Engagement of private healthcare sector in addressing noncommunicable diseases at primary care level in the Eastern Mediterranean Region

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Abstract

Background: The private healthcare sector is a critical stakeholder in the provision of health care services, including noncommunicable diseases (NCDs), and engagement with the sector is increasingly being advocated in efforts to achieve Universal Health Coverage.

Aim: This study was conducted to explore the role of the private health sector in delivering NCD-related primary care services in selected countries of the WHO Eastern Mediterranean Region (EMR): Jordan, Oman, Pakistan, Sudan, and the Syrian Arab Republic.

Methods: We adapted the analytical framework for this study from the “Framework for action to implement the United Nations political declaration on noncommunicable diseases”. We conducted a desk review to gather evidence, identify gaps and provide direction for the subsequent stakeholder interviews. Key informant interview respondents were selected using the snowball sampling method. Data from the interviews were analysed using MAXQDA, version 2020.

Results: We reviewed 26 documents and interviewed 19 stakeholders in Jordan, Oman, Pakistan, Sudan and the Syrian Arab Republic. Our results indicated increasing advocacy at the regional and national levels to align the private and public health sectors, just as there were efforts to reduce the risk factors for NCDs by implementing tobacco laws, introducing food labelling guidelines, increasing taxes on soft drinks, and promoting the healthy cities approach. NCDs health information systems varied widely among the countries, from being organized and developed to having poor record-keeping. The private health sector is the predominant provider of care at primary level in most of the EMR countries.

Conclusion: Increased collaboration between the public and private sectors is essential for better management of NCDs in the EMR. Governments need to strengthen regulation and defragment the private health sector and harness the sector’s strengths as part of efforts to achieve national health targets, NCD goals and Universal Health Coverage.

Keywords: private sector, primary health care, noncommunicable disease, Universal Health Coverage, Eastern Mediterranean


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Introduction

Noncommunicable diseases (NCDs) are the leading cause of mortality worldwide, being responsible for 41 of 55 million deaths annually (1), with disproportionately higher rates in the low- and middle-income countries (2). It is projected that the proportion of NCD-related deaths will increase by 17% in the next 10 years, with the greatest increase in the World Health Organization (WHO) African Region (27%) followed by the Eastern Mediterranean Region (EMR) (25%) (3). Currently, NCDs are the leading cause of death in the EMR, with over 1.7 million people dying annually from ischaemic heart disease, diabetes mellitus, cancer and chronic respiratory disease (4). It is estimated that almost 42% of NCD-related deaths are premature, occurring before the age of 70 years, thus affecting economically productive individuals and impoverishing families (5, 6). Future projections suggest that 4 main NCDs (cardiovascular disease, diabetes mellitus, cancer and chronic respiratory disease) will cause 2.4 million deaths in 2025 unless urgent action is taken (7). Two-thirds of premature mortality as a result of NCDs has been linked to 4 shared modifiable behavioural risk factors: tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol (6). Consequently, premature mortality can be considerably reduced or prevented through simple lifestyle changes and cost-effective interventions.

EMR countries face multidimensional challenges in their efforts to control NCDs. Some of the high-income countries (e.g. Oman, Saudi Arabia) have some of the world’s highest rates of diabetes mellitus (8). Although financial resources are available in these countries,
attention to the socioeconomic drivers of NCDs and action on population health have so far been ineffective in halting the rise in overweight and obesity (9). Middle-income countries have a large base of human resources but policy and programme development and financing of NCDs prevention and control measures remain inadequate (10). Low-income countries suffer from poor financial and human resources along with a weak health systems (11). It has been projected that EMR is not on track to achieve Target 3.4 of the Sustainable Development Goals: reducing premature mortality by one-third by 2030 (12, 13).

The whole-of-government and whole-of-society concepts are now increasingly advocated to tackle health-related issues, including NCDs (14). In addition to measures taken by governments for prevention and control, the private healthcare sector can play a vital role in the implementation of responses to NCDs (15). The whole-of-society approach emphasizes and acknowledges the important role played by all relevant stakeholders (individuals, families, communities, intergovernmental organizations, religious institutions, civil society, academia, the media, voluntary associations and the private sector) in support of national efforts for NCD prevention and control, and recognizes the need to further support the strengthening of coordination among stakeholders to improve the effectiveness of any measures taken (16). The importance of multisectoral and multistakeholder collaboration, including engagement with the private sector for the prevention and control of NCDs has been recognized and emphasized by several political commitments (14, 16–18).

