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Changing the paradigms

Policy Brief

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Longer lives and exasperated patients: Israel's health system does it the hard way

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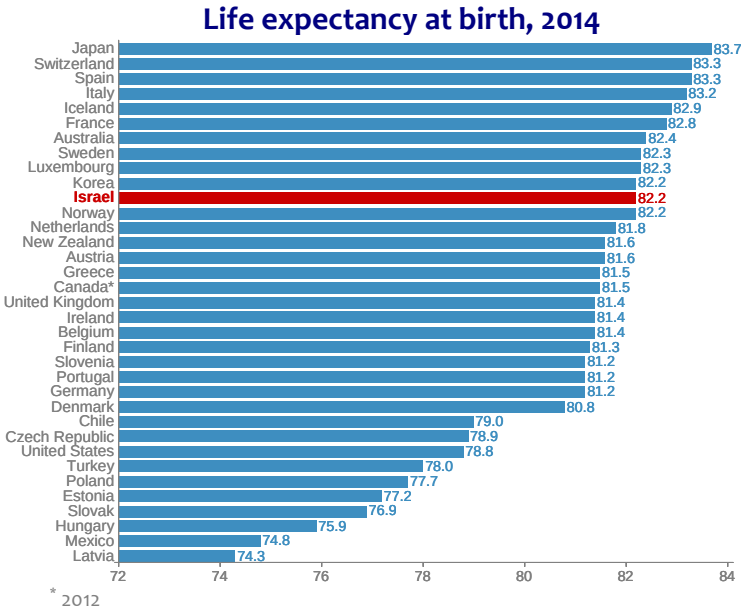
If the quality of a healthcare system were determined on the basis of life expectancy, then Israel's could certainly be thought of as one of the best in the developed world. Over the past four decades, the average expected lifespan of an Israeli has grown by over a decade – from just under 72 years in the early 1970s to over 82 years in 2014. Physicians and nurses trained at the highest international professional standards play a key role in ensuring that Israelis enjoy one of the highest life expectancies in the world (Figure 1). Mediterranean diets and other idiosyncratic factors also contribute to the longevity in Israel.

There are differences in life expectancy between women and men, and between Jews and Arab-Israelis. As in other countries, it is longer for women than for men: 84.5 years for Jewish women and 81.2 years for Arab-Israeli women (the latter number is identical to the life expectancy of American women); 81.1 years for Jewish men and 76.8 years for Arab-Israeli men (by comparison, it is 76.4 for American men).

Another indication of the health system's effectiveness is the 87% drop in infant mortality, from 24.2 deaths per 1000 live births in 1970 to 3.1 in 2014 (Figure 2). While there are several OECD countries with better outcomes, Israel is nonetheless in the lower half of the organization's countries – and in a considerably better position than it was in the past.

Figure 1



Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

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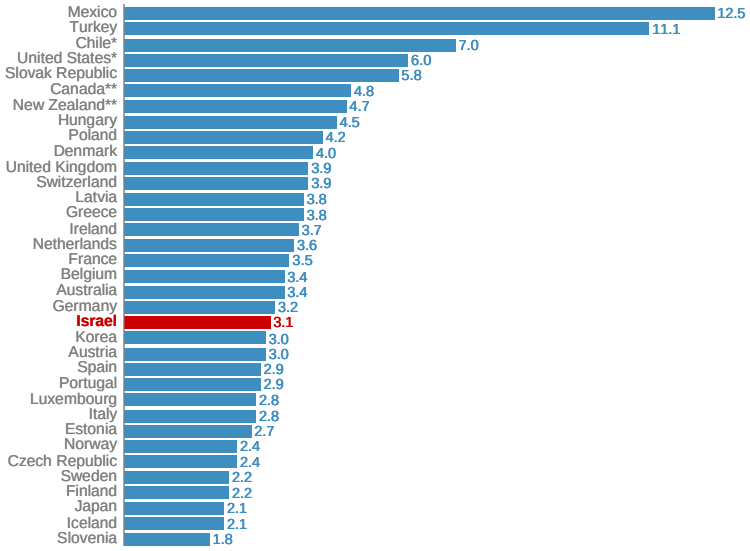
And yet, not all is as it may appear. A very large number of assaults on healthcare workers, numbering in the hundreds each year – including the horrifying murder of a nurse set ablaze recently – suggests that that there may exist some major problems beneath the surface. As in the case of reckless drivers who kill others, the guilty ones are those who inflict harm on others. While an augmented police presence in every clinic and street intersection deals could reduce the problems, it would deal only with the symptoms. There's also a need to address some of the latent root problems that don't appear to be on the policy radar. Broadly speaking, society includes not only includes the normative, but also the careless and the crazy – fringes that need to be accounted for more fully in the planning stages. Charging drivers who run over others who stop on road shoulders is not a substitute for widening the shoulders and moving back the guardrails so that drivers will not have to change a flat tire while their bodies protrude onto the road.

