## **REVIEW ARTICLE**

# Health Economics In Palestine Within A Global Context: A Review Study Till 2006

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# اقتصاديات الصحة في فلسطين في السياق العالمي

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الملخص: تعتبر اقتصاديات الصحة أحد الجوانب الهامة للصحة في ظل حياة تعتمد على الاقتصاد اعتمادا كليا. تهدف هذه الدراسة إلى استخلاص إيجابيات وسلبيات النظام الصحي الفلسطيني حديث النشأة عبر مقارنته بأنظمة صحية راسخة خاصة في مجال اقتصاد الصحة والتأمين الصحي في محاولة لوضع الخطط اللازمة لتطويره.

إن الاحتلال الإسرائيلي وسلوكه المدمر للإنسان والأرض والحياة يعد من أهم الصعوبات التي تواجه النظام الصحي الفلسطيني. يضاف إلى ذلك غياب الكفاءة في النظام الاقتصادي الفلسطيني سواء من حيث البنية أو الفساد الإداري، مما يلعب دورا هاما في إعاقة تطور النظام الصحي. ويعد الاستثمار في التعليم الطبي وإصلاح الرعاية الصحية هما الخطوتان الأساسيتان في طريق إنشاء نظام صحي فلسطيني متطور.

**ABSTRACT:** Health economics is a very important aspect of health in the economic dependent life the world lives. By comparing the newly established Palestinian Health system and its economics; mainly the health insurance system, with other well established systems, we are trying to figure out the advantages and the drawbacks in order to set forward the plans for development.

The most important difficulties facing the Palestinian Health system are the Israeli occupation and its destroying effect on people, land and life. Moreover, the lack of efficient financing system in both design and administrative corruption play a major role against the improvement of the health system.

Investment in both medical education and health care reform are the main steps in the way of setting forward a modern Palestinian Health system.

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#### **INTRODUCTION:**

Economics is the best possible allocation of scarce resources (labor, raw materials, production equipments, land, time and manpower) among competing ends (infinite demands) under given institutional arrangements. 1,2 Health economics is to allocate resources available to the production of health services, and to distribute those services between those who want them. Allocation is made by either a governmentally planned or market-based system, but most systems use mixed ones.2

The main goals of health economics are efficiency and equity. While in the market based systems you get the care if you can pay for it, the governmental funded systems have difficulties in setting a system both equitable and coefficient, (e.g. rural areas need more expenditure to reach urban health service quality).<sup>2</sup>

We will review USA and France as developed countries representing both ends of the economic system of health: the market and the planned systems, respectively; and Kingdom of Saudi Arabia (KSA) and Israel as examples of nearby countries in the Middle East.

#### **DISCUSSION:**

#### **HEALTH SYSTEM OF USA:**

There are both private and public insurers in the US health care system with the dominance of the private system, a unique feature of the US system in the world. In 2003, 62% of non-elderly Americans received private employer-sponsored insurance, and 5% purchased insurance on the private non group (individual) market. 15% were enrolled in public insurance programs like Medicaid, and 18% were uninsured.<sup>3</sup>

Public health insurance includes Medicare which is a federal program administered by the government, and financed by federal income taxes, shared by employers and employees, and individual enrollee premiums, covering individuals aged 65 and over and some disabled individuals. Medicaid is a program administered by the states and financed through taxes, designed for the low-income and disabled. S-CHIP is The State Children's Health Insurance Program which resembles Medicaid and was designed in 1997 to cover children with low income families. The Veteran's Administration (VA) is a federally administered tax-funded program offering almost free care for veterans of the military.3

Private health insurance includes Employersponsored insurance; the main health insurance in USA, provided as part of the benefits package for employees, financed mainly by employers; and administered by private companies, both forprofit (e.g. Aetna, Cigna) and non-for-profit (e.g. Blue Cross/Blue Shield). Private non-group insurance covers the self-employed, retired or those unable to obtain employer insurance. This type allows health insurance companies to deny people coverage based pre-existing on conditions.3

#### Health care expenditure:

The United States spends a larger share of its gross domestic product (GDP) on health than does any other major industrialized country. In 2005, national health care expenditures in the United States totaled \$2 trillion, 31% for hospital care, 21% for physician and clinical services, 10% for prescription drugs and 6% for nursing home care. Other personal services (e.g. dental, medical devices....etc) account for 16%. governmental administration and investment in research and structure account for 10% and 6% respectively.4

