



# The impact of healthcare financing on safe surgical care in Nigeria: a review

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Received 16 Aug 2021; Accepted 4 Oct 2021; Published 27 Oct 2021

## Abstract

Healthcare financing is a key component to the good health and wellbeing of a community or country. It has been outlined as one of the critical components towards achieving Universal health Coverage. However, healthcare financing from out-of-pocket financing which is popular amongst the LMICs are a back breaking burden for those seeking health services. It has also been studied and deduced that one of the major catastrophic expenditures in healthcare is from surgical and post-operative surgical care. Further review of different literatures also brought to light the fact that there have been a 3 fold increase in the costs of common surgical procedures performed, whilst more than two-third of the Nigerian population still earns less than \$60 monthly.

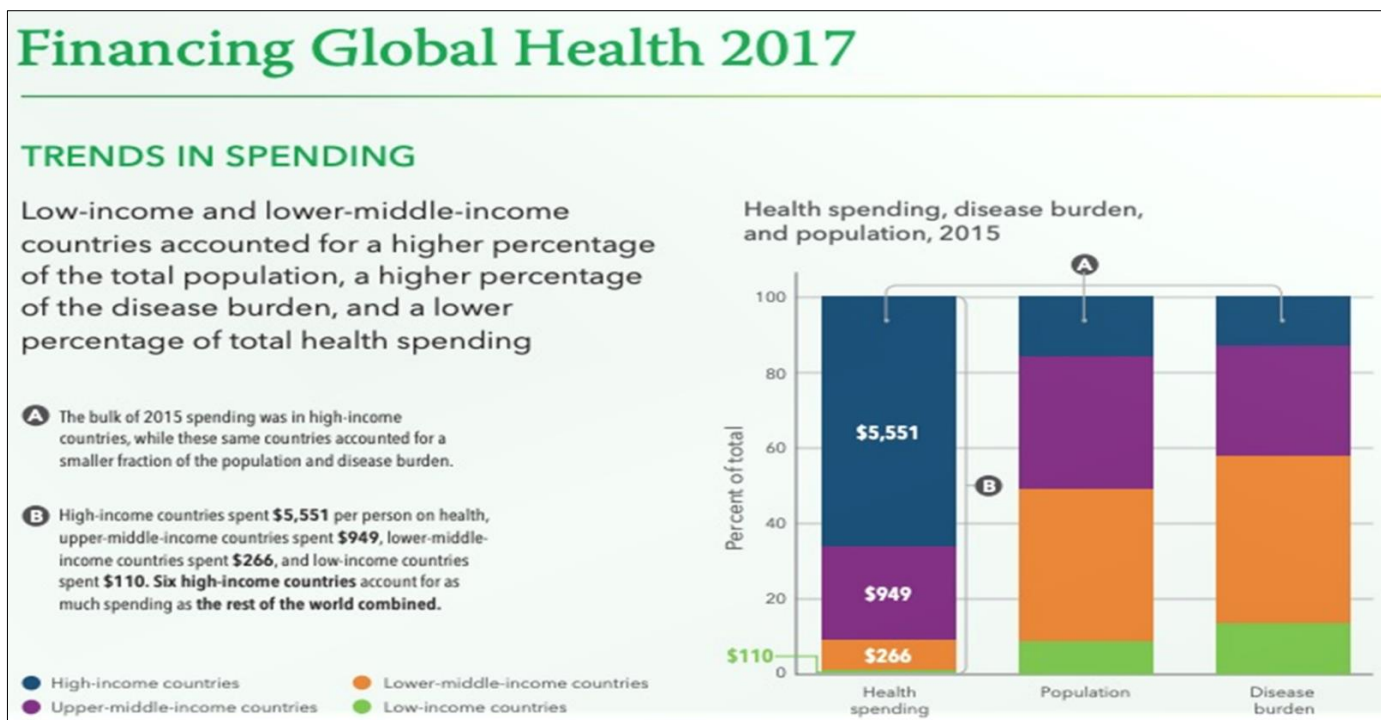
**Keywords:** healthcare financing, SDGS, surgical care, Nigeria

## Introduction

One of the key components of the sustainable development goals is good health and wellbeing (SDG 3). To achieve this, the World Health Assembly adopted the goal for Universal Health Coverage (UHC). In a lay man's term, this is simply seen as the right care, for the right person, for the right ailment and for the right price, to all who need it. This does not just highlight the need for the right care, but also the fact that it has to be given at the right price. Although health is a human right, it seldom comes free. At the current rate, the health systems transformation to achieve the SDG 3's goal will need an

estimated US\$371 billion per year by 2030 for about 67 countries in the LMICs as estimated by the United Nations Development Programme (UNDP) [1].

