



HEALTH, POPULATION AND ECONOMIC DEVELOPMENT IN NIGERIA; POLICY PERSPECTIVE, AND TRIANGULAR-DYNAMICS EFFECT

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Article Received on 11/02/2016

Article Revised on 02/03/2016

Article Accepted on 22/03/2016

ABSTRACT

The concept of demographic transition and population dynamics should be accorded a paramount place if a meaningful development must take place in any nation. Scholarly studies have shown direct links between population growth and economic developments which impacts on the health of the citizenry. Optimum population distribution with good economic status will ultimately promote good and improved health care leading to improved health outcomes and positive indices among the people. This study identified the relationship between health, population and economy. Population structure is as a determinant or a litmus test for the economic and developmental strides of a nation. A falling birth rate could translate to increasing life expectancy over time, all things being equal. The economic freedom score for Nigeria was 54.3 in 2014 and rose by 1.3 points to 55.6 in 2015 making her the 120th freest economy in the world. Nigeria is now the largest economy in Africa. However, 61% of her 180 million estimated populations live below \$1 United States Dollar (USD) per day. Government policy through privatization revamped the banking and telecommunication sectors leading to massive investments in these vital areas of the economy. This preceded the elimination of dual exchange mechanisms in 1999. There appear to be relationship between population change, economic growth and the health status of a people in a triangular dynamic equilibrium, determined by government policies and education status of the people. A decrease in economic growth tends to adversely affect population growth and the health indices of a people. Positive economic growth tends to have a positive impact on the health indices and encourages population growth and vice versa while increase in population growth tends to adversely affect the economy and health status. These are in a triangular dynamic equilibrium stabilized and determined by government policies and their level of education.

KEYWORDS: Public health, population, economy, policy, model, Nigeria.

INTRODUCTION

The percentage of government expenditure for health in Nigeria was 17.97% in 2013 according to the World Bank.^[1] A total of \$1.7b was allocated to health in the 2014 budget out of which recurrent expenditures gulped a whopping 82%. This figure was approximately 6% of the entire budget. Results showed that government funding for the health sector has been unsatisfactory over the years compared to the 1980s when an average of \$533.6 million accrued to the health sector from the Federal Government considering the low value of inflation during that period. This figure declined below \$518.8 million in 1987 and rose up to \$524.4 million USD in 2002 and ultimately to 1.79 billion USD in 2013. This showed a downward trend from 5% in 1997 to 2.7% in 2000 with a slight marginal increase to 5.6% in 2013.^[2,3,4.] A study on Health care expenditure, by Journal of Economic and International Finance on health status and national productivity in Nigeria (1999-2012), revealed that between 2005 and 2012, Nigeria's Health Development Index (HDI) value appreciated from 0.434

to 0.471, giving rise to an average annual increase of 1.2 per cent. However, the health care spending as a proportion of the Federal Government expenditures nose-dived from an average of 3.5% in the 1970s to less than 2% in 1980s and 1990s. This grossly affected the nation's health indices with a negative impact on her socioeconomic status. It led to the ranking of Nigeria as the 187th among the 191 United Nations member states in 2000. There was further reduction in her per capita on health to 4 USD, below the World Health Organization (WHO) minimum benchmark of 14USD per capita for developing countries. This downward trend continued until the year 2002, when the total health expenditure was 4.7%, a complete deviation from the normal. However, in 2012, total expenditure for health as percentage of Gross Domestic Product (GDP) stood at 5.3%, placing her at a position of 153 out of 187 nations.^[4,5] Population growth is a dynamic process that affects the health and socioeconomic status of the people. Poor control of resources without improvement on the economic status of the people will in no doubt lead to

catastrophic consequences of starvation, poor health indices and population decline. This study identified the relationships between health, population and economy.

Population Policy, Health and Economic Development

The goal of the National Population Policy for Sustainable Development in Nigeria is, *“to improve the quality of life and standard of living of the Nigerian population”*.^[6,7,8] The impact of population on health and economic status of the people made the federal government of Nigeria to come up with the National population policy. The specific objectives of the policy targeted, *“actualizing sustainable economic growth, protection, and preservation of the environment, poverty eradication and provision of quality social services. Achievement of a balance among the rate of population growth, available resources and the social and economic development of the country was among the key objectives”*. The targets set by the government through the National Population Policy include *making progress toward a complete demographic transition to a reasonable growth in birth rates and a low death rate, and improvement on the reproductive health of all Nigerians at every stage of the life circle. Acceleration of a strong and immediate response to the HIV/AIDS pandemic and other related infectious diseases without prejudice to achieving balanced and integrated urban and rural development were included.*^[7,8] It was based on the principle and consideration that achieving a high quality of life for the people today should not jeopardize the ability of future generations to meet their own needs. Nigeria has confounding contradictions in her economic development, which is that of growth without development. With noticeable rise in her economic indices within the past one decade, the country's overall rate of unemployment increased from 6.4% in 2006 to 24.2% in 2015. This figure was about the documented rate for people between the ages of 15 to 34 years. The dwindling oil price in the world market has further threatened this status since she relies more on capital-intensive sectors like oil and gas, and less on the labor-intensive ones like agriculture.^[9,10,11,12,13] These have taken its toll on the nation's health indices. A recent study provided evidence that the per capital poverty rate (Nigerian definition based on less than 3000 calorie-a-day consumption) is significantly lower than what had been estimated earlier. The survey estimated that 33.1% of the population lived below poverty line in 2012/2013 and noted that poverty is much lower in urban areas with a value of 12.6%, than in rural areas where the value was 44.9%. The study noted that the urban poverty reduction dynamic is much stronger than that of the rural areas. The high variability in the living standards by geographical regions was tailored to differences in the provision of public developmental services and the level of relationship to larger markets.^[14]

