

Health Care Expenditure in Nigeria and National Productivity: A Review

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Authors' contributions

This work was carried out in collaboration between all authors. All the authors designed the review and managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/SAJSSE/2018/1i1125768

Editor(s):

(1) Angel Paniagua Mazorra, Department of Economics and Politics, Scientific Researcher of OPIS, Instituto de Políticas y Bienes Públicos, Spain.

Reviewers:

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(2) Antonio D. Juan Rubio, Universidad Internacional de La Rioja, Spain.

Complete Peer review History: <http://prh.sdiarticle3.com/review-history/24059>

Review Article

Received 13th January 2018

Accepted 26th March 2018

Published 9th April 2018

ABSTRACT

National productivity of any nation is a function of the health of such nation which is usually an offshoot of how much such nation invests into the health care system. This paper assesses the health care expenditure of Nigeria and resultant effects on the national productivity. An overview of literature shows that health care expenditure in Nigeria is very poor and low compared to other developing nations even in Africa. The little money that is made available is invested majorly in the curative aspect of health care as against preventive health care that promotes national productivity. This paper suggests that to achieve the much needed improvement in national productivity, special attention must be paid to increasing national investment in health sector especially in primary prevention.

Keywords: Health care; expenditure; national productivity.

1. INTRODUCTION

The way a country finances its health care system is a critical determinant for reaching universal health coverage. This is so because it determines whether the health services that are available are affordable to those that need them or not. In Nigeria, the health sector is financed through different sources and mechanisms. The difference in the proportionate contribution from these stated sources determines the extent to which such health sector will go in achieving successful health care financing system. Unfortunately, in Nigeria, achieving the correct blend of health care expenditure remains a challenge. This review draws on relevant literature to provide an overview and the state of health care expenditure in Nigeria, including policies in place to enhance national productivity.

2. HEALTH CARE FINANCING IN AFRICA

The improvement and extension of healthcare delivery in Africa has been constrained by gaps in financing. Sub-Saharan Africa makes up 11% of the world's population but accounts for 24% of the global disease burden, according to the International Finance Corporation [1]. More worrisome still, the region commands less than 1% of global health expenditure. Public-sector funding for health care remains uneven across the continent. According to Nwafor [2] despite the fact that 53 African countries signed the Abuja Declaration pledging to devote 15% of their national budgets to health, most African countries remain far from that target and, according to some estimates, some countries have actually cut their spending on health over the past decade. More than half of healthcare costs on the continent are currently met by out-of-pocket spending, a ratio that rises to as much as 90% in some countries. With many of the poorest citizens unable to afford treatment, costs are kept down artificially by people's inability to pay, further exacerbating the problem.

Nigeria, with its population of over 170 million and a population growth rate of 2.5 percent, is the most populous country in Africa and the 8th most populous country in world [3]. The country's tumultuous history is reflected in its abundance of states—beginning with only three states at the time of Nigeria's independence from the British government in 1960 and now with 36 states and the Federal Capital Territory (FCT), where the capital Abuja is located. This highlights the potential challenges of managing such a

heterogeneous country. Nigeria is ranked as one of the fastest growing economies in the world with a growth rate of 6.4 percent in 2007 and 7.4 percent in 2011 [4]. Nigeria's GDP per capita in PPP adjusted dollars is \$1,500 according to World Bank estimates for 2011.

The constraints to achieving universal health care in Nigeria are numerous and complex. Factors limiting Nigeria's health outcomes are both demand and supply-side including inadequate financing, weak governance and enforcement, inadequate infrastructure and poor service quality, household poverty and insufficient risk pooling [5].

Health care financing has in recent times received extensive research and policy attention in both developed and developing countries. One of the foremost issues is how to raise sufficient resources to finance health care needs for all citizens [6]. Health care provision in Nigeria is a concurrent responsibility of the three tiers of government namely Local, State and Federal governments. Nigeria operates a mixed economy therefore private providers of health care have role to play in health care service delivery. The federal government role is mostly limited to coordinating the affairs of the University Teaching Hospitals (Tertiary health care system) and federal medical centers, the state governments manage the various general hospitals (secondary health care system) while the local government focuses on dispensaries and health centers (Primary health care system) which are regulated by the federal government [7].

3. NIGERIA'S HEALTH SYSTEM FINANCING

Primary Health Care (PHC), which forms the bedrock of the national health system, is in a prostrate state because of the poor political will, gross under funding, and lack of capacity at the LGA level, which is the main implementing body. The health system remains overstretched by a burgeoning population; physical facilities are decaying, equipment are obsolete and there is scarcity of skilled health professionals. In addition, the roles of stakeholders are misaligned and coordination systems are weak. These are further compounded by the dearth of data which renders evidence based on planning, policy formulation and weak health management systems. The very weak health system contributes to the limited coverage with proven

cost-effective interventions. For example, immunization coverage is 23% [8] only 12% of under-fives sleep under Insecticide Treated Nets, 20% of children in urban areas and only 14% of people in rural areas with fever are appropriately treated with anti-malarials at home, contraceptive prevalence rate is 15% and only 39% of women deliver under the supervision of skilled attendants [8].