Furthermore, a key component of Global health, is Global surgery. In this stead, we will be looking at the right surgical care, for the right ailment, at the right time, to the right person and at the right price. It is basically a timely and price friendly intervention of essential surgical care delivered to those in need of it. Global surgery is a rather new terminology adopted by the lancet commission to deal with an essential part of global surgery.



**Fig 1:** The image above shows the financing global health chat for achieving sustainable financing of healthcare, showing the current pattern of healthcare financing in LMICs. (Extract from UNDP's capacity development for health)

## Discussion

### Financing Global Surgery

To achieve the tenets of global surgery, one will generally have to strive for universal health coverage at their national and local levels. This will need an overhaul and reform of the healthcare financing policies to be more inclusive and covering of the members of that community irrespective of their nation, tribe, religion or ethnicity. A meta-analytical study conducted by Odoch WD, *et al* found out that though the SDGs have created an enabling environment for government and countries to utilize several avenues to ensure the improvement in UHC at their national levels, most ministries of health were not really open with their plans as to how to achieve that. While most authors and ministries were merely just publishing the positive results of initiatives they had taken, the steps taken to achieve them were seldom revealed. Hence, other communities and countries could not really imitate effectively to achieve similar positive results [3]. At the UN gathering in 2018, when the SDGs were discussed, it was already an unanimously agreed fact that to achieve the SDG 3's goal of good health and wellbeing, policies geared towards improving goof health and wellbeing were essential to this [4-5].

In Nigeria, healthcare financing is commonly from in-pocket funds, almost 70% of all healthcare financing [6]. Nigeria is still yet to find a blend between economic stability and healthcare financing. With the annual allocation for health obviously not seen as one of the government's priorities. This has created a sort of financial stress on the citizenry. Thus, worsening the WHO's identified delays, especially the first and third delays. Delay to seek healthcare and delay in health workers taking action after a patient presents to the healthcare facility. As regards surgical care, some of the most common reasons people present to health facilities in Nigeria seeking for surgical care is Trauma. As we are one of the world's leading nations in trauma and traumatic related morbidities and mortalities. However, due to financial expenditures, amongst others, the

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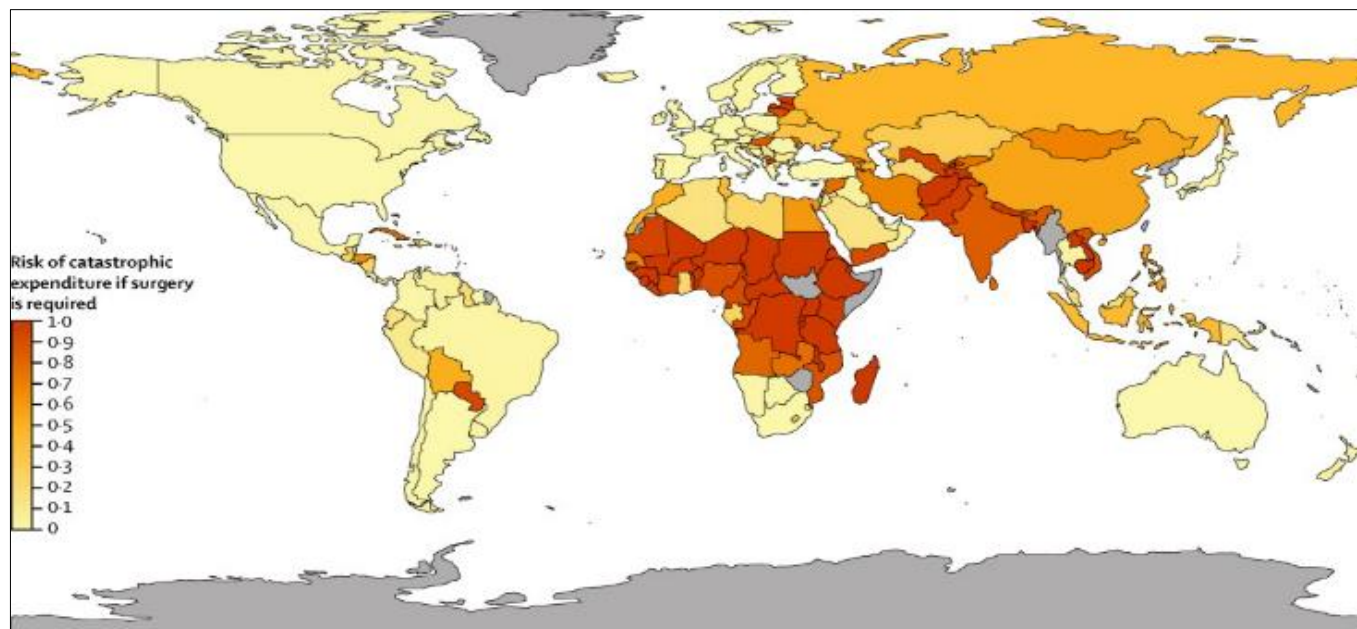
average Nigerian will rather result to herbal or traditional remedies for surgical pathologies. In 2015, *Uzochukwu et al* conducted a systematic review on healthcare financing in Nigeria. Their study focused on a 6-year period from 2009 to 2014, and they found that the recurrent national expenditure for healthcare financing in Nigeria was within the range of N103.8 Bn and N217.8Bn, with us seeing a decline towards 2014. Same was noticed in the capital expenditures, which was between N46.3Bn and N65.0Bn. With 2014 having the lowest capital expenditure. Furthermore, within this period, the percentage of the national budget allocated to national health was between 3.7% and 5.7%. This simply reflects the fact that healthcare financing is still of negotiable importance to the Nigerian government. They concluded that out of pocket spending needed to be replaced with more equitable methods of healthcare financing and more appropriate financing models and policies were needed for PHCs [6].

