# A thriving informal drug market: The case of Roxy market in Abidjan, Ivory Coast

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# Abstract

In the last decade, the informal drug market (IDM) in sub-Saharan Africa has been growing exponentially, including in Ivory Coast. This growth of the informal market could be partly attributed to the failure by states in their duties of provision and regulation of medical drugs. In Ivory Coast, the informal market is an unofficial core part of the health system and provides for up to 70% of the national medicines supply. Given the risk associated and attributed to this informal drug market, it is important to understand factors leading to the growth of this market and the role of the government in regulating this market.

A case study qualitative design was chosen for this study. The main methods for data collection were semi-structured interviews and focus group discussions (FDGs). In addition, the study also relied on policy documents and informal observations. The study had three categories of study participants, purposively selected, to unravel this complex phenomenon: sellers of the drugs, buyers of the drugs and health experts with extensive pharmaceutical knowledge. Four semi-structured interviews were conducted, two drug sellers and two health experts. Two FGDs of four participants each were also conducted with buyers of the drugs. Roxy market a well-known informal drug market in Adjamé, a district in Abidjan, was purposively selected as the study site.

The study found out that the main reason for using the IDM are the following: it is cheaper, the pricing is flexible, the drugs are of good quality albeit this being heavily contested by health experts and that it is less regulated and therefore more flexible. The informal drug market was also favored for cultural, social and religious reasons and finally the market thrives because it is a source of employment and sustains many families. The study found out that there was a perceived failure by the government to execute its duties of provision and regulation in the drug market. The study findings were consistent with the AAAQ framework used in this study.

The study concludes that there many factors pull people to the informal drug market and these factors cannot be separated from the failure of the state in its roles making sure its citizens has access to drugs and that of regulation this market. In this regard the state needs to re-establish its role and potentially work towards formalizing this informal market taking more of a collaborative than confrontational approach as this market is thriving and growing.

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« *À vaincre sans péril, on triomphe sans gloire* »
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# List of Acronyms and abbreviations

**A.A.A.Q**: Acceptability, Accessibility, Availability, Quality

**C.E.S.C.R**: Committee on Economic, Social and Cultural Right

**COTRAMED:** National Committee to combat Illicit Traffic and Counterfeit Medicines

**D.I.H.R**: Danish Institute for Human Rights

**D.P.D.L**: Directorate of Pharmacies, Drugs and Laboratories in Ivory Coast

**FGD:** Focus Group Discussion

**GVT:** Government

**I.D.M**: Informal Drug Market

**NESRI:** National Economic & Social Rights Initiative

**N.I.S**: National Institute for Statistics in Ivory Coast

**U.N**: United Nation

# Chapter 1

# Introduction

## *Background*

This thesis is exploring the factors that lead people to buy drugs at the informal drug market in Ivory Coast and the role of the government in regulating this market. Over the past two decades, the phenomenon of Informal Drug Markets (IDM) has grown steadily around the world, particularly in low-income countries from sub-Saharan African countries and South Asia (Sudhinaraset, Ingram, Lofthouse, & Montagu, 2013). However, to get a better understanding of the magnitude of the informal drug market, it is important to understand its genesis.

Before the advent of the pharmaceutical drugs and in pre-colonial Africa, people used to heal themselves with traditional herbs. In Africa, pharmaceutical drugs were introduced and regulated by the settlers and missionaries and this introduction was largely between 1930 and 1960 (Baxerres, 2011). As pharmaceutical drugs were a new phenomenon in these countries, it was a common practice that populations in these contexts remain skeptical about using pharmaceutical drugs preferring traditional medicine. A practice that is still relevant to an extend even to this present day (Baxerres, 2011). However, contrary to traditional medicines, pharmaceutical drugs have the advantage of being immediately ready for use, and this advantage has greatly contributed to their rapid expansion and acceptance in the contemporary society (Van Der Geest & Reynolds Whyte, 2003).

This introduction and expansion of the use of pharmaceutical drugs in colonial states was also at the time when the World Health Organization offered its ground breaking definition on health, defining health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (W.H.O, 2017).

The fundamental idea being that every person should be able to enjoy a healthy environment which includes having appropriate healthcare facilities, goods and services. WHO goes further to assign countries with an obligation to ensure that appropriate conditions exists for the enjoyment of health for all people without discrimination (W.H.O, 2017). Access to medical drugs of the populations therefore becomes a fundamental obligation of the state.

Despite the issue of access to drugs being high on the agenda of the world's leading health institution and despite many countries being signatories to various UN conventions on the right to health which includes access to medication, many low- and middle-income countries still fail to provide adequate drugs to their population. This failure by states in their obligation force people to find alternatives. One obvious alternative for populations, especially the poor, is using the informal drug market (Bloom et al., 2011).

There are a number of reasons why the informal drug market is such an easy alternative to the formal drug market besides the failure of states in their obligation. The informal market have been argued to be economically attractive to users (Baxerres & Le Hesran, 2006), it is also argued that it fits the populations' needs socially and culturally (Baxerres, 2011). Instead of being viewed as a competition for the formal market, there are some arguments that the market actually complements the formal market and acts as an unofficial support mechanism to states in their mission to provide healthcare to people especially in remote and inaccessible areas (Goodman, Brieger, et al., 2007).

In this regard, the informal drug market is a core in the health system in many developing countries, although unofficially (Bloom et al., 2011). It has been advanced that the informal drug market has been exponentially growing as demand surge making it virtually impossible for authorities to keep up with the pace in terms of regulatory frameworks (Bloom, Champion, Lucas, Peters, & Standing, 2009).

According to United Nations, the sudden expansion of the informal drug market is driven by demand (U.N., 2018), this exponential growth of the informal drug market has also

unfortunately been associated with an increase in counterfeit drugs which provide a great risk to the population (Lavorgna, 2014). Ivory Coast is among these countries where this growth of the informal drug market is very noticeable.

## *Context and scope of the study*

Ivory Coast like several West African countries such as Benin, Burkina, Cameroon or Senegal has experienced unprecedented increase of the informal drug market since the turn of the century. The informal sale of drugs is so widespread in Ivory Coast and supply up to 70% of the population (U.N., 2018). In Abidjan, the economic capital city and more precisely the popular district of Adjamé there is a market called Roxy which is exclusively dedicated to the informal sale of drugs. This market is one of the biggest of its kind and known worldwide and the International Institute of Research Against Counterfeit Medicines (IIRACM) defines Roxy as the haven of fake medicine (Kadiri, 2017). Although arguably the drugs may pose a serious health risk, the demand for the drugs remains high. It is against this background that there is need to understand factors that lead people to use the Roxy market despite the risks it poses for the public and health promoting policies in this area.

## *Definitions of the Informal Drug Market*

Throughout this research, the term *informal drugs market (IDM)* is used on several occasions. According to Baxerres (2014, p.123) IDM, is defined as *"the practices of selling and buying medicines that take place outside the formal framework imposed by the state and the biomedical health system that prevails in a country. In concrete terms, these are drugs that are sold outside pharmacies, in markets, at street corners, from door to door, by actors who do not have official recognition"*. This will be my operational definition throughout this thesis when I refer to the informal drug market, IDM in short.

## *Thesis Outline*

This thesis is organized into seven chapters. The chapter one provides the general introduction of the IDM issue in Ivory Coast and also outlines the aim of the study. Chapter two presents the theoretical framework, which is the AAAQ framework and literature review. Chapter three is the methodology chapter, followed by chapters four and five where empirical findings of this study are presented. Chapter six is where the findings are discussed, and finally, chapter seven presents the conclusion to the study and recommendations of the study.

# Chapter 2

## Theoretical framework and literature review

### *Theoretical framework*

The AAAQ model (Availability, Accessibility, Acceptability and Quality) was used to frame this study in order to get a better understanding of the factors leading people to buy drugs on the informal drug market and the role of the government in regulating this market. Pioneers of this framework, the AAAQ model are Hunt & Mesquita (2006) and Yamin (Yamin, 2009). This framework was inspired by the general comment 14 on the right to health of the United Nations (UN) Committee on Economic, Social and Cultural Rights (C.E.S.C.R.) for the right to the highest attainable standard of health (CESCR, 2000). According to the right to health, every human being must have access to the highest attainable standard of physical and mental health (NESRI, 2015). The health care system is responsible for ensuring this right which must be universally accessible without any kind of discrimination.

In simple terms the framework states that: a) healthcare facilities, goods and services must be **a**vailable in adequate numbers throughout a state, b) healthcare facilities, goods and services must be **a**ccessible in four dimension: physically and geographically, economically, without any discrimination and the last dimension is accessibility of information, c) healthcare facilities, goods, and services must be culturally **a**cceptable and respectful of medical ethics, d) healthcare facilities, goods and services must be of good **q**uality, including scientifically and medically appropriate. The four dimensions of the AAAQ criteria are presented in **Figure 1**.

**Figure 1. The four AAAQ criteria**

Source : *www.humanrights.dk/sites/humanrights.dk/files/media/dokumenter/udgivelser/aaaq/aaaq-srhr_issue_paper_dihr_2017_english.pdf*

Since its conception, the framework has been used in many researches, in many different contexts demonstrating its applicability and that its usefulness as an analytical tool. For example, The Danish Institute for Human Rights (DIHR) used this framework to assess the right to water (Villumsen & Holst Jensen, 2014), Exworthy and colleagues (2012) used it to assert prisoners' right to health, Chimhutu (2011) used the framework to understand the maternal health services system in Tanzania and Walker (2014) framed the right to healthcare service for women and migrants in Saudi Arabia with this approach.

In the present study, I chose to use the AAAQ approach to frame the research and the findings. This approach was appropriate to assess the drugs and the services delivered at Roxy market in Abidjan. It helps to understand the factors encouraging people to buy drugs on the informal market. The framework also helps, to frame the government's role in all this, thus, understand why people prefer the informal channel rather than the formal channels in drugs procurement. Is the government doing enough both in providing services and regulatory frameworks with regards to medical drugs, are they available,

accessible, and acceptable to the people and are they of good quality in public health facilities?

## *Literature review*

The literature review for this research was done using the University of Bergen database through *Oria* and the University of Quebec À Montreal (UQAM) online library called *Virtuose*. Most of the articles used for this study are in English, however, since the research was conducted in Ivory Coast, a francophone country, I used relevant articles in French related to the topic that I could not find English versions. I also used policy documents and publications from the Ivorian government.

The searching process was essentially focused on the informal drug market in low-income countries with a specific focus on sub-Saharan Africa. To find articles on the topic, I also used different terms such as *informal drug market*, *the drugs black market, informal health provider.* Articles were selected according their relevance, quality and also preferably date of publication. More than 75% of the articles are peer-reviewed most of them were published after 2010.

### ***The informal drug market: A third world's issue***

The selling of drugs on the informal market, is a phenomenon mainly observed in low-income countries from Latin America, South Asia and sub-Saharan Africa (Sudhinaraset et al., 2013). This sector is considered informal because it does not follow the rules imposed by the health system regulated by the government (Baxerres & Le Hesran, 2011).

The informal sector represent a significant support to the formal health system (Sudhinaraset et al., 2013). As a matter of fact, researchers estimated that in Bangladesh 87% of the healthcare is provided by informal providers, including drug sellers (Ahmed, Hossain, & Chowdhury, 2009), while in India they represent between 51-55% of the health providers (De Costa, Al-Muniri, Diwan, & Eriksson, 2009). Same observations

were made in Uganda, where the informal providers represent 77% of healthcare providers (Konde-Lule et al., 2010). In Ivory Coast, where the present study was conducted, the formal pharmaceutical market provides only for 30% of the local population, meaning up to 70% relies on the informal drug market (Ferrand & Aloko-N'guessan, 2017).

This informal market, which provides drugs and services chiefly for people with low-income (Bloom et al., 2011), has enabled many poor people to access previously inaccessible or unavailable drugs and medical services. According to Hajjou and colleagues (2015), the most requested drugs in these areas are antimalarial and antibiotic. However, it is also possible to buy psychotropic drugs[1] such as Tramadol in the informal market without any prescription (Salm-Reifferscheidt, 2018).