Figure 2

Infant mortality, 2014



* 2012, ** 2013

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

Small number of hospital beds per person

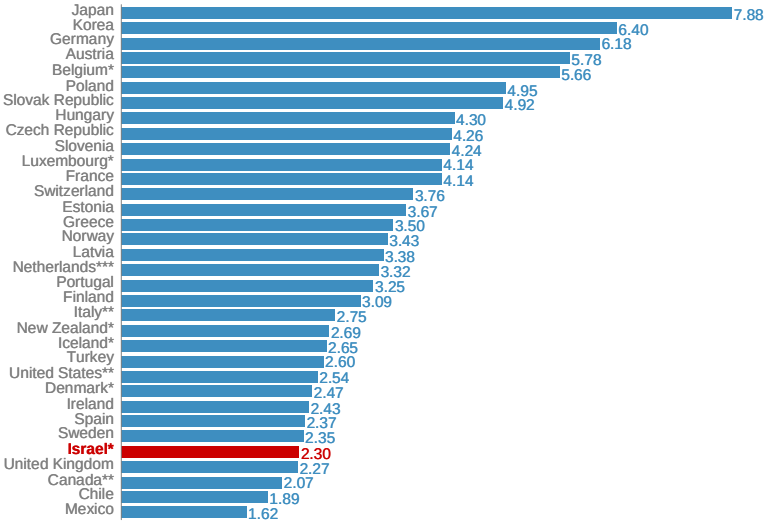
It is similarly with healthcare. When Israel was young, it built not only towns and roads, but also research universities and hospitals. The number of curative (acute) care hospital beds managed to keep pace with Israel's phenomenal population growth from 1948 until the late 1970s. Then the country's priorities changed. During the decades that ensued, the number of hospital beds per capita in Israel fell steadily. As is evident in Figure 3, Israel is situated today beneath nearly all of the OECD countries.

This may be a positive outcome to those who feel that it is wanton to waste precious resources on empty hospital beds. But it is tantamount to claiming that roads need to be utilized by the maximum number of vehicles possible. In light of the fact that congestion on Israel's roads (as measured by the number of vehicles per kilometer road) has risen to three times the OECD average – despite the fact that Israel has 38% fewer vehicles per capita than the OECD average – this may

Figure 3

Hospital beds[1]

per 1,000 population in all 35 OECD countries, 2014



[1] Curative (acute) care hospital beds
* 2015, ** 2013, *** 2012

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

indeed be the prevailing line of thinking in Israel's governments. There is no doubt that fewer beds per person imply greater utilization of very expensive healthcare assets. But avoiding overflows during peak seasons requires accommodating slack during other periods.

A relatively young population doesn't need many beds since young people fall ill less frequently, and Israel's population is younger than most in the developed world. However, today the country's population older – and the country is wealthier – than it was three decades ago. Despite this, Israel funded 60% more beds per capita in 1988 than it does today. So the discrepancy exists not only vis-à-vis other countries. It also exist when a comparison is made to Israel itself many years ago.

