

# Social Determinants of Non-Communicable Diseases in the occupied Palestinian Territory

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# Introduction

Why looking at Social determinants of health(SDH)?

SDH are major source of ***HEALTH INEQUALITIES***

Definition:

***HEALTH INEQUALITIES*** are unequal health opportunities and outcomes between different social groups that are systematically distributed , unfair and socially produced.

*Jabbour Samer, Giacaman Rita, Khawaja Marwan, Iman N (2012) **Public Health in the Arab World**, first edn. Cambridge University Press, New York*

**TERRITORIES OCCUPIED  
BY ISRAEL  
SINCE JUNE 1967**

MEDITERRANEAN  
SEA

32°

31°

30°

EGYPT

SINAI

*The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitation of its frontiers or boundaries.*

34°

35°

LEBANON

Nahariyya

Haifa

Tiberias

Nazareth

Netanya

Tel Aviv

Ramle

Gaza

Rafah

Bersheeba

Jenin

Tulkarm

Qalqilya

Nablus

Jericho

Jerusalem

Bethlehem

Hebron

GOLAN

SYRIAN ARAB  
REPUBLIC

Amman

JORDAN

--- Armistice Demarcation  
Line, 1949  
- - - Boundary of Former  
Palestine Mandate  
- - - International Boundary

0 10 20 30 40 km  
0 10 20 30 mi

36°

Department of Public Information  
Cartographic Section

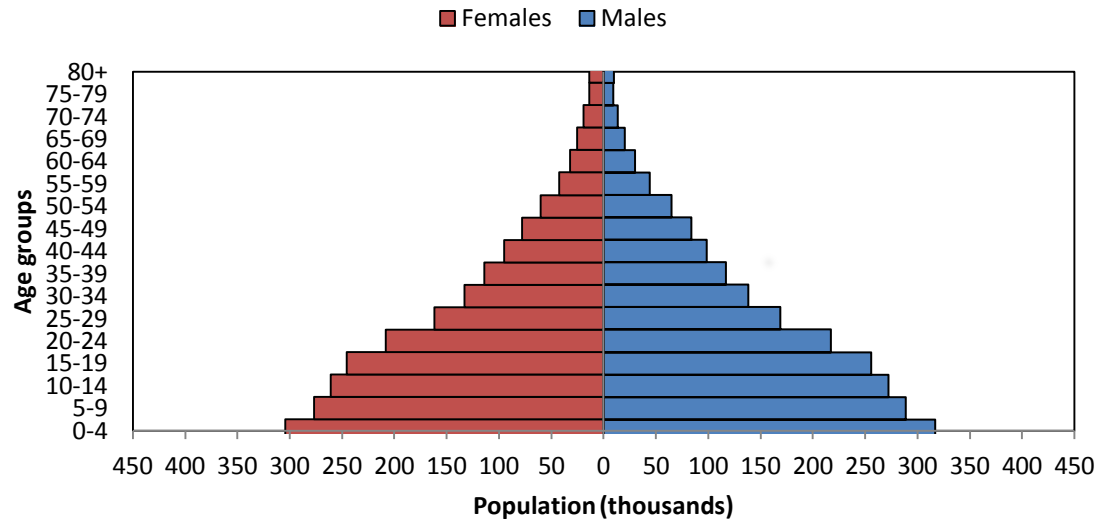
The Palestinian population has endured ongoing conflict since 1948, with the first Arab Israeli war and the creation of the State of Israel

The West Bank and the Gaza Strip have been occupied by the Israeli military since 1967

