

A brief on the Health Care System of Bahrain

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The country

- The Kingdom of Bahrain is an island of about 750 km².
- The population is estimated at 800,000 of which 40% are expatriates.
- The literacy rate among adult is one of the highest in the region (of 90%).
- Women play a prominent role in society. The first girl school in the Arabian Gulf was established in Bahrain in 1928. Women's associations have been in existence since the 1950s and have contributed actively to the development of a civil society. A Supreme council for women was established in 2003. Women constitute about 30% of the workforce.
- The economy is based on petrochemicals, banking, financial, and commercial services. Bahrain is home to numerous business firms and multi-nationals
- The Kingdom of Bahrain's government is a monarchy. It has a bicameral National Assembly that consist of an elected Chamber of Deputies (40 members), and appointed Consultative Council (40 members).
- Bahrain has an independent legal and judicial system.
- Bahrain is a Moslem society with Arabic is the official language. English is widely spoken.
- Bahrain is a member of the Gulf Cooperation Council (GCC).
- Bahrain Joined the World Health Organization in May 1967.
- Bahrain ranked 34th on the Human Development Index in 2004

Health Status and demographics

- Health status indicators in Bahrain are comparable to those of developed countries.
- Life expectancy is 75 years; Infant mortality is only 7.6 /1,000live births; the under-5 mortality rate is 10/1,000 live births and the maternal mortality is nil. .
- Bahrain has controlled most communicable diseases, has 100% coverage of basic immunization and is witnessing a rise in chronic non communicable diseases.
- Population is young with only 2.3% older than 65 years.

Health System Organization

- Comprehensive health care is provided to all population, either free or at much reduced payments.
- Primary health care is the cornerstone of the public health services and is delivered through a network of 21 modern PHC centers.
- Secondary care is provided in the Salmaniya Medical Complex (910 Beds), a psychiatric hospital (201 beds) a geriatric hospital (101 beds) and four maternity hospitals (total of 241beds).
- The Bahrain Defense Force Hospital (BDF) has 349 beds and provides care to members of the Bahrain defense force and their dependents.
- The public sector accounts for approximately 90% of health services in Bahrain.
- The Ministry of Health is responsible for planning, policy making, provision and regulation of health services. All related major functions such public health services, licensing, and drug control are part of the Ministry of Health responsibilities.
- Private health care has been growing rapidly over the past ten years.
- It is anticipated that the public sector will focus more on regulation and policy making in the future.
- A new directorate for health planning was established in 2006 to reinforce planning and implementation.
- "Bahrain health Strategy - Framework for action 2002-2010" is a document that highlights twelve strategic goals for the health system.
- The health information system of Bahrain is well developed.

Health Care Finance and Expenditure

- Health care is financed mainly through the Treasury.
- Bahrain spends a modest 4% of its GDP on health. Nevertheless, the health sector has seen a rapid escalation in cost and spending over the last decade.
- Private expenditure on health was estimated in 2004 to accounts for 35% of the total health care spending.
- Furthermore, a substantial amount of private spending is out-of-pocket and covers payments for private medical care, dental care and treatment abroad.

Deep Roots

Endless Skies

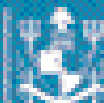
Shining Stars

The American University of Beirut Medical Center (AUBMC) is the private, not-for-profit teaching center of the Faculty of Medicine. It includes a 420-bed hospital and offers comprehensive tertiary/quaternary medical care and referral services in a wide range of specialties and medical, nursing, and paramedical training programs at the undergraduate and post-graduate levels.

AUBMC is accredited by the Joint Commission International (JCI) and the Lebanese Ministry of Public Health.



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- Private medical insurance market is still small. A social insurance scheme is implemented by the Government Organization for Social Insurance (GOSI).
- Health professionals employed by Government are salaried and are subject to the rules and regulation of the Civil Service Bureau. Salaries are supplemented by a "limited private practice" scheme.
- Since 1992, Ministry of Health Bahraini physicians have been granted permission to establish part-time private practice.

