

Scaling up action on non-communicable diseases across Gulf Cooperation Council countries

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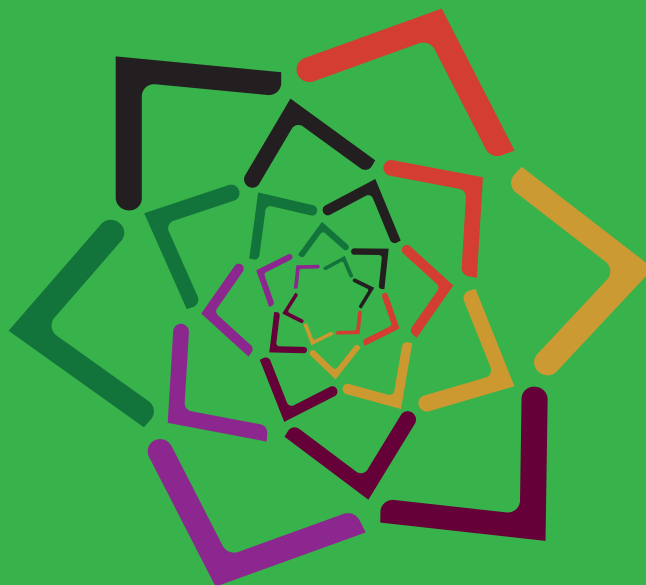
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SCALING UP ACTION ON NON-COMMUNICABLE DISEASES

ACROSS THE GULF COOPERATION COUNCIL COUNTRIES



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ACROSS THE GULF COOPERATION COUNCIL COUNTRIES

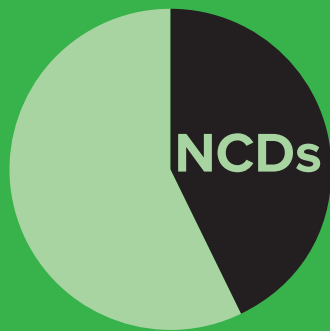


A synthesis of results from six country investment case reports and stakeholder interviews, with recommendations on next steps

December 2021

Key findings

LIVES LOST



NEARLY 43,000 PEOPLE DIE IN THE GCC COUNTRIES FROM THE FOUR MAJOR NON-COMMUNICABLE DISEASES (NCDs) EVERY YEAR, CAUSING

43% OF ALL DEATHS

IN THE REGION.

ECONOMIC BURDEN



NCDS COST THE ECONOMIES OF THE GCC COUNTRIES US\$ 50 BILLION EVERY YEAR, EQUIVALENT TO

**3.3% OF THEIR
2019 GDP.**

OF THESE COSTS, US\$ 30 BILLION ARE SPENT TO TREAT NCDS AND US\$ 20 BILLION ARE LOST PRODUCTIVITY.

Why invest?

BY INVESTING **US\$ 14 BILLION** OVER **15 YEARS** IN FOUR POLICY PACKAGES THAT TARGET SALT CONSUMPTION, TOBACCO USE, PHYSICAL INACTIVITY, AND THAT SCALE UP CLINICAL INTERVENTIONS FOR CARDIOVASCULAR DISEASE AND DIABETES, GCC COUNTRIES CAN:



PREVENT MORE THAN

290,000

DEATHS



ADD ALMOST

2 MILLION

HEALTHY LIFE-YEARS TO THE
POPULATION OF THE GCC



SAVE

US\$ 68.5 BILLION

OR US\$ 1,200 PER CAPITA, EQUIVALENT
TO 3 % OF THE GCC'S 2019 GDP

THE BENEFITS OF INVESTING FAR OUTWEIGH THE COSTS WITH AN AVERAGE RETURN-ON-INVESTMENT (ROI) ACROSS THE GCC OF **US\$ 5** OVER **15 YEARS** FOR EVERY **US\$ 1** INVESTED NOW.

ACKNOWLEDGMENTS

The authors express their sincere gratitude to the Ministries of Health of the countries of the Gulf Cooperation Council (GCC), the national teams that supported the data collection and analysis and the stakeholders who took the time to be interviewed. In particular, the authors would like to acknowledge the contributions of the Ministry of Health NCD focal points, which provided key information through interviews: Dr. Ameera Al-Nooh, Bahrain; Dr. Shaker Alomary, Kingdom of Saudi Arabia; Dr. Homoud Al-Zuabi, Kuwait; Dr Shadha Al-Raisi, Oman; Dr. Bhutaina Bin Belaila, United Arab Emirates; and Dr Kholoud Al Mutawaa, Qatar.

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Daniel Grafton wrote this report together with Dr Elmusharaf, Johanna Jung, Emily Roberts, and Dudley Tarlton of the United Nations Development Programme, Giuseppe Troisi of the Secretariat of the United Nations Inter-Agency Task Force on the Prevention and Control of NCDs and Nasim Pourghazian of the WHO Eastern Mediterranean Regional Office.

The synthesis report was conceived under the overall guidance of Dudley Tarlton with the HIV, Health and Development Team, United Nations Development Programme; Slim Slama, Regional Advisor of the Non-communicable Diseases Prevention Programme at the WHO Regional Office for the Eastern Mediterranean; and Nick Banatvala, Head of the Secretariat of the United Nations Inter-Agency Task Force on the Prevention and Control of NCDs.

Graphic design by Zsuzsanna Schreck.

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ABBREVIATIONS

BD	Bahraini dinar
COVID-19	Coronavirus disease
CRD	Chronic respiratory diseases
CVD	Cardiovascular disease
DALY	Disability-adjusted life-year
FOP	Front-of-package
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GHC	Gulf Health Council
LEA	Legal environment assessment
LMIC	Low- and middle-income country
MOH	Ministry of Health
NCD	Non-communicable disease
NCM	National coordinating mechanism
NGO	Non-governmental organization
ROI	Return-on-investment
SDG	Sustainable Development Goal
SEEDs	Social, economic and environmental determinants of health
SSB	Sugar-sweetened beverage
STEPS	WHO STEPwise approach to surveillance
TAPS	Tobacco advertising, promotion and sponsorship
UAE	United Arab Emirates
UN	United Nations
UNDP	United Nations Development Programme
UNIATF	United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases
WHO	World Health Organization

EXECUTIVE SUMMARY

From 2019 to 2021 the Gulf Health Council (GHC) together with the United Nations Development Programme (UNDP), World Health Organization (WHO) and UN Inter-Agency Task Force on NCDs (UNIATF) developed six non-communicable disease (NCD) investment cases in the each of the Gulf Cooperation Council (GCC) countries. The investment cases examined both the health and economic burden of non-communicable diseases (NCDs), as well as the benefits and returns on investment for implementing four packages of WHO-recommended interventions including the ‘best-buys’, or highly cost-effective interventions.

This report summarizes findings from the investment cases and – through interviews with the six ministries of health (MOH) – identifies priority actions to further reduce the health and economic impact of NCDs across the GCC countries.

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NCD health and economic burden

1

NCDs are the leading cause of death and disability among GCC countries.

The six investment cases confirm that NCDs – in particular cardiovascular diseases (CVD), diabetes, cancer, and chronic respiratory disease (CRD) – are the leading cause of death and disability among GCC countries. Results indicate that the four major NCDs cause nearly 40,000 deaths across the region every year, accounting for over 43 percent of all deaths each year. Of these deaths, CVDs account for nearly 30,000 deaths, 75 percent of deaths due to the four major NCDs and 31 percent of all deaths in the region. Many of the deaths are premature, meaning people dying before the age of 70.

2

Economic costs due to NCDs amount to US\$ 50 billion each year, equivalent to 3.3 percent on average of GCC countries' 2019 GDP.

Beyond the tremendous toll on life and health, NCDs result in high economic losses, including healthcare costs and productivity losses. The investment cases estimate that economic costs due to NCDs amount to US\$ 50 billion each year, equivalent to 3.3 percent on average of GCC countries' 2019 GDP. Of this, 60 percent or US\$ 30 billion are direct costs spent to treat the four NCDs, while indirect productivity losses amount to US\$ 20 billion, or 40 percent of the total economic burden.

3

Investing in NCD prevention and control presents an opportunity not only to improve population health but also to generate positive returns on investment by reducing economic losses.

The investment case results confirm that NCDs pose a significant health and economic burden in GCC countries. However, investing in NCD prevention and control presents an opportunity not only to improve population health but also to generate positive returns on investment by reducing economic losses. The investment cases estimate that implementing the modelled interventions across the GCC would cost US\$ 14 billion over 15 years, equivalent to an average increase of 1.4 percent in total health expenditure, or US\$ 16 per capita per year in each country. These investments would avert 290,000 premature deaths over 15 years and result in US\$ 49 billion in labour productivity gains, equivalent to 3 percent of the GCC's 2019 GDP. The investment cases indicate that - on average across the interventions – GCC countries would receive nearly US\$ 5 over 15 years for every US\$ 1 invested now.

Way forward

Each investment case included an institutional and context analysis and concluded with tailored recommendations centred around five themes.¹ Interviews with MOH focal points in each of the GCC countries were conducted to understand how the investment cases were being used, ongoing challenges, and identify priority actions to translate investment case recommendations into action. Main findings from the key informant interviews were as follows:

1 Application of the investment cases

- Focal points found the **investment cases will support the NCD agenda** by increasing NCD awareness among the public and generating high-level support among key stakeholders;
- Ministries of Health indicated the **investment cases have helped prioritize NCD interventions** to be included under national NCD strategies and health sector plans;
- Interviewees found the **investment cases will help strengthen multisectoral coordination and accelerate necessary legislation** on NCDs.

2 Challenges to strengthening NCD policies in GCC countries

- **Weak multisectoral national coordination** due to minimal awareness among different sectors regarding NCDs and lack of high-level sectoral commitment;
- **Minimal progress on NCD legislative action** due to lack of advocacy, low regional cooperation on legal matters, and industry interference;
- **Lack of evidence, data, and best practices** due to absence of strong standardized NCD surveillance systems and need to identify and share best practices among GCC countries.

¹ 1) Investing in new and scaling-up current WHO-recommended cost-effective interventions; 2) Strengthening national multisectoral coordination, planning and strategy; 3) Continuing and expanding efforts to monitor the entire population for NCDs and their risk factors; 4) Implementing novel policy approaches and test innovative solutions to increase utilization of existing services and incentivize healthy behaviour; 5) Ensuring that the prevention and control of NCDs is a central element of the COVID-19 response and recovery.

3 Priority actions

- **Work with regional and international partners** to strengthen non-health sector roles in addressing NCDs. Priorities mentioned by MOH focal points include:
 - » raising of NCDs on the agenda of international and regional fora;
 - » increasing engagement with non-health sectors through regular national coordinating mechanism (NCM) meetings, high-level meetings with non-health government sectors, and research on the social, economic and environmental determinants of health;
 - » raising the importance and awareness of NCDs at the national level by integrating NCDs into national strategies and plans, and by launching new awareness campaigns.
- **Advance legislative action on NCDs** through legal analysis, regional cooperation, and targeted advocacy and support. Priorities mentioned by MOH focal points include:
 - » using the investment case findings and additional evidence (e.g. health tax modelling) to advocate for passage of NCD legislation;
 - » identifying legal gaps and implementation obstacles through legal environment analyses;
 - » conducting annual parliamentary capacity building and follow-up technical support to advance the legislative process.
- **Increase collaboration among GCC countries** through the GHC and with UN partners to conduct research and share best practices. Priorities mentioned by MOH focal points include:
 - » building the evidence-base through follow up investment cases and modelling in additional areas such as nutrition, road traffic injuries, mental health, health taxes and air pollution;
 - » increasing the understanding of the nexus between COVID-19 and NCDs, as well as other co-morbidities;
 - » benchmarking of GCC health systems, tracking of GCC country progress and sharing best practices and data from the region and globally;
 - » receiving technical support where necessary to establish unified surveillance and health information systems, as well as in early diagnosis and technology in NCD prevention and control.