The informal market has also contributed to the increase of self-medication and inappropriate consumption of drugs (Bennadi, 2013; Ocan et al., 2015). Additionally, the informal market has also increase the proliferation of substandard and counterfeit drugs (Bloom et al., 2011; Johnston & Holt, 2014).

### ***The IDM in sub-Saharan African countries***

Nowadays, the informal sale of drugs is an omnipresent phenomenon in sub-Saharan countries particularly in francophone countries (Apetoh, Tilly, Baxerres, & Le Hesran, 2018) and present many advantages as well as disadvantages. Baxerres and Le Hersan (2006) showed in their article that in Senegal, the informal drug market is contributing to help people from Niakhar, an area located 135 kilometers away from the capital, Dakar, to have access to drugs. In this area, there are some daily street vendors of drugs who acquire their stocks from the capital city and sell for local communities that would otherwise will not have accessed these drugs. This example shows how the IDM was significantly contributing to the health of populations in remote areas.

[1] According to the WHO, Psychotropic drugs refer to drugs that can affect behaviors, emotions or the mind.

The informal market also help to provide home treatment to people who are too sick to go to the hospital, for instance, in Cotonou, Benin there are some drug sellers who come at home to sell their products (Apetoh et al., 2018). In this case, the IDM is convenient for local communities in many various circumstances, especially where formal channels are inaccessible either financially or geographically. Thus, the IDM is greatly contributing to people's healthcare in remove areas and help those who are not able to go the drugstores to buy the drugs for themselves (Goodman, Kachur, Abdulla, Bloland, & Mills, 2007; Salako et al., 2001). However, it must be noted that accessibility in terms of geographical distance is not the only factor contributing to the thriving of IDM, although important. According to Sudhinaraset et al. (2013) factors such as affordability and convenience also plays a major role in why the informal market thrives especially among low-income earners.

That said, the informal sale of drugs has some negative effects. First of all, the knowledge and the perception of drugs among sellers and the consumers is not the always appropriate. A study conducted in Lao (Syhakhang, Freudenthal, Tomson, & Wahlström, 2004) showed that in the informal market the sellers and the consumers do not have adequate knowledge and awareness about drugs' quality. This lack of knowledge and awareness has led to another issue which is the popularization of self-medication which can be a good alternative, if quality knowledge is available, but can also lead to unwanted side-effects such as getting another disease, develop resistance to certain drugs or addiction (Chipwaza et al., 2014; Salm-Reifferscheidt, 2018).

In their article, Boko at al. (2017) promotes the benefits of the informal market emphasizing on it made a contraceptive drug, *Misoprostol* accessible to women and girls in contexts where abortion is either illegal or stigmatized. The authors argue that this drug has significantly contributed to the reduction of maternal mortality and unwanted pregnancies enabling women to have more control over their bodies and live longer in the process. A study conducted in Haiti showed that women who receive hospital assisted deliveries and those seeking postpartum care commonly acquire their medication from

the informal market and not formal market despite that the main healthcare service are rendered at a health facility (Jules et al., 2010).

Another danger associated with the IDM is the possibility to get drugs without prescription. An article from Salm-Reifferscheidt (2018) states that the informal market is harmful for many. Through a study conducted in Lomé, Togo, it is showed that *Tramadol*, an analgesic which supposed to be available only with a prescription, can be easily bought from street vendors without prescription (Salm-Reifferscheidt, 2018).

Moreover, not all of drugs sold in the informal market respect the international standards, as a matter of fact, a study conducted in Cameroon comparing ibuprofen tablets brands sold in the formal and those sold in the informal sectors showed that the ones sold on the informal sectors did not adhere to the international standards, comprising less active ingredients and are therefore less effective than the ones sold on the formal market (Nga, Guetchueng, Manga, Sidjui, & Mpondo, 2016). Another study conducted in South-Africa showed similar result stating that substandard drugs, and degraded drugs are sold on the market which place the patients' health at risk (Lehmann, Katerere, & Dressman, 2018).

The establishment of informal drug markets has led to the proliferation of drugs whose origins are untraceable and unknown (Baxerres & Le Hesran, 2011). These drugs are sold in the market without having been tested beforehand, thus the quality and effectiveness of these drugs cannot be confirmed and is in question (Baxerres, 2014).

While there are a number of articles with a focus on the informal drug market in low income context countries in general, there are very few qualitative articles that take into account the narratives of buyers, sellers and experts on why this market is thriving. To establish this, it is important to know the reasons why buyers prefer the informal market, this can significantly help governments in many different contexts trying to combat the IDM or incorporate it. In this regard, this research helps to plug this gap and contribute to this important public health debate on IDM in Ivory Coast and possibly beyond. It is with this in mind that the study aim is presented and defined.

## *Aim of the Study*

Given the above context, my motivation for doing this research was guided by the purpose of exploring the informal drug market in Abidjan. My main objective is: **to explore factors that encourage people to buy drugs on the informal market and the role of the government in regulating this market.** The specific objectives of the research are:

- To explore the main factors that encourages people to buy drugs in the informal market of Roxy.
- To explore the experiences of sellers and buyers from Roxy.
- To explore what are the means put in place by the government to address the informal sell of drugs.

# Chapter 3

# Methodology

## *Research Design*

This research was carried out using a qualitative case study design. The qualitative case study is defined as a research method in which the researcher studies social phenomena by thoroughly investigating an individual case (Punch, 2014). This approach gives to the researcher the opportunity to explore in-depth the complexity and the uniqueness of phenomena in their context (Baxter & Jack, 2008; Flyvbjerg, 2011; Thomas, 2011). Case study research implies to investigate the case as a bounded system (J. Creswell, 2007) hence, the findings are rooted in time or space and are not expected to be generalized but might be transferable into other contexts (Green & Thorogood, 2004).

In this particular case, I used Roxy, a well-known informal drug market in Abidjan as a site to investigate this phenomenon common is Ivory Coast and many low-income countries. In this regard, findings from this study at Roxy are not necessarily generalized but might be transferrable into other contexts. Roxy offers the opportunity to study the IDM, a complex phenomenon in- depth in a bounded manner. According to Yin (2002), a case study design is suitable when the researcher seeks to understand the "how" or "why" of a contemporary set of event while keeping in mind that it is occurring in a bounded system (R. K. Yin, 2002). The aim of this study was to understand the factors leading people to buy drugs on the informal market instead of going to official pharmacies using *Roxy* market as a case. In this regard, a case study design was suitable in understanding this complex phenomenon occurring in its natural form at this popular informal drug market, Roxy.

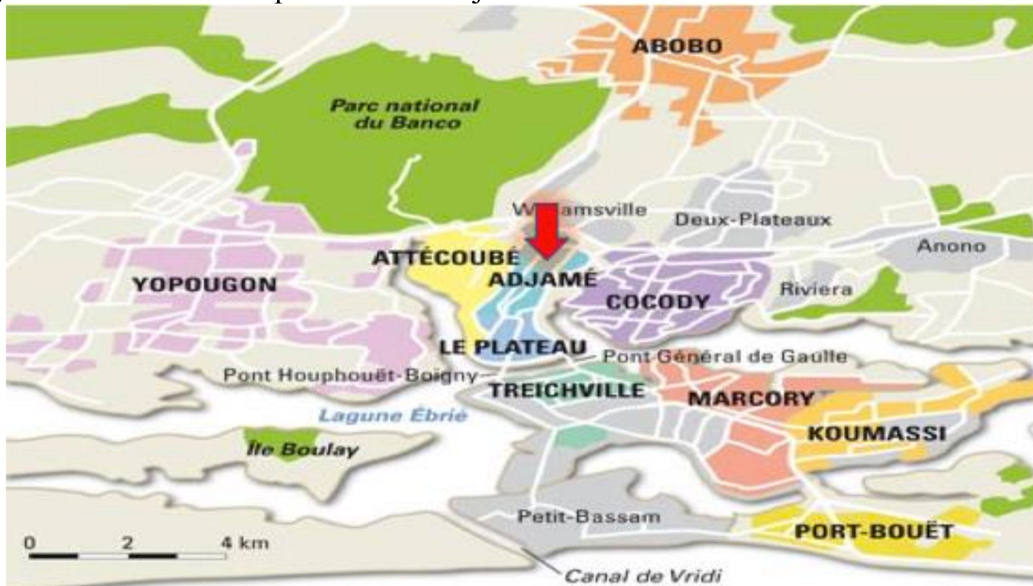
## *Study Area*

My research took place at *Roxy Market* located in Adjamé, Abidjan (**Figure 2**). Abidjan according to the latest census data available, has slightly over 5 million inhabitants and is

the economic capital of Ivory Coast (N.I.S., 2018). It is also one of the main metropolises in West Africa. According to a World Bank report, Ivory Coast, just like its capital, is experiencing sharp economic growth and in 2017, the estimated gross domestic product (GDP) growth was between 7 to 7.5% and this makes Abidjan one of the fastest growing cities in Africa, and the economic hub of the country. However, Abidjan is also known for having one of the biggest informal drug market in West Africa which is in Adjamé (Baxerres, 2011). With an area of 12.10 km$^2$, Adjamé is one of the smallest municipality of the capital, yet Adjamé is one of the busiest places in the country.

According to the National Institute for Statistics of Ivory Coast (N.I.S), more than half of the commercial goods destined to Abidjan transit through Adjamé, which makes this municipality an important economic place for the country. Adjamé is the main commercial hub in Ivory Coast with its big market called *Adjamé Market*. Furthermore, Adjamé has the largest bus station in the country with buses serving other local cities of the country but also the neighboring countries such as Benin, Burkina Faso, Ghana, among others.

**Figure 2.** The 10 municipalities of Abidjan




***Source :*** *http://abidjanais.mondoblog.org/quelle-commune-dabidjan-etes-vous*

The *Roxy* market (**Figure 3 & 4**) is in the *Adjamé Market*. This market is exclusively dedicated to the informal sell of drugs. The market has a large range of drugs (**Figure 3 & appendix 6**) and many drug sellers. Although there are other areas near Adjamé where drugs are sold on the streets, *Roxy Market* by far remain the biggest and busiest in this regard and is known as the main supply point.

As this study was aimed to investigate the reasons leading people to buy drugs from the informal market, Roxy market as the main focal point for this activity in Abidjan, was purposively selected. Roxy market, being the busiest informal drug market in Ivory Coast, made it ideal for accessing both users of these drugs and sellers and also to observe activities at this informal drug market.

**Figure 3.** Woman selling drugs at *Roxy market*

**Figure 4.** Drug stand in *Roxy Market*

## *Selection of study site and recruitment of study participants*

The study relied on purposive sampling for the selection of both the research site and research participants. According to Maxwell (1997, p. 87) purposive sampling is a strategy in which "*particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices"*. In this regard, I choose purposive sampling to select research participants and site with a specific purpose of answering the study questions (Barbour, 2001; J. W. Creswell, 2014; Teddlie & Yu, 2007).

Roxy market was selected as the main hub of the informal drug market in Abidjan as stated above. When it comes to research participants, three groups of participants were selected for their in-depth knowledge of and experiences with the study phenomenon. The three groups of participants that were targeted include drug sellers, drug buyers and experts with knowledge on the pharmaceutical industry, the informal drug market and the role of government in this industry. One of the experts works in a top position for a British pharmaceutical company in Ivory Coast while the other works for the Directorate of Pharmacies, Drugs and Laboratories (D.P.D.L) in Ivory Coast, making these experts knowledgeable on the subject matter of this study and hence suitable. In this study, these experts are referred to as health experts.

These three groups of participants provided different and sometimes similar views, perspectives and experiences on the study phenomenon. This triangulation of data sources is important in ensuring that the study is information rich and hence enhancing the quality and credibility of the study (Denzin, 1970). For example, in this study, sellers' views could be overwhelmingly positive about the informal drug market, as such using their views only in the study may reduce the credibility of the study findings.

