



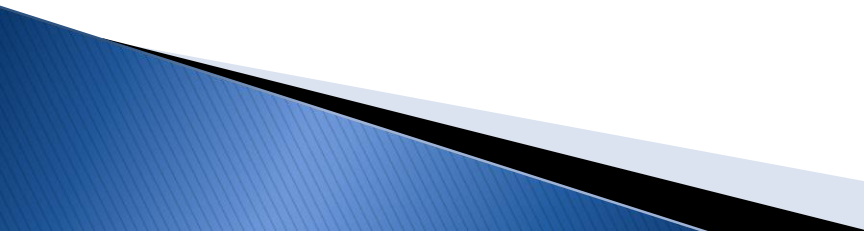
Social Determinants of Noncommunicable Diseases in Jordan

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The social determinates of health (SDH) have been described as:

‘The causes of the causes’ they are the social, economic and environmental conditions that influence the health of communities from birth to the death; and that potentially can be altered by informed action.

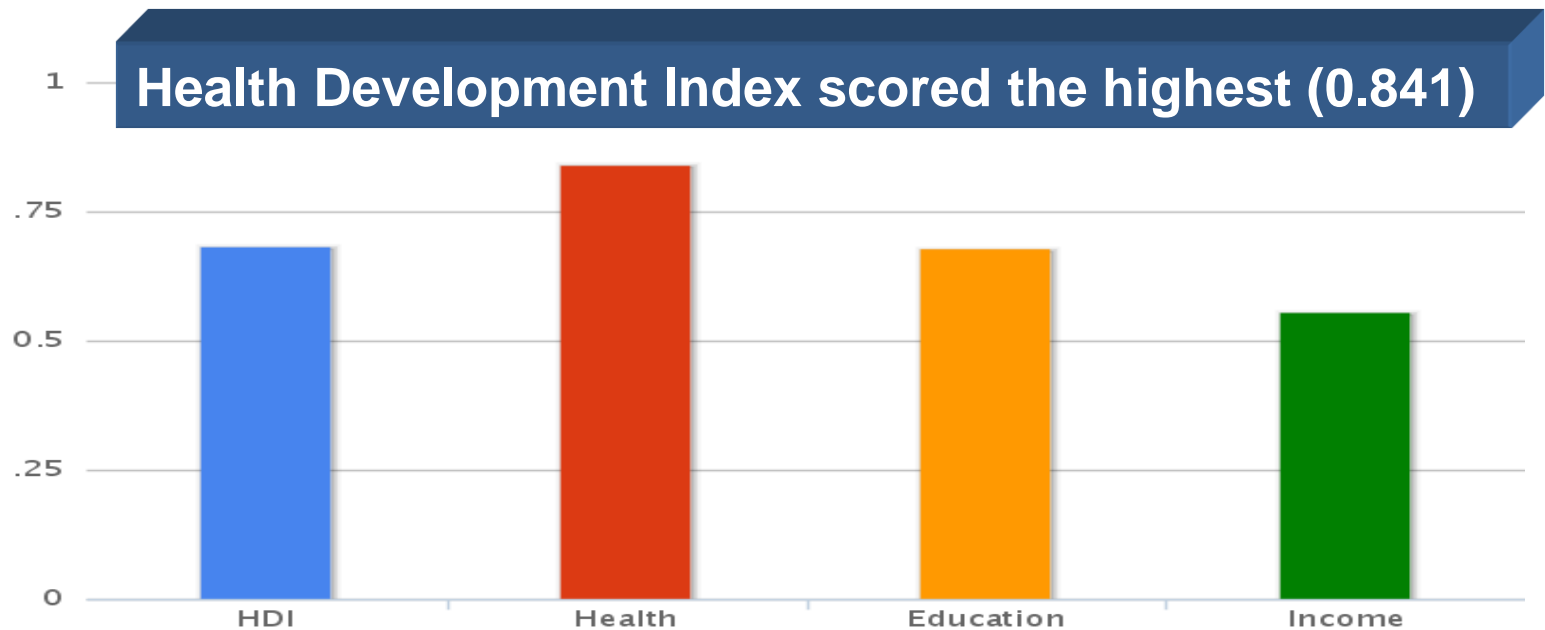
Socioeconomic Indicators for Jordan 2011

- ▶ Jordan is a middle income country.
 - ▶ Annual **per capita** income: US\$4,628 .
 - ▶ **unemployment rate** :12.5%(10.8% for males , 19.9% for females).
 - ▶ **Poverty incidence** is 14.4% (rural 37% urban 29%).
 - ▶ **Expenditure on health**: about 9.5% of GDP (US\$381 per person per year).
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Jordan demographic indicators, 2011

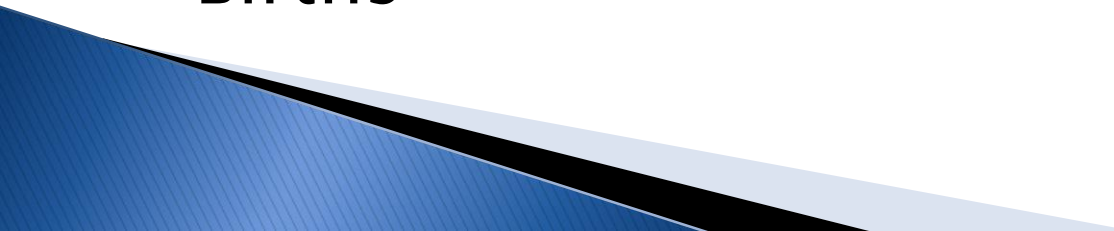
Indicators	
Total population	6249000
Population Growth Rate	2.2
Dependency Ratio	68.2
% population <15 years	37.3
Total Fertility Rate	3.8

