houses. Only one (1) opinion piece was found as part of the news reports on tramadol.

3.1 Tone of the Report

Tone considered how the news was presented. Similar to the report style, tone gives a clear picture of how the news content was constructed. Categories used in analysing the tone included informative, critical, comparative and contextualized information. While informative tones only provide descriptive facts in the news, critical tones emphasize balance by going beyond the description of facts to identify connections and relationships. News reportage with a comparative tone looks at how different opinions are represented in the news. News stories that explained facts within a given context were categorized as contextualized information.

Fig. 2: What is the tone of the report?



An overview of the various tones used in the news is presented in Fig 2. From the analysis of 27 news reports, the informative tone of news presentation was the most predominant (17). An example of such informative tone could be *“Tramadol abuse: 21 shops to face sanctions in Ashanti”* and *“High incidence of tramadol abuse in Upper West Region”*². A few (6) reported with a comparative tone while three (3) assumed a more critical tone which is exemplified in headlines such as: *“Tramadol abusers resort to cough mixtures”*³ and a press statement headline, *“Tramadol abuse: Occupy Ghana demands urgent government action”*⁴.

The significant high numbers of informative reporting tone could be explained by the dominance of general news as the main style of media reports as it only describes facts of recent events. Most news contents were produced by just covering events and reporting on things happening around the country. This however points to a dearth in news reports that set the stage for critical discourses. The data suggests that news articles were mainly restricted to only the description of facts and regurgitation of same without recourse to discovering underlying causes and solutions in order to give the news a more critical outlook.

It was important to give some indication of the voices that were represented in the various news articles regarding tramadol. On the basis of that, the following categories were developed: government – which includes all public institutions, Civil Society Organization, Experts, Professionals, Users.