In an attempt to resolve the anomaly in health care financing, Nigeria government established National Health Insurance Scheme (NHIS), designed to facilitate fair financing of health care costs through risk pooling and cost-sharing arrangements for individuals. The scheme is federally funded with little or no input from the states, local governments and people in the informal sector of the economy. Since its launch in 2005, the scheme claims to have issued 5 million identity cards, covering about 3 percent of the population [9]. The majority of the enrollees, however, are individuals working in the formal sector and the community scheme still leaves large gaps among the poor and informally employed. Several proposals are currently in the works to expand the reach of NHIS. One of such proposals is to make registration mandatory for federal government employees [10].

Earlier, the creation of a "health fund" collecting an earmarked "health tax" of 2 percent on the value of luxury goods was proposed. The fund is to be used for the health insurance of specified groups of Nigerian citizens, including: children under-five physically challenged or disabled individuals, senior citizens above 65years, prison inmates, pregnant women requiring maternity care, and indigent persons. At a broader level, the National Health Bill which was first proposed in 2006 to improve its poor health sector by allocating at least 2 percent of the federal government's revenue to the health sector is still not signed into law due to some gray areas of the bill that is yet to be reconciled by the stakeholders.

Healthcare expenditure, which is the sum of public and private health expenditure, covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation) (% of GDP) in Nigeria was 5.07 as of 2010 with its highest value over the past 15 years being 7.55% in 2003 while its lowest value was 3.91 in 2002.

4. THE STATE OF HEALTH IN NIGERIA

Nigeria has very poor population health as measured by several health indicators. In the last decade, maternal mortality rate is estimated to be 576 per 100,000 live births and this was one of the highest in the world [11]. There were observed vast regional inequalities in health outcomes across the country. Infant Mortality Rate (IMR) ranges from 77 and 89 per 1,000 live births in the Northeast and Northwest respectively to 58 and 82 in the South-south and Southeast respectively and 61 per 1,000 live births in south west [11]. The prospects of achieving the Millennium Development Goals (MDGs) are slim but more promising in some than other states. Nigeria Demographic and Health Survey 2013 [11] shows that, Under-5 mortality for rural mothers is 167 per 1,000 live births while it is 100 per live births for mothers in the urban areas. Also, under-5 mortality for illiterate mothers is 180 mothers while for mothers with secondary education is 91 per 100 live birth and 62 per 1000 live births for mothers with more than secondary education [11]. The health status of Nigerians has always been ranked low. In 1999, Nigeria ranked 74th out of 115 countries, based on the performance of some selected health indicators [1]. Recall also that the Nigerian overall health system performance was ranked 187th among the 191 Member States by the WHO in 2000 [6].

In the recent time Nigeria's health indicators have either stagnated or worsened despite the federal government's acclaimed efforts to improve healthcare delivery. Life expectancy at 52 years is below the African average, while the numbers of child mortality are astounding — partly because of the country's size. Annually, one million Nigerian children die before the age of five; this is mostly due to neonatal causes followed by malaria and pneumonia. Maternal mortality is 630 per 100,000 live births which is comparable to low-income countries such as Lesotho and Cameroon [12]. An estimated 3.3 million Nigerians are infected with HIV and access to prevention, care and treatment is minimal [13]. Even the little prevention, care and treatment services provided have been mostly financed from donor fund from developed nations of the world. Nigeria also continues to combat the double burden of communicable and non-communicable diseases (NCD). It therefore becomes imperative to ask if governance has an impact on the effectiveness of health expenditure in Nigeria.

5. CONSTRAINTS TO ACHIEVING UNIVERSAL HEALTH CARE IN NIGERIA

The constraints to achieving universal health care in Nigeria are numerous and complex. Factors limiting Nigeria's health outcomes are (i) non replacement of OOPs with more equitable modes of financing; (ii) no articulate clear policies on PHC financing; (iii) there is currently a lack of clarity as to the roles of different levels of government in financing PHC, and which components are to be financed by each level of government; (iv) Health status indicator (v) governments not given higher priority to health in their budget allocations; (vi) non aggressiveness in passing the national health bill and implementing it; (vii) little/ no exploration on innovative ways of mobilizing funds and financing health.

