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DUBAI



The return on
investment in NCDs
control in GCC



DR KHALIFA ELMUSHARAF

MBBS, PgCert, PgDip, FRSPH, FFPH, MRSTMH, IPMA[®]C, PhD

Associate Professor in Public Health

Director of Public Health Master Programme

University of Birmingham Dubai



Acknowledgment



مناطقة البحثين
وزارة الصحة
Ministry of Health



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وزارة الصحة ووقاية المجتمع
MINISTRY OF HEALTH & PREVENTION

مجلس الصحة
لحول مجلس التعاون
Gulf Health Council



UN INTERAGENCY
TASK FORCE ON NCDs
@un_ncd

World Health
Organization



حالات الاستثمار في في الأمراض غير السارية في دول مجلس التعاون الخليجي

النتائج الرئيسية العبء الحالي

يموت ما يقرب من 43 ألف شخص في دول مجلس التعاون الخليجي كل عام بسبب الأمراض غير السارية الرئيسية الأربعة، مما يساهم في 43% من إجمالي الوفيات في المنطقة.

43 ألف شخص

تكلف الأمراض غير السارية، اقتصادات دول مجلس التعاون الخليجي سنويًا أي ما يعادل 3.3% من الناتج المحلي الإجمالي في عام 2019.

50 مليار دولار

ومن بين هذه التكاليف، يتم إنفاق على علاج الأمراض غير السارية 20 مليار دولار هي زيادة الإنتاجية المفقودة.

30 مليار دولار

منع

أكثر من 290,000 حالة وفاة.

إضافة

ما يقرب من 2 مليون سنة حياة صحية لسكان دول مجلس التعاون الخليجي.

توفير

68.5 مليار دولار أي 1200 دولار للفرد.

فوائد الاستثمار

من خلال استثمار 14 مليار دولار على مدار 15 عامًا، يمكن لدول مجلس التعاون الخليجي:

عاجل | سلطات جيتومير الأوكرانية: القوات الروسية قصفت المدينة بالمسيرات وتنعاني مشاكل في

اقتصاد | دول الخليج العربي

4 أمراض كلفت اقتصاد دول الخليج 50 مليار دولار



«صحية» الشورى تستضيف الوفد المشترك لدول الخليج لدراسة مكافحة الأمراض غير المعدية بالسلطنة



استضافت اللجنة الصحية والبيئية بمجلس الشورى الوفد المشترك الممثل لمجلس الصحة لدول مجلس التعاون لدول الخليج العربية، ومنظمة الصحة العالمية وبرنامج الأمم المتحدة الإنمائي لدراسة جدوى الاستثمار في مكافحة الأمراض المزمنة غير المعدية في دول مجلس التعاون الخليجي، والتكون من عدد من الخبراء الصحيين والباحثين من مجلس الصحة الخليجي وجامعة السلطان قابوس، ومن برنامج الأمم المتحدة الإنمائي بالكتب الاقليمي في إسطنبول، ومن جامعة ليمبرك بجمهورية إيرلندا ومن دائرة الأمراض المعدية بوزارة الصحة. جاء ذلك خلال اجتماع اللجنة الصحية والبيئية الذي عقد بمجلس الشورى، برئاسة سعاده هلال بن محمد الحارثي رئيس اللجنة الصحية والبيئية. حيث تم خلال اللقاء التعرف على أهداف ومبررات الدراسة التي يقوم بها الفريق البحثي المشترك، والتعريف بالمشكلة الصحية.

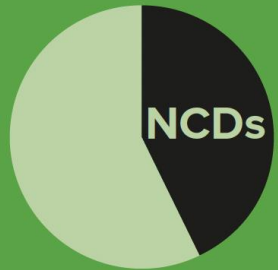
■ خلال اجتماع اللجنة الصحية بمجلس الشورى

مطلوب تعديل التشريعات والقوانين الخاصة بمكافحة مسببات تلك الأمراض

NCD investment cases in the GCC – key findings

BURDEN

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 GDP

IN 2019. OF THESE COSTS, US\$ 30 BILLION ARE SPENT TO TREAT NCDS AND US\$ 20 BILLION ARE LOST PRODUCTIVITY GAINS.

INVESTMENT BENEFITS

BY INVESTING US\$ 14 BILLION OVER 15 YEARS GCC COUNTRIES CAN:



PREVENT MORE THAN
290,000
DEATHS



ADD ALMOST
2 MILLION
HEALTHY LIFE-YEARS TO THE
POPULATION OF THE GCC



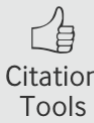
SAVE
US\$68.5 BILLION
OR US\$ 1,200 PER CAPITA



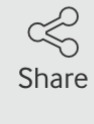
Article Text



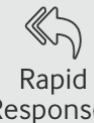
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Original research

The case for investing in the prevention and control of non-communicable diseases in the six countries of the Gulf Cooperation Council: an economic evaluation

