HPR73: Underfunding of Public Health System and Unmet Dental Needs Among the European Elderly Population

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Introduction

- With the aging population increasing, ensuring access to essential healthcare is crucial for older adults' health. Although most European health systems have achieved a level of universal health coverage, many countries are still challenged by significant access barriers [1].
- The availability of public health resources plays a pivotal role in shaping the performance of the healthcare system [2]. Underinvestment strains public health systems, hindering their ability to meet basic healthcare needs.

Objective

- This study assessed the impact of public health expenditure on unmet dental needs among older Europeans.

Methods

- We analyzed data from 42,780 individuals aged 50 years and above, representing 26 participating countries in wave 8 (2019/2020) of the Survey on Health, Ageing, and Retirement in Europe.
- Probit regression analyses were employed to estimate the impact of public health expenditure on the likelihood of unmet dental needs.

Results

- The proportion of individuals who had a dentist visit in the previous year notably increased in nearly all participating countries from 2004 to 2020, as illustrated in Fig. 1. In 2020, Denmark (85.6%), Luxembourg (83.1%), and Germany (82.3%) had the highest dental visit rates, while Poland (31.5%), Hungary (16.5%), and Romania (13.2%) reported the lowest dental visit rates.
- From 2004 to 2020, there was a noticeable rise in the prevalence of unmet dental needs in the majority of countries, as indicated in Fig. 2. In 2020, Greece recorded the highest incidence at 17.4%, followed by Romania at 11.8% and Estonia at 11.1%. Conversely, the lowest rates were observed in Croatia (2.2%), Slovenia (2%), and Luxembourg (2%).
- In terms of the largest absolute inequalities between the poorest and richest quartiles in the prevalence of unmet dental needs, France stood out as having the most significant disparities, followed by Latvia and Italy, as depicted in Fig. 3. Conversely, Hungary, Czechia, and Slovakia ranked at the bottom with the least pronounced disparities.
- Increased public health expenditure demonstrated a significant effect in reducing the likelihood of unmet dental needs (Fig. 4).
- The average marginal effect varied among European countries, with higher rates observed in nations characterized by high unmet dental needs and low public health expenditure.
- Additional significant risk factors for unmet dental needs encompassed factors such as younger age, female gender, unmarried status, urban residence, unemployment, lower education, reduced income, poorer health status, and living in a Bismarckian welfare state, when compared to the Social-democratic welfare regime (Fig. 4).

Conclusions

- There is a significant presence of unmet dental needs among older adults in Europe, and these needs have also seen a significant increase over time.
- To address this issue, it is crucial to make substantial and sustained investments in public health. By increasing public health expenditure, we can substantially enhance access to dental care, leading to improvements in the overall health outcomes of

Results

Figure 1. Changes in the share (%) of individuals with a dentist visit in the previous year per country

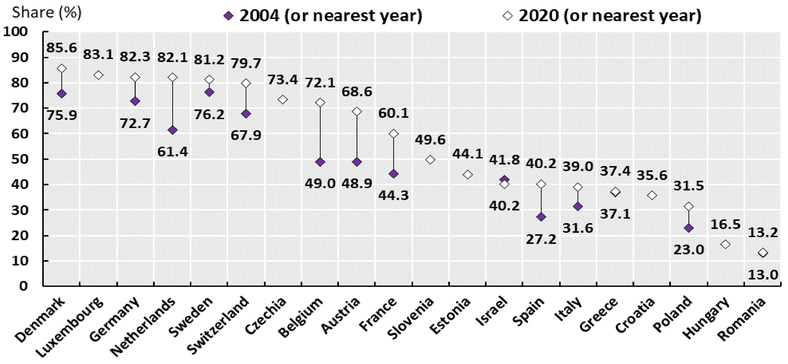


Figure 2. Changes in the prevalence (%) of unmet needs for dental care per country

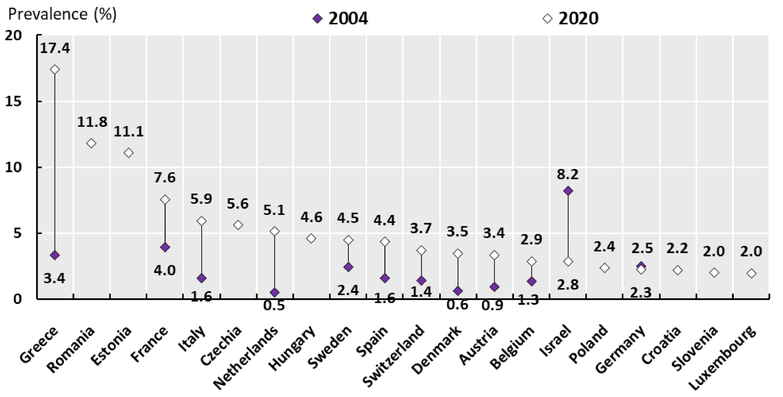


Figure 3. Income-related inequalities in the prevalence (%) of unmet dental needs by country (2020)

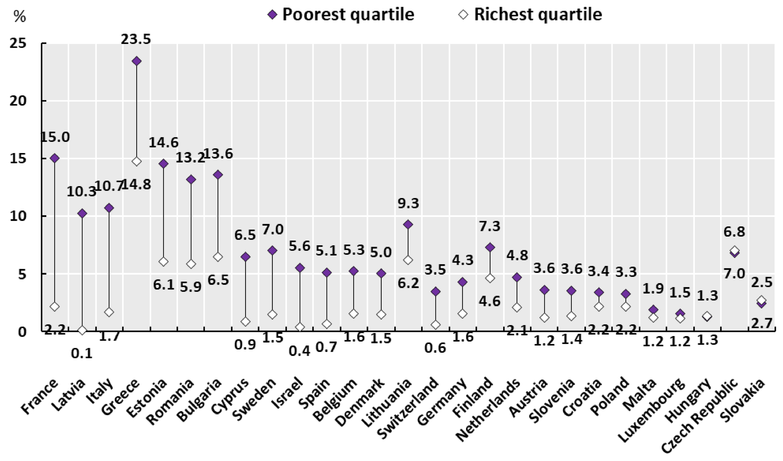
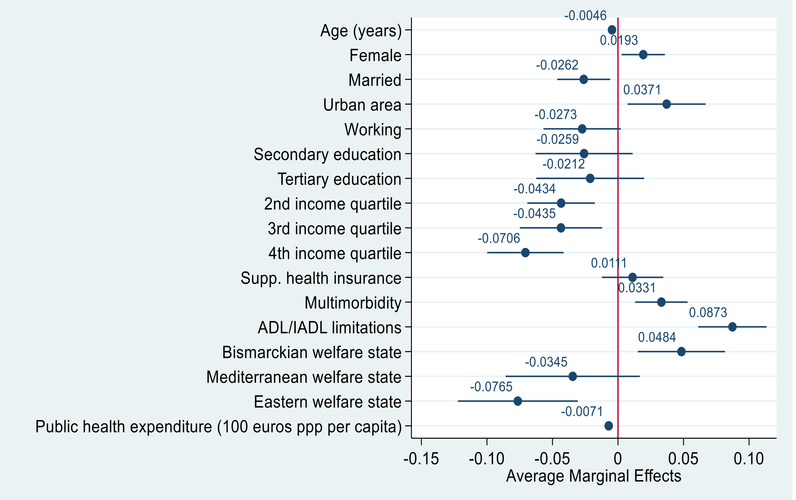


Figure 4. Average marginal effects of independent predictors of the probability of unmet dental needs following probit model estimation



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