

**MEDCHAMPS REPORT OF WORK PACKAGE 2:
DATA COLLECTION, SECONDARY ANALYSIS,
AND CRITICAL APPRAISAL**

1 INTRODUCTION

The goal of MEDCHAMPS project is to contribute towards health improvement in the three selected International Cooperation Partner Countries (ICPC) countries (Palestine, Syria, Tunisia) and Turkey, particularly to reduce NCD burden, focusing on CVD and diabetes.

The overall objective is to be able to make recommendations about the policy initiatives, both within and outside the health sector, likely to be the most effective and cost-effective in reducing the burden of CVD and diabetes mortality and morbidity in each country. The Project has 10 workpackages. WP2 aims to provide necessary data on CVD and diabetes for IMPACT modelling in each country during the project.

Objectives:

1. To identify and critically appraise existing data on population and demography, CVD risk factors, CVD morbidity and mortality and treatment uptake levels in specific CVD patient groups in Mediterranean partner countries
2. Overview of local CVD risk factor surveys and disease registers, and critically appraise these against standard international guidelines
3. To make recommendations for future collection of data (using the WHO STEP guide)

Partners involved in the WP2:

- UNEW, UK
- ICPH, Palestine
- SCTS, Syria
- INSP, Tunisia
- DEU, Turkey

Start date of WP2: Month 4th (April 2009)

End date: Month 18th (August 2010)

Alarming cardiovascular trends in Eastern Mediterranean countries

Authors: MedCHAMPS Collaboration (Turkey, Palestine, Syria and Tunisia, plus UK and Ireland)

BACKGROUND

Many Eastern Mediterranean countries are undergoing demographic and epidemiologic transitions and hence now face noncommunicable disease epidemics.

OBJECTIVES

To evaluate recent trends in cardiovascular mortality and risk factors in Palestine, Turkey, Syria, and Tunisia.

METHODS

Data sources in each country were identified, searched and appraised on population, mortality, major CVD risk factors and uptake of medical or surgical treatments. Official statistics, electronic databases, national survey and studies were screened from 1995 onwards.

RESULTS

Coronary heart disease mortality rates showed a decreasing trend in Turkey (1995- 2008) and in Palestine between 1998-2009. Tunisia and Syria showed an increasing trend.

Table1. Changes in coronary heart disease mortality rates in men and women in Palestine, Syria, Tunisia and Turkey

		Men	Women
Palestine (Age 25+)	1998	0,00143	0,00093
	2009	0,00122	0,00077
	% Change	-0,14	-0,26
Syria (Age 25+)	1996	0,00161	0,00097
	2006	0,00255	0,00170
	% Change	0,63	0,63
Tunisia (Age 25+)	1997	0,00070	0,00028
	2009	0,00087	0,00041
	% Change	0.21	0.14
Turkey (Age 35+)	1995	0,00456	0,00380
	2008	0,00366	0,00325
	% Change	-0,34	-0,28

% Change was calculated using indirect standardisation for aging

Smoking prevalences were high ranging from 24% to 59% in men. Smoking prevalence decreased in Turkey and Palestine but persisted in Tunisia and Syria (Table 2). Obesity and diabetes prevalence in the region rapidly increased, especially among women (Table 3 and 4). Population blood pressure levels decreased in Palestine and Turkey but increased slightly in Tunisia and Syria (Table 5). Cholesterol levels decreased in Palestine and Tunisia but increased in Turkey and Syria (Table 6).

Table 2. Changes in smoking prevalence in Palestine, Syria, Tunisia and Turkey

		Men	Women
Palestine (Age 25+)	1998	0,54	0,10
	2009	0,40	0,03
	% Change	-0,25	-0,68
Syria (Age 25+)	1996	0,55	0,10
	2006	0,59	0,15
	% Change	0,06	0,47
Tunisia (Age 25+)	1997	0,47	0,02
	2009	0,42	0,04
	% Change	-0,11	1,82
Turkey (Age 35+)	1995	0,44	0,094
	2008	0,25	0,072
	% Change	-0,45	-0,23

Table 3. Changes in population mean body mass index in men and women in Eastern Mediterranean countries

		Men	Women
Syria	1996	26,78	29,13
	2006	28,26	31,24
	% Change	0,06	0,07
Tunisia	1997	24,83	27,17
	2009	26,76	28,15
	% Change	0,08	0,04

Turkey	1995	26,07	28,724
	2008	27,87	30,098
	% Change	0,07	0,05
Palestine*	1998	0,27	0,27
	2009	0,30	0,41
	% Change	0,12	0,51

**obesity prevalence*

Table4. Changes in diabetes prevalence in men and women in Eastern Mediterranean countries

		Men	Women
Palestine	1998	0,08	0,13
	2009	0,09	0,11
	% Change	0,09	-0,16
Syria	1996	0,08	0,10
	2006	0,11	0,15
	% Change	0,52	0,52
Tunisia	1997	0,12	0,12
	2009	0,19	0,16
	% Change	0,58	0,29
Turkey	1995	0,15	0,159
	2008	0,18	0,205
	% Change	0,21	0,29

Table 5. Changes in population mean systolic blood pressure and total cholesterol levels in men and women in Eastern Mediterranean countries

		Systolic blood pressure		Total cholesterol	
		Men	Women	Men	Women
Palestine	1998	124,25	118,53	5,02	5,03
	2009	123,43	119,23	4,95	4,91
	% Change	-0,01	0,01	-0,01	-0,02
Syria	1996	125,42	118,79	5,02	5,08
	2006	131,80	129,94	5,23	5,46
	% Change	0,05	0,09	0,04	0,07
Tunisia	1997	129,44	131,34	4,44	4,73

	2009	133,43	128,76	5,17	4,31
	% Change	0,03	-0,02	0,17	-0,09
Turkey	1995	124,06	130,167	4,91	5,017
	2008	123,35	125,776	4,92	5,027
	% Change	-0,01	-0,03	0,00	0,00

Conclusions

Good quality epidemiologic data on the extent and determinants of noncommunicable disease are essential to respond the changing health needs of the population. Recent regional cardiovascular mortality and risk factor trends are worrying, and represent a new policy priority.

Full report available on request.