



Munich Personal RePEc Archive

Healthcare expenditure progress in Tunisia: a qualitative analysis

Ismail, Safa

10 February 2021

Online at <https://mpra.ub.uni-muenchen.de/111493/>
MPRA Paper No. 111493, posted 14 Jan 2022 14:23 UTC

Healthcare expenditure progress in Tunisia: a qualitative analysis

Safa Ismaïl

Email : safa_ismail@yahoo.fr

Ph.D in economics. Assistant at the Faculty of Economic Sciences and management of Nabeul, Tunisia. E-mail: safa_ismail@yahoo.fr*

Abstract

Improving health requires necessarily equitable funding. This study focuses on the evolution of health spending in Tunisia. Developments are observed between the years 2000 and 2015. Comparisons are made between Tunisia, other countries from North Africa and Middle East region (MENA) and France as a country with an efficient health insurance system. The results show that health spending in Tunisia is growing steadily, but State funding remains insufficient, which has affected the quality of health care provision in the public health sector. The financing of health in Tunisia is mainly based on out-of-pocket household expenditure, which obstructs the access to health care.

Key words: Health expenditure; Health financing; Out-Of-Pocket expenditure; Tunisia

Introduction

Financing the health care system has always been a critical issue for politicians in both developed and developing countries, since improving health requires necessarily equitable financing.

Health expenditure in developed countries is considerable. In 2018, health spending in the United States reached 16.9% of GDP, Switzerland 12.2%, other countries such as Germany, France, Sweden, and Japan spent almost 11% of their GDP (OCDE 2021).

The relationship between country health expenditure and GDP is more than proportional whether for low, middle, or high-income countries (Colombo and Morgan 2006).

Countries in the North Africa and Middle East region devote an average of 6.25% of their GDP to health spending. In Tunisia, the improvement in the performance of the health system has also resulted in a notable change in health expenditure. The share in GDP is 7.29% in 2018 (Banque Mondiale 2018).

Health expenditure mainly involves 3 sources of financing: the state contribution, the contribution of social security funds and out-of-pocket expenditures (OOP).

In the countries of the European Union, on average, 79% of the total health expenditures (THE) are covered by compulsory health insurance schemes, 5% are covered by optional complementary insurance while the rest is paid by households (DREES 2020).

On the other hand, in developing countries, OOP expenditures represent between one-third and three-quarters of all health expenditure (World Health Organization (WHO) 1995-2013). These payments have a negative effect on household well-being (Xu, Evans et al. 2007). In Tunisia, the contribution of households has remained stagnant at around 40% for decades (CNS 2012-2013).

This paper studies the level of health spending in Tunisia as well as the contributions of the main sources of funding. We are interested in analyzing their changes by explaining the factors and effects on household well-being.

The remainder of the paper is organized as follows: the first section describes the study method and data. The second section presents the results, and the last sections are for discussion and conclusion.

Method and data

This study aims to analyze the health spending progress in Tunisia over the period 2000-2015. Two indicators are used: First, health expenditure per capita, PPP (international \$). This indicator is defined by the sum of global public and private health expenditures as a ratio of the whole population. Data are converted to international dollars using purchasing power parity (PPP) rates. Then, health expenditure (in % of GDP). This indicator is defined by the sum of global public and private health expenditures as a ratio of the country's Gross Domestic Product (GDP). Both indicators exclude the provision of water and sanitation services.

The evolution of the participation of the main contributors to health financing was also studied. Four indicators are used here: general government expenditure on health (as a % of the THE). This indicator includes recurrent and capital expenditures forecast by government budgets (central and local), external loans and subsidies, and social health insurance funds. Social security health insurance expenditure (as a% of THE) includes social health insurance funds, complementary health insurance expenditure (% of THE) and OOP expenditures (% of THE) which includes all expenditures incurred directly by households and not reimbursed.

