1

# **Review Article**

#### 2 HEALTH CARE EXPENDITURE IN NIGERIA AND NATIONAL PRODUCTIVITY

#### 3 Abstract

National productivity of any country 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 has
compared to other developing nation 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 brings
about national productivity.

11 This paper suggest that to achieve the much needed improvement in national productivity, 12 special attention must be paid to increasing national investment in health sector especially in 13 primary prevention.

14

15 Key Words: Health Care, Expenditure, National Productivity

#### 16 1.1 HEALTH CARE FINANCING IN AFRICA

The improvement and extension of healthcare delivery in Africa has been constrained by gaps in 17 financing. Sub-Saharan Africa makes up 11% of the world's population but accounts for 24% of 18 19 the global disease burden, according to the International Finance Corporation (The Business of Health in Africa, n.d.). More worrisome still, the region commands less than 1% of global health 20 expenditure. Public-sector funding for healthcare remains uneven across the continent. Despite 21 22 the fact that 53 African countries signed the Abuja Declaration pledging to devote 15% of their 23 national budgets to health, most remain far from that target and, according to some estimates, some countries have actually cut their spending on health over the past decade (Health Situation 24 Analysis in the African Region, nd). More than half of healthcare costs on the continent are 25

currently met by out-of- pocket spending, a ratio that rises to as much as 90% in some countries.
With many of the poorest unable to afford treatment, costs are kept down artificially by people's
inability to pay, further exacerbating the problem.

29 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 (The World 30 Bank, 2011). The country's tumultuous history is reflected in its abundance of states—beginning 31 with only three states at the time of Nigeria's independence from the British government in 1960 32 and now with 36 states and the Federal Capital Territory (FCT), where the capital Abuja is 33 34 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 35 percent in 2007 and 7.4 percent in 2011 (The World Databank, 2013). Nigeria's GDP per capita 36 in PPP adjusted dollars is \$1,500 according to World Bank estimates from 2011. 37

The constraints to achieving universal health care in Nigeria are numerous and complex. Factors 38 limiting Nigeria's health outcomes are both demand and supply-side including inadequate 39 financing, weak governance and enforcement, inadequate infrastructure and poor service quality, 40 , household poverty and insufficient risk pooling (Gustafsson-wright & Schellekens, 2013). 41 42 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 43 resources to finance health care needs for all citizens (WHO, 2000). Health care provision in 44 Nigeria is a concurrent responsibility of the three tiers of government namely Local, State and 45 Federal governments. Nigeria operates a mixed economy therefore private providers of health 46 care have role to play in health care service delivery. The federal government role is mostly 47 48 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 (Rais, 1991).
Quality rural health services in rural communities are needed to attract business and industry.
(Chirilos & Nostel, 1985; Lyne, 1988; and Scott, Smith, & Rungeling, 1997).

- 54
- 55

## 1.2 NIGERIA'S HEALTH SYSTEM FINANCING

Nigeria operates a pluralistic health care delivery system with the orthodox and traditional health 56 57 care delivery systems operating alongside each other, albeit with little or no collaboration. Both the private and public sectors provide orthodox health care services in the country. In 2005, 58 Federal Ministry of Health (FMoH) estimated a total of 23,640 health facilities in Nigeria of 59 which 85.8% are primary health care facilities, 14% secondary and 0.2% tertiary. However, 38% 60 of these facilities are owned by the private sector, which provides 60% of health care in the 61 country (Federal Ministry of Health, 2005). Also, 60% of the public primary health care facilities 62 are located in the northern zones of the country, they are mainly health posts and dispensaries 63 that provide only basic curative services. The Private Out-Of-Pocket- Expenditure (OOPE) in 64 65 Nigeria accounts for over 70% of the estimated \$10 per capita expenditure on health (Federal Ministry of Health, 2004), limiting equitable access to quality health care. 66

The public health service is organized into primary, secondary and tertiary levels. While the Constitution is silent on the roles of each levels of government in health services provision, the National Health Policy ascribes responsibilities for primary health care to local governments, secondary care to states and tertiary care to the federal level. At the same time, a number of parastatals, based at the federal level, for example, the National Primary Health Care Development Agency (NPHCDA) are currently engaged in primary health care services development and provision; the latter is evidently part of its mandate. Although national policies, formulated by the Federal Ministry of Health provide some level of standardization, each level is largely autonomous in the financing and management of services under its jurisdiction. The health system is in a deplorable state with an overall health system performance ranking 187th out of 191 member States by the World Health Organization (WHO) (WHO, 2000).

