HUMAN CAPITAL FORMATION AND HEALTH PROGRAMMES IN DEVELOPING ECONOMY

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Abstract
In almost every African country, the Western-oriented medical delivery system is the predominant system. This system is inefficient, dependent expensively on trained personnel, often grossly overtaxed by the level of expectations and demands placed upon it, and generally of limited relevance to the conditions and goals of the developing countries. The focus of this paper is to see how expenditure on health programmes enhances healthy human capital formation in developing economy.

Introduction
The orthodox economic theory draws a distinction between four broad categories of economic resources, namely land, labour, capital and entrepreneur. In the past days, a lot of emphasis was placed on physical capital, as the engine of growth. But, in recent times, there has been a shift in emphasis from capital accumulation in the orthodox sense to human capital formation. In other words, there is now a growing interest in human resources development *per se*. If we look at the orthodox classification of resources, land, labour, capital and entrepreneur, we will observe that two of these derive directly from human beings. They are labour and entrepreneurship. Labour refers to

man's mental, physical effort, directed towards the production of goods and services. It is not the man himself that is referred to as labour but the effort emanating from him.

In the case of entrepreneurship, we note that it refers to the risk bearing ability with reference to business undertaking. Looking at this closely, we will see that the man is not the factor called entrepreneurship but rather source of this factor. The quality of any labour effort and of any entrepreneurial exercise depends very much on the quality of man. If the quality of man is raised, then we can be sure that the qualities of these economic resources tend to be raised. The quality to a large extent depends on education, health services and environmental factors. Of these three variables we tend to see how adequate health care services can enhance human capital formation.

Human development concept is all about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests (Okafor, 2006). People are the real wealth of a nation. Development is thus, about expanding the choices people have, to lead lives that they value. Fundamental to enlarging these choices is building human capabilities - the range of things that people can do or be in life. The most basic capabilities for human development are to lead long and healthy lives, to be knowledgeable to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community. In realization of the above, goals 4 – 6 of the Millennium Development Goals (MDGs) focused mainly on strategies that will bring about reduced child mortality, improved maternal health and combat HIV/AIDS, malaria and other diseases. The overall objectives of the above are the improvement on life expectancy rate. In support of the above, the National Health Policy (NHP) was officially launched and became operative in October 1988. The NHP aims at a level of health that will enable all Nigerians to achieve socially and economically productive lives. The NHP emphatically adopts the primary health care concept (PHC) as the main engine by which the goal of health for all Nigerians can be attained. With the introduction of the NHP, it becomes important for Nigeria to match her health care strategy with the reality of her health problems, vis-à-vis improvement

on human capital. No country have achieved sustained development without substantial investment in human capital (Adeniyi, 1990; Ogujiuba, 2001). Several studies have evolved to analyze the channels through which human capital can affect growth (surveys include Barro and Martin 1995). Much of this literature have emphasized the complementary relationship between human and physical capital.

Human capital development is a means to enhance the skills, knowledge, productivity and inventiveness of people through a process of human capital formation (Uwatt, 2002). Thus, human capital development is a people-centred strategy, and not goods centred or production centred strategy of development.

People are assets – in fact, a country's most valuable assets. It is essential for human development that these assets be deployed sensibly. A defective incentive system can result in a waste of human resources and often, too, in a higher incidence of poverty and greater inequality in the distribution of income (Ogujiuba, 2007). It is not enough to use existing resources wisely; we must also add to the existing resources through human capital formation.

Therefore, there can be no significant economic growth in any country without adequate healthy human capital formation. In the past, much of the planning in Nigeria were centred on the accumulation of tangible capital for rapid growth and development, without recognition of the important role played by human capital in the development process (Dazen; 1990). This is the major concern of the paper.

Theoretical Background

Bocke (1953); Lewis (1954); Ramis and Fei (1961); and Keynes (1936) argue that the growth of an economy, whether rural or non-rural, is a function of capitalist investment and employment of labour. Because of the fact that capital tends to flow into sectors characterized by high rates of return and high marginal productivity of capital while labour similarly moves into a sector characterized by high wages rates, the classical and neo-classical proposition stipulates that the promotion of economic development in the rural area should involve measures which will raise the rate of return to capital investment and the earnings of labour (Essang, 1975).

But the above propositions ignore the importance of improved quality of labour as a factor in economic development. Also, the neoclassical theory of growth developed by Solow and Swan (1950), centred mostly on tangible capital formation as the driver of economic growth. However, the theory showed that because of decreasing marginal returns in substituting physical capital for labour, the accumulation of capital would not indefinitely support a steady rate of growth in labour productivity.

Then, the emergence of endogenous growth theories which broadened the concept of capital to include human capital upon which this paper is based.

Lucas (1988), considers human capital to be another input in the production function, not fundamentally different from physical capital, but only formed by workers through certain activities (principally, education or on-the-job training). A second line of analysis shifts attention away from treating human capital as a direct input to the production of goods. Instead, it focuses upon modelling other important activities pursued by skilled labour, especially innovation. Technological change resulting from research and development (R&D) investment that creates a greater variety of goods or improves the quality of the existing ones is the main form of innovation recognized by the endogenous growth theory (Romer, 1990).

