

Presented by the ISPOR Arabic Network

# THE HEALTH AND ECONOMIC THREATS OF NON-COMMUNICABLE DISEASES IN THE MIDDLE EAST AND NORTH AFRICA



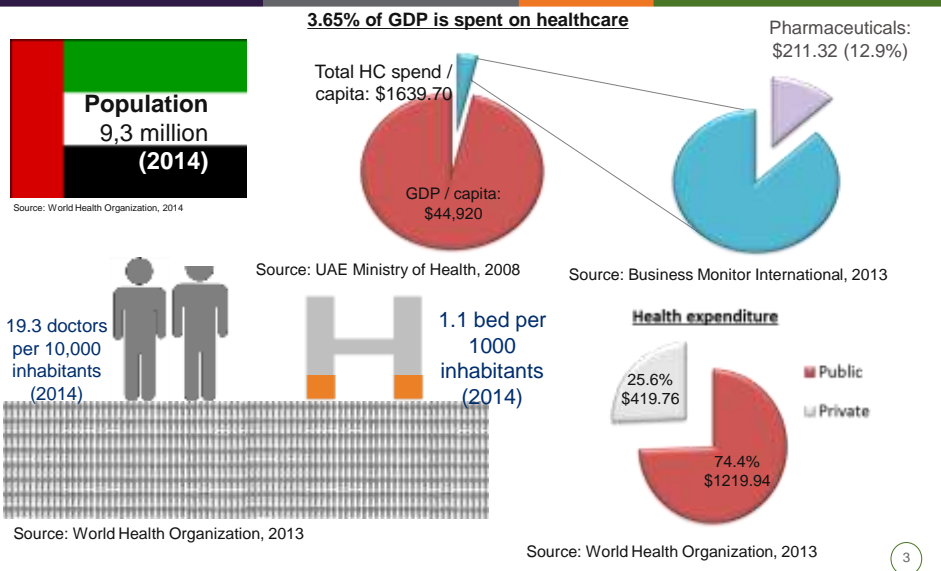
Ola Ghaleb Al Ahdab, PhD  
President, ISPOR UAE Chapter

## Agenda



- Healthcare System in the UAE: Snapshot
- Non-Communicable Diseases:
  - General overview
  - Diabetes : Burden of Diseases
- Approaches and solutions
- Summary

# The United Arab Emirates



## Health Care System in the UAE



- Health Insurance models becoming the dominant way of health funding.
- Industry has the latest technology
- Government operates the majority of hospitals
- Healthcare facilities achieve International accreditation.
- International service providers manage many facilities with higher standards
- Private sector participation has increased over last few years

# Non-Communicable Diseases

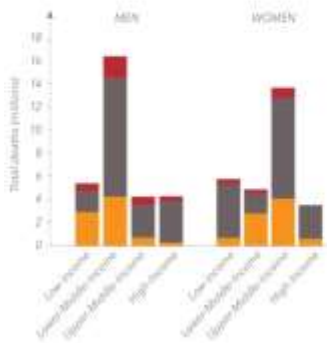


NCDs pose a significant threat to lives, livelihoods and economic development globally.

## NCDs COST 36 MILLION LIVES

Total deaths (millions) by broad cause groups 2008

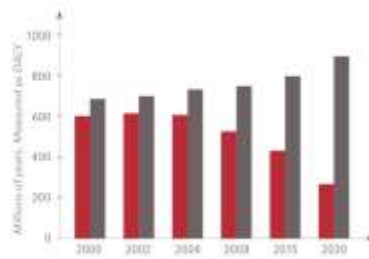
COMMUNICABLE, MATERNAL, PERINATAL AND NUTRITIONAL CONDITIONS (orange)  
NON-COMMUNICABLE DISEASES (dark grey)  
INJURIES (red)



## NCDs CAUSE LARGE SCALE DISABILITY

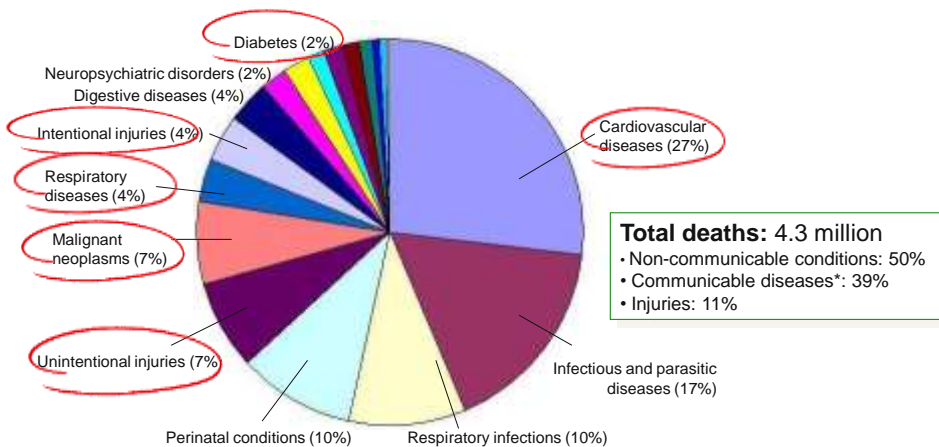
Millions of years of "health life" lost globally to NCDs and other conditions