Khalifa Elmusharaf ¹, Daniel Grafton ², Johanna S Jung ³, Emily Roberts ³, Yahya Al-Farsi ^{4, 5}, Ameera Ali Al Nooh ⁶, Buthaina Bin Belaila ⁷, Amin ElShamy ⁷, Hamoud Al-Zuabi ⁸, Kholood Ateeq Al Mutawa ⁹, Shadha Alraisi ¹⁰, Najla Al Lawat ¹⁰, Ali Gharbal ¹⁰, Shaker Alomary ¹¹, Alexey Kulikov ¹², Nasim Pourghazian ¹³, Slim Slama ¹⁴, Dudley Tarlton ¹⁵, Nicholas Banatvala ¹²

Correspondence to Dr Khalifa Elmusharaf; Khalifa_Elmusharaf@yahoo.com



PDF



PDF +
Supplementary
Material

Abstract

Background While the non-communicable disease (NCD) burden in the countries of the Gulf Cooperation Council (GCC) (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) has surged over the past decades, the costs and return on investment (ROI) of implementing cost-effective, WHO-recommended NCD interventions have not been established.

Methods We performed an economic analysis to estimate the ROI from scaling up four sets of NCD interventions over 15 years. We estimated the direct costs of the four main NCDs (cancer, diabetes, cardiovascular diseases and chronic respiratory diseases) using a prevalence-based, bottom-up cost-of-illness approach. We estimated indirect costs based on productivity loss due to absenteeism, presenteeism and premature deaths. We costed the scaling up of interventions using the WHO Costing Tool and

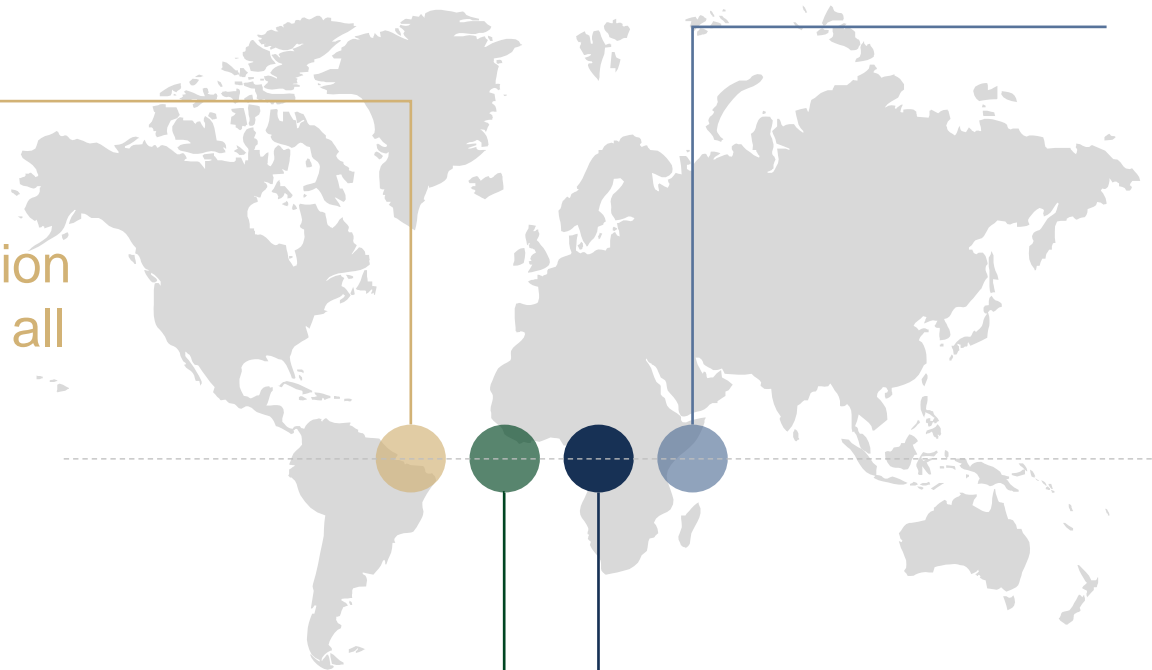
Scale of the NCD epidemic

70 %

NCDs account for 40 million deaths annually (70% of all global deaths)