Finally, Romer (1982), tries to incorporate some of the development variables like human capital into the growth framework.

Human Capital Formation and Health Care Service

The point here is to establish whether healthy human capital was one of the important factors in explaining economic development.

Although there are many variables that can represent human capital and health conditions of the people of a nation, to keep the analysis simple, while at the same time capturing the basic broad thrust of these two variables, this paper will focus meanly on “life expectancy at birth”.

Analyzing the health variable measured in terms of life expectancy at birth in East Asian developing countries, which

accounted for their exceptional economic development in the last three decades in terms of increasing GNP per capita income, vis-à-vis other Asian least developed countries and South Asian developing countries, one discovers an increase of over 65 times for the Republic of Korea, 13 times for Thailand and about 10 times for Malaysia compared to only a meager increase of 2 to a little 5 times for developing countries.

A cursory look at the health variable in terms of life expectancy at birth across East Asian developing, countries. Asian least developed countries and South Asian developing countries reveal the following pattern (Table 8.1):

Table 8.1: ***Life Expectancy at Birth for the East Asian Developing Countries, the East Asian Least Developed Countries, and South Asian Developing Countries***

Country	Year	Life Expectancy at Birth	GNP per Capita Income
Asian least developed countries	1960	Below 45 years	Below $ 200
Republic of Korea	1966	Less than 40 years	$ 130
Cambodia	1966	Less than 40 years	$ 130
Bhutan	1960	‘’ ‘’ ‘’ ‘’	
Nepal	‘’	‘’ ‘’ ‘’ ‘’	
Thailand (East Asian developing countries)	1990	51 years	$ 2,000
Republic of Korea	1990	Over 54 years	$ 8,500
Malaysia	1990	53 years	$ 2,500
	Late 1990’s		
Asian least developed countries	“	Over 60 years	$ 9,000.00
South Asian developing countries	“	“	“
Bangladesh	“	“	“
Bhutan	“	“	“
India	“	“	“
Pakistan	“	“	“
Malaysia	“	Over 72 years	$ 9, 500.00
Republic of Korea	“	Over 72 years	“
Thailand	“	69 years	$ 9, 000.00

Source: World Bank Report, 2003.

From the Table 8.1, one can infer that in the past three decades, the three groups of Asian countries considered started with a similar state of economic development. But, in the late 1990's, there was a marked difference among them on account of their per capita incomes. The East Asian developing countries are now well beyond the East Asian least developed countries as well as South Asian developing countries in terms of economic development.

Secondly, although in terms of per capita income all these groups of countries were quite comparable in the 1960's. Nevertheless, in the context of human capital and health sector development, there were huge differences among them. East Asian developing countries were by far ahead of both Asian least developed countries as well as South Asian developing countries even in the 1960's.

Thirdly, based on the facts presented earlier, it is evident that the onslaught of East Asian developing countries' rapid economic progress in the 1980's occurred along with their reasonably well developed and healthy human capital endowment which started to take momentum in the 1960's or even earlier.

Table 8.2: ***Commitment to Health – Access to Health Services***
Table 8.2 shows the patter of commitment to health and public expenditure in selected countries of the world.

Table 8.2: ***Commitment to Health and Public Expenditure in Selected Countries***

	Human	**Development Index**	**Births attended by skilled health personnel**	**Physicians per 100,000 persons**	**Public Exp. as % of GDP $**	**Private Exp. as % of GDP**	**PPPUS**
			(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Rank	**Country**	**1995-2001**	**1990-2002**	**2000**	**2000**	**2000**
High	1	Norway	-	413	6.5	1.1	2769
	2	Iceland	-	326	7.6	1.4	2642
	54	Tobago	99	79	2.3	2.2	468rytp
	55	Mexico	86	130	2.5	2.8	477
	56	Antigua	100	17	3.3	2.2	629
	57	Bulgaria	-	344	2.9	0.8	225
Medium	140	Congo	-	25	1.5	0.5	23
	141	Togo	49	8	1.5	1.4	35
	142	Cameroun	56	7	1.0	2.9	55
	143	Nepal	11	4	1.6	3.6	-
Low	174	Niger	16	4	1.5	1.8	15
	175	Sierra Leone	42	9	1.0	1.7	64
Nigeria	152	Nigeria	42	19	0.5	1.2	15
	129	Ghana	44	6	2.2	1.9	51
	151	Gambia	51	4	3.0	0.6	51
	156	Senegal	51	10	2.6	2.0	56
	157	Guinea	35	13	1.9	1.4	56
	159	Benin	66	10	1.8	1.4	28
	161	Cote D' ivoire	47	9	1.0	1.8	45
	166	Guinea Bissau	35	17	1.8	0.4	12
	172	Mali	24	5	2.2	2.7	32
	173	Burkina Faso	31	3	3.0	1.2	37
	152	Nigeria	42	19	0.5	1.2	15

Source: UNDP Human Development Report, 2001, 2003.

