THE IMPORTANCE OF HEALTH EXPENDITURES ON SUSTAINABLE DEVELOPMENT

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ABSTRACT

Health is both a resource for, as well as an outcome of, sustainable development. The goals of sustainable development cannot be achieved when there is a high prevalence of debilitating illness and poverty.
Development, not only the height of the economic indicators, are expressed in terms of education, health and social structure. The amount of health expenditure is one of most important indicators of development. All the countries and associations aimed to improve the health conditions and expenditures.
Development policies need to take into account current and future impacts on health and the environment. Healthy generation; is a part of qualified human resources and huge importance for sustainable development.
This study examined the relationship between health expenditures and sustainable development within economic and health indicators. In this research gross domestic product (per capita GDP), the basic health indicators; as infant mortality rate, life expectancy at birth, and other health indicators are used. Turkey's health expenditures and other development indicators related to the reseach,are compared among advanced countries. A benchmark and due diligance is done within the countries and Turkey about sustainable development.
Key Words: Sustainable Development, Health Expenditures, Health Indicators.
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1.INTRODUCTION

Health is central to sustainable developmet. Health-related issues are prominent in the current Millenium Development Goals (MDG) framework. Health is both a resource for, as well as an outcome of, sustainable development.
The goals of sustainable development cannot be achieved when there is a high prevalence of debilitating illness and poverty, and the health of a population cannot be maintained without a responsive health system.

In general all expenditures made for prevention, development, care, nutrition and emergency programs with an aim of improving and protecting health are accepted as “Health Expenditure”.

1.The Relation Between Health and Sustainable Developmet

A new generation of development goals offer a means of measuring progress across the economic, social and environmental pillars of sustainability. At the same time, the conditions of health in countries becomes the major key of development as its one of the compenents og Human Development Index(HDI).
In many emerging countries health progress over the past decade has been impressive.
The relationship between health and sustainable development was well captured in the original Rio Declaration in 1992 where Principle 1 speaks of “human beings as the central concern of sustainable development (…) living a healthy and productive life in harmony with nature”. The role of health was reaffirmed in Johannesburg and is equally vital today(UN,2012:8). The relationship seems generally in three ways:

- Health as a contributor to the achievement of sustainability goals;
- health as a potential beneficiary of sustainable development;
- health as a way of measuring progress across all three pillars of sustainable development policy.

Health as a contributor, particularly extent to which health policy, through universal health coverage, can contribute to poverty reduction. Healthy people are more likely to be efficient at assimilating knowledge, have stronger productivity, and an intergenerational effect through lower birth weight.
The goals of sustainable development can only be achieved in the absence of a high prevalence of debilitating diseases, and where populations can reach a state of physical, mental and social well-being. It is convinced that action of health, both for the poor and for the entire population, is important to create inclusive, equitable, economically productive and healthy societies(UN Report, 2012:27).
The cost of inaction to noncommunicable diseases – estimated in trillions of dollars - is now recognized as a global risk requiring action in all countries that extends well beyond the health sector alone. Similarly, emerging infectious disease outbreaks and epidemics constitute a universal threat to the “just-in-time” global economy. In 2003, the SARS outbreak halted travel and trade in Southeast Asia and cost an estimated $50 billion in that region alone. In 2010, the H1N1

outbreak highlighted the inequity in global access to vaccines, and illustrated that a lack of domestic detection and response capability.

1.2 Narrowing Health Inequalities for Global Development

Each year environment-related diseases, including acute respiratory infections and diarrhoea, kill at least 3 million children under age 5-more than the entire under-five populations of Austria, Belgium, the Netherlands, Portugal and Switzerland combined(HDI Report,2011:6).
Health affects people's capability to function and flourish. The evidence shows a positive correlation between health and socioeconomic status. This has led researchers to focus on income and social inequalities as determinants of health, with recent investigations using new household data to examine trends.
The analysis suggests that the rising longevity around the world investigated in the 2010 *HDR* has been associated with greater equity: health inequality, measured by life expectancy, declined across the board. Very high HDI countries led the way, closely followed by improvements in East Asia and the Pacific and Latin America and the Caribbean, with the Arab States not far behind. Gains were most modest in Sub-Saharan Africa, from the lowest starting levels, due mainly to the HIV/AIDS pandemic, especially in Southern Africa, where adult HIV/AIDS prevalence rates still exceed 15 percent(HDR 2011:27-28)

Table 1. Disestar Related Casualities and Costs by HDI group 1971-2010

	Deaths (per million people)		Affected population (per million people)		Cost (percent of GNI)	
Country group	1971–1990	1991–2010	1971–1990	1991–2010	1971–1990	1991–2010
HDI group						
Very high	0.9	0.5	196	145	1.0	0.7
High	2.1	1.1	1,437	1,157	1.3	0.7
Medium	2.7	2.1	11,700	7,813	3.3	2.1
Low	6.9	1.9	12,385	4,102	7.6	2.8
World	2.1	1.3	3,232	1,822	1.7	1.0

Source: Human Development Report 2011:37.