USD 47 trillion

NCDs will cost USD 47 trillion from 2015-2030

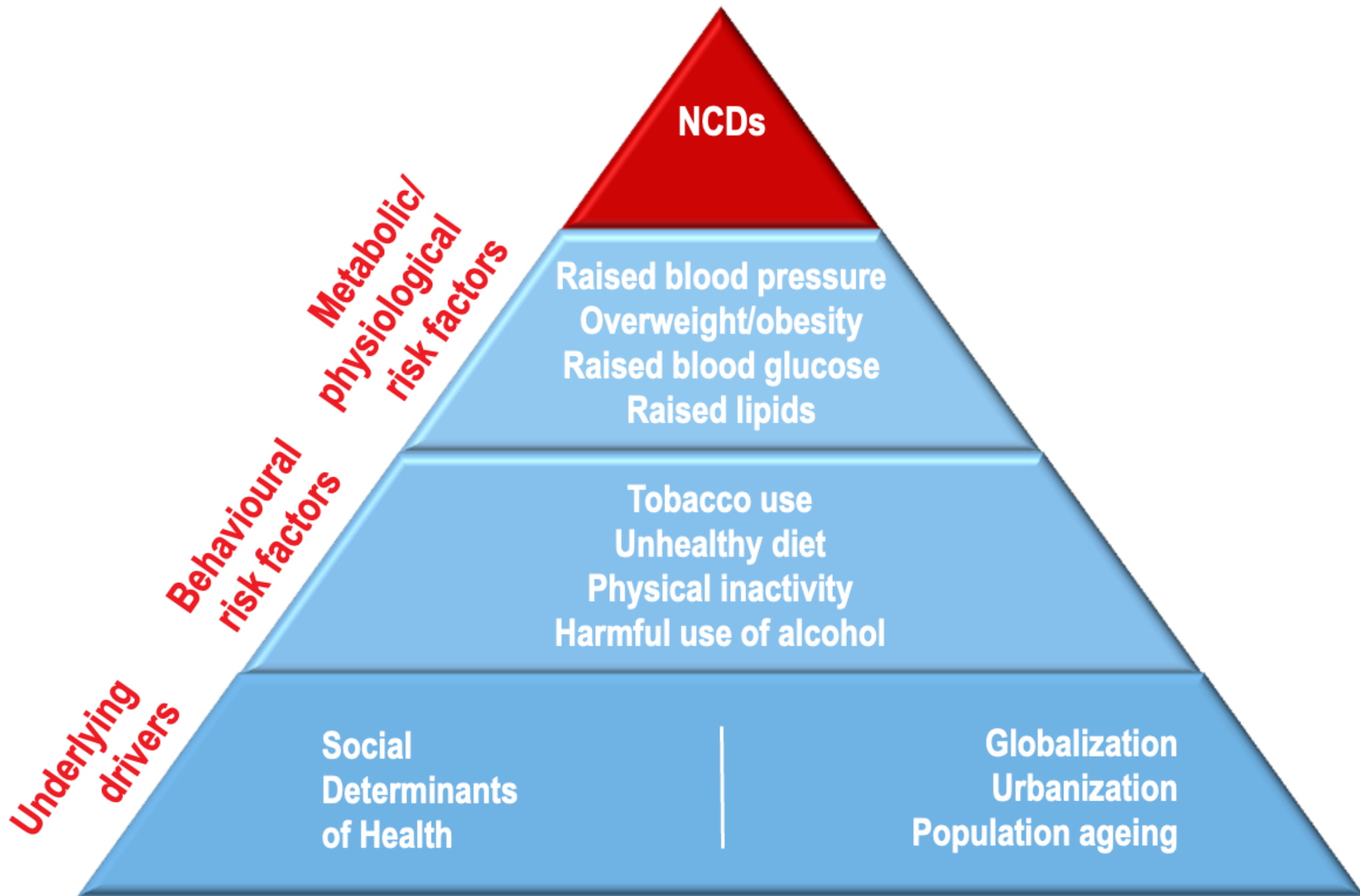


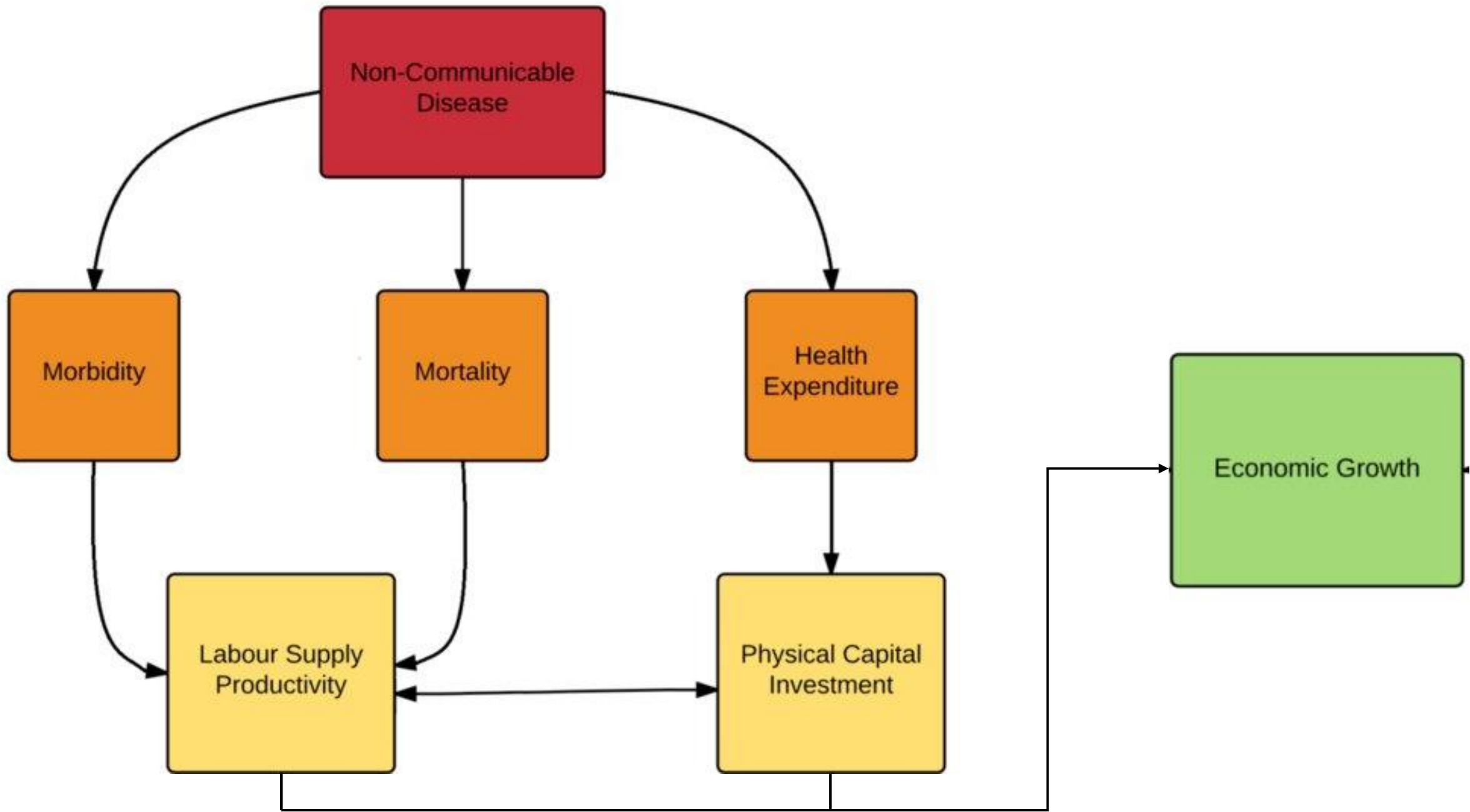
60%

NCDs account for 60% of the global disease burden

1.2%

Only 1.2% of total development assistance is spent on NCDs







Why invest in NCDs?

Visible part of disease burden

Direct cost
of NCDs

Invisible part of disease burden

Indirect costs
resulting from loss
of workforce and
reduced
productivity



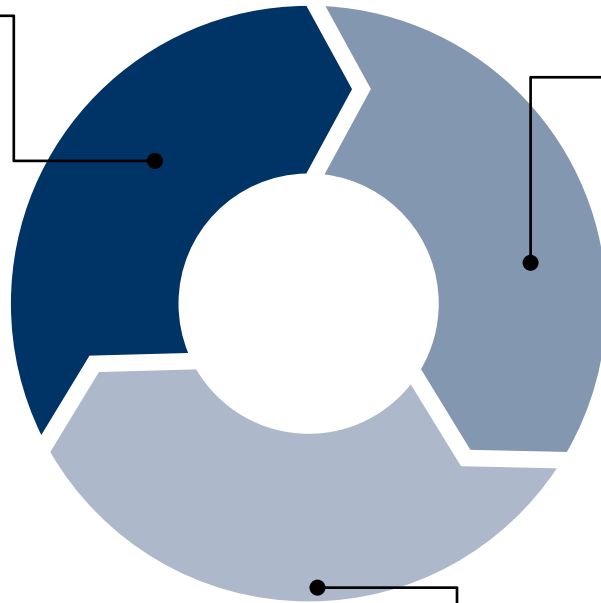
Reducing disease burden

Investing in suggested interventions
reduces disease burden and
generates return of investment
quickly

What is an NCD Investment Case?

WHAT?

A quantitative analysis of the economic advantages of investing in NCD prevention and control.



WHY?

Demonstrate that **implementing cost-effective policies will have substantial economic rewards** in upcoming years

WHO?

For the Ministry of Health to present to the Ministry of Finance. Can be used as an **advocacy piece** for policy makers.



Steps to NCD investment case modelling



