

Examining health care spending trends over a decade: the Palestinian case

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دراسة اتجاهات الإنفاق على الرعاية الصحية على مدى عشر سنوات: الحالة الفلسطينية

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الخلاصة: لقد أجري تحليل لأحداث أنماط الإنفاق على الرعاية الصحية في الأراضي الفلسطينية المحتلة بُعِيَة إعلام صناعات السياسات الصحية والتخطيط لها في المستقبل. وتم الحصول على البيانات من الحسابات الصحية الوطنية للفترة 2000-2011. حيث وجد أن المستوى الحالي للموارد المخصصة لقطاع الرعاية الصحية أعلى مما هو عليه في كثير من البلدان المتقدمة وغير مستدامة. ويمثل القطاع الخاص أكبر مصدر للتمويل الصحي (61%)، ويقع العبء على الأسر بشكل فردي على نحو غير متناسب، والتي (الأسر) تغطي 63% من الإنفاق على الرعاية الصحية الخاصة. إن التوصيات الرئيسية تشمل: بناء كوادرات في القطاع الحكومي للحد من الاستعانة بمصادر خارجية في مجال الخدمات الصحية، وتعديل آليات التمويل غير المنصفة لتخفيف العبء عن الأسر، وتخصيص المزيد من الموارد لبرامج تعزيز الصحة والوقاية من الأمراض. كما أن هناك حاجة إلى إعادة توجيه النظام الصحي من ناحية تقليل حصة الإنفاق على خدمات رعاية المرضى الداخليين لصالح المزيد من خدمات جراحة اليوم الواحد وخدمات المرضى الخارجيين والخدمات المنزلية.

ABSTRACT An analysis was made of recent health care spending patterns in the occupied Palestinian territory, in order to inform future health policy-making and planning. Data were obtained from the national health accounts for the period 2000–2011. The current level of resource allocation to the health care sector is higher than in many developed countries and is not sustainable. The private sector represents the largest source of health financing (61%) and the burden falls disproportionately on individual households, who account for 63% of private health care expenditure. Key recommendations include: building capacity in the government sector to reduce the outsourcing of health services; modifying inequitable financing mechanisms to reduce the burden on households; and allocating more resources for health promotion and disease prevention programmes. Reorientation of the health system is also needed in terms of reducing the share of spending on inpatient services in favour of more day surgery, outpatient and home-based services.

Examen des tendances en matière de dépenses de soins de santé au cours des dix dernières années : le cas palestinien

RÉSUMÉ Une analyse a été faite des tendances récentes des dépenses en soins de santé dans le territoire palestinien occupé afin de guider l'élaboration des politiques et la programmation en matière de santé. Les données ont été obtenues à partir des comptes nationaux de la santé pour la période allant de 2000 à 2011. Le niveau actuel d'allocation de ressources au secteur de soins de santé est supérieur à celui de nombreux pays développés et ne s'inscrit pas dans la durée. Le secteur privé représente la source la plus importante de financement de la santé (61 %) et la charge pèse de manière disproportionnée sur les ménages individuels qui participent à hauteur de 63 % aux dépenses de soins de santé privées. Les recommandations clés sont les suivantes : renforcer les capacités du secteur public afin de réduire l'externalisation des services de santé ; modifier les mécanismes de financement inéquitables pour réduire la charge pesant sur les ménages ; et allouer davantage de ressources aux programmes de prévention des maladies et de promotion de la santé. Il est aussi nécessaire de réorienter les dépenses du système de santé pour réduire la part allouée aux services d'hospitalisation et augmenter celle de la chirurgie ambulatoire, des consultations externes et des soins à domicile.

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Introduction

The occupied Palestinian territory (OPT) consists of 2 geographically separated areas, West Bank and Gaza Strip, administered by the Palestinian National Authority across 16 governorates. Covering an area of about 6860 km² (6500 km² in West Bank and 360 km² in Gaza Strip), the OPT comprises a very densely populated country, with more than 650 inhabitants per square kilometre. The total population of the OPT in 2013 was about 4 485 459 (50.8% male and 49.2% female), with 41% of inhabitants under 15 years of age (1).

The life expectancy at birth in the OPT was reported to be 72.6 years in 2013, having increased by 10.4 years between 1980 and 2013 (2). Gross national income per capita increased during the same period by about 45% to reach US\$ 5168 purchasing power parity, although it did not increase monotonically over this period (2). The crude death rate decreased from 4.1 in 1993 to 2.5 per 1000 people in 2013 and the infant mortality rate also fell from 32 to 18.8 per 1000 live births between 1993 and 2013 (2).

When compared with neighbouring countries such as Jordan and Egypt, the OPT shows good results in terms of health workforce indicators. However, the indicators lie well below average of the Organisation for Economic Co-operation and Development (OECD) countries. Over the past 2 decades the number of physicians per capita in the OPT increased substantially to reach 24 per 10 000 people, compared with 26 in Jordan and 28 in Egypt, but it remains well below the OECD average of 32 per 10 000 people. There were about 25 nurses per 10 000 people in 2013, much less than the average of 87 in the OECD countries, and even below the average 40 in Jordan and 35 per 10 000 in Egypt. The total bed capacity in the OPT was 5619 beds in 2013, which can be translated into 13 beds per 10 000

people, well below the OECD average of 48, and below the average of 18 in Jordan and 17 per 10 000 people in Egypt.