To access the drug buyers and sellers, snowball sampling technique was used. This technique consist of selecting and recruiting new participants based on recommendations from potential or other participant who have similar characteristics and knowledge on

the study phenomenon  (Skovdal & Cornish, 2015). Using snow ball technique is very useful in topics that could be perceived sensitive, for example the subject of this present study. The informal drug market in unregulated and therefore illegal in Ivory Coast, as such recruiting the buyers was challenging but the snow ball technique was helpful in this regard. Buyers too were recruited through networks of other participants, that is, through snow balling.

Doing a research on a very sensitive issue such as this can be a difficult task for the researcher, especially  if participants involved are reluctant to provide any information and therefore will not trust the researcher (Dickson-Swift, James, Kippen, & Liamputtong, 2007). In this study this was solved by building rapport to gain research participants' trust (Kaiser, 2009) by using tools such as snow ball technique. After gaining access to research participants, the following section will elaborate on the methods that were used to gather this rich data from these participants.

## *Methods of data collection*

To gather data for this research, multiple methods were used, namely semi-structured interviews and FGDs, secondary data such as policy documents as well as informal observations and conversations during my fieldwork period. This triangulation of methods to collect data allow the researcher to gain more information than he would have gained if only one method was used (Denzin, 1970). Relying on a single method would provide only potentially one perspective  on the study phenomenon (Hammersley & Atkinson, 1983). For example, using interviews only may not provide a group milieu that may be important when individuals do not want to personalize their experiences; hence in that case focus group discussions could provide such a platform.  Another advantage is that methods combination increase the study's credibility (Patton, 1999).

### ***Semi-structured Interviews***

Four semi-structured interviews were conducted, two with drug sellers and two with health experts, see table 1 below. All interviews were conducted in French, the official

language in Ivory Coast. Semi-structured interview is a one-to-one conversation between the researcher and an informant where the researcher set the agenda of topic to be covered (Green & Thorogood, 2004). Based on a pre-established interview guide (see **Appendix 1**), semi-structured interviews give the respondents flexibility in their answers while following the interview guide. Semi-structured interview is a great tool for probing individual experiences in detail (Skovdal & Cornish, 2015).

In this study, semi-structured interviews were the appropriate method to get access to the information from the sellers at the informal market to better understand their perception about and experiences with their activity. Questions that were asked are around these thematic areas: perception of the risks linked to the Roxy market, the role of the government toward this market and their experiences and perception with the IDM.

Pursuing these thematic areas, enabled me understand their perceptions, motivations and reasons for engaging in this activity of selling drugs on the informal market, something that can be perceived by outsiders as high risk. Health experts also participated in semi-structured interviews and an interview guide was used (**Appendix 2**) exploring the following thematic areas: the role of the government in drug regulation, the state of the pharmaceutical industry in Ivory Coast and their perceptions and experiences on the informal drug market. Valuable information was acquired from these four semi-structured interviews and informs the findings of this study.

**Table1:** Interviewed informants

| Name | Age | Sex | Occupation |
|---|---|---|---|
| **Assia** | 39 | Female | Drug seller at Roxy |
| **Fatou** | 27 | Female | Drug seller at Roxy |
| **Julien** | 44 | Male | Health expert |
| **Raymond** | 37 | Male | Health expert |

***FGDs***

Two focus group discussions were conducted with buyers, the two groups had four participants each all of which were buyers and males except one seller who participated (also a consumer of drugs from the informal market) and female (see table 2, below). The FGD were conducted in French, the official language in Ivory Coast. It was particularly challenging to recruit female participants, partly due to the nature of the topic and partly because through snow balling, it happens only male participants were willing.

FGD is a data collection method where a group of participants have a conversation amongst themselves as the researcher gathers information (Krueger & Casey, 2009). It is having a group of participants – selected on research needs criteria – brought together to discuss an issue (Green & Thorogood, 2004) and in this particular study, the discussion was around the informal drug market. A topic guide was used exploring the following thematic areas: the benefits of using Roxy market or the perception of the risks linked to the use of the drugs from Roxy.

Using FGDs is a suitable method to gather information from people who more or less share the same point of view, as Skovdal and Cornish said, "focus groups are a good way of getting a more collective view of what people assume to be the norm" (2015, p. 61).
The group provided participants with a setting where they can speak without being embarrassed or the fear of being judged by the researcher. Moreover, listening to others' stories and experiences can make the participant feel a sense of belonging to the group. For example, during the discussions it was common to hear my participants using pronouns such as "we" or "us" and not "I" or "me" when narrating their experiences. It was rewarding to see this sense of belonging emerging from the group. Additionally it was also common to see participants seeking peers' approval during the course of the discussions.

**Table 2**: FGD participants

| Name | Age | Sex | Occupation | Participated in |
|---|---|---|---|---|
| **Abdul-Razak** | 34 | Male | Unemployed | 1st FGD |
| **Paul** | 31 | Male | Taxi Driver | 1st FGD |
| **Serge** | 29 | Male | Car mechanic | 1st FGD |
| **Sidiki** | 33 | Male | Sim card seller | 1st FGD |
| **Aminata** | 40 | Female | Drug seller (in Cocody | 2nd FGD |
| **Edmond** | 41 | Male | Security guard | 2nd FGD |
| **Joel** | 38 | Male | Sidewal couturier | 2nd FGD |
| **Stéphane** | 27 | Male | Unemployed | 2nd FGD |

### ***Informal observations and conversations***

During the course of the fieldwork, valuable observations were made that were useful in data triangulation. In the findings chapters, there are instances I am using these observations as a form of triangulation. Although it was not a primary method, researchers by being on the research site observe and experience many issues related to the study phenomenon that can be useful for the study. Additionally, during the fieldwork, I also engage in many informal conversations on the informal drug market either with my participants or people outside of my sample, however, these conversations could have had some significance in the way the data collected was analyzed and interpreted.

### ***Secondary data- documents***

Secondary data, especially policy documents were important sources of information for this study. During my interviews with health experts, was made aware of many policy documents, white papers or legislative agendas around the study phenomenon. At times, I was given access to these documents. Although this was not a primary method for this study, the documents accessed were provided important information for this study. The second empirical chapter of this study refers to some of these documents.

## *Data management and analysis*

All the interviews and focus group discussions were voice-recorded, after permission was sought from the participants. After the data collection process, that is conducting interviews and FGDs, the data collected was transferred from the recording device to a personal computer only accessible by myself and protected by a password. The data collected was transcribed in French and then translated in English and then the analysis began. I have linguistic abilities both in French and English and this ability helped greatly in this process.

Data analysis is a process whereby the researcher go through all the data collected (Skovdal & Cornish, 2015). To achieve this task a Computer Assisted Qualitative Data Analysis Software (CAQDAS) named *Nvivo 12,* a product of QSR International was used (Nvivo, 2018) The advantage of using CAQDAS is that it helps the researcher to retrieve data and code them more easily, however it has to be emphasized that CAQDAS can never replace the researcher's analysis and interpretation (Green & Thorogood, 2004). Thematic analysis was used for this research as a mode of analysis (Braun & Clarke, 2012). The transcripts were subjected to a thorough review before the coding exercise began. According to Saldaña (2015, p. 3) a code "is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocating attribute for a portion of language based or visual data". Meaning units at manifest level were identified and coded and from these sub-themes and themes were identified. The results were presented as informed by the categories, sub-themes and themes that emerged during the analysis period (Braun & Clarke, 2012). An example of some of the codes, categories and themes are annexed as **appendix 3**.

## *Trustworthiness of the research*

In qualitative researches there is a debate when it comes to the choice of concepts related to the trustworthiness of the research (Yilmaz, 2013). While some qualitative researchers prefer the use of terms from the quantitative jargon such as generalizability, reliability and validity (Graneheim & Lundman, 2004), the terms credibility, dependability,

transferability and confirmability are preferred to describe trustworthiness in qualitative research (Lincoln & Guba, 1985).

Ensuring trustworthiness of this current research is important because since it is a sensitive but topical issue, I have to be transparent in describing the processes that led to the findings and conclusion of this study. The aim for this is to increase the trustworthiness of this research. Although ultimately it is the reader who decides on the quality of a particular study, the researcher has a duty to make sure that the processes itself is trustworthy, credible and transparent (Malterud, 2001; Tracy, 2010)

### ***Credibility***

In qualitative researches, credibility is the main benchmark to assess the trustworthiness of the research, that is why the researcher must show thoroughness in the presentation of the different steps of the research process (Golafshani, 2003). In this research, I explained the research process, how data was acquired, where was it acquired from, who provided the data, what were some challenges encountered in the process. For example, FGDs were male dominated, with only one female participant. This gender dimension may have had an effect on the findings, females being the ones doing most of the reproductive duties, including caring for the sick (Folbre, 2004) maybe they have different experiences to the access of drugs and formal care.

However, one female who participated was quite vocal and expressive and still did not seem to provide very divergent views as the other participants. Additionally, I also chose to combine different type of participants and different method of data collection because as Patton (1999) among many maintained, it increases the research's credibility.

### ***Dependability***

This concept is also important in the process of ensuring trustworthiness of qualitative studies. It refers to the consistency and the replicability of the research's process over time (Yilmaz, 2013). In this research, the methods chosen for data collection and data analysis were both in consistency with other qualitative studies and these methods,

interviews (Kvale, 2009) and FGDs (Krueger & Casey, 2009), have proved to be dependable in qualitative research.

### ***Transferability***

Transferability, which refers to generalizability in quantitative research, (Lincoln & Guba, 1985) refers to the possibility of generalizing to an extent the findings to a different group or settings (Polit & Hungler, 1999). The IDM issue is a common phenomenon in low-income countries, especially in sub-Saharan African and South Asian countries (Goodman, Brieger, et al., 2007). Many studies on the IDM issue have been conducted in countries such as Benin (Baxerres & Le Hesran, 2011), Senegal (Baxerres & Le Hesran, 2006), Tanzania (Goodman, Kachur, et al., 2007) or Bangladesh (Ahmed et al., 2009), where conditions relating to the study phenomenon seem similar. In this regard, my findings do not substantially divert from other findings from similar contexts.

This then means the current findings are also transferrable to an extent to countries with similar contexts, that is, the low-income sub Saharan African context. However, it has to be emphasised that it is up to the reader to judge the transferability of any qualitative study to other contexts, all the researcher can do is to make sure the study is as trustworthy as possible (Malterud, 2001).

### ***Confirmability***

According to Yilmaz, "the study enjoys *confirmability* when its findings are based on the analysis of the collected data and examined via an auditing process" (Yilmaz, 2013, p. 320). As the researcher and a student, I worked within a team, being in constant touch with my academic supervisor, who was privy to all the research process and had access to primary data materials contributes to the trustworthiness of this study. This constant engagement within the research team ensured a credible and confirmable research process.

## *Role of the researcher*

As a researcher, it is quite difficult to completely detach myself from the research. As Cornish and Skovdal (2015, p. 94) said *"it is not possible, or desirable, to iron out the influence of the researcher on the data, but it is possible to reflect upon it, and then make efforts to diversify the data if necessary"*, thus, is to remain as neutral as possible. A researcher must therefore be in a constant mode of reflexivity as encouraged by many scholars (Finlay, 2002) reflexivity entails be conscious of yourself and that you are a possible tool in the research process. Having an Ivorian background, I am concerned about this issue because people are dying, directly or indirectly, due to this IDM. On the other side of the coin, people lack employment and the informal market, in general employs many people.

Additionally, governments in sub Saharan Africa including the Ivorian government have in general neglected the public health sector and many often times prioritizing security and defense ministries at the expense of health, education and welfare ministries. Given this conducting such a study can be emotive. However, throughout this study, I tried to be reflexive as much as possible and constantly reminding myself of my role as a researcher. For instance, when conducting interviews, I did not have to show my emotions, preferences, judgement or inclinations on the topic, although this is difficult in qualitative research as the researcher is seen as a tool in the research process (Malterud, 2001).