Health Expenditure Per Capita

Health expenditure per capita is the sum of the total public funds and private out-of-pocket expenditures on health divided by the total population of that country. For effective global comparison, the per

capita expenditure on health is expressed at PPP US $. In the first and last two countries ranked under high human development index countries, health expenditures per capita in 2000 were as outlined in Table 8.3:

Table 8.3: ***Health Expenditure per Capita for Best and Worst 2 Countries in HDI***

High HDI	**Per Capita PPP US $ 2000**
Norway	2769
Iceland	2642
Tobago	468
Mexico	477
Medium HDI	**Per Capita US $ 2000**
Antigua	629
Bulgaria	225
Congo	23
Togo	35
Low HDI	Per Capita US $ 2000
Cameroon	55
Nepal	64
Niger	15
Sierra Leone	64
Nigeria	15

Source: UNDP Human Development Report, 2001, 2003.

From the Table 8.3 above, births attended by skilled health personnel or nurses is a measure of a country's commitment to health services and this is a determinant of the health status of that country. The importance of attendance to birth by skilled health personnel and the safety of such birth cannot be over-emphasized.

Commitment to Health - Health Expenditure

The percentage of the GDP of a country which is expended in the provision of health facilities and services in the people is an indication of government commitment to health and is a trial factor in the

achievement of human capital development in that country. According to the UNDP, statistics on commitment to health under reference, Nigerian Government spent 0.5% of the GDP in 2000 on health. Statistics for other groups of countries were as shown above in Table 8.2.

Curiously, none of the low human capital development countries, including Sierra-Leone, which was ranked last in the HDI, spent as little percentage of their GDP on health as Nigeria did in 2000. In fact, Nigeria spent the least percentage of its GDP on health among the ECOWAS countries cited. Out of the 175 countries where data were available, the percentage of the GDP which Nigerian Governments spent on public health in 2000 was better only than that of Myanmar and the Democratic Republic of Congo with 3%. With the above scenario, government expenditure on health cannot but be described as very inadequate. Hence, greater percentage of the GDP should be spent on the provision of health facilities and source, especially in the rural areas where most of the people live.

Divergence in Human Capital Formation among Nations

As shown above, a well developed human capital base of a nation play an important role in economic development. On this count, East Asian developing countries were far ahead of Asian least developed countries and South Asian developing countries, even at the early stages of economic development.

This overwhelming disparity can also be attributed to huge expenditure on education and health sector in East Asian developing countries. For instance, in health sector, although the per capita public investments gaps in the 1970's (or earlier) were some what narrower, an East Asian developing country, like Malaysia, was still spending over $5.5 per person, as opposed to only 12 cents by Pakistan.

Now in the new millennium, however, the disparities in per capita expenditure on both education and health between Asian least developed countries and South Asian developing countries and East Asian developing countries are staggering to the extent that for education on a per capita basis, the Republic of Korea is spending over

26 times that of India and Pakistan and as high as 95 times of Cambodia.

The impact of those investments were directly ruminated in terms of high literacy rates and markedly improved years of life expectancy at birth, thus leading to higher per capita incomes and economic development.

Recommendations

For human capital to have a reasonable impact on economic development, a nation needs to have a minimum of at least 70 percent or more literate population. What this means is that if an overwhelmingly large number of people in a country are literate, even with simple basic education as being able to read newspapers, this may open up the minds of the masses, possibly make them more enlightened workers and perhaps institute some element of discipline in them. These are, of course, some of the essential prerequisites for a large organized production to run efficiently and for leading to rapid growth.

Facilitating access to efficient health care services for all contributes to fostering greater social and economic cohesion. The Government of Nigeria has put in place a maternal and child health policy whose aim includes the reduction in maternal morbidity and mortality as well as increasing public/professional awareness on harmful traditional practices. Also, contained in the National policy is the provision of family planning services through the various public and private sector outlets and the strengthening of maternal and child health care services. The restoration of democracy in Nigeria in 1999 brought the first signs of a strengthened national response to the growing HIV and AIDS epidemic with the formation of the presidential Commission on AIDS (PCA), which includes Ministers from all sectors. The National Action Committee on AIDS (NACA) was formed to foster a multi-sectoral approach to AIDS. SACA and LACA are also being formed to spearhead the local multi-sectoral response to HIV and AIDS.

Conclusion

It has been found from the analysis above that there is a correlation between broad based healthy human capital and rapid economic development, as seen from the transformation of East Asian developing countries. Secondly, effective and efficient human capital formation involves huge investments in educational and health sectors on a per capita basis.

Thirdly, unlike physical infrastructure investment, human capital development investment is a long term as well as continuous proposition and therefore, its affliction with economic growth and development should be delved and analyzed within a framework which has a longer perspective (Pasha, 1996a; Hasan *et al*, 1996b).

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