

## Abstract

Despite the threat counterfeit drugs represent to health and the government's endeavor to discourage their consumption, some people in Benin still prefer buying medicine in the underground economy. This research purported to understand the causes of the phenomenon. The research method used a survey of a sample of sixty-eight people randomly selected at Cotonou, a city with a population representative of Benin general population status regarding socio-economic conditions. The data about people's habits regarding drug consumption, monthly income, insurance coverage, and reasons why people chose to buy counterfeit medicines were collected and analyzed using Excel Spreadsheet. The analysis of those data suggested that the main contributing factor to counterfeit drugs consumption is financial limitations. Other significant causes are drug shortages or stock-out in pharmacies as well as limited knowledge of risks.

## Introduction

Counterfeit drugs are medicines that fail to meet technical requirements in terms of drug efficacy, quality, and safety (World Health Organization, 2006). In the scope of this research, we confine our examination of counterfeit drugs to medicines that are found in the informal sector (underground economy). Counterfeit drugs pose many threats to health such as treatment failure and death (Blackstone et al., 2014). In Africa, more than 100,000 people die every year due to counterfeit drug consumption (Deloire, 2019). Despite the effort of Benin's government to curb counterfeit drug consumption – 118 tons were seized and destroyed in 2016 (USAID, 2018) – the problem persists. A better understanding of the causes of the problem would help the government of Benin to tackle the issue more efficiently. That is why this research sought to understand the reason why there is a continuing demand for such medicines. This study found out that the demand for counterfeit drugs continues to exist because of a combination of financial limitations, drug stock-out or shortages in the formal sector, and a lack of awareness of health risks.

## Method

A survey was administered to a representative sample of 68 people with diverse socio-economic backgrounds in Benin. The data obtained are compiled below.

Earnings per month	Number of people who consume counterfeit drugs	Number of people who consume quality drugs	Number of people with insurance coverage for pharmaceuticals
< \$-160 (total =49)	40	9	5
> \$-160 (total = 19)	7	12	7

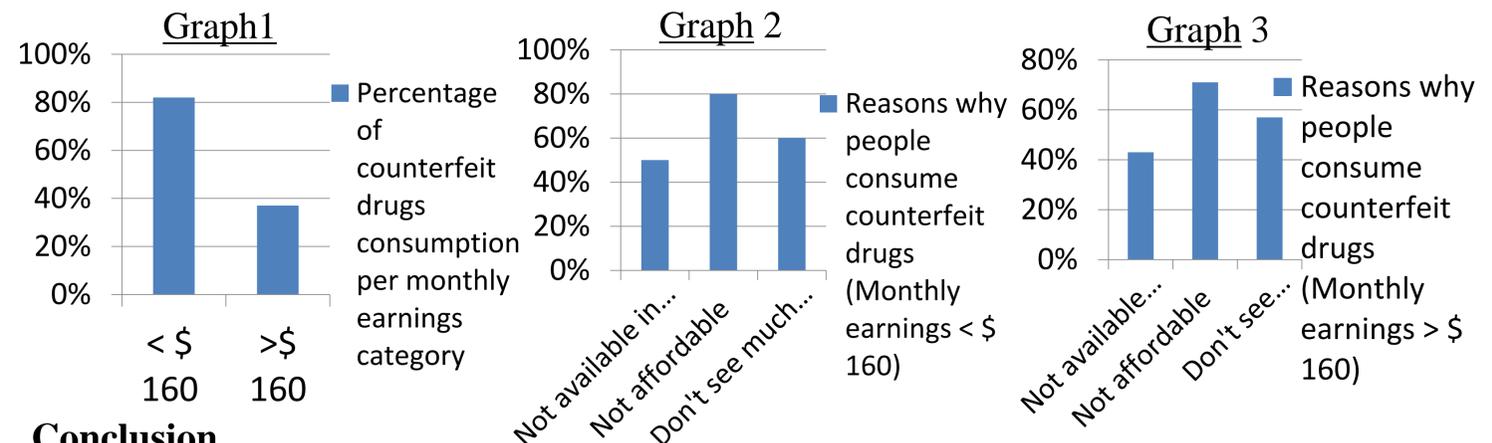
Monthly Earning	Number of people who consume quality drugs and have insurance coverage	Number of people who consume counterfeit drugs and have insurance coverage
Monthly Earning <\$-160	5	0
Monthly Earning <\$160	7	0

The sample size was calculated using Benin population on August 4, 2020: 12,149,364 (Benin Population, n.d.). The sample calculator (Determining Sample Size: How to Make Sure you Get the Correct Sample Size, n.d.) used a margin error of 10%, and a confidence level of 90% .

Reasons	Number of favorable answers	
	Earnings per month < \$-160 (Total=40)	Earnings per month > \$-160 (Total=7)
Not available (in pharmacies)	20	03
Not affordable (drugs in pharmacies)	32	05
They don't see much difference	24	04

## Results

Counterfeit drugs consumption decreases as monthly income increases (graph1). Moreover, it disappears with insurance coverage (Table 2). Therefore **one reason of counterfeit drug consumption is financial constraints**. Other reasons of counterfeit drug consumption are **unawareness of risks as well as drug shortages in pharmacies** as it appears in graph 2 and 3.



## Conclusion

The financial burden of buying insurance coverage or drugs in a pharmacy is the most prominent cause of counterfeit drug consumption in Benin. However, stock-out, drug shortages, as well as poor knowledge of the dangers associated with consuming counterfeit drugs also contribute to the phenomenon. As the evidence shows, the best way for Benin's government to combat counterfeit drug consumption is not only to improve drug availability but also to make it possible for the Benin population to have their pharmaceutical bills covered by insurance.

## References

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