Human Development Index: Health, Education and Income, Jordan 2011

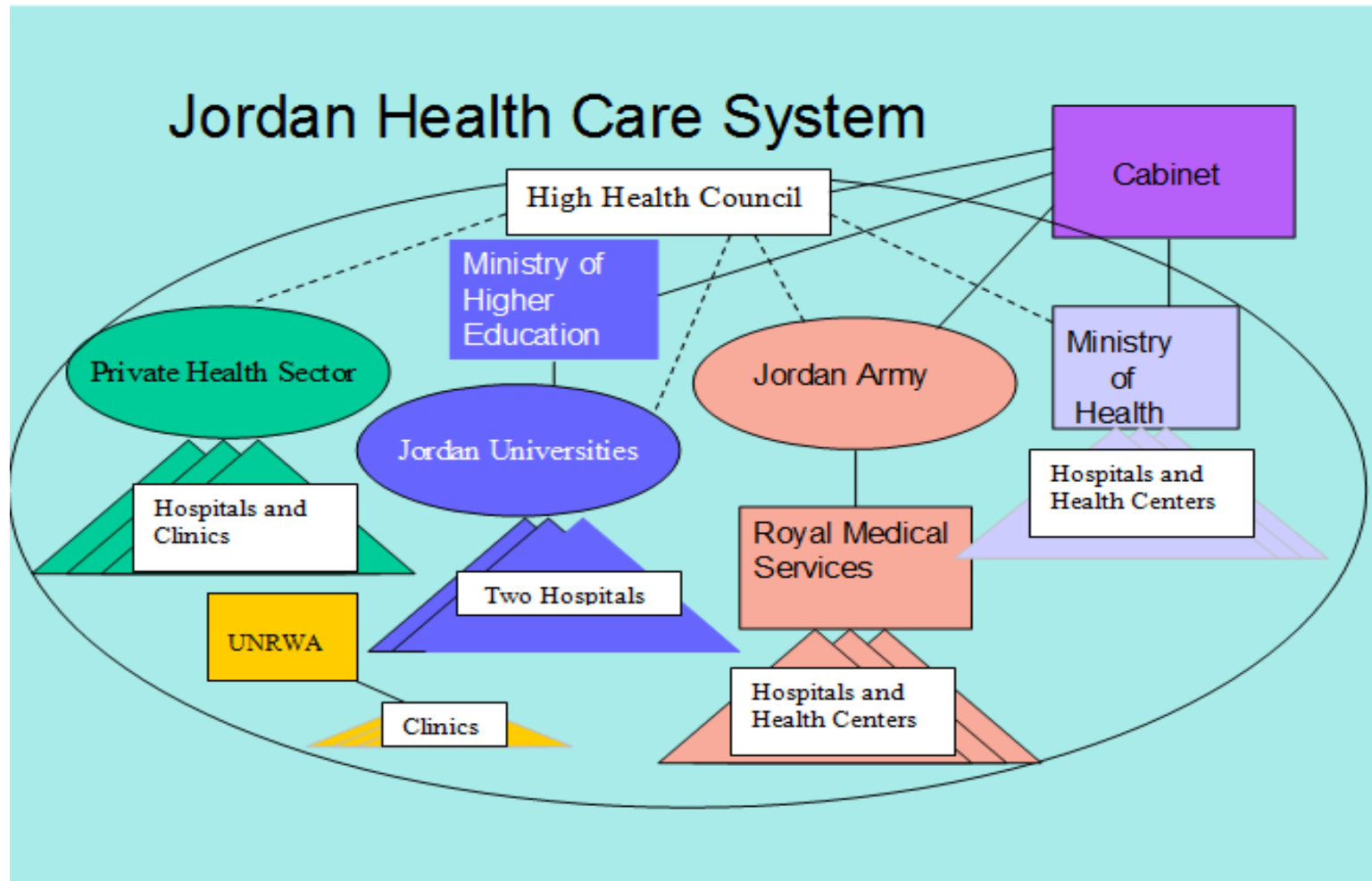


Source: UNDP: <http://hdrstats.undp.org/en/countries/profiles/JOR.htm>

Jordan Health Indicators, 2011

- ▶ Life expectancy: 73 years.
 - ▶ Crude death rate: 7 per 1000: the leading cause of death is cardiovascular followed by cancer.
 - ▶ Infant mortality: 23 per 1000 Live Births
 - ▶ Maternal mortality: 19.1 per 100,000 Live Births
- 

Jordan health Care Sub – Systems



Health Care System Achievements and Challenges

Achievements

- ▶ Extensive network of PHC facilities
- ▶ Physician to population ratio is higher than most of MENA
- ▶ 76 % of the population in Jordan is covered by formal health insurance
- ▶ Government commitment
- ▶ Improvement in health indicators
- ▶ Modern health care infrastructures
- ▶ Accreditation Program
- ▶ Medical Tourism

Health System Challenges



Inequalities

- ▶ Access to health services is uneven across Governorates
- ▶ Mandatory coverage for employed population is not properly enforced
- ▶ Public funds are subsidizing some wealthy households income
- ▶ Around 25% of the population does not have any sort of insurance coverage

Findings from the Jordan Healthcare Utilization and Expenditures Survey, 2006

Health System Challenges



Inequalities

- ▶ 75 % of out of pocket expenditures on outpatient care are for pharmaceuticals. This represents a burden to the population as a whole and to at-risk groups in particular.
- ▶ The elderly ,females and the poor spend more out of pocket on outpatient care than others do.
- ▶ Some demographic groups (the elderly and the illiterate) have average expenditures on outpatient care that exceed 10 percent of household income.
- ▶ Females pay out of pocket expenditures three times as much as males on Inpatient Care.

Non-communicable Diseases in Jordan: Trends and Challenges

▸ Top 5 causes of Mortality, 2009

Rank	Mortality
1	Diseases of circulatory system (36%)
2	Neoplasm's (15%)
3	External Causes of Mortality (10%)
4	Endocrine, nutritional and metabolic diseases (8%)
5	Certain conditions originating I in the perinatal period (7%)

69 %
of all
deaths

Prevalence of NCDs in Jordan as Reported by Population –Based Studies

A- Prevalence Rate of Some Chronic Diseases in Jordan ≥ 25 year old (2007)