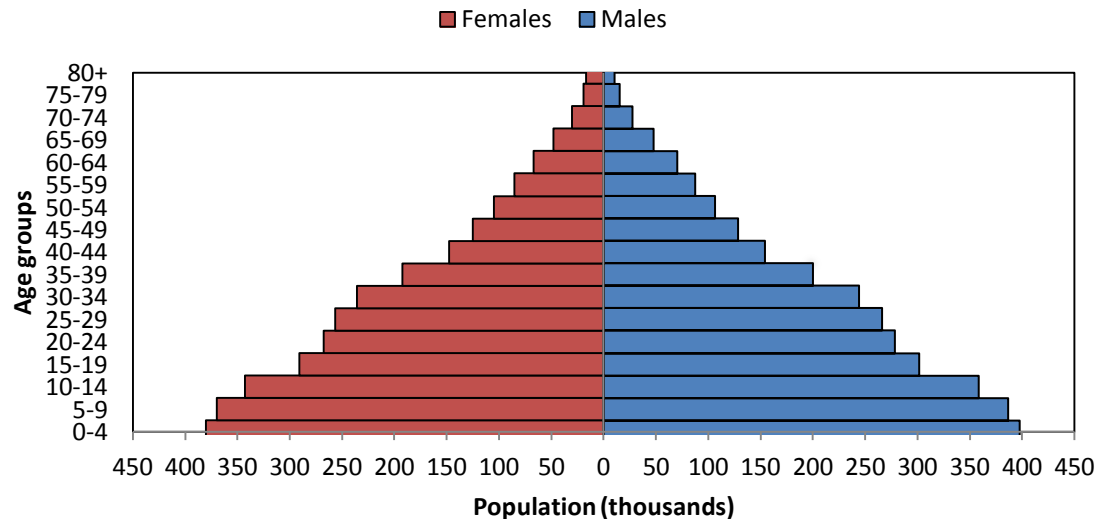
The interactions between different political, economic, social and cultural factors have shaped and modified the characteristics of the Palestinian population