Primary Health Care (PHC), which forms the bedrock of the national health system, is in a 78 prostrate state because of poor political will, gross under funding, and lack of capacity at the 79 LGA level, which is the main implementing body. The health system remains overstretched by a 80 burgeoning population; physical facilities are decaying, equipments are obsolete and there is 81 scarcity of skilled health professionals. In addition, the roles of stakeholders are misaligned and 82 coordination systems are weak. These are further compounded by the dearth of data which 83 renders evidence based planning, policy formulation and health systems management weak. The 84 very weak health system contributes to the limited coverage with proven cost-effective 85 interventions. For example, immunization coverage is 23% (National Population Commission 86 (2008); only 12% of under-fives sleep under Insecticide Treated Nets, 20% of children in urban 87 88 areas and 14% resident in rural areas with fever are appropriately treated with antimalarials at home, contraceptive prevalence rate is 15% and only 39% of women deliver under the 89 supervision of skilled attendants (National Population Commission, 2008). 90

91 In attempt to resolve the anomaly in health care financing, Nigeria government established 92 National Health Insurance Scheme (NHIS), designed to facilitate fair financing of health care 93 costs through risk pooling and cost-sharing arrangements for individuals. The scheme is 94 federally funded with little or no input from the states, local governments and people in the

95 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. (National Health Insurance 96 Scheme (NHIS), nd). The majority of the enrollees, however, are individuals working in the 97 formal sector and the community scheme still leaves large gaps among the poor and informally 98 employed. Several proposals are currently in the works to expand the reach of NHIS. One of 99 such proposals is to make registration mandatory for federal government employees (Dutta & 100 Hongoro, 2013). Earlier, the creation of a "health fund" collecting an earmarked "health tax" of 2 101 percent on the value of luxury goods was proposed. This fund would be used for the health 102 103 insurance of specified groups of Nigerian citizens, including: children under-five, physically 104 challenged or disabled individuals, senior citizens above 65 years, prison inmates, pregnant women requiring maternity care, and indigent persons. At a broader level, the National Health 105 106 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 107 some gray areas of the bill that is yet to be reconciled by the stakeholders. 108

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.

114

115 1.3 HEALTH STATUS INDICATOR

116 The health status indicators for Nigeria are among the worst in the world. The life expectancy at 117 birth is 49 years while the disability adjusted life expectancy at birth is 38.3 years; vaccinepreventable 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 (National Population Commission, 2008) and a maternal mortality ratio of 800 per 100,000 live births, contributes a disproportionate 10

126 % to the global burden of maternal and also infant mortality (Federal Ministry of Health, 2008).

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 (FMoH, 2004).

131

#### 132 1.4 THE STATE OF HEALTH IN NIGERIA

Nigeria has very poor population health as measured by several health indicators. In the last 133 decade, maternal mortality rate is estimated to be 800 per 100,000 live births and this was one of 134 the highest in the world. Infant and under-five mortality rates were estimated to be 100 and 201 135 per 1,000 live births respectively (Demographic and Health Survey 2003). There was observed 136 137 vast regional inequalities in health outcomes across the country. Infant Mortality Rate (IMR) ranges from 121 and 125 per 1,000 live births in the Northeast and Northwest respectively to 66 138 and 69 in the Southeast and Southwest respectively and in general the prospects of achieving the 139 140 Millennium Development Goals (MDGs) are slim but more promising in some than other states.

141 Nigeria Demographic and Health Survey (NDHS) 2003 shows that Under 5 mortality for 142 illiterate mothers is 269 while it is 113 for mother with secondary education and just 80 for 143 mothers with more than secondary education.

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 (World Bank, 1999).
Nigerian overall health system performance was also ranked 187th among the 191 Member
States by the WHO in 2000 (National Health Policy, 2004).

In the recent time Nigeria's health indicators have either stagnated or worsened despite the 148 federal government's acclaimed efforts to improve healthcare delivery. Life expectancy at 52 149 years is below the African average, while the numbers of child mortality are astounding —partly 150 because of the country's size. Annually, one million Nigerian children die before the age of five, 151 152 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 153 Cameroon. (The World Databank, 2010). An estimated 3.3 million Nigerians are infected with 154 155 HIV and access to prevention, care and treatment is minimal. (The World Databank: Health Nutrition and Population Statistics, 2010). Even the little prevention, care and treatment services 156 provided has been mostly financed from donor fund from developed nations of the world. 157 Nigeria also continues to combat the double burden of both communicable and non-158 communicable diseases (NCD). It therefore becomes imperative to ask if governance has an 159 160 impact on the effectiveness of health expenditure in Nigeria.

161

162

#### 164 1.5 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 both demand and supply-side including inadequate financing, weak governance and enforcement, inadequate infrastructure and poor service quality, , household poverty and insufficient risk pooling.

