



Assessment of the change in Obesity Prevalence of women and men living in Balcova District of Izmir according to the Social Determinants of Health

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BACKGROUND

- Difference in obesity prevalence between women and men
- Gender, as one of the important social determinants of health may have an important role in the difference of obesity prevalence

BACKGROUND

- Balcova Heart Study
- Population-based intervention study
- Conducted in Balcova district of Izmir
- Aimed to assess the risk factors of coronary heart diseases
- Applying a questionnaire and doing the antropometric measurements
- 16,080 persons over 30 years of age
- Ongoing cohort study, began in 2007

*Ergor G. et al, Balcova Heart Study, Rationale and methodology of the Turkish Cohort, 2011 **Unal B.et al, High prevalence of cardiovascular risk factors in a Western urban Turkish population: a community-based study,2012

OBJECTIVE

The aim of this study is to determine the prevalence of obesity in women and men living in Balcova district of Izmir and to assess the change in the prevalence according to the social determinants of health

METHOD

- The data of Balcova Heart Study
- ▶ BMI≥30
- First Stage desity prevalence for both women and men
- In each layer of independent variables:
 - education
 - employment status
 - occupational categories
 - perceived economical status

METHOD

- Finally age and comorbidity adjusted OR according to
 - Age
 - Hypertension
 - Diabetes
 - Coronary heart diseases
 - Stroke

Table 1: Obesity prevalence between women and men

	Women	Men	OR	Adjusted OR*	Adjusted OR**
	(%)	(%)	(95% CI)	(95% CI)	(95% CI)
OBESITY	44.2	29.3	1.91(1.77-2.07)	2.10 (1.94-2.28)	2.05 1.89-2.22)

*Adjusted for age **Adjusted for age, comorbidity

Table 2: Obesity prevalencebetween women and menaccording to education

EDUCATION	Women	Men	OR	Adjusted OR*	Adjusted OR** (95% Cl)	
	(%)	(%)	(95% CI)	(95% CI)		
Illiterate	64.2	21.4	6.56 (3.40- 12.66)	6.35 (3.29-12.26)	5.83 (3.00-11.34)	
Literate	57.6	27.0	3.67 (2.04-6.61)	3.72 (2.06-6.71)	3.23 (1.77-5.89)	
Primary School	50.5	31.1	2.25 (1.99-2.55)	2.55 (2.25-2.90)	2.51 (2.21-2.85)	
Middle School	36.1	30.7	1.27 (1.01-1.61)	1.53 (1.19-1.95)	1.50 (1.17-1.93)	
High School	29.2	28.0	1.06 (0.89-1.25)	1.26 (1.06-1.51)	1.27 (1.06-1.52)	
University	22.7	28.0	0.75 (0.59-0.94)	0.90 (0.71-1.14)	0.91 (0.71-1.15)	

*Adjusted for age**Adjusted for age, comorbidity

Table 3: Obesity prevalence between women and men according to employment status

EMPLOYMENT STATUS	Women (%)	Men (%)	OR (95% CI)	Adjusted OR* (95% CI)	Adjusted OR** (95% CI)
Unemployed	47.2	24.3	2.77 (2.07-3.71)	2.56 (1.90-3.46)	2.49 (1.84-3.37)
Employed	20.2	27.7	0.66 (0.52-0.82)	0.72 (0.57-0.90)	0.70 (0.55-0.89)
Retired	44.7	30.8	1.81 (1.57-2.09)	1.88 (1.62-2.18)	1.89 (1.62-2.19)

*Adjusted for age**Adjusted for age, comorbidity

Table 4: Obesity prevalencebetween women and men according tooccupational categories

OCCUPATIONAL	Women	Men	OR	Adjusted	Adjusted	
CATEGORIES	(%)	(%)	(95% CI)	OR*	OR**	
				(95% CI)	(95% CI)	
Unemployed	46.9	29.4	2.12	2.83	2.79	
			(1.91-2.34)	(2.54-3.15)	(2.50-3.12)	
Workers	25.8	32.1	0.73	0.78	0.80	
			(0.44-1.20)	(0.47-1.29)	(0.48-1.33)	
Temporary	22.5	28.4	0.73	0.75	0.66	
Workers			(0.47-1.13)	(0.48-1.16)	(0.42-1.04)	
Professionals	16.6	25.1	0.59	0.68	0.68	
			(0.41-0.85)	(0.47-0.98)	(0.47-0.98)	
Employers	25.0	30.3	0.76	0.84	0.82	
			(0.45-1.29)	(0.49-1.44)	(0.47-1.41)	
*Adjusted for age						

**Adjusted for age comorbidity

Table 5: Obesity prevalence between women and men according to perceived economical status

PERCEIVED ECONOMICAL STATUS	Women (%)	Men (%)	OR (95% CI)	Adjusted OR* (95% Cl)	Adjusted OR** (95% Cl)
Bad	45.2	24.2	2.58 (1.94-3.43)	2.80 (2.09-3.75)	2.62 (1.94-3.54)
Moderate	44.9	30.1	1.89 (1.73-2.06)	2.06 (1.89-2.26)	2.01 (1.84-2.20)
Good	37.9 🗸	28.9	1.49 (1.16-1.92)	1.73 (1.33-2.25)	1.74 (1.34-2.27)

*Adjusted for age **Adjusted for age,comorbidity

CONCLUSION

Education and employment status

important roles

Benefit from the increase in educatonal and occupational level

CONCLUSION

- Perceived economical status not a good indicator
- Due to the economical dependence of women
- Better economical status perception may arise from husbands' income

CONCLUSION

- The causal relation between education and gender inequality in obesity
- Further researches

THANK YOU...