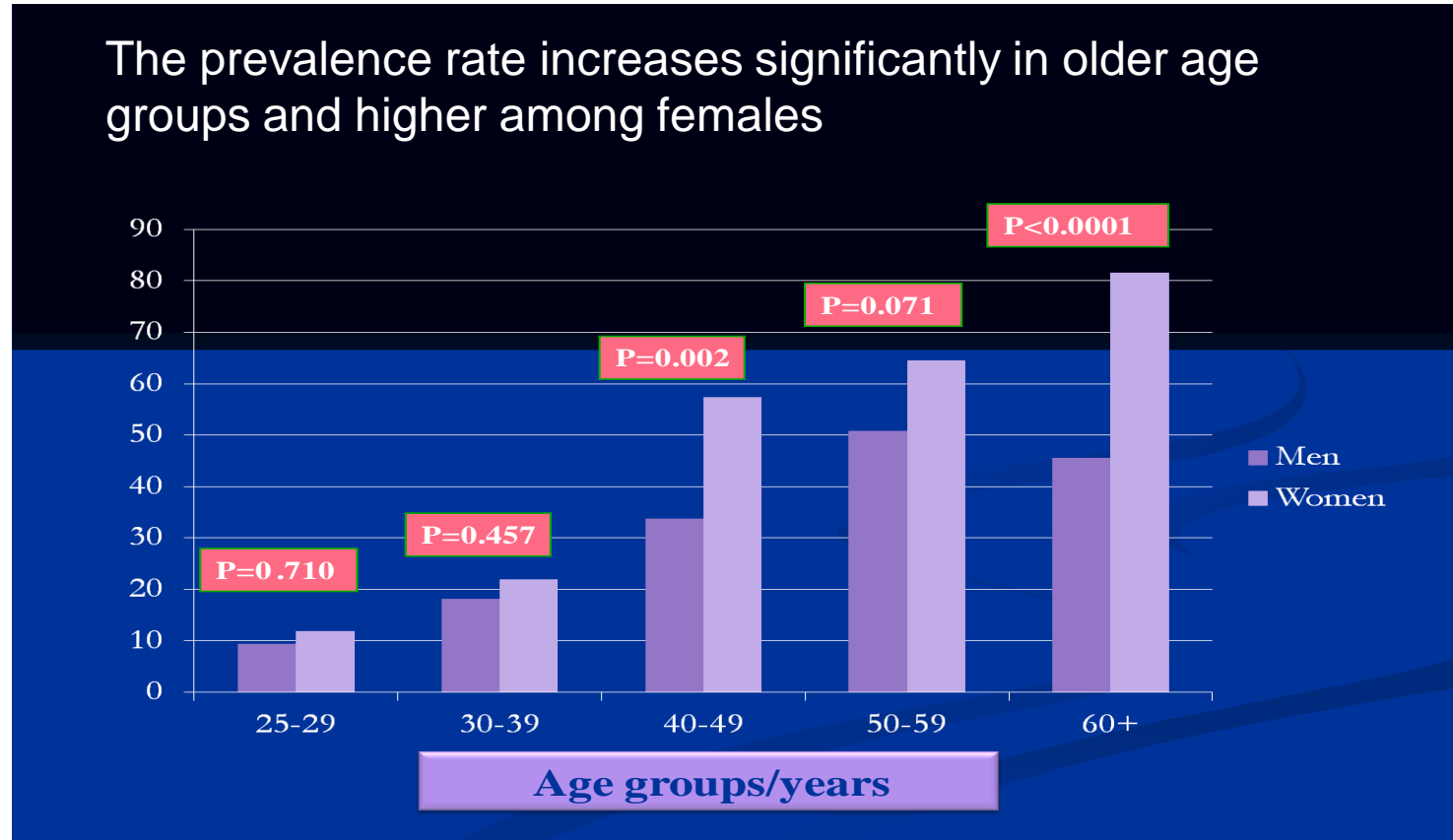
Disease		Standardized value
Hypertension	29.6%	Systolic/ diastolic ≥ 140/ 90
Diabetes: a.Diabetes b.Pre- Diabetes	13.2% 17.3%	≥ 126 mg/ dl 100- 126/ dl
Cholesterol: Total cholesterol HDL- C LDL-C Triglyceride	50.2% 27.9 % 42.3 % 43.6%	>200 mg/ dl <40 mg/ dl >130 mg/ dl > 150 mg/ dl
Overweight and obesity (BMI): Overweight Obesity	42% 39.8%	(BMI 25- 29.9 kg/ m2) (BMI ≥ 30 kg/ m2)

Baseline (2007) Disease and Risk Factor Proportions among Jordanian Youth Aged (18–34)

Category	Prevalence (%)
Hypertension	4.5
Diabetes Mellitus (Type 2)	6.2
High Cholesterol	5.2
Overweight	28.8
Obesity	18.2

Source: EMPHNET (2012). Estimating the Prevalence of Non-Communicable Diseases for the Jordanian Youth Population for years 2007 – 2050.

Prevalence Rate of Metabolic Syndrome in Jordan According to Age Groups and Gender (Diabetes, Blood Hypertension, Obesity, Cholesterols)



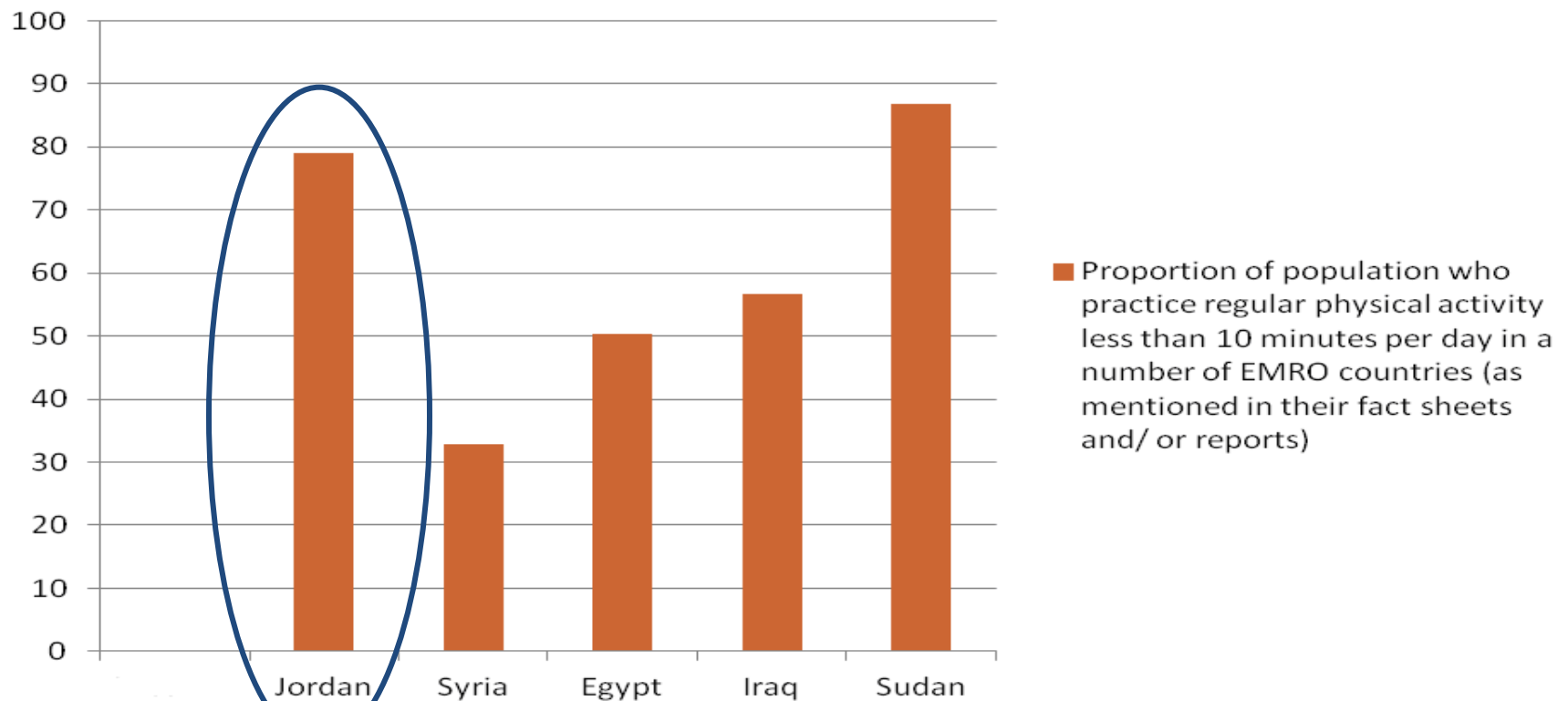
Source: Prof. Kamel Ajlouni .International Conference on Healthy Lifestyles and NCDs in the Arab World and the Middle-East. (Riyadh, KSA, 9-12 September 2012)