To assess the level of these health expenditures and these contributions to health financing, a comparison is made with other countries in the MENA region with equivalent cultures and incomes such as Algeria, Morocco, Jordan. and Egypt. But also compared to France, which was

ranked first by the World Health Organization (WHO) in 2000 (OMS 2000) relative to the efficiency of its health system. The reasons and impacts of the evolution of these payments are also discussed. The data used in this study are taken from the National Institute of Statistics (INS 2015), the World Bank (Banque Mondiale 2018) and the National Health Accounts surveys (CNS 2012-2013).

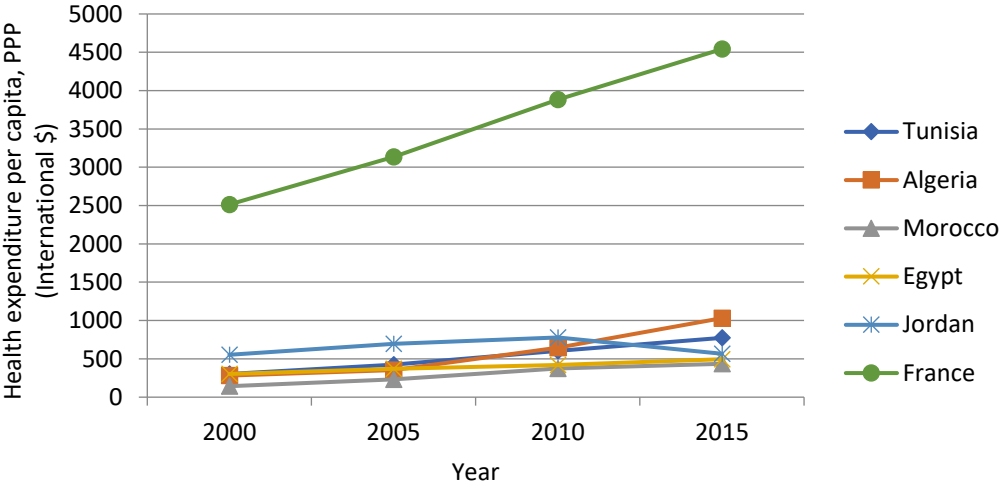
Results

The scale of health spending

Figure 1 shows that Tunisia is experiencing a continuous and rapid change in the level of health spending over the period 2000-2015. This is also the case for Algeria, Morocco, and Egypt. These countries have close per capita health expenditure. This expenditure doubled between the years 2000 and 2015 but compared to France, the levels of expenditure appear relatively very low and so do their growth. French health expenditure per capita is eight times higher than that of a Tunisian household.

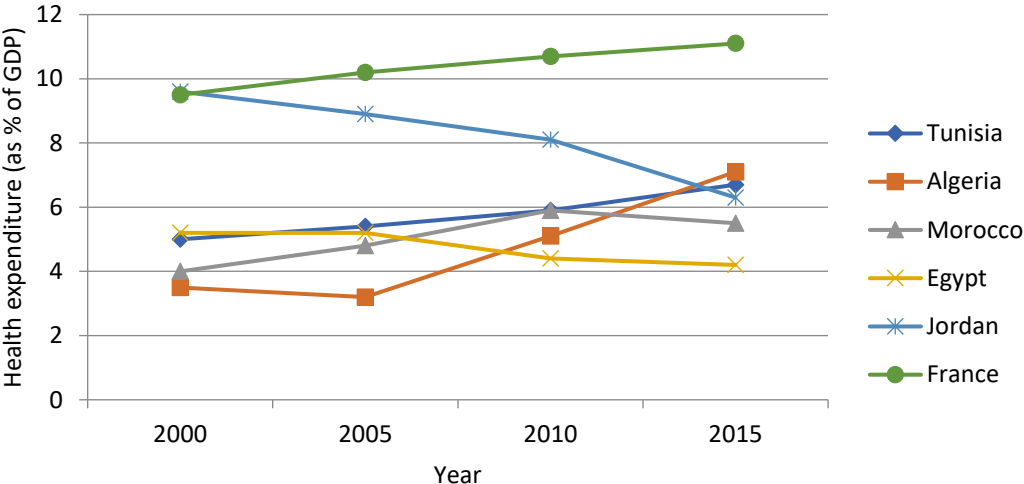
In terms of percentage of GDP, the share of Tunisian health expenditure is equivalent to that of the MENA countries studied here. It is steadily increasing at the same rate as France. But this rate remains considerably low compared to France. In 2015, Tunisia devoted 6.7% of its GDP to healthcare spending while France devoted 11.1%. Among the countries presented here, there is only Algeria which shows a rapid evolution in the share of its health expenditure. Indeed, it doubled between 2000 and 2015, going from 3.5% to 7.1%. On the other hand, the expenditure shares for Jordan and Egypt are rather declining (Fig. 2).