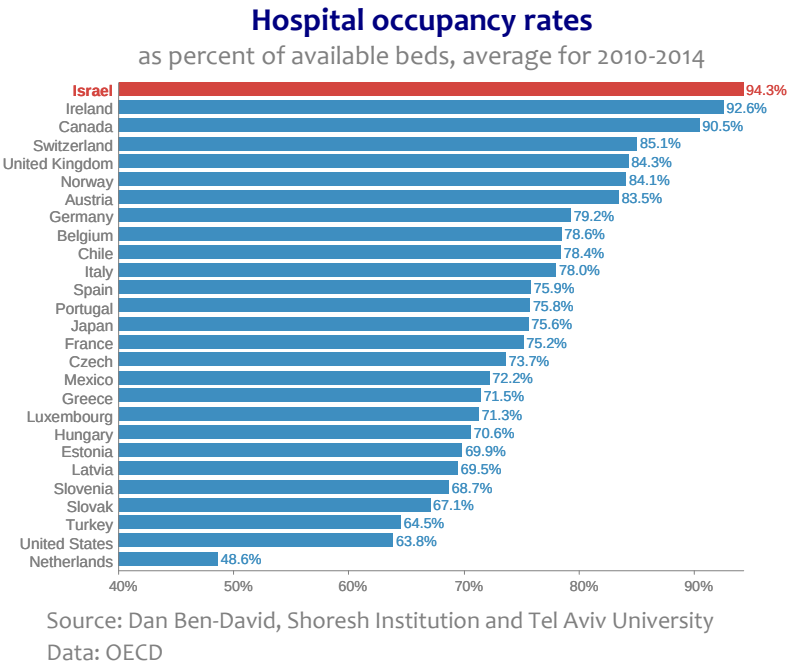
Hospitals with the highest occupancy rates in the developed world

In some instances, there are healthcare alternatives that may be less expensive than hospitalization. When such alternatives exist, then a smaller number of hospital beds makes sense. But the frequent overflow of Israeli patients into hospital corridors and dining areas suggests that while the number of beds per capita has fallen precipitously over the past several decades, there has not been a concurrent improvement in providing alternatives.

Israel's insufficient investment has yielded an hospital occupancy rate of 94%, greater than in any other OECD country and a quarter higher than the average (75%) of all the other countries in the organization (Figure 4). This is an annual average for an entire country. It does not reflect the tremendous pressures that develop during peak seasons in some of the most populated areas.

This could be regarded by some as efficient. But it creates problematic hospitalization conditions and considerable misery for the patients and their families. And all too often, it also leads to friction and violence.

Figure 4



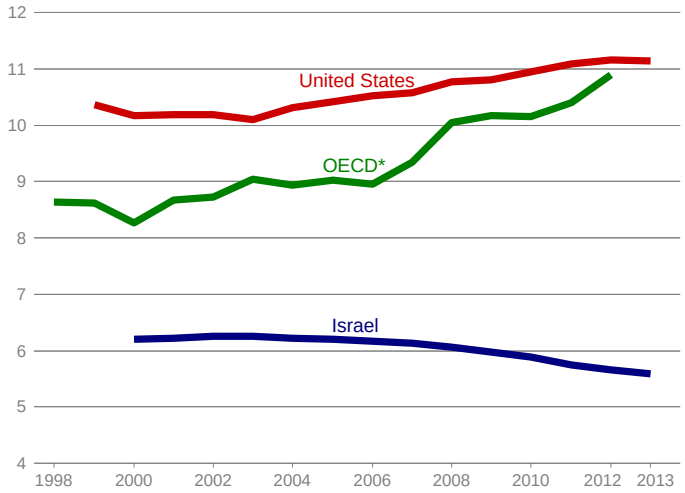
Steady decline in the number of nurses – towards the bottom of the developed world

As if the above were not enough, Israeli patients face an additional challenge: severely undermanned medical staffs. The number of active nurses per capita in Israel is low compared with the OECD average. In the year 2000, the number of nurses per capita in Israel was three-quarters of the OECD average (Figure 5). Since then, the average number of nurses per capita in the OECD has risen by a third while in Israel this number has declined by about a tenth. Consequently, in just one dozen years, the number of nurses per capita in Israel fell to about half the OECD average.