Behavioral Risk Factors:

Physical Activity

Proportion of population who practice regular physical activity less than 10 minutes per day in a number of EMRO countries

Low Regular Physical Activity



Source: National Strategy and Plan of Action against Diabetes and Metabolic Syndrome in Jordan 2010-2015

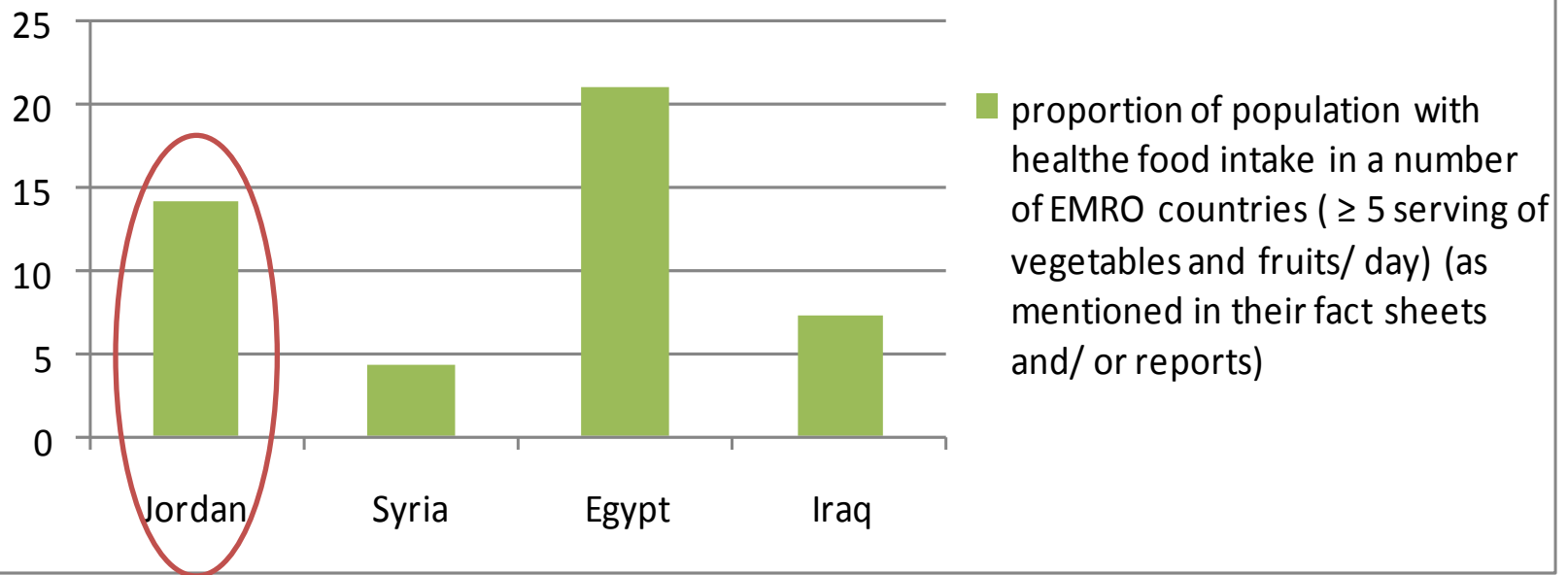
Behavioral Risk Factors:

Healthy Food

**proportion of population with healthy food intake in
a number of EMRO countries**

(≥ 5 serving of vegetables and fruits/ day) (as mentioned in their fact sheets and/ or reports)

Healthy Food



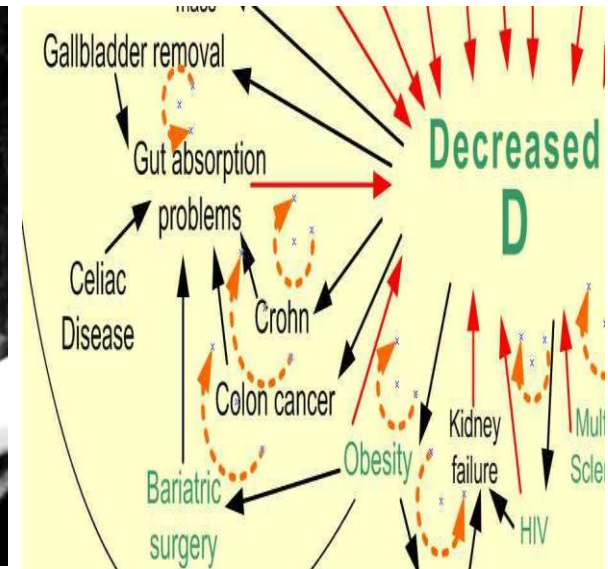
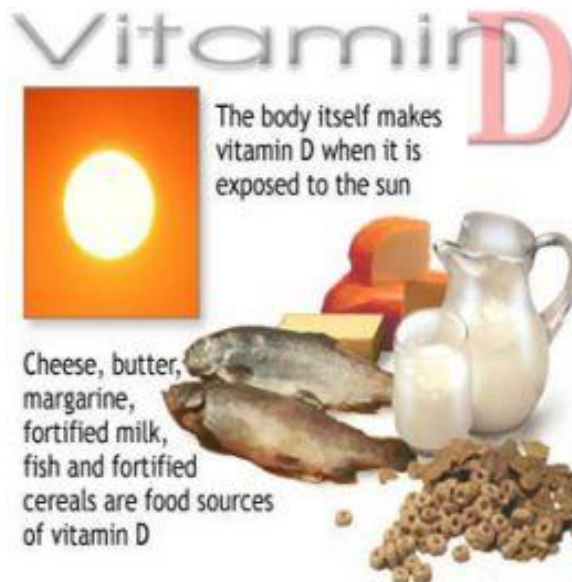
Behavioral Risk Factors: Smoking

- ▶ 50 % of Jordanians above the age of 25 are smokers.
- ▶ 21% of teenagers between the ages 13–15 smoke:
(15% female, 25% male)
- ▶ Average household spends 7.8 % of its income on cigarettes (poor households 10%).