World Health
Organization

Regional Office for the Eastern Mediterranean



#NCDs

UN INTERAGENCY
TASK FORCE ON NCDs



@un_ncd



UN
DP

The two components of an investment case

- **ECONOMIC MODELLING**

Quantify the burden and possible economic gain from interventions



INSTITUTIONAL CONTEXT ANALYSIS

Analyse stakeholders, resources and status quo in a country-specific context



Steps to NCD investment case economic modelling

1

Estimate economic burden of NCDs



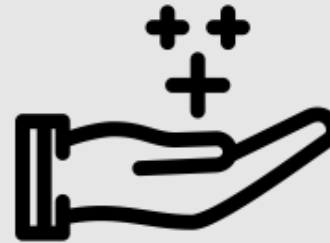
2

Estimate cost of interventions



3

Estimate impact of intervention



4

Quantify return on investment of intervention



1. Economic burden of NCDs



- Estimate economic burden of NCDs

Analyse the total costs of NCDs to society and economy

DIRECT COSTS

Health care expenditures:

- Government
- Private insurance
- Out-of-pocket



INDIRECT COSTS

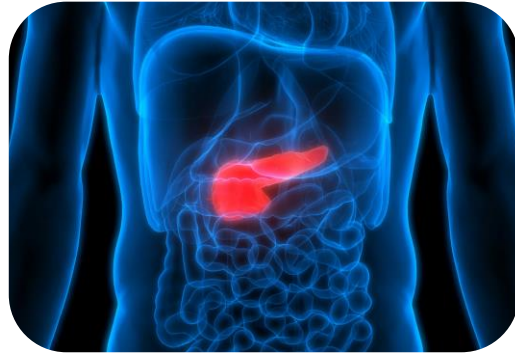
- Absenteeism (sick leave)
- Presenteeism (reduced productivity due to disease while at work)
- Premature death