Figure 5

Professionally active nurses

per 1,000 population, 1998-2013



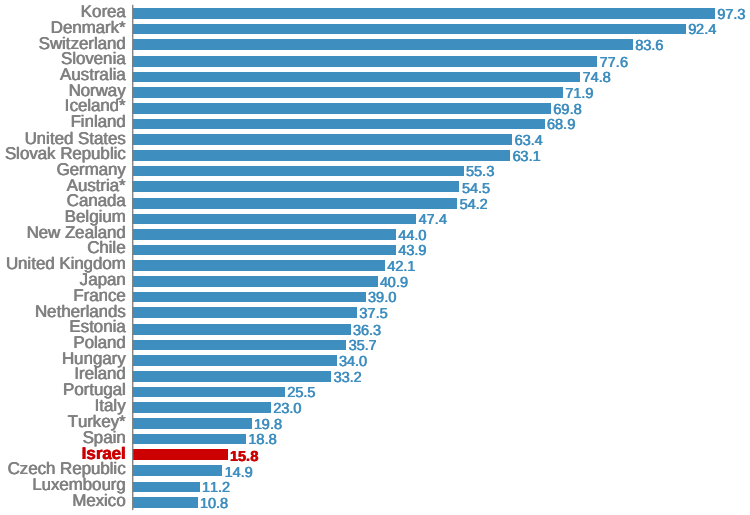
* Excluding US and Israel.

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

Figure 6

Nursing graduates

per 100,000 population, 2013



* 2012

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

Even more concerning is the state of the nurse flows – that is, the annual number of nursing graduates – because it underscores the direction that Israel is headed. The average number of nursing graduates in the OECD (47 per 100,000 population) is nearly three times the Israeli number (16), which is near the bottom of the OECD (Figure 6).

This has considerable ramifications for the country's sick and weak during their most vulnerable moments, when they are most in need of care and attention. Such over-crowded hospitalization conditions, combined with such small nursing staffs, not only lead some of the less stable toward violence, they are also dangerous from a healthcare perspective.

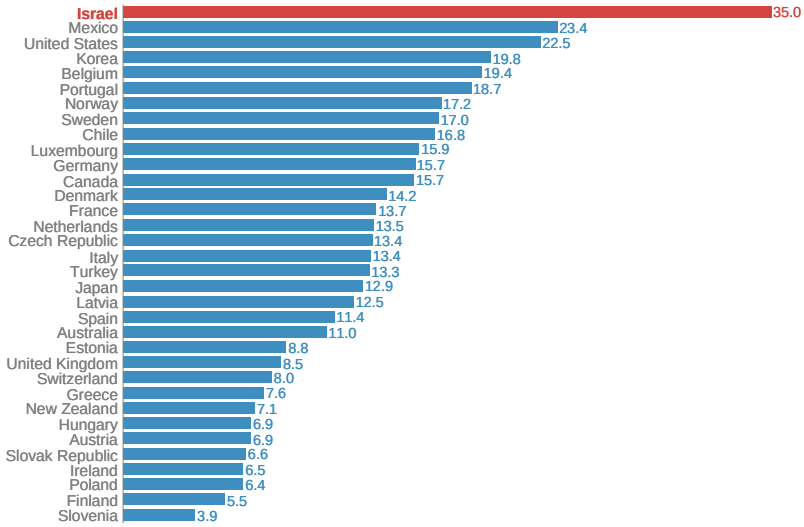
First place in infectious diseases

In some respects, Israeli hospitals are like giant petri dishes – breweries for infections and diseases. The share of Israelis dying from infectious and parasitic diseases is the highest in the OECD. After taking into account the number of deaths from such diseases by different age groups and standardizing the populations of the various developed countries to enable a more accurate comparison, it is clear that Israel is in a league of its own. The number of deaths from infectious and parasitic diseases (35 per 100,000 population) is 50% greater in Israel than in the second place country, Mexico (23 per 100,000 population), and almost twice the OECD average excluding Israel (Figure 7).