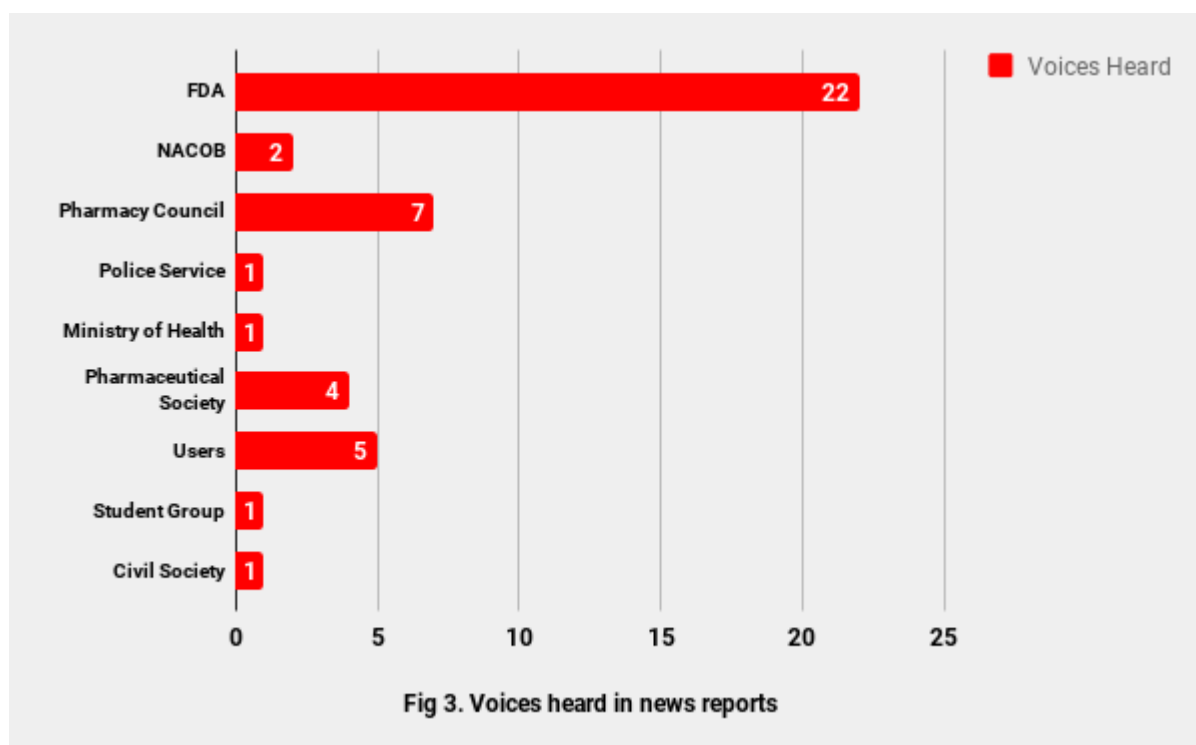


Figure 3 provides a pictorial representation of the voices heard in the reports. The most dominant and leading voice in the articles analysed was government, and this was through Food and Drugs Authority (FDA), Narcotics Control Board (NACOB), Pharmacy Council, Ghana Police Service, Ministry of Health, with mentions in 22, 2, 7, 1 and 2 news articles respectively. Other voices represented included professionals (2 Psychiatrists, 3 Pharmacists and a community health nurse), umbrella bodies such as Pharmaceutical Society of Ghana and users (2 problematic and 3 non-medical users). Other voices such as chemical shop attendants, a student group (Pharmaceutical Sciences Students Association of Ghana) and a civil society organization were also identified.

The Head of Substance Abuse at FDA was the most prominent voice in the news reports, while Regional Heads occasionally constructed the narrative from the FDA. The FDA voice was mostly informative and as the industry regulator, it was to be expected that most of its narrative would be to give assurances and engender public trust and confidence. This was illustrated with news captions such as “FDA calls for inter-agency collaboration to stop Tramadol abuse”⁵, “FDA seizes large quantities of tramadol and other drugs”⁶ and reinforced by others (Eg. “Tramadol Silent killer as FDA partners Pharmacy Council to fight menace”)⁷. On the very few occasions NACOB was heard, they sought to clarify their role vis-à-vis tramadol stating that, tramadol was not under their control since it is not listed as a narcotic substance.

As expected, the voices of the professionals were more attuned to public health outcomes, particularly in advocating for psychological help and rehabilitation programmes for those who abuse the drug. In some instances, contact numbers were provided for people who needed help to reach out. An FDA official noted that “Mental Health Authorities in the country should start with the provision of psychological help for those who are addicted because users may resort to alternatives when the illicit drug is controlled”⁸.

On the part of law enforcement (eg. Ghana Police), the voice sought to draw linkages between tramadol use and armed robbery and other public order offences.

3.2 Characteristics of Users

This aspect of the analysis focused on the drug users, with the aim of identifying their profiles: a) who they are; b) what they use the drugs for; c) where they get the drugs from and d) if they use other drugs in addition to the tramadol.

With regards to those using the drug as reported in the media, the generic descriptor ‘Youth’ was a theme that run through the reports to describe young adults. The ages of those that were mentioned was 26, 29, 32 and 36. Headlines such as “*Ghana alarmed by tramadol abuse by young people*”⁹, “*Abuse of Tramadol among the youth worrying - FDA*”¹⁰ and “*FDA overwhelmed by the use of tramadol among youth*”¹¹ aptly captures the extent to which the use and abuse of tramadol was pervasive among young people (Youth). Teenagers were also identified to be users of the drug with ages ranging between 14 to 19 many of whom were also students. One of the reports indicated that a 10-year-old boy allegedly died as a result of tramadol overdose. It was revealed that pupils in primary and junior high schools were taking tramadol. It also came to the fore that some parents sent children as young as between seven and nine years to buy the drug. An over the counter (OTC) dispenser voiced her displeasure by saying: “*when we refuse to sell to the kids, they return with their parents to either verbally abuse us or spread falsehood about our activities thereby affecting sales.*”¹²

Commercial/Truck drivers, market women and manual workers such as farmers, truck pushers and head porters were also identified as users. The case of armed robbers came from the perspective of law enforcement. Figure 4 presents a word cloud of people reported to be taking tramadol.

