Current Health Event

Neonatal Mortality

Globally, under-five mortality is on the decline. However, over the last 25 years the proportion of child deaths occurring during the neonatal period increased in all WHO regions.

Editorial note:

A neonate is a newborn infant under 28 days of age. In 2015, 45% of all under-five children deaths were neonatal deaths (around 2.7 million). Almost one third of these deaths occurred on the first day of birth and around two third occurred during the first week of life.

Globally, the main causes of neonatal mortality are prematurity, complications during birth, and severe infections. It is known that 75% of newborn deaths are preventable with high quality care. Developing countries have the highest rates of neonatal mortalities and that is due to low healthcare access.
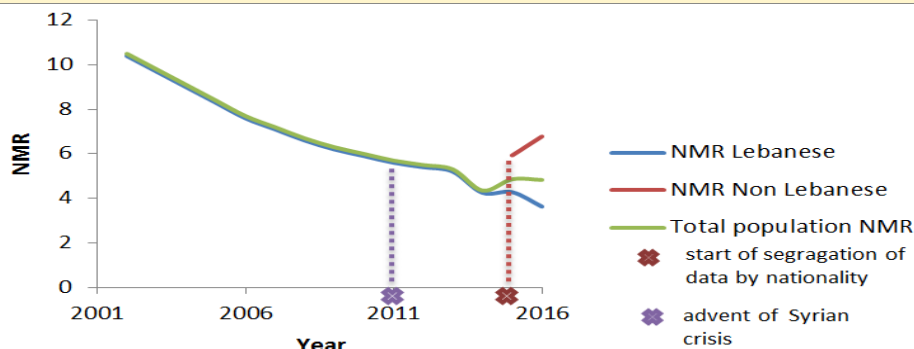
In 2014, WHO and UNICEF lead the preparation of a global action plan called Every Newborn: an action plan to end preventable deaths. The plan sets out a clear vision of how to improve newborn health and prevent stillbirths by 2035.

The Neonatal Mortality Rate (NMR) is the number of newborns dying during their first 28 days of age in a certain country for a certain year divided by the number of live births in that country during the same year, multiplied by 1,000.

In Lebanon, data on NMR was provided initially by the National Collaborative Perinatal Neonatal Network (NCPNN) for more than 12 years. The network has been established with WHO support. Around 30 hospitals regularly report to the NCPNN on immediate neonatal and maternal hospital based outcomes.

In 2011, a Maternal and Neonatal Mortality Notification System was officially launched by the Lebanese Ministry of Public Health (MOPH). It was later named Vital Data Observatory and included data on live births. All hospitals in Lebanon report monthly to the MOPH on the births, and the neonatal and maternal deaths occurring at their facilities through an online application.

The NMR for the Lebanese population has been declining since 2002; it dropped from 10.4 in 2002 (WHO country statistics) to 3.63 in 2016 (MOPH data). However, NMR cases among other nationalities –mainly Syrian refugees– is higher than the Lebanese NMR. In 2015 the NMR for this population group was 5.93 and in 2016 it was 6.78 (data was not segregated by nationality before 2015). Investigations are being carried out in order to examine the reasons behind these high NMRs, noting that observations from the field indicate that refugee pregnant women have low antenatal care service utilization and a significant percentage of adolescent pregnancies.

The MOPH is working towards comprehensive lifelong access to health care; which entails a continuum of care that starts with preconception care, prenatal care, care during pregnancy and at childbirth, and postnatal care. Across the years, the MOPH conducted multiple interventions aiming at improving neonatal healthcare. In 2015, with the support of WHO and the EU, the MOPH implemented a series of training workshops on 'Emergency Obstetric Care' and 'Neonatal Resuscitation and Stabilization' for physicians, midwives, and nurses working in delivery rooms across Lebanon, creating a critical mass of more than 3000 healthcare professionals well trained on mother and child health. Moreover, the national capacity of Nursery Intensive Care Units has been improved with support from the humanitarian community in Lebanon.

Improving neonatal health is one of WHO's key priorities. In line with SDG 3, namely target 3.2, WHO is working with the MOPH on developing a national reproductive, maternal, neonatal, child health strategic plan in accordance with the United Nations global strategy on women's, children's and adolescents' health.

Fig. 1: Neonatal Mortality Rates in Lebanon from 2002 till 2016

Legend: NMR Lebanese; NMR Non Lebanese; Total population NMR; start of segregation of data by nationality; advent of Syrian crisis

Notifiable Diseases in Lebanon [cumulative n° of cases among all residents (among Syrians)] *as of 30 July 2017*				
Disease	2016	2017	June	July
Vaccine Preventable Diseases				
Polio	0 (0)	0 (0)	0 (0)	0 (0)
AFP	123 (17)	55 (11)	3 (0)	8 (4)
Measles	44 (18)	88 (28)	11 (5)	8 (2)
Mumps	486 (86)	181 (27)	22 (6)	5 (4)
Pertussis	97 (18)	66 (16)	11 (2)	13 (3)
Rabies	0 (0)	0 (0)	0 (0)	0 (0)
Rubella	12 (6)	8 (5)	1 (1)	2 (2)
Tetanus	2 (0)	0 (0)	0 (0)	0 (0)
Viral Hep. B	367 (48)	202 (37)	22 (3)	18 (3)
Water/Food Borne Diseases				
Brucellosis	402 (165)	208 (55)	20 (3)	43 (3)
Cholera	0 (0)	0 (0)	0 (0)	0 (0)
Hydatid cyst	11 (2)	7 (1)	0 (0)	0 (0)
Typhoid fever	598 (11)	340 (11)	53 (3)	60 (0)
Viral Hep. A	519 (78)	320 (40)	43 (3)	39 (6)
Other Diseases				
Leishmaniasis	58 (52)	15 (15)	0 (0)	0 (0)
Meningitis	458 (63)	208 (43)	32 (6)	42 (6)
Viral Hep. C	116 (8)	69 (3)	8 (2)	10 (0)