OTHER CONDITIONS (red)  
NON-COMMUNICABLE DISEASES (dark grey)



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## Non-communicable Diseases Magnitude in the Middle East



**Total deaths: 4.3 million**  
 • Non-communicable conditions: 50%  
 • Communicable diseases\*: 39%  
 • Injuries: 11%

\* Including maternal and perinatal conditions and nutritional deficiencies

[www.who.int/healthinfo/global\\_burden\\_disease/estimates\\_regional/en/index.html](http://www.who.int/healthinfo/global_burden_disease/estimates_regional/en/index.html)

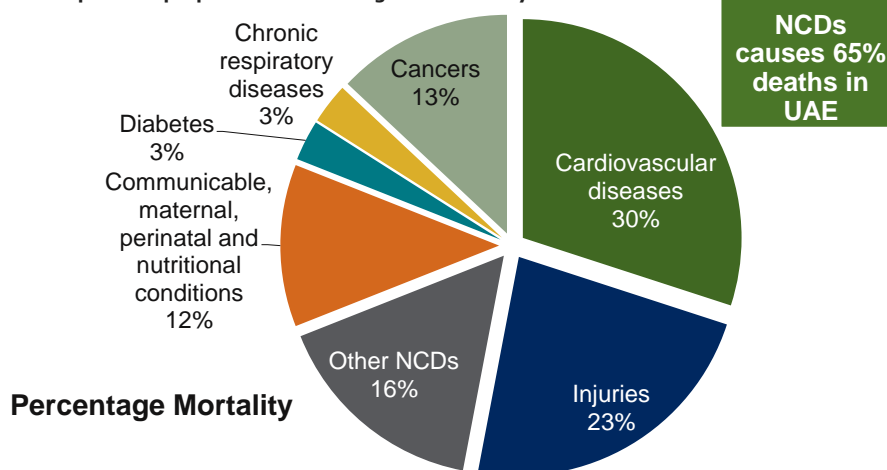
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## Non-Communicable Diseases In UAE Proportional mortality



**Percentage of population living in urban areas: 84.4%**

**Population proportion between ages 30 and 70 years: 45.9%**



World Health Organization – Non-communicable Diseases (NCD)  
Country Profiles , 2014 & Diabetes country profiles, 2016

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## Major Non-Communicable Diseases In UAE and Related Causative Risk Factors



*NCDs pose a significant threat to lives, livelihoods and economic development globally.*

		Causative risk factors			
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Non-communicable diseases	Heart disease and stroke	✓	✓	✓	✓
	Diabetes	✓	✓	✓	✓
	Cancer	✓	✓	✓	✓
	Chronic lung disease	✓			

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# Diabetes



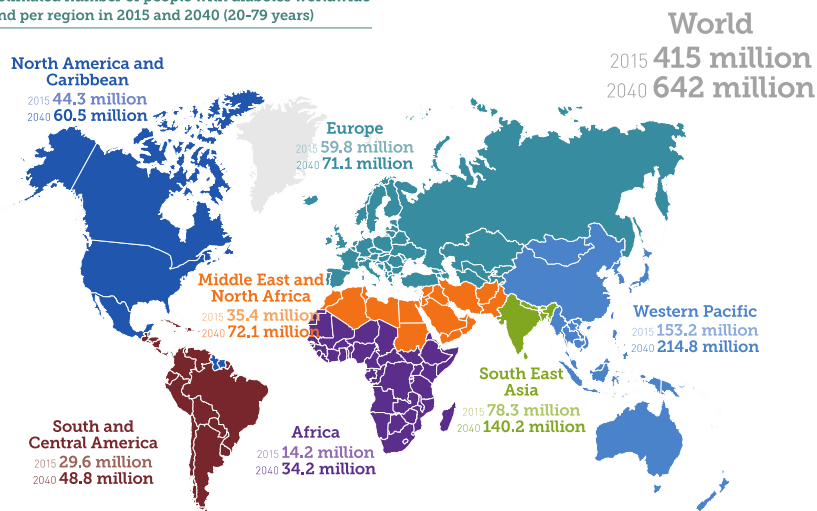
- The incidence of diabetes is increasing globally and considered a major problem worldwide.
- In 2015 :
  - 8.8% worldwide prevalence of diabetes
  - 9.1% in Europe
  - 2.9% in North America
  - 10% in the Middle East
- Diabetic in MENA
  - Egypt has the highest number of patients 7.6 million.
  - Higher epidemiology impact in the Gulf States (GCC)
- The % of diabetic of population in the GCC are:
  - 24% In Saudi Arabia is diabetic
  - 35% in Kuwait
  - 22% in Bahrain
  - 20% in Qatar
  - 19% in UAE