Population and Health Policy

In line with the principle of sustainability and development, the government set the following targets to achieve their plans for maximum impact on the policy, program planning and implementation. The targets put in place by the policy include reduction of the national population growth rate to 2 percent or less by 2015 and reduction in the total fertility rate by at least 0.6 of children every five years. Encouraging child spacing through the use of family planning and increase in the contraceptive prevalence rate for modern methods by at least 2% per year through family planning methods were included. Other targets put in place were to reduce the infant mortality rate to 35 per 1,000 live births by 2015, reduction of child mortality rate to 45 per 1,000 live births by 2010 and reduce the maternal mortality ratio to 125 per 100,000 live births by 2010 and to 75 by 2015. Targets were set to achieve sustainable Universal Basic Education before 2015, eliminate the gap between males and females in school enrolment at all levels and in vocational and technical education by 2015, eliminate illiteracy by 2020 and achieve at least a 25 percent reduction in HIV/AIDS adult prevalence every five years.^[12,15,16,17,18] Nigeria's National Health Insurance Scheme (NHIS) was established in 1999 to promote health coverage. The national health policy was formulated in 1988. It aimed at achieving quality healthcare for all Nigerians. Due to emerging issues and the increasing need to focus on the health realities, issues, challenges and trends, a review of the policy became very necessary. The new policy, was tagged, *“The Revised National Health Policy”* and was launched in September 2004. It underscored the goals, structure, strategy and policy direction of the health care delivery system in Nigeria. The underlying principles and values of the Revised National Health Policy are social justice, equity, and the ideals of freedom and opportunity affirmed in the 1999 constitution.^[21,22] Health insurance coverage is predominantly among people within the urban areas and common among the educated population. Women enrolment is less than 2% of those between the ages of 15 to 49 years.^[12]

Health, Economic Growth and Development

Economic growth and development is a key determinant of health. Empirical studies have shown that improvement on the income and the overall social status of a nation led to improvement in their health outcomes. This implies that improvement in per capita income of a people can improve their health outcomes or status. The study of developmental economics has shown that developmental process in low-income countries has potentials for positive improvement through health, education and work place conditions.^[19,20] The implication is that improved health and education status and indices can lead to positive economic growth. Controlled population growth under a healthy condition supports healthy economic growth, which in turn affects demographic transition and population structure. These factors in addition to the National Demographic and

Health Survey (NDHS) indices were taken into consideration in the formulation of Nigeria's National Health Policy (NHP) and the Revised National Health Policy.^[19,20,21,22]

The Triangular Dynamics Model

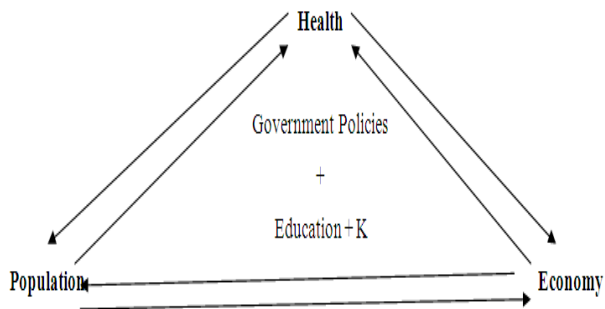


Figure 1: Triangular Dynamics Model for health, economy and population.

This is a model, which summarizes the relationships between health, economy and population. Health, economic status and population are in a state of dynamic equilibrium in which health and economy, economy and population, population and health are all in reverse causality dynamic state with government policies and education status as the key determinants, all other factors represented by the constant "K" being equal. The model depicts that increase in population beyond a critical limit of economic sustainability can lead to reduction in health indices while a moderate population will support increase in per capita distribution leading to increase in health indices and outcomes if favorable government policies are adopted. It is predominantly possible in a society of improved educational status with other factors being constant. A positive increase in the economy of a people in an optimally regulated population will favor positive health outcomes while improved health status will promote positive economic growth and development if the government policies are favorable and the educational status of the nation and her people is optimum. Excessive population growth with poor health status will negatively influence the economic status or indices of a nation. A moderate population can be favorable to the economy if health is maintained at optimum level, under a favorable government policy and good education, with all other modifiable conditions being equal, constant and favorable (e.g. the "K" in Brian's Triangular Dynamics Model depicts: geographical climate, science and technology, political climate, and other factors that directly or indirectly affect the people or impact on the economy).

CONCLUSION

There exist some relationship between health, population and the economic status of a nation with government policies, educational status of the people and other modifiable factors playing key roles to determine the direction of outcomes. A triangular dynamic relationship

exists between population change, economic growth and the health status of a people and rests government policies and education status of the people involved; all other factors being equal. A decline in economic indices tends to impact negatively on population growth and the health indices of a people while economic growth improves health outcome, promote population growth and vice versa. Increase in population growth adversely affects the economy and health status of the people involved. These three are in a triangular dynamic equilibrium, and reverse causality pivoted by government policies educational status of the people and other modifiable and non-modifiable factors, which directly or indirectly affect the well-being of the people.

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