The Palestinian Ministry of Health (MoH) is the main entity responsible for governing, regulating and delivering health care services in the OPT. Four major providers share the responsibility of health care provision: the MoH, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), various nongovernment organizations and the private sector. Primary health care centres throughout the Palestinian governorates have expanded from 454 centres in 1994 to 750 in 2012, a 65.2% increase. The MoH is the main primary health care provider, operating 61.3% of the total primary care centres (3). Secondary and tertiary care is provided mainly in the MoH and private sector.

For effective health policy development and planning, it is critically important to analyse the current health care spending and utilization patterns and the key determinants of these patterns. Unfortunately, there are very few published studies analysing and describing the patterns of spending and utilization of health services in the OPT. Further increases in government spending on health occurred after 2006, in line with the vision of the MoH to promote the health of Palestinians and to aid the poorest members of the population (4). Between 2000 and 2006, MoH allocations represented between 8% and 11% of total public funds (5). In 2013, the budget of the MoH (US\$ 531 million) accounted for about 13% of the overall government budget (US\$ 3900 million). The expansion of public sector expenditure on contracted specialty care services, and on health workforce and pharmaceuticals, contributed significantly to the overall rise in government sector health spending (6). Despite the adoption of several measures to rationalize operational health expenditure, spending reached 15% above the year-end budget target (7).

The MoH budget for 2008 was US\$ 322 million. According to the *Health sector review report 2007*, almost half of public funds (49%) were directed to hospitals compared with only 29% for primary health care (8). A study conducted by Younis et al. in 2008 found that government hospitals spent about 37% of their budget on salaries, 27% on drugs, 27% on overheads and 8% on other expenses. About 75% of the hospital expenditure was on inpatient care and 25% on outpatient care. The average costs of outpatient visits and inpatient days were US\$ 13.0 and US\$ 90.0 respectively (4). In another study conducted at Rafidya government hospital, Younis et al. found that the major component of the total costs was workforce salaries, at an average of 54%, followed by drugs 17%, operating costs 10%, capital costs 9% and other expenses 10% (9).

Given the limitations of the studies summarized above, and in order to inform future health policy-making and planning, the main purpose of this study was to analyse health care spending patterns in the OPT over the period 2000–11. Specifically, we aimed to analyse the following: total health care expenditure by source of finance, by function and by provider; government spending by function and by provider; private spending by function and by provider; private out-of-pocket spending by function and by provider; and non-profit institutions serving households expenditure by function and by provider.

Methods

Data source

The data utilized in the study were published jointly by the MoH and Palestinian Central Bureau of Statistics in the Palestinian national health accounts from 2000 to 2011. National health accounts are a powerful health policy tool that describe how much a country

spends on health, and map out in detail the sources and uses of health care expenditure (10). The method is designed to give a comprehensive description of resource flows in a health system, showing where resources come from and how they are used. National health accounts help both health and social planners to identify health policy issues, develop policy interventions and monitor the impact of interventions.

We analysed the total average health care spending in the OPT over the period 2000–11, and the annual trends, by source of funding, by type of health care function and by type of health care provider. Among funding sources we focused on private household out-of-pocket payments.

The Palestinian Central Bureau of Statistics adopts a number of measures to ensure data quality and coverage. However, despite these measures, some problems and challenges remained in the development of coverage and the comprehensiveness of the data. This was primarily because health expenditure covered by the OPT excluded those parts of Jerusalem which were occupied in 1967 and the Gaza Strip, due to the lack of detailed data from its sources.

Definition of key study constructs

To address the research objectives of the study, all constructs used including sources of finance, functions and providers were defined in accordance with the definitions of the Palestinian Central Bureau of Statistics (11). The Bureau has adopted the *System of health accounts 2000* developed by the OECD (12).

Total health expenditure

Total health expenditure measures the value of outlays for the final consumption of health care goods and services and for the production of certain activities defined as health activities. It is broken down into 2 entities. The first

is the current expenditure incurred for health care goods and services, such as inpatient curative care; medical goods dispensed to outpatients and administration; and insurance. The second is gross capital formation in health care industries. Expenditures for gross capital formation are those that add to the stock of resources of the health care system and last more than an annual accounting period. Capital formation in terms of up-to-date equipment and the availability of essential supplies bolster the quality of care provided by health facilities, improve results in diagnostic and treatment services and contribute to the long-term sustainability of service provision (12). In the case of the OPT, total health expenditure includes gross capital formation in health care industries, but only at an aggregated amount, thus missing data on gross capital formation by funding sources. Therefore, the study was able to use total health expenditure data composed of current health expenditure in all the analyses (13–15).

Funding source

There are 3 main sources of finance for the health system of the OPT: public; private; and the rest of the world.

The government acts as the main public financing source. It comprises all institutional units of central and local government including the MoH and Military Health Services via the Ministry of Finance. Non-profit institutions that are controlled and mainly financed by government units are also included.