Conceptually, a healthy person cannot only work more effectively and efficiently but also devote more time to productive activities. Bloom and Canning (2003), find that health capital indicators positively influence aggregate output. They find that about 22 to 30 % of growth rate is attributed to health capital and

improvements in health conditions equivalent to one more year of life expectancy are associated with higher GDP growth of up to 4 % points per year.

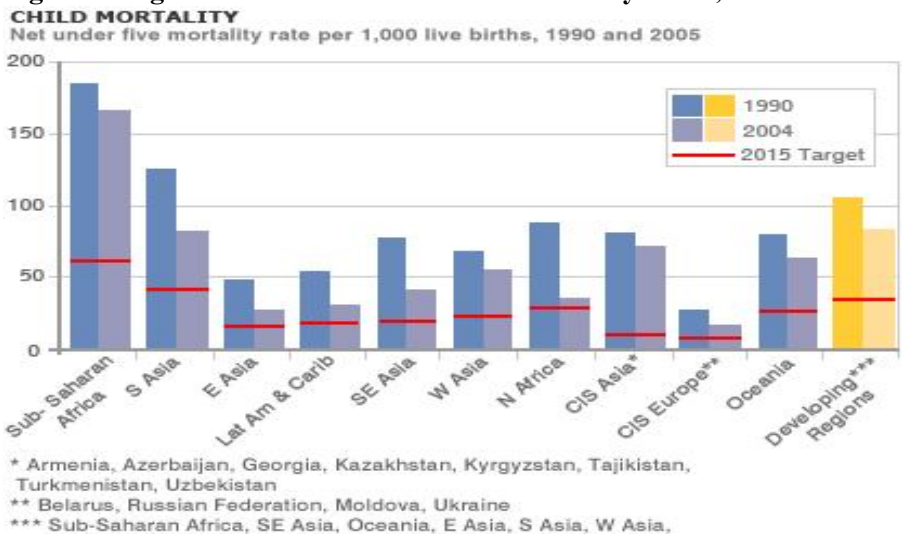
1.3.Expenditures on Health Services

Expenditure on health has been increasing gradually over the past decades and is expected to continue growing in the decades to come. As health expenditure increases in the last years of life it is expected that health expenditure will increase as a result of demographic change.

The target is to reduce by two-thirds, between 1990 and 2015, the under five years old mortality rate, from 93 children of every 1,000 dying to 31 of every 1,000. Child deaths are falling, but much more needs to be done in order to reach the development goal.

Maternal and child mortality are still relevant in many high countries, and will need continued monitoring in the coming decades, but are less suitable as a global goal in the current context of a much broader set of health and development challenges that affect all countries.

Figure1. Regional Overview of the Child Mortality Rates, 1990 and 2005



Source: Anyanwu,2007:5

2. The Literature Review

A growing literature in recent years has tried to examine between health expenditure and health outcomes as it affects under-five and infant mortality.
Using a model similar to that of Filmer and Pitchett (1997, 1999), Wagstaff and Cleason (2004) show that good policies and institutions are important determinants of the impact of government health expenditures on outcomes.
A recent World Bank report includes an analysis of infant mortality and health expenditure using a panel of data for the Indian states during 1980-99 (World Bank, 2004: 45-50). This study finds no effect of health expenditure on mortality rates once state fixed effects and a linear time trend are included in the model. However, using data for 50 developing and transition countries observed in 1994, Gupta, Verhoeven and Tiongson (1999) find that health expenditure reduces childhood mortality rates. Some recent studies have found a positive relationship between spending on health and health outcomes (Or, 2000a,b; Baldacci et al., 2002; Berger and Messer, 2002), but others did not find a significant relationship between the two variables (Filmer and Pritchett, 1999; Thornton, 2002). Still others, such as Baldacci et al. (2002), found that their results depend on the data set and/or estimation methods used. All these studies, however, did find a positive and significant relationship between health outcomes and real per capita income.
Similarly, a number of other studies find that the contribution of health expenditure to health status—as measured by infant mortality or child mortality—is either small or statistically insignificant (Kim and Moody (1992), McGuire et al. (1993), Musgrove (1996), Filmer and Pritchett (1997).