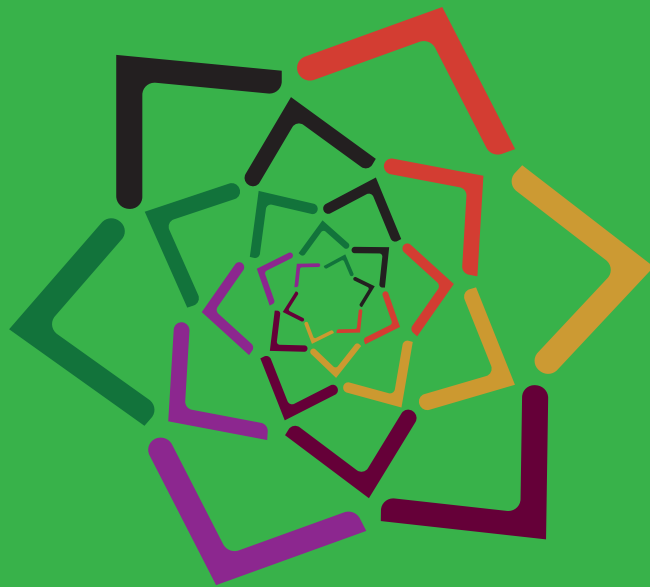
“Moving forward, we need to leverage the expertise and experience within our region. Through training and sharing of best practises within the GHC, we can tackle NCDs together.”

Dr. Homoud Al-Zuabi

Director of NCD Prevention and Control, Ministry of Health, Kuwait

Photo credit: © Ken Doerr via Flickr





1

INTRODUCTION



INTRODUCTION

NCDs are the world's biggest killers and are responsible for 41 million deaths every year.² Tackling the NCD epidemic is a major global priority that is underpinned by the United Nations Political Declaration on NCDs, adopted by Heads of State and Governments in 2011. NCDs have since been included under Sustainable Development Goal (SDG) #3 of the 2030 Agenda for Sustainable Development, and UN Member States have adopted roadmaps for achieving SDG #3 including the WHO Global Action Plan for NCDs.³ In 2012, Governments of the WHO Regional Committee for the Eastern Mediterranean adopted the Framework for Action to implement the United Nations Political Declaration on NCDs.

The risk of developing NCDs can be reduced by modifying four types of behaviour (tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity) and metabolic risk factors such as high blood pressure and cholesterol. WHO developed a menu of highly cost-effective policy options, referred to as 'best buys', and an additional set of cost-effective interventions to assist member states to reduce the NCD burden. These interventions are laid out under the Global Action Plan for NCDs 2013–2030. The WHO best buys were updated at the 2017 World Health Assembly and include measures to reduce behavioural and metabolic risk factors known to lead to NCDs as well as clinical interventions to prevent and treat disease. Despite the strong evidence of their cost-effectiveness, WHO best buys remain under-implemented globally.

Recognizing the threat that NCDs pose, in 2017, member countries of the GHC governments invited the UNIATF to assess the situation regarding NCDs and to make recommendations on how to further reduce the burden of NCDs. Developing an investment case for NCDs was one of the resulting recommendations for several GCC countries. As a result, between 2019-2021, a multiagency team from WHO, UNDP, the UNIATF Secretariat and the GHC conducted investment cases in Bahrain, Kuwait, Oman, Saudi Arabia, the United Arab Emirates (UAE) and Qatar. The investment cases quantify the burden of NCDs and the returns on investment of cost-effective interventions for NCD action and were designed to assist GCC countries in making the economic rationale for action to prevent and control NCDs.

Each investment case was written in close collaboration with the GHC project countries and based on data obtained from ministries of health. An analysis of the institutional context covering existing policies, initiatives and strategies as well as country-specific governance arrangements allowed for tailored recommendations. In addition to a detailed report of the findings from the economic and institutional and context analyses, countries were provided with advocacy materials including slide decks, infographics, and a suggested social media strategy to maximise the impact of the findings.

2 WHO. NCD Fact Sheet. Available at: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

3 WHO. Global Action Plan for NCDs 2013-2020. Available at: <https://www.who.int/publications/i/item/9789241506236>

As the risk factors and impact of NCDs reach far beyond health, it is evident that this massive challenge cannot be tackled by the health sector alone. Non-health government sectors as well as media, academia, civil society and community leaders have a large role to play on impacting NCD outcomes. A whole-of government, whole-of-society approach covering sectors such as health, agriculture, communication, education, finance, food, justice, legislation, sports, tax, transport and urban planning is therefore crucial to successful NCD

prevention and control. Multisectoral action has been endorsed as a cornerstone of NCD responses in several high-level political decisions, including the 2011 Political Declaration on the Prevention and Control of NCDs.⁴

“The launch of the NCD investment case to all involved sectors helped increase awareness and prioritise NCD prevention during the pandemic.”

*Dr. Ameera Al-Nooh
Head of NCD Group, Public Health
Directorate, Ministry of Health, Kingdom
of Bahrain*

Highlighting Best Practise and GCC Regional Collaboration

GCC countries have strong national coordination mechanisms for NCDs and national multisectoral NCD strategies allowing them to engage with non-health sectors. Indeed, GCC countries serve as models for countries around the world, with several GCC countries having received WHO and UNIATF awards for their progress and leadership in combatting NCDs and advancing health. However, securing support from non-health sectors for sustainable national NCD responses, while essential, presents unique governance challenges and requires thorough understanding of political and institutional contexts. The GCC can strengthen its engagement with non-health sectors, furthering health-in-all-policy approaches and strong law enforcement in non-health sectors to tackle the determinants of NCDs that are within the remit of those sectors, such as air pollution or taxation of health-harming products.

GCC countries have already made significant strides towards improving NCD prevention and control on a national level. Notable initiatives include the healthy cities projects which aim to create a health-promoting urban environment, NCD screening programmes, mass media campaigns on diet and physical activity, front-of-pack (FOP) food labelling, national coordination mechanisms (NCMs) for NCD action and dedicated committees for diabetes and tobacco control, health clinics for obesity, and initiatives to reduce salt consumption in collaboration with bakeries and food manufacturers.

NCD action also highly benefits from supranational initiatives, and the GHC already has a track record of tackling NCDs as a unit. Indeed, as the GHC makes tax decisions as a regional block, a 100 percent excise tax for health-harming products such as sugar-sweetened beverages (SSBs) and all tobacco products was approved in 2017. This commendable initiative was implemented by nearly all countries in the region, and will help reduce tobacco use and consumption, as well as the associated health and economic costs.

4 United Nations high-level meeting on noncommunicable diseases. Geneva: World Health Organization; 2011. Available at: https://www.who.int/nmh/events/un_ncd_summit2011/en/

GCC countries have also taken rapid action in face of the COVID-19 pandemic which is exacerbated by NCDs.⁵ Governments among the GCC countries have created internet resources and apps providing screening, surveillance and contact tracing services as well as key information on COVID-19 symptoms, vaccinations and vulnerable groups including those suffering from NCDs.

“In addition to COVID-19 and industry lobbyism, a main challenge to implementing NCD measures is to make them a priority for high-level stakeholders.”

*Dr. Kholoud Al-Motawaa
Head of Non Communicable Disease
Department, Ministry of Public Health,
Qatar*

Countries should prioritize low-cost, high-impact interventions for preventing and treating NCDs and mental health conditions, such as those listed in WHO’s ‘best buys’.⁶ Implementing such interventions requires governments to work as one and to join forces with other stakeholders. The GCC countries continue to advance efforts to implement WHO-recommended ‘best buys’ and other cost-effective and recommended interventions to reduce modifiable risk factors for NCDs and strengthen health systems. However, no country has fully implemented every intervention, creating opportunity for scale-up. **Box 1** summarizes the findings of **Annex 1** which maps the implementation status of each WHO-recommended intervention modelled in the investment cases across the GCC countries.

Photo credit: © Freepik.com



- 5 NCDs and their risk factors – such as tobacco use, overweight, and exposure to air pollution – increase the likelihood of severe symptoms and death from COVID-19, and people living with NCDs are also at risk of adverse health outcomes due to disruption of prevention and treatment services for NCDs.
- 6 Tackling NCDs: “best buys” and other recommended interventions for the prevention and control of NCDs. Geneva: World Health Organization; 2020 . Available at: <https://apps.who.int/iris/handle/10665/259232>

Box 1. Opportunity to scale-up implementation of WHO ‘best buys’

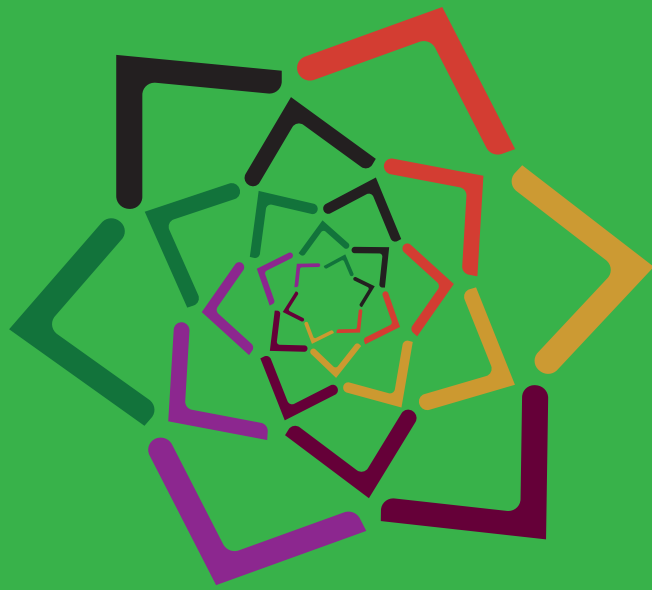
Overall, the four packages of WHO-recommended interventions around tobacco control, unhealthy diet, physical inactivity, and CVD and diabetes clinical interventions, have similar implementation statuses across the GCC countries. However there is variation when comparing among countries and specific interventions. On tobacco control, out of the six tobacco control ‘best buy’ interventions that were modelled under the NCD investment cases, providing brief advice for tobacco cessation to all who want to quit had the highest implementation status, but is yet to be fully implemented in every GCC country. The lowest level of implementation was plain packaging, with only Saudi Arabia implementing this intervention.

Although there has been considerable progress, the GCC countries have room for growth when it comes to unhealthy diet, physical inactivity and CVD and diabetes clinical interventions. It is key to invest in reducing unhealthy diets and physical inactivity as obesity is a major risk factor and highly prevalent across all GCC countries with some rates more than double the global average. The WHO unhealthy diet ‘best buys’ focus solely on salt reduction, with effective and other recommended interventions pertaining to trans-fat, sugar and other elements of the diet. Mass media campaigns to reduce salt intake had the highest level of implementation status across the six GCC countries. As many of the unhealthy diet interventions were only partially implemented, it is critical that this momentum to advance action on unhealthy diets continues.

Saudi Arabia has the strongest trans-fat policy and qualifies for the WHO’s certification programme for trans-fat elimination. All GCC countries have or are planning to adopt the GCC-approved tax increases of 50 percent on carbonated drinks and 100 percent on energy drinks. Of note, Kuwait is steadily moving forward with unhealthy diet initiatives. The Government initiated a “Healthy Living” Programme for those living with NCDs and a “Healthy Lifestyle” Programme to reduce NCD risk factors. There are also strong efforts to reduce salt in the food supply and improve school nutrition in Kuwait.

While there is progress to implement the one ‘best buy’ intervention for physical activity – community-wide public education and awareness campaigns – there remains opportunity to scale-up physical activity counselling across all GCC countries.

Across the GCC countries, there is action to implement the CVD and diabetes clinical interventions, with the ‘best buy’ – drug therapy and counseling to high-risk individuals – having the overall highest implementation status. Notably, as NCD screening is top priority in Oman, there is an advanced widespread screening program for NCDs targeting all citizens aged 40 and over that are not already diagnosed with certain NCDs.



2

METHODS



METHODS

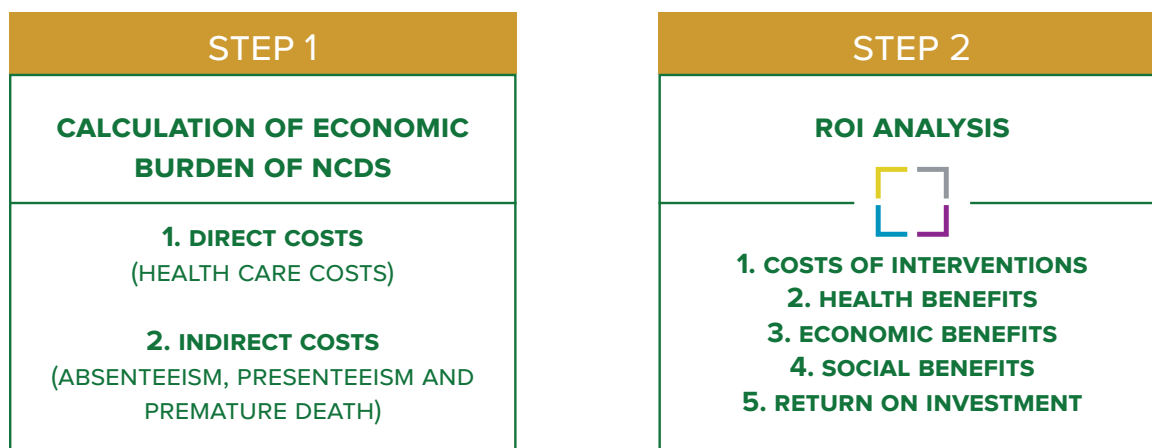
A) Investment case methods

The investment cases consist of two main steps: 1) estimating the burden of NCDs and 2) estimating the costs and returns of interventions. The following describes in brief the investment case methodology and terminology. For in-depth description of the investment case methodology, please refer to the guidance note for NCD investment cases.⁷ National data collection was complemented by relevant regional and international proxy data where national data was not available.