Furthermore, in 2014 a study took a closer look into the National health insurance scheme and its implementation revealed that a lot of work still needs to be done as regards its design and implementation [7]. Yet, in 2019 *Onwujekwe et al* tried to explore the effectiveness of other healthcare financing mechanisms in Nigeria, they discovered that this are poorly evaluated, monitored nor result-driven. Checkmating this may yield better results. Until then, they will just remain another failed effort within the country. Hence, the current methods are nor effective [8]. This shows that over the years, no check mating or re-evaluation has been done on the healthcare policies or designs made. All in all, some studies have cited the challenges of the Nigerian health system as regards healthcare financing as beyond just patients care and more of a whole infrastructural dysfunction, calling for a reform of the system, structures and leadership. As this being the key component to improving healthcare financing in Nigeria [9]. At the state level, while there exist an obvious disparity in the spatial distribution of health facilities more towards the urban area, it is still

appalling the state of the ones located in the local areas. This has caused healthcare seekers to have to travel towards the urban region, where care is obviously more expensive and not as easily accessible as they will have received it at the rural areas <sup>[10]</sup>.

Nevertheless, a closer look into healthcare financing in surgery is a global burden. The lancet commission made an estimation that as much as 3.7 billion (PCI 3.2-4.2 billion) people globally

risk catastrophic expenditure if they need surgery. With as much as 81.3 million people being driven in to financial catastrophe annually from the costs of surgical care alone. Furthermore, they revealed that this catastrophe is most prevalent amongst the LMICs, especially the poor population <sup>[11]</sup>. Worse off, with such global statistics, imagine what the tale will be in a nation like Nigeria where approximately 80% of her populace live below the poverty line <sup>[12]</sup>.



**Fig 2:** Risk of catastrophic expenditure if surgical care is necessary <sup>[11]</sup>

### Financing surgical care in Nigeria

The critical need for improved healthcare financing for surgical care cannot be over emphasized, even in countries where a lot of their healthcare services are basically free; surgical expenses are still most catastrophic. Especially the orthopaedic surgical procedures, which is a common encounter in Nigeria from numerous Road Traffic Accidents (RTAs) daily <sup>[12]</sup>. However, the real nightmare, for both patients and surgeon alike is the post operative period. This is in fact, the most critical part of every major surgery. As regards the possible cost incurred around this period, some researchers have described it as the hidden pandemic. Hence, it is suggested that healthcare financing goals towards surgical care improvement should also take this into consideration <sup>[13]</sup>. When *Okoroh and Riviello* looked into causes of catastrophic health expenditures as regards surgical care in Sub Saharan Africa, they discovered that medicines such as antibiotics commonly used during post-surgical care was one of the major causes. Although healthcare in these regions were reported as being free, costs for these were sourced from out of pocket (OOPs) <sup>[14]</sup>.