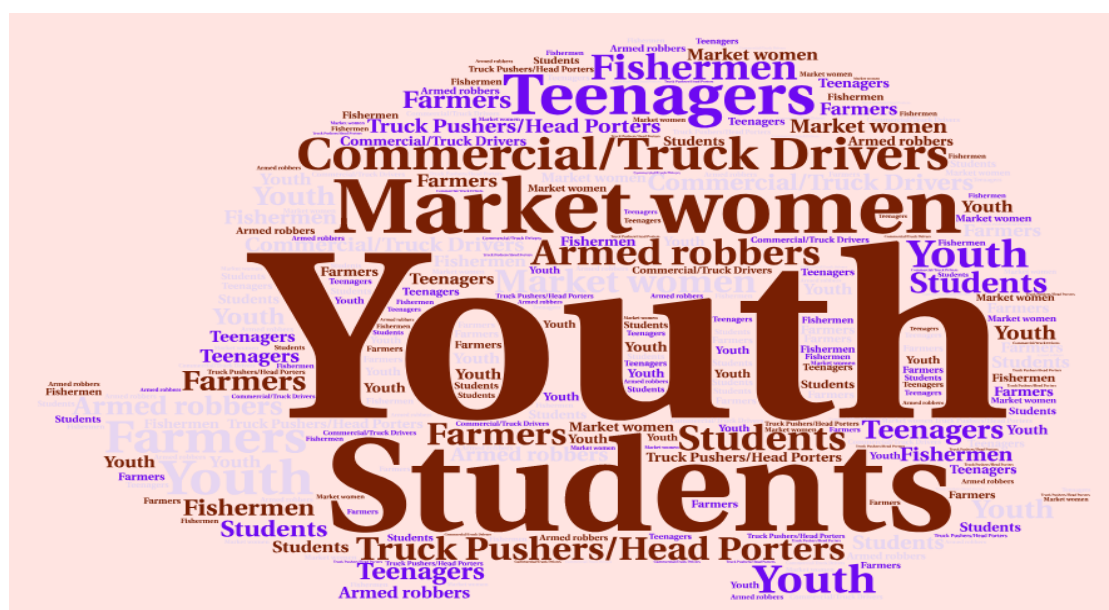


Figure 4: Who is taking tramadol?

3.3 What Are They Using It For?

It was evident from the news reports that very few people were using the tramadol for medical purposes and if they were, it was mostly for treating headaches. Majority of the users identified was for sexual drive enhancement mainly among the youth. Tramadol was used as an aphrodisiac for prolonged sex. Additionally, majority of the youth used the drug to derive

euphoric feeling. This is supported by the description of tramadol abuse among young people to get “high” by a newspaper as the “new cocaine craze”. A spokesperson of the Mental Health Authority said *“Children have now diverted from the use of other substances such as Indian hemp, cocaine and other illicit drugs because they are criminalized unlike the tramadol”*.⁸

Manual workers and others whose work requires expending a lot of energy such as truck drivers, farmers, market women and head porters usually took tramadol to boost their energy levels in order to work for long hours without feeling tired. It emerged that some farmers in the Upper West Region christened the drug as “koo da nan hum” translated literally as “farm and buy cow” to wit, the drug gives you energy to cultivate a large farm in order to be wealthy (cow as a status symbol of wealth).

Some students who were also athletes, were known to be using tramadol as a performance enhancement drug. While some took the oral tablets directly, others mixed it with energy drinks or alcohol and sometimes marijuana.