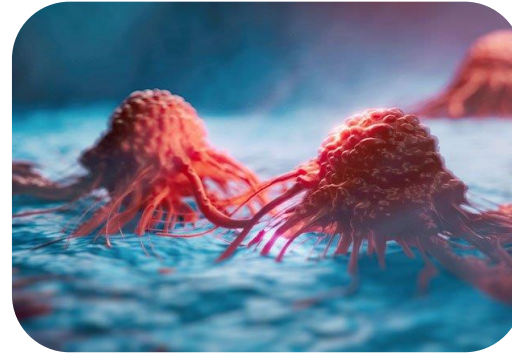
NCDs included in the investment case



CVDs



Diabetes



Cancer



CRD

2. Estimate cost of interventions



1. Tobacco



- Monitor**
Monitor tobacco use and prevention policies
- Protect**
Protect people from tobacco smoke
- Offer**
Offer help to quit
- Warn**
Warn about the dangers tobacco
- Enforce**
Enforce bans on tobacco advertising, promotion and sponsorship
- Raise**
Raise taxes on tobacco

2. Salt

- S SURVEILLANCE**
MEASURE AND MONITOR SALT USE
- H HARNESS INDUSTRY**
PROMOTE THE REFORMULATION OF FOODS AND MEALS TO CONTAIN LESS SALT
- A ADOPT STANDARDS FOR LABELLING AND MARKETING**
IMPLEMENT STANDARDS FOR EFFECTIVE AND ACCURATE LABELLING AND MARKETING OF FOOD
- K KNOWLEDGE**
EDUCATE AND COMMUNICATE TO EMPOWER INDIVIDUALS TO EAT LESS SALT
- E ENVIRONMENT**
SUPPORT SETTINGS TO PROMOTE HEALTHY EATING

3. Alcohol



4. Physical activity



5. CVD and DM interventions





M MONITOR

tobacco use and prevention policies



P PROTECT

people from tobacco smoke



O OFFER

help to quit tobacco use



W WARN

about the dangers of tobacco



E ENFORCE

bans on tobacco advertising, promotion and sponsorship



R RAISE

taxes on tobacco



SHAKE

THE SALT HABIT



S SURVEILLANCE

Measure and monitor salt use



H HARNESS INDUSTRY

Promote the reformulation of food to contain less salt



A ADOPT STANDARDS FOR LABELLING AND MARKETING

Implement standards for effective and accurate labelling and marketing of food



K KNOWLEDGE

Educate and communicate to empower individuals to eat less salt



E ENVIRONMENT

Support settings to promote healthy eating



A WORLD FREE FROM ALCOHOL RELATED HARMS

SAFER

Strengthen
restrictions
on alcohol
availability

Advance &
enforce drink
driving
counter
measures

Facilitate
access to
screening,
brief
interventions
& treatment

Enforce bans/
comprehensive
restrictions on
alcohol
advertising,
sponsorship &
promotion

Raise prices
on alcohol
through
excise taxes
& pricing
policies

SAFER





PHYSICAL ACTIVITY



Awareness campaigns

Implement community wide public education and awareness campaign for physical activity



Counselling at PHC

Offer brief advice as part of routine care and provide physical activity counselling and referral as part of routine primary health care services using a brief intervention



CLINICAL INTERVENTIONS



Screening & Treatment of CVD/diabetes at PHC

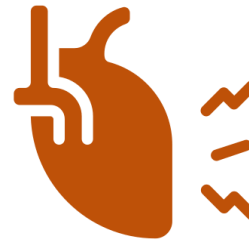
Screening for risk of CVD/diabetes
High cholesterol
High blood pressure
High absolute risk of CVD/diabetes
Acute myocardial infarction
Established ischaemic heart disease
Glycemic control
Retinopathy screening
Neuropathy screening

3. Estimate impact of intervention



**HEALTHY
LIFE-YEARS
GAINED**

**ACUTE IHD
AVERTED**



**LIVES
SAVED**

**STROKES
AVERTED**

**AVOIDED
ECONOMIC
LOSSES**

4. Estimate return on investment

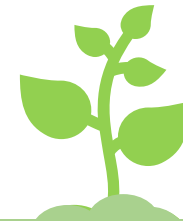


ROI

USD \$
COST



ROI



OVER 15-YEAR PERIOD
INCLUDING SOCIAL BENEFITS

USD \$ billion
BENEFIT

ROI



ROI

ROI



ROI



**Data
needed**



4. Estimate return on investment

Epidemiological Data

- Incidence of NCDs
- Prevalence of NCDs
- Prevalence of Risk factors
- Mortality of NCDs

Economic Data

- Health Expenditures
- Health services costs and utilization
- Labor force data

Costing Data

- Media and Communications Operating Costs
- Hospital Visits and Hospital-Stay Costs
- Personnel Salaries and Per Diem Costs
- Equipment Costs
- Cost of medicines and laboratory Tests

Coverage Data

- Tobacco control
- Alcohol control
- Salt reduction
- Diet and physical activities
- CVDs and DM interventions