Private sources include private insurance enterprises, private household out-of-pocket expenditure and non-profit institutions serving households, none of which belong to the government sector. Private insurance enterprises comprise all private insurance companies. Private household out-of-pocket is the direct payments (formal and informal) of households to health care providers, whose primary intent is to contribute to the restoration or to the enhancement

of the health status of individuals or population groups. Out-of-pocket expenditure exclude payments made by enterprises which deliver medical and paramedical benefits, mandated by law or not, to their employees. Non-profit institutions serving households comprise non-profit institutions which provide goods or services to households free or at prices that are not economically significant.

The “rest of the world” category represents the list of projects that support the health sector as registered in the Ministry of Planning. These projects cover primary and secondary health care activities from a variety of donors. The projects also fund special vertical programmes, such as the tuberculosis programme and maternal and child health, and capital infrastructure establishments.

Function

The functional categories used in this study comprised only health care functions and, due to lack of data, excluded health-related functions such as capital formation, environmental health, and research and development in health.

The health care functions analysed here included: inpatient curative care; outpatient curative care; medical goods dispensed to outpatients; prevention and public health services; and other. The “other” category included services of rehabilitative care; inpatient long-term nursing care; ancillary services to health care; and prevention and public health services.

Provider type

Hospitals were classified according to type: general hospitals; mental health and substance abuse hospitals; and specialized hospitals.

Statistical analysis

The data were analysed using *Stata*, version 12, and *Microsoft Excel*. Descriptive statistics were used to show the health care spending trends during the study period. To examine the relationship

between current health expenditure per capita and GDP per capita, a regression analysis was performed using the natural log of current health expenditure as the dependent variable over the study years and the natural log of GDP as the independent variable. Bar charts were used to present the data broken down into: current health expenditure per capita, current health expenditure by funding source, current health expenditure by health care provider, current health expenditure by health care function, and private health expenditure.

Results

Trends in current health expenditure as a share of GDP

Figure 1 presents the current health expenditure and its share of the GDP across the study years. Current health expenditure in the OPT increased from US\$ 384 million in 2000 to US\$ 1201 million in 2011. Current health expenditure per capita grew from US\$ 137 in 2000 to US\$ 308 in

2011, a 125% increase, while GDP per capita increased from US\$ 1498 to US\$ 2506 over the same period, a 67% increase. Although GDP per capita decreased from 2000 to 2002, it increased on a regular basis after 2002 until 2010. Current health expenditure per capita decreased from 2000 until 2003, and then increased from the year 2003 onwards. However, the total health expenditure as a percentage of GDP, at current prices, increased from about 9% in 2000, to peak at nearly 15% in 2008, and then decreased to 12% in 2011.

The results of regression analysis ($F = 43, P = 0.0001, \text{adjusted } R^2 = 80\%$) showed that there was a strong positive relationship between GDP per capita and current health expenditure per capita (Figure 2). If GDP increased by 1.2%, current health expenditure would increase by 1%. In other words, if the OPT faced serious financial sustainability problems, then health care utilization would be highly likely to suffer.

Trends in total health expenditure

Analysis by financing source

Over the period 2000–11, the government sector contributed on average about 36% of health funding, private households out-of-pocket expenditure contributed 39%, and non-profit institutions serving households, including UNRWA, contributed on average about 22% of the total health expenditure. Direct contributions by the rest of the world to funding health services during the same period averaged about 3%, as shown in Figure 3.

Government expenditure constituted about 36% of total per capita expenditure with a range of 31% to 41%. Government expenditure per capita increased by 142% from US\$ 45 in 2000 to US\$ 109 in 2011. Health expenditure on outsourcing health services outside MoH also increased from US\$ 60 in 2005 to US\$ 132 million in 2011, and to US\$ 147 million in 2013. In 2013, about 26% of the MoH budget was spent on health services outsourced from other providers. About 50% of this amount