# Palestinian Population Pyramid 2011-2025

2011



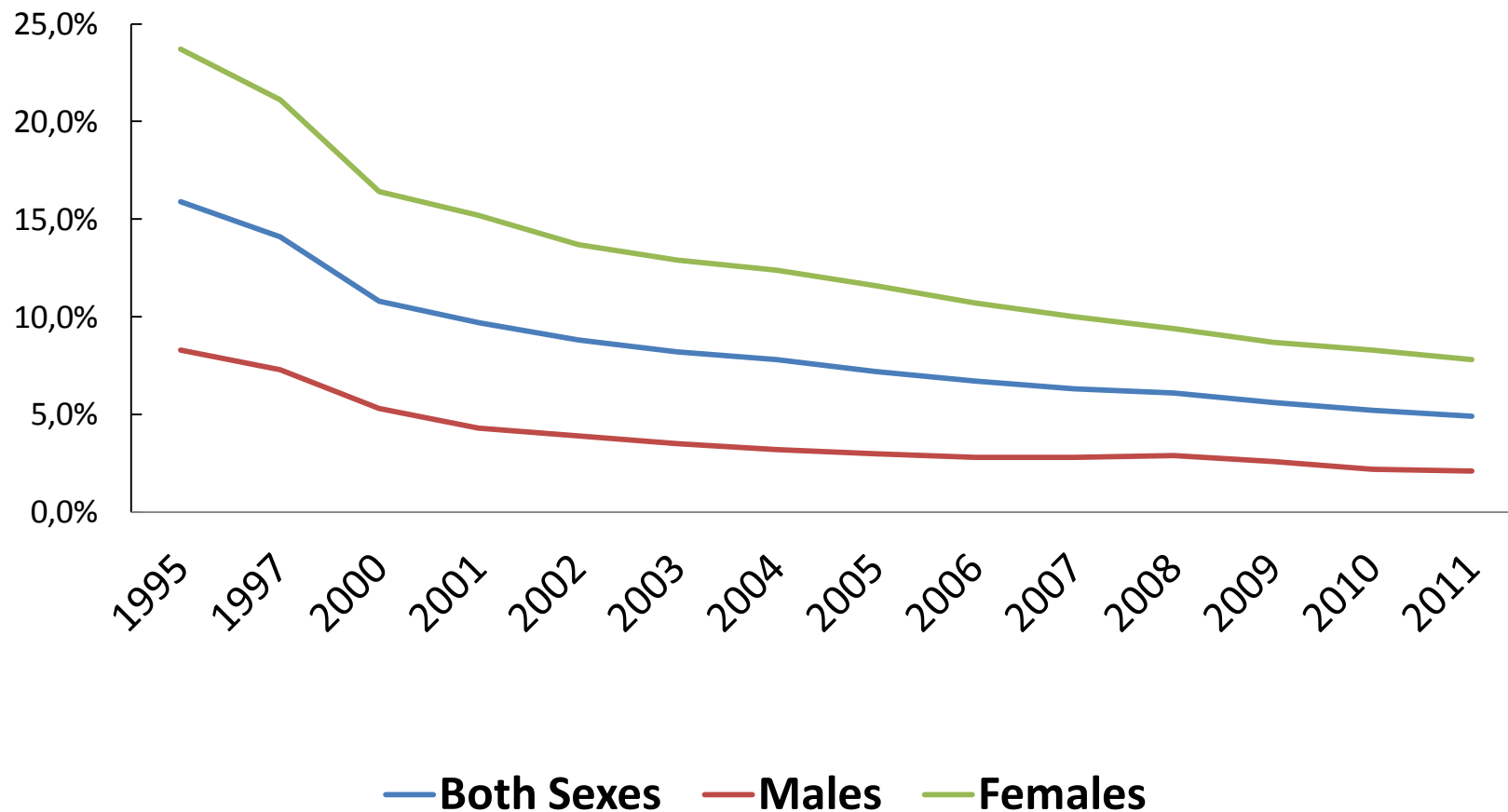
2025



# Selected Characteristics

		oPt	West Bank	Gaza strip	year
Population size	N	4,231,084	2,614,594	1,616,490	2011
Sex distribution	Males	50.8%	50.8%	50.8%	2011
	Femles	49.2%	49.2%	49.2%	2011
Literacy Rate (age: 15+)	Both sexes	95.30%	95.10%	95.50%	2011
	Males	97.90%	97.90%	97.70%	2011
	Females	92.60%	92.20%	93.30%	2011
Poverty level	Poverty	25.7%	18.3%	38.0%	2010
	Deep poverty	14.1%	8.8%	23.0%	
% urbanized		73.8%	69.0%	81.5%	2011
Unemployment level (15 years and above)	Both sexes	20.9%	17.3%	28.7%	2011
	Males	19.2%	15.9%	25.8%	2011
	Females	28.4%	22.7%	44.0%	2011