The second objective of WHO’s “Global action plan for the prevention and control of NCDs” is to strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country-level response to NCDs (19). Member States are encouraged to establish national multisectoral mechanisms “for engagement, policy coherence and mutual accountability of different spheres of policy-making that have a bearing on noncommunicable diseases” (19).

The importance of the private health sector is increasingly being acknowledged and advocated globally and in most of the EMR countries (20–22). Despite this recognition, it has so far proven impossible to formulate any evidence-based strategy or roadmap that incorporates the contribution of the private health sector to the achievement of public health goals. The private health sector could play a more active role in NCD-related service provision if its functions were aligned with the public sector, particularly in settings where the public health infrastructure is weak (23, 24). Collaboration is not only an opportunity that needs to be exploited but has become a necessity for the implementation of national responses to NCDs to achieve Target 3.4 of the Sustainable Development Goals.

This study was designed to explore the role and engagement of the private health sector in delivering NCD-related primary care services in selected EMR countries: Jordan, Oman, Pakistan, Sudan and the Syrian Arab Republic. It aimed to identify good practices and positive contributions in these countries, as well as gaps and constraints in the provision of care. The study also aimed to make evidence-based recommendations that could help strengthen and facilitate more meaningful partnership between the public and private health sectors.

Methods

Engagement of the formal, for-profit private health sector was explored sequentially in 4 phases from August to December 2020 (Figure 1). The analytical framework for the study was adapted and modified from the “Framework for action to implement the United Nations political declaration on noncommunicable diseases” (26). This was followed by the development of a survey...
instrument (Phase II) and data collection via a desk review and interviews with the stakeholders.

The Ethical Review Committee, Aga Khan University, and the National Bioethics Committee, Pakistan, provided ethical clearance (ERC No. 2020-5042-10909) for this study.

**Desk review**

For the desk review, we used 3 strategies to gather information: a systematic search to filter relevant published articles on PubMed, solicitation of documents from the WHO Regional Office, and a manual online literature search for relevant policy documents and reports.

The review helped in identifying available evidence, identifying existing gaps in the literature and providing direction for the stakeholder interviews (the detailed methods and the findings of the desk review are available on request).

**Stakeholder interviews**

The interviews were conducted with stakeholders from Jordan, Oman, Pakistan, Sudan and the Syrian Arab Republic. These countries were selected during a virtual meeting of the research team and representatives of the WHO Regional Office for the Eastern Mediterranean. A maximum of 5 countries was included so as to complete the study within the stipulated time-frame. It was decided to select countries across all income levels: Oman represents the high-income countries, Jordan and Pakistan the middle-income countries and Sudan represents the low-income group. Syrian Arab Republic was selected as a conflict-affected State. The stakeholders were selected through snowball sampling from the public and private sectors, academia and WHO, taking the WHO focal person for NCDs in each country as the starting point (Table 1).

The interviews were conducted using a semi-structured interview guide based on the analytical framework (Table 2) (interview guide available on request). Each key informant interview was web-based; it lasted around 45–70 minutes, was audio recorded and subsequently transcribed. The directed content analysis technique was adopted to conduct the interviews and analyse the data. This is a qualitative research technique whereby data are collected and analysed using a pre-set theory, construct or framework. The data were collected, analysed and organized in accordance with the components of the analytical framework of the study. All analyses were performed using MAXQDA, version 2020. Additional relevant documents, reports, health information system forms and templates were also requested from the interviewees.

**Data synthesis**

All collected data (desk review, stakeholder interviews and relevant documents solicited during the interviews) were organized and combined to give a better understanding of engagement of the private health sector at the primary care level in the EMR and to identify potential areas for improvement. Information from all sources was discussed among the research team and cross-verified to enhance the credibility and reliability of the results. The findings of the desk review were compared with those from the stakeholder interviews to gain a more comprehensive understanding of the engagement of the private health sector in the region. To further clarify the situation, a SWOT (strengths, weaknesses, opportunities, threats) analysis was conducted.

**Results**

**Overview**

A total of 26 documents were retrieved and included in the desk review (9 peer-reviewed articles and 17 reports) (27–54). Nineteen stakeholder interviews were conducted (Table 1). The results are presented according to the themes outlined in the analytical framework.