In Nigeria, costs of things further worsened after the Corona Virus pandemic. A study conducted by *Adesunkami et al* that tried to look at the impact of the COVID-19 pandemic on costs of surgical and obstetric care revealed an obvious 3 fold sharp increase in the costs of commonly performed surgical operations, while the minimum wage of N30,000 (<\$60) which about 70% of the Nigerian Populace survives on did not get increased <sup>[15]</sup>.

**Table 1:** Cost of some commonly performed surgeries and medical consumables for surgeries in our centre pre- and during the COVID-19 pandemic <sup>[15]</sup>

	Appendectomy		Herniorrhaphy		Excisional biopsy		Caesarean section	
	Pre-COVID-19, ₦ (\$)	COVID-19, ₦ (\$)	Pre-COVID-19, ₦ (\$)	COVID-19, ₦ (\$)	Pre-COVID-19, ₦ (\$)	COVID-19, ₦ (\$)	Pre-COVID-19, ₦ (\$)	COVID-19, ₦ (\$)
Cost of surgery (inclusive of anesthesia and surgical pack)	48,500-55,650 (127.5-146.3)	48,500-55,650 (127.5-146.3)	23,000 (60.4)	23,000 (60.4)	17,000 (44.7)	17,000 (44.7)	30,000-35,000 (78.8-92.0)	30,000-35,000 (78.8-92.0)
Surgical gowns (at a unit price of ₦3,500 - ₦4,000)	x 3 = 10,500-12,000 (27.6-31.5)	x 7 = 24,500-28,000 (64.4-73.6)	x 3 = 10,500-12,000 (27.6-31.5)	x 7 = 24,500-28,000 (64.4-73.6)	x 3 = 10,500-12,000 (27.6-31.5)	x 7 = 24,500-28,000 (64.4-73.6)	x 3 = 10,500-12,000 (27.6-31.5)	x 7 = 24,500-28,000 (64.4-73.6)
Regular surgical masks (at a unit price of about ₦1,000/pack)	1,000 (2.6)	-	1,000 (2.6)	-	1,000 (2.6)	-	1,000 (2.6)	-
KN 95 masks (at a unit price of ₦850)	-	x 9 = 7,650 (20.1)	-	x 9 = 7,650 (20.1)	-	x 9 = 7,650 (20.1)	-	x 8 = 6,800 (17.9)
PPE for radiologic investigation/obstetric scan (if required)	-	5,000 (13.1)	-	5,000 (13.1)	-	5,000 (13.1)	-	5,000 (13.1)
COVID-19 testing (RT-PCR) before surgery	-	up to 100,400 (263.9)	-	up to 100,400 (263.9)	-	up to 100,400 (263.9)	-	-
Pre-admission COVID-19 antibody testing	-	-	-	-	-	-	-	5,000 (13.1)
Total	60,000-68,650 (157.7-180.4)	186,050-196,700 (489-517)	34,500-36,000 (90.7-94.6)	160,550-164,050 (421.9-431.1)	28,500-30,000 (74.9-78.8)	154,550-158,050 (406.2-415.4)	41,500-48,000 (109.1-126.1)	71,300-79,800 (187.4-209.7)

In conclusion, I think it is evidently safe to say that Nigeria is still far from attaining the goals of SDG3, especially as regards UHC due to poor Healthcare financing structures. Furthermore, due to the corona virus pandemic, the pathology as regards catastrophic healthcare finances has further worsened.

### Recommendations

Healthcare financing reforms should be considered so as to improve the general national healthcare related schemes. This should be evaluated at local, states and national level.

The concept of community healthcare financing should be contemplated, as it may hold a possible promise to tackle rural to urban migrations to seek healthcare services which further worsens catastrophic healthcare expenses (CHEs).

Health Insurance Schemes should take into account the anaesthetic and post-surgical aspects of surgical care, and not just the surgical operations.

### Abbreviations

CHE – Catastrophic Health Expenses

OOPs – Out of Pockets

UHC – Universal Health Coverage

UNDP – United Nations Development Programme

### Conflict of interest

The Authors declare no conflict of interests.

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