## *Epistemological reflections*

The epistemological roots of this study are in the constructionism paradigm. A reflection of how knowledge is created is important at this stage, as reality is not some objectifiable truth waiting to be discovered out there, through a positivist scientific inquiry (Astley, 1985). Reality is socially constructed (Searle & Freeman, 1995) so in this present study, I had to work closely with my research participants in the process of creating this knowledge. Constructionist paradigm is also very suitable for a case study design as encouraged by leading scholars on case studies (Merriam, 1998; Stake, 1995; R.K. Yin,

2009). This paradigm is fitting for this design as a case study relies on knowledge from a specific context bounded by time or space (Flyvbjerg, 2011). Therefore, this current study has to be understood and interpreted within the constructionist paradigm where the participants and researcher actively collaborated to create knowledge.

## *Ethical consideration*

Ethical clearance for this research was approved by the Norwegian Centre for Research Data (NSD) which is in the **appendix 4**. Before collecting data in Abidjan, I got a verbal approval from the Directorate for Pharmacies, Drugs and Laboratory (D.P.D.L), which was accessed by my academic supervisor. In addition to formal research clearance, this study observed ethical principles of informed consent, confidentiality and anonymity (Davies, 1999; Wax, 1980). All participants and informants in this study gave their consent to participate in the study, this was after I had explained the research objectives of the study. Consent was given either in written form or verbally. A consent form was designed (see **appendix 5**).

In qualitative research, protecting the study participants' privacy must be the researcher's priority (Kaiser, 2009), it is a core tenet of research ethics (Morse & Coulehan, 2015). As researcher, I was privileged to get valuable and rich data from participants. Additionally, I also observed them in their natural environment. It was my responsibility therefore that I ensure confidentiality and anonymity. All names in this study are pseudo-names so that my informants cannot be identified by their names in their environments.

# Chapter 4

## Roxy the thriving informal drug market: reasons why it thrives

This chapter presents Roxy, the informal drug market as a thriving market. It puts forward the reasons why this market is thriving amid the perceived illegality of such informal drug markets. The chapter will present accounts from informants and participants, the buyers (users), sellers and health experts. The accounts from the buyers are largely collaborated and complemented with the sellers' accounts, that is, the buyers and sellers share similar reasons why Roxy is a popular choice for buying drugs. These accounts from buyers and sellers and perceived benefits of the informal market are largely contested by the health experts who were interviewed.

The main reason for using the IDM are that: it is cheaper, the pricing is flexible, the drugs are of good quality albeit this is heavily contested by health experts, it is used in favor of the formal market which is heavily regulated, it is used for cultural, social and religious reasons or beliefs and finally the market thrives because it is a source of employment and sustains many families.

### ***Cheaper and convenient***

Throughout the FGDs, the buyers overwhelmingly expressed their favor towards buying drugs from the IDM. One of the main reasons for this was that buyers saw this market as a cheaper alternative to the formal market. It is this affordability that attracted the buyers to the IDM as one of the buyers Stéphane explained:

> *"It's undeniable, the drugs at Roxy are cheaper. For people like me, who do not have a stable source of income, we cannot afford to buy drugs at the pharmacy, it makes sense to buy drugs at Roxy, the cheaper option.*"

Joël another FGD participant agreed with Stephane on the affordability of drugs at the informal market but also went further by noting that the informal market is far more convenient use than the formal market, especially through a health insurance:

> *"My wife and I subscribed to a health insurance I have glaucoma in my left eye so I have to buy drugs for my eye every month and this medication is very expensive. We had to pay 18,000 CFA[2] francs each, every month for a year and the insurance was also covering the drugs. I used to buy drugs at the pharmacy with my money and wait about one month before the insurance pays me back 25% of the price. One day I found the drugs I use for my treatment at Roxy and from that day I stopped paying for the insurance because even though I pay a little more than with the insurance, it is still cheaper at Roxy than at the pharmacy and more importantly I don't have to wait to get my money back from the insurance."*

Sidiki also added to this discussion by noting that it is the convenience at the informal market that makes it attractive and a cheaper option. He especially emphasised the fact that at the informal market you can buy exactly the quantities you want while in pharmacies you may have to buy the drugs in packages:

> *"Last time, my aunt went to the hospital and the doctor prescribed her tablets to take in the morning and in the evening. She had to take those tablets during 4 days to get better. In pharmacies, a pack of 24 of these tablets is sold for more than 7,000 Franc CFA[3]. I went to Roxy and bought 12 of these tablets at 4,000 Franc CFA[4]. As you can see, at Roxy you can buy the actual units you want whereas in pharmacy you are forced a full pack even if you don't want to use it all. Due to this I paid almost half of the price offered in pharmacies. I do not understand why I should pay more to get exactly the same product."*

The fact that the informal market allows for the selling of drugs is smaller quantities and units, while the formal market sells fully packaged drugs can be very convenience for those of less income. However, this perception that drugs are cheaper on the informal market was queried and contested by Raymond, one of the health experts I interviewed:

> *"The argument most often mentioned by the buyers is the price. People think that buying drugs at Roxy is cheaper. Yet this is not necessarily true. For example, on the black market, the tablet cac-1000 is sold retail at a price of 200 or 250 francs while in pharmacy, the box of 10 tablet costs 1,800 francs if I have good memory. Thus, anyone who does not know this or cannot afford to buy the full box, will buy it at retail but when you cumulate you realize that they spend more on buying on the black market. I would say, twice as expensive because the conservation of the drug on the black market is not*

[2] The CFA franc is the currency used in Côte d'Ivoire and in several west African countries such as Senegal, Cameroon or Benin. 18,000 CFA franc ≈ **265 NOK**

[3] 7,000 CFA franc ≈ **103 NOK**

[4] 4,000 CFA franc ≈ **59 NOK**

> *optimal which causes a loss in term of quality, that is why I am saying it is going to be expensive. It will be expensive for the consumer's health because the storage is bad and the purchase price is a bit more expensive."*

While Raymond's argument on pricing can be sustained it must be noted however that it is the convenience and flexibility that make the IDM easily accessible, for example the fact that at the IDM customers can buy medication in units and not packages only, make it seemingly cheaper for customers. It is this flexibility that is not available in the formal market where you may be required to buy tablets in packages when you may just need to use 2 units.

It is clear that many buyers prefer the IDM for its convenience even if the issue of affordability can be contested considering total cost of units bought, the issue of convenience is a main driver for the use of the IDM. Raymond confirmed this issue of convenience:

> *"Some people choose the easy way. They tell themselves that at the pharmacy there is a lot of hassle with the prescriptions, or the insurances that do not pay right away. In this regard when they can get the drug at the price on the black market they go for it, in addition they also can negotiate pricing on the black market".*

### ***Pricing and terms of payment are flexible on the informal market***

Raymond in the citation above raised an important point of negotiating for prices at the IDM something which bolsters the convenience of this market over the formal market. Stéphane, a participant in FGD even went further to say that at the IDM they can negotiate for pricing, get discounts or even at times get credit facilities to pay later:

> *"Pharmacies are complicated* (in terms of prescriptions and rigid pricing). *For instance, when I go to Roxy, I always go to the same market stall, I have a favorite seller. I have been going there for years now. Since I always go there, now we know each other well and we have even become friends. I always go to her booth because sometimes she gives me discounts when I negotiate with her. Sometimes she even gives me drugs on credit, and I can pay later when I earn money. I am also a vendor like her, so we understand each other and we help each other."*

Having payment facilities is a substantial advantage for the sellers from the IDM. The formal drugstores do not offer this kind of service.

### ***The contested subject of quality of drugs from the informal market***

The issue of quality of the drugs from the informal market was highly contested. Buyers and sellers were adamant that drugs from the IDM are of good quality while the health experts contested this and were keen to emphasize that many of the drugs sold on the IDM do not meet formal guidelines, for example, procurement procedures, market authorization, preservation and storage requirements among many guidelines necessary for quality control. Due to this, it is extremely difficult to ascertain the quality of such drugs, as Julien, one of the interviewed health expert puts it:

> *"I say it loud and clear, products from the Roxy market are not good in terms of quality. In order to dispense a drug to a patient, first of all, certain criteria must be respected in terms of the preservation of the drug, whereas in the Roxy market, the drugs are exposed to the sun, to dust, to rain, and to extreme temperatures. Moreover, these drugs are not recognized by Ivory Coast laws and guidelines and should not be marketed in the territory. All medicines sold in Ivory Coast must obtain a marketing authorization to be sold, which is not the case for many medicinal products of the informal market."*

Regardless, the perception that drugs from the informal market are of good quality was also one of the contributory factors why users buy drugs from this informal market. Serge, a user of these drugs had this to say:

> *"Even if I don't know where these drugs from Roxy come from or how they are procured, I do not doubt their quality. I have always get value for money from these drugs and they really treat the ailments they are after. I do trust the quality of these drugs"*

Another participant Abdul, interjected into the discussion stating that most of the drugs sold at Roxy where the same drugs sold in the pharmacies and as such of similar quality:

*"The drugs sold at Roxy are same as most of the drugs sold in pharmacies. However, I must admit that some of the drugs sold at Roxy come from China, my experience is that Chinese products, in term of ointment and stuff, are of very good quality"*

During my fieldwork, I also observed what Abdul said. In Roxy, I saw the box of 16 tablet of Doliprane 1000mg and this drug is also sold in pharmacies in Abidjan. From the 12 boxes that I checked, only one was expired and most of them were expiring in about a

year from the time of the fieldwork. Abdul in the above citation raised an important issue on the origins of the drugs sold at Roxy. Health experts interviewed also hammered on this issue as to why the quality of the dugs at Roxy has to be questioned. According to Raymond the origin and the composition these drugs sold on the IDM remain largely unknown and as such expose the users to a great risk:

> *“These drugs have never been tested by professionals and end up on the market and in people's homes. There is no traceability of these drugs, the concentration is not known. The dosage is not known. All we know is that these drugs are by no means good for citizens”*

Additionally, Raymond noted that the lack of traceability of the drug widens the possibility that uncertified drugs can be sold in this market, in that regard, IDM is prone to counterfeit drugs and drugs without any active component.

> *“In Abidjan, like in many other big cities of the country, there are black markets for drug. These are places where we find smuggled drugs, I'm talking about counterfeit drugs."*

The sellers at the informal market were also adamant that their products are of good quality and not harmful in any way. They truly believed in the efficacy and efficiency of their products to the extent that they also consumed the same drugs when sick. Fatou, a seller had this to say:

> *“Of course, I do use the drugs I sell if I am sick, if I don’t use them then people would say I'm a witch. How can you sell something you do not trust? There is no risk to use them”*

Additionally, Fatou went further to say emphasize that while they did sell their drugs informally this was to be differentiated from illegal activities. She maintained in her career as a drug seller, she had not received any complain that her drugs were harmful:

> *“The drugs that I am selling are not dangerous for the consumer. I have never received any complaint yet and nobody died because of the products I am selling. I'm not doing anything wrong, I'm not a drug dealer.”*

Closely related to the issue of quality of the drugs was also the quality of knowledge these sellers have on their products. Knowledge or lack of it is contributory to the issue of

quality of service offered to users and to whether they sell right drugs to right ailments. According to Julien, a health expert, the drug sellers on the informal market lacked the required training and knowledge to sell drugs, especially prescription drugs:

> *"A pharmacist is entitled to make prescription drugs because he has done extensive studies to acquire a great knowledge of drugs, which is not the case when you go to Roxy, where Aïssata or Fatoumata* (pseudo seller names) *who sell drugs in their market stalls are not necessarily able to prescribe the right medication for your need because they don't have the knowledge, neither do they even read or write."*

While the fact that sellers lack knowledge was contested as this section will demonstrate, the issue of illiteracy, that is, in formal education was collaborated by sellers. Fatou, a seller had this to say:

> *"I did not get the chance to go to school so all I learned was thanks to my mom and my experience that I accumulated over time. Now, I know what medicine to give against malaria, cough, kidney pain, etc."*

During our interview, she mentioned a drug called "two colors" and when I ask more details about this drug she revealed to me that:

> *"Well, I do not know the real name, but at the market here we call it two-colors. It is because there is one side that is red and the other side is white that we call it like that."*

The lack of formal education was also observable among the consumers given that three out the eight buyers who took part in this study mentioned that they did not get the chance to go to school while two said they stop after elementary school. However, it was noted that regardless of formal qualifications and knowledge of the drugs, most sellers gained their knowledge through some form of apprenticeship, which mainly is family based. As a matter of fact, both Assia and Fatou mentioned that they started to sell drugs at a very young age so they gained training and knowledge through family apprenticeship. Therefore, the lack of formal knowledge was neither a deterrent for them to participate in the informal drug market nor a demonstration that they lacked appropriate knowledge on their products. This is what Assia had to say:

> *"I started when I was very young. I cannot remember exactly how old I was at that time but I recall that I used to recognize the right amount thanks to the color of the bills and the coins' size and I did not know what I was selling then. Now I know all the drugs I'm selling, and I will also pass down this knowledge to my children."*

Like Assia, Fatou also started at an early age:

> *"I started when I was about her age* (pointing to her little girl). *She is 6 years old but when I started I was 9 years old."*

According to Assia, starting at a young age is an important advantage because it allowed her to gained experience more quickly. Watching her mom and the other sellers and growing up in this kind of environment granted her, and the other sellers, the necessary training and knowledge to sell drugs. However it is clear that the issue of quality of drugs and knowledge of the sellers was highly contested. While this was the case, users and sellers were adamant that the drugs at Roxy were of good quality and hence part of the reasons why the informal drug market thrives at Roxy.

