

# Socioeconomic inequalities in the use of dental care services in Europe: what is the role of public coverage?

Laia Palència<sup>1,2,3,4</sup>, Albert Espelt<sup>1,2,3,5</sup>,  
Marco Cornejo-Ovalle<sup>2,6</sup> and  
Carne Borrell<sup>1,2,3,4</sup>

<sup>1</sup>CIBER Epidemiología y Salud Pública (CIBERESP), Madrid, Spain, <sup>2</sup>Agència de Salut Pública de Barcelona, Barcelona, Spain, <sup>3</sup>Institut d'Investigació Biomèdica Sant Pau (IIB Sant Pau), Barcelona, Spain, <sup>4</sup>Universitat Pompeu Fabra, Barcelona, Spain, <sup>5</sup>Departament de Psicobiologia i Metodologia de les Ciències de la Salut, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Bellaterra, Spain, <sup>6</sup>Facultad de Odontología, Universidad de Chile, Santiago, Chile

Palència L, Espelt A, Cornejo-Ovalle M, Borrell C. Socioeconomic inequalities in the use of dental care services in Europe: what is the role of public coverage?. Community Dent Oral Epidemiol 2013. © 2013 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd

**Abstract – Objectives:** The aim of this study was to analyse inequalities in the use of dental care services according to socioeconomic position (SEP) in individuals aged  $\geq 50$  years in European countries in 2006, to examine the association between the degree of public coverage of dental services and the extent of inequalities, and specifically to determine whether countries with higher public health coverage show lower inequalities. **Methods:** We carried out a cross-sectional study of 12 364 men and 14 692 women aged  $\geq 50$  years from 11 European countries. Data were extracted from the second wave of the Survey of Health, Ageing and Retirement in Europe (SHARE 2006). The dependent variable was use of dental care services within the previous year, and the independent variables were education level as a measure of SEP, whether services were covered to some degree by the country's public health system, and chewing ability as a marker of individuals' need for dental services. Age-standardized prevalence of the use of dental care as a function of SEP was calculated, and age-adjusted indices of relative inequality (RII) were computed for each type of dental coverage, sex and chewing ability. **Results:** Socioeconomic inequalities in the use of dental care services were higher in countries where no public dental care cover was provided than in countries where there was some degree of public coverage. For example, men with chewing ability from countries with dental care coverage had a RII of 1.39 (95% CI: 1.29–1.51), while those from countries without coverage had a RII of 1.96 (95% CI: 1.72–2.23). Women without chewing ability from countries with dental care coverage had a RII of 2.15 (95% CI: 1.82–2.52), while those from countries without coverage had a RII of 3.02 (95% CI: 2.47–3.69). **Conclusions:** Dental systems relying on public coverage seem to show lower inequalities in their use, thus confirming the potential benefits of such systems.

Key words: dental health care; public coverage; socioeconomic factors

Laia Palència, Agència de Salut Pública de Barcelona, Plaça Lesseps 1, 08023 Madrid, Spain  
Tel.: +34 932027774  
Fax: +34 933686943  
e-mail: lpalenci@aspb.cat

Submitted 1 February 2013;  
accepted 15 May 2013

Oral health is a condition in which people can speak, eat and socialize without active (oral) disease, discomfort or embarrassment (1). While having good levels of oral health is important in itself, it has also been linked to general health (2). However, levels of oral health are not equally distributed throughout the population, as there are

inequalities in terms of socioeconomic position (SEP), with people of disadvantaged SEP being more likely to have poorer outcomes in all oral health conditions (1, 3). These inequalities are mediated by certain health-related behaviours such as having a balanced diet, smoking or alcohol consumption (1, 4). In contrast, the role attributable to