3.4 Where do They Get the Drugs From?

The analysis also sought to get a clear idea of the source of the tramadol. From the media reports reviewed, drug peddlers in the open market, who hawk their wares together with other drugs were the most predominant source of the tramadol. This is echoed by narrations such as: *“.....we arrested people between the ages of 14-16 years who were peddling it [drugs] in our open market with other aphrodisiacs and other substances including tramadol”*.¹³ The reports further showed that, a number of the drug peddlers arrested were foreigners, notably from Niger.

Some chemical shops, which are over-the-counter (OTC) drug selling shops were identified in the reports as a source of the tramadol purchase. A number of these shops were found to be stocking and selling tramadol. It was adequately highlighted in the reports that FDA officials had referred the defaulting shops to the Pharmacy Council for sanctions. Drinking spots/bars and other unapproved traders were captured as sales points for tramadol.

3.5 What Other Drugs Do They Use?

In order to find connections between tramadol usage and other drugs, this analysis sought to uncover other drugs tramadol users take. From the data, it emerged that codeine, including codeine-containing cough syrups was significantly cited in the reports as another substance tramadol users mostly abused. A classic illustration is what a chemical shop attendant noted: *“when they ask for tramadol and i tell them it is not available, they request for cough syrup”*.¹⁴ Other drugs included marijuana, pawpaw leaves and the seeds of a local flower plant called ‘daaradaara’ or ‘ogeeri’ seeds which is common in the Upper West Region. It was striking to note that some also engaged with psychoactive substances such as petrol and turpentine. They inhaled it in order to derive energy for heavy manual work. A farmer is quoted as saying, *“the petrol makes us charge like buffalos, to gain extra energy to do extra work”*.¹⁵

4. Key Frames Constructed

This part of the analysis deals with the type of narratives that were constructed in reporting issues around tramadol. These were coded as key frames, and served as the central theme behind each news report which was essentially how the issue around tramadol was portrayed.