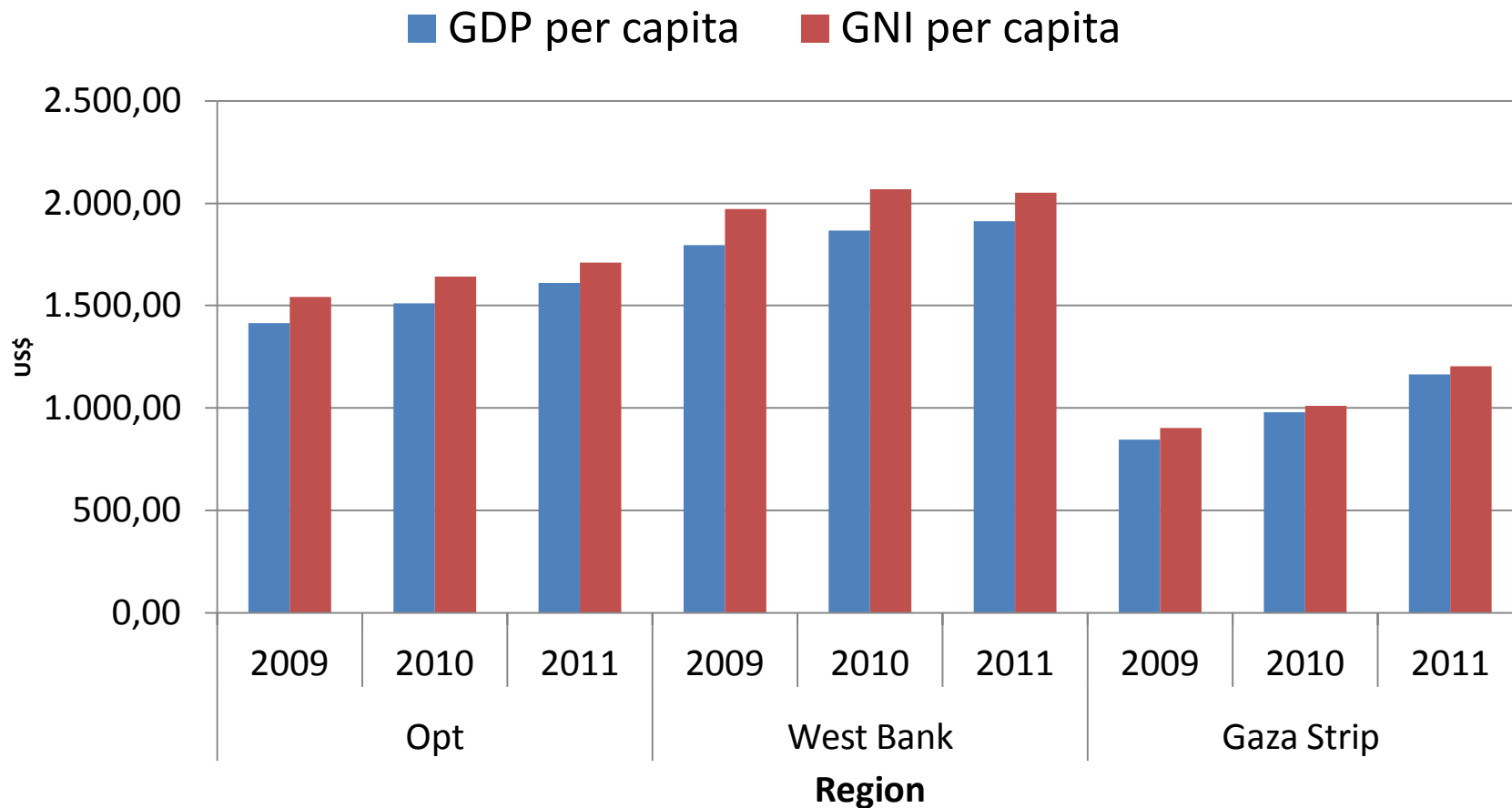
**Figure 3: Illiteracy rate among the Palestinian population (age 15+) by sex and year**



# Economic and Development Indicators

Indicator	oPt	West Bank	Gaze strip	year
GDP	9982 US\$ million	7086 Millon US\$	2896.1 Million US\$	2011
GDP per capita	2541 US\$	3029.7 US\$	1822.7 US\$	2011
GNI	10647 Million US\$	7658 Million US\$	2989Million US\$	2011
GNI per capita	2710.8 US\$	3274.1 US\$	1881.5 US\$	2011
Human development index	0.67			2012
GINI	35.5			2009

**Figure 2: GDP and GNI per capita in the occupied Palestinian territory by region at constant price (US\$)**





# **Political instability (Occupation)**

- Underdevelopment and de-development
- Destruction of institutional infrastructure.
- Severe budgetary restrictions.
- No control over land or water .
- Siege and closures – checkpoints
- West Bank totally separated from Gaza strip.
- West Bank divided into areas and separated by checkpoints.