Behavioral Risk Factors: Vitamin D deficiency

- It was found to be highly prevalent in Jordanian females (37.3%) compared to 5.1% for males.



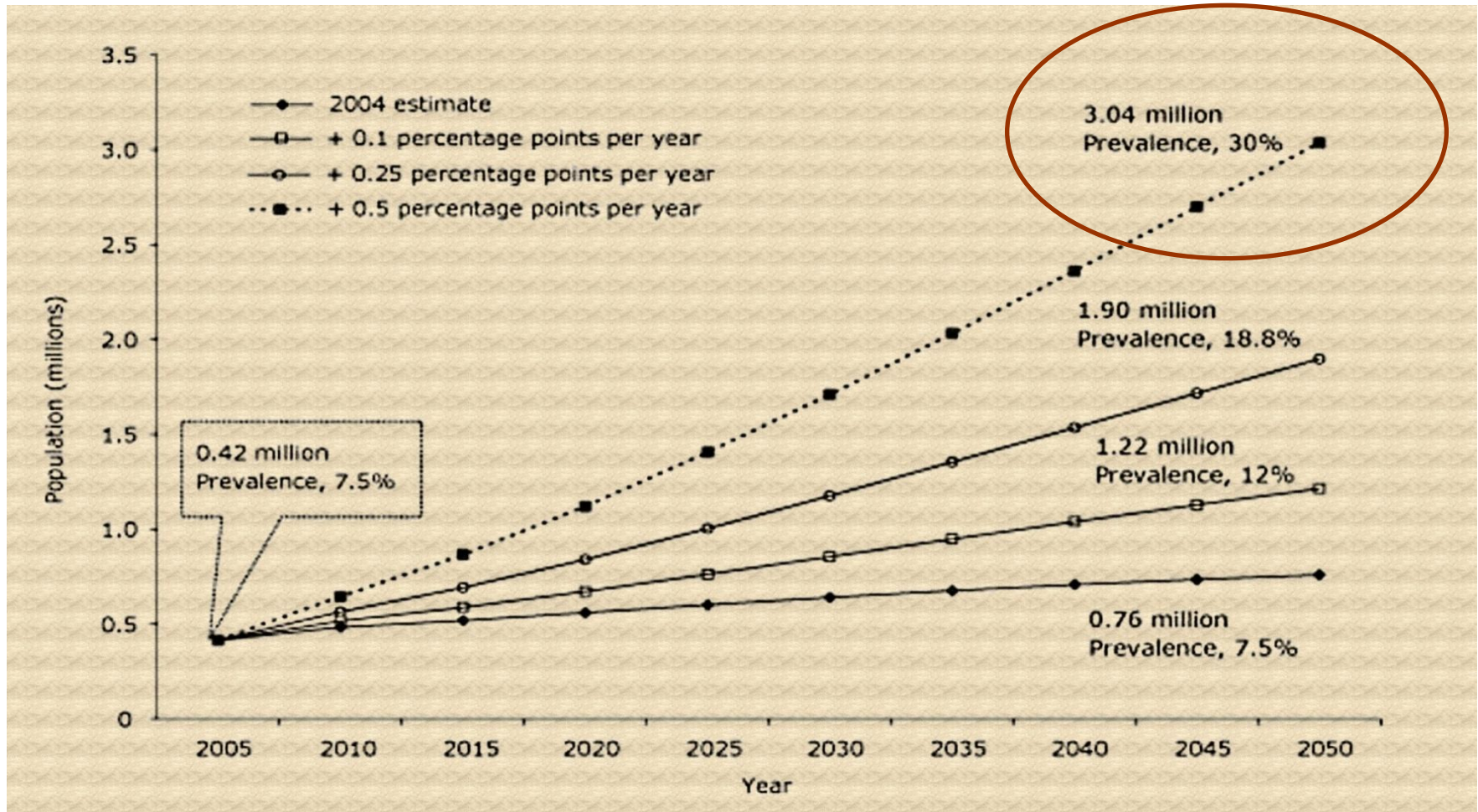
Estimated Cost for Treatment Diabetes, Hypertension and High Blood Cholesterol in Jordan 2004 (Million Jordanian Dinar)

Medical procedures	All cases
Drugs	428
Medical consultations	16
Lab- investigations	24
Hospitals (inpatient)	186
Total	654

