

# An assessment of socio-demographic characteristics in relation to NCDs in the occupied Palestinian territory

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# Background

- NCDs are among the most pressing health challenges in the oPt.
- However, research on NCDs in the region and in Palestine in particular is limited.
- Cardiovascular disease has been the leading cause of death in the West Bank (MoH)



# Objective

- The aim of this study is to assess select socio-demographic characteristics of health in relation to NCDs among Palestinians in the West Bank and the Gaza Strip.



# Methodology

- This study utilizes secondary data from the 2006 Palestinian Family Health Survey conducted by the Palestine Central Bureau of Statistics which utilizes a two-stage stratified sampling technique.
- The survey is nationally representative and includes about 13,000 households.



# Methodology

- Individuals 30 years of age and older were included in this analysis.
- Logistic regression models (separated for males and females) are used to examine the impact of socio-demographic (including education, marital status, employment, refugee status, locale) characteristics on the probability of reporting having at least one NCD.
- NCDs include hypertension, stroke, diabetes, cardiac disease and cancer.



## Results: NCD reporting

- About 20% (2204 out of 11121) of the population sampled reported having at least one NCD.
- 15.5% of men (843) reported having at least one NCD.
- 24% of women (1361) reported having at least one NCD.



# Results

- Women are significantly more likely than men to report having at least one NCD

Male	1
Female	1.49 (95%CI:1.28-1.73)



## Results: The Gaza Strip and the West Bank

- Participants from the West Bank are slightly more likely than those from the Gaza Strip to report at least one chronic disease

Total Sample	Odds Ratio
Gaza Strip	1
West Bank	1.14 (95%CI:1.01-1.30)
Women	Odds Ratio
Gaza Strip	1
West Bank	1.10(95%CI:0.93-1.30)
Men	Odds Ratio
Gaza Strip	1
West Bank	1.19 (95%CI:0.98-1.44)



# Results: Refugees

- Refugees are more likely to report having at least one NCD as compared to non-refugees.

Total Sample	Odds Ratio
Non-refugee status	1
Refugee status	1.22(95%CI:1.08-1.38)
Women	Odds Ratio
Non-refugee status	1
Refugee status	1.36 (95%CI:1.15-1.60)
Men	Odds Ratio
Non-refugee status	1
Refugee status	1.05 (95%CI:0.87-1.27)



## Results: Dwelling type

- Residing in a rural dwelling is associated with significantly lower odds of reporting chronic diseases than residing in urban and camp dwellings.

Total Sample	Odds Ratio
Rural	1
Urban	1.36 (95%CI:1.19-1.56)
Camp	1.41 (95%CI:1.17-1.71)



## Results: Dwelling type

Women	Odds Ratio
Rural	1
Urban	1.31 (95%CI:1.10-1.57)
Camp	1.29 (95%CI:1.01-1.66)
Men	Odds Ratio
Rural	1
Urban	1.46 (95%CI:1.18-1.80)
Camp	1.66 (95%CI:1.23-2.23)



## Results: Education

- Education in relation to reporting at least one NCD was significant for women, but not men.

Total Sample	Odds Ratio
Secondary education or more	1
Preparatory Education	1.65 (95%CI:1.16-2.36)
Primary or below	2.07 (95%CI:0.63-0.05)



# Results: Education

Women	Odds Ratio
Secondary education or more	1
Preparatory Education	1.65 (95%CI:1.16-2.36)
Primary or below	2.07(95%CI:1.47-2.91)
Men	Odds Ratio
Secondary education or more	1
Preparatory Education	0.87 (95%CI:0.66-1.14)
Primary or below	0.82(95%CI:0.63-1.05)



## Results: Employment

- Employment was found to be significantly associated with reporting to have at least one NCD among men, but not women.

Total	Odds Ratio
Employed	1
Unemployed	1.14 (95%CI:0.94-1.39)
Outside the labor force	1.44 (95%CI:1.22-1.71)



# Results: Employment

Women	Odds Ratio
Employed	1
Unemployed	1.16 (95%CI:0.69-1.95)
Outside the labor force	1.33 (95%CI:1.00-1.76)
Men	Odds Ratio
Employed	1
Unemployed	1.27 (95%CI:1.02-1.57)
Outside the labor force	1.74 (95%CI:1.36-2.24)



# Summary of findings

- Unequal burden of chronic disease, mainly faced by women and refugees.
- Among women, those with less education are at an even greater disadvantage.
- Slight differences in NCD reporting among West Bank and Gaza.
- Significant differences between rural, urban and camp dwellers in NCD reporting.



# Limitations

- Analysis is based on a proxy self report sample.
- However, this is a nationally representative survey with a large sample size.



# Conclusion

- Further research is needed to account for these disparities, including a closer investigation into socio-demographic variables such as sex, residence, education and employment in relation to NCDs.