#### 169 **1.5.1 Inadequate government financing for health**

There are four main sources of public funding for the public (nonfederal) health sector: state 170 governments, local governments, direct allocations from the federal government, private 171 172 individuals and organizations, including non-governmental organizations and international donors in some states. The federal government and some state governments have increased 173 funding to public health care (PHC) over the past decade, with a dramatic increase between 2005 174 175 and 2007 where the percent increase in health sector allocations jumped from 31.4 percent to 86.2 percent. (The World Health Organization, 2009). Nonetheless, Nigeria spends a mere 5.3 176 percent of its GDP,) or \$139 (PPP) per capita on health care. This is extremely low, in particular 177 178 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 179 is also not certain the actual percentage that is spent directly on health has good percentage of 180 monetary allocation and acclaimed spending in Nigeria are usually lost to leakages and 181 corruption in the system. 182

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 187 country. Just 9.2 percent of spending is donor funded, which is very low compared to, for188 example, Ghana with 16.9 percent, which has a comparable GDP per capita. (WHO, 2011).

#### 189 **1.5.2** Poverty constraints, insufficient risk pooling and burden on private individuals

190 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 191 states of the country up till now have not enrolled their workers on the scheme. As the national 192 193 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 194 195 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 196 the past decades and now provides over 65 percent of health care services (FMoH, 2009). The 197 198 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 199 schemes, it is common in poverty stricken environments, that decision-making take place in a 200 201 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 202 which people are unsure of benefits from a product or service in the future against a payment 203 today. In Nigeria, prepaid spending or risk-pooling only encompasses 3.1 percent of all private 204 health spending. The remaining private spending consists of out-of-pocket payments. This makes 205 206 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 207 efficient and least inclusive financing channel. It weighs heavily on households budgets and 208 209 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 below shows. Prepayment is low because

211 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.

- 213
- 214



215

216 Source: PharmAccess Foundation, 2012

217 Figure

218

219 Poverty incidence has varied but remained high over the past decade. In 2004, the poverty rate 220 was 54.4 percent, it rose to 62.6 percent in 2010 and dropped back down to 54.4 percent in 2011. 221 (The World Bank PovCalNet, 2011). 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 (The 222 223 World Databank: Poverty and Inequality Database, 2010). The poorest zones of the country are those in the North while the South East zone has the lowest incidence of poverty. Inequalities, as 224 measured by the Gini coefficient, rose steadily since 1985, save for a slight decline in 1992. As 225 of 2011, the total population inequality is back at the only slightly better 1992-levels with a Gini 226 coefficient of 0.397. (The World Databank: Poverty and Inequality Database, 2011). Human 227

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) (UNDP,
2011).

231

## **1.6 HEALTH CARE EXPENDITURE AND ECONOMIC GROWTH**

Better health care is a primary human need. According to the World Health Organization (WHO, 233 2005), fifty percent of economic growth differentials between developed and developing nation 234 is attributable to ill-health and low life expectancy. Developed countries spend a high proportion 235 236 of their Gross Domestic Product (GDP) on Health Care because they believe that their resident health can serve as a major driver for economic activities and development. This is however, not 237 the case in many developing nations especially Nigeria and is therefore not strange that much 238 239 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 240 the highest in the world, and the immunization coverage has dropped below thirty percent while 241 242 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 243 244 complications. In addition, the life expectancy ratio on the average has been on the decline over the study period. 245

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 witness much increase over the year. Per capita determine theeffect of monetary allocation to a common man on the street.

Bakare & Olubokun (2011) in their quest to establish the relationship between health care 252 expenditure and economic growths in Nigeria submitted that gross capital formation has positive 253 coefficients and it is significant at the 3% level. They found out a direct relationship between 254 capital formation and gross domestic output in Nigeria. This indicates that a unit increase in the 255 gross capital formation will increase the GDP by about 84 percent. There result suggests a direct 256 relationship between health expenditure and gross domestic output in Nigeria. It implies that the 257 increase in health expenditure over the years has boosted national income which is a good 258 measure of national productivity. They also showed that 1 percent increase in the health 259 expenditure leads to about 69 percent increase in the real Gross Domestic product. 260

It is therefore not a sweet saying that increase in per capita expenditure will result in better healthindices and resultant healthy nation and increase national productivity.

263

264

# 265

#### REFERENCE

- Amakom U., & Ezenekwe U., (2012). Implications of households catastrophic out of pocket
   (OOP) healthcare spending in Nigeria. Journal of Research in Economics and
   International Finance (JREIF) Vol. 1(5) pp. 136-140, November 2012 Available online
   <a href="http://www.interesjournals.org/JREIF">http://www.interesjournals.org/JREIF</a>
- Bakare A.S., & Olubokun (2011). Health Care Expenditure and Economic Growth in Nigeria:
  An Empirical Study. Journal of Emerging Trends in Economics and Management
  Sciences (JETEMS) 2 (2): 83-87
- Chirilos, T.N. and Nostel, G. "Further Evidence on the Economic Effects of Poor Health."
  Review of Economic and Statistics. Volume 67(1): 61-69. 1985.