### ***Strict adherence to procedures by the formal market***

While this could be considered a positive thing in many contexts, during my fieldwork, it emerged that the strict adherence to the protocol by the formal market was cited by buyers as among the reason why they prefer the informal market. The informal market was associated with convenient and flexibility which made the drugs more accessible to users. Paul had this to say:

> *"Pharmacies are too complicated, most of the time they will ask you for a prescription, for you to get that prescription means you need to visit a doctor at the hospital, then you have to pay for consultation fees, it makes the whole process long and expensive. Additionally, some other time they will tell you that the drug you are looking for is out of stock. It is very exhausting, frustrating and time consuming for people most of the time."*

Paul here is raising many issues related to the convenience of the informal market and costs associated with using the formal market. It also follows that due to many costs associated with formal channels, many users of the informal market indulge in self-diagnosis. While this can lead to misdiagnosis and potentially fatal, in this context, the

users as highlighted by Paul's citation are not in a position to afford the costs associated with formal channels and they also do find the formal channels frustrating and time consuming. Aminata, a participant in one of the FGD, is one person who engages in self-diagnosis. She had this to say:

> *"Not everyone can afford to see a doctor and get a prescription. As a result we just have to use Roxy to save time and money"*

While there is a perception among the users that it is cheaper and convenient to buy drugs from the informal market, Raymond, a health experts expresses that from the informal market can be costly to the health of customers. He emphasized his point by giving one sad case that happened to one user of the IDM:

> *"I do not know if you have heard about it but there is a lady who died while going to the field, this story made a lot of noise in the news but there is no judicial follow up to this story. To put it in a nutshell, this woman died on her way to work in the field and the postmortem revealed that she regularly consume drugs that she was getting from the black market but this drug is not supposed to be taken on a regular basis as it is dangerous"*

This case by Raymond highlighted the dangers of self-medication and diagnosis, which naturally explains why formal channels have to be strict with procedures albeit that this drive users to the informal market. Besides death, Raymond also raised the issue that over-consumption of non-prescribed drugs is causing a public health crisis of addition in Ivory Coast, especially among the youths:

> *"Medications can also create dependencies. Tramadol is killing young people in Ivory Coast. You will see, in a few years the government will have to create hundreds of drug rehabilitation centers for these young people who are taking these drugs for fun. The government has opened more than 100 dialysis centers to treat kidney failure. Yet the specialists said that these diseases are often due to intensive use of drug, or the use of unapproved drugs. The problem must be fixed at its source. Ending this market would solve many problems including self-medication and the informal sale of psychotropic medication."*

In this vein, it is crystal clear that perceptions of users, sellers and health experts fundamentally differ on whether strict procedures to medication are a good thing or not.

The health experts emphasize on the dangers on if it while users mainly emphasize that the informal market which is unregulated makes the process of acquiring drugs not only faster but also less costly.

### ***Cultural, social and religious reasons***

In the interviews and FGDs with buyers and sellers of drugs at the informal market, it also emerged that there were also some cultural, social and religious reasons for using this market. Paul, a participant in the FGD stated that he prefers to go to the IDM because the IDM also sells traditional herbs, hence the market offers a variety of drugs than the pharmacies:

> *"Another good thing about Roxy is that I do find traditional drugs and other stuff that allow me to perform better with my wife* (some laughter from the group). *This kind of stuff is not found in pharmacies. Anyways* (laughing), *I never tried to find them in pharmacies as Roxy is my place for that."*

From this citation by Paul we can see that traditional herbs at the informal market are part of the reasons why he uses this market. Some of these drugs, traditional herbs, may be considered illegal on the formal market and yet they have meaning to local communities. As such cultural beliefs and practices, such as Paul's boosting of his virility plays apart in the utilization of drugs from the informal market. In addition to these users also raised the discussion that in cases where diseases attract social stigma, for example, sexually transmitted diseases (STIs), it was much safer for them to buy drugs at the informal market discreetly. This could be so because they already have strong social ties with some of the sellers and they can trust them not to divulge any sensitive information related to their illness. Aminata had this to say:

> *Some people are so ashamed of their illness that they prefer to buy drugs in Roxy market on the sly* (discreetly). *Sometimes, even the spouse may not be aware of this disease. This makes Roxy the place to buy these drugs because through formal channels they may ask for your sexual partners' while you may not want this known"*

The issue of trust to the of the informal market was also raised in relation to long family traditions of using such drug market. A number of my participants in FGDs said the reason they used Roxy were social, they are used to the market and have been socialized to do so mainly parents or close family members. Therefore for them buying drugs at Roxy was the normal thing to do. Abdul had this to say:

> *"I grew up in a family that consumes drugs from the Roxy. I have always consumed drugs from Roxy because my family has always used them. Thus, for me it is normal to use these drugs. In recent years, people have begun saying that street drugs are harmful, yet I have always used them and they have always been good to me."*

Edmond a participant in the same FGD with Abdul raised the same point adding a class issue dimension. To him it is those who are rich or who can afford that express the idea that the informal market is harmful:

> *"I've been living in Adjamé for more than 20 years now. My family and I have always bought our medicine here (*talking about Roxy). *It is the people from Cocody* (one of the richest neighborhood in Ivory Coast) *who keep saying that these drugs are dangerous because they can afford to buy their drugs at the pharmacy."*

In addition to keeping up with family tradition, my participants also had a perception that their life is in the hands of God and they cannot do much to protect its longevity. It was not up to them but up to God to decide how long they will survive regardless they are using drugs from Roxy or from the formal market. Moreover, death occurs in accordance to God's will and nothing else. Paul had this to say:

> *"You know what- we will all die one day. God is the one who decides the moment, but everyone will have to face death. Doesn't matter how someone dies, it could an accident, it could by bitten by a poisonous snake, it could be anything. Whether you are treated with Roxy's medicines or not, we will all die one day. Are those who buy pharmacy drug immortal?"*

Serge was in agreement with Paul and goes on to say even if there could be stories of people dying from Roxy drugs, that cannot stop him from buying the drugs because life comes from God and he can take it however he wishes:

*"As Paul just said, life is a gift from God. God is the one who can take it back whenever he wants to. So even thought this lady was one of my family member, I think it would not have prevent me from using drugs from the Roxy. Of course, I would have been very angry at the sellers and the authorities who allow this to happen. But I wouldn't stop buying drugs at Roxy because that's what my family can afford to buy."*

This statement shows how religious beliefs can influence people's decision-making. In this particular case, believing in God contributes to the acceptability of using the drugs from the informal market. Serge also in this citation besides the religious angle also emphasised the issue of affordability raised early on. Users of drugs from the informal market are willing to take the risk because that is what they can afford.

### ***Selling drugs as form of employment***

As a market Roxy also thrive because it provides employment for many. The sellers see this as a form of employment, something that sustains their families. Sellers were very upfront in the interviews that the most attractive feature of the IDM is its financial aspect. Fatou noted that this is a profitable business although it is unstable:

*"I do not make millions but I am not to be pitied. Whoever sells drugs and reinvests his money in other businesses will get rich. This is not a business in which we need to put all eggs in one basket because we do not know what tomorrow holds for this nature of business."*

Assia, while appreciating that the work has helped her to take care of her family and keep it going, she also stressed that IDM is an unpredictable and not a very safe industry. Probably because of its unregulated nature which make it an illicit activity. To this end, Assia wishes to move into another safe and legal enterprise:

*"I cannot tell you that it's an easy and safe job. I have suffered to get to where I am today, but this job has always helped me to feed my family and pay for my children's schooling. I plan to stop this activity in a few years to open a hair salon, it will be less stressful."*

Additionally, Fatou revealed the communal nature of the business. It is a business that allows for the strengthening of communal, social and kinship ties. This connects to the point raised earlier that social reasons contribute to the thriving of Roxy, the IDM. For the sellers and users, the enterprise is more than just a business for profit making. It offers the sellers an opportunity to help close friends and relatives in need on occasions they may not have money, something which cannot be done by formal pharmacies. Fatou had to say this:

> *"Yes of course my family is aware of my activity! They even come to take the drugs here at my stand. I lose money when they come by because they don't pay for anything, but you cannot charge the family when into a business because they are the reason why you are doing this."*

The sellers expressed satisfaction about the presence of the IDM essentially because this market provides them an income-generating activity. In a town where the unemployment rate is high, especially for the non-skilled, who do not have the luxury of choosing safe and suitable jobs. This is therefore part of the reasons why the market thrives it is a form of employment to sellers.

# Chapter 5

## The efforts by the government to combat the IDM: is it enough?

This chapter looks at efforts and measures by the government of Ivory Coast to combat the informal drug market (IDM). As the previous chapter, this chapter also uses data from both informants and participants, that is, sellers, buyers and health experts. Additionally, as the government's role in IDM is under scrutiny, the section will also use data from policy documents and policy materials gathered during the course of the fieldwork. The section will be divided into four sub-sections. These sub-sections present complementary and conflicting roles of the government in accordance to how informants and participants perceived the role of the government. In the four sections, the government is seen to be doing well, while this position is contested by others. Additionally, the IDM is accounted as complex, hence the government is overwhelmed. Lastly, the issue of corruption is various levels is seen to be aiding the existence of the IDM.

### ***The government is doing all it can***

According to Julien, the government is doing all it can to fight the scourge of IDM. The issue of drugs on the informal market is a public health challenge to which the government is responding by establishing appropriate structures to tackle the problem. This is what Julien had to say to concretely exemplify the efforts of the government:

> *"The fight against illicit traffic of drugs here in Ivory Coast is organized by the COTRAMED[5]. It's an interdepartmental committee whose activities are essentially to eradicate the informal drug market. It's an inter-ministerial committee is composed of the Ministry of Internal Affairs, represented by the police, especially the police for narcotics and drugs, the Ministry of Defense represented by the national gendarmerie and its anti-drug section, the Ministry of Justice, the Ministry of Communication and finally the Ministry of Health. They all working together to tackle this issue, you see how the*

[5] In August 2013, following the decree nº2013-557 the National Committee to Combat Illicit Trafficking and Counterfeit Medicines (COTRAMED) was established by the Ivorian government to stop the traffic of counterfeit drugs in Ivory Coast.

*government is really trying to eradicate this challenge by setting up such a highly powered structure".*

Additionally, Julien also gave me a government news release showing that in 2017 the Ivorian National Assembly (the parliament) adopted a law regulating the pharmaceutical sector. This news release shows lays out what the government is doing to strengthen the control the quality and the distribution of pharmaceuticals products. Moreover, the government is planning to increase the vigilance towards the pharmaceutical market by collecting data to enhance the traceability products on the market. More so, government will provide harsher punishment for those who traffic illicit drugs on the Ivorian soil including fines as high as 100 million CFA francs[6] and prison terms of up to 10 years. All these measures are to have a deterrent effect towards the thriving informal drug market.