FINDINGS

Key Findings: Burden

Sum across 6 GCC countries

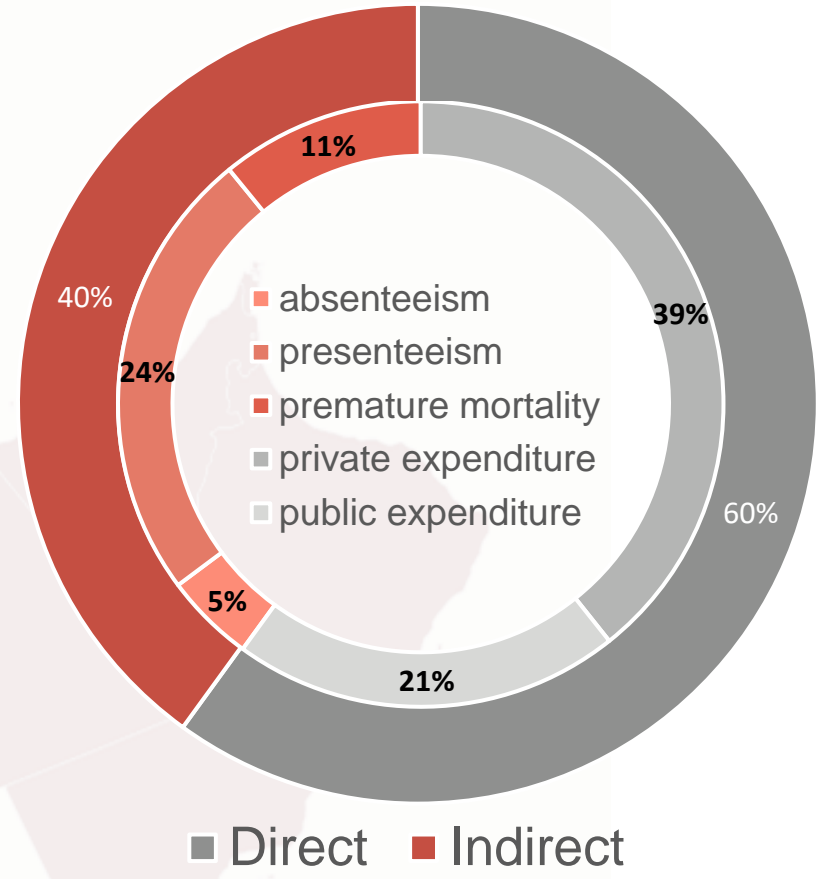


ANNUAL ECONOMIC BURDEN OF NCDs AMOUNTS TO NEARLY

USD 50 billion

3.3% of GDP

IS LOST ON AVERAGE



Direct & Indirect Costs

Sum across 6 countries

Visible part of 4 NCDs burden

USD 30 billion

Estimated direct cost of 4 NCDs