B) Key informant interview methods

Investment case partner agencies (UNDP, WHO, and UNIATF Secretariat) conducted key informant interviews with focal points from the six Ministries of Health of each GHC investment case project country. The primary aim of the interviews was to identify potential follow-up activities for UN-led support to GCC countries, as well as potential for GHC-led cooperation between GCC countries in NCD prevention and control. These are listed in the final section of this report. The interviews served two other aims, namely to 1) understand the utility of the investment cases in the project countries to date and identify potential process and output improvements for future investment cases; 2) to understand challenges and opportunities for scaling-up NCD prevention and control in GCC countries.

Interviews were an hour long and followed a semi-structured interview methodology. Questionnaires were sent to focal points prior to the interviews, and consisted of three sets of questions grouped under the headings of 1) investment case process, outputs and impacts to date, 2) opportunities, barriers, and priorities for NCD prevention and control in the country, and 3) potential for UN- and GHC- collaboration and support to GCC countries as well as regional collaboration for scaling-up NCD prevention and control. Interviewers sent focal points the questionnaires and interview notes for their review and correction, if necessary. Interviewers reviewed notes for common themes, lessons learned, and next steps which have been summarized under the recommendations section.



7 WHO, UNDP, UNIATF (2019). Non-Communicable Disease Prevention and Control: A Guidance Note for Investment Cases. Available at: <https://apps.who.int/iris/bitstream/handle/10665/311180/WHO-NMH-NMA-19.95-eng.pdf?sequence=1>

1) **Estimating the economic burden of NCDs**

Calculating the direct costs: Direct costs represent costs incurred by individuals and the health system to treat NCDs. The total health expenditure on each of the four major NCDs (cancer, diabetes, CVD and CRD) was calculated by multiplying the estimated average cost per patient by the estimated number of patients using the health service.

“The NCD investment case for the UAE provided a clear insight regarding the economic and health burden of NCDs with good understanding of existing structures and leadership.”

*Dr. Buthaina Bin Belaila
Head of Non-communicable Disease,
Department of Public Health &
Prevention, MOHAP UAE*

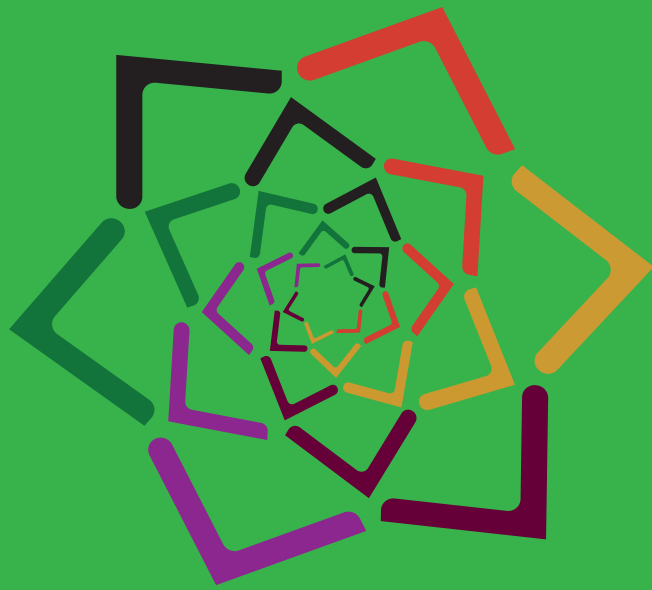
Calculating the indirect costs: When individuals die prematurely, the labour output they would have produced in their remaining working years is lost. In addition, people who have a disease are more likely to miss days of work (absenteeism) or to work at a reduced capacity while at work (presenteeism). Indirect costs calculated are the costs of absenteeism, presenteeism, and the economic losses due to premature deaths caused by NCDs.

2) **Conducting return on investment (ROI) analysis**

Calculating the costs of interventions: Costs of policy and clinical interventions were calculated using the WHO Costing Tool for NCD prevention and control. For each policy intervention, the WHO Costing Tool costs human resources, training, external meetings, mass-media campaigns, and other miscellaneous equipment needed to enact policies and programmes. For clinical interventions, the WHO Costing Tool estimates costs of treatment interventions, primary care visits, ancillary care visits, lab and diagnostic tests, and drugs for the total number of NCD cases who are expected to be covered each year. Baseline implementation levels for each intervention were estimated and assumed to scale-up over several years to full implementation within 15 years.

Estimating the impact of interventions: The WHO OneHealth Tool was used to assess the health benefits of implementing and scaling-up policy and clinical interventions by modelling the number of disease cases averted, healthy life-years gained, and lives saved over the 15 years under study. Avoided economic losses were determined considering the increase in healthy life-years, GDP per employed person, and the reduction in rates for absenteeism and presenteeism. In addition, to estimate the intrinsic value of longevity each healthy life-year gained from the interventions was multiplied by 0.5 times GDP per capita.

Calculating the returns on investment: The return-on-investment (ROI) for each intervention package was reached by comparing the impact of avoided economic losses to the total costs of setting up and implementing the interventions. The model employs a 3 percent discount rate to arrive at the net present value of all costs and economic benefits.



3

SYNTHESIS OF THE INVESTMENT CASES



SYNTHESIS OF INVESTMENT CASE RESULTS

Demographic and epidemiological characteristics

The GCC countries have a strong economy and a history of investing in health of their citizens. In 2019, the total GDP of the GCC countries was more than US\$ 1,630 billion, or US\$ 28,741 per capita. Among the six GCC countries, Saudi Arabia and the United Arab Emirates had the highest GDP, accounting together for about 73 percent of the GCC's total GDP. The six GCC countries together spent more than US\$ 80 billion on health in 2019, and 70 percent of it was spent by governments.

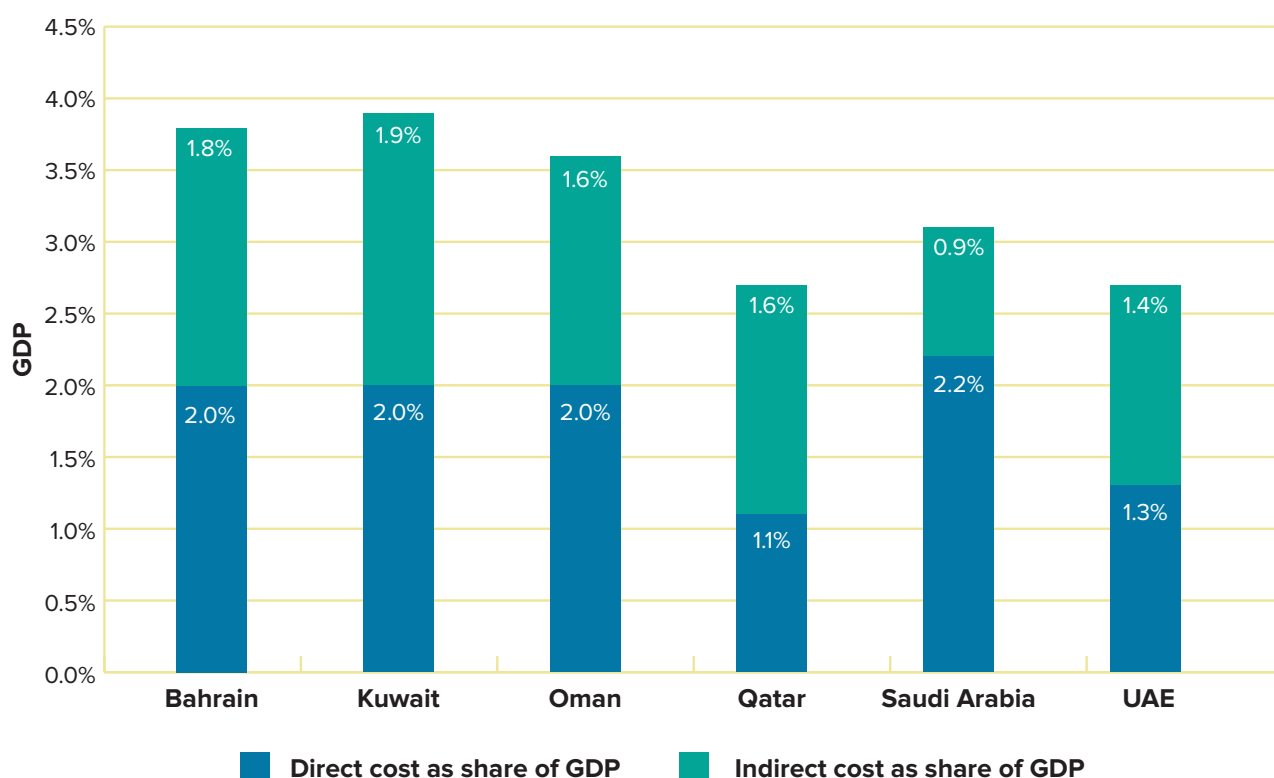
Population estimates show that nearly 60 million people live in GCC countries; 77 percent of them live in Saudi Arabia and the United Arab Emirates. There are more than 30 million people in the labour force in the six GCC countries. The average labour force participation rate is 74 percent, and the average unemployment rate is 2.3 percent.

Economic and health burden of NCDs

This synthesis of findings across the six GCC countries estimates that in 2019, nearly 43,000 people died due to the four major NCDs (cancer, diabetes, CVD and CRD), accounting for roughly 46 percent of all deaths in the region. Of these deaths, nearly 32,000 people died due to CVD, equivalent to 75 percent of the deaths due to the four major NCDs and 34 percent of all deaths in the region. Moreover, these NCDs cost the GCC economy US\$ 50 billion, equivalent to 3.3 percent on average of its 2019 GDP.

These costs can be split into direct costs, representing government and private health spending, and indirect costs, representing economic losses from loss of workforce productivity through absenteeism, presenteeism and premature death. The direct costs are estimated at US\$ 30 billion, accounting for 60 percent of the total economic burden and 1.8 percent of GCC GDP lost. Direct costs of treating the four NCDs constitute 36.5 percent of the GCC total health expenditure. The indirect costs are estimated at US\$ 20 billion, accounting for 40 percent of the total economic burden and 1.5 percent of GDP lost across the GCC. The substantial indirect costs, which are often overlooked, highlight the far-reaching consequences of the NCD epidemic.

Figure 1 depicts the share of indirect and direct costs due to NCDs as a share of that country's GDP in 2019. Losses range from 2.7 percent of GDP in the United Arab Emirates and Qatar to 3.9 percent of GDP in Kuwait.

Figure 1: Direct and indirect costs of 4 main NCDs per country share of GDP in 2019

Cost of interventions

Investments in NCD prevention and control can be broken down into intervention packages. This study modelled four packages of WHO-recommended policy and clinical interventions for NCDs to be implemented over 15 years. These packages are tobacco control, physical activity, salt reduction and cardiovascular and diabetes clinical interventions at primary healthcare level.

Figure 2 depicts the total cost of implementing these packages over 15 years in the six GCC countries (US\$ 14 billion). **Figure 3** breaks down this total cost across the region by country, including the share by which each country would need to increase its total health expenditure in order to implement all intervention packages. On average, countries would need to increase total health expenditure by 1.4 percent over 15 years,⁸ ranging from 1.2 percent in Saudi Arabia to 4.6 percent in Bahrain. Implementing all interventions over 15 years would cost an average of US\$ 243 per capita (US\$ 16 per capita per year), ranging from US\$ 149 per capita in Oman to US\$ 584 in Bahrain.