Besides the legislative and regulatory frameworks, the government was noted to be already taking tougher actions on the informal drug market. According to Julien, the government is already undertaking actions to stop the parallel sell of drugs in the country for example by raiding popular informal drug hotspots like Roxy and seize the drugs:

> *"The Roxy market has been the target of several raids by the police authorized to perform this type of mission. No later than two weeks ago, there was a raid there. When we try to stop the Roxy market with these raids, it also seems the market start to operate again instantly, after raids the sellers come back"*

In addition to regulatory framework and its enforcements through raids, the government has also put in place other strategies to combat the IDM. For example, the campaigns sensitizing the population about the risks linked to the consumption of drugs from the informal market. These campaigns are done through various mediums of communication and are done by the Directorate for Pharmacies and Medicinal Products (DPMP). These campaigns include television programs and advertisements informing people about the risks linked to the drugs sold on the informal market such as Roxy. Julien had this to say regarding this:

[6] 100 million CFA franc ≈ 1,5 million NOK

*"Last time, Dr. Tohoué from the DPMP was live on the national television and took part of a discussion with consumers from the IDM about the issue. We are even trying to set up platform on WhatsApp so that everyone could be able to exchange a little bit on this topic and share experiences."*

In addition to television advertisements and programs, there are also other various awareness campaigns aimed at discouraging people from consuming drugs from the IDM,:

*"There have been awareness campaigns against the street sales of drugs such as "my health, my life" or "my health first" etc. But maybe, these campaigns do not carry much because until now this phenomenon has been persisting."*

According to him, the following advertisement was one of the most effective campaigns launched by the government because as a result many people came to the DPMP to find out the real risk linked to these drugs.

*Figure 5: This is an advertisement for a campaign against the IDM that Julien showed to me.*
*It stating: "drugs from the street lead to death in the street" (in red)*
*"do not buy your drugs in the street, go to the drugstore." (in white)*

Raymond, the other health expert, did not share the same view with Julien that these campaigns were effective. The fact that the informal drug market and Roxy are thriving makes it difficult to convince anyone that the campaigns are achieving the intended objectives:

> *"Awareness campaigns do not work because people are used to these products and do not see the importance of buying drugs at the pharmacy. In my opinion we should also punish people caught up in the process of buying drugs in unofficial drugstores."*

Through the citation above, Raymond raised an important point. In fact, the laws available are silent on buyers which make it legal to buy drugs on the IDM but illegal to sell the drugs. These disparities do not make it easy for enforcement agencies.

### ***The government is not doing enough, it has other pressing priorities***

While Julien was of the opinion that the government is doing all it can to fight the informal drug market, other informants did not share the same view. According to Raymond, another health expert interviewed, all the government was doing was piece-meal and tepid which lead to questioning the commitment of the authorities in fighting the informal drug market. Raymond had this to say:

> *"I find it hard to believe that the government really wants Roxy market to disappear. In Adjamé there is a police station less than 500 m away from the Roxy market and they try to make us believe that the government is really fighting against this market? Do you think it's fair that people sell death without being worried by the police? Between these people* (drug sellers) *and gun sellers for me there is no difference."*

Raymond went further to advance that the laxity of the government was probably for the reason that the government is misjudging and underestimating the public health threat of the IDM. The threat is of great magnitude according to Raymond:

> *"The informal sale of drugs is a serious threat to Ivory Coast and I feel like the higher authorities do not have a real idea of the impact that this has on the health of populations because they misjudge this plague […] You will see, in a few years the government will have to create hundreds of drug rehabilitation centers for these young people who are taking this drugs for fun."*

Users who participated in FGDs also noted that the government was probably not doing enough to fight the informal drug market maybe not because they are underestimating its threat as Raymond puts it above but because the government has other major priorities, especially those of main political significance. Serge had this to say:

> *"In addition, I think the government has bigger issues to tackle at this moment. Right now, the farmers are complaining about the price of Cocoa. Between this you think the government can focus on Roxy? These small traders, I don't this so, these small traders aren't bothering them."*

Paul another participant added that the government was more concerned by the financial aspects of eradicating the IDM than the population's health. If the government really wants to fight the informal drug market, it means they have to commit a lot of resources into it. Presently it does not seem so. Additionally Roxy provides employment, which may reduce political interest to fight it, as Paul puts it:

> *"Do you think the government is going to waste money by deploying people on the field to deal with Roxy? Afterall Roxy is employing many people, will the government crewate employment for these vendors? I don't think so".*

### ***The IDM is complex, the government is overwhelmed***

Another view raised was that the IDM is so complex that the government is overwhelmed on how to successfully tackle it. It was noted that the challenge and threat does not only come from within borders but from outside, which makes it complex, perhaps explaining why the composition of COTRAMED is also complex, consisting of 5 ministries, including the defence ministry. Beyond the borders of Ivory Coast the threats come from countries like Benin, Nigeria, which considers as major players in the IDM and as far as China. According to Julien, this greatly contributes to the thriving of the informal drug market in Ivory Coast:

> *"Drugs sold illicitly in Ivory Coast come from all over the world. There are mafias from Asia who are delivering these drugs throughout west Africa through Benin and Nigeria.*

*Nigeria remains an important country when it comes to counterfeit drug trafficking. There are also counterfeiters in Benin and Nigeria who manufacture this type of drugs."*

Julien also raised the point stated earlier that it is costly for the government to fight the informal drug market as a lot of resources are needed. He said:

*"It is important to note that when drugs are seized, we analyse them and then send them to the crematorium to burn them. We cannot take the risk of burying them because people can go dig them up and put them back on the market, so send them to a cement factory where there is an incinerator. But all this has a cost and it is the responsibility of the government to take care of it."*

To emphasize the government's desire to put an end to this illegal market, he also mentioned that the government want to sign international partnerships to enable cooperation with other countries beyond borders:

*"The government wants to become a signatory to the Medicrime Convention[7]. This will allow us to share the experience from countries already signatory and this will also allow us to extend our field of action. Unfortunately, very few countries from sub-Saharan countries are signatories, there is only Guinea at this moment."*

While this is a good step for the government of Ivory Coast to take, one may ask why is it taking the country so long if the government is really concerned that the problem is of great public health magnitude. This laxity could signal lack of political commitment or is remotely connected to the issue of corruption raised in the next section.

## ***Corruption - big powerful people with big interests in the IDM***

IDM is a billion- dollar industry worldwide and this raises the assumption that in all countries where this market thrives there could be some very powerful people benefiting from this industry. During my fieldwork, the issue of corruption in the IDM was raise on many instances. This corruption could be at many various levels. This corruption could be at the highest level, as Raymond puts it:

[7] The medicrime convention is "a binding international instrument in the criminal law field on counterfeiting of medical products and similar crimes involving threats to public health" www.coe.int/en/web/medicrime/the-medicrime-convention

> *"It should be known that some people who engage in this kind of practice have a long arm and manage to avoid justice because they have powerful positions or got connections with those in power and in the courts. As you know this is a multi-billion dollar industry with powerful people."*

From top level, the corruption can also permeate to lower levels of the society and this may make any efforts to combat the IDM fruitless, as Raymond points further:

> *"Unfortunately, everyone is involved: there are corrupt pharmacists, crooked delegates, even heads of agencies who sell samples on the black market to make money. nowadays it is easy since the government does not play its role everyone does what they want!"*

It was also noted that the corruption can also have a cultural dimension. In the 'African' setting it was contented by Julien, it is difficult to report anyone you know even if they are engaging in illegal activities:

> *"In Africa, it is hard to get tough on people and punish them when they have power or good relations. Also, you cannot punish a family member or a person who comes from the same village as you do, it is cultural, it is life. Because if you do so all the village will consider you as a traitor. This is the reason why a lot of people live a life of illegality."*

In this vein, it is clear that corruption to an extent is fuelling the informal drug market at many various levels. This then diminishes the few efforts by the government to combat this market. If the government really what to eradicate or at least fight the IDM, it has the power to do so according to Raymond, this is because.

> *"The only solution is that the government must simply enforce the laws! The government is the legal entity in charge of raising awareness, punish corrupt customs officers, crack down corrupt pharmacists and corrupt medical representatives. And the law must apply to everyone, even to powerful people."*

# Chapter 6

## Discussions

This chapter presents the discussion of the findings presented in the previous two empirical chapters. The discussion will be in two sections. The first section is on the government's failure to regulate the IDM and enforce laws. This section is largely informed by findings as presented in the second empirical chapter. The second section of the discussion is on the reasons why Roxy the informal market is thriving, this section is informed findings from both empirical chapters. The discussion will be framed analytically by the AAAQ framework as presented in the chapter two. The AAAQ framework (De Mesquita & Hunt, 2006; Yamin, 2009) is a tool to assess facilities, goods and services in healthcare according to following criteria: availability, accessibility, acceptability and Quality.

### ***The Government's failure to regulate and enforce***

Ivory Coast, like in many low- and middle- income countries, is failing in its duty to provide adequate health care facilities, goods and services for many reasons and that foster the establishment of the informal drug market (Bloom et al., 2011). It has to be emphasized that it is first and foremost the responsibility of governments to make sure that drugs are available and accessible for the general population. Failure by the government in this endeavor leads to the proliferation of the informal drug market (Bloom et al., 2011). Secondly, it is the responsibility of the state to regulate the drug market and curb the informal drug market. My findings suggest the failure by the government in all these tasks, that is, that of provision and regulation, as this discussion section will elaborate.

According to the literature, the mere presence of an informal drug market is a proof that the government has failed in many ways to meet the population's needs (Baxerres, 2011). In the same vein, the presence of the informal market of drugs also reveals the absence of

well-functioning public institutions from the ministry of health to hospitals and pharmacies that are directly regulated by the government (Chang, 2006). It is these institutions, especially the ministry of health, that must not only make sure drugs are available and accessible to the population through formal channels but must also take a leading role in the regulation of the drug market in the country.

Findings from this study show unsuccessful efforts by government to address the informal drug market issue. The government through the COTRAMED is trying in vain to put an end to the IDM issue essentially because there is demand for the drugs and the formal drug market is not accessible and at times unacceptable to many as shown by narrations from buyers and sellers in the first empirical chapter. When government agencies responsible try to implement the laws against the IDM, it is not perceived as successful either. As one of my informants, Julien, a the health expert, sums up, such acts of IDM repression, such as raids and imprisonment, remain largely on paper, as laws are rarely implemented and when they do unfortunately it is the sellers who are punished while these are just the faces behind the real actors in this billion dollar industry in low-income countries (GIABA, 2017).

In addition, infringements of drug regulations are common in the IDM for many reasons including corruption as well as petty corruption. As Julien stressed in the second empirical chapter, sanctions for the IDM activities remain largely lenient regarding the risk this market pose. Drug sellers, for example, Fatou in this study alluded to the fact that when raids are organized for the IDM, they are tipped by the enforcement agents well in good time to avoid these raids. This petty corruption at lower levels, complemented by grand corruption at procurement and distribution levels, makes the IDM difficult to deal with. This same issue of corruption among the enforcement agents and rent seeking behaviour was also observed in Tanzania, where the regulatory violations was fined lenient penalties such as Tsh 5,000[8], while enforcements agents could also accept bribes (Goodman, Kachur, et al., 2007).

[8] 5,000 Tsh ≈ **20 NOK**

It is also important to note that due to various challenges bordering on resources, it is extremely difficult for authorities to make ensure that enforcements are quite regular. In this study it was noted that regulatory inspections were sporadic and that coupled with bribes as discussed above make it extremely difficult to successfully curb the IDM. The same phenomenon was also observed in Tanzania where informal drug sellers revealed that they barely experience regulatory inspection at their stalls or shops (Goodman, Kachur, et al., 2007). In this study, it is also important to note that Roxy market is located just 500 meters from a police station. This therefore brings into question the will by the authorities to bring an end to the IDM, it may seem that there is a tacit permission from the authorities for the IDM to continue, as insinuated by one of our health experts, because unofficially, the IDM act to supplement the gaps by the formal market, hence reduce pressure on politicians to solve drug shortages.