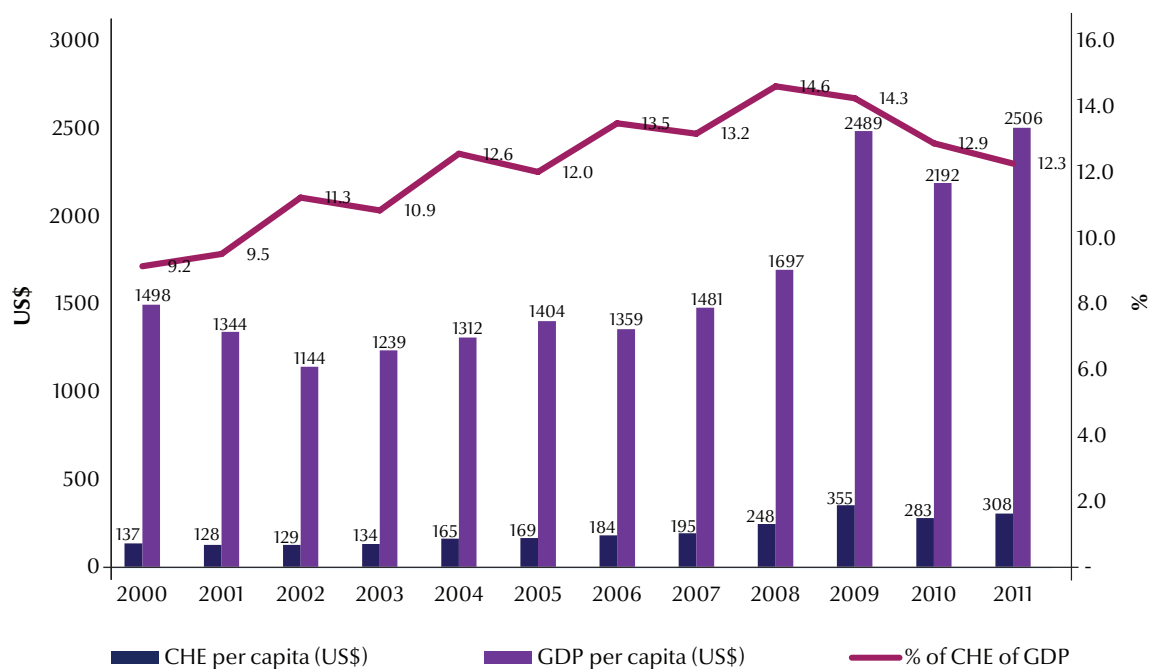


Figure 1 Current health expenditure (CHE) by funding source in the occupied Palestinian territory over the years 2000–2011 (GDP = gross domestic product)

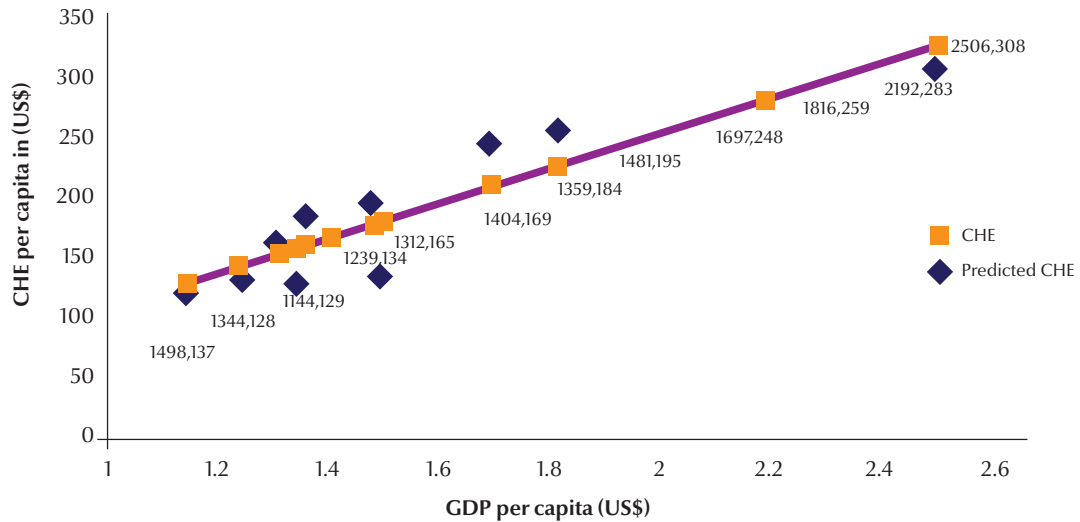


Figure 2 Relationship between current health expenditure (CHE) per capita and gross domestic product (GDP) per capita in the occupied Palestinian territory over the years 2000–2011

was spent on 4 main services including oncology, haematology, neurosurgery and cardiac catheterization.

Analysis by function

As shown in Figure 4, the analysis of current health expenditure for the different health care functions showed that on average 25%, 37%, 18% and 21%

was spent on inpatient curative care, outpatient curative care, medical goods dispensed to outpatients and other services respectively. Health expenditure for prevention and public health services (covered in the “other” category) ranged between 6% and 12% of current health expenditure. The level of spending on medical goods dispensed

to outpatients (about 18% of the current health expenditure) may indicate insufficient availability of medicines in the government sector.

Analysis by provider

The breakdown of current health expenditure by types of provider showed that hospitals accounted for