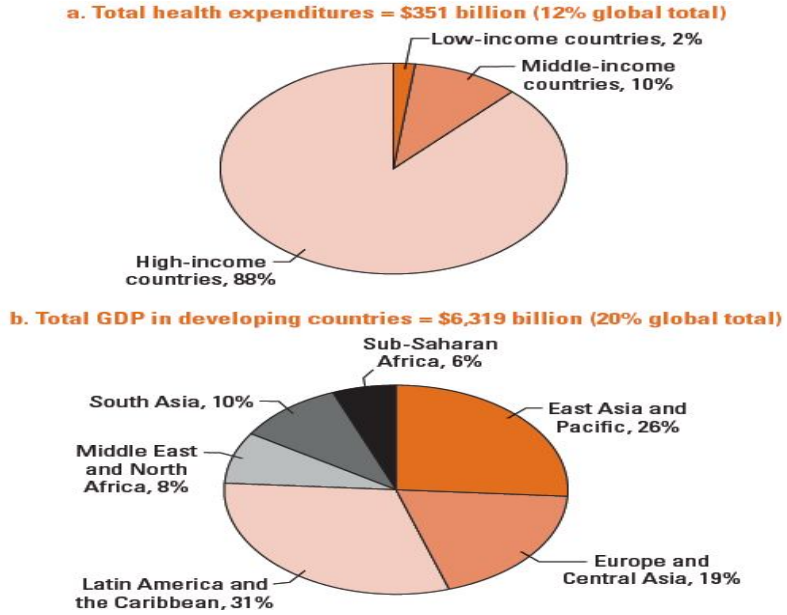
Or (2001) studies the determinants of variations in mortality rates across 21 OECD countries between 1970 and 1995 and finds evidence of a weak statistically significant relationship between per capita health spending and health outcomes. Furthermore, some other studies have failed to identify strong and consistent relationship between health care expenditure and health outcomes (after controlling for other factors), whilst in contrast, socio-economic factors are often found to be important determinants of health outcomes (Nolte and Mckec, 2004).

3. Global Distribution of Health Expenditures

Accurate cross-country comparisons of national health expenditure data are complicated by the fact that many developing countries do not have national health accounts. The following discussion relies on estimates from country-level

data compiled by the Organisation for Economic Co-operation and Development (OECD), the World Health Organization (WHO), and the World Bank.

Figure 2. Global distribution of GDP and health expenditures in developing countries, 2008



Source: World Bank 2009.

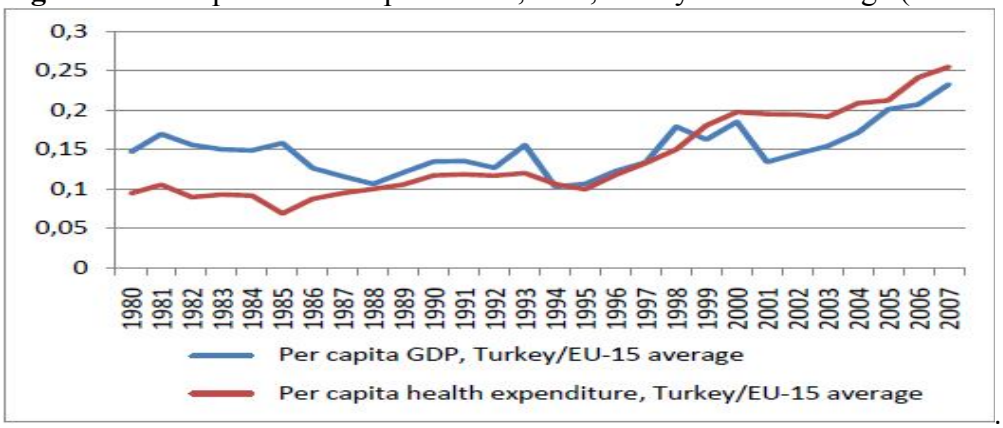
In analyzing health spending patterns, it is important to distinguish between the sources of health spending and these funding sources. National health accounts provide data on sources of health spending, as well as the uses of health spending. Such data give information only on the immediate source of the expenditure, whether from the public sector, the private sector or external sources. The mix of these sources has many implications for health systems.