Human Resources

- More than 90% of the human resources for health in Bahrain are employed by the Ministry of Health.
- Bahrain has paid attention to the preparation of highly qualified human resources since the mid seventies. "Bahrainization" has been promoted as a government policy since. Many sectors are not staffed only by Bahrainis such as Dentistry, Pharmacy, and Laboratory.
- The College of Health Sciences was established in April 1976. It offers educational programs for nursing and allied health professionals. (I am the founder of this college and its first dean over the period 1976-79).
- The medical school of the Arabian Gulf University was established in 1982 is located in Bahrain but owned by the six GCC countries.
- Recently private higher educational institutions have been established. The Medical University of Bahrain has been established in cooperation with the Royal College of Surgeons in Ireland.
- Educational institutions are accredited by Ministry of Education.
- A significant number of Bahrainis seek professional education in health abroad.
- Continuing professional development is actively supported by the Directorate of Training in Bahrain.

Health services delivery

- The 21-bed American Mission Hospital was established in 1902 and was followed in 1905 by the 12-bed memorial Victoria hospital that was staffed by a general practitioner appointed by the British Governor. Government services started in 1925 with a small clinic to treat injured pearl divers. The Bahrain Government Police Force hospital followed in 1936. The discovery of oil in Bahrain in 1932 led to medical provision by the Bahrain Petroleum Company for its staff. Al Naim Hospital was the first formal government hospital in 1938.
- The first Salmaniya Hospital was constructed in 1957. The new "hospital" was inaugurated in 1978 and was further developed to serve as the main teaching hospital for the Arabian Gulf University during 1984. In 1997, the Salmaniya Medical Complex was further expanded to

910 beds.

- A full package of comprehensive health services is provided to the population.
- Health services are provided through a network of modern and well staffed health centers.
- Access to secondary care is granted through referral from primary care. Some patients get direct access through accident and emergency. The referral process is well structured.
- Primary care is delivered by well trained family physicians and community nurses, social workers and health educators. Bahrain initiated the first residency program in Family Medicine of the region in 1979 in cooperation with the American University of Beirut at the same time as that of AUB.
- Health centers are managed by health center council headed by medical doctor, and includes representative from the concerned community.
- The consultation rate in primary care is 3-4 visits per person per year. This does not include the utilization of private clinics (that is quite significant).
- Health promotion and Prevention programs are actively supported by the Ministry and include pre-material examinations, screening for breast cancer and other diseases, most notably sickle cell, thalassemia and other metabolic disorders. The rate of consanguinity is high in Bahrain.
- The Directorate of Public health within the Ministry of Health pays special attention to issues related to the environment.
- A wide range of services is provided through the secondary and tertiary care facilities at the Salmaniya Medical Complex (SMC). A new 310-bed hospital is being constructed (the King Hamad Hospital) in Muharraq and will be associated to the Bahrain Medical College.
- Long-term care is provided at the 100-bed geriatric hospital (to be expanded to 159 beds).
- Bahrain imports the totality of its pharmaceuticals. Bahrain has no pharmaceutical plants. The per capita consumption of drug is estimated at \$134.

Health System Reform

- Major strategic reforms over the past ten years have been conservative.
- However, reforms are being considered to promote efficiency, quality, over-utilization, public expectation and cost containment.
- Legislation for a mandatory health insurance is under consideration.
- Proposals for reform are advocating privatization, contracting to the private sector, outsourcing - all call to strengthen the regulatory and policy maker roles of the Ministry.

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Swedish Health Care System:



A single payer health system, a socialized health care system, for how long? Are we aiming in Lebanon to a single payer health system or to merging of the government funded health services? This short overview might shed light on some relevant issues.

Sweden is a country of about 9.1 million people on the Scandinavian Peninsula of Northern Europe. It is by any measure a first world country, with a labor force working primarily in industry or the service area, a GDP per capita of about \$31,600 and an unemployment rate of 5.6 percent.^{1,2} For much of the 20th century, Sweden had a single-payer system of health care in which the government paid almost all health care costs. Like other nations with a single-payer system, Sweden has had to deal with the problem of ever-growing health care expenses causing a strain on government budgets. It has dealt with this problem by rationing health care - instituting waiting lists for medical appointments and surgery.

Sweden's entire population has equal access to health care services. The Swedish health care system is heavily decentralized. Compared with other countries at a similar development level, the system performs well, with good medical success in relation to investments and despite cost restrictions.

The life expectancy of the Swedish population continues to rise. In 2005 the life expectancy was 78 years for men and 82.8 years for women. This can be attributed to falling mortality risks for both heart attacks and strokes. A little more than 5 percent of the population is 80 years or older, which means that Sweden has proportionally Europe's largest elder population.