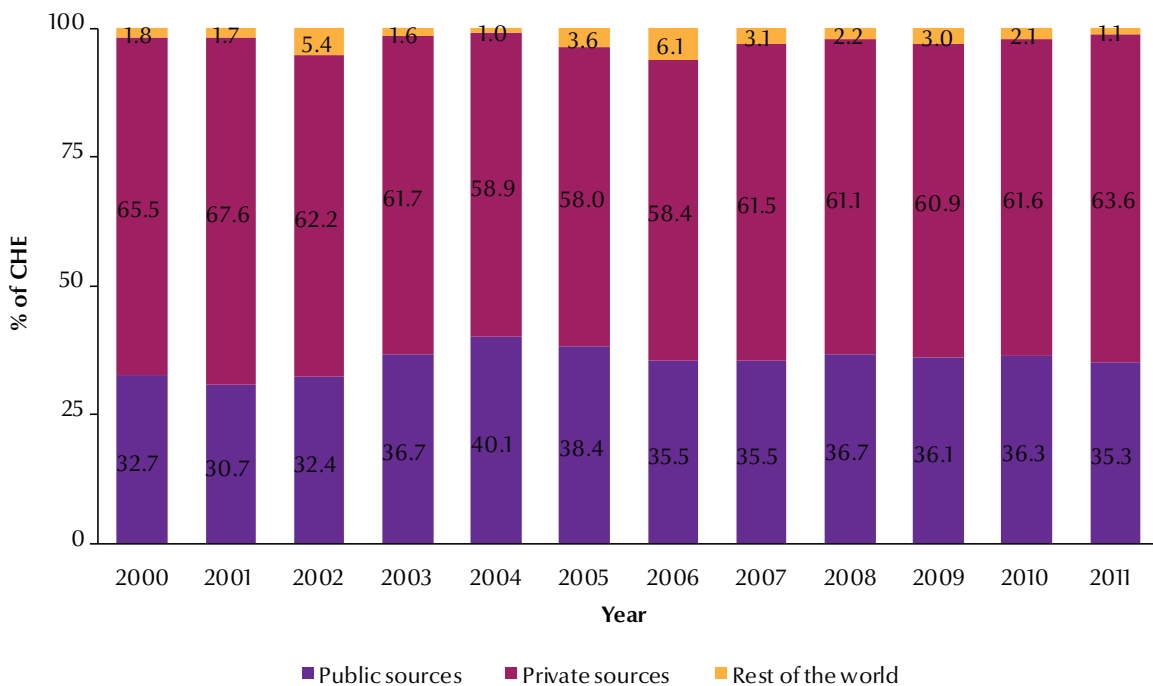


Figure 3 Current health expenditure (CHE) by funding source in the occupied Palestinian territory over the years 2000–2011

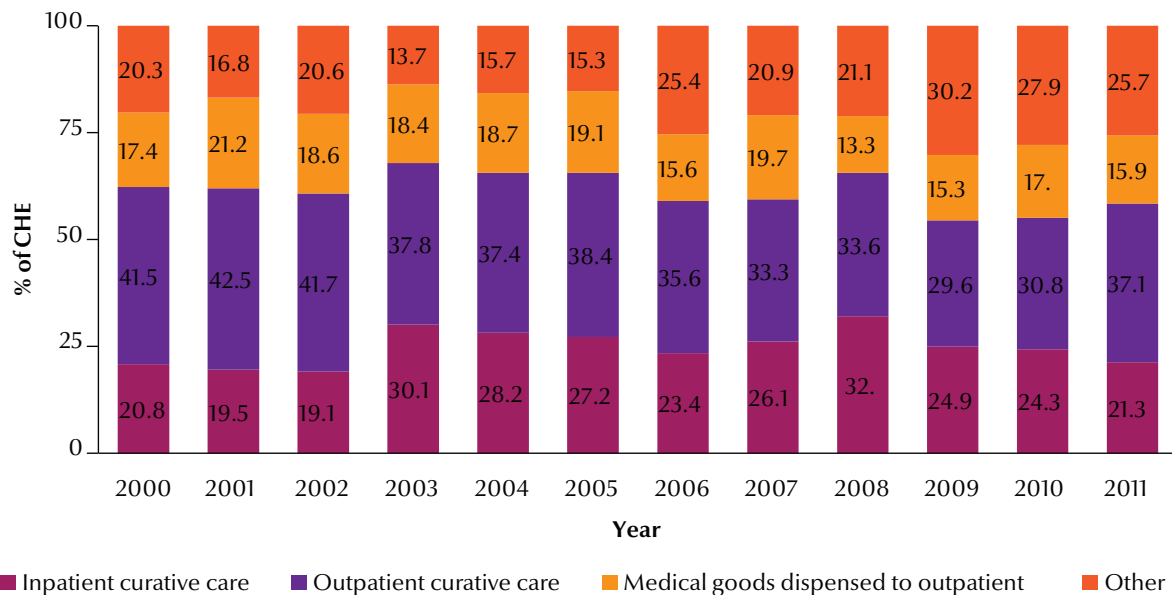


Figure 4 Current health expenditure (CHE) by funding source in the occupied Palestinian territory over the years 2000–2011

about 36% of current health expenditure (Figure 5). Providers of ambulatory care recorded a rise in primary health care services between 2000 and 2011, including outpatient activities and independent outpatient clinics of hospitals. The value of health expenditure

for this category accounted for 28% of current health expenditure. Retail sales and other providers of medical goods accounted for 17% of current health expenditure. Total expenditure by providers on nursing and residential care facilities in all sectors in the OPT was

equivalent to about 3% of current health expenditure. Expenditure on general health administration and insurance companies accounted for 9% of current health expenditure, and “other” accounted for 11% of current health expenditure (Figure 5).