Another reason why people turned to the informal drug market is because the institutions regulated by the government such as hospitals and pharmacies are perceived to have failed in their duty to make sure drugs are continuously available and accessible and that their services are acceptable and of good quality. The first empirical chapter show buyers complaining about regular drug stock outs at public pharmacies and hospitals leading to dissatisfaction. As noted in another study from Ivory Coast (Ferrand & Aloko-N'guessan, 2017), it do take a while for some of these drugs to be restocked. For individuals who need these drugs urgently, the waiting period could be longer and life threatening. Hence the IDM offers a ready solution.

Studies from Ivory Coast (Angbo-Effi et al., 2011; Ferrand & Aloko-N'guessan, 2017) estimated that the formal pharmaceutical market satisfies only 30% of the population's needs and the rest of the population is getting its medicines on the informal market. Considering that this formal market is also including both private and public efforts, the statistics clearly shows that the IDM is supplying a significant part of the population of up to 70% which fundamentally raises questions around the role of the government in making sure that drugs are available, accessible on the formal market for the population. Ahmed et al. (2009), observed the same issue in Bangladesh where public facilities were

not appropriately stocked in drugs, with regular drug stock outs and hence unable to satisfy the population's needs.

Additionally, it was also observed in the context of Ivory Coast that in remote areas there is almost no access to adequate health facilities and services and therefore people in these areas sorely depends on the informal market (Angbo-Effi et al., 2011; Kassoum & Memon, 2016). My study was conducted in the capital city but still my findings indicate an over reliance by the people on the informal drug market, this do make it worse for remote areas as found in the two cited studies.

According to the right to health, all states must provide accessible goods and service to their population (NESRI, 2015). Here again, the Ivorian government is failing in its duty which is to provide accessible goods and services to its population without any kind of discrimination. As noted in the first empirical chapter, the formal market favours the rich and discriminates against the poor or those with diseases that contributes to social stigma. These were some of the reasons noted by buyers why they use the IDM, reasons which varied from financial to socio and cultural reasons as will be discussed in the next section. In this regard the buyers find drugs at the IDM to be available and acceptable as well as the services being acceptable, including being culturally appropriate. In their article, Bloom et al. (2011) found that the informal health sector was essentially used by poor people who find the services not only affordable but appropriate. Sudhinaraset et al. (2013) also reached the same conclusion in their systematic review of the literature on informal providers in health sectors in low-income contexts.

Another important facet to discuss regarding the role of the state is the converse idea that people prefer the IDM for the reason that the formal market is too strict on following the protocol. One can argue that by following a strict protocol, the government is doing its duty to protect the citizens' right to life and against harmful practices, an argument supported in the AAAQ model (De Mesquita & Hunt, 2006; Yamin, 2009). Interviews with health experts revealed that all the drugs sold on the formal market in Ivory Coast

meet international standards. This is something that can be argued to be positive about the role of the state in its regulation and provision duty. .

However, it was also noted that despite following this strict protocol, this was conversely interpreted as a push factor from the formal market. It must be noted that addiction especially to the youths is becoming a big scourge in sub Saharan Africa which calls for strict regulation for certain drugs (Salm-Reifferscheidt, 2018). For example, the inappropriate use of psychotropic drugs such as Tramadol can lead to addiction or even death (Salm-Reifferscheidt, 2018) or the misuse of malaria control pills can impact the resistance to the virus (Mahamé & Baxerres, 2015). All these dangers call for strict regulation, however not in a way that drives away people from the formal market which conversely exacerbates the situation. It is important to note here that it is the government's responsibility to provide appropriate information to population on the dangers of using the IDM and self-medication. Something the Ivorian government is trying as noted in the second empirical chapter albeit with limited success.

Kassoum and Memon (2016) in their study noted that the utilization of public health centres is becoming less in Ivory Coast and this trend is easily noticeable since the end of the welfare state system in the mid-sixties. In this regard, citizens must pay out of pocket to access health services. This arguably has contributed to the proliferation of informal health services, especially as a significant number of the population feel that the services provided are not worth the price (Gobbers, 2002). The perception of the value for money is an important determinant of consumer choice, as a matter of fact, a study conducted in Cameroon revealed that, when the quality of health services is satisfactory, even the poor are more likely to sacrifice for a high price to access the services offered (Litvack & Bodart, 1993). Another study from Mali showed the same result (Mariko, 2003).

Despite the introduction of the Bamako initiative in 1987, whose central tenets are to ensure consistency in provision of quality essential drugs at affordable prices in all communities (Johnson, Adiakpan, & Asuzu, 2015) in sub-Saharan countries, the Ivorian government is still failing to satisfy the population in term of availability and

accessibility of these essential drugs. Additionally, services offered at public institutions are not of good quality and therefore not acceptable to most of my informants in his study. It is with this in mind that there is need to approach the discussion on why the IDM is such a thriving market in Ivory Coast and if not in many low-income countries.

### ***Reasons why Roxy market is thriving***

Despite repeated attempts to put an end to Roxy market, this informal market exclusively dedicated to the sale of drugs is still thriving and it does not seem like it is about to stop. Based on the AAAQ model here are the reasons why Roxy is thriving.

As demonstrated in the first empirical chapter, in FGDs with buyers and users of the IDM, affordability ranks among the top attractive feature why this market is preferred by many. This informal drug market is mainly used by the poor (Bloom et al., 2011) and it enables low-income earners to get previously inaccessible drugs both in terms of pricing (Hajjou et al., 2015). A study by Ferrand & Aloko (2017) conducted in Ivory Coast substantiated the claims by my research participants that the informal drug market is cheaper than the formal market. Just to give one example, *Levobact 500mg*, which is an antibiotic prescribed for the treatment of pneumonia or bronchitis. Cost 8,030 CFA franc in official drugstores, while at Roxy, it is available its price varies between 6,850 and 7,900 CFA francs (Ferrand & Aloko-N'guessan, 2017). This gives Roxy a competitive advantage. Studies conducted in Bangladesh also revealed that the most commonly cited reason for visiting the informal drugstore is its affordability (Sudhinaraset et al., 2013).

In addition to prices being affordable than the formal market, prices at the informal market are negotiable and offers flexible terms of payment as noted in this and other studies (Sudhinaraset et al., 2013). Prices in pharmacies are fixed and can only be reviewed if need be but not negotiated at the counter while the vendors in Roxy are more flexible about pricing. According to Stéphane, one of my research participants, over time, sellers and consumers develop friendship and trust, and this does not only improve the services rendered such as discounts but also beneficial to both buyers and sellers in times need.

Overtime sellers and buyers develop a sense of loyalty and solidarity to one another, buyers can choose to buy at the same place or refer their friends and families to the same vendor while sellers can also reduce prices and offer flexible payment options which may not be limited to money but can extend to barter trading. This phenomenon of barter trading was also noted in Tanzania where medicines were sold in exchange of food or electronics, however this kind of transaction can only take place if both parties, seller and buyer, find the exchange to be fair (Mills et al., 2012), which is normally the case because of the friendship and trust developed. These multiple payment options were also found to be existing in Bangladesh (Ahmed et al., 2009).

Given this, it is important to note that the informal drug sellers therefore possess many social advantages over the formal market. The relationship between sellers and buyers at the informal drug market are more personal and closer. In this study the first empirical chapter has demonstrated the importance of this relationship and that both sellers and buyers prefers to hang on to it. This relationship increases the sellers' credibility and strengthens their business position as well as duty to the community. A study conducted in Uganda revealed that the informal health providers again respect and responsibility within their community and consequently increase the sellers' obligation to provide improved or quality services (Sudhinaraset et al., 2013). It is common therefore that the business and social relationship between sellers and buyers is enduring and potentially socially binding, although such a relationship can still be broken for example due to bad service experiences or late payments among many factors.

Another factor in favor to the Roxy market lies in its proximity. Roxy is located in Adjamé, one of the poorest municipalities of Abidjan but also one with the most inhabitants. Roxy is therefore close to its target customers, which facilitates the informal sale of drugs. A study conducted in West Bengal, India, revealed that consumers from the parallel health care market prefer the informal market because of its location and proximity (Sudhinaraset et al., 2013). In addition, to the issue of proximity, the informal drug market is always open, even after hours at times when the formal drug stores are

closed. In this regard the proximity and flexible operating times makes the informal drug market more accessible. It is also a common practice that users when in need can even visit houses of sellers even deep into the night when need for medicine arises. The informal market carries this advantage over the formal market.

Besides being physically and financially accessible, Roxy is offering a broad range of drugs **(see appendix 6)**. As Paul said, Roxy offers both modern and traditional medicines, the variety of products that cannot found in pharmacies. In this case, Roxy also suits users who prefer to use traditional herbs over modern medicines, given that Roxy market on its own has over 8,000 drug sellers packed within a one-kilometer radius, it increases chances that users can find any type of drug they are looking for be it modern or traditional. In this regard, drugs are not only available at Roxy but available in sufficient quantities making Roxy a one stop shop for a broad range of drugs.

One fundamental issue that was raised mainly by the health experts was that sellers at the informal market lack knowledge and training. It must be emphasized however, that what these lack is formal training but they do possess a wealth of experience. From this study, it emerged that the sellers from the informal market gained their knowledge through some form of apprenticeship just like Assia and Fatou. Despite their lack of formal scientific knowledge or formal training, the sellers from Roxy manage to run their business efficiently and displayed good knowledge around the products they sell. What is more striking from this study is that it is the experts who were skeptical about the knowledge the sellers possess but not the users, the buyers. The buyers, the consumers of the products from the IDM expressed full confidence in the sellers' knowledge, even though they were aware this knowledge did not come through formal training.

According to a study conducted in Ivory Coast (Ferrand & Aloko-N'guessan, 2017), most of the time, the sellers start their career at a very young age as apprentices and their main activity is to help the main seller to sell the drugs by learning the names of the drugs and the diseases they cure and also learn the pricing. Most of these sellers do not have formal education or stop schooling due to poverty. In Roxy, 92% of the apprentices are related to

the main seller (Ferrand & Aloko-N'guessan, 2017) this contributes greatly to strengthening of the relationships between the seller's family and the buyer's family. Like this current study found, studies from Uganda, India and Bangladesh also revealed that informal drug sellers mainly gain their experience through apprenticeships (Sudhinaraset et al., 2013).

One issue that was heavily contested is the issue of whether drugs sold on Roxy are of good quality. The health experts interviewed were adamant that informal drug market are not of good quality and pose a great risk to the population. The simple fact that there is no market authorization makes it very difficult from experts' point of view to validate the quality of the drugs from the informal market. However, sellers and buyers as demonstrated in the first empirical chapter were adamant that drugs from Roxy are of good quality. There is evidence to support the claims of the health experts that some of the drugs from the informal market are not of good quality and even at times are counterfeits. Studies from Cameroon and Niger revealed that several drugs sold on the informal market are counterfeits and hence poses great risk to the population (Pouillot et al., 2008). Another study from Cameroon on the pharmaceutical control of *ibuprofen* tablets sold on the formal and informal sectors found that some of the drugs from the informal market are substandard (Nga et al., 2016). The same results also came from a study from Burkina Faso where the antimalarial drug sold on the informal market was deemed substandard (Tipke et al., 2008).

There is no doubt therefore from this evidence that some of the drugs on the informal market are either counterfeits or of poor quality given poor storage or handling. However, in this study this was not a deterrent factor to the buyers, in fact buyers and sellers maintained that the drugs from the IDM are of good quality which makes them acceptable to them. In this regard, the Roxy informal market seems to by and large paradoxically meet most of the criteria as outlined in the AAAQ framework, something which the formal market seems not to achieve. Its thriving however cannot be separated from the failure by the state in its duties of provision and regulation.