Chronic diseases that require monitoring and treatment - and usually a lifetime of medication - place high demands on the system. One positive development is that fewer people smoke; almost 85 percent of the population are non-smokers. However, the increasing number of overweight and obese children and teenagers is a problem that the health care system is examining more closely.³

Management

In Sweden the responsibility for providing health care is decentralized to the county councils and, in some cases, the



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municipalities. A county council is a political body whose representatives are elected by the public every four years on the same day as the national general election. According to the Swedish health and medical care policy, every county council must provide residents with good-quality health services and medical care and work toward promoting good health in the entire population.²

Sweden is divided into 20 county councils. One municipality, the island of Gotland, carries the same responsibilities as the

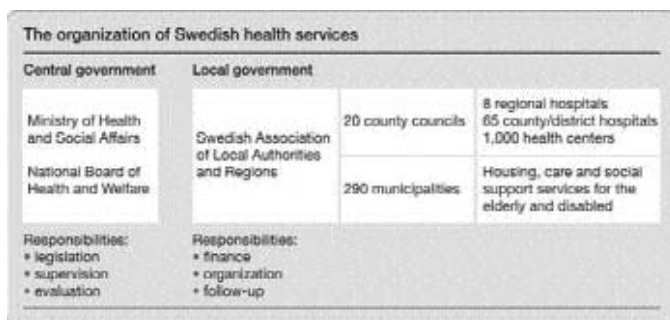
county councils for health care. Around 90 percent of the Swedish county councils' work involves health care but they are also involved in other areas, such as culture and infrastructure.

The population in these 21 areas ranges from 60,000 to 1,900,000. The county councils have considerable leeway in deciding how care should be planned and delivered. This explains the wide regional variations.

Similarly, Sweden's 290 municipalities are responsible for care for elderly people in the home or in specially adapted housing. This includes people with physical or psychological disabilities. Services provided by doctors are not included in the care for which municipalities are responsible.

The role of central government is to establish principles and guidelines for care and to set the political agenda for health and medical care. This is achieved by means of laws and ordinances or by reaching agreements with the Swedish Association of Local Authorities and Regions, which represents the county councils and municipalities.

At national level there are a number of authorities within the area of health care. The National Board of Health and Welfare plays a fundamental role as the central government's expert and supervisory authority. The others are The Medical Responsibility Board, The Swedish Council on Technology Assessment in Health Care, The Pharmaceutical Benefits Board, The Medical Products Agency and state-owned Apoteket AB, a national chain of pharmacies.^{2,3}



Organization

For much of the last fifty years Sweden has had a heavily socialized health care system. Almost all of the funding comes from government revenue, and most aspects of the health care system, such as hospitals, primary care centers and prescription drugs, are controlled by the government. Doctors could still have a private practice, although by the 1960s about 80 percent of doctors worked in government-run hospitals.²

The Swedish Parliament first tried to provide comprehensive national health insurance in 1946 with the passage of the National Health Insurance Act. Because of financial restraints, it was not actually implemented until 1955.

At the national level, the agency with the most authority over the health care system is the Ministry of Health and Social Affairs. It is responsible for ensuring that the health care system runs efficiently and supervises the health care activities of county councils. It also provides research and advice to the Swedish parliament on legislation and policy matters regarding health care. National legislation sets the goals and ground rules for the provision of health care in Sweden.

There are a number of boards and institutes at the national level that focus on health care, but they have little more than advisory or research roles. The three exceptions are the Medical Products Agency, the Pharmaceutical Benefits Boards and the National Corporation of Swedish Pharmacies.

While physicians can practice privately in Sweden, county councils heavily regulate the establishments of new private physicians. They regulate the number of patients that private providers can see in a year. Private physicians must also have an agreement with the county council in order to get reimbursed by the government. If a physician does not have an agreement, then the patients will have to pay the full charge of the physician.

Primary care has traditionally played a less important role in Sweden than in many other European countries. However, the aim is now to make it the basis of the health and medical care system. Today most health care is provided in health centers where a variety of health professionals - doctors, nurses, midwives, physiotherapists and others - work. This should simplify things for patients

and foster teamwork. Patients should be able to choose their own doctor. Around 25 percent of health centers are privately run by enterprises commissioned by county councils. There are special clinics for children and expectant mothers as well as family planning clinics for teenagers.