# Selected Health Indicators

Indicator		Value			Year
		oPt	West bank	Gaza Strip	
Total fertility Rate		4.1	3.8	4.9	2008-2009
Under 5 mortality rate		21/1000			2011
Infant Mortality rate			18.8/1000		2011
Maternal mortality rate			28/100,000		2011
Crude death rate		03.9/1000	04.0/1000	03.8/1000	2012
Crude birth rate		32.7/1000	30.1/1000	37.3/1000	2012
Natural growth rate		3.0%	2.7%	3.5%	2012
life expectancy at birth (years)	Both Sexes	72.7	73.1	72.1	2012
	Males	71.4	71.7	707	2012
	Females	74.0	74.5	73.5	2012

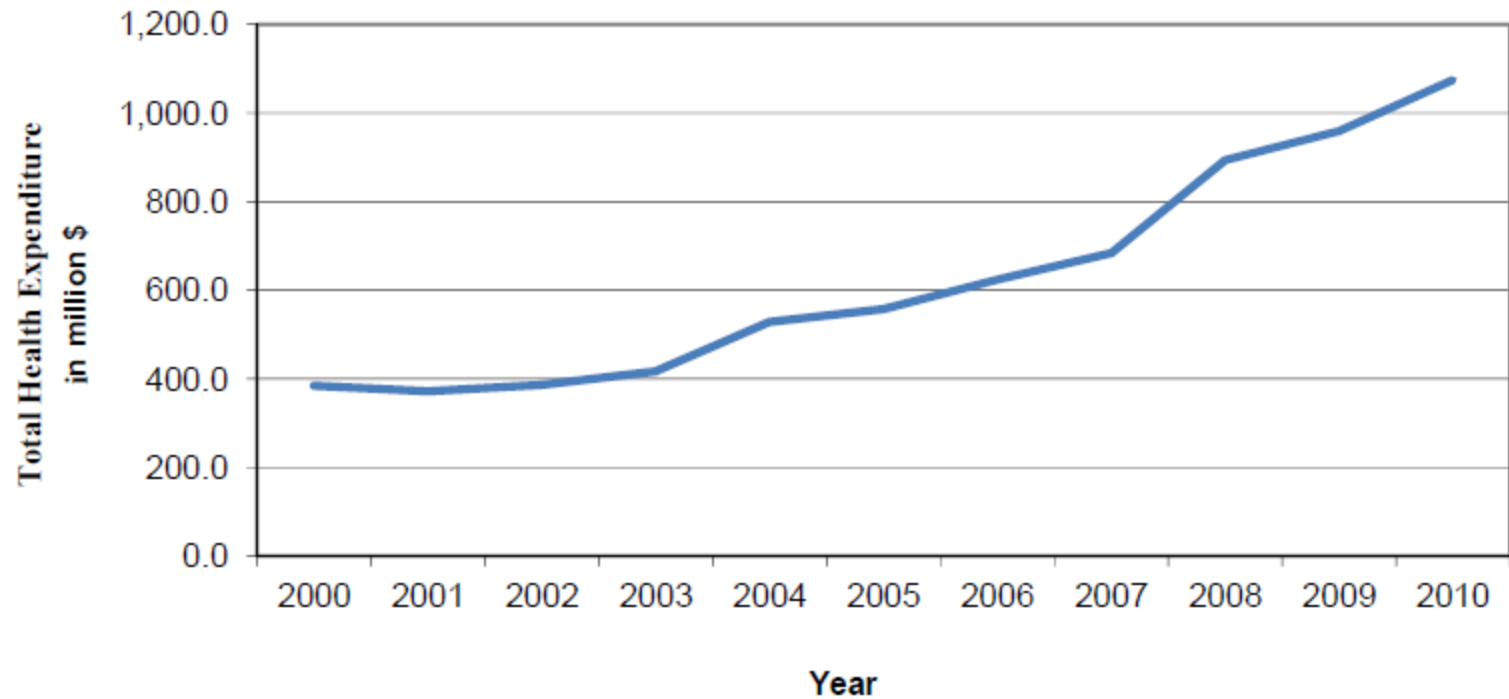
# Table 3: Selected health care/services indicators