# Chapter 7

## Concluding remarks and recommendations

This last chapter of this thesis will give some concluding remarks to the study following the above discussion. Additionally, the chapter will also proffer some recommendation as informed by study findings and literature in the field. As a health promoter, it is important to give these recommendations as this study may have immediate policy implication and impact on this topic of the informal drug market as many countries are struggling with this issue and in need of actionable recommendations. This is in line with the Ottawa Charter (W.H.O, 1986) which calls for the building of healthy public policies as its one of the five action areas.

### *Conclusion*

The main objective of this study which was to explore factors that encourage people to buy drugs on the informal market such as Roxy market and the role of the government in regulating this market was successfully reached.

The study found out that a number of factors make Roxy the informal drug market attractive to users. The informal drug market meets all the criteria of the AAAQ framework that is the drugs are readily available, they are accessible both in terms of being affordable and proximity (geographical accessibility), the drugs and services from the informal market are acceptable to the population and the reasons for this have a social, cultural and religious dimension as discussed.

The issue that was contested is on the quality of these drugs, experts and evidence from other studies show and maintain that counterfeits are rife and since the market is unregulated therefore makes it difficult to ascertain the quality of drugs from the informal market. Besides these factors that pull people to the informal drug market, the role of government was also a major finding and discussion point. The Ivorian government is not doing enough in combating or regularizing the informal drug market. Participants in this

study overwhelmingly converged on the perception that the government is not playing its role correctly in the informal drug market. Lack of resources and corruption were the main reasons cited as to why the authorities were failing in their efforts to combat the informal drug market.

Given all these factors, that the informal drug market meets almost all the criteria of the AAAQ framework and the subdued role of the government in combating this market, it is safe claim that that Roxy, the IDM is a thriving market at the present moment.

## *Recommendations*

1. The government and responsible agencies such as COTRAMED must play their roles effectively paying particular attention to the corruption in this industry at various levels. Measures must be put in place to combat this corruption at all these various levels. As noted earlier the corruption in this industry is from grand to petty. Issues of bribes to enforcements agents can be dealt with internally while there is need to collaborate with other countries to secure borders and know the sources of these drugs.

2. As suggested by Ferrand & Aloko in their study (2017), the creation of health insurance for all can promote accessibility to medicines for all, even the poorest. Given that the affordability of the drugs at the informal market is the main reason for its success, a health insurance that could partially cover the purchase of medicines would undoubtedly help to reduce consumers of drugs of the informal market. For this to be successful a careful analysis on factors that gives the informal market a competitive advantage is needed at multi-disciplinary level.

3. There is a need integrate the informal drug seller in the formal sector by making them more qualified and not criminalize their activities. For example the Ivorian government and the civil society could offer drug sellers formal training through free courses and workshops. This could go a long was in reducing the risk the IDM poses on the population. Additionally, this collaborative approach will make the sellers more accommodative and less combative when government attempts to regulate the selling of

drugs. In short there is a need for authorities to realize that besides the risk it poses, the IDM is also a livelihood issue. Cooperation could be more effective than confrontation.

4. Given the importance of this subject matter and the risk its poses to millions of people in low-income contexts, its befitting that more research and publications are needed in this area. Research in this area need to be inter-disciplinary and multi-disciplinary in nature in order to unravel the complexities of this phenomenon.

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# APPENNDICES

# Appendix 1

## ***Interview guide for sellers***

- How did you start to sell drugs?
- Can you please explain me how did you get the knowledges about the drugs you are selling?
- What kind of drugs do you sell at your stall?
- What are the feedbacks from your customers about your products, are they satisfied?
- How do you manage to provide for your family?
- How do you think the authorities perceive your activity?
- Do you think your products can be harmful to your customers?
- Do you have anything else to add?

# Appendix 2

## ***Interview guide for the health experts***

- How big is the informal pharmaceutical market in Ivory Coast?
- How do you think Roxy got so established in Abidjan?
- How do you perceive Roxy?
- Do you think Roxy can be harmful to people's health?
- What are the means put in place by the government to regulate this market?
- Do you think the government will be able to put an end on this market?
- Do you have anything else to add?

# Appendix 3

| Examples of codes | Basic themes | Organising themes | Global themes |
|---|---|---|---|
| Drugs should be free if they want us to stop buying at Roxy | Lack of financial support from the government | Negative perception of the government's role towards Roxy | Perceived role of the government in the thriving of Roxy market |
| Government doesn't care about the issue of Roxy<br>there is a lack of actions undertaken by the government<br>The government should take tougher lines<br>The government is misjudging the magnitude of the issue<br>There is a lack of communication to discourage people to buy drugs at Roxy<br>The government is not focusing on the main problem | Lack of commitment from the government | | |
| They are all liars<br>There is plenty of corrupted people within the government<br>They don't apply the law | The gvt must enforce the law | | |
| The government is overwhelmed<br>The government is trying hard to put an end to Roxy<br>It's not the government's fault<br>The main threat is coming from abroad<br>The government is resource less to address this problem<br>The government wants to improve the health of the population | The government is doing all it can | Positive perception of the government's role towards Roxy | |

NSD NORSK SENTER FOR FORSKNINGSDATA

## NSD's assessment

### Project title

Exploring the factors that lead people to by medicine in the informal market instead of going to a formal drugstore:The case of Adjamé, in Abidjan

### Reference number

326946

### Registered

05.02.2019 av Armel Dagrou - Armel.Dagrou@student.uib.no

### Data controller (institution responsible for the project)

Universitetet i Bergen / Det medisinske fakultet / Institutt for global helse og samfunnsmedisin

### Project leader (academic employee/supervisor or PhD candidate)

Victor Chimhutu, Victor.Chimhutu@uib.no, tlf: 4796884913

### Type of project

Student project, Master's thesis

### Contact information, student

Armel Dagrou, djarmel06@hotmail.com, tlf: 91837582

### Project period

28.02.2019 - 17.05.2019

### Status

22.03.2019 - Assessed

### Assessment (1)

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### 22.03.2019 - Assessed

Our assessment is that the processing of personal data in this project will comply with data protection legislation, so long as it is carried out in accordance with what is documented in the Notification Form and attachments, dated 22.03.2019, as well as in correspondence with NSD. Everything is in place for the processing to begin.

NOTIFY CHANGES
If you intend to make changes to the processing of personal data in this project it may be necessary to notify

NSD. This is done by updating the Notification Form. On our website we explain which changes must be notified. Wait until you receive an answer from us before you carry out the changes.

TYPE OF DATA AND DURATION
The project will be processing personal data relating to criminal convictions and offences, special categories of personal data relating to religion and health and general categories of personal data until 17.05.2019.

LEGAL BASIS
The project will gain consent from data subjects to process their personal data. We find that consent will meet the necessary requirements under art. 4 (11) and 7, in that it will be a freely given, specific, informed and unambiguous statement or action, which will be documented and can be withdrawn.

The legal basis for processing personal data relating to criminal convictions and offences will therefore be explicit consent given by the data subject, cf. the General Data Protection Regulation art. 6 nr.1 a), cf. art. 10, cf. the Personal Data Act § 11(2) a), cf. § 9 (2).

The legal basis for processing special categories of personal data is therefore explicit consent given by the data subject, cf. the General Data Protection Regulation art. 6.1 a), cf. art. 9.2 a), cf. the Personal Data Act § 10, cf. § 9 (2).

PRINCIPLES RELATING TO PROCESSING PERSONAL DATA
NSD finds that the planned processing of personal data will be in accordance with the principles under the General Data Protection Regulation regarding:

- lawfulness, fairness and transparency (art. 5.1 a), in that data subjects will receive sufficient information about the processing and will give their consent
- purpose limitation (art. 5.1 b), in that personal data will be collected for specified, explicit and legitimate purposes, and will not be processed for new, incompatible purposes
- data minimisation (art. 5.1 c), in that only personal data which are adequate, relevant and necessary for the purpose of the project will be processed
- storage limitation (art. 5.1 e), in that personal data will not be stored for longer than is necessary to fulfil the project’s purpose

THE RIGHTS OF DATA SUBJECTS
Data subjects will have the following rights in this project: transparency (art. 12), information (art. 13), access (art. 15), rectification (art. 16), erasure (art. 17), restriction of processing (art. 18), notification (art. 19), data portability (art. 20). These rights apply so long as the data subject can be identified in the collected data.

NSD finds that the information that will be given to data subjects about the processing of their personal data will meet the legal requirements for form and content, cf. art. 12.1 and art. 13.

We remind you that if a data subject contacts you about their rights, the data controller has a duty to reply within a month.

FOLLOW YOUR INSTITUTION’S GUIDELINES
NSD presupposes that the project will meet the requirements of accuracy (art. 5.1 d), integrity and confidentiality (art. 5.1 f) and security (art. 32) when processing personal data.

To ensure that these requirements are met you must follow your institution’s internal guidelines and/or consult with your institution (i.e. the institution responsible for the project).

FOLLOW-UP OF THE PROJECT
NSD will follow up the progress of the project at the planned end date in order to determine whether the processing of personal data has been concluded.

Good luck with the project!

Contact person at NSD: Belinda Gloppen Helle
Data Protection Services for Research: +47 55 58 21 17 (press 1)

# APPENDIX 5

## Are you interested in taking part in the research project "A thriving informal drug market: The case of Roxy market in Abidjan, Ivory Coast"?

This is an inquiry about participation in a research project where the main purpose is to understand why people buy drugs in the informal market. In this letter, we will give you information about the purpose of the project and what your participation will involve.

**Purpose of the project**
I am a master's student from University of Bergen (herein- Researcher). I am doing research to explore the factors that lead to buy drugs in the informal market instead of going to a formal drugstore in Abidjan. The objective of this research is to understand how the government fail to meet people's expectation that force them to buy their drugs in the informal drug market. The data produced from this study would only be used for academic purpose to complete a master's thesis.

**Who is responsible for the research project?**
University of Bergen is the institution responsible for the project.

**Why are you being asked to participate?**
You have been selected on a random basis. You've have been observed looking or buying drugs at the drug stand in the market. You will not be the only person selected, I plan to do a Group discussion with four to six persons, and if you can refer me a potential participant it would be appreciated.

**What does participation involve for you?**
I plan to do a group discussion with people who buy drugs in the informal market. The discussion will be among the participants and I want the participants to give their point of view on the topic.

I also plan to do one-to-one interviews with people who sell drugs in the market to get their point of view. Here again, If you can refer me a drug seller it would be appreciated.

**Participation is voluntary**
Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

**Your personal privacy – how we will store and use your personal data**
We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

- My supervisor and I will be the only persons to have access to your personal data.
- I will replace your name and contact details with a code. The list of names, contact details and respective codes will be stored separately from the rest of the collected data.

The participants can be identified as a fictive person with a different name so they will not be recognizable in publication. The personal information that I might publish are: the name, the age, the occupation.

**What will happen to your personal data at the end of the research project?**

# APPENDIX 5

The project is scheduled to end May 3th. At the end of the research, your personal information will be completely destroyed.

**Your rights**

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

**What gives us the right to process your personal data?**

We will process your personal data based on your consent.

Based on an agreement with University of Bergen, NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

**Where can I find out more?**

If you have questions about the project, or want to exercise your rights, contact:

- University of Bergen via Chimhutu Victore by email: (Victor.chimhutu@uib.no) or by telephone: +47 96 88 49 13
- Our Data Protection Officer: University of Bergen
- NSD – The Norwegian Centre for Research Data AS, by email: (personverntjenester@nsd.no) or by telephone: +47 55 58 21 17.

Yours sincerely,

| Project Leader<br>(Chimhutu Victor *PhD*) | Student (Armel Dagrou) |
|---|---|

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# Consent form

I have received and understood information about the project "Exploring the factors that lead people to by medicine in the informal market instead of going to a formal drugstore: The case of Adjamé Roxy Market in Abidjan" and have been given the opportunity to ask questions. I give consent:

- ☐ to participate in Focus Group Discussion
- ☐ to participate in one-to-one interview
- ☐ for information about me/myself to be published in a way that I can be recognised (in other word, using a fictive name)

I give consent for my personal data to be processed until the end date of the project, approx. May 3th 2019

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(Signed by participant, date)

# Appendix 6