- 275 Dutta, A., and Hongoro, C. (2013). Scaling up national health insurance in Nigeria: Learning from case studies of India, Colombia, and Thailand. Washington, DC: Futures Group, 276 277 Health Policy Project. p. 1. Dutta, A., and Hongoro, C. (2013). Scaling up national health insurance in Nigeria: Learning 278 from case studies of India, Colombia, and Thailand. Washington, DC: Futures Group, 279 Health Policy Project. p. 1. 280 Federal Ministry of Health (2004) Health Sector Reform Program: Strategic Thrusts and Log 281 Framework Abuja: Federal Ministry of Health 282 Federal Ministry of Health (2005) Inventory of Health Facilities in Nigeria Abuja: Federal 283 Ministry of Health 284 Federal Ministry of Health (2008) Integrated Maternal, Newborn and Childhealth Strategy. 285 286 Federal Ministry of Health, Abuja FMoH. (2009). Nigeria demographic health survey 2008. Federal Ministry of Health and ORC 287 Macro. 288 Gustafsson-wright, E., & Schellekens, O., (2013). Achieving universal health coverage in 289 290 Nigeria one state at a time a public-private partnership community-based health insurance model. Brooke Shearer Working Papers Series. Global Economy and Development. 291 Lyne, J. "Quality-of-Life Factors Dominate Many Facility Location Decisions." Site Selection 292 Handbook. Volume 33: 868-870. 1988. 293 294 National Health Insurance Scheme (NHIS). Retrieved from http://nhis.gov.ng/index.php?option=com\_content&view=article&id=47:welcome-note-295 from-executive- secretary&catid=34:home. 296 Health 297 National Insurance Scheme (NHIS). Retrieved from 298 http://nhis.gov.ng/index.php?option=com\_content&view=article&id=47:welcome-notefrom-executive-secretary&catid=34:home. 299 300 National Population Commission (2008) National Demographic and Health Survey Abuja: National Population Commission 301
- Rais A (1991). Health care patterns and planning in developing countries, Greenwood Press, pp
   264-5.

304	Scott L.C., Smith, L., and Rungeling, B. "Labor Force Participation in Southern Rural Labor
305	Markets." American Journal of Agricultural Economics. Volume 59:266-274. 1997.
306	The Business of Health in Africa; Partnering with the Private Sector to Improve People's Lives,
307	International Finance Corporation, vii
308	The World Bank PovCalNet. (2011). Nigeria summary report. Retrieved from http://iresearch.
309	worldbank.org/PovcalNet/index.htm?2.
310	The World Bank. (2011). Nigeria population total. Retrieved from http://data.worldbank.org/
311	country/nigeria;
312	The World Databank. (2010). Maternal mortality ratio (modeled estimate, per 100,000 live
313	<i>births</i> ). Retrieved from <u>http://data.worldbank.org/indicator/</u> SH.STA.MMRT.
314	The World Databank: Health Nutrition and Population Statistics. (2010). Adults (age 15+) and
315	children (0-14 years) with HIV. Retrieved from http://databank.
316	worldbank.org/data/views/reports/tableview.aspx.
317	The World Databank: Poverty and Inequality Database. (2010). Retrieved from <u>http://databank</u> .
318	worldbank.org/data/views/reports/tableview.aspx.
319	The World Databank: Poverty and Inequality Database. (2011). Retrieved from <u>http://databank</u> .
320	worldbank.org/data/views/reports/tableview.aspx.
321	The World Databank: World Development Indicators. (2011). Retrieved from <u>http://databank</u> .
322	worldbank.org/data/views/reports/tableview.aspx?isshared=
323	true&ispopular=series&pid=1.
324	The World Health Organization. (2009). WHO country cooperation strategy 2008-2013:
325	Nigeria. Republic of Congo: World Health Organization, 2009. p. 8.
326	UNDP. (2011). Human development report 2011: Sustainability and equity: A better future for
327	all. New York: United Nations Development Programme.
328	United Nations Statistics Division. (2010). Nigeria: Country profile. Retrieved from
329	http://data.un.org/CountryProfile.aspx?crName=Nigeria.
330	WHO (2000) World Health Report 2000: Health Systems - Improving Performance. Geneva:
331	World Health Organization

- WHO (2000). The World Health Report 2000 Health Systems: 'Improving Performance',
   WHO (Chapter 5). Available at <u>www.who.int/whr/2000/en/whr00\_en.pdf</u>. Accessed
   February 20th2012.
- WHO. (2011). Global health observatory data repository. Retrieved from http://apps.who.int/gho/ data/node.main.75?lang=en.
- 337 World Health Organization (2005). World Health Development Indicators. Washington, DC.
- 338