

Non-Communicable Diseases Epidemiology And Response in Lebanon



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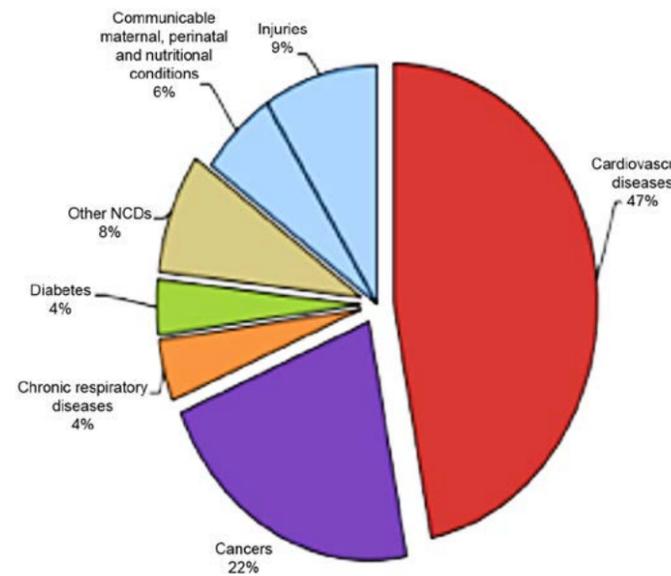


Figure 1: Proportional mortality, Lebanon (WHO, 2014)

countries in the Arab world³. With an aging population, the burden of non-communicable diseases becomes even more prominent.

In line with the completion of epidemiologic transition, today NCDs are the leading causes of disease and illness in Lebanon accounting for 85% of all deaths in 2014⁴. 47% of total deaths are attributed to cardiovascular diseases while 22% are attributed to cancers and 4% to diabetes⁴. In terms of morbidity, the STEPwise Approach to Surveillance (STEPS) conducted in 2009 found that almost 30% of adults reported having at least one NCD and this number increased to 65% in those aged 50 years and above⁵. As such, NCDs constitute a social and economic burden on individuals, families and the healthcare system. According to the ministry of public health reports, almost 75% of all in-patient admissions in public hospitals in 2011 were caused by four major NCDs (cardiovascular diseases, cancers, chronic respiratory diseases and diabetes)¹.

Epidemiology of non-communicable diseases in Lebanon

The threat of non-communicable diseases in the epidemiological profile of Lebanon has been well defined by a number of studies and reports. Lebanon has completed its epidemiological transition in the early 1990s, and its morbidity profile today resembles that of more developed, increasingly ageing nations¹. Recent reports have shown that those whose ages are 65 years and over represent 10% of the population². In fact, Lebanon has the highest proportion of their population aged 65+ years among

Response to the non-communicable disease threat – A primary care approach

The World Health Organization identifies investments in primary healthcare as a “best buy” in the prevention, control and management of NCDs⁶. Faced with changing risk patterns and subsequent epidemiological trends, the ministry of health in Lebanon has launched a number of initiatives to tackle this public health concern, rooted mainly in primary care¹. The most notable initiatives are: (i) the integration of NCD screening within primary care in 2012; and (ii) the provision of a fully subsidized disease management package for diabetes and hypertension at primary care centers in 2016.

Primary care in Lebanon is delivered through a national primary healthcare network supported by the MoPH. Primary healthcare centers (PHCCs) belonging to the network are affiliated with NGOs (66%), municipalities (20%), academia (1%) while only 13% are public (affiliated with MoPH or Ministry of Social Affairs)⁷. To date, the MoPH national primary healthcare network encompasses 226 PHCCs across the country and serves over 1 million beneficiaries annually including both vulnerable Lebanese and displaced Syrians⁸. The PHCCs provide services including promotive, preventive and palliative care in addition to early diagnosis and treatment⁸ for reduced nominal fees. The MoPH supports these PHCCs through providing training, medical equipment and supplies, vaccines, essential medication, and a health information system for continuous reporting.