5.1 Inadequate Government Financing for Health

There are four main sources of public funding for the public (nonfederal) health sector: state governments, local governments, direct allocations from the federal government, private individuals and organizations, including non-governmental organizations and international donors in some states. The federal government and some state governments have increased funding to public health care (PHC) over the past decade, with a dramatic increase between 2005 and 2007 where the percent increase in health sector allocations jumped from 31.4 percent to 86.2 percent [14]. Nonetheless, Nigeria spends a mere 5.3 percent of its GDP, or \$139 (PPP) per capita on health care. This is extremely low, in particular when compared to other African countries such as Burkina Faso (6.7 percent) and the Democratic Republic of Congo (7.9 percent), which have considerably lower GDP per capita. It is also not certain the actual percentage that is spent directly on health has good percentage of monetary allocation and acclaimed spending in Nigeria are usually lost to leakages and corruption in the system.

In order to achieve effective access and financial protection, the government must begin by making a more serious commitment to spend on health. The absence of institutionalized National Health Accounts (NHA), however, contributes to the challenge of reassessing health spending in the country. Also, low levels of external health financing reflect an unwillingness to invest in the

country. Just 9.2 percent of spending is donor funded, which is very low compared to, for example, Ghana with 16.9 percent, which has a comparable GDP per capita [15].

5.2 Health Status Indicator

The health status indicators for Nigeria are among the worst in the world. The life expectancy at birth is 49 years while the disability adjusted life expectancy "at birth is 38.3 years"; vaccine- preventable diseases and infectious and parasitic diseases continue to exact their toll on health and survival of Nigerians, remaining the leading causes of morbidity and mortality. In the face of these, non-communicable diseases are increasingly becoming public health problems, especially among the affluent urban population.

Even though only 2% of the global population is in Nigeria, the country, with an estimated infant mortality rate of 75 per 1000 live births, child mortality rate of 88 per 1,000 live births, under 5 mortality rate of 157 per 1,000 live births [8] and a maternal mortality ratio of 800 per 100,000 live births, contributes a disproportionate 10% to the global burden of maternal and also infant mortality [16]. Wide regional variations exist in infant and maternal mortality across the zones. Infant and child mortality in the North West and North East zones of the country are in general twice the rate in the southern zones while the maternal mortality in the North West and North East is 6 times and 9 times respectively the rate of 165/100, 000 recorded in the South West Zone [17].

5.3 Poverty Constraints, Insufficient Risk Pooling and Burden on Private Individuals

Nearly two-thirds of Nigerian's live below the poverty line; eighty percent work in the informal sector. Even not all those that work in the formal setting are able to access the scheme. Most states of the country up till now have not enrolled their workers on the scheme. As the national health system mostly covers the formally employed only 3 percent of the population is covered by the NHIS. Private prepaid schemes are unreachable for the poor as premiums are unaffordable. With the overburdened public system unable to deliver, people have no option but to pay for health care out-of-pocket. By default, the private health sector has grown rapidly over the past decades and now provides over 65 percent of health care services [18].

The health financing system is therefore mainly based on out-of-pocket user-fees; payments are made at the point of service. Beyond the inability to pay for existing expensive health insurance schemes, it is common in poverty stricken environments, that decision-making take place in a much shorter time horizon, with people refraining from saving, investing and buying health insurance. The willingness to prepay for health care is low in an environment of low trust in which people are unsure of benefits from a product or service in the future against a payment today. In Nigeria, prepaid spending or risk-pooling only encompasses 3.1 percent of all private health spending. The remaining private spending consists of out-of-pocket payments. This makes the development of risk pools difficult and creates an environment that is not conducive to private investment. The high share of out-of-pocket expenses is the most expensive, least efficient and least inclusive financing channel. It weighs heavily on household's budgets and forces many into poverty due to unpredictable catastrophic health expenditure. In short, the poor are stuck in a vicious cycle for health care as the Figure. 1 below shows. Prepayment is low because people do not trust the system and because the quality of the services is low, while a lack of steady revenue stream discourages providers from investing.

Poverty incidence has varied but remained high over the past decade. In 2004, the poverty rate was 54.4 percent; it rose to 62.6 percent in 2010 and dropped back down to 54.4 percent in 2011 [19]. There are great regional disparities, reflected in a contrast between rural areas with a poverty rate of 69.0 percent and 51.2 percent in the urban sector [20]. The poorest zones of the country are those in the North while the South East zone has the lowest incidence of poverty. Inequalities, as measured by the Gini coefficient, rose steadily since 1985, save for a slight decline in 1992. As of 2011, the total population inequality is back at the only slightly better 1992-levels with a Gini coefficient of 0.397 [21]. Human development indicators are staggeringly low considering the country's GDP per capita. Nigeria ranks 156th out of 173 countries with data on the Human Development Index (HDI) [22].

