



Tuberculosis in Gulf Health Council Member States: Opportunities and Challenges Towards TB elimination

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Tuberculosis (TB) is a major public health problem affecting millions of people globally.¹ In 2016, 10.4 million people developed TB causing 1.7 million deaths. Over 95% of these deaths occurred in low- and middle-income countries.²

On 19 May 2014, the World Health Assembly adopted the World Health Organization Post-2015 Global TB strategy with its ambitious targets. The strategy aimed at reducing the number of TB deaths by 95% and decreasing its incidence by 90% by 2035 compared to 2015 levels.³⁻⁶ Low-incidence countries are those with a TB notification rate of < 100 TB cases (all forms) per million population and year. Pre-elimination is < 10 notified TB cases per million population and year, and elimination of TB as a public health problem is < 1 notified TB case per million population and year.^{3,6} In low-incidence countries, TB elimination requires tailored actions and bold interventions to improve care and strengthen preventive measures.

In 1997, the Gulf Health Council (GHC) of Health Ministers endorsed the TB elimination goal by the end of 2010 ('elimination phase of TB') aimed at reducing the incidence of new smear-positive cases among nationals to < 1 per 100 000 population. The adopted strategies included 100% directly-observed treatment short-course (DOTS) population coverage, upgrading of TB surveillance, active case finding among high-risk populations, contacts screening, latent TB therapy, implementation of programmatic management of drug-resistant TB activities, provision of TB care, control and prevention services for foreign-born individuals, advocacy, communication, and social mobilization.

These approaches have been adopted by the six GHC of Health Ministers.⁷

GHC member states had several achievements since the establishment of TB programs in 1975. In 1996, there was the introduction of DOTS, building laboratory diagnostic capacities, TB contact screening, and preventive therapy and care for multi-drug resistance (MDR)-TB. In 1998, MDR surveillance and treatment of latent TB infection (LTBI) in selected populations was established.

Globally, there is a need for countries to demonstrate that TB elimination is possible.⁸ Based on our regional TB epidemiology, which is characterized by the low incidence rates observed in some GHC member states and with a significant number of probable cases occurring mostly in foreign-born populations,¹ elimination in the current situation seems unfeasible by 2035.

According to global TB reports (2016),¹ GHC member states have diverse burden trends ranging from 6.8 to 200 per million population. According to TB notifications rate, only Bahrain (100 per million population), Oman (79 per million population), and Saudi Arabia (89 per million population) were among the low-incidence countries. None of these countries showed major changes in their notification rate for the last three years. The notification rate for Kuwait, Qatar, and the UAE were 200, 190 and 6.8 per million population, respectively.

Based on recent projections considering trends for the last three years, no country has yet reached the TB pre-elimination threshold. Furthermore, with the current decline in TB rates, only Oman would reach pre-elimination by 2036, and the others by 2043. To reach TB pre-elimination by 2035, the

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average annual rate of decrease from 2015 onwards should have been 12–18%, with a mean decrease of 16% (i.e., much higher than the decrease noted in most of GHC member states in the recent past). The average annual rate of decrease that is required to achieve elimination by 2050 is 7–11%.³

GHC member states were lagging behind the 2010 targets and progress since has been negligible. Although each member state has made individual efforts to implement the TB elimination strategies recommended, the above projections trends will continue in an unfavorable direction, and accelerate unless critical consideration and actions to mitigate the threats that can reverse trends are adopted.

GHC member states have a relatively well-financed health system, including TB national programs and TB diagnosis, and treatment is nominally free of charge. Despite these favorable basic conditions, several challenges exist including critical health system limitations to ensure that vulnerable (foreign-born) populations, especially undocumented, are included under universal health coverage schemes. This means access to needed health services for all residents without financial hardship in using them and fear of discrimination.⁹ GHC member states have the highest comparative prevalence of diabetes in the world,¹⁰ with five countries in the region among the top 10 worldwide according to the International Diabetes Federation.¹¹ Furthermore, diabetes triples a person's risk of developing TB. About 15% of TB cases globally maybe linked to diabetes,¹² therefore, there is a tremendous need to ensure a collaborative framework for care and control of TB among diabetics and other at-risk populations such as HIV patients, whose risk of TB activation is 10-times greater than the general population.¹³

More dynamic and coordinated implementation of all eight-key action global strategies is needed among the member states to avoid another lapse.^{3,4} Many low-incidence countries in Europe have failed to consistently implement all of them.¹⁴ GHC countries need a critical review of the progress and challenges that prevented them from meeting targets. Much needed at country levels are: a) strong governance and stewardship towards the TB program within the Ministry of Health (i.e., to establish a strong and suitable National TB Program (NTP) with strong NTP central unit to lead the TB elimination strategy); b) manage treatment of

LTBI in particular the foreign-born population originating from high prevalence TB countries;¹⁵ c) develop strategies to address other vulnerable groups such as HIV patients and diabetics, and organize a framework for care and control of TB in both groups through integration between the NTP and national HIV/AIDS and diabetes programs; and d) establish ways of monitoring and evaluating the programs so the impact is sustained and maintained.

As for the GHC, roles and responsibilities should be reviewed for a sustainable initiative with future directions being explicitly set to achieve globally-agreed targets.

The GHC member states under the umbrella of GHC have an excellent opportunity to eliminate TB by adopting further elimination strategies.

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