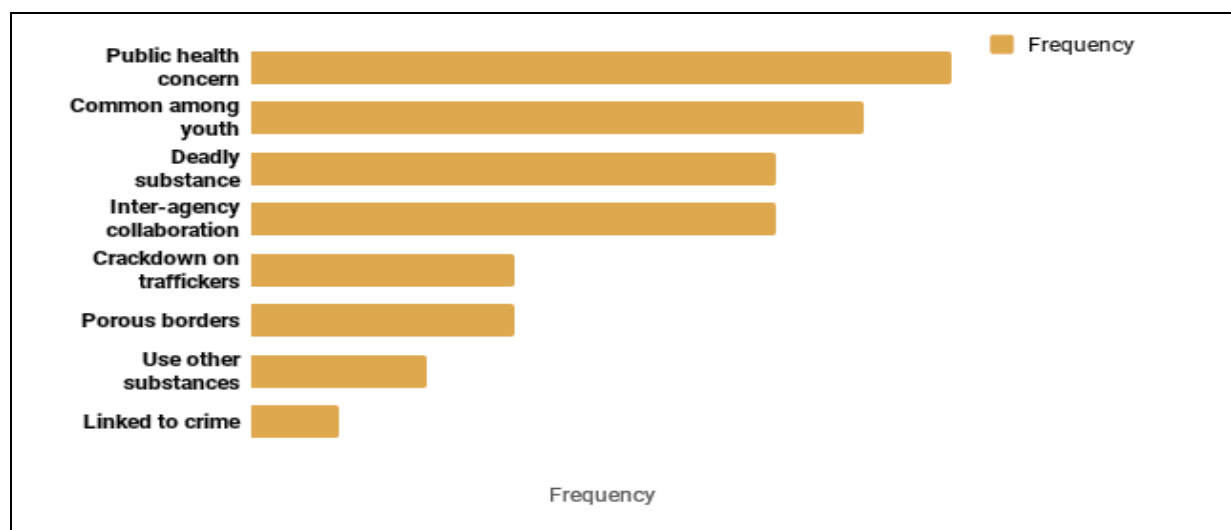


Figure 5: Frames constructed in the news

Figure 5 illustrates the eight frames identified from the news reports in order of significance. It is apparent that the most dominant frame constructed in the media reportage on tramadol was that of a public health concern as a result of the proliferation of high dose tramadol. This was illustrated by headlines such as: *“High incidence of tramadol abuse in the Upper West Region”*² and *“High dose tramadol floods market”*⁶. These concerns were accentuated by some of the voices heard in the reportage, particularly with some professionals warning about severe consequences if the rising incidence of abuse was not curbed. It was revealed in one of the reports that health professionals were warning of devastating effects and consequences such as heart diseases among others if the trend of tramadol abuse continued. A psychiatrist is quoted as saying *“this is why the police and the law enforcement agencies must go after the people who are illegally or trading these things [tramadol]...this is a public mental health emergency”*⁷

The FDA was also reported as having uncovered alarming quantities of unregistered tramadol strengths (eg. 120mg, 225mg, and 250mg), especially in three regions (Northern, Volta, Western)¹⁷. It was however clear from the review of the reports that these proliferation of high dose tramadol was not limited to any part of the country, but widespread across the country.

Another significant frame that emerged from the reports was that, tramadol abuse was construed as being common among young people. It was a recurring theme in the reports as all the voices represented, expressed concern about the pervasive use of tramadol among young people. For example, the headlines of the Ghanaian Chronicle and the Ghana News Agency were captioned respectively as *“Ghana: NACOB, FDA Raise Red Flags – Over Abuse of Tramadol Among the Youth – Say the Drug Could Cause Kidney Failure, Stroke Et Al”*⁸ and *“Abuse of Tramadol among the youth worrying-FDA”*¹⁰. Similarly, a Ghanaian Times report also revealed that *“a high number of youth in the fishing community [European Town,*

*Sekondij including teenagers are addicted to tramadol*¹⁹ while citifmonline headlined an article as *“FDA overwhelmed by the use of tramadol in youth”*.¹¹

Further frames identified in the news reports was a clear portrayal of tramadol as a deadly substance. The news reports were replete with warnings about potential death if the drug was abused, and in some cases, deaths of people alleged to have abused tramadol were reported¹⁹. In one of the reports, the FDA Chief is quoted as saying, *“It is important we let people know that abusing medicines like Tramadol can have bad consequences, including death”*¹⁷.

Other frames that emerged from the analysis was that an inter-agency and stakeholder collaboration is ongoing to stop tramadol abuse. This was expressed in a variety of ways, for example, organizing a number of regional inter-agency fora, FDA partnering with agencies such as Pharmacy Council, border control agencies, Mental Health Authority to fight the abuse of tramadol, and a number of training programs organized for security officers. In other instances, heads of schools as well as other traditional leaders and opinion leaders have been involved in the sensitization efforts to reduce the abuse of tramadol.

Law enforcement activities to crackdown the supply of tramadol into the market was a conspicuous frame identified in the reportage. This, from the reports, was partly achieved through inter-agency collaboration. For example, FDA was reported to have intensified its surveillance activities together with the security agencies. Another was FDA reporting a number of chemical shops to the Pharmacy Council to be sanctioned for stocking and selling tramadol. Furthermore, a number of drug peddlers found with tramadol were arrested. An example of a headline was *“FDA seizes large quantities of tramadol and other drugs”*²⁰.

A very interesting frame identified from the reports had to do with the fact that most of the tramadol found on the market came through unapproved routes as a result of porous border. The FDA is reported as specifying that, they were unable to track the final destinations of drugs that came through unapproved routes. Thus, porous borders have contributed to the flooding of the market with tramadol. Efforts to tighten security at the various borders were highlighted. This frame finds expression in one of the headlines which was captioned as *“Tramadol packaged as Indomie seized from smugglers in the Volta Region”*²¹.