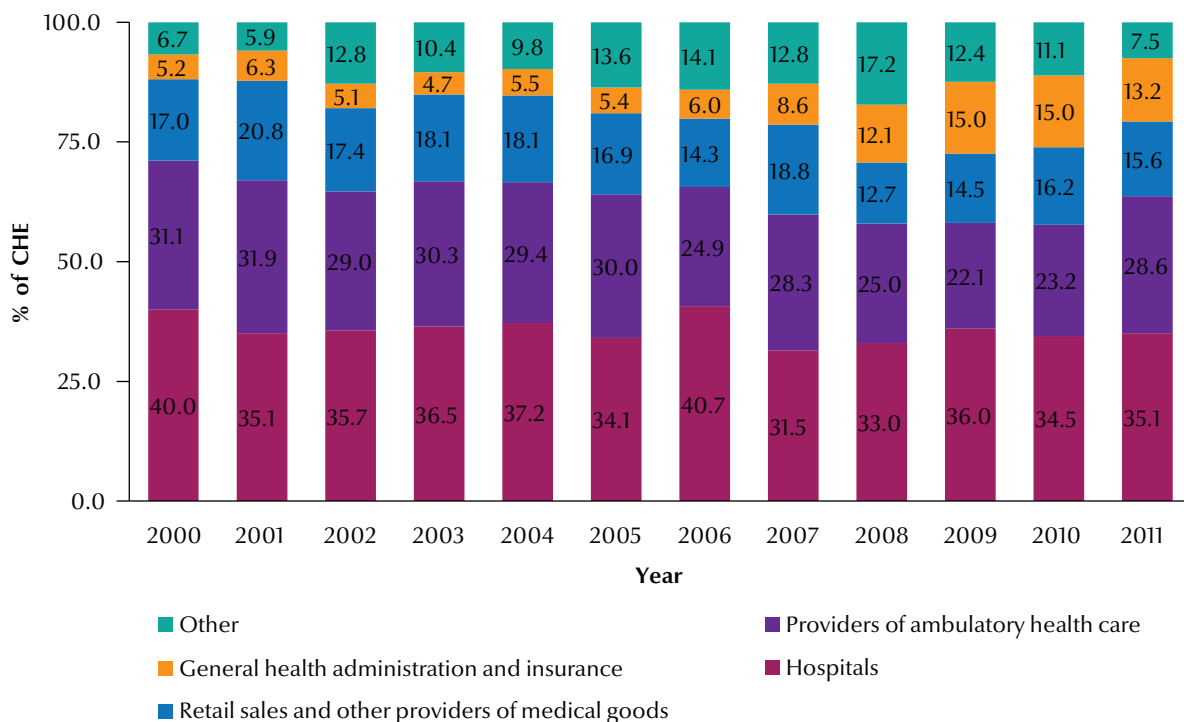


Figure 5 Current health expenditure (CHE) by health care provider in the occupied Palestinian territory over the years 2000–2011

Trends in government expenditure

Analysis by function

Analysis of government spending on different types of health care revealed that, on average over the decade, inpatient curative care constituted 59% of expenditure, outpatient curative care 26%, prevention and public health services 14% and other types of care 1%.

Analysis by provider

Analysis by type of provider showed that hospitals accounted for 58% of government expenditure, public clinics outpatient care centres 17%, health administration and insurance 14% and other 12%. Over 40% of government payments to hospitals were made to general hospitals. Nearly all the payments included in the “other” category were made to the rest of the world.

Trends in private expenditure

During 2000–11, the per capita private expenditure increased from US\$ 90 to US\$ 196 (117%). Given that private sources contributed disproportionately to the financing of the health care system—on average 61% of all health expenditure—further breakdown of private sources was made to analyse the extent of household contributions

(Figure 6). On average across 2000–11, household health expenditure reached 63% of all private sources, non-profit institutions serving households 34% and private insurance enterprises 4%. During the same period, expenditure per capita of private insurance enterprises increased from US\$ 3.5 to US\$ 5 (29%), expenditure per capita of household out-of-pocket increased from US\$ 54 to US\$ 133 (145%) and expenditure per capita of non-profit institutions increased from US\$ 32 to US\$ 59 (82%).

Trends in private households' out-of-pocket expenditure

Households contributed on average 39% of current health expenditure in the period 2000–11, which, despite the large public health infrastructure in the OPT, comprised the largest source of financing. Household out-of-pocket expenditure per capita increased from US\$ 54 in 2000 to US\$ 133 in 2011, a 145% increase.

Analysis by function

The average out-of-pocket health expenditure analysed by health function was as follows: outpatient curative care 27%, non-classified services of curative care 17%, medical goods dispensed to outpatients 42% and other 14%. An

increase in the out-of-pocket expenditure covered in the “other” category was due largely to the inclusion of health administration and insurance costs starting from 2007. The out-of-pocket contribution for inpatient curative care accounted for less than 1%, except in 2007 when it was nearly 6%. Overall, the out-of-pocket expenditure for prevention and public health services accounted for about 1%.

Analysis by provider

On average, the out-of-pocket household health expenditure on different types of providers were as follows: hospitals 18%, providers of ambulatory health care 31%, retail sales and other providers of medical goods 42%, and other 9%. All the payments made to hospitals in all years were to general hospitals. At least 40% of the out-of-pocket spending made to ambulatory care providers was accounted for by for-profit private clinics outpatient care centres. The main reason for the rise of payments to providers in the “other” category, especially after 2007, was the addition of health administration and insurance payments to the out-of-pocket expenses.