6. DISCUSSION

Better health care is a primary human need. According to the World Health Organization [23] fifty percent of economic growth differentials between developed and developing nation is attributable to ill-health and low life expectancy. Developed countries spend a high proportion of their Gross Domestic Product (GDP) on Health

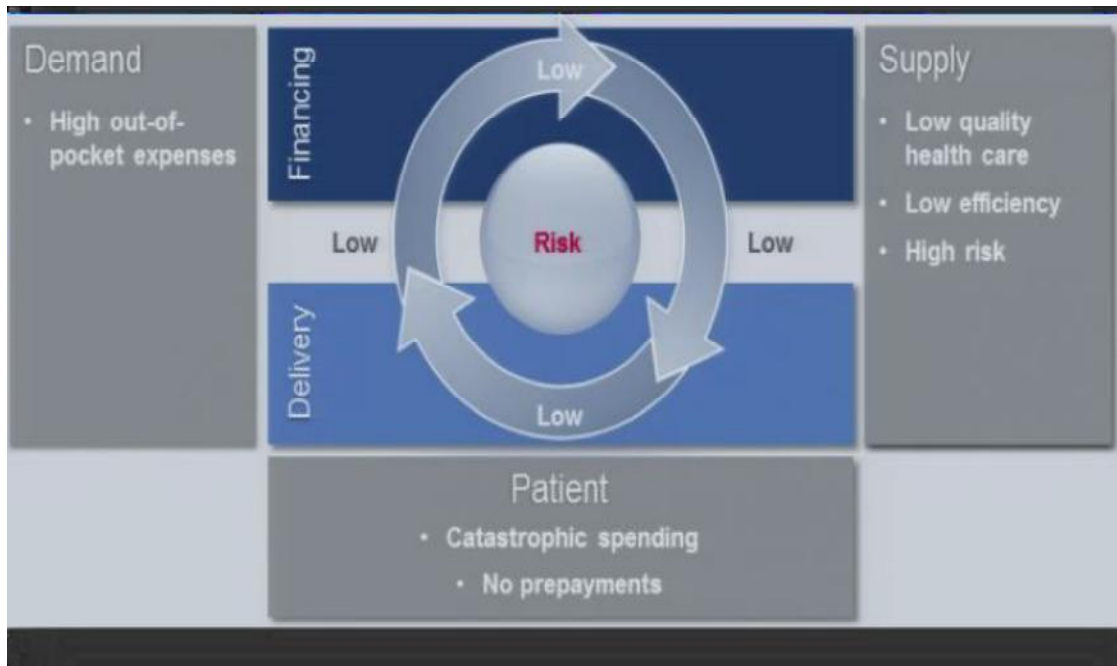


Figure 1. The vicious healthcare cycle of the poor

Source: Pharm Access Foundation, 2012

care because they believe that their resident health can serve as a major driver for economic activities and development. This is however, not the case in many developing nations especially Nigeria and is therefore not strange that much impact has not been made in the area of reduction of infant, under five and maternal mortalities since 1970. For instance, the Nigeria's rate of infant mortality (91 per 1000 live births) is among the highest in the world, and the immunization coverage has dropped below thirty percent while the mortality rate for children under age five is 192 deaths per one thousand. By year 2007, it was reported that more than one hundred and thirty four thousand women died from pregnancy complications. In addition, the life expectancy ratio on the average has been on the decline over the study period.

It should however be noted that despite the increase in government expenditure in health care in Nigeria, the contribution of this to health is still marginally low whereas the extent and magnitude of its impact on economic growth is undetermined. In the actual sense there has been increase in the amount of money allocated and spent on health services but per capita expenditure on health has not witnessed much increase over the year. Per capita determine the effect of monetary allocation to a common man on the street. Bakare & Olubokun [24] in their quest to establish the relationship between health care expenditure and economic growths in Nigeria submitted that gross capital formation has positive coefficients and it is significant at the 3% level. They found out a direct relationship between capital formation and gross domestic output in Nigeria. This indicates that a unit increase in the gross capital formation will increase the GDP by about 84 percent.

7. CONCLUSION

This result suggests a direct relationship between health expenditure and gross domestic output in Nigeria. It implies that the increase in health expenditure over the years has boosted national income which is a good measure of national productivity. They also showed that 1 percent increase in the health expenditure leads to about 69 percent increase in the real Gross Domestic product.

Health care expenditure had been found to affect gross domestic output of a nation with resultant effect on the national productivity. In Nigeria the percentage of national budget allocated to health

is low coupled with mismanagement of the fund allocated to health. It is therefore not a sweet saying that increase in per capita expenditure will result in better health indices and resultant healthy nation and increase national productivity.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:

*The peer review history for this paper can be accessed here:
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