Sixty hospitals provide specialist care with emergency room services 24 hours a day. Eight are regional hospitals where highly specialized care is offered and where most teaching and research is located. Since many county councils have small service areas, six health care regions have been set up for more advanced care. Furthermore, as Sweden only has nine million inhabitants, the entire country must serve as one service area for the most advanced specialist care. This is coordinated by a newly formed committee, Rikssjukvårdsnämnden, within the National Board of Health and Welfare.

The county councils own all emergency hospitals, but health care services can be outsourced to contractors. For pre-planned care there are several private clinics from which county councils can purchase certain services to complement care offered within their own units. This is an important element of the effort to increase accessibility.^{3,4}

Financing

Costs for health and medical care amount to approximately 9 percent of Sweden's gross domestic product (GDP), a figure that has remained fairly stable since the early 1980s. In 2005 care and services provided by the county councils, including the subsidization of pharmaceuticals, cost SEK 175 billion (USD 25.4 billion). Seventy-one percent of health care is funded through local taxation, and county councils have the right to collect income tax, the average level being 11 percent. Contributions from the state are another source of funding, representing 16 percent, while patient fees only account for 3 percent. The remaining 10 percent come from other contributions, sales and other sources.²

Most county councils use some form of purchaser-provider system, in which a council negotiates compensation agreements with health care units - for example, performance-based compensation determined by diagnosis-related group (DRG), that is, a system to classify hospital cases into one of approximately 500 groups expected to have similar hospital resource use. This allows hospitals to become more independent of political bodies. In some cases hospitals have become corporations owned by the council. It is now more common for county councils to buy health care services - 10 percent of health care is financed by county councils but carried out by private health care providers.⁵

Patient fees

Patients in Sweden pay user fees (similar to co-payments

in the United States) that are set by county councils. The fee for seeing a primary care physician varies from 11 to 17 kronas (the Swedish unit of currency; \$1 U.S. equals about 6.90 kronas), while the fee for seeing a specialist ranges from 22 to 33 kronas. While county councils have discretion in setting user fees, the national government limits the amount of total user fees paid per patient at 100 kronas annually for physician and specialist visits. The maximum user fee for hospital care is nine kronas per day.³ For prescription drugs, patients pay no more than 200 kronas annually. Payment for prescription drugs is set on a sliding scale, in which patients pay 100 percent of the first 100 kronas charged, 50 percent of the next 89 kronas, 25 percent of the next 178 kronas, and 10 percent of the next 111 kronas. After that, the state pays 100 percent of the cost for drugs.^{2,4}

County councils provide dental care without charge for patients under age 20. For the remainder of the population, the national government sets fixed subsidies for dental care, and patients must pay the difference between the subsidy and what the provider charges. Municipalities set the user fees for nursing homes and home health care, although the national government limits such user-fees to no more than 175 kronas per month.

Private funding, beyond user fees, plays a small role in Swedish health care. Only about 2.3 percent of the population has supplementary health insurance, and the primary benefit of it is the ability to avoid waiting lists for treatment.⁵

Accessibility

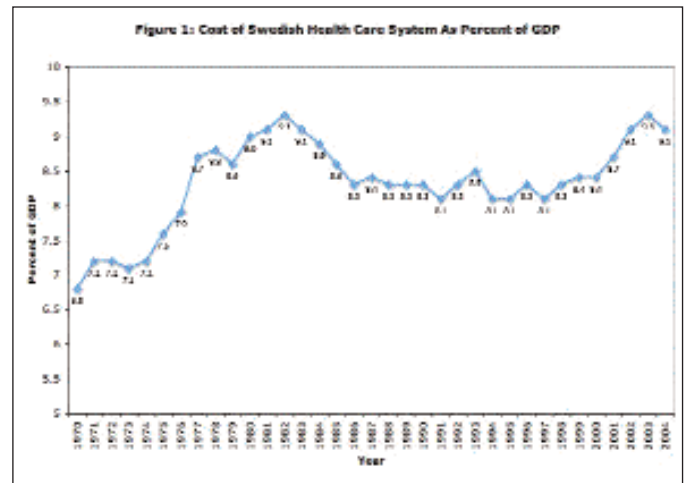
Waiting times for pre-planned care, such as cataract or a hip replacement surgery, have long been a weakness that has caused dissatisfaction. Despite a major increase in productivity - the number of operations in relation to population size is higher in Sweden than in other countries - there are still long waiting lists. Therefore the county councils and the government agreed to establish a care guarantee at the end of 2005, stating that no patient should have to wait for more than three months once it has been determined what care is needed. If the time limit expires, the patient is offered care elsewhere, which is paid for by his or her own county council, including any travel costs.³ Generally, patients are free to choose where to go for care. Referrals may be necessary, for example for treatment outside the region where the patient lives. No referral is usually necessary for specialist care. This is different from many other countries where such "gatekeeper functions" are more common.³

Reform

During the 1990s, many county councils adopted market-oriented reforms of the health care system. This reform wave had its roots in an attempt in the 1980s to control the

burgeoning cost of the Swedish health care system.