# Problems facing health economics in the USA:

1) The increment in aging population; as the population aged 65 and over is increasing at a faster rate than the total population (2% total 37

million vs. 1.2% in 2005).4

2) Unequal access and utilization of health care; as in 2005, more than 40 million adults (about 19%) did not receive "needed services" because they could not afford them.4

Some causes of unequal access are geographical distribution, supply shortages of some health care services, lack of health insurance coverage especially in Hispanics, American Indians and Alaska Natives, poverty and high costs, and other barriers such as transportation problems and communication difficulties with the provider due to language or cultural barriers.<sup>4</sup>

#### **HEALTH SYSTEM OF FRANCE:**

France has a national health insurance that insures 99.8% of the French population and covers 75-80% of the nation's total health care expenditures, by providing uniform coverage for all French citizens, regardless of their employment status.5

In contrast to USA, Public Health Insurance is the main type of insurance in France. The Ministry of Social Affairs and the Ministry of Finance oversee the French national health insurance system, by administrating a series of regional and local national health care funds known as Sickness Insurance Funds (SIFs) which are the main organizational feature of the French system. The main regional fund, the general fund, covers 80% of the French population. Every SIF is financed directly by employer and employee payroll contributions based on a percentage of every employee's salary and vary depending on the SIF involved and the employee's current employment status.<sup>5</sup>

Inclusion in the general fund requires employee contributions of 6.8% and employer contributions of 12.8% of the employee's gross salary (total 19.6%), which is then divided into 16% for health care funding and 3.6% unemployment insurance. The contribution entitles the employee and his or her family to the

full range of benefits of both the health care and unemployment insurance systems. Selfemployed individuals contribute 12.8% of their gross salary to CANAM (National Health insurance NHI fund for self-employed), and so they receive fewer health care benefits and no salary continuation benefits. Retired people contribute only 1.4% of their social security payments and 2.4% of their income from other pensions; however, they continue to receive the full range of health insurance benefits that currently-employed members of their SIF receive.5

Unemployed individuals cease contributing to their SIF when they first become unemployed; however, the social security system pays their contributions for a certain period of time, in which their health insurance benefits remain unchanged. If they continue to be unemployed after, and cannot afford contributions, the government would be obligated to make the insurance contributions.<sup>5</sup>

The remaining 20-25% of health care expenditures can be paid for by the patients themselves, by mutual insurance companies, or by "Aide Sociale", a government organization that pays the patients' contributions for all French citizens who fall below a minimum level of income. Supplementary insurance is provided by a variety of different organizations, ranging from mutual insurance companies to private insurance companies.

The French national health insurance system has an important feature of exerting careful control over medical service fees which are set yearly by a national committee, and which all health care providers should adhere to.<sup>5</sup>

#### Health care expenditure:

According to OECD (The Organization for Economic Co-operation and Development) estimates published in 1998, France ranks in eleventh place for the level of per capita health

care expenditure, but in fourth place for health care expenditure as a proportion of GDP. In 2000, total expenditure on health care in France was estimated at €140.6 billion or 10% of GDP. Health care consumption accounted for €122.2 billion or 86.9% of total health care expenditure, giving an average of €2020 per capita. Total expenditure on health care consumption, by type of service, is divided as 46.5% on inpatient care (mainly hospitals); 26.1% on outpatient care and 20.5% on medications.6

# Problems faced by the French health insurance system:

French NHI system frequently runs deficits. The main causes are the recent increase in unemployment, the aging population and abuses of the health insurance as the French citizens are permitted to consult as many doctors as they wish to consult for the treatment of the same problem.<sup>5</sup>

# HEALTH SYSTEM OF KINGDOM OF SAUDI ARABIA (KSA):

The Saudi health system was established in 2002, aimed to insure the provision of comprehensive and integrate health care to all inhabitants in Saudi Arabia in an equitable, affordable and organized manner.7

**Public sector** represented by the Ministry of Health (MOH) is the main provider of health care, (providing more than 60% of health services, the rest provided by other governmental governmental non sectors). governmental sectors are the military, National Guard, universities (and affiliated teaching hospitals) and large multinational corporations such as Saudi Aramco oil company, each responsible for its members' care; along with a number of specialist hospitals. Private Health Care System includes private hospitals, clinics, dispensaries and pharmacies.<sup>7</sup>