Figure 7

Deaths from infectious and parasitic diseases

per 100,000 population, average for 2010-2014



[1] adjusted by the ratio of standardized population to actual population

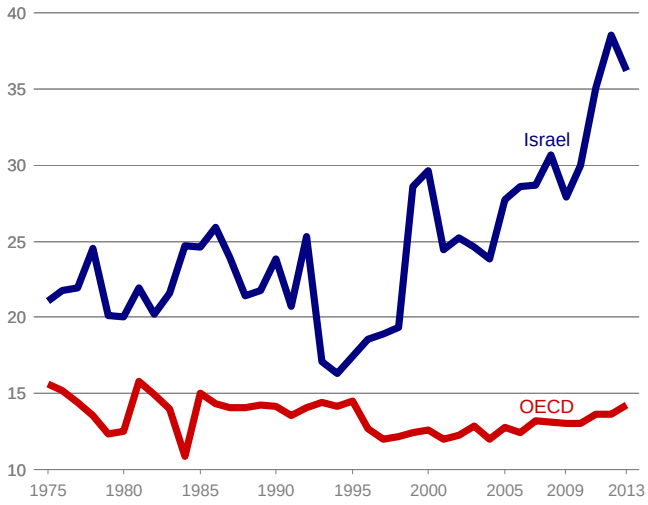
Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

Of course, not all deaths from infectious and parasitic diseases are related to hospital conditions. Yet the number in Israel is extraordinary. Anyone who thinks that Israel and the developed world are at least converging should think again. There has been a vast gap between Israel and the OECD average since the 1970s. While the number of deaths per capita from infections in the OECD has been stable, even falling slightly, it has been increasing rapidly in Israel over the past two decades (Figure 8). Since the healthcare reform in 1995, the number of deaths per capita from infectious and parasitic diseases in Israel has doubled.

Figure 8

Deaths from infectious and parasitic diseases*

per 100,000 population, 1975-2013



[1] adjusted by the ratio of standardized population to actual population

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

It is possible to gain a perspective on the severity of the problem when comparing it to other issues that receive widespread public attention. For example, the number of persons murdered in terror incidents reaches double digits at most each year while the number of traffic fatalities is measured in the hundreds. But the number of Israelis dying from infectious diseases is in the thousands every year. This is not destiny. It is an issue of national priorities.

The problem is not a lack of money, but its utilization – and who is paying

Clearly, over-crowding, a paucity of nurses and the great number of deaths from infectious diseases don't represent the overall picture of Israel's health system. Often, the country's high life expectancy rates coupled with its low healthcare expenditures are