3.1 Health Expenditures in Turkey

Turkish health system has recently been going through a transformation process. Health expenditures tend to increase along with the changes in the health system. In fact, upwards trend in health expenditures can be traced back in 1995. Main health indicators are commonly used to assess the efficiency of health expenditures and the performance of the health system. This research examines how the health expenditures and leading health indicators over the last three

decades changed in comparison with EU-15 countries and other selected countries and reveals that Turkey converges to the EU-15 average considering both expenditures and indicators(Arslanhan,2010:1)

Figure 3. Per capita health expenditures,GDP,Turkey/EU-15 average (1980-2007)



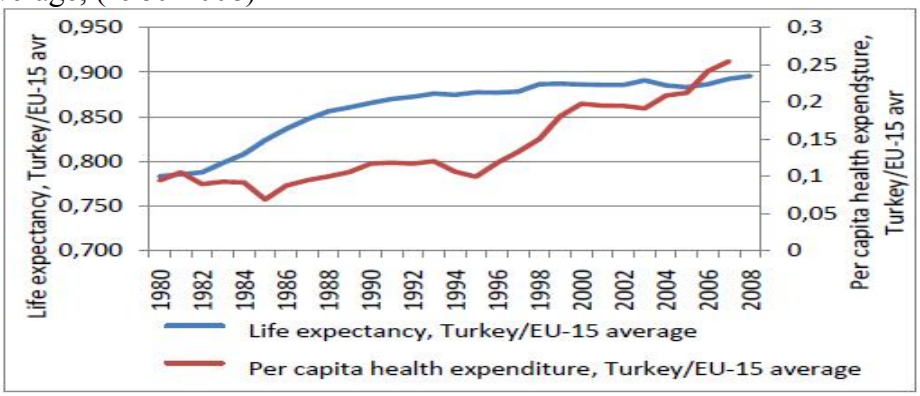
Source: WHO-HFA Database and Ministry of Health Statistics 2008.

As its seen in the figure 3, after 1985, pace of increase in per capita health expenditures for each year exceeded the EU-15 average. Pace of increase in health expenditures was the highest in 1995-2000 period whereas a slowdown was observed in 2000-2003 period. As of 2007, per capita health expenditures in Turkey correspond to 26% of the EU-15 average while per capita GDP reached 23% of the EU-15 average.

Life expectancy and infant mortality, although determined by many factors, are the main indicators used to assess the performance of health systems and underlined that in 1980's life expectancy in Turkey was 58.1 years despite the EU-15 average of 74.2 years.

In the 1980-2008 period, life expectancy in Turkey rose more rapidly than the EU-15 average reaching 72.1 years. Pace of growth of life expectancy slows down after a certain level. In this context this trend is recently observed in Turkey similar to the change in the EU-15 average. Even though Turkey/EU-15 average ratio tends to vary between years, the convergence can be observed for life expectancy as well as for per capita health expenditures.

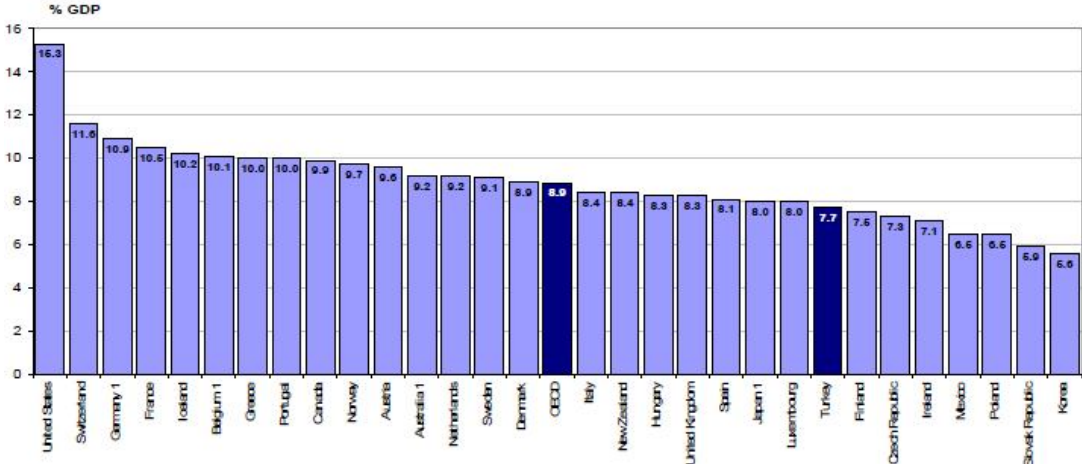
Figure 4. Per capita health expenditures and life expectancy, Turkey/EU-15 average, (1980-2008)



Source: WHO-HFA Database and Ministry of Health Statistics 2008.

As a result, Turkey converges to the EU-15 average considering health expenditures as well as main health indicators. In the period between 1980 and 2008 health expenditures in Turkey increased, life expectancy rose and infant mortality rate reduced significantly.