Health care is financed mainly by the governmental revenues as "Tax-based Financing" is not applicable. In 2006, GDP per capita was \$14653, MOH Budget was 6% of governmental budget and MOH expenditure per capita was \$257.8 The co-operational insurance in Saudi Arabia is under the process of application in phases. Changes in demography towards aging population, high incidence of road traffic accidents and non-communicable diseases increase the burden of long term care including expenses.7

#### **HEALTH SYSTEM OF ISRAEL:**

The MOH is responsible for the development of health policy, operation of the nation's public health services and management of the governmental health care budget. Medical services are provided through four health insurance companies, known as sick funds: Kupat Holim Clalit (General Sick Fund), Kupat Holim Maccabi, Kupat Holim Meuhedet and Kupat Holim Leumit.9

In 1995, the National Health Insurance (NHI) Law went into effect, provides that: "Every resident must register as a member with one of the four sick funds". The law sets forth the state's responsibility to provide health services for all residents of the country.9

There are two forms of Voluntary Health Insurance (VHI) available in Israel: supplementary VHI offered by the health plans and commercial VHI. Approximately 60% of Israelis have supplementary VHI, which provides partial coverage for services uncovered in the NHI.<sup>10</sup>

Sources for funding of health costs include progressive health insurance premiums paid by each resident, employers' health tax payments (30% of expenditure), National Insurance Institute funds, funds from the MOH budget and consumer participation payments. External financing sources such as donations from Jews in US and Europe often play an important role in funding health expenditure. In 2000 Israel spent over NIS 40 billion (\$11.2 billion) on health care, amounting to 8.2% of GDP.<sup>10</sup>

The Israeli health insurance system suffered from a series of budgetary problems in the past decade and a half. The continual improvement of medical procedures, which are consequently more expensive, has accelerated these budgetary problems.

# **HEALTH SYSTEM IN PALESTINE AND ITS ECONOMICS:**

#### Palestinian Economy:

Gross National production (GNP) was \$5.454 billion in 1999 and decreased to \$4.169 billion in 2005; and Gross Domestic Production (GDP) was \$4.517 billion in 1999 and decreased to \$3.832 billion in 2005. In 2005, The World Bank reported that the unemployment rate was 32% (from 11.8% in 1999) and the poverty rate in Palestine was 44%. This situation is a result of Israeli enforced restriction on Palestinian movement, military operations, land confiscation and leveling and the construction of Barrier in addition to other escalating activities imposed on Palestinian people.11 Income data classifies Palestine as a lower-middle income country, similar to Jordan according to World Bank classification.<sup>12</sup>

### Brief History of the Health Care System:

Following Oslo agreement, the responsibility of the Gaza Strip and West Bank had been taken over by the Palestinian Authority by November 1994. Before this, the features of the health financing system included: 1) A heavy reliance on external assistance for a significant part of health financing (over 40% in 1991, including UNRWA); 2) Relatively limited contribution from the Israeli Civil Administration, derived primarily from health insurance and accounting for less than fifth of total health expenditure and covering only about fifth of the Palestinian population; 3) Direct household expenditures that accounted for about 40% of the total health expenditures.<sup>12</sup>

The Ministry of Health after passing the transition period, started to implement the

recommendations of the National Health Plan, in establishing the Health Insurance Administration within the Ministry of Health. There are four major health service providers in Palestine: the MOH, United Nations Relief and Work Agency (UNRWA), non-governmental organizations (NGOs), and private providers. 12

Private Health Care System includes: 1) For-profit; in which most of the individual private health clinics are not registered, and are run by governmental employees in their outwork hours. 2) Not-for-profit and all these institutions are registered and work with cooperation with public sector. The source of financing for the nongovernmental organization is coming mainly from international donations. 12

Ministry of Health operates 56.5% of total Primary Health Care (PHC) clinics in Palestine in 2004, UNRWA operates 7.3% and NGOs operates 36.2 percent. 57% of health human resources in Palestine are employed by MOH.<sup>12</sup>

#### **HEALTH CARE FINANCING (REVENUES):**

In 2005, 25.3% of MOH running budget came from Governmental Health Insurance (GHI) premiums, and 3.82% from co-payment and fee revenues.11