**Governance**

Our results indicate increasing advocacy efforts at regional and national levels to align the private health sector with the public sector. The national policies are slowly starting to incorporate engagement with the private health sector in their strategic visions (e.g. Oman and Pakistan) (34, 35); however, operational frameworks are lacking. Currently, the role of the private health sector in NCDs policy formulation is minimal. The general approach is to involve a few people from the private sector (e.g. the Private Hospital Association in Jordan; Heartfile, and the Aga Khan University in Pakistan) in the policymaking process, with little weight given to their...
We found that licensing of private health care facilities is a one-time undertaking in most countries and is not based on the quality of services provided. However, registration of private health care facilities is challenging, and many private clinics are not registered in countries such as Afghanistan, the Islamic Republic of Iran and Pakistan (43-45). Similarly, we found that, although the prominent tertiary care hospitals in the EMR have achieved national or international accreditation, the accreditation of primary health care facilities is generally inadequate. The process of accreditation in Iraq is at an early stage and is active only at primary care level (41). The current legal framework for licensing, accreditation, regulation and oversight of the private health sector in Palestine was deemed “inadequate” and “inefficient” (47).

Public-private partnerships (PPPs) have gained acceptance in the EMR over the past decades. Afghanistan and Pakistan have introduced PPPs extensively at all levels, including the primary care level. Contracting out by the private sector has shown positive results in Afghanistan, whereas the results were inconclusive for Pakistan as the public primary health facilities remain heavily under-utilized and account for less than 5% of the overall demand for health care (54). One of the stakeholders stated: “They (the public sector) collaborate just to avoid their responsibility. We have to wake the government (to be more proactive in sharing the burden through PPPs).” (Academia, Pakistan).

Social health insurance for Universal Health Coverage has been rolled out in Sudan: 69% of the total population and 80% of the poor population are insured. This includes services procured from the private sector (48). Renal dialysis has been privatized in Oman; a law covering PPP was expected to be finalized by the end of 2021 (key informant interview, Oman). Our informants revealed that nutrition counselling at primary health care level has also been contracted out in some countries (key informant interviews: Jordan, Pakistan). Jordan is relatively new to this type of partnership, but a telemedicine company, Al-Tibbi, an NCD management system which connects patients to general practitioners and specialists, has recently been widely retained (key informant interview, Jordan). In general, PPPs are disposed towards the reproductive, maternal, neonatal and child health services: targeting of NCDs is not often seen.

**Prevention of noncommunicable diseases and reduction of risk factors**

Our results indicate that there are efforts in many countries to reduce NCDs risk factors. These include implementing tobacco laws, introducing food labelling guidelines, increasing taxes on soft drinks, and promoting the healthy cities approach; however, participation of
the formal, for-profit private health sector is typically missing (key informant interviews).

Research from Sudan shows varying levels of comprehensiveness in the package of services, ranging from curative to preventive and promotional services, which also cover nutrition (48). In the Islamic Republic of Iran, private providers play a significant role in primary health care service provision in urban areas, where 41.5% of the primary health care centres are private. The services provided include health education, nutrition improvement and breastfeeding promotion. The private sector does not, however, provide services in the rural areas (44). The stakeholder interviews from Pakistan revealed that private providers at the primary health care level are in a “race against time”, where they struggle to cater for as many patients as possible in their clinics, leaving little or no time for counselling or health promotion. A similar scenario was described for Sudan: “The physicians do not give more than 5 to 10 minutes to each patient ... It is the same in both sectors ... Thus, counselling for the risk factors becomes difficult ...” (Federal Ministry of Health, Sudan).

**Surveillance, monitoring and evaluation of noncommunicable diseases**

Health information systems in the EMR countries vary widely from being organized and developed (e.g. Al-Hakeem system, Jordan; Al-Shifa system, Oman; the health information system of Saudi Arabia) to having poor record-keeping (e.g. Afghanistan, Pakistan). The public and private tertiary tiers do share cancer-related patient data for national cancer registries (e.g. Jordan, Morocco, Oman, Pakistan), however, information flow from the primary health care level is minimal (34, 35, 37, 49). The information is fragmented and does not include detailed data on cancer size, stage, grade, or treatment; accuracy is also questionable (key informant interviews). Registries for diabetes mellitus, hypertension and renal diseases have recently been established in Jordan (key informant interview, Jordan). As a part of Al-Shifa health information system, an NCD dashboard is being developed that would maintain e-records on all patients in Oman. There are efforts to include the private sector in the health information system, with a comprehensive system being designed through which public and private providers would be able to access each other’s systems (key informant interviews, Oman). For Sudan and Pakistan, little evidence was available on whether any proper data are maintained by the private health sector; the use of shared data by the public sector also remains questionable (key informant interview, Sudan, Pakistan).