Figure 1: Health expenditure per capita, PPP (international \$): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



Source: World Bank

Figure 2: Health expenditure (as % of GDP): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



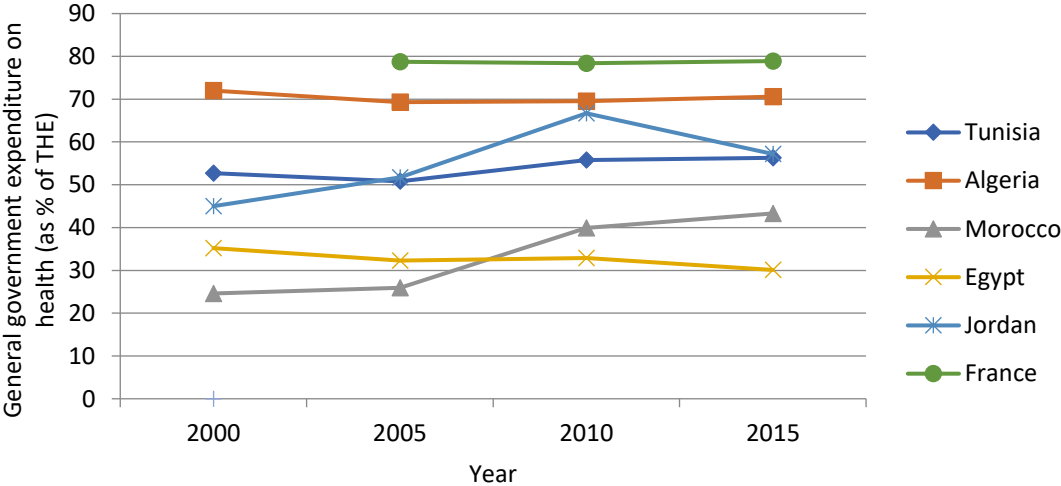
Source: World Bank

Health financing

Health expenditure is shared between public expenditure insured by the State and social security funds, and private expenditure insured by complementary insurance and households. The different contributions, during the period 2000 and 2015, are presented as a percentage of total health expenditure in Figures 3, 4, 5 and 6.

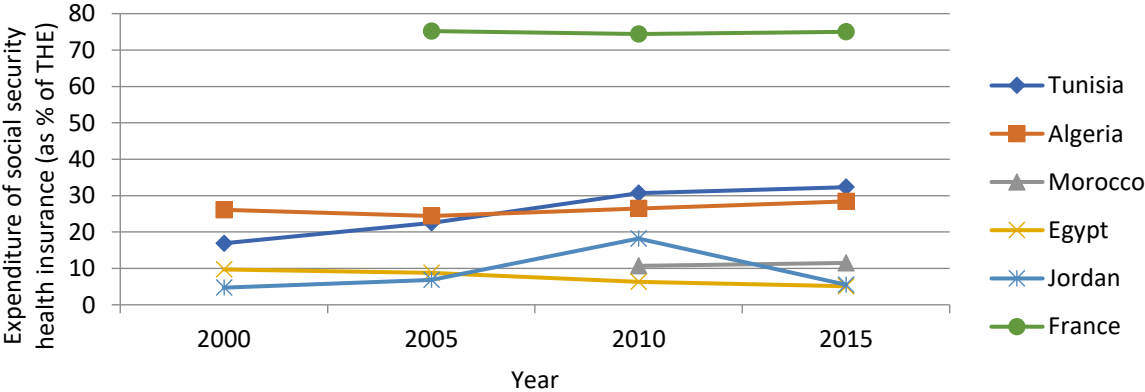
Figure 3 shows the government's contribution trend. In Tunisia, this contribution increased slightly over the period (from 52.7% in 2000 to 57.2% in 2015). Compared to France and Algeria, this contribution is quite low. It is shared between the contribution of social security funds (28.4% in 2015) shown in Figure 4 and that of the State (24.3%). Compared to the other MENA countries selected in this study, the contribution of social funds is quite high in Tunisia. But, compared to French social funds which finance 75% of total health expenditure, the role of Tunisian funds is still weak. This contribution has remained for decades between 10% and 25%. Even in recent years, it has not exceeded one third of total health care spending, although members enrolled in these funds represent more than half of health care consumers.