Figure 5. Health expenditure as a share of GDP, OECD countries , 2008



Source *OECD Health Data 2008* .

Total health spending accounted for 7.7% of GDP in Turkey in 2008, more than one percentage point below the average of 8.9% across OECD countries. The United States is, by far, the country that spends the most on health as a share of its

economy, with 15.3% of its GDP allocated to health in 2008. Switzerland and Germany followed with, 11.6% and 10.9% of their GDP spent on health. Health spending per capita in Turkey is the lowest all OECD countries, with spending of 580 USD in 2008. This compares with an OECD average of 2550 USD.

Table 2. Infant mortality Deaths per 1 000 live births in Turkey.

	2004	2005	2006	2007	2008	2009	2010
Turkey	20.5	18.4	16.9	15.9	14.9	13.1	10.1

Source: **OECD Health Data:2012**

As in other OECD countries, infant mortality rates in **Turkey** have fallen dramatically over the past few decades. The rate stood at 10.1 deaths per 1 000 live births in 2010, still higher than the OECD average of 4.1. Infant mortality is the lowest in Japan and in the Nordic countries (Iceland, Sweden, Finland and Norway).

Tablo 3. Life expectancy at birth, total population in Turkey

	2004	2005	2006	2007	2008	2009	2010
Turkey	72.5	73.0	73.2	73.3	73.6	73.8	74.3

Source: **OECD Health Data:2012**

Most OECD countries have enjoyed large gains in life expectancy over the past 40 years. In Turkey, life expectancy at birth increased by over years between 1960 and 2010, rapidly catching up to the OECD average. Still, in 2010, life expectancy in Turkey stood at 74.3 years, below the OECD average of 79.3. On the other hand, health spending per capita in Turkey grew, by an average of 8.0% per year between 1999 and 2010, one of the fastest growth rates of all OECD countries and significantly higher than the OECD average of 5.2% per year.

The public sector continues to be the main source of health funding in all OECD countries, except the United States (% 45) and Mexico(% 46). In Turkey, 72% of health spending was funded by public sources in 2010, slightly below the average of 73% in OECD countries.

Despite an increase in the number of doctors in recent years, Turkey continues to have the lowest doctorto-population ratio of all OECD countries. In 2003, Turkey had 1.4 physicians per 1 000 population, less than half the OECD average of 3.0. Similarly, there were only 1.7 nurses per 1 000 population in Turkey compared with an OECD average of 8.3. The number of acute care hospital beds in Turkey

in 2010 was 2.4 per 1 000 population, below the OECD average of 4.1 beds per 1 000 population.

3.2. What Do Countries Need To Do?

In countries with good governance, additional government health spending does reduce child mortality (Rajkumar and Swaroop 2002). Development assistance has a stronger effect in countries with strong policies and institutions than in countries with only average-quality policies and institutions—and an insignificant effect in countries where policies and institutions are weak.

In principle,well-governed countries with good policies and institutions could achieve the goals simply by scaling up their expenditures on existing programs in proportion to current allocations. In practice, the amount of extra spending required would be difficult and would even be prohibitively expensive.

To reach the under 5 year mortality target, a minimum of 5 percentage points would need to be added to the annual rate of growth of the government health share of (GDP). That would take the projected share of GDP spent on government health programs to 3.7 percent in 2015—more than twice what it would be if the 1990s pattern of growth continued (Wagstaff and Claeson 2004).

Poorly governed countries cannot expect to make much progress toward the MDGs by scaling up their expenditures on existing programs in proportion to current allocations.Although well-governed countries could simply scale up existing spending to reach the targets.This situation has two implications:
• First, targeting additional government spending to activities that will have the largest effect on the MDGs is important for both sets of countries.
• Second, building good policies and institutions is important for all countries: doing so increases the productivity not just of additional spending but also of existing spending commitments.

CONCLUSION

For improvements in financing policy to be sustained, countries—more than donor partners, must be convinced that policies are desirable, and they must have the adequate capacity to implement those policies. Most developing countries lack the technical capacity to make their own assessments, which would also enable

them to retain ownership over these choices. Consequently, they often mistrust or reject evidence.

For the sustainability of the improvements in main health indicators the importance attached to and the funds allocated for preventive health services shall be improved and maintained that this way the economic burden of inpatient treatment services can be reduced while the improvements in the main health indicators will be furthered. Therefore efficient use and sustainability of health expenditures are of vital importance. This note makes a comparison and assessment on the basis of health indicators and developmet. In order to examine the efficiency of the reforms in the health sector and the sustainability of health expenditures, detailed analysis on each reform component must be conducted.

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