REPORT

Syria: Public health achievements and the effect of sanctions

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Since May 2011, Syria has faced severe economic sanctions which are all pervasive for the economy and society. There is by now considerable evidence in literature that sanctions have a serious impact on the health of citizens in both the short and long terms (1, 2). We, as a group of public health doctors and teachers, outline some key achievements of health services in Syria that took decades to become a reality, mainly through the efforts of professionals and the public at large. In this report, we explore the consequences of sanctions on the economy, on people's health status, and healthcare systems. We call upon health activists everywhere to debate whether western-imposed economic sanctions have the right to punish whole populations, as they did with devastating consequences for the population of Iraq. An embargo affects whole populations and as such is akin to collective punishment, illegal in international law.

Health system achievements

Syria is a lower middle income country (the estimated per capita income for 2009 was 3,900 US dollars) which achieved substantial improvements in the health of its population over the past three decades, owing to the efforts of dedicated public health professionals and an enabling health systems organisation. These include improvements in access to maternal and child healthcare services, education and better nutrition, resulting in the following:

- major declines in maternal and child mortality over the past three decades;
- comprehensive vaccination coverage;
- improved levels of literacy (particularly among women);
- plans to address a rising incidence of non-communicable diseases (NCDs) through partnerships ;
- a project on an Integrated Response of Health Care System to Rapid Ageing (INTRA) of the Population conducted in coordination with the World Health Organisation (since 2003) to involve older people in designing health services at the local level;
- a re-organisation of health services to increase local level control as part of the process of decentralisation; and
- a systematisation of data and trends through the Health Metrics Network and Syrian National Accounts.

The country reveals a positive record with a declining infant mortality rate (IMR) and maternal mortality ratio (MMR) over the past two decades, as highlighted by Table 1 below.

Table 1: Essential health indicators: IMR, MMR, Syria, 1970-2010 (actual) and 2015 (projected to MDGs)

	1970	1993	2002	2003	2004	2010	2015
IMR per 100,000 live births	132	33	24	18.1	17.1	14	12
U5 MR per 100,000 live births	164	44	29	20.2	19.3	16	13
MMR per 100,000 live births	482	107	71	65.4	58	45	32

Source: Ministry of Health, Damascus, Syria, Central Bureau of Statistics (2010)

Table 1 highlights significant declines in IMR from 132 per 100,000 live births in 1970 to 14 in 2010; and in MMR from a high of 482 per 100,000 live births in 1970 to 45 in 2010. This 10-fold decrease is a notable achievement given the relatively low per capita income of the country.

Table 2: MMR comparatively with other countries of the region over 1990-2008

Year	Egypt	Syria	Jordan
2008	82 (51-130)	46 (20-100)	59(35-100)
2005	90 (56-150)	50 (22-110)	66 (38-120)
2000	110 (69-180)	58(26-130)	79 (46-140)
1995	150 (94-240)	77(34-180)	95(55-170)
1990	220 (130-350)	120(52-290)	110(64-210)

Source: Maternal Mortality 1990-2008 – WHO, UNICEF- WB, MM estimation. Inter- Agency group. Numbers in brackets are confidence intervals.

Table 2 highlights trends in MMR in Syria in comparison with countries at similar levels of development in the region. The MMR for Syria are lower, despite comparatively low levels of income and absence of substantial donor inputs in maternal health services, by comparison to those for Jordan and Egypt. To a large extent, the lower rates have been achieved by an integrated health system, in which institutional deliveries constitute more than 90% of all deliveries. These are complemented by improved literacy and awareness among women and with free maternal healthcare, all of which have contributed to the relatively positive health status of women and infants in the country up to 2011.

Syria can also credit itself with comprehensive vaccination coverage, complemented by improved living standards, greater citizen awareness of health issues, and reductions in illiteracy especially among women. These have been supported by improvements to infrastructure, providing access to clean water and expanding public healthcare systems. There has been a commitment to the integration of healthcare at all levels of primary, secondary and tertiary care. It is also one of the countries of the region on target (until recently) to meet the health Millennium Development Goals (3).

Public health services

Syria has provided free healthcare to all its citizens with a ceiling for charges from private providers. The right to comprehensive health coverage is guaranteed by the constitution with overall coordination, management and provision of services falling under the ministry of health. Despite external pressures to fully commercialise the health sector, 80% of beds in the country remain in the public sector; for outpatient facilities, a fee-for-service system had been recently introduced. However, private providers in the hospital sector have increased by 41% since the economy was opened up in 2005, posing a threat to universal access (4).