Figure 3: General government expenditure on health (as % of THE): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



Source: World Bank

Figure 4: Expenditure of the social security health insurance (as % of THE): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



Source: World Bank

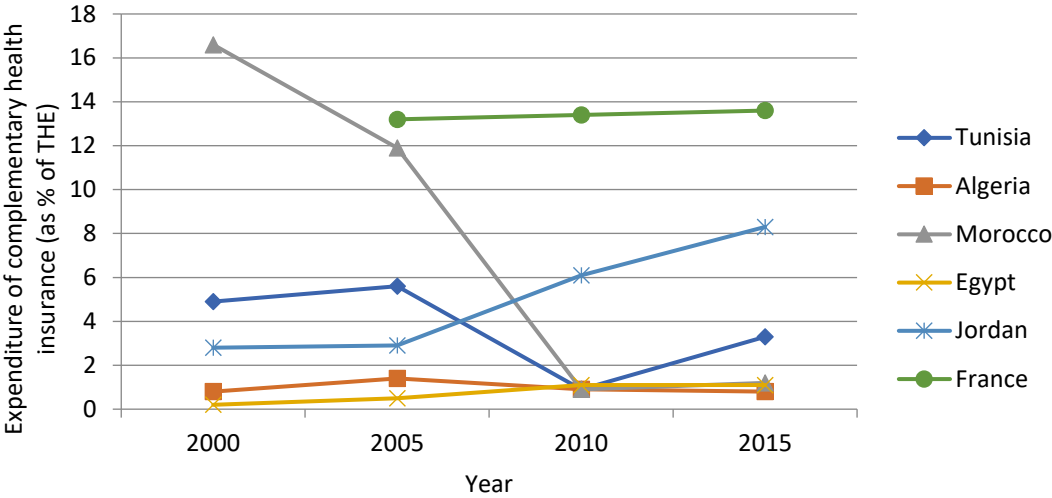
The contribution of complementary insurance to the financing of health expenditure is minimal in the countries studied here. It only represents 3.3% in 2015 for Tunisia. Apart from France's complementary insurance, whose contribution was 13.6% in 2015, only Jordan, among these countries, shows a significant change in the role of complementary insurance with a contribution of 8.3% in 2015 (Fig. 5).

The level of these different contributions is reflected in OOP expenditure. In fact, any health service which is not financed by the government (social funds and the state) or by the complementary insurance will be reflected in expenses payable by the household.

Despite an observable growth in the contribution of complementary insurance in Jordan and a high contribution of State in Algeria, the OOP expenditure of these two countries remains relatively high (between 25% and 28%) (Fig. 6). In the other side, Morocco, and Egypt experience health expenditure deeply dependent on OOP expenditure with rates well above those of Tunisia. On the contrary, thanks to a very significant support on its social security funds (with a contribution of 75%) and without neglecting the role of its complementary insurances, France, leaves only a small part, which does not exceed the 8% of total health expenditure, borne by its citizens.