We asked the interviewees about the role of the private health sector in conducting the WHO STEPwise approach to surveillance (STEPS). It was stated that the private sector was minimally, if at all, involved in collecting, analysing or disseminating core information on NCDs via STEPS (key informant interviews).

**Care and management of noncommunicable diseases**

Our findings indicate that the private health sector is the pre-dominant provider of care at primary level in most countries of the region. Private clinics have proliferated the urban areas in many developing countries. There is a tendency towards the provision of curative care, treatment and management of NCDs due to the greater financial benefits. Screening for NCDs is based on the patients’ wishes and does not follow clinical protocols in most countries, although the private health sector has been involved in the early detection of NCDs in community-based campaigns in Oman (key informant interviews, Oman). In other countries, nongovernmental organizations have been actively involved in screening for NCDs, with the for-profit sector playing only a limited role. The technical capacity of the providers varies across countries. In developing countries such as Pakistan, “quick relief formulae” have been adopted by the private providers for instant relief: “The public and the private sector are equally incompetent” (key informant interview, Academia, Pakistan).

Although service cost in the private health sector is higher than in the public sector, many patients prefer private sector because the travel and waiting times are shorter, the laboratory and diagnostic services are superior, and the availability of medicines is greater. The private health sector is equipped with the required diagnostic and laboratory support for NCDs: sphygmomanometers and glucometers are generally available in clinics but for advanced diagnostics such as Echo, X-ray and ECG, patients go elsewhere (key informant interviews: Jordan, Pakistan, Sudan, Syrian Arab Republic). The public sector in Oman was considered superior to the private sector because it offered a team-based approach and continuity of care (key informant interview, Oman).

Continuing medical education and capacity-building among the private health care providers was generally not seen at the primary care level, however, Oman has launched short courses on NCDs and other health domains (key informant interviews, Oman). Community participation and engagement are given little priority by the private providers in responding to NCDs. Community engagement by the private health sector was mentioned for breast cancer awareness as a means of marketing self-services (key informant interview Sudan). In most countries, referral mechanisms between the public and private sectors are not well developed (key informant interviews: Jordan, Pakistan, Sudan).

A SWOT analysis for understanding engagement of the private health sector was conducted. Major strengths of the sector in many EMR countries were: gaining the trust of the general public, offering diversity from one-person clinics to specialized hospitals and providing high quality diagnostic and laboratory support. However, the sector has its weaknesses: there is a distinct urban bias, limited services are offered to the rural population, skill-mix and team-based approach are absent, and continuing
medical education among the private providers is generally not common. The flow of data from the private to the public sector is lacking because of inadequate legislation and poor regulatory capacity. Referral mechanisms are not well developed. However, the private health sector offers opportunities for partnership with the public sector towards achieving Universal Health Coverage (i.e. PPPs). The significance of the private health sector is increasingly being realized by governments and a demand for engagement has been created. Health insurance laws recommending collaboration with the private health sector are under development in many countries. The private health sector remains the sector of choice among the public, who perceive it as offering superior quality care.

Some challenges need to be considered before taking advantage of any opportunities. The engagement of the private sector in policy-related forums and decision-making related to NCDs remains limited. The PPPs are generally unplanned and are subject to obsolete legislation which is essentially incompatible with partnerships. Dual practice by health care providers can lead to conflict of interest and needs to be addressed through proper legislation.

**Discussion**

Our study identified the private health sector as the predominant sector in most low- and middle-income EMR countries, catering for a large population. This sector has grown tremendously in the past few decades, with unchecked and unregulated expansion. Urban bias is obvious in the for-profit sector, while the not-for-profit sector is left to cover the rural areas and hard-to-reach populations. Services provided by the private health sector are diverse, from single-person clinics at the primary health care level to huge tertiary care hospitals. These services provide care and management of NCDs at all levels, and are well used by the public. The collection, maintenance and flow of data on NCDs and information from the private health sector remains poor across the region. The quality of services provided by the private sector is assumed by the public to be superior but we found no robust evidence supporting this notion. However, the private health sector has won public trust over the past few years.