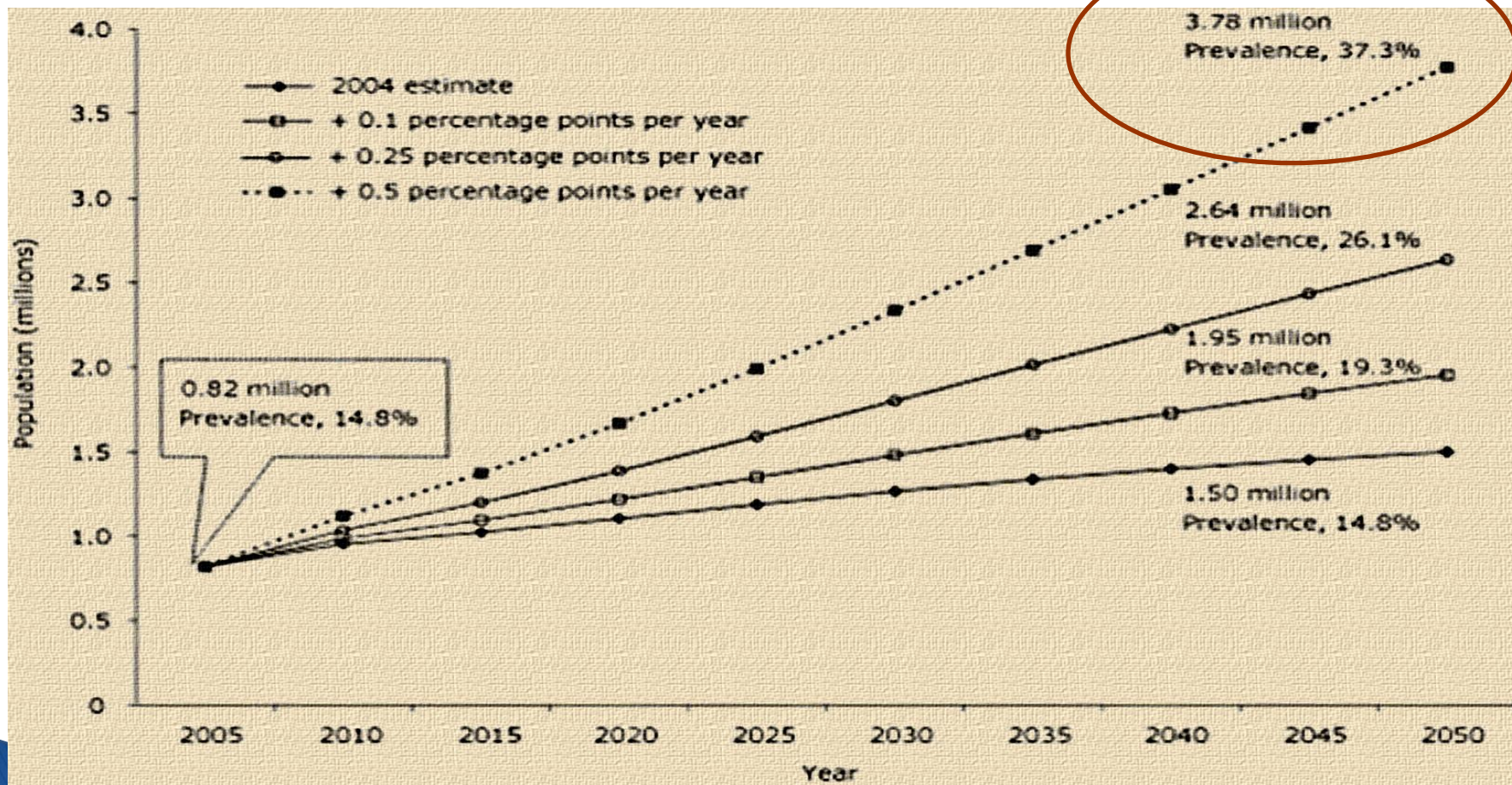
JD
950
million
in
2010

Source: National Strategy and Plan of Action against Diabetes and Metabolic Syndrome in Jordan 2010-2015

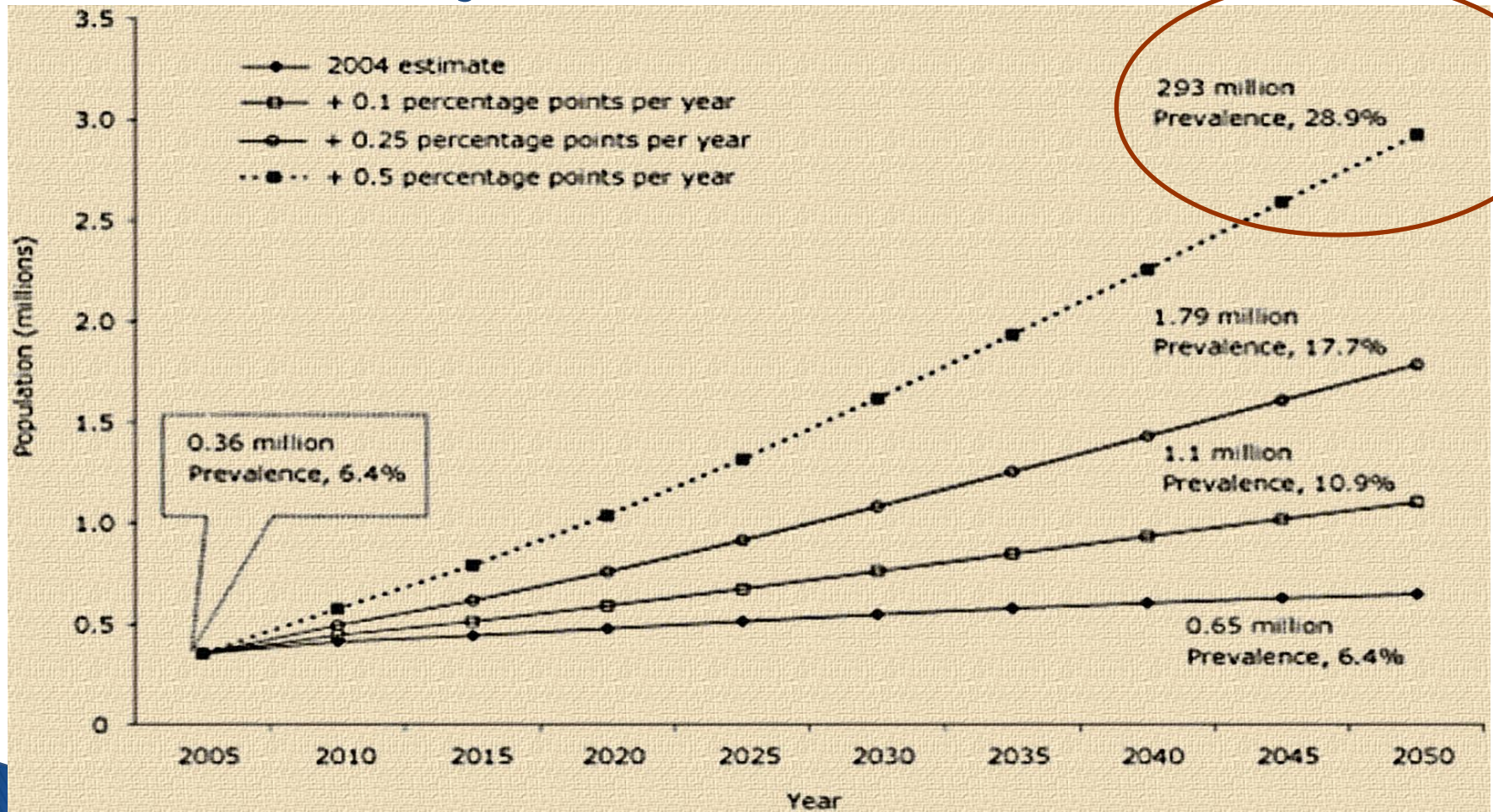
Projected population with **diabetes mellitus** in Jordan from 2005 to 2050 according to 4 different projected prevalence variants.



Projected Population with Hypertension in Jordan from 2005 to 2050 According To 4 Different Projected Prevalence Variants.