8 The GCC total health expenditure over 15 years was calculated by multiplying the total health expenditure in all GCC countries in 2019 by 15 years and discounted at a rate of 3 percent.

Figure 2: Cost of implementing four intervention packages over 15 years in the GCC

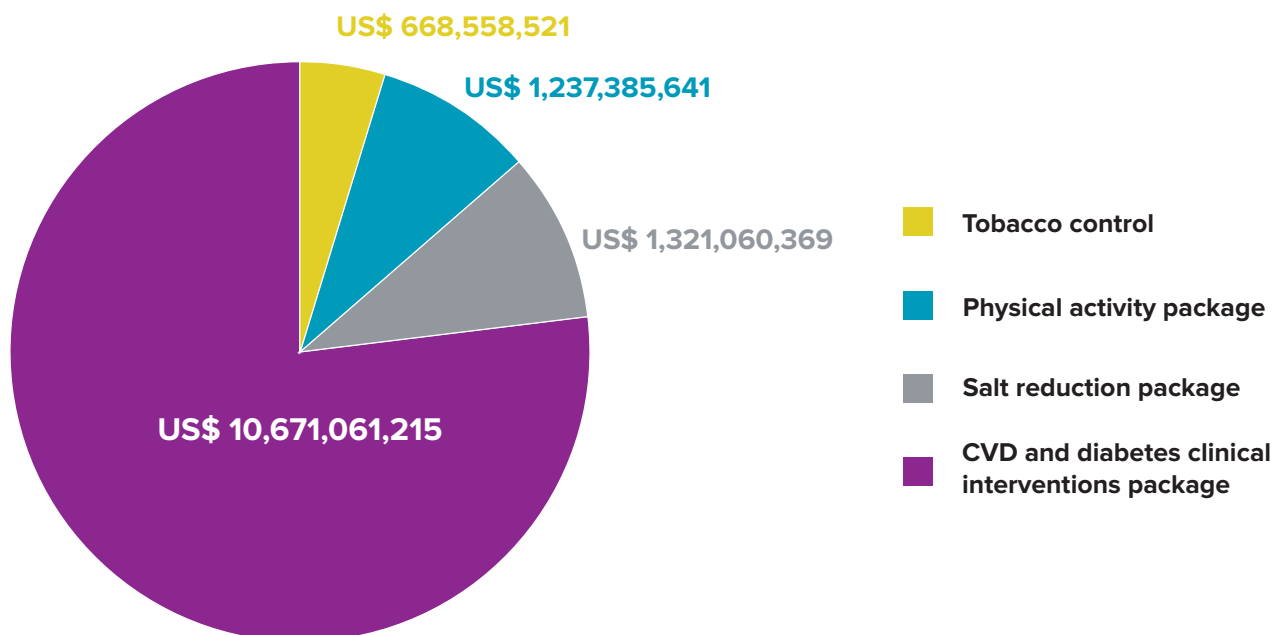
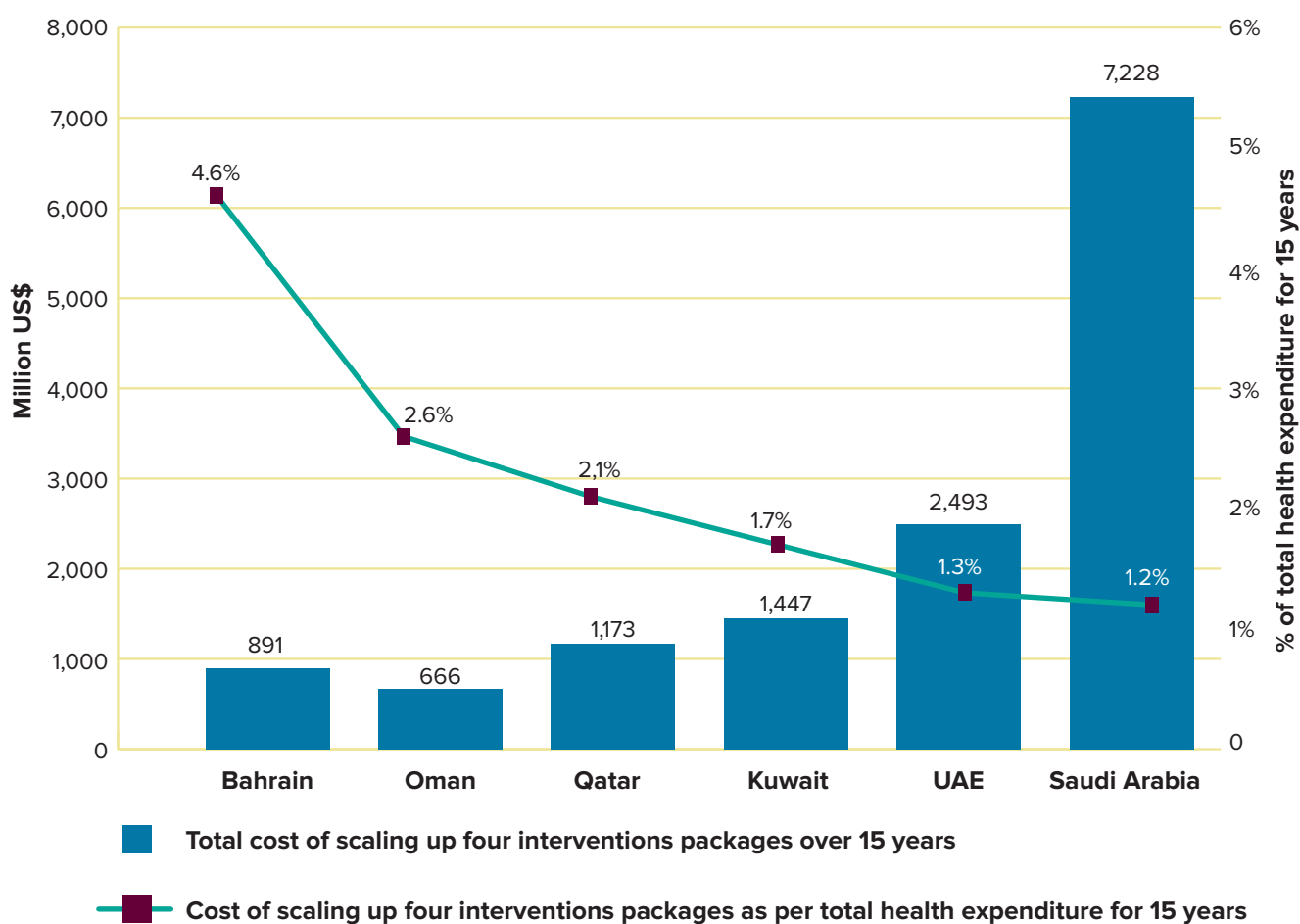


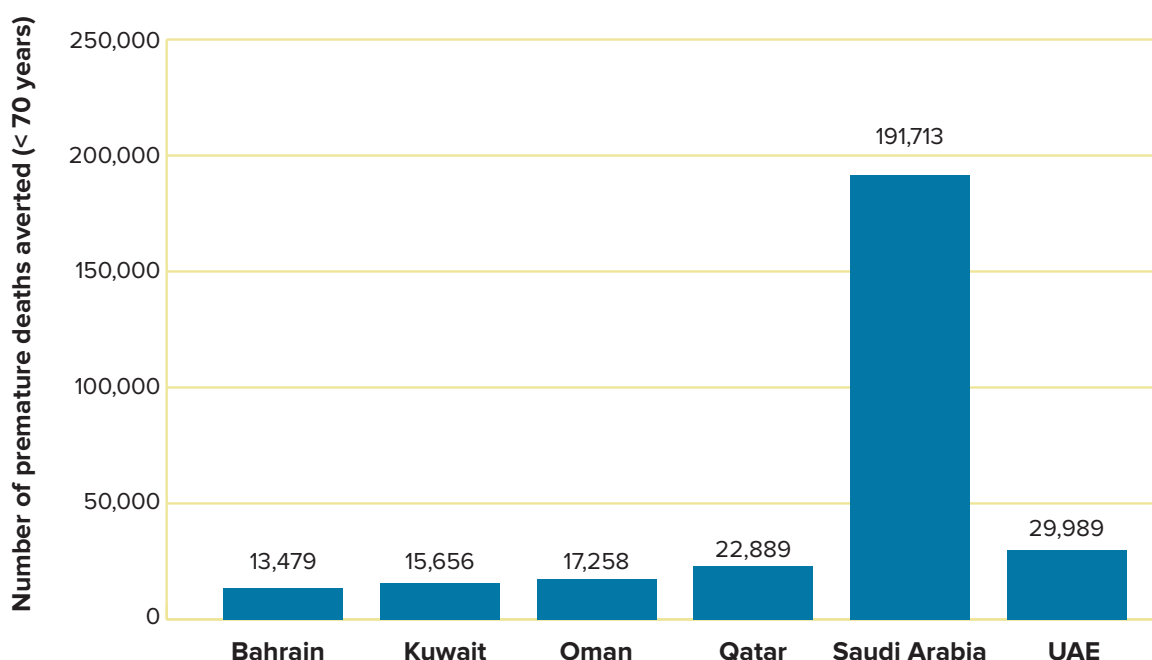
Figure 3: Cost of implementing four intervention packages over 15 years in each country in the GCC (in millions US\$ and as a percentage of total health expenditure)



Benefits

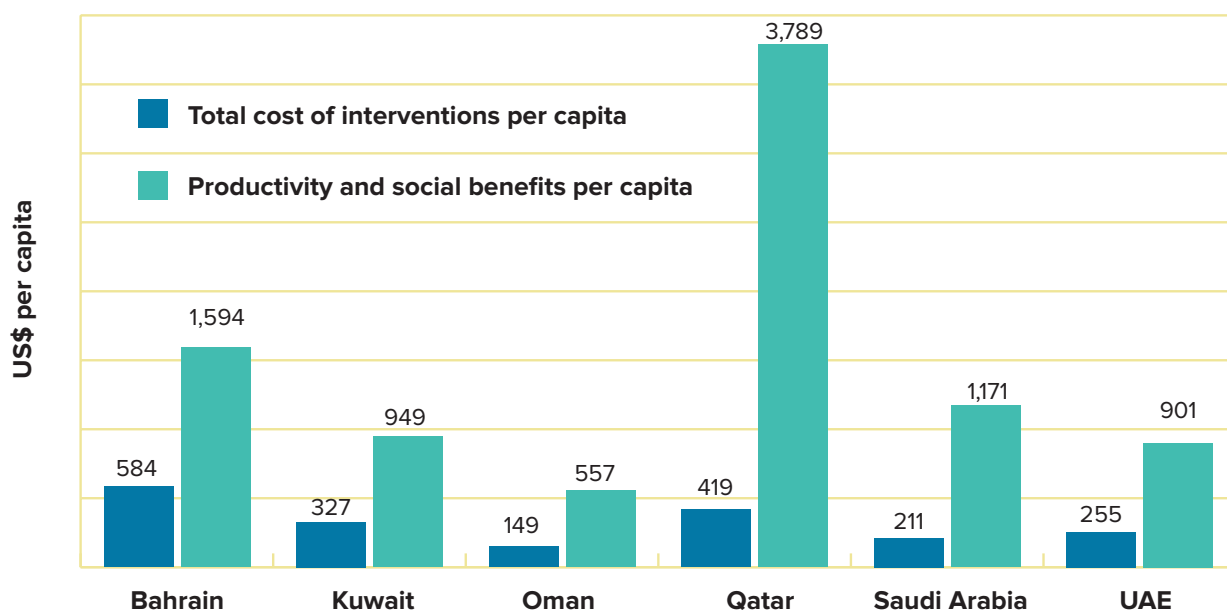
The health and economic benefits of investing in NCD prevention and control in GCC countries are substantial. Indeed, implementing intervention packages at the recommended scale-up would avert more than 290,000 premature deaths and add more than two million healthy life years to the population in the GCC over the next 15 years. It would also prevent more than 270,000 stroke events and more than 210,000 ischemic heart disease events over the next 15 years. The number of lives saved range from 13,479 in Bahrain to 191,713 in Saudi Arabia (see **Figure 4** below). One healthy-life year is gained with each US\$ 7,000 invested and one premature death is averted with each US\$ 48,000 invested.