Our findings resonated with the current situation of private health sector engagement for NCDs in other WHO regions. The private sector has been reported to be the predominant health care sector in East Africa, with 75% of health expenditure being made through out-of-pocket payments (55). The WHO Regional Office for Africa advocates engagement with the private health sector via a "regional framework for integrating essential NCD services in primary health care", but it remains poorly aligned with the public sector, as is the case in the EMR (55, 56). South-East Asia countries rely on the public and private primary health care services for NCD care delivery and multisectoral PPPs have been advocated to manage issues with accessibility, efficiency and quality (57). Private health care is widespread in the Americas and it has been proposed that countries use the reach of the private health sector to identify patients at risk for NCDs, provide education on healthy lifestyles and deliver a standard package of care for chronic conditions (58).

Alignment of the private and public sectors remains a global challenge as they tend to work independently, leading to the "mixed health systems syndrome" in many countries (59). The importance of incorporating the private health sector is increasingly being recognized in the public sector, but efforts to achieve this remain sparse and fragmented. In most countries, operational frameworks to engage the private health sector in controlling NCDs at the primary health care level are absent. The PPPs are generally set up on an ad-hoc basis, without a clear roadmap for sharing responsibilities.

This study has attempted to show the importance and engagement of the private health sector across 5 EMR countries, with a special focus on management of NCDs at the primary care level. Although, we tried to incorporate the views of stakeholders from a variety of backgrounds, we could not arrange interviews with stakeholders in some settings (Table 1). Our findings are not generalizable to the whole of the EMR since in some other countries, e.g. Morocco and Tunisia, the healthcare systems may differ. Information for the Syrian Arab Republic is also limited as only 2 interviews were completed there.

Despite these limitations, and based on our findings, we propose specific recommendations and suggest actions for stakeholders in the region. We suggest that all countries formulate and adopt a clear policy or strategic plan to engage the private health sector in all health domains, including NCDs. It is essential to clearly define the package of health care services regarding NCDs that are offered at the primary care level in each country. Courses, workshops and seminars should be held for continuing medical education at minimal cost to private sector providers. Modules designed to update knowledge and practices regarding NCDs should be included. Certifications for these courses should be provided to incentivise the participation of healthcare professionals. We noted disparities in the policies for licensing of health professionals, with one-time provision predominating in many countries. It is essential to renew the licenses of private health care providers every 5 years, with strict requirements for providing continuing medical education to assure the quality of care.

In considering the management and care of patients with NCDs, improving the technical capacity of governments to create PPPs is necessary at the primary care level. The role and expectations from each sector, the accountability mechanisms and the package of services should be clearly demarcated in the proposed partnership. Dedicated funds should be earmarked for contracting the private sector. The private health sector should typically be involved in service delivery (especially in areas where public sector coverage is low),
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Participation du secteur privé des soins de santé à la lutte contre les maladies non transmissibles au niveau primaire dans la Région de la Méditerranée orientale

Résumé

Contexte : Le secteur privé des soins de santé est une partie prenante essentielle dans la prestation de services de soins de santé, notamment pour les maladies non transmissibles (MNT), et la collaboration avec ce secteur est de plus en plus souvent préconisée dans le cadre des efforts déployés pour instaurer la couverture sanitaire universelle.

Objectif : La présente étude a été menée pour étudier le rôle du secteur privé des soins de santé dans la prévention et la lutte contre les maladies non transmissibles (MNT) dans certains pays de la Région OMS de la Méditerranée orientale : Jordanie, Oman, Pakistan, République arabe syrienne et Soudan.


Résultats : Nous avons examiné 26 documents et interrogé 19 parties prenantes en Jordanie, à Oman, au Pakistan, en République arabe syrienne et au Soudan. Nos résultats indiquent une sensibilisation accrue aux niveaux régional et national afin d'aligner les secteurs privé et public de la santé ; de même, des efforts ont été déployés pour réduire les facteurs de risque des MNT en mettant en œuvre des lois sur le tabac, en introduisant des directives sur l'étiquetage des denrées alimentaires, en augmentant les taxes sur les boissons gazeuses et en promouvant l'approche des Villes-santé. Les systèmes d'information sanitaire sur les MNT variaient considérablement entre...
References