Direct and indirect effects of sanctions

Since May 2011, Syria has been the target of economic sanctions. Their consequences, particularly to the health situation and facilities, both directly and indirectly are as stated below.

Economic sanctions caused the USD exchange rate value in the Syrian markets to rise from 45 to above 70 Syrian pounds (SP). This essentially destroyed the value of the SP with ramifications for the overall economy. The table highlights the cost of basic essentials such as cooking oil and gas, milk, eggs. These have doubled and tripled over the past year, halving the value of salaries. The combination has had a devastating effect upon families, especially those with children, pregnant women and elderly people.

The collapse of the exchange rate has increased the cost of health services and of medicines which are part of out-of-pocket expenditure. These changes will disproportionately affect vulnerable groups: mothers, children and the elderly. The cost of medicines to treat NCDs for example, will be seriously affected. Not only has the value of salaries collapsed, but there are thousands of job losses in the service sector (tourism in particular), booming prior to the conflict.

Sanctions have led to interrupted power supply for up to 12 hours per day in many areas. This, apart from exposing people to extreme Syrian winter and summer temperatures, undermines the vaccines cold chain supplies and contributes to interruptions in the vaccination programme. In the longer term, this will lead to the loss of gains made in infection prevention and control in diseases such as poliomyelitis, contributing to a rise in morbidity and mortality among children.

Table 3: Prices of essential goods before and after sanctions

Item	Price before sanctions (SP)	Price after sanctions (SP)
Gold	1,700	3,100
Gas (one cylinder)	250	800
Mazoot heating oil (one litre)	13	30
Vegetable ghee (Aseel) (4 kg)	615	675
Cheese 1 kg	80	180
Yogurt 1 litre	35	100
Sugar 1 kg	50	65
Cow ghee 1 litre	290	350
Milk 1 litre	20	55
Vegetable oil 1 litre	60	100
Rice 1 kg	40	160
Eggs 30 eggs	80	200
Tea 250 gm	30	45
Tomatoes 1 kg	15	50

From: http://www.hamafree.com/index.php?name=news&op=view&id=1208 (adjusted to May 2012 rates for rice, milk)

Sanctions have prevented the entry of essential medical supplies into the country, including those for cancer, diabetes and heart disease (not produced locally), and this will affect millions of people. The crisis in this sector will remain largely hidden as its consequences will be known mainly at the household level, and over a long period.

Sanctions have also led indirectly to environmental sanitation defects (inability to guarantee potable water supplies for example). This is already having an effect in the short term by increasing the incidence of diarrhoeal disease, especially among children, and will contribute to a long term increase in mortalities from water-borne infections.

Cold weather there is difficult, especially for vulnerable groups, but has been aggravated by the difficulties of obtaining oil for heating. As the above price index shows, the cost of heating oil has increased three-fold in the past year. Cold weather in the absence of heating will increase droplet infections and respiratory tract infections among the most vulnerable. There are indications that these are on the rise following a bitterly cold winter in 2011-2012. In the long run, an increase in mortalities from respiratory tract infections, especially among the elderly and children, will lead to losing gains made in increasing life expectancy and decreasing child mortality rates and cause immense suffering for the population. Refugees fleeing from violence are living in dismal conditions with little access to basic essentials, whilst the psychosocial impact (especially on children) is of serious concern.

Health and human rights

The global health and human rights agenda is on the ascendant, with a collection of dedicated scholars and lawyers on board, determined to defend the right to accessible quality healthcare for all. The situation in Syria for the majority of the population is an urgent one for this forum to address. The effects of the post- gulf war sanctions on the health and nutritional status of Iraqis, in particular children, have been well documented and one can only hope that the world will have learned some lessons from this experience[1].

Note

[1]Concerns about sanctions were expressed by the UN's Committee on Economic, Social and Cultural Rights as early as 1997. In an extensive discussion the Committee noted that trade sanctions almost always have a dramatic impact on the rights recognised in the Covenant on Economic Social and Cultural Rights frequently causing "significant disruption in the distribution of food, pharmaceuticals and sanitary supplies."(para 3 in http:/www.unhcr.org/refworld/type,GENERAL,,,47q7079eO,O.html)

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