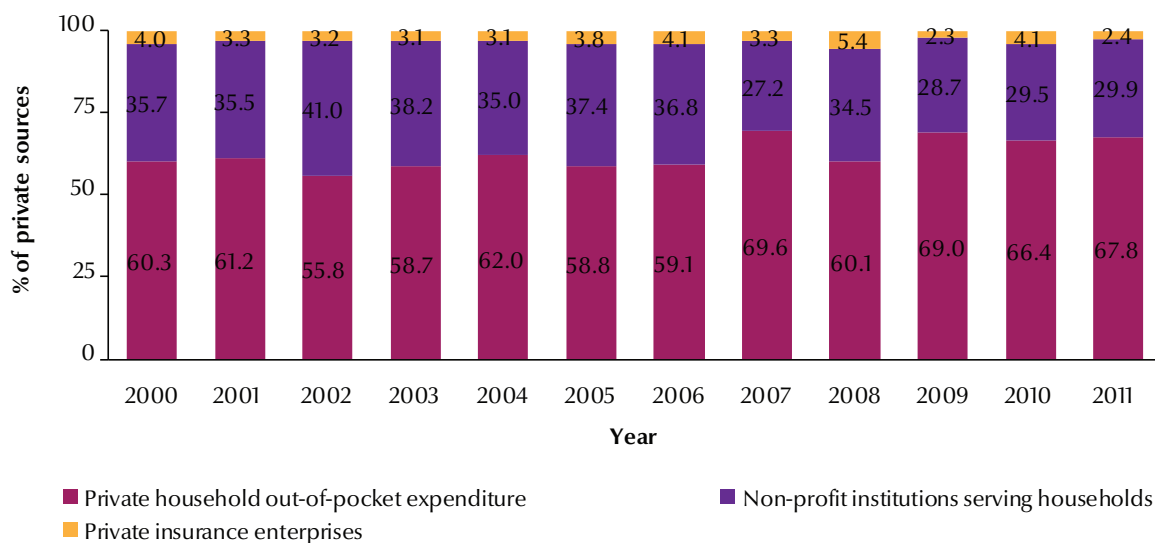


Figure 6 Breakdown of private health care expenditure in the occupied Palestinian territory over the years 2000–2011

Trends in private non-profit institutions serving households expenditure

Expenditure per capita of non-profit institutions increased from US\$ 32 in 2000 to US\$ 59 in 2011, an 82% increase.

Analysis by function

When analysed by health care function, the expenditure on non-profit institutions serving households were as follows: inpatient curative care 12%, outpatient curative care 80%, and other 8%. The notable increase in expenditure in the "other" category during the years 2008–10 was due mainly to health administration and insurance payments.

Analysis by provider

On average, spending on non-profit institutions serving households to different health care providers were as follows: hospitals 36%, nursing and residential care facilities 13%, outpatient care clinics provided by UNRWA 24%, outpatient care clinics provided by non-profit institutions serving households 9% and other 18%. Almost all the payments to hospitals were made to general hospitals. Payments to offices of physicians rose notably, especially in the years 2006–08 when there was a major decrease in payments to outpatient care centres provided by non-profit institutions serving households.

Discussion

Our results show that households and government bear the heaviest burden of funding of health services in the OPT. This raises issues such as accessibility, inequity, health finance sustainability and allocative efficiency in terms of return on investment in health and the opportunity cost of that investment, and the need to consider possible reallocation of resources to other sectors to maximize return. Several other significant findings from our study are discussed below.

High level of government spending on health services

Government health expenditure increased markedly from 2000 to 2011, which can be attributed to increasing salaries to finance unplanned and excessive health sector employment, cost of pharmaceuticals and outsourced health services. The total health expenditure as a percentage of GDP, at current prices, was about 12.3% in 2011. Total health expenditure per capita was US\$ 308 in 2011 and the government's contribution to this was about 40%. Government expenditure per capita increased from US\$ 45 in 2000 to US\$ 109 in 2011, a 142% increase. This was despite the Palestinian fiscal crisis which affected the ability of MoH to secure supplies for its hospitals and clinics, resulting in severe shortages in essential medicines (16).

A recent assessment of the MoH showed that its salary budget had risen over 2000–05 from US\$ 48 million in 2000 to US\$ 83 million in 2005 (17). Health expenditure on outsourcing health services increased 10-fold from 2000 to 2005 (US\$ 6 million to US\$ 60 million). A total of 30 000 cases were referred outside of MoH facilities in 2005, costing over US\$ 60 million, of which 40% were spent in neighbouring countries. The MoH specifically states "there are enormous hidden financial and social costs to the families of those referred abroad; costs that put some families in debt or are only affordable for the better off." (18).

About 85% of this amount was spent on curative care and only 14% on prevention and public health services. Our results also showed that about a quarter of the MoH budget was spent on health services outsourced from other providers, and about half of the budget was spent on salaries. The expanding salaries expenditure will have reduced the funds available for operating costs, which is likely to have adversely affected health utilization, quality outcomes, allocative efficiency and health finance

sustainability. Donors have financed the bulk of capital investments in the past decade, and hence government budget allocations to capital investment were minimal. The high degree of dependence on donor funding, which is included within the government budget, raises serious doubts about the sustainability of several key programmes.

Health services outsourced by the MoH constitute a significant part of the national health budget. Health expenditure on outsourced services have been on the rise (from US\$ 60 in 2005 to US\$ 147 million in 2013), reducing funds available for operating costs. The increasing level of outsourced services is not fiscally sustainable. Outsourced services referred abroad are also more complicated than local referrals, and thus more expensive than those provided by Palestinian health care institutions (19). The MoH has initiated reform efforts to improve the equity and efficiency of the overall referral system. The referral process is currently centralized under the authority of the General Directorate for Health Insurance, and is subjected to clear and stringent eligibility criteria. The MoH would be advised to weigh the costs of this investment, and its ability to attract highly skilled health professionals, against the benefits of purchasing these services from outside providers with existing capacity in the future. The MoH needs to provide well-developed health facilities and sufficient skill-mix of human resources. It should also develop its contracting capacity to better manage the health needs of the population.