Indicator		Value			Year
		oPt	West bank	Gaza Strip	
Percent with no health insurance	Total	17.8%	26.8%	3.3%	2011
	Urban	17.4%			2011
	Rural	28.3%			2011
	Camp	3.2%			2011
	Males	18.5%			2011
	Females	16.9%			2011
Social insurance coverage		NA			
Number of health workers per 1000 population	Doctors	1.6	1.3	2.3	2011
	Nurses	2.6	1.8	3.8	2011
	Dentists	0.6	0.7	0.5	2011
	Pharmacists	1.2	1.1	1.4	2011
	Hospital beds	1.2	1.2	1.3	2011

# Health care expenditure 2010

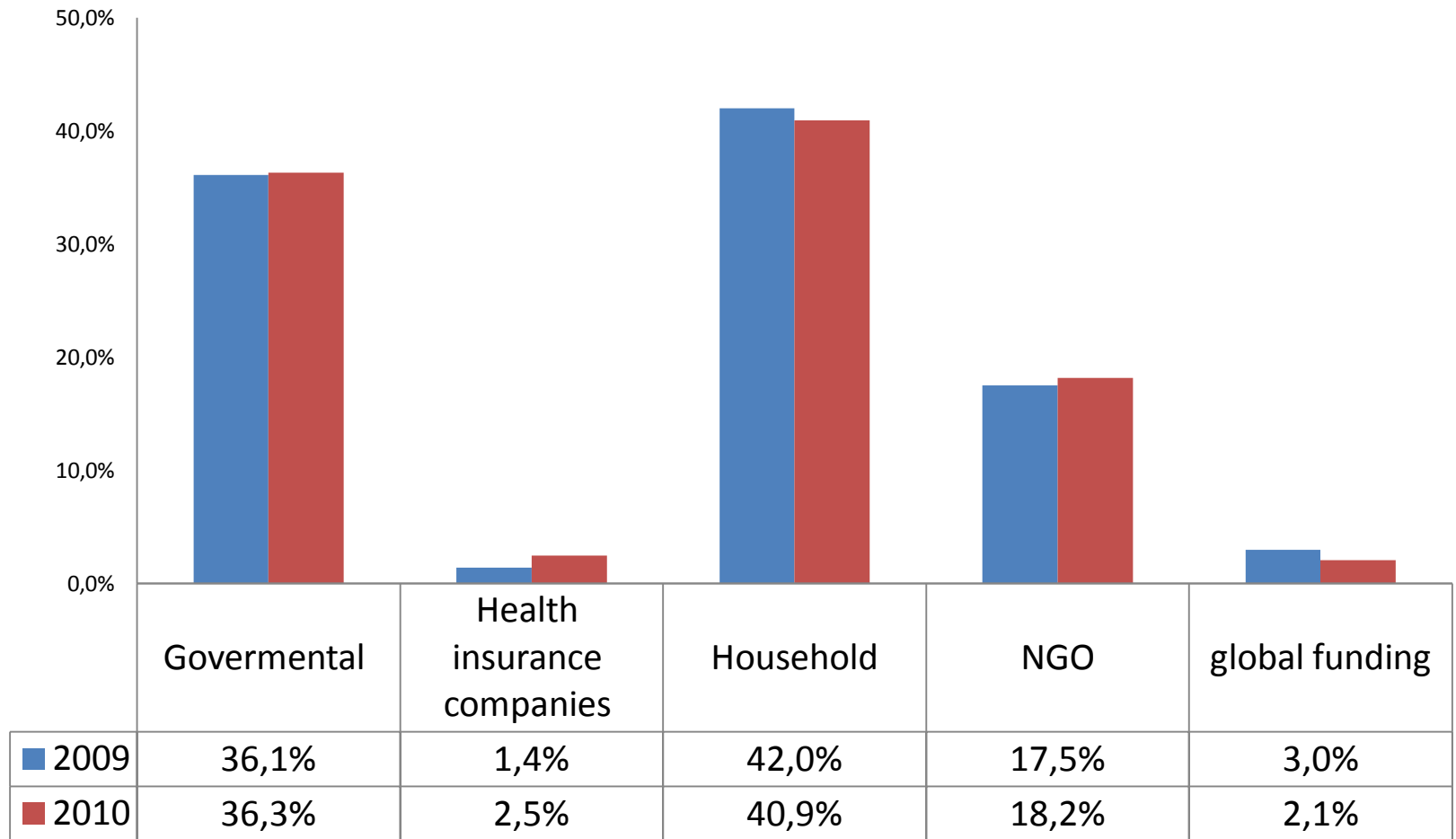
Type	Value
Health care expenditure	1074.4 Million US\$
Health care expenditure per Capita	282 US\$
Percentage of health expenditure out of the GDP	13.70%