Figure 4: Lives saved by implementing interventions over 15 years in the GCC



Beyond fostering healthier societies, investing in NCDs brings economic benefits. The recovered economic output from implementing the recommended intervention packages would be US\$ 49 billion in labour productivity gains over the 15-year period, equivalent to 3 percent of the GCC's 2019 GDP. The social value resulting from healthy life-years gained over the 15-year period is estimated at US\$ 19.5 billion. Adding the social value to the recovered economic output results in economic benefits of US\$ 68.5 billion over the 15-year period which is equivalent to US\$ 1,200 per capita over the 15-year period.

Figure 5 depicts the costs and benefits over 15 years by country, with costs per capita ranging from US\$ 149 in Oman to US\$ 584 in Bahrain. The average cost across the region per year per capita to implement all intervention packages is US\$ 22 while the average benefits per year per capita amount to US\$ 100. The NCD investment cases thus highlight the substantial returns on investment and relatively low costs of implementation.

Figure 5: Cost and benefit of implementing interventions over 15 years in the GCC, US\$ per capita

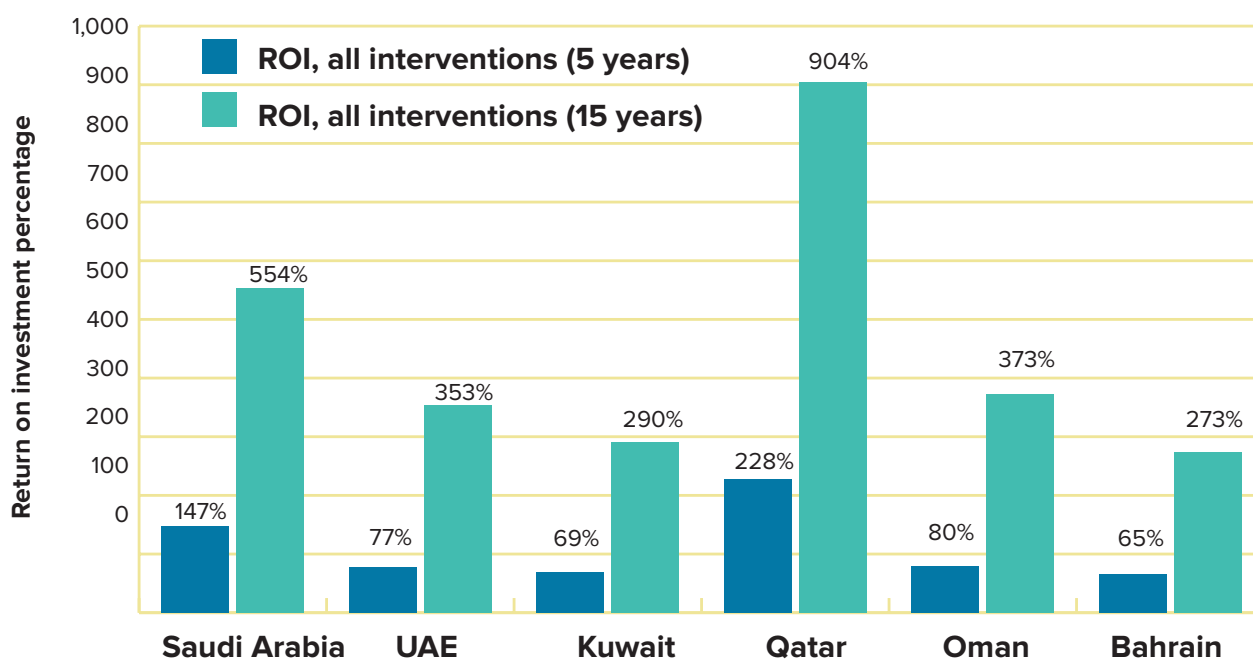
Box 2. Potential of health taxes and reinvesting in health

Health taxes are considered the most effective policy measure to reduce consumption of health-harming products. Those changed consumption patterns relieve stress on health systems by improving health. These taxes also generate significant revenue streams that can be used to finance a range of sustainable development activities. The Addis Ababa Action Agenda on Financing for Development recognizes price and tax measures on tobacco specifically as an important revenue stream for financing for development, and the Global Action Plan for SDG 3 – to ensure healthy lives and promote well-being at all ages – emphasizes the role of taxes on cigarettes, tobacco, and sugar in improving population health while reducing healthcare expenditures and increasing government revenue.

Raising taxes on tobacco is an intervention modelled in the investment cases. Beyond the economic implications of the improved health outcomes, the UN and GHC team doing this work have developed a model to forecast additional revenue that could come from further tax increases. Depending on how much they are raised, these taxes may cover a substantial amount of the required implementation cost. In Bahrain, preliminary additional analysis beyond the investment case suggests that an increase of 30 percent for tobacco and 10 percent increases for sugar sweetened and alcoholic beverage retail prices would generate an additional 145 million Bahraini Dinar (BD) over five years. This would provide nearly three times the required revenue to cover the costs of implementing the cost-effective interventions modelled in the investment case over five years (BD 58 million), leaving significant revenues still available for other efforts. A 75 percent increase in tobacco retail prices and 50 percent increase in sugar sweetened and alcoholic beverage retail prices would result in BD 478 million over five years, which is more than the estimated cost of implementing all modelled interventions over 15 years (BD 339 million).

Comparing costs and benefits shows that, on average, interventions have ROIs over 15 years that are greater than US\$ 4.9 for each US\$ 1 invested now (ROI = 493 percent). **Figure 6** depicts returns on investment broken down by country, ranging from 65 percent in Bahrain to 228 percent in Qatar over five years, and from 273 percent in Bahrain to 904 percent in Qatar over 15 years. These ROIs are substantial and outweigh returns observed from investments in many other sectors.

Figure 6: Percentage of ROI in implementing interventions over 5 and 15 years



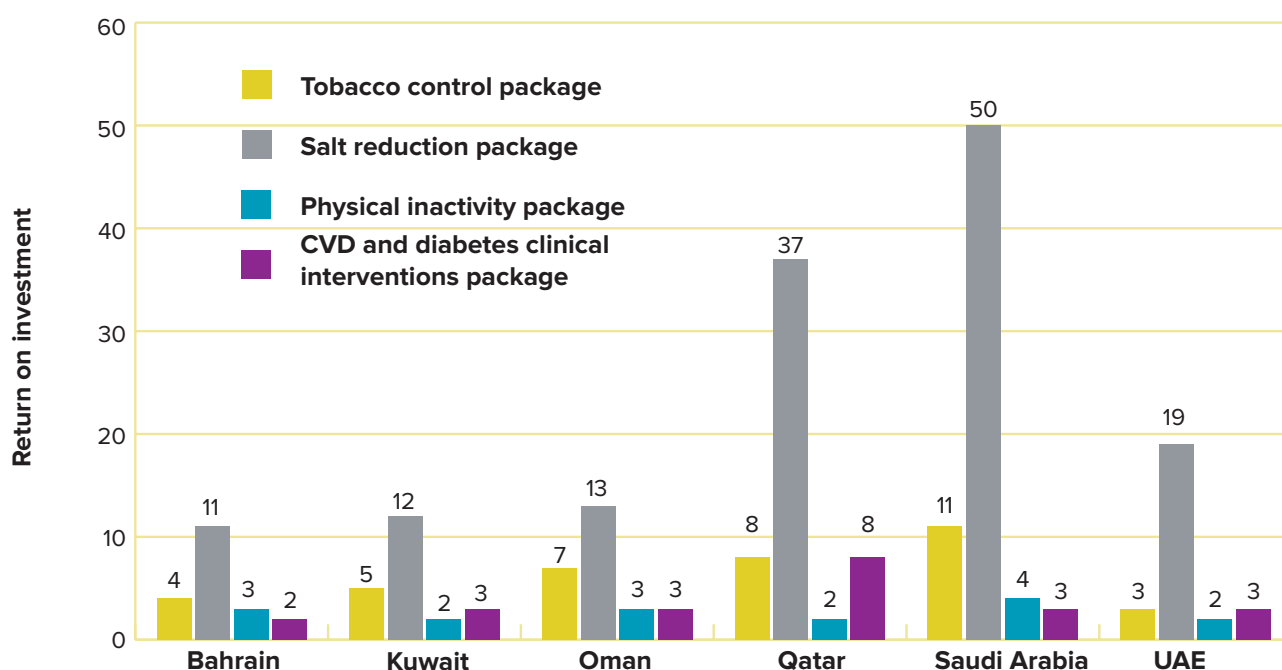
“The investment case has convened colleagues from the Ministry of Health, Saudi Food and Drug Authority, the Ministry of Human Resources and Social Development, and many more entities. This has not only helped to identify data gaps in Saudi Arabia, but has also fostered a great collaboration for gathering and exchanging information.”

Dr. Shaker Alomary

*Director-General of the General Directorate for Health Programmes and Chronic Disease,
Ministry of Health, Kingdom of Saudi Arabia*

Figure 7 below depicts the ROIs of each intervention package for each country. Of note, the tobacco control and salt reduction packages provide the highest ROIs among all intervention packages, due to their effectiveness and relatively lower costs of implementation. While campaigns and brief advice by physicians to address physical inactivity and the package of clinical interventions have lower ROIs, they are necessary to support the population's right to health and to avoid a significant amount of premature mortality and morbidity.

Figure 7: ROI (productivity and social benefits) of each intervention over 15 years



“The NCD investment case in Kuwait has already influenced the updating of the national NCD strategy, and particularly the costing of NCDs in the report has been helpful in advocating for NCD action with non-health sectors.”

Dr. Homoud Al-Zuabi

Director of NCD Prevention and Control, Ministry of Health, Kuwait

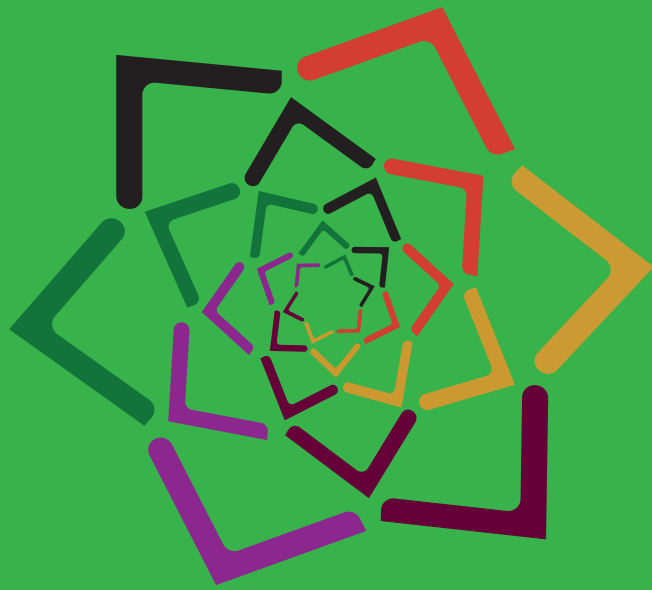
“The layout of the investment case report, the content, analysis and the translation were outstanding and exceeded the expectations. It identified the priority areas of action and quantified the benefits of action and the cost of inaction. It incorporated both the economic and political perspectives to ensure that the recommendations are suitable for the country’s institutional capacities and political environment.”

Dr. Ameera Al-Nooh

Head of NCD Group, Public Health Directorate, Ministry of Health, Kingdom of Bahrain

Photo credit: © Chris Price via Flickr





4

SYNTHESIS OF NATIONAL COUNTERPART INTERVIEWS



SYNTHESIS OF NATIONAL COUNTERPART INTERVIEWS

Following completion of the six NCD investment cases, interviews were conducted with focal points from the MOH of each GCC country. The investment cases and follow-up interviews indicated that the overall investment case process went well, and that the investment case reports and associated deliverables are valuable for NCD prevention and control in GCC countries. The following summarizes key findings from these interviews.

1

Key challenges to strengthening NCD policies

While all GCC countries have been making considerable progress in strengthening NCD policies, key challenges remain, particularly surrounding multisectoral coordination, legislative action and gathering of evidence, data and best practices. All focal points highlighted that weak multisectoral national coordination was a major challenge. It was believed that this was due to lack of high-level multisectoral commitment on NCDs and minimal NCD awareness across sectors and the public. Such a lack of awareness and advocacy also contributes to slow legislative action on NCDs, which is exacerbated by industry interference. Indeed, lobbying from industries including tobacco, alcohol, fast-food and SSBs, was highlighted as a key challenge to drafting and passing NCD policies. Furthermore, some laws require the GCC countries to act as a regional block (e.g. raising taxes); in such instances, focal points cited the need for increased regional collaboration. There is a lack of evidence, data and best practices given the absence of standardized NCD surveillance and health information systems in all countries. As an emerging and immediate barrier, focal points cited the COVID-19 pandemic. Responding to the pandemic has required tremendous resources and occupied much of their policy dialogue space.