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## Diabetes: A global emergency

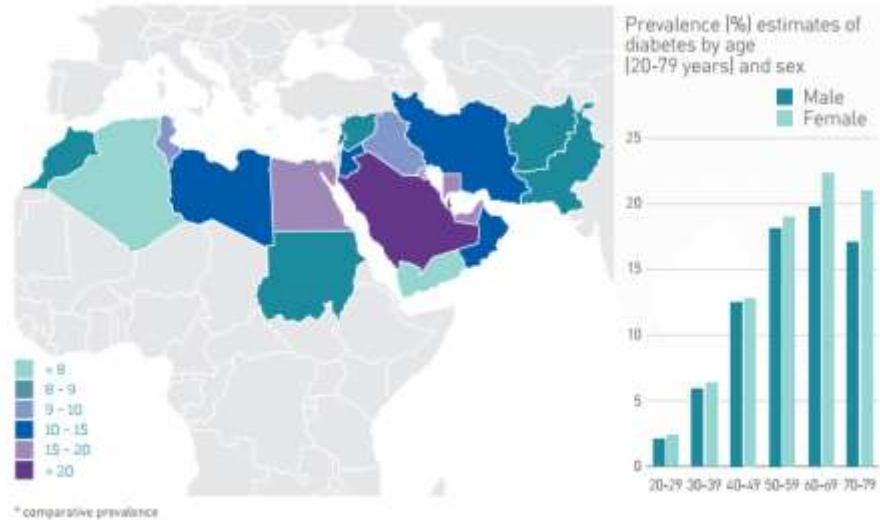


Estimated number of people with diabetes worldwide and per region in 2015 and 2040 (20-79 years)



IDF World Atlas 7<sup>th</sup> edition-2015

## Prevalence\* (%) estimates of diabetes (20-79 years) Middle East and North Africa Region, 2015



IDF World Atlas 7<sup>th</sup> edition-2015<sup>(13)</sup>

## Diabetes in the UAE



- The study revealed that the average management costs per diabetic patient without complications in the UAE were \$1,605 (SD ± \$1,473) compared to \$5,645 (SD ± \$5,966) for those with DM complications
- This cost increased 2.2 times with the presence of DM related complications for patients with microvascular complications, by 6.4 times for patients with macrovascular complications and 9.4 times for patients with both micro and macrovascular complications.

Al-Maskari et al; 2010, Assessment of the direct medical costs of diabetes mellitus and its complications in the United Arab Emirates  
<http://bmcpubhealth.biomedcentral.com/articles/10.1186/1471-2458-10-679>

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## Approaches and solutions: *Global action plan for the prevention and control of NCDs 2013-2020*: WHO Plan

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- Under WHO leadership in 2011
- Plan aims to reduce the number of premature deaths from NCDs by 25% by 2025 through nine voluntary global targets
- More than 190 countries agreed to reduce the avoidable NCD burden
- The nine targets focus in part by addressing factors such as: ***tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity*** that increase people's risk of developing these diseases.
- The plan offers a menu of “best buy” or cost-effective, high-impact interventions for meeting the nine voluntary global targets
- In 2015, countries start to set national targets and measure progress on the 2010 baselines reported in the *Global status report on noncommunicable diseases 2014*.
- The UN General Assembly will convene a third high-level meeting on NCDs in 2018 to take stock of national progress in attaining the voluntary global targets by 2025.

<http://www.who.int/mediacentre/factsheets/fs355/en/>

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# Non-Communicable Diseases: WHO Strategies/the 9 Targets



<b>Target 1:</b>	• A 25% relative reduction in risk of premature mortality from CVDs, cancer, diabetes, chronic respiratory diseases.
<b>Target 2:</b>	• At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
<b>Target 3:</b>	• A 10% relative reduction in prevalence of insufficient physical activity.
<b>Target 4:</b>	• A 30% relative reduction in mean population intake of salt/sodium.
<b>Target 5:</b>	• A 30% relative reduction in prevalence of current tobacco use
<b>Target 6:</b>	• A 25% relative reduction in the prevalence of raised BP according to national circumstances.
<b>Target 7:</b>	• Halt the rise in diabetes and obesity.
<b>Target 8:</b>	• At least 50% of eligible people receive drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes.
<b>Target 9:</b>	• An 80% availability of the affordable basic technologies and essential medicines, to treat major NCDs in both public and private facilities.