### Health expenditure trend line in the Palestinian Territory for the years 2000-2010



*Source: PCBS. National Health accounts report (2009-2010).*

# Figure 4: Distribution of funding for health care expenditure in the oPt 2009-2010



# **Non-communicable diseases: Risk factors, Mortality and Morbidity**

# Non-communicable diseases

Definition :

**“Noncommunicable conditions (diseases) : A descriptive term for common and important conditions of public health importance that are not caused by infectious pathogens. Formerly some of these were classified as "chronic diseases," but this term is a misnomer when applied to cardiovascular disease such as acute myocardial infarction that causes sudden death. Even the adjective "noncommunicable" may be misleading when applied to cervical cancers caused by papilloma virus, some behavioral epidemics, or traffic-related injury and disability”**

***Source: Dictionary of Public health***

***John Last 2007***



# 1. Mortality

Health conditions included were:

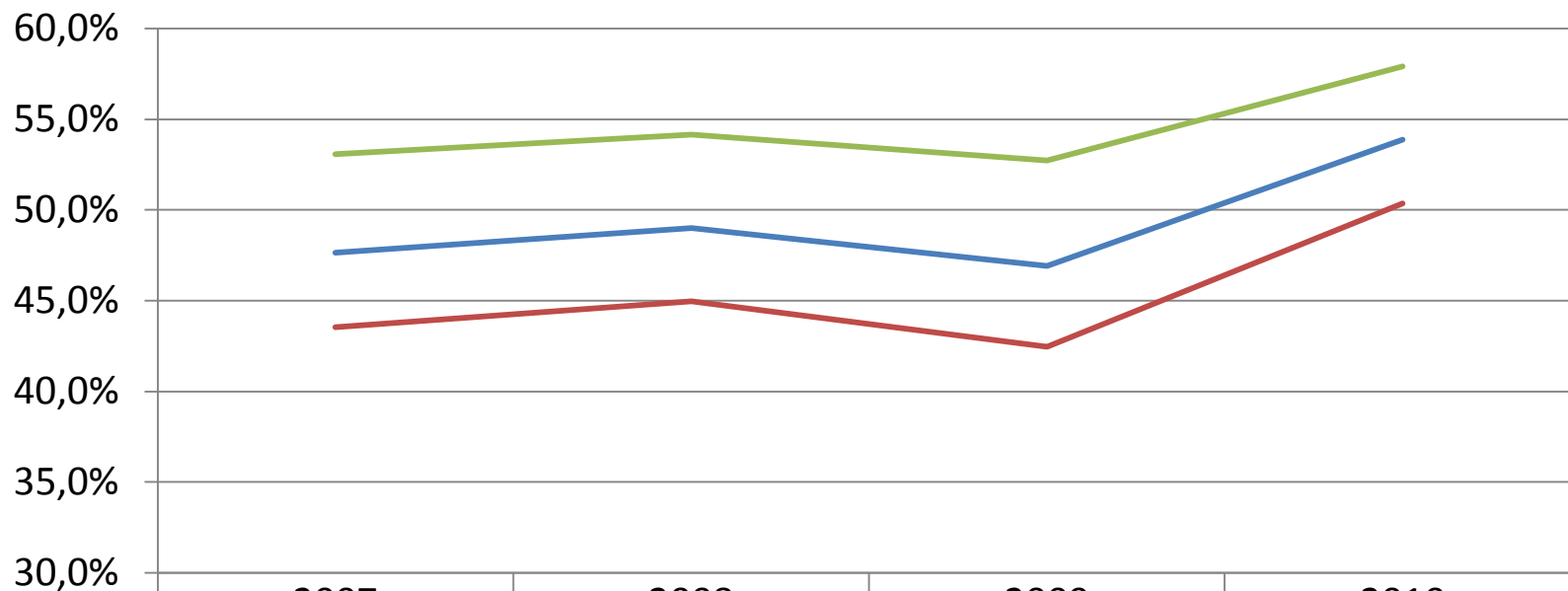
(based on availability of data)

