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#### Determinants of The Impact of The Economic Crisis on General and Oral Health in Greater Athens Area Greece



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# **Determinants of the impact of the economic crisis on general** and oral health in the greater area of Athens, Greece

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### Introduction

- Since the year 2009, the economic crisis has spawned profound economic, social and political consequences in Greece [1].
- There is an ongoing extensive discussion on the health and healthcare effects of the economic crisis. First evidence is alarming as it suggests the existence of increased mental health problems. suicides and epidemics, while the consequences for the healthcare system are more concerning due to the unprecedented public health expenditures cuts [2]
- Information on the impact of the crisis on oral health in Greece is scarce.

### • In a non-randomized, cross-sectional, observational study, 463 dental patients were enrolled from 5 private dental clinics in the greater area of Athens, between March and April 2014.

Methods

- Patients completed a self-administered quescollecting data tionnaire on SOCIOdemographics, self-rated general and oral health status, and oral and general healthrelated quality of life, while a 5-point selfevaluation of the impact of the economic crisis on their oral and general health was also used.
- Descriptive statistics were used to summarize data.

## Results

- 61.7% of the sample were females.
- 36.2 years was the overall mean age.
- 60.1% and 54.6% of the sample reported at least some impact of the economic crisis on their general and oral health (Figure 1); the impact was statistically significantly higher on general health (p=0.007, based on a Wilcoxon signed-rank test).
- Females, older age, lower education and income, and unemployment were associated with higher reported health bearing of the crisis on both general and oral health (Figures 2-6).

## **Objective**

- To investigate the determinants of the impact of the economic crisis on general and oral health in the greater area of Athens, Greece.
- Binary logistic regression models with backward elimination (removal at 10% level) of poor predictors were employed to determine the most important factors influencing the health impact of the economic crisis.
- Statistical significance level was set at  $\alpha = 0.05$ .
- A year increase was associated with 14% (p<0.001) and 3.3% (p<0.001) increased odds of recording an impact on oral and general health, respectively. Participants of the highest income class were 82.3% (p=0.001) και 72.9% (p=0.010) less likely to report an impact on their oral and general health, respectively, than those belonging in the lowest (Tables 1 & 2).

	Results					
<b>Figure 1.</b> Health impact of crisis on oral and general health	at	<b>Table 1.</b> Results of bination of the some impact of called the some impact of called the source of		•		
45,4%	Oral health   54.8%   26.2%   9.5%   9.5%   0.0%				050/ 0	
40% 40% 55%	Image: Constraint of the second sec		Sig. for b		95% C.I. for OR	
	Note   Sector   Sector <td></td> <td>coefficient</td> <td>OR</td> <td>Lower</td> <td>Upper</td>		coefficient	OR	Lower	Upper
1 25.7% <sup>26.9%</sup>	General health 40.2% 27.7% 23.2% 7.1% 1.8%   Age p<0.001	5.41				
<sup>o</sup> 25% 19.7% 16.3% 10.8%	상 Oral health 45.5% 27.3% 16.4% 9.1% 1.8%	come (< 500 € ref.)	p<0.001			
	Ceneral health 15.6% 36.4% 23.4% 22.1% 2.6%	vel 500 – 999 €	' p=0.355	0.68	0.31	1.53
<u>v</u> 15% 10.8%	Oral health   26.0%   29.9%   27.3%   13.0%   3.9%	1.000 – 1.499 €	•	0.44		0.97
	General health 8.3% 16.7% 16.7% 45.8%					
5%	Oral health 16.7% 16.7% 12.5% 41.7% 12.5%	1.500 - 2.499 €	•	0.26		0.60
0%	<b>0% 20% 40% 60% 80% 100%</b>	>2.500 €	p=0.001	0.18	0.07	0.47



NONE SMALL MODERATE IMPORTANT VERY IMPORTANT

Figure 2. Health impact of crisis & gender



Moderate Important Very important Small None None

### Figure 5. Health impact of crisis & income



#### **Figure 4.** Health impact of crisis & age



Figure 6. Health impact of crisis & employment

**Table 2.** Results of binary logistic regression with at least some impact of crisis on general health as dependent variable

p=0.866

Constant

2.48

		Sig. for b		95% C.I. for OR		
		coeffi- cient	OR	Lower	Upper	
Age		p<0.001	1.03	1.02	1.05	
Income Ievel	(<500 € ref,)	p=0.001				
	500 – 999 €	p=0.909	1.05	0.45	2.45	
	1.000 – 1.499 €	p=0.393	0.69	0.30	1.60	
	1.500 - 2.499 €	p=0.015	0.34	0.14	0.81	
	> 2.500 €	p=0.010	0.27	0.10	0.73	
Education	(Lower ref.)	p=0.065				

### Conclusions

• The economic crisis exerts a significant health impact on Greek citizens, which appears to be marginally higher on general compared with oral health. • Lower age and higher socio-economic status, as it is measured by income, exhibit a protective function against the health aggravating effects of the economic crisis in both general and oral health status.

## References

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