By the early 1980s, with an aging population and increasingly expensive health care technology, the system had become unsustainable. In a ten-year period from 1972-1982, the health care portion of Sweden's GDP grew from 7.2 percent to 9.3 percent (see Figure 1). Until 1985, the national government reimbursed county councils for health care expenses on a fee-for-service basis. The Dagmar Reform of 1985 changed the reimbursement formula to one of "capitation," in which counties were reimbursed for the number of patients served. This led to "global budgets" - a fixed amount that each county could spend annually on health care services.



Global budgeting would prove to have serious consequences for Sweden's health care system, most notably expanding waiting lists. Waiting lists for surgery and other procedures had long been a problem in Sweden. Like most government-run systems, the Swedish health care system was already plagued by declining productivity - a consequence of which included delays in care. Global budgeting, however, worsened the problem of waiting lists. With county councils now operating with fixed budgets and citizens facing few restraints on demand for health care, county councils needed to ration health care services. An increase in wait times was the result. By 1988 the wait time for an angiogram - a heart X-ray - was up to eleven months. The wait time for bypass surgery could be an additional eight months.⁴

Although the Dagmar Reform had some success in containing health care costs, the rationing that resulted from it led to public outcry over waiting lists that grew throughout the late 1980s and early 1990s. During the 1990s, the national government shifted responsibility for funding of health care to county councils but also gave counties more freedom to structure health care delivery. This led to a number of market-oriented experiments by county councils. Of all counties, Stockholm County engaged in the most aggressive reform regimen.² Under this reform, which became known as the "Stockholm

Qatar
GlobeMed Qatar
(2006)

Ivory Coast
MCI - SOGEM
(2002)

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MedNet Liban
(1991)

Syria
GlobeMed Syria
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Kuwait
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Model," the county council still provided the funding, but health care providers could be owned by private individuals or companies. The initial results were impressive. Stockholm County encouraged doctors, nurses and private companies to take over the operation of primary health care centers. Over 60 percent of primary care centers were run privately by 2002. Costs declined, particularly for laboratory services, which dropped by 30 percent. Stockholm also privatized one of its seven hospitals, St. George's. St. George's Hospital began running a profit in 1994, and 90 percent of patients were satisfied with the care they received there.^{5,6}

Other county councils followed suit and initiated a purchaser-provider split, in which the government would continue to pay for health care, but the provider would become a private entity. The county council would contract services out to primary health care centers and other private providers. Providers would be paid on a "per-case" basis, and, thus the provider would be able to make a profit based on his ability to attract patients while also holding down costs. Additional reform at the national level created circumstances in which a patient could go to any hospital of his choice, even one in another county. This reform was the Patient Choice and Guarantee of 1992, which required patients to be treated within three months of diagnosis. According to Swedish economist Ragnar Lofgren, "The logic behind this reform was to let the money follow the patient. This approach would give hospitals and doctors a strong incentive to increase efficiency in order to attract patients from outside their hospital's catchment area and avoid losing patients to other hospitals."² These reforms at the national and county levels had some early success. Waiting lists dropped by over 20 percent from early 1992 to late 1993. Furthermore, health care expenses did not increase, as health care as a percent of GDP held steady during the 1990s.