Another narrative that was constructed to a lesser extent was that, tramadol users experimented with other addictive substances. This was evident in a few of the news reports as non-medical users of tramadol were reported to be taking codeine-containing cough syrups and other substances including petrol and turpentine.

Finally, tramadol use was also linked to crime and other violent acts, especially in news reports from the Ashanti and Brong Ahafo Regions^{22,23}. Some reported cases of vandalism and serious crimes such as armed robbery were believed to be carried out under the influence of tramadol abuse. It was portrayed in the news reports that tramadol produced euphoric feelings which gave abusers a sense of invincibility.

5. Conclusion

The report set out to ascertain how issues surrounding tramadol were reported in the media by means of a media analysis technique. It sought to address the issues by answering the following questions:

1. What styles and tone were adopted for the news reports on tramadol?
2. Which voices were represented in the media reports related to tramadol?
3. What are the characteristics of tramadol users?
 - a. *Who is using the drug?*
 - b. *What are they using it for?*
 - c. *Where do the users get the drug from?*
 - d. *What other drugs do tramadol users engage in?*
4. What frames and narratives were constructed in the news regarding tramadol?

The results show that, reporting on tramadol related news was done mostly with an informative tone, by adopting a general news style for a significant number of the reports. There is a paucity in terms of news that is critical and elucidating, since most of the reports lacked the necessary data to support the extent of abuse and impact of interventions, particularly from the agencies at the forefront of regulating tramadol use.

The findings also show a lack of balance in the leading voices speaking with regards to tramadol. Most of the pronouncements were made by the FDA without any voices subjecting those facts to evidence based scrutiny. Voices of experts (academics) were conspicuously missing while very little input came from civil society organizations.

It was also established from the analysis that, the profile of the users of the drug was mostly young people, with non-medical reasons, particularly sexual drive enhancement standing out as the reported reason for using the drugs. Drug peddlers were found to be the primary source of tramadol in particular, high dosage strength pills which are illegal. It also came to light that abusers of tramadol have also been noted to be using other substances, including codeine-containing cough syrups and psychoactive substances.

Finally, eight frames were identified as the anchors of the narratives in the media regarding tramadol reportage. They are as follows:

1. High dose tramadol proliferation is a public health concern
2. Tramadol abuse is common among young people
3. Tramadol abuse is deadly
4. Inter-agency and stakeholder collaboration is required to stop tramadol abuse
5. There is a crackdown on tramadol supplies by law enforcement agencies
6. Tramadol influx is mainly from unapproved routes
7. Tramadol users experiment with other substances
8. Tramadol abuse is linked to crime

These findings clearly provide a useful framework to better understand the issues that have been given prominence and those that appear to have been overlooked. These have implications for drug policy formulation and implementation.

[1] <https://www.graphic.com.gh/news/general-news/tramadol-fda-seizes-5-000-tablets-and-refers-21-shops-for-sanctions.html>

[2] <https://mynewsgh.com/high-incidence-of-tramadol-abuse-in-upper-west-region/>

[3] <https://www.graphic.com.gh/news/general-news/tramadol-abusers-resort-to-cough-mixtures.html>

[4] <https://www.graphic.com.gh/news/general-news/tramadol-abuse-occupyghana-demands-urgent-gov-t-action.html>

[5] <http://www.ghananewsagency.org/print/130488>

[6] <https://www.businessghana.com/site/news/general/163161/FDA-seizes-large-quantity-of-Tramadol-and-other-drugs>

[7] <https://www.todaygh.com/tramadol-silent-killer-fda-partners-pharmacy-council-fight-menace/>