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## Recent Regional and local Initiatives



- MENA Leadership Forum
- GCC Executive Board, Health Ministers' Council partnership with World Diabetes Foundation (WDF)
- UAE Plans/local initiatives
  - UAE Vision 2021
  - MOH Plan of Action
  - HAAD: Weqaya Program
  - DHA : Changing Diabetes World Tour
  - Health Insurance Payer Partnership - Disease Management Program

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## UAE Healthcare National Agenda 2021 Vision: Value based opportunities



Emphasis on NCDs

Indicators	2012 Result	2021 Target
Deaths from cardiovascular diseases per 100,000 population	211	158.2
Prevalence of diabetes	19.02%	16.28%
Deaths from cancer per 100,000 population	78	64.2
Average healthy life expectancy	67	73
Physicians per 1,000 population	1.5	2.9
Nurses per 1,000 population	3.5	6
Prevalence of smoking	21.6% (Men) 1.9% (Women)	15.7% (Men) 1.66% (Women)
Percentage of accredited health facilities	46.8%	100%

Source: UAE Vision 2021

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## Ministry of Health and Prevention POA



- Raising awareness of population
- Reducing people's exposure to risk factors
- Improving patients and communities general health.
- Decreasing the cost of health care
- Increasing access to health care
- Improving services to prevent and treat these leading health problems

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## Ministry of Health and Prevention launches the 'Healthy Restaurant' initiative



As part of the ongoing national initiative to promote awareness of healthy lifestyle and healthy eating routines in the community, the Ministry of Health and Prevention represented by the Health Education and Promotion Department in the Health Centers and Clinics Sector has introduced the 'Healthy Restaurant' initiative in various emirates.

<http://www.dayofdubai.com/news/ministry-health-and-prevention-launches-%E2%80%98healthy-restaurant%E2%80%99-initiative>

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## Health Authority Abu Dhabi (HAAD) Weqaya Programme



- The results from the Weqaya screening have demonstrated a **very high burden of cardiovascular risk** factors in the Abu Dhabi Emirati population
- **Confirming international data suggesting** that the UAE has the world's **second highest rate of diabetes**
- Adding detail of **high rates of overweight, obesity and pre-diabetes**
- Data suggests that the high rate of diabetes will rapidly increase without aggressive intervention.
- Weqaya screening has provided substantial impetus for coordinated planning and action

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## SUMMARY: PREVENTION & CONTROL OF NCDs

- World class healthcare system, quality education, capacity building, promote & support research are at the top of the UAE gov. agenda
- Main way to reduce NCDs is to follow WHO plan and focus on:
  - Lessening the risk factors associated with these diseases
  - Reduce the common modifiable risk factors (mainly tobacco use, unhealthy diet and physical inactivity, and the harmful use of alcohol) and map the epidemic of NCDs and their risk factors.
- MoH& local health authorities has develop and implement successful strategies in line with WHO 9 targets; the 'Healthy Restaurant' initiative was the latest one
- Joint efforts & active collaboration among all sectors is essential

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## The Way Forward

### World Economic Forum Competitiveness Report 2014–2015

	Economy	Score <sup>1</sup>	Prev. <sup>2</sup>	Trend <sup>3</sup>
1	Switzerland	5.70	1	
2	Singapore	5.65	2	
3	United States	5.54	5	
4	Finland	5.50	3	
5	Germany	5.49	4	
6	Japan	5.47	9	
7	Hong Kong SAR	5.46	7	
8	Netherlands	5.45	8	
9	United Kingdom	5.41	10	
10	Sweden	5.41	6	
11	Norway	5.35	11	
12	United Arab Emirates	5.33	19	
13	Denmark	5.29	15	

### UAE VISION

We want to be among the best countries in the world by 2021

“With our Citizens at the heart of development, we strive to become one of the most competitive countries in the world”

**His Highness Sheikh Mohammed Bin Rashid Al Maktoum**

“نسعى في دولة الإمارات الى ان نكون من اكثر دول العالم تنافسية

مع وضع مواطنينا في صميم عملية التنمية”  
صاحب السمو الشيخ محمد بن راشد آل مكتوم

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# Thank you!

## Lets Work Together to Minimize the Burden of NCD



## Q&A

**Dr. Ola Ghaleb Al Ahdab, PhD.**

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