Nonetheless, focal points highlighted several opportunities for advancing the local and regional NCD agenda. In particular, focal points emphasised the potential of GCC regional committees on topics such as diabetes, tobacco control and NCDs, which can strengthen messaging to non-health sectors and provide a forum for exchange of challenges and best practices. Further opportunities for NCD

“At present there is a worldwide focus on COVID-19 and it may be a crucial time to again bring back the focus on the NCD agenda – especially given the impact COVID-19 has on patients living with NCDs.”

*Dr. Shadha Al-Raisi
Director of Non-communicable Diseases,
Ministry of Public Health, Oman*

“The investment case has not only shown the progress the KSA has made in NCD action over the past years, but has more importantly also highlighted key gaps and opportunities for improvement.”

*Dr. Shaker Alomary
Director-General of the General
Directorate for Health Programmes and
Chronic Disease, Ministry of Health,
Kingdom of Saudi Arabia*

action included addressing NCDs and COVID-19 together in recognition of their linkages; integrating NCDs in national strategies and sectoral action plans; receiving and developing technical guidance on NCD best practices; expanding efforts to advance the legislation process; increasing collaboration among the GCC countries; convening high-level meetings with engagement from relevant sectors and international organizations; and gaining support from international organizations to raise the NCD agenda at the national and regional levels to encourage engagement of all relevant stakeholders.

2 Application of investment cases

All focal points envisaged using the NCD investment cases as a communication and advocacy piece on a global, regional and national level. Interviewees felt that the investment case deliverables will help their departments raise awareness and support education on NCDs both within and outside of the MOH, particularly through mass media campaigns including social media messaging. Focal points also indicated the importance of these messages to mobilize high-level support among non-health sectors to promote and strengthen multisectoral coordination on NCDs. This will be particularly important as MOH representatives indicated the need for more ministries to be part of the country's NCM on NCDs. Indeed, the Minister of Health in Bahrain has already used the investment case to convene non-health stakeholders including the Ministries of Finance and Commerce through a special committee to follow up on investment case recommendations. As alternatives or alongside NCMs for NCDs, focal points highlighted the possibility of investment cases influencing the formation of NCD-related committees, such as those in Qatar around diabetes (e.g. the National Diabetes Committee).

In addition to raising awareness, focal points mentioned how the investment case reports would assist their ministries in prioritizing NCD interventions and in accelerating the passage of NCD legislation. For example, the UAE would like to use the investment case to advocate for legislation around food labelling and bans of marketing of unhealthy foods and tobacco. They also mentioned that their ministry would integrate NCD prevention and control measures modelled under the investment case including the WHO-recommended NCD 'best buys' to increase efforts on smoking prevention, salt reduction, physical activity and access to a healthy diet within their national NCD strategy and health sector plan. In Kuwait, the investment case was already instrumental in prioritizing interventions while updating the country's national NCD strategy 2020-2025.

"A main challenge in NCD action has been to sensitise leaders from different sectors to prioritise NCD prevention and control. The investment cases can help clarify to all stakeholders, not just those related to health, that there is an evidence-based need for multisectoral action on prevention and control of NCDs."

*Dr. Kholoud Al-Motawaa
Head of Non Communicable Disease
Department, Ministry of Public Health,
Qatar*

In particular, the investment case can also help identify and accelerate action on key NCD priority areas across the region. One such priority area is obesity and weight management. Indeed, the Gulf region has one of the highest rates of obesity, which is of particularly high concern for the health of children, youth and women. A major factor driving rates of obesity in the Gulf region is the difficulty of living a healthy lifestyle due to the intense heat, availability of unhealthy foods, and societal norms. In addition, women face social taboos that can discourage them from staying physically active. Investment cases were noted as a tool to influence more NCD research studies and innovation, especially on physical activity and obesity (notably in children).

Key priorities moving forward and opportunities for collaboration

Focal points identified priority areas for NCD action revealed by the investment case process. These can be summarized in three main areas:

- **Strengthen involvement of non-health sectors**
- **Advance legislative action on NCDs**
- **Increase collaboration and coordination to conduct research and share best practices**

Strengthening the involvement of non-health sectors was a common priority area for NCD action across GCC countries. This involves raising NCDs on national, regional and international agendas, increasing engagement with non-health sectors, and updating action plans and strategies. Focal points also planned to heighten the sense of urgency to address NCDs during the COVID-19 pandemic. Indeed, Oman is planning to engage non-health stakeholders through raising awareness of the impact of the COVID-19 pandemic on NCDs, for example to provide more digital platforms for screening services in collaboration with the Ministry of Finance and regulatory authorities for telecommunication.

The second common priority area was to advance NCD legislation and strategy. Other mentioned aims included the drafting and passing of NCD legislation, identifying legal gaps, and conducting parliamentary capacity building. The focal points mentioned that the investment case will be used as an advocacy tool to support the passing of NCD legislation.

In addition to advancing advocacy, strategy and legislation, GCC countries aim to strengthen surveillance systems to monitor NCD risk factors and disease prevalence, as well as to track the impact of interventions. For example, the UAE and Oman aim to strengthen their surveillance systems of the four main NCDs and their risk factors in the country. To support GCC countries in these efforts, the GHC can coordinate a unified surveillance system across the six countries, including standardized NCD national surveys, to produce epidemiological data that can support strong policy measures. Additionally, focal points highlighted the need to benchmark progress and NCD epidemiology among GCC countries.

Overarchingly, focal points called for continued and strengthened collaboration with regional and external partners including the GHC and UN agencies. Sharing best practices and conducting training as a regional block would allow for an efficient and collaborative approach to NCD prevention and control. Furthermore, involvement of the GHC and UN can help catalyse the importance of NCD messaging in non-health sectors. In terms of collaboration with the UN system, focal points expressed a desire for technical support, capacity building and the use of digital tools. For example, Bahrain expressed interest in a collaboration on health taxes for NCDs, including support on planning and regional involvement. The

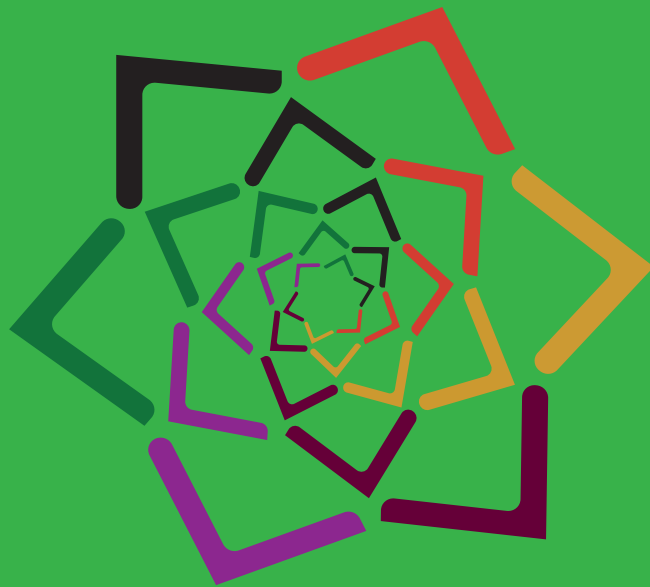
KSA would like to see even more user friendly material developed for the investment cases, such as short videos, a dashboard or sector-specific advocacy briefs. Moreover, follow-up investment cases, analyses and health tax models can be conducted to strengthen the evidence-base of the GCC countries and better understand the extent of the impact of the COVID-19 pandemic on NCDs in this region. During interviews, collaboration with NGOs was mentioned as an important avenue to support the NCD agenda. It seems evident that policy leaders not only need to prioritize NCDs, but leaders from NGOs, media, academia, government sectors and other national and international stakeholders need to advocate for and implement interventions and campaigns to combat NCDs.

“Developing the investment case together with the multisectoral national committee for NCDs and associated committees actively involved all stakeholders and sectors. By efficiently engaging non-health stakeholders, the project has been leading to more multi-sectoral policies.”

*Dr. Ameera Al-Nooh
Head of NCD Group, Public Health
Directorate, Ministry of Health,
Kingdom of Bahrain*

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5

DISCUSSION



ANALYZING THE FINDINGS

Health and economic burden of NCDs among GCC countries

As in many parts of the world, NCDs among GCC countries are causing a surge in costs expended by governments to provide healthcare, early retirement benefits, social care and welfare support. This impedes efforts to strengthen human capital, inclusive economic growth and fiscal balance. Synthesis of the investment case findings across the GCC countries reveal that Saudi Arabia, Kuwait, Oman, Bahrain, the United Arab Emirates and Qatar together lose nearly 43,000 lives every year due to the four major NCDs (CVD, diabetes, cancer and CRD), amounting to over 46 percent of all deaths. Moreover, US\$ 50 billion is lost every year due to expenses to treat NCDs and productivity losses when people exit the workforce due to illness or work at reduced productivity.

Each GCC country faces a similar health and economic burden due to NCDs: the four major NCDs account for between 41 percent of all deaths in Saudi Arabia and 65 percent of all deaths in Kuwait. Economic losses range from 2.7 percent of GDP in the United Arab Emirates and Qatar to 3.9 percent of GDP in Kuwait. Differences between countries examined are mainly due to economic factors including per capita GDP which is used to calculate the economic loss due to people exiting the workforce or working at reduced productivity.

Of the four major NCDs, CVDs account for most of the deaths each year. Of the 43,000 lives lost each year, CVDs account for nearly 32,000, or 74 percent of all deaths. This highlights the need to address comprehensively the main behavioural, environmental and metabolic risk factors that contribute to NCDs and poor health.

Health and economic benefits of investing in NCD prevention and control

The investment cases show that scaling up three WHO-recommended behavioural intervention & policy packages and one clinical intervention package targeting diabetes and CVDs across the region would – over 15 years – avert 290,000 premature deaths before the age of 70, adding US\$ 49 billion to the GCC countries' economic output through labour productivity gains. This does not include savings in direct health expenditures. Investing in scaling-up the modelled intervention packages would avert more than 270,000 stroke events and more than 210,000 ischemic heart disease events and result in substantial savings within the healthcare system.

Costs of investing in NCD prevention and control

The costs of fully implementing the four intervention packages amount to US\$ 14 billion over 15 years, ranging from US\$ 666 million in Oman to US\$ 7.2 billion in Saudi Arabia, with an average required investment of US\$ 16 per capita per year across the GCC countries. To cover these costs Saudi Arabia would need to increase its total health expenditure by 1.2 percent, and Oman by 2.6 percent. Qatar, Kuwait and the UAE lie within this range of

expenditure increase with Bahrain requiring more investment compared to the other countries at 4.6 percent increase of total health expenditure.

Nevertheless, even in the country with the highest investment requirement, this amounts to an additional investment of only US\$ 39 per capita in Bahrain. Preliminary estimates resulting from a model piloted for Bahrain indicate that an increase of 30 percent for tobacco retail prices would generate an additional 134 million Bahraini Dinar (BD) in government revenue over five years. This would provide nearly three times the required revenue to cover the costs of implementing the cost-effective interventions modelled in the investment case over five years (BD 58 million), leaving significant revenues still available for other efforts.

“The investment case has helped identify priority areas for actions and efficiently engage non-health stakeholders in a multidisciplinary network for NCD prevention and control in the KSA. Further products, including advanced stakeholder analysis, sector-specific advocacy materials, action plans to implement the recommendations or benchmarking of best practices from other countries would further strengthen the impact of the investment case.”

*Dr. Shaker Alomary
Director-General of the General
Directorate for Health Programmes and
Chronic Disease, Ministry of Health,
Kingdom of Saudi Arabia*

Health taxes are therefore not only highly effective at reducing consumption of health-harming products including tobacco, sugar-sweetened beverages, fossil fuels, fast foods, and alcohol, but can also generate significant revenue that can have positive effects on improving health-system sustainability if reinvested in NCD prevention and control. Case studies show that populations are generally supportive of tax increases on health-harming products if they are made aware of the purposes and where the revenue will be reinvested, especially if that is within the health and other social sectors.