DM - HTN - Heart Disease - Cerebrovascular  
Disease - Disease of Arteries - Malignant  
neoplasm

Duration : 2007-2010

*Source: MoH annual reports – cause of death  
mortality statistics*

# Proportionate mortality rate from NCDs in the oPt by sex and year



	2007	2008	2009	2010
Both Sexes	47,6%	49,0%	46,9%	53,9%
Males	43,6%	45,0%	42,5%	50,4%
Females	53,1%	54,2%	52,7%	57,9%

# Morbidity

## Prevalence of Hypertension and Diabetes (Measured)

Disease	Definition		oPt	West Bank	Gaza Strip
Hypertension	<i>Percentage of Raised BP (SBP <math>\geq</math>140 , DBP <math>\geq</math> 90 or on medications</i>	Both sexes	45.3%	39.5%	55.8%
		Males	44.8%	39.4%	54.8%
		Females	45.7%	35.7%	56.8%
Diabetes	Proportion of raised FBS ( $\geq$ 126mg/dL venous blood glucose)	Both sexes	12.5%	12.7%	12.1%
		Males	14.0%	14.2%	13.5%
		Females	11.0%	11.1%	10.8%

**Source: The WHO stepwise survey 2010**

# Metabolic Risk Factors

Risk factor		oPt	West Bank	Gaza Strip
<b>Hypercholesterolemia</b>  <i>Parentage of Raised Total Cholesterol ( <math>\geq 5</math>mmole/L) (age 25-64)</i>	Both sexes	47.4%	50.0%	42.1%
	Males	48.1%	52.0%	40.3%
	Females	46.6%	47.9%	44.0%
<b>Obesity</b>  <i>Percentage Overweight and Obese</i>	Both sexes	71.9%	70.0%	75.2%
	Males	68.1%	67.8%	68.6%
	Females	76.1%	72.5%	82.6%

# Behavioral Risk Factors

Risk factor		oPt	West Bank	Gaza Strip
<i>Percentage who currently smoke tobacco</i>	Both sexes	23.90%	27.5%	17.1%
	Males	44.30%	49.3%	34.6%
	Females	3.50%	5.3%	0.3%
<i>% of low level physical activity (&lt;600 met-min/week) (both sexes)</i>	Both sexes	49.90%	48.6%	52.1%
	Males	38.30%	35.3%	43.5%
	Females	61.60%	62.0%	60.9%
Percentage who ate less than 5 servings of fruits and vegetables	Both sexes	86.10%	80.7%	96.0%
	Males	86.10%	80.7%	96.0%
	Females	86.10%	80.7%	96.0%

# Health system in the oPt

- Established unit for the prevention and control of NCDs with dedicated staff and budget in the national health authority in 2011
- A multi-sectoral national policy for NCD inline of the global strategies was developed in 2010.
- A Palestinian tobacco control law was passed in 2005.

# Conclusion

- High Level of NCDs and their risk factors in the oPt
- Limited data on mortality, morbidity and risk Factors
- Variations observed by region and sex.
- High level of urbanization, unemployment, and poverty in addition to the effects of the occupation.

# Recommendations

- Improve availability and quality of data through conducting surveys and establishing registries.
- Implementation of available strategies and policies targeting NCDs.
- Establishing prevention programs targeted classical and social determinants of NCDs.
- Intersectoral collaboration should be enhanced between different health stakeholders.