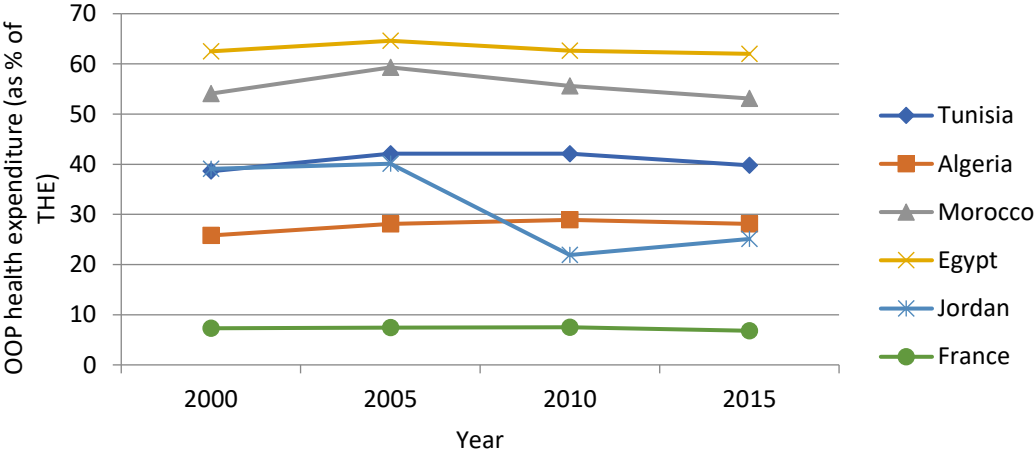
For Tunisia, OOP expenditure is estimated at 40% in 2015. This rate remained almost the same, while the level of these expenses increased throughout the period studied (INS 2015). 94% of this expenditure is made in the private sector and only 6% in public and parapublic health structures (CNS 2012-2013). These expenses are shared between four categories of care: current medical care (29%), exceptional medical care (24%), pharmaceutical products (45%) and medical products (2%).

Figure 5: Expenditure of the complementary health insurance (as % of THE): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



Source: World Bank

Figure 6: OOP health expenditure (as % of THE): Tunisia, Algeria, Morocco, Arab Republic of Egypt, Jordan, and France, 2000-2015



Source: World Bank

Discussion

This study shows that total health expenditure is low in Tunisia and in the countries with similar incomes, studied in this paper. France's total spending is much higher. The close and positive relationship between the level of GDP and the level of total health expenditure has been affirmed for several countries (L'horty, Quinet et al. 1997), this explains the gap that exists between health expenditure in France and that in the other countries studied.

In addition, health expenditure is growing steadily in Tunisia. This development is linked to the growth of GDP per capita and to several other factors. Advances in medicine and the introduction of new and expensive healthcare technologies also have a significant impact on these expenses (L'horty, Quinet et al. 1997). The same effect is provided by the demographic transition accompanied by the aging of the population, the spread of serious diseases, urbanization attended with risky behavior (accidents, stress, etc.), and the development of the liberal sector.

In Tunisia, the State's contribution to health financing has declined significantly in recent decades. In fact, until the end of the 1980s, the state was the main source of funding for health spending, with a rate exceeding 50% of total health spending. The macroeconomic and budgetary constraints facing Tunisia have limited State intervention in guaranteeing the functioning and financing of healthcare services for public health structures. The lack of funding has led to the decline of the quality of services provided by this sector. Public health structures suffer from a lack of medical, paramedical, and administrative staff, as well as a considerable shortage of drugs. The State becomes unable to finance new projects that follow demographic and epidemiological changes. This has resulted in congestion and very long wait times for surgeries, medical x-rays, etc. The state of public health structures has led citizens to move towards the private health sector, which is more expensive, but of better quality. Several companies have taken out complementary insurance for their employees to benefit from coverage in this sector. But the contribution of this type of insurance remained minimal (3.3% in 2015).

Several measures and reforms (Arfa and Elgazzar 2013) have been carried out by Tunisia to further involve social funds in health financing and reduce OOP expenditure in order to improve access to health care for the population. In 2004, a reform that allows the coverage of health services in the private sector was performed. However, the increase in the contribution of social

funds remains insufficient and subsequently general government expenditure could not exceed 60% of total health expenditure. These insufficient contribution rates have not alleviated the burden on households, which still constitutes the main source of financing for health expenditure (40%). This high level of the rate of OOP expenditure is observed for countries comparable to Tunisia and it mainly characterizes developing countries. In France, only 6.8% are borne by the households.

