

Trends and determinants of smoking-related disparities following Israel's National Tobacco Control Plan: Analysis of two nationwide surveys (2010 and 2017)

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Background and aims

Despite a global decline in smoking prevalence, social disparities in smoking rates persist in many countries. We evaluated 7-year changes and predictors of smoking habits, following the National Tobacco Control Plan (NTCP), launched in 2011.

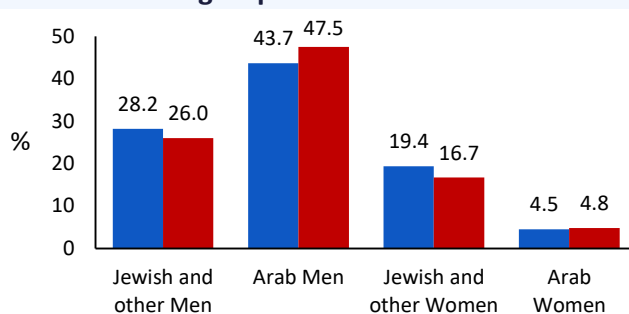
Methods

Data from the cross sectional Israeli Central bureau of statistic Social Surveys in 2010 (n=7,524) and 2017 (n=7,230) were collected from adults >20 years old through in-person interviews. Data comprised information on smoking habits, and demographic, socioeconomic and health-related characteristics.

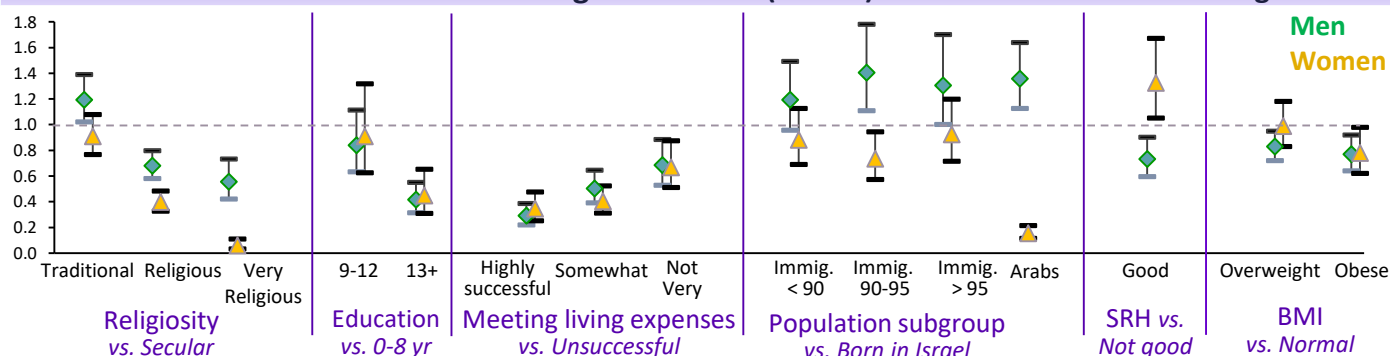
Results

Consent rate was 75% in 2017 and 79% in 2010.

Proportion of current smokers by population subgroup in 2010 vs 2017



Factors associated with smoking status— ORs (95% CI) for current vs. never smoking¹



SRH, Self-Rated Health; Immig., Immigrants; ¹Results from multinomial logistic regression models (current, past and never smoking). Normalized weights applied, adjusted for age, marital status, physical activity and Survey year. In men, adjusted also for number of people in household, employment status and geographical district.

Factors associated with younger smoking initiation age: Parametric survival analysis of interval-censored data²

Variable	Men			Women		
	Estimate ³	SE	P	Estimate ³	SE	P
Birth cohort, vs 1930-49						
1950-59	-0.75	0.24	0.002	-0.79	0.27	0.004
1960-69	-0.42	0.27	0.12	-0.85	0.28	0.003
1970-79	-0.33	0.25	0.18	-1.69	0.26	<0.001
1980-89	-1.23	0.26	<0.001	-2.33	0.27	<0.001
1990+	-1.93	0.37	<0.001			
Population subgroup, vs Born in Israel						
Immigrants < 1990	-0.21	0.23	0.37			
Immigrants in 1990-95	-1.42	0.25	<0.001	n.s.		
Immigrants > 1995	-1.36	0.28	<0.001			
Arabs	1.06	0.22	<0.001			

Variable	Men		
	Estimate ³	SE	P
Years of education, vs 0-8			
9-12	0.49	0.27	0.067
13+	1.79	0.27	<0.001
Meeting living expenses, vs Unsuccessful			
Not very successful	0.55	0.27	0.041
Somewhat successful	0.89	0.25	0.005
Highly successful	1.20	0.31	<0.001

²Normalized weights applied, adjusted for religiosity. In men, also adjusted for physical activity, geographical district and number of people in household.

³Positive estimates indicate an older smoking initiation age; negative estimates indicate a younger initiation age.

Conclusions and recommendations

Despite the enactment of the NTCP, we observed a trend towards younger smoking onset age with later birth cohort; and a disturbing increase in smoking rates, which were high in the first place, among Arab men. Effective implementation of tobacco-control policies requires adequate allocation of resources and long-term coordinated action of all relevant stakeholders. Future tobacco-control policies should focus on reducing social and cultural inequalities in smoking uptake.