1.8 % of GDP

IS LOST ON AVERAGE
Due to direct cost of 4 NCDs
Range from 1.1 % to 2.2% of GDP

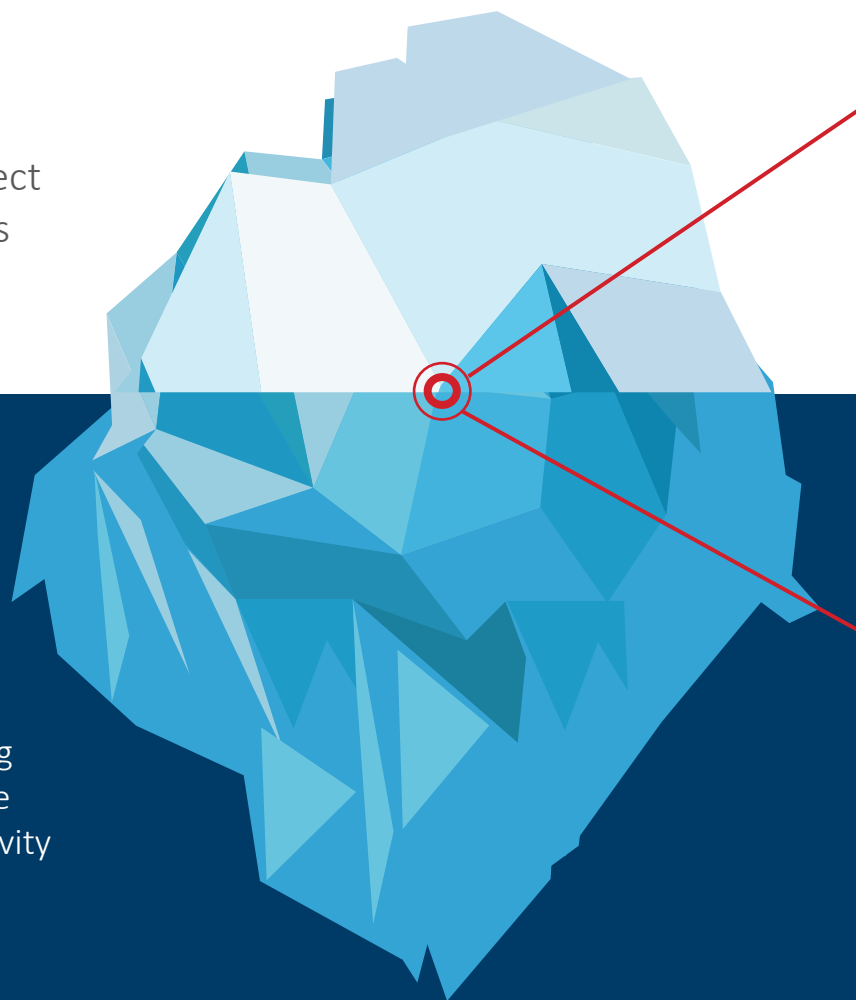
Invisible part of diabetes burden

USD 20 billion

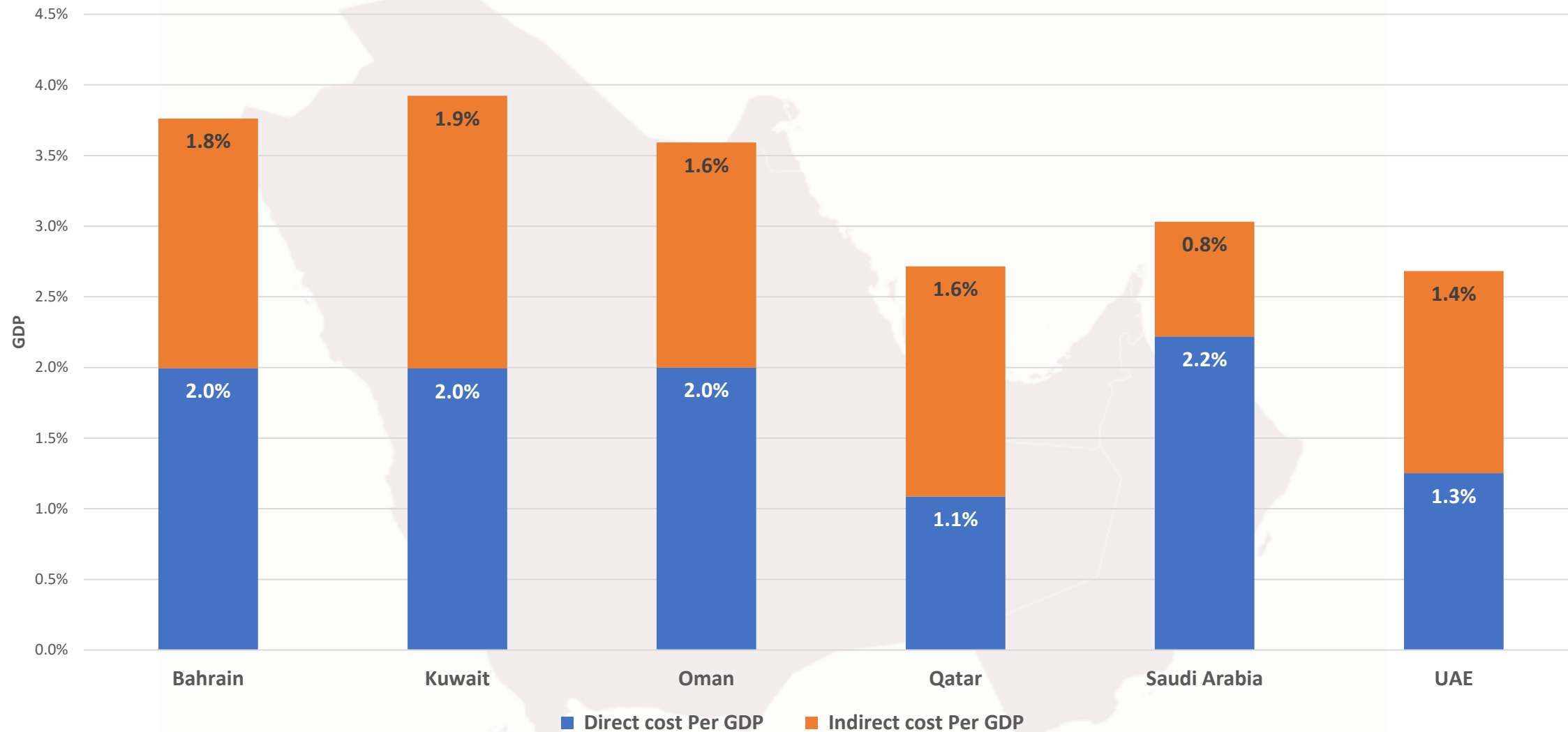
Indirect costs resulting from loss of workforce and reduced productivity