Returns on investment to NCD prevention and control

The investment case shows that investments in the NCD prevention and control measures modelled result in high returns in the short- and long-term, ranging from 273 percent in Bahrain to 904 percent in Qatar over 15 years, with an average return of 493 percent across the GCC countries. The salt and tobacco consumption reduction measures result in the highest returns on investment (ROIs) across all intervention packages, due to their high effectiveness at reducing NCD mortality and morbidity and low costs of implementation. While campaigns and brief advice by physicians to address physical inactivity and the package of clinical interventions have lower ROIs, they are necessary to support the population's right to health and to avoid a significant amount of premature mortality and morbidity.

Scaling-up NCD prevention and control in GCC countries

Results from key informant stakeholder interviews among the ministries of health from GCC investment case project countries suggest that the investment cases have already aided in prioritizing NCD interventions within health sectoral strategies, and in raising awareness within the MOH and within others sectors, thereby mobilizing whole-of-government support. Interviewees nevertheless cited the need for further advocacy targeting specific sectors, as well as the public to overcome challenges of low awareness weakening high-level sectoral commitment. They requested assistance with generating new and novel advocacy materials stemming from the investment cases themselves (e.g. video-clips and sectoral briefs) together with support in designing awareness campaigns with different target audiences (e.g. parliamentarians, youth).

Support was also requested in establishing the necessary networks to facilitate whole-of-government and whole-of-society action. This includes assisting with 1) convening high-level bi-lateral meetings to sensitize different government sectors and identify sectoral actions that are of priority, 2) building capacity within the health and other sectors through technical trainings, 3) including NCDs in regional and international fora, and 4) strengthening multisectoral engagement through NCMs for NCDs.

Ministry of Health representatives also cited the lack of progress on NCD legislative action as a barrier, along with the need for increased regional collaboration to share best practices and agree on legal decisions that are taken within the GCC as a regional block (e.g. taxes on health-harming products). In addition, interviewees cited the need for capacity building, targeted advocacy support, and support in building the evidence base for legislative action on NCDs. Increased regional collaboration was a common theme identified among all MOH representative interviews, including conducting additional research on the economics of NCDs, as well as the broader social, economic, and environmental determinants of health (e.g. contributions of food systems, subsidies, and poverty with NCDs).

The need to increase understanding of the nexus between COVID-19 and other co-morbidities with NCDs was cited frequently, as well as the need to unify different surveillance and health information systems within countries while establishing a single database at the regional level in order to allow GCC countries to share data and trends. This need for increased collaboration around data collection and sharing was often cited along with the need for benchmarking of health systems and identification of best practices among GCC as well as other countries.

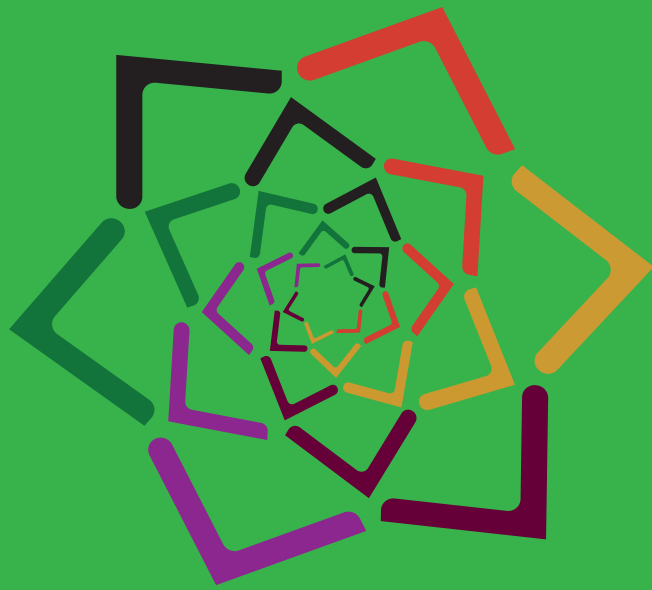
“Both the Gulf Health Council and United Nations play a critical role in raising awareness. Convening high-level meetings with international organisations will support multisectoral engagement, particularly if these focus on the synergistic effect between COVID-19 and NCDs.”

Dr. Shadha Al-Raisi

Director of Non-communicable Diseases, Ministry of Public Health, Oman

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WAY FORWARD



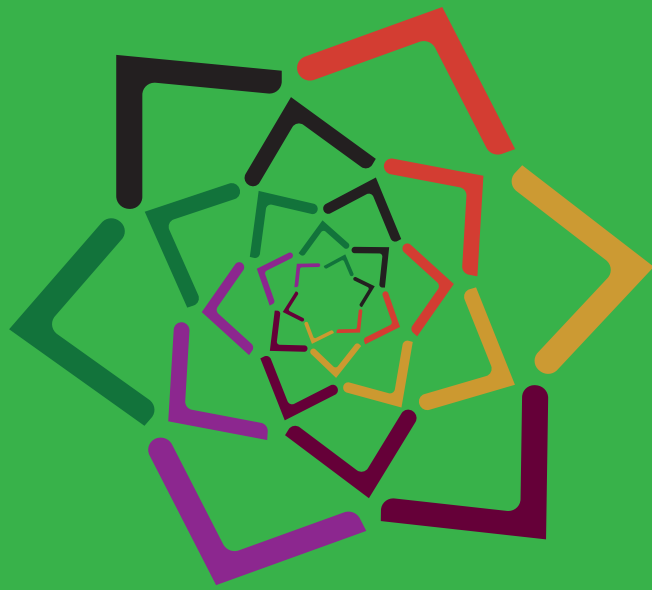
WAY FORWARD

The interview findings described above are summarized in the following table outlining key priorities mentioned by focal points and captured by the NCD investment cases as well as UNIATF Joint Mission reports. The table also outlines possible action and outputs that the GCC countries could collaborate on with international and regional partners, including the UN system (WHO, UNDP, and beyond) and the Gulf Health Council. Priorities and outputs were thematically grouped into three key areas of 1) increasing non-health sector roles in addressing NCDs, 2) advancing NCD legislative action, and 3) increasing regional and international collaboration around NCDs.

Table 1: Summary of priority actions mentioned by Ministry of Health focal points

AREA 1: Work with regional and international partners to strengthen non-health sector roles in addressing NCDs.		
Expressed priorities	Outputs or activities	Target countries
1.1 Raise NCDs on the agenda of international and regional fora	Annual high-level NCD meetings of the GCC countries with non-health government sectors present, convened by the GHC.	All GCC countries collectively
	High-level global and regional forums on NCD-related topics such as obesity and diabetes are used as opportunities to showcase the NCD investment cases and increase NCD awareness.	All GCC countries collectively
1.2 Increase multisectoral coordination and engagement with non-health sectors through NCMs	Review national NCD governance mechanisms and agree on roadmaps (e.g. strengthening NCMs, establishing NCD-related subcommittees). Implement roadmaps with technical support.	Each GCC country individually
	Research on the social, economic and environmental determinants of health and recommendations made for scaling up sectoral support in key areas (e.g. food systems, education, fiscal policy, the built environment).	Each GCC country individually and the region as an economic block
	Bi-lateral meetings conducted to sensitize non-health sectors leading to increased representation on NCMs.	Qatar, Oman and other GCC countries as needed
	Quarterly meetings of NCD NCMs with increased engagement by non-health sectors.	Each GCC country individually
1.3 Raise importance and awareness of NCDs at the national level	Technical support to integrate NCDs, their risk factors and 'best buys' into national and sectoral action plans and strategies, as well as national development agendas, UN cooperation frameworks and high-level political commitments.	Each GCC country where this is a priority including UAE, Qatar, KSA
	New advocacy products (e.g. video clips, summary articles, sector-specific advocacy) for media campaigns and targeted advocacy to raise NCD awareness among the public as well as key governmental and non-governmental stakeholders that engage civil society organizations and local communities (especially on weight management and obesity as this is a key issue).	Each GCC country individually

AREA 2: Advance legislative action on NCDs through legal analysis, regional cooperation, and targeted advocacy and support.		
Expressed priorities	Outputs or activities	Target countries
2.1 Use the investment case and additional evidence to advocate for NCD legislation	Convening of lawmakers to advocate for implementing and/or improving and enforcing legislation for NCD prevention and control (e.g. UAE - legislation around food labelling and bans of marketing of unhealthy foods and tobacco).	Each GCC country individually
2.2 Identify legal gaps and implementation obstacles through legal environment analyses (LEAs)	Completion of an LEA in each of the GCC countries.	Each GCC country individually
2.3 Conduct parliamentary capacity building to advance the legislative process	An annual parliamentary workshop is held with all GCC countries linked with Tobacco Control Parliamentary Caucus.	All GCC countries collectively
	Country-specific follow-up technical support to parliamentarians.	Each GCC country individually
AREA 3: Increase collaboration among GCC countries through the GHC and with UN partners to conduct research and share best practices		
Expressed priorities	Outputs or activities	Target countries
3.1 Build the evidence-base through follow up investment cases and health tax modelling	Follow-up investment cases and modelling in the areas of nutrition, road traffic injuries, mental health, health taxes and air pollution. Additional in-depth analyses and remodelling for the NCD investment cases with new data.	Based on demand
3.2 Increase understanding of the contributions of COVID-19 pandemic and co-morbidities, pandemic preparedness and response	Technical support on addressing NCDs, COVID-19 and other comorbidities together.	Each GCC country individually
3.3 Benchmark health systems and share best practices from the region and globally	GCC country progress in NCD prevention and control measures is analysed, compared and shared among the six countries. Focus on best-buys, best practices, and shifting towards PHC and service integration.	All GCC countries collectively
	Quarterly thematic meetings established through the GHC to share best practices.	All GCC countries collectively
	Data-base established to record progress on NCD-related targets and indicators and share best practices, including on emerging challenges such as novel tobacco products.	All GCC countries collectively
3.4 Technical support for strengthening NCD surveillance and early diagnosis	Technical support to GCC countries where necessary to establish unified health information and surveillance systems.	UAE, Oman, Qatar and other GCC countries as needed
	Technical guidance for approaches to early NCD diagnosis (e.g. cancer screening programmes).	Bahrain, and other GCC countries as needed
	Technical guidance for integrating technology for NCD prevention and control.	Oman, Bahrain, and other GCC countries as needed



ANNEXES



ANNEX I: MATRIX OF GCC COUNTRIES AND IMPLEMENTATION STATUS OF ‘BEST BUYS’ AND OTHER RECOMMENDED INTERVENTIONS

The WHO has developed a comprehensive list of ‘best buys’ and other recommended interventions to reduce tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity and also to manage CVD, diabetes, cancer and CRD.⁹ The following matrix outlines the status of implementation in the six GCC countries of WHO recommended interventions that were modelled or discussed in the GHC NCD investment cases.

The list of interventions below include ‘best buys’ which are effective interventions with a cost-benefit ratio of \leq I\$ 100 per disability-adjusted life year (DALY) averted in low- and middle-income countries (LMICs) (in red); effective interventions with cost effectiveness analysis $>$ I\$ 100 per DALY averted in LMICs (in blue); other WHO- recommended interventions (in green); and those not among the WHO ‘best buys’ and other recommended interventions,¹⁰ but which are necessary to effectively implement the intervention package (in yellow).

Intervention color code	Implementation status color code ¹¹
\leq I\$ 100 per DALY averted in LMICs (Best buys)	Fully implemented – intervention is adequately implemented and enforced
$>$ I\$ 100 per DALY averted in LMICs	Partially implemented – at least one aspect is implemented and/or there is action to implement, but the intervention is not entirely implemented
Effective, cost-effective analysis not available	Not implemented – no portion of the intervention has been implemented
Not among 'best buys' but are necessary to effectively implement other interventions	

9 WHO (2017). ‘Best buys’ and other recommended interventions for the prevention and control of noncommunicable diseases: Tackling NCDs. Available at <https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y>

10 *ibid*

11 The level of implementation was based on the situation analysis section of the NCD investment case reports – “Implementation status of measures modelled under the investment case”, referring to the “WHO report on the global tobacco epidemic 2021: addressing new and emerging products” available at <https://www.who.int/teams/health-promotion/tobacco-control/global-tobacco-report-2021>, and the “Noncommunicable Diseases Progress Monitor 2020” available at <https://www.who.int/publications/i/item/ncd-progress-monitor-2020> for criteria and additional information.