(i) Integrating NCD Screening in primary care

In 2012, the Primary Health Care Department at the MoPH in collaboration with WHO, launched a pilot initiative of Non-Communicable Diseases (NCD) screening in PHCCs. By the year 2016, this initiative was fully integrated as a sustainable service into the package of health care services provided by a total of 189 PHCCs across Lebanon⁷.

The initiative aims primarily at the early detection of (i) cardiovascular disease, (ii) hypertension, (iii) diabetes, and (iv) dyslipidemia through screening beneficiaries of designated PHC centers who are 40 years and above. It further aims at the prevention of these diseases, promotion of health awareness, management of individuals with these pre-existing diseases, and surveillance of cardiovascular

diseases in the Lebanese population. The risk for the development of diabetes, hypertension, and dyslipidemia is assessed by calculating the cardiovascular risk of each individual within the screening criteria. This risk is calculated using an algorithm developed jointly by WHO and the International hypertension Society. Once risk is calculated, education and referral for medical treatment as per PHC protocol is performed accordingly.

During 2016, the NCD initiative screened over 16,000 PHCC beneficiaries and referred 43% of those beneficiaries to receive further lab tests⁷. A study on a subset of the population screened through the initiative found that approximately 25% of the sample displayed metabolic impairments, 11% for impaired blood glucose metabolism and 17% for impaired systolic blood pressure⁹.

Summary of the Emergency Primary Healthcare Restoration Project

The project is being implemented in 75 PHCCs belonging to the National Primary Healthcare Network. PHCCs are expected to recruit beneficiaries, enroll them into the program and deliver the EHCP based on the age, sex and health condition of the beneficiary. Once enrolled, individuals are exempted from payment for EHCP services as they are fully subsidized by the Government. A nominal fee of about US\$12 per year will be paid by each household as loyalty fee. The project is serving as the foundation for universal health coverage in Lebanon by building the capacity of the national primary healthcare system and the MoPH, to be later expanded to cover the entire Lebanese population.

(ii) Emergency Primary Healthcare Restoration Project - Subsidizing NCD screening and management at primary care

In 2016, the MoPH through a grant from the Multi Donor Trust Fund (MDTF), embarked on a project to subsidize the delivery of an Essential Healthcare Package (EHCP) of primary healthcare services to 150,000 impoverished Lebanese identified through the National Poverty Targeting Program (NPTP). The EHCP includes: (i) age and sex specific wellness packages covering primary and secondary preventive services including NCD screening

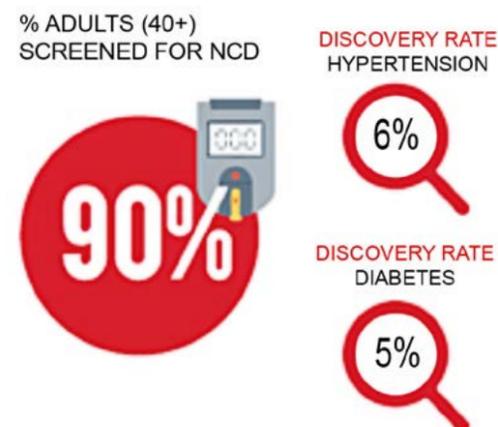


Figure 2 Selected indicators, EPHRP, 2018

and prevention; (ii) a safe motherhood package for females in reproductive age; and (iii) NCD packages covering the management of two of the most common NCDs in Lebanon, hypertension and diabetes.

The project builds on the aforementioned screening initiative and follows the same PHC protocol for calculating risk and performing referrals. In addition to fully subsidizing the screening process and needed tests, the project offers management for diabetes and hypertension. Beneficiaries who are diagnosed with these diseases benefit from the pertinent packages where the following services are administered as per package guidelines: immunization, follow-up diagnostic tests, health care providers' consultations (doctors, others), pertinent counseling and health education, and medication dispensing when applicable.

By 2018, the project had delivered services to 101,454 beneficiaries, of whom 61,887 are adults. PHCCs screened 90% of those who are 40 years and above for NCDs and discovered 6% with Hypertension and 5% with Diabetes. Overall, 20% and 14% of adult users are enrolled in the hypertension and diabetes packages respectively. 83% of diabetics conducted their follow-up HbA1c tests while 74%

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