1.5 % of GDP

IS LOST ON AVERAGE
Due to Indirect costs
Range from 0.8 % to 1.9 % of GDP

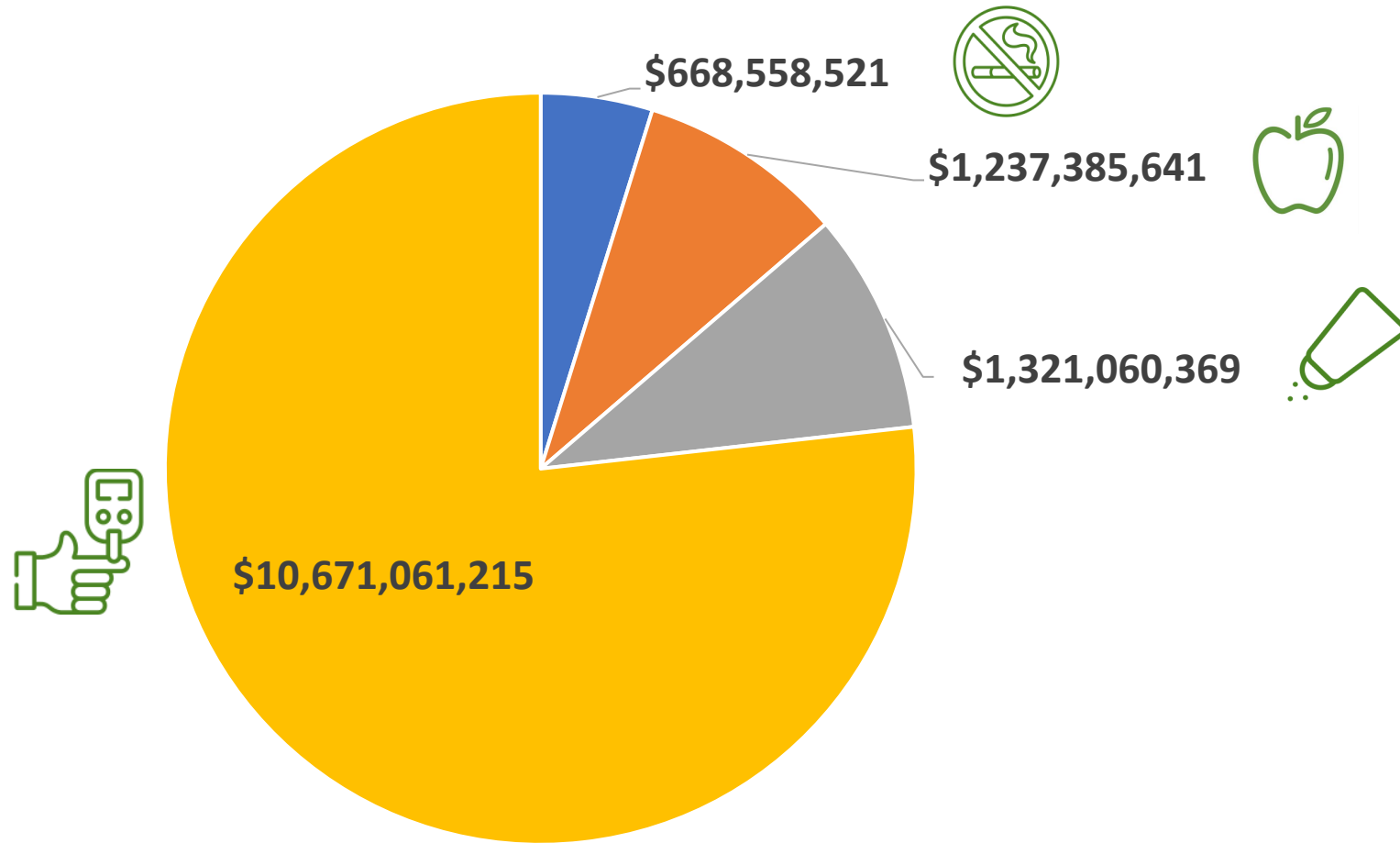


Direct and indirect costs of 4 main NCDs as per GDP in GCC in 2019



Cost of interventions for 15 years in GCC

USD 14 billion



- Tobacco Control package
- Diet and physical activity
- Salt reduction package
- CVD and diabetes clinical intervention package

Key Findings: Benefits

Sum across 6 GCC countries



MORE THAN
290,000
LIVES SAVED

AND

MORE THAN
2 million
HEALTHY LIFE-YEARS
GAINED

OVER 15-YEAR
PERIOD



Key Findings: Benefits

Sum across 6 GCC countries



MORE THAN
270,000
STROKES AVERTED

AND

MORE THAN
210,000
ACUTE IHD AVERTED

OVER 15-YEAR
PERIOD



Key Findings: Return on Investment

Average across 6 GCC countries



2.8

23.7



USD 14 billion
COST



ROI



USD 69 billion
BENEFIT

OVER 15-YEAR PERIOD



6.3

3.6



Summary over 15 years

BURDEN

in 2019

50
billion US\$



INVESTMENT^s

14
billion US\$



BENEFITS^s

69
billion US\$



Way forward



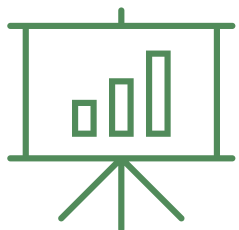
Invest in measures to promote healthy diets and physical activity; detect, diagnose and treat NCDs early; and reduce consumption of health-harming products.



Work with regional and international partners to strengthen non-health sector roles in addressing NCDs



Advance legislative action on NCDs through legal analysis, regional cooperation, and targeted advocacy and support



Increase collaboration among GCC countries through the GHC and with UN partners to conduct research and share best practices



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