Health system revenues include: 1) The International Aids which is still the main supporter of health sector in Palestine, distributed as supporting the MOH recurrent budget (8%), MOH investments (16%), UNRWA (10%), and NGOs (14%).12 2) Tax-based Financing which decreased in responding to the difficult economic situation with high percentage of unemployment. Taxes are set as 17% as VAT (value added tax), and 10% for income tax and taxes on export and import.12 3) Public health insurance in which coverage increased in the years from 1995 to 2000. However, After the second Intifada (Sep. 2000), thousands of families have free emergency insurance coverage to provide them with the public health services, overloading the already

Activity	1999	2000	2001	2002	2004	2005
Insurance	33,000	29,000	19,000	21,888	30,543	29,957
Co-payment	9,500	9,200	8,000	6,948	8,772	5,332
Total	42500	38200	27000	28836	39,315	35,289

**Table1:** Actual MOH revenues in Palestine (in 1000\$) from 1999-2005. 11

weak health system.<sup>12</sup> 4) Out-of-Pocket Payments, in which insured people pay cost sharing for drugs, lab, investigations and referral abroad cases. Moreover, medication out of the essential MOH list and private services are paid for. Private sector is financed through private investments.12

The deficit in GHI revenues compared to 1999 was 2.1% in 2000 and increased to 33.3% in 2001, and 25%, 12% in 2002 and 2003 respectively. The revenue of GHI showed increase in 2004 and 2005 by 4% and 2% respectively; this was due to the increase of the compulsory GHI revenue by 75.4% and social welfare by 44.6% in comparison with 1999.11

Health insurance systems include: GHI system, in which enrolment grew from 20% of the total West Bank and Gaza Strip population in 1993 under Israeli Civil Administration to over 50% in 1998. After Intifada (Sept. 2000), the total coverage in the Palestinian Territories exceeds 90% of population (Dec. 2004).<sup>12</sup> The coverage for the Palestinian families in 2005 was 56% (25.6% paid and 30.5% free of charge).11

# There are five types of Participation in GHI;

1) Compulsory participation for the government and municipality employees (working and retired) whose premium equals 5% of the basic salary. The compulsory premium has minimum limit of NIS 40 and maximum of NIS 75 (\$21) per month. 12 2) Voluntary participation for all self-employed people, who pay a fixed premium of NIS 75, on a

monthly basis, or yearly with a 10% discount of the total bill.<sup>12</sup> 3) Workers in Israel who work more than two weeks monthly have a special compulsory insurance, with premiums paid by an authorized Israeli office, to the Palestinian Authority, on behalf of Palestinian workers in Israel. The Israeli Labor Authority deducts NIS 93 (\$26) monthly and pay NIS 75 for the Palestinian Ministry of Finance, the rest of the money is paid to the Israelis as administration cost. 12 4) Contracts insurance gives chance to the selfemployed groups who affiliated are occupational societies or associations to be covered by the governmental health insurance scheme. They are charged with a discount rate, this type of payment is negotiable every year and subject to change. The Worker Union members inside the Palestinian territories pay 50 NIS (\$14) per month.<sup>12</sup>5) Hardship cases are covered by the supplement services of the Ministry of Social Welfare, who pays NIS 40 (\$11) on behalf of those cases.12

The family members are included freely in the same insurance ticket of the insured person. Those include the wife, husband, children below 18, single daughters, university students below 26 years and parents over 60 years old. Other members may be added with increasing payments.<sup>12</sup> The Ministry of Health purchases tertiary health services from neighboring countries; Israel, Egypt, and Jordan, versus a copayment of 5% to 25% of the cost. Free service is provided to the handicapped, Thalassemia, and Hemophilia patients, children below 3 years,

Activities	1999	2000	2001	2002	2004	%	2005	%
Salaries	39,354	45,500	46,000	57,622	70,986	56.1	73,197	52.4
Drugs & medical disposables	21,411	24,616	14,129	24,785	23,500	18.6	31,501	22.6
Referral for special treatment	6,095	6,200	8,500	6,344	18,888	14.9	21,926	15.7
Other operating cost	15,739	24,020	12,500	10,786	13,100	10.4	12,959	9.3
Total expenditure	82,599	100,336	81,129	99,538	126,475	100	139,583	100