As already indicated above, the OOP expenditure of Tunisian households is almost totally occurred in the private health sector and particularly in private drugstores (45%). In other words, the purchase of drugs is the main source of OOP expenditure.

Policy makers need to take adequate measures to reduce OOP health expenditure by focusing on self-medication control and drug accessibility in public hospitals. A high rate of OOP health expenditure presents an obstacle to access to health care (Xu, Evans et al. 2007). It can lead households to catastrophic spending and even impoverishment (Abu-Zaineh, Romdhane et al. 2013). Measures to extend the covered care packages and the covered population must be carried out and the commitment of social funds and complementary insurance must be strengthened. Indeed, several studies show that public health expenditure contributes significantly to the decrease of the infant mortality rate (Nixon and Ulmann 2006, Messaili and Tlilane 2017), and has a positive impact on life expectancy at birth (Crémieux, Ouellette et al. 1999).

Conclusion

The observation of the health expenditure progress in the few MENA countries, appearing in this study, and particularly in Tunisia, shows that despite the continued growth of this expenditure, it remains insufficient, and its financing is mainly based on out-of-pocket expenditure. This high contribution of the households is worrying, especially since it persists

despite the efforts made by all these countries to reduce it. It constitutes an obstacle to the healthcare access (Xu, Evans et al. 2007) and therefore to the improvement of health indicators in these countries (Crémieux, Ouellette et al. 1999, Nixon and Ulmann 2006, Messaili and Tlilane 2017). The additional commitment of compulsory and optional health insurance funds, the extension of health insurance coverage for the entire population and the improvement of the healthcare offer in public hospitals are essential means for a more equitable healthcare system.

References

- Abu-Zaineh, M., H. B. Romdhane, B. Ventelou, J.-P. Moatti and A. Chokri (2013). "Appraising financial protection in health: the case of Tunisia." International journal of health care finance and economics **13**(1): 73-93.
- Arfa, C. and H. Elgazzar (2013). "Consolidation and transparency: Transforming Tunisia's health care for the Poor."
- Banque Mondiale (2018). Données de la Banque Mondiale. Available from: <https://donnees.banquemondiale.org/indicateur/SH.XPD.CHEX.GD.ZS?locations=JO>.
- CNS (2012-2013). Comptes nationaux de la santé 2012-2013, Ministère de la santé.
- Colombo, F. and D. Morgan (2006). "Evolution des dépenses de santé dans les pays de l'OCDE." Revue française des affaires sociales(2): 19-42.
- Crémieux, P. Y., P. Ouellette and C. Pilon (1999). "Health care spending as determinants of health outcomes." Health economics **8**(7): 627-639.
- DREES (2020). « Comparaisons internationales de la dépense courante de santé et du reste à charge ». Les dépenses de santé en 2019 > édition 2020 > DREES.
- INS (2015). Enquête nationale sur le budget, la consommation et le niveau de vie des ménages 2015. Institut National de la Statistique. Tunisie.
- L'horty, Y., A. Quinet and F. Rupprecht (1997). "Expliquer la croissance des dépenses de santé: le rôle du niveau de vie et du progrès technique." Économie & prévision **129**(3): 257-268.
- Messaili, M. and N. K. Tlilane (2017). "Public spending on health and population health in Algeria: an econometric analysis." Sante Publique **29**(3): 383-392.
- Nixon, J. and P. Ulmann (2006). "The relationship between health care expenditure and health outcomes." The European Journal of Health Economics **7**(1): 7-18.
- OCDE (2021). Panorama de la santé 2021 : Les indicateurs de l'OCDE, Éditions OCDE, Paris.
- OMS (2000). Rapport sur la santé dans le monde, 2000: Pour un système de santé plus performant, Organisation mondiale de la Santé.
- World Health Organization (WHO) (1995-2013). Database, available on <https://apps.who.int/gho/data/node.imr>.
- Xu, K., D. B. Evans, G. Carrin, A. M. Aguilar-Rivera, P. Musgrove and T. Evans (2007). "Protecting households from catastrophic health spending." Health affairs **26**(4): 972-983.