National healthcare expenditures

as percent of GDP

Figure 9.a

Unadjusted healthcare expenditures, 2015

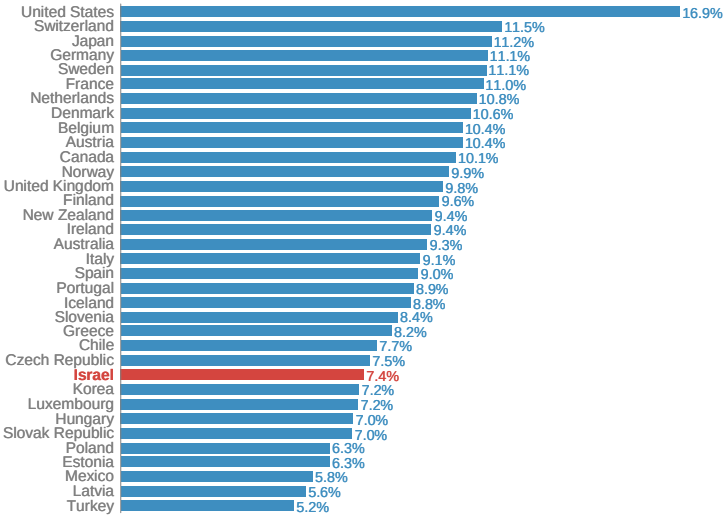
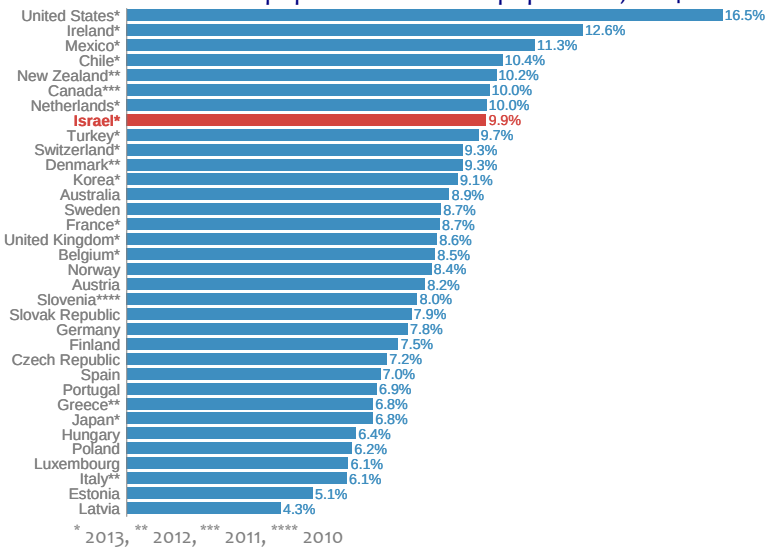


Figure 9.b

Healthcare expenditures adjusted by the ratio of standardized population to actual population, 2014



* 2013, ** 2012, *** 2011, **** 2010

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

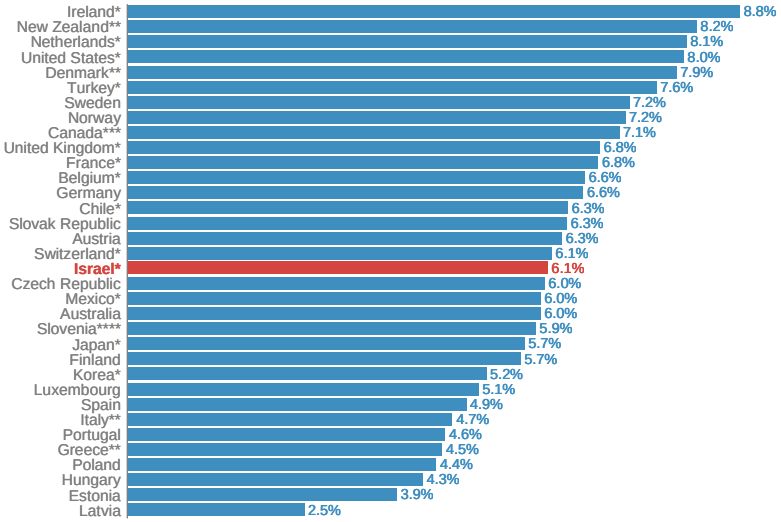
presented as an indication of the system's efficiency.

At first glance, Israel's national healthcare expenditure (as a percent of GDP, to enable international comparisons) appears to be relatively low. In fact, it is lower than the national healthcare expenditures in 71% of the OECD countries (Figure 9a). However, a major reason for the low expenditure has less to do with the system's efficiency and more to do with Israel's fairly young population. The older a population, the higher the mortality rates and healthcare expenditures. When national healthcare expenditures are normalized by the relative weights of the various age groups and their mortality rates, Israel's expenditure picture flips. The country's normalized healthcare expenditure is higher than the expenditure in 76% of the OECD countries (Figure 9b).

Figure 10

Public healthcare expenditures[1]

as percent of GDP, 2014



[1] adjusted by the ratio of standardized population to actual population

* 2013, ** 2012, *** 2011, *** 2010

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

National healthcare expenditures may be divided into public and private expenditures. Public healthcare expenditures (after normalizing for population age groups) as a share of GDP in Israel place the country in the middle of the OECD (Figure 10). It is not particularly high, nor is it particularly low, in comparison with the rest of the developed world. While Israel's population is relatively young, it is aging at one of the fastest rates in the developed world – and it takes years to train the personnel and build the necessary infrastructures to deal with this phenomenon.