**Table2:** Actual health care expenditure in Palestine (in 1,000\$) from 1999-2005. 11

vaccinations and high risk pregnancy and family planning services.12

Private insurance programs are run through general insurance companies as a part of their insurance program covering only 3% of population. Private insurance commonly do not insure people older than 65 years. The insured employees have free choices within the insurance  $medical\ network\ only^{.12}$ 

#### **HEALTH CARE EXPENDITURE:**

In 2005, The postulated budget for the MOH was \$152,975,111 (7.65% of general budget). The actual MOH expenditure was \$139,584,400, which means that the MOH expenditure per capita was \$41.5.11 Salaries represent 56% of MOH expenditure; whereas 18.6%, 15% and 10.4% cover Pharmaceuticals and medical needs, purchasing private medical services and non-medical expenditures, respectively.<sup>12</sup> Comparison from 1999-2005 is in the table below:

"Treatment Abroad" represents a big burden for the Palestinian health system. The total cost of treatment abroad represented 46% of the actual expenditure in 2004 and 42.7% in 2005. These cases are referred to local health care facilities (16,800 cases) with a total cost of 79,428,587 NIS; while referrals to Jordan, Egypt and Israel totally cost 188,615,438 NIS (\$52,812,322) in 2005.11

# Problems facing The Palestinian Health **System:**

The health system in Palestine is vulnerable to

continuously changing conditions. Causes were classified as political, financing problems and administrative inefficiency problems.

The main political obstacle is the occupation. The responsibility of health in the Gaza Strip and West Bank had been taken over by the Palestinian Authority by November 1994, after the Oslo Declaration and therefore, the agreement frees the occupation from holding its responsibilities, represented in Geneva Convection IV of 1949.<sup>13</sup> The general situation of economic depression after the second Intifada and the Israeli counteracts actions did not allow MOH to implement the National Strategic Health Plan (1999-2003).<sup>12</sup> In addition, Intifada itself increases the health care burdens by the increased number of killed and injured people including medical staff, and the destruction of health care facilities. 11

The route of the Apartheid Wall officially approved by the Israeli government directly harms the health status of around 425,000 people (20% of West Bank residents). Forty-one clinics are located within 28 isolated areas and 38% of the Palestinians are deprived from health services due to the apartheid wall. Of the clinics on the other side of the apartheid wall; 45% are not equipped for emergency services, 23.5% are not supplied with the essential drugs, 62.5% have no access to laboratory services and 51.5% have no epidemiological surveillance services.<sup>11</sup>

Palestinian Healthcare financing is dependent to a large extent on the external fund and thus the health policies are adhesive to these funds. Analysis of externally funded health projects revealed focusing on less important services in comparison to the great needs of the Palestinian people, such as large funds for family planning and too little for medications of the chronic diseases. 11 The decrement in the revenues of health insurance was mainly due to diminished economical activity due to closure and siege apposed by Israeli occupation after Al-Aqsa Intifada.14

Administrative inefficiency problems cause a great increase in the burden of the health care expenditure. Import taxes are still under the Israeli control according to the Paris Economic Agreement. There is no independent Palestinian tax system except for VAT (value added tax), income and municipalities taxes.<sup>12</sup> It is important to mention that the salaries expenditure in the MOH increased from 45.35% out of the total MOH expenditures in 2000 to 52.4% in 2005; while non salaries expenditure decreased from 54.65% out of the total MOH expenditures in 2000 to 47.6% in 2005. 11 This is caused in part by the great number of employees of administrative function without actual production. Referral abroad also consumes a great portion of the MOH budget.

#### **CONCLUSION:**

The Palestinian health system is a newly established system that needs a lot of hard work in order to meet the needs and aspirations of Palestinian people. A national strategy on health care quality improvement should be developed and implemented, with systematic evaluation of quality improvement projects and dissemination of those that succeed. Planning should be the cornerstone of any project, and planning for the future is the main factor of the health care system success.

The Palestinian government should develop viable and sustainable insurance and health care financing systems. In order to do so, it should integrate health system planning and policy development more closely, with meaningful input from and coordination with all relevant governmental and nongovernmental holders. The MOH should expand the scope of available primary care services and the access to comprehensive primary care. Investment of the cost of treatment abroad in establishing comprehensive medical services in Palestine will make the system more cost effective.

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