Government hospitals consumed about 59% of the MoH budget, yet appear to be inferior to private hospitals in terms of efficiency and quality. To enhance the ability of hospitals to tackle the financial sustainability issue, there must be a division between finance and provision. Transformation of the current government health insurance scheme into a separate agency which controls its own financial resources

could encourage competition among government and private providers and improve quality and efficiency.

High level of spending on curative care and hospital services

Over the period 2000–11, the OPT spent on average about 61% of total current health expenditure on curative inpatient and outpatient care. This percentage was even higher in the government sector, at about 85% of the government health expenditure. Spending on inpatient curative services was the highest costing component, at 49% of current health expenditure, and 59% of government expenditure. Inpatient care is highly labour-intensive and expensive. Injuries due to conflict-related trauma contribute to this high percentage because they require special programmes with a much higher average cost as compared with programmes for the general population. This reduces the resources available for preventive and general care. On the other hand, over the same period, the share of total OPT spending on preventive and public health services was 7.7%, and the share of government spending on preventive and public health services was 14.0%. The private sector has low occupancy rates because they are more expensive than public hospitals. Underutilized hospitals are inefficient since a large portion of hospital costs are fixed, and the cost per patient is much higher.

There is little doubt that curative care is not as cost-effective as relatively inexpensive preventive services. It has been shown that investing in a well-defined package of evidence-based clinical preventive services is effective in preventing disease and offers very good economic value (20). It is therefore suggested that deliberate efforts be taken to shift resources in the OPT from curative to preventive services. Policy-makers involved with health promotion should re-evaluate levels of current spending

in the health sector in order to be sure about future financial sustainability and return on investment. Health promotion and disease prevention efforts should be implemented by diverting additional resources.

Reorientation of the health system is needed also in terms of reducing the share of spending on inpatient services in favour of more day surgery, outpatient and home-based services. The payment methods for hospitals also play a major role in this shift. The way hospitals are currently organized and financed encourages excessive hospital utilization. Government hospitals in the OPT are reimbursed using global budget payment arrangements, which reward hospitals for doing more and which provide weak incentives for cost containment. Revision of hospital payment systems to include capitation and diagnosis-related groups are some possible options.

High level of out-of-pocket expenditure by households

The private sector accounted for the largest share of health funding in the OPT —about 61% of total current health expenditure. Remarkably, households bore most of this cost, as they contributed about 63% of private spending, exceeding the contribution of the government to health. The results showed that on average over the study period, households contributed 39% of current health expenditure, which is the largest source of financing. Households' out-of-pocket expenditure per capita increased from US\$ 54 in 2000 to US\$ 133 in 2011, a 145% increase.

The World Bank has reported that the poorest population quintile of the OPT spent 40% of their income on medical expenses; a staggering financial burden (5). The burden on individual households should be reduced by a modified financing system. Global evidence indicates that it is difficult to achieve universal coverage and a high level of financial protection

if out-of-pocket payments are higher than 30% of current health expenditure (21). The OPT is on the borderline, where about one-third of the burden of financing the health system falls primarily on households. A reduction in out-of-pocket payments would be an additive advantage as the OPT plans to move towards universal coverage.

Our results also showed that on average about 42% of the amount spent by households was spent on pharmaceuticals. Despite measures by the MoH to improve the efficiency of the pharmaceutical sector—by training physicians, using generic drugs, introducing an essential medicines list, enforcing pharmaceutical pricing policy and regulating the retail pharmacy market to prevent self-prescribing of drugs—the problem of high pharmaceutical prices is evident in both the government and private sectors, and households bear the greatest cost. The domestic pharmaceutical industry can produce about 700 different medicines, which satisfies the expectations of half of Palestinians (22). However, there is a lack of real competition in the domestic pharmaceutical market (6). The MoH procures pharmaceuticals as 7 times higher than international procurement prices (6). Besides, access of the OPT to the neighbouring Arab markets, which could have provided medications at lower prices, is hindered by the trade restrictions of the Paris protocols, part of the Oslo Accords with Israel. Moreover, the shared customs system prevents the international pharmaceutical industry from implementing differential pricing for the OPT. The OPT national health accounts provide limited data on the cost of pharmaceuticals and other durable and non-durable medical products. Therefore, this study was unable to perform further analyses to address the issue of pharmaceutical expenditure, especially from the perspective of households.

This article was an attempt to analyse health care spending patterns in the OPT to inform future health

policy-making and planning. It is also an invitation to other researchers in the field to apply quantitative techniques to measure and provide a deeper insight into how health services are financed and organized. However, there is a need for additional research on health expenditure patterns in the OPT. Only this kind of understanding can help us to ensure that we are moving forward

in our journey to enhance the efficiency and sustainability of the health system in the OPT.

Key messages

- Health policy-makers in the OPT should reassess the current spending levels in the health care sector to

ensure future financial sustainability and return on investment.

- Current financing mechanisms should be modified to reduce the burden on individual households.
- More resources should be allocated for health promotion and disease prevention programmes.

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