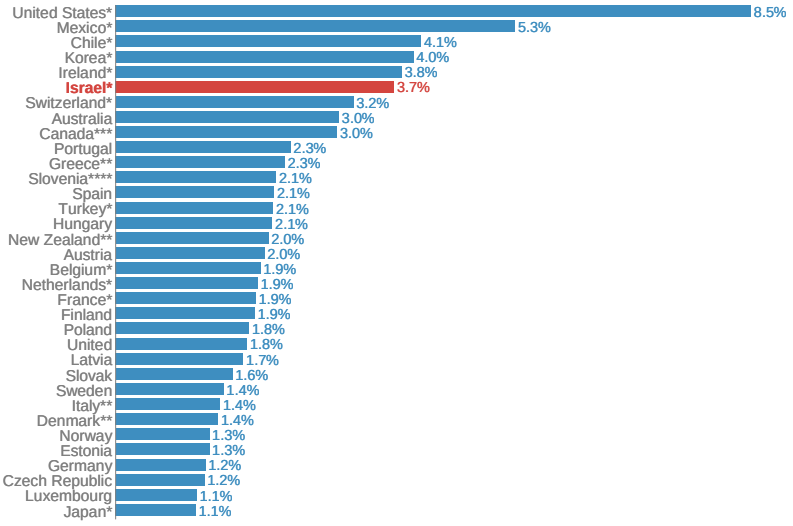
The source of Israel's relatively high national expenditure is its private expenditure. While private healthcare expenditures in Israel (after normalization and division by GDP) are not even close to American private expenditures, they are higher than the private expenditures in two-thirds of the developed countries (Figure 11).

Israel, with income and education gaps that are among the highest in the developed world, is in danger of attaining similar distinctions in healthcare provision. This is the implication when the share of private expenditures is high. Not everyone can bear such a burden.

Figure 11

Private healthcare expenditures[1]

as percent of GDP, 2014



[1] adjusted by the ratio of standardized population to actual population

* 2013, ** 2012, *** 2011, *** 2010

Source: Dan Ben-David, Shoresh Institution and Tel Aviv University
Data: OECD

A healthcare system with some of the characteristics detailed above can lead to many exasperated patients. Family and friends cannot, and should not, replace hospital nurses. Corridors need to be for passage and dining areas for eating. Patients should be hospitalized only in hospital rooms – and not in conditions that considerably increase the likelihood that they may be infected by others.

The question of questions: what kind of a health system does Israel want?

Health systems encompass one of the most complicated problems in economics. These are systems in which two of the three key sides determine what the third side will pay. In the United States, it is the patients and physicians who often decide how much insurance companies pay. In Israel, it is the health maintenance organizations (or insurance companies) and the physicians who decide what patients will pay – whether in terms of money, in terms of waiting periods, or in terms of health.

Therefore, the healthcare question in Israel is much greater than the issues raised here. How is it possible to compensate quality healthcare professionals at rates that will attract them to the profession, and retain them, while maintaining an adequate expenditure level for an Israeli society, half of whom do not even reach the bottom rung of the income tax ladder? In light of the fact that just 20% of Israel's population already accounts for 90% of the country's entire income tax revenue, the answer does not lie in increasing the burden even further on those narrow shoulders, but rather in a significant change in Israel's national priorities. The time has come for a different allocation of the limited national budget in directions that benefit the greater good rather than narrow and sectoral interests.

However, it is not enough to throw money at a problem and hope that it resolves itself. Instead of endlessly looking for symptomatic patchwork solutions that create inherent inconsistencies, the time has come to provide an answer to the big question – what kind of a health system does Israel want in another decade? Only then will it be possible to build it from the existing pieces and to add the necessary missing parts.

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