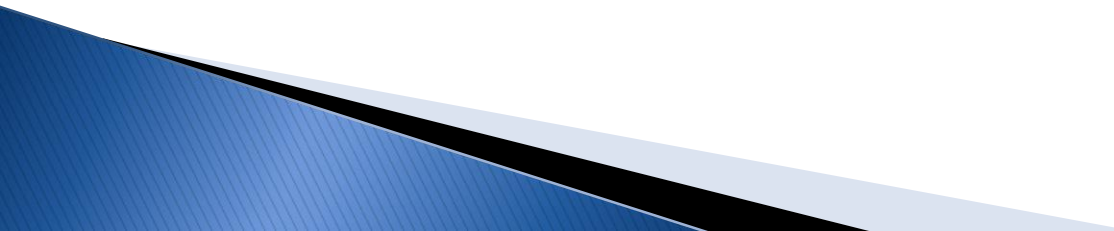


Projected Population with **high blood cholesterol** in Jordan from 2005 to 2050 According To 4 Different Projected Prevalence Variants.



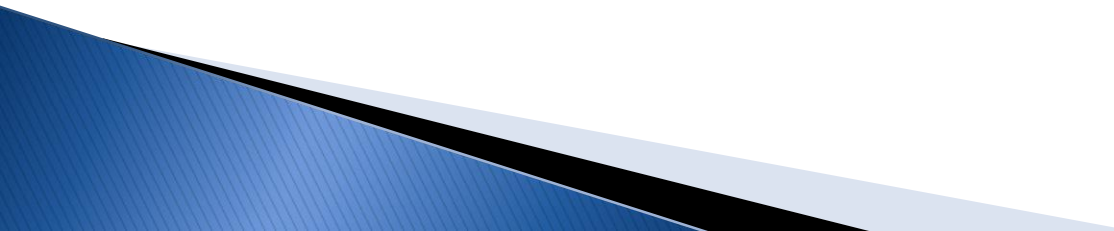
Challenges Related to NCD in Jordan:

Morbidity Trends

- ▶ Jordan is witnessing epidemiological transition (increase of NCDs)
 - ▶ High rates (present and future) of metabolic syndrome (diabetes, blood hypertension, obesity, cholesterol) especially among females and older age groups.
 - ▶ High rates of NCDs risk factors as overweight, obesity, high blood cholesterol and dyslipidemia among adults and adolescents.
 - ▶ Deficiency of Vitamin D mainly in females.
- 


Challenges Related to NCD in Jordan:

Health Care System (HCS)

- ▶ Lack of comprehensive, accurate and reliable cost accounting system.
 - ▶ Lack of comprehensive morbidity information system.
 - ▶ The surveillance system for NCDs is performed on periodic not ongoing basis.
 - ▶ The HCS is mainly “disease– oriented” not “health promotion oriented”.
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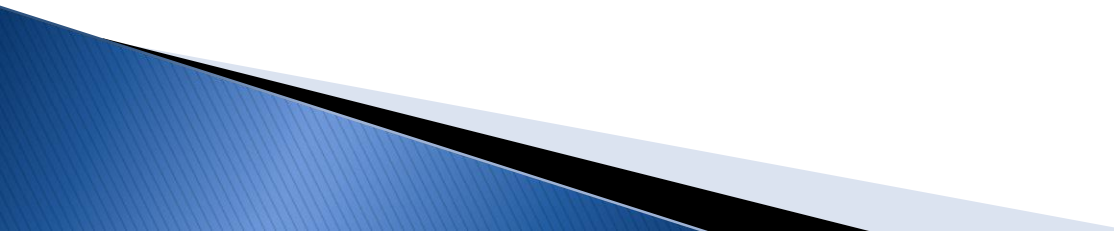
Challenges Related to NCD in Jordan:

Health Care System (HCS)

- ▶ Health promotion, empowering patients to care for themselves, community involvement and home healthcare services are not well planned and organized.
 - ▶ The price of drugs of NCDs is high compared to neighboring countries, and may not be affordable by many people specially the uninsured.
 - ▶ Pharmaceutical sector and Private Health Sector are not participating effectively in health promotion or financing NCDs control programs (**lack of social responsibility**).
- 

Challenges Related to NCD in Jordan:

Social Determinants of Health (SDH)

- ▶ High rates of smoking cigarettes.
 - ▶ High rates of unhealthy diets and physical inactivity.
 - ▶ High population growth and increasing percentage of elderly.
 - ▶ Low economic growth and increased percentages of unemployment and poverty.
 - ▶ Shortage of financial resources on both national and household levels to meet the alarming increased costs of treating NCDs especially metabolic syndrome.
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Challenges Related to NCD in Jordan:

Social Determinants of Health (SDH)

Unplanned urbanization

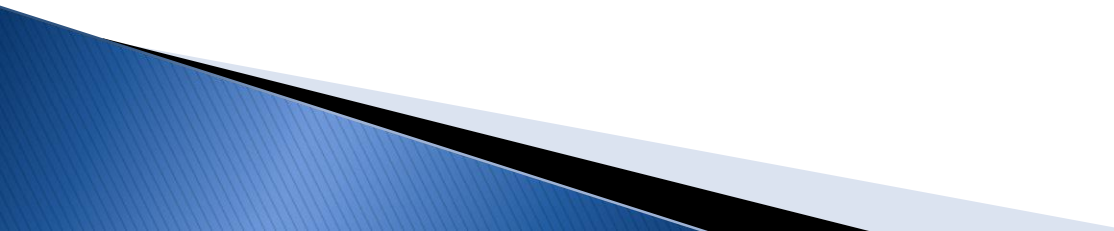
- ▶ 82.6% of population is urban , about 50% lives in Amman



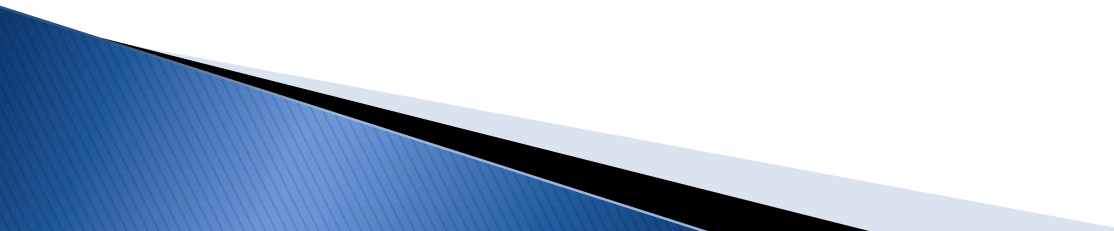
- Less Physical Activity
- Increased Tobacco Consumption
- Overweight and Obesity
- Poor Diet

Challenges Related to NCD in Jordan:

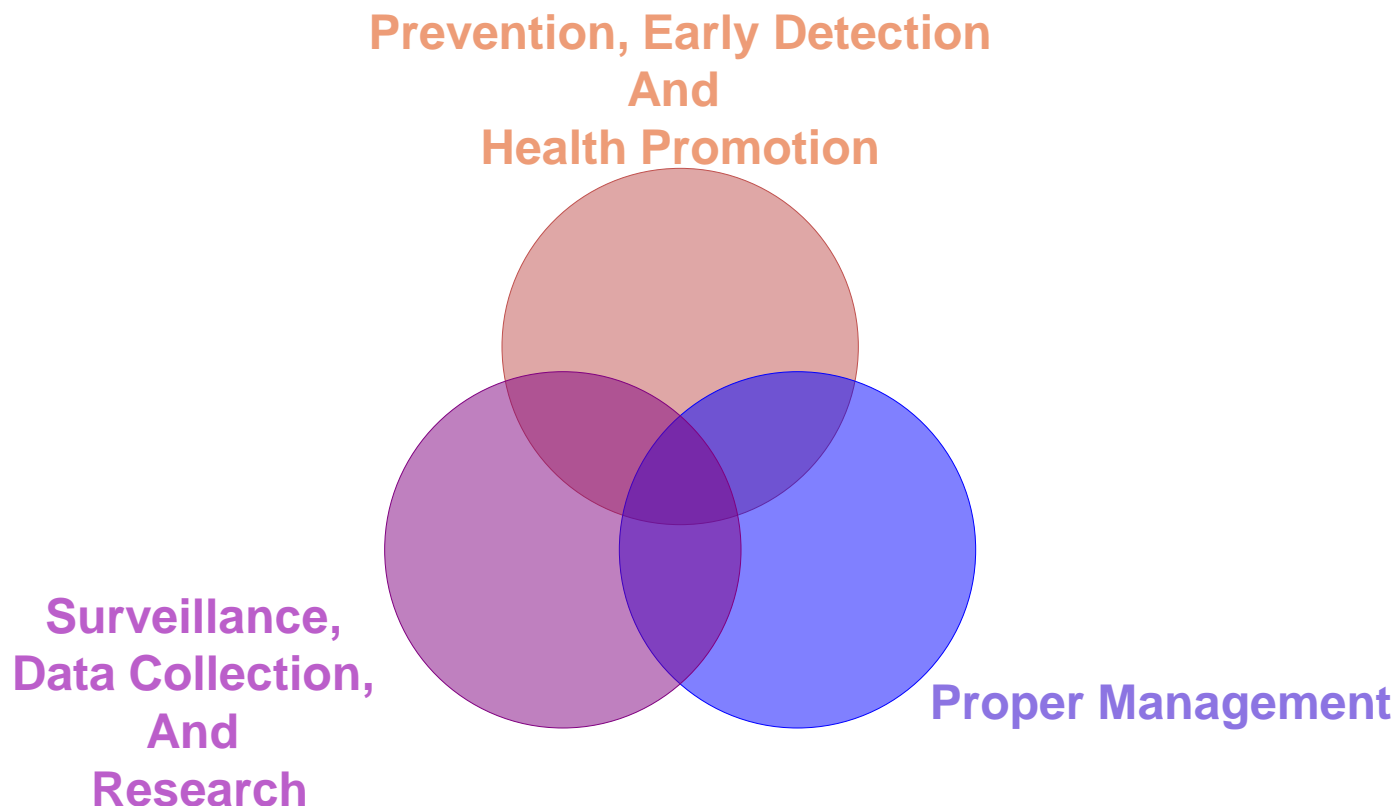
Social Determinants of Health (SDH)

- ▶ Inequality issues related to unequal access to high quality services or medicines especially for the poor ,uninsured and marginalized people.
 - ▶ Limited involvement of other sectors outside the health sector.
 - ▶ The political instability in the region and its consequences for Jordan may impede progress against diabetes and other NCDs (forced immigration)
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Achievements

- ▶ The health infrastructure and human resources for health are well and sufficiently developed
 - ▶ High literacy rate(>93%)and mass communication network(high accessibility to educational messages)
 - ▶ The National Center for Diabetes, Endocrinology and Genetic Diseases (1996): Treatment, Research, Training
 - ▶ The National Strategy and Plan of Action against NCDs and Diabetes in Jordan for 2010–2015 was recently adopted .
- 

National Strategy and Plan of Action against NCDs and Diabetes in Jordan for 2010–2015: **Three Main Pillars**



Achievements

- ▶ Several Community– based national research projects on the prevalence of NCDs and their risk factors.
- ▶ Many programs and initiatives have been adopted during the last ten years for promoting healthy lifestyles and improving the nutrition status of the population (Health Competent Schools; Passport to My Future; Healthy Villages; Healthy Cities; Fortification of Flour and Salt Iodization; Banning Smoking in Public Places; National Screening Programs etc.;)

Recommended/Planned Policy Interventions

I–Improving the Health Care System (HCS) Performance:

- ▶ **Strengthen The HCS Capacity:**
(HR, Facilities, technology, drugs, training, management and cost accounting, Information, routine surveillance, etc..)
- ▶ **Reform Health Services Delivery:**
Universal access to care, “wellness oriented”, screening and early diagnosis, integrating NCD care to PHC, management guidelines for NCDs, Empower patients , peer and community support, etc....

Recommended/Planned Policy Interventions

II–Improving Social Determinants of Health (SDH)

- ▶ **Reduce the Level of Risk Factors in the Population (Target diet and physical activity):**
 - Establish a reliable surveillance system for nutrition.
 - Introduce mass media, education and information campaigns.
 - Create healthy school environments and youth programmes; create healthy workplace environments.
 - Change physical environments to support active commuting.
 - Enact legislation and fiscal policies that encourage the consumption of healthier food products.

Recommended/Planned Policy Interventions

II–Improving Social Determinants of Health (SDH)

▶ **Develop and Implement Advocacy Plans to:**

- Increase awareness of people, community mobilization.
- Obtain political support.
- Insure funding.
- Put health on the national development agenda.
- Incorporate health on all relevant programs outside the health sector and enhance multisectoral approach.

▶ **Propose Policies and legislations for:**

- Dietary composition.
- Physical activity: schools, work places, urban planning, etc.
- Equitable access to care.

Why treat people's illnesses without changing the conditions that made them sick? (WHO Commission on Social Determinants of Health, 2008)



A close-up photograph of a purple iris flower in bloom, positioned in the upper center of the frame. The flower has deep purple petals with some lighter, almost white, variegation on the inner petals. It sits atop a thick, green, sword-shaped leaf. The background is a soft-focus landscape of rolling green hills and mountains under a pale sky. In the distance, a tall, thin, green structure, possibly a wind turbine or a tower, is visible on the left. The overall scene is peaceful and natural.

Thank You