Unfortunately, waiting lists began to increase in 1994 and in late 1996 the Patient Choice and Guarantee was abandoned.^{3,4} By the early part of this decade, most counties once again faced a problem with waiting lists.⁶

Worse still, costs have clearly been on the rise again, as demonstrated in Figure 1. Part of the recurrence of these problems stems from the purchaser-provider split, or lack of one. First, a majority of county councils did not implement a provider-purchaser split based on a per-case payment basis or did so only partially.³ Thus, there was not sufficient pressure on providers to attract patients for fear of losing funding. Second, the split was weak to begin with. As one study of the split policy noted, the contracts between purchasers and providers often amounted to little more than "letters of intent," and the "escape route back to traditional planning and management was always open to the central county-council administration."⁵

Another problem was that although patients were free to choose which hospital in which they could get treatment,

there were few penalties on providers that failed to attract patients. For example, in Stockholm, the county council did not permit any emergency hospital - public or private - from shutting down. Additionally, market-reform initiatives were vulnerable to the whims of politicians. In 2004, the left-leaning Social Democratic coalition, which controlled parliament, banned the privatization of hospitals and forbade the practice of private patients buying their way past waiting lists.

One of the underpinnings of any successful market is that entities that do not adequately satisfy consumers eventually go out of business. The greatest failing of the market-oriented reform of the Swedish health care system is that they did not permit private providers to, in essence, "fail." As a result, one of the hallmarks of single-payer systems, waiting lists, are again plaguing the Swedish patients.⁵

CONCLUSION

While Sweden is a first world country, its health care system - at least in regards to access - is closer to the third world. Because the health care system is heavily-funded and operated by the government, the system is plagued with waiting lists for surgery. Those waiting lists increase patients' anxiety, pain and risk of death.

Sweden's health care system offers lessons for the policymakers of other countries.

1. A single-payer system is not the answer to the problems faced as Lebanese. Sweden's system does not hold down costs and results in rationing of care.
2. Market-oriented reforms must permit the market to work. Specifically, government should not protect health care providers that fail to provide patients with a quality service from going out of business.
3. Providing health care for a growing elder population is a great challenge. It requires better cooperation between the county councils' health care services and the elder care that is the responsibility of the municipalities:

Integrated care

4. There are improvements and more efficiency of the system recorded lately because the National Board of Health and Welfare and the Swedish Association of Local Authorities and Regions have agreed to reevaluate the system and reestablish a model for comparing and evaluating achieved goals and results. There were many reasons for this:
 - to provide a better platform for public debate and political decisions,
 - to make it easier for county councils and municipalities to manage and streamline health care and
 - to provide the general population and patients with more easily accessible information.

Statistics based on national research have already been

produced on issues such as health effects, quality, patient security, waiting times, patient opinions and costs. This type of benchmarking enables county councils to be evaluated in relation to each other.

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Establishing a Neonatal Resuscitation Program with the Ministry of Health and UNICEF

NCPNN RECIPIENT OF UNICEF GRANT



It is reported that neonatal mortality accounts for 38% of all deaths in children less than 5 years of age. Goals four

and five of the Millennium Development Goals undertaken by the United Nations aim at reducing by two-thirds under five mortality rates and improving maternal health by 2015. Inspired by these goals and with over 19% of neonatal deaths worldwide caused by birth asphyxia, improving the resuscitation skills of health attendants is likely to be an effective strategy for preventing a large proportion of neonatal death and for improving the outcomes of resuscitated newborns. As a matter of fact, the National Collaborative Perinatal Neonatal Network (NCPNN), among its several projects, has started implementing with the ministry of health and in collaboration with UNICEF a Neonatal Resuscitation Program (NRP) among the hospitals of the network.

Established in 1998, the NCPNN currently includes 25 hospitals in Lebanon covering the North, South, Mount Lebanon, Bekaa, and Beirut with its coordinating center located at the American University of Beirut Medical Center (AUBMC). It is a multidisciplinary network that aims at improving the health of pregnant mothers and their newborn infants through

scientific research and public health interventions. Dr. Khalid Yunis, the director of this network, is the recipient of the

UNICEF grant for the establishment of the Neonatal Resuscitation Program in the NCPNN network hospitals. It is important to mention here that the ministry of public health is establishing this program across all the hospitals in Lebanon in collaboration with the World Health Organization, specialized doctors from the United States, and the Lebanese association for early childhood development.

The objectives of the NRP project include establishing the Neonatal Resuscitation Program (NRP) across the hospitals of the network, training health care personnel in the urban and rural member hospitals in neonatal resuscitation, and to evaluate the impact of the NRP in improving the knowledge and skills of trained health care personnel and decreasing the in-hospital neonatal mortality rates at health care institutions. The network is holding several workshops for those purposes throughout the country spearheaded by the network member, Dr. Lama Charafeddine, an assistant professor in clinical pediatrics at the AUBMC, and with the help of several investigators from the member hospitals.