- [8] <https://mynewsghana.net/pupils-tell-drug-authorities-why-they-use-tramadol/>
- [9] <https://africafeeds.com/2018/05/03/ghana-alarmed-by-tramadol-abuse-by-young-people/>
- [10] <http://www.ghananewsagency.org/health/abuse-of-tramadol-among-the-youth-worrying-fda-125111>
- [11] <http://qhheadlines.com/agency/citifm/20180514/78072265/fda-overwhelmed-by-the-use-of-tramadol-in-youth>
- [12] <http://www.ghananewsagency.org/print/131721> [Par. 2]
- [13] <http://citifmonline.com/2018/03/27/fda-intensifies-surveillance-to-curb-influx-abuse-of-tramadol/>
- [14] <http://ghananewsonline.com.gh/tramadol-abusers-resort-to-cough-mixtures/> [Par. 10]
- [15] <http://citifmonline.com/2017/12/02/abuse-of-tramadol-other-hard-substances-ruining-lives-in-uwesi/> [Par 10]
- [16] <http://businessdayghana.com/high-dose-tramadol-floods-market/>
- [17] <http://dailyguideafrica.com/ghanas-fight-against-tramadol-abuse/>
- [18] <https://allafrica.com/stories/201707040715.html>
- [19] <http://www.ghanaiantimes.com.gh/some-sekondi-residents-abuse-tramadol/>
- [20] <http://www.ghananewsagency.org/health/fda-seizes-large-quantity-of-tramadol-and-other-drugs-131270>
- [21] <https://www.primenewsghana.com/general-news/fda-seizes-tramadol-packaged-in-indomie-box-from-smugglers.html>
- [22] <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Tramadol-abuse-influencing-crime-Police-649575>
- [23] <https://ghanaguardian.com/tramadol-aiding-in-crime-actions-in-the-country-police>

Annexe 7. List of Acronyms

AMM	: Autorisation de Mise sur le Marché
ARV	: Anti-Rétro-Viraux
AU	: African Union
BBC	: British Broadcasting Cooperation
BMRA	: Medicines Regulation Authority
CAME	: Centrale d'Achat des Médicaments Essentiels
CENASHI	: Centre Nationale Hospitalier Universitaire
CFA	: Colonies Françaises d'Afrique/Communauté Financière Africaine (Union Economique et Monétaire Ouest-Africaine)/Coopération Financière en Afrique (Union Monétaire de l'Afrique Centrale ou Communauté Economique et Monétaire de l'Afrique Centrale)
CHD	: Centre Hospitalier Départemental
CND	: Commission of Narcotic Drugs
CNHU	: Centre National Hospitalier Universitaire
DPMED	: Direction de la Pharmacie, des Médicaments et des Explorations Diagnostiques
DRU	: Drug Registration Unit
ECDD	: Expert Committee on Drug Dependence
FDA	: Food and Drug Agency
HIV	: Human Immune Virus
HONLEA	: Heads of Narcotics Law Enforcement Agencies
HPLC	: High Pressure Liquid Chromatography
ISBA	: Institut des Sciences Biomédicales Appliquées
INCB	: International Narcotics Control Board
LNCQ	: Laboratoire National de Contrôle de Qualité

MS	: Ministère de la Santé
NACOB	: Narcotics Control Board
NAFDAC	: National Agency for Food and Drug Administration
NARD	: National Association of Medical Doctors
NDLEA	: National Drug Law Enforcement
NSAIDs	: Non-steroidal anti-inflammatory drugs
OCERTID	: Office Centrale de Répression du Trafic Illicite des Drogues et des précurseurs
OCS	: Organe de Contrôle des Stupéfiants
OMS	: Organisation Mondiale de la Santé
ONG	: Organisation Non Gouvernementale
PPMV	: Patent Proprietary Medicine vendors
SHARPA	: South African Health Products Regulatory Authority
UMCC	: Unité Mixte de Contrôle des Conteneurs
UNC	: United Nations
UNOCD	: United Nations Office on Drugs and Crime
WACD	: West Africa Commission on Drugs
WDR	: World Drug Report
WHO	: World Health Organisation

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 - 24 Interview with the PSG secretary Dennis Sena Awitty, Accra, 24 June, 2018
 - 25 Interview Abidjan, Directrice de la Police de Stupefiantes et des Drogues 28/09/2018
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