Tobacco	Bahrain	Oman	Kuwait	UAE	KSA	Qatar
Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport						
Implement large graphic health warnings on all tobacco packages						
Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second hand smoke						
Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship						
Increase excise taxes and prices on tobacco products (expressed as percent of the most sold brand of cigarettes, the WHO-recommended level is 75%)* <i>*Displayed are the 2020 tax rates from WHO report on the global tobacco epidemic 2021: addressing new and emerging products – Annex 9.1 Taxes and retail price for a pack of 20 cigarettes most sold brand and as such, may not correspond directly to the implementation status during development of the investment cases.</i>	72.15%	72.59%	18.91%	72.59%	73.84%	68.18%
Implement plain/standardized packaging						
Provide cost-covered, effective and population-wide support (brief advice) for tobacco cessation to all those who want to quit	*	*			*	
Provide cost-covered, effective and population-wide support (national toll-free quit line services) for tobacco cessation to all those who want to quit		Not available				
Monitor tobacco use and prevention						
Enforce youth access restriction						
Unhealthy diet						
Reduce salt intake through the reformulation of food products to contain less salt and the setting of target levels for the amount of salt in foods and meals						
Reduce salt intake through the implementation of front-of-pack labelling						
Reduce salt intake through a behaviour change communication and mass media campaign						
Reduce salt intake through the establishment of a supportive environment in public institutions such as hospitals, schools, workplaces and nursing homes, to enable lower sodium options to be provided	Not available					Not available
Eliminate industrial trans-fats through the development of legislation to ban their use in the food chain	*	*	*	*	*	*
Reduce sugar consumption through effective taxation on sugar-sweetened beverages	*	*	*	*	*	*
Surveillance (unhealthy diets / salt)						
Adopt standards: strategies to combat misleading marketing						

Physical inactivity						
Implement community wide public education and awareness campaign for physical activity which includes a mass media campaign combined with other community-based education, motivational and environmental programmes aimed at supporting behavioural change of physical activity levels						
Provide physical activity counselling and referral as part of routine primary health care services through the use of a brief intervention				Not available		
CVD and diabetes						
Drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total risk approach) and counselling to individuals who have had a heart attack or stroke and to persons with high risk ($\geq 30\%$) of a fatal and non-fatal cardiovascular event in the next 10 years						
Treatment of new cases of acute myocardial infarction with either: acetylsalicylic acid, or acetylsalicylic acid and clopidogrel, or thrombolysis, or primary percutaneous coronary interventions						
Treatment of acute ischemic stroke with intravenous thrombolytic therapy (treatment for those with established cerebrovascular disease and post-stroke)						
Screening for risk of cardiovascular diseases and diabetes						
Treatment of cases with established ischaemic heart disease and post-myocardial infarction	Not available	Not available				
Managing diabetes						
Effective glycaemic control for people with diabetes, along with standard home glucose monitoring for people treated with insulin to reduce diabetes complications						
Diabetic retinopathy screening for all diabetes patients and laser photocoagulation for prevention of blindness						
Preventive foot care for people with diabetes (including educational programmes, access to appropriate footwear, multidisciplinary clinics)						

N/A = not included in situation analysis of the investment case report

*Intervention not modelled in the investment case

ANNEX II: OVERVIEW OF INVESTMENT CASE RECOMMENDATIONS

Investment case recommendations centred around five themes of 1) invest and scale up, 2) engage and collaborate, 3) monitor and account, 4) innovate and 5) build back better. Recommendations included in the investment case reports are tailored to each country, but there are clear overlaps given the similar geographic and political contexts of these countries, which provides the opportunity for significant regional cooperation. The following provides an overview of investment case recommendations across GCC countries.

Invest and scale up

It is recommended for all six countries to invest in new and scale up current cost-effective clinical and population-based interventions.

- **Invest in scaling-up WHO-recommended ‘best-buys’.** For all six countries, all intervention packages – tobacco control, salt reduction, physical inactivity, and CVD and diabetes clinical interventions – generated positive ROIs in both the short (5 years) and long term (15 years). Out of the three prevention-focused intervention packages, the salt reduction package provided the greatest ROI, followed by tobacco control and physical inactivity intervention packages. (**Annex 1** includes a summary of the implementation statuses of ‘best buys’ across the six GCC countries).
- **Extend efforts in salt reduction.** All six countries have enacted several policies already in this area. Countries have excelled in efforts to reformulate popular foods to contain less sodium – primarily bread. Qatar has reached their bread salt reduction goal, while other countries have set targets and initiatives to achieve similar reductions. Still, further action is needed to reap the economic and health benefits of this intervention package. For instance, Kuwait, Qatar and Oman can implement front-of-pack labelling (FOP), following the process in Bahrain to adopt FOP labelling as part of their pilot diet surveillance project, or use a traffic light labelling system similar to those in place in Saudi Arabia and the United Arab Emirates.
- **Invest and scale up tobacco control measures,** such as monitoring of tobacco use and prevention, smoke free policies, tobacco cessation support, warning labels, mass media campaigns, comprehensive bans on tobacco advertising, promotion and sponsorship (TAPS), youth access restriction, tobacco tax increases and plain packaging. Not only should implementation of these measures be carried out, but importantly enforcement as well. The following measures are of particular interest for the GCC countries:
 - » **Smoke-free policies.** Across the GCC, this measure is only somewhat implemented. While there are bans on smoking in many public spaces across the Gulf region, there are designated smoking areas and some countries, such as Qatar and Kuwait, which allow smoking in indoor places such as restaurants and workplaces.
 - » **Warning labels.** Only Saudi Arabia has fully implemented warning labels on tobacco packages.

- » **Mass media campaigns.** Bahrain implemented a national mass media campaign on television and radio and Qatar launched a national anti-tobacco campaign. GCC countries can expand upon these examples by integrating social media messaging and utilizing the investment case advocacy strategy.
- » **Comprehensive TAPS ban.** Bahrain, Oman, Kuwait, Qatar and the United Arab Emirates can follow the example of Saudi Arabia and strengthen restrictions on TAPS. In addition, all countries can ensure a comprehensive TAPS ban that includes e-cigarettes and other novel products.
- » **Ensure tobacco taxation aligns with WHO recommendations.** All countries should ensure tobacco taxation aligns with the WHO-recommended 75 percent of the retail price of the most sold brand of cigarettes with an excise tax component of at least 70 percent, especially in Kuwait where tobacco taxation is among the lowest among the GCC members.
- » **Implement plain packaging of tobacco products.** Bahrain, Oman, Kuwait, Qatar and the United Arab Emirates can follow the example of Saudi Arabia and implement plain packaging of tobacco products.

Engage and collaborate

- **Strengthen national multisectoral coordination.** Across the GCC countries, a whole-of-government and whole-of-society approach is needed for effective prevention and control of NCDs and their risk factors. This means integrating more non-health sectors and strengthening relationships within the NCM on NCDs. Qatar can follow the example of the other GCC countries and establish an NCM for NCDs with high-level participation. Notably, ensuring accountability and transparency within multisectoral coordination among sectors is key to block points of entry for industry interference in policymaking.
- **Integrate NCDs into national and sectoral plans and strategies.** National development agendas should highlight the importance of addressing NCDs and their risk factors; non-health sectors should integrate NCD-relevant activities and targets into their sectoral plans and strategies. Where relevant, UN cooperation frameworks should also include NCDs and their risk factors.
- **Raise awareness.** The six countries can also increase media campaigns and advocacy measures to spread awareness of NCD risk factors and prevalence among the public as well as key governmental and non-governmental stakeholders. As mentioned in interviews with country focal points, the investment cases will help countries to achieve key priorities on NCD awareness.
- **Engage with international and regional partners.** The GHC serves as a great way to coordinate among countries to share best practices surrounding NCDs (notably combatting undue industry influence), implementation and benchmarking of NCD measures, surveillance of NCD risk factors and prevalence, and allocation of the NCD budget. The GHC is also an ideal unit to coordinate support from the UN – increasing efficiency in allocation of UN support across the six countries.

- **Integrate NCDs into high-level agendas.** The GCC countries can integrate NCD measures into strategies and high-level political commitments. Given the strong policy measures on salt reduction in Kuwait, the Government of Kuwait can offer support to the United Arab Emirates and the GHC as a whole in efforts to reduce salt consumption. Bahrain's successful monitoring system sets a good example for Oman and the other GCC countries. The system in Bahrain analyses samples from bakeries for salt and fat content, as well as nutrition labelling, which will be expanded to include the 200 most consumed products.

Monitor and account

GCC countries should continue and expand efforts to monitor the entire population for NCDs and their risk factors, including foreign residents.

- **Each GCC country should update nationwide surveys,** such as the STEPS survey, and youth and adult tobacco surveys on a routine basis. The WHO recommends conducting the STEPS survey every 3 to 5 years.¹²
- **Prevalence and incidence of NCDs and their risk factors, NCD policies and campaigns should also be continually monitored, evaluated for effectiveness, and assessed for achievement of targets and outcomes.** GCC countries can follow the example of the United Arab Emirates and set national key performance indicators in their national agendas and Qatar can monitor progress of the bread salt reduction initiative to reach designated targets.
- **All six GCC countries can monitor taxation of health-harming products.** The recommended tax increases on tobacco, alcohol, and SSBs can be monitored for impacts on consumption patterns and tax revenue.

Innovate

All six countries can use innovative solutions to increase utilization of existing services and incentivize healthy behaviour. Four main areas of innovation include:

- **Urban planning:** innovation through urban planning can help mitigate heat-related challenges to outdoor exercise, staying active and access to healthy foods. The GCC countries can look to Bahrain and the United Arab Emirates examples of "built environment measures" to incentivize an active lifestyle. Khalifa Town in Bahrain utilizes wide streets and green spaces to promote physical activity. Masdar City and the Sustainable City in the United Arab Emirates were developed using a sustainable approach. In addition, Bahrain, Oman, Kuwait and Saudi Arabia are home to WHO-certified "Healthy Cities".
- **Improve air quality:** to improve air quality, the GCC countries can implement measures to encourage the use of public transport, such as the GCC high-speed rail link project and promote investment in renewable energy sources such as wind and solar.
- **Promotion of healthy food choices:** the investment case reports of all six countries included a robust annex with a menu of options of behavioural nudges towards healthy dietary choices in various settings including grocery stores, restaurants and schools, as well as reformulating foods to reduce sugar, trans-fat and salt. For example, schools in

12 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4695948/>

GCC countries can ensure responsible food marketing towards children that encourages healthy food choices such as fruits and vegetables and discourages consumption of unhealthy items.

- **Increase availability and access to healthy foods:** regarding the food environment, addressing access and availability for healthy food is key to a holistic approach to health. The GCC countries should prioritize the agriculture sector to ensure not only food security, but also access to locally produced health-promoting foods. Countries can look to Oman whose Ministry of Agriculture and Ministry of Health are planning a project to produce carrot and papaya in North Batina to supply the school and local markets.
- **Shape fiscal policies:** all GCC countries should increase taxes on health-harming products beyond tobacco, including SSBs and alcohol (in the countries where alcohol is consumed). While the GCC set an excise tax on carbonated beverages at 50 percent and energy drinks at 100 percent, WHO recommends an excise tax based on sugar content or volume, not price alone, which may encourage consumers to choose healthier beverages. GCC countries can also shift subsidies from health-harming food to health-promoting ones such as fruits and vegetables.

Build back better

The COVID-19 pandemic underscores the urgent need of effective NCD prevention and control measures. NCDs and their risk factors, to varying degrees, increase susceptibility to both COVID-19 infection and more severe outcomes. At the same time, impacts from the pandemic on health systems and prevention approaches threaten to stall progress on NCDs. People living with or at risk of NCDs face significant disruptions in access to prevention and treatment services for NCDs which calls for swift action to address the NCD-COVID-19 double pandemic.

GCC countries can build back better to ensure that prevention and control of NCDs is a central element of the COVID-19 response and recovery. This means ensuring NCDs and NCD health and development experts are represented on COVID-19 taskforces; integrating NCDs into the country's National COVID-19 Strategic Preparedness and Response Plan; optimizing regional and global coordination and information sharing on the nexus of NCDs and COVID-19; and using the NCD sectoral briefs developed by UNDP, WHO and UNIATF to analyse how COVID-19 response and recovery can be sensitive to NCDs and to further integrate NCDs into longer-term efforts to realize the SDGs.

“The NCD investment case can accelerate food legislation and FCTC implementation, as well as enhance lifestyle modifications.”

Dr. Buthaina Bin Belaila

Head of Non-communicable Disease, Department of Public Health & Prevention, MOHAP UAE

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