## Correspondence

Dear Sir,

I feel obliged to comment on the article by Calado *et al.*, "Caries prevalence and treatment needs in the young people in Portugal: the third national study" published in Community Dental Health (2017) 34, 107-111. This was not the third national study but the sixth. Three National Pathfinder Surveys were completed in 1983/4, 1989/90 and 1998/9 after proposals by WHO to our General Director of Health (Möller and Marthaler, 1985; Almeida *et al.*, 1990a,b; Almeida *et al.*, 1991; Almeida, 1997; Almeida, *et al.*, 2002; Almeida *et al.*, 2003).

It is important that we remember the members of WHO that supported the studies (Dr. David Barmes, Dr. Ingolf Möller, Prof. Thomas Marthaller and Prof Paul Erik Petersen), Prof Clarimundo Emílio, who directed the first study and the many teachers, children, adults and schools that participated in the first three surveys.

These three studies have implications for the conclusions of Calado *et al.*, that will be analyzed in a Portuguese publication.

César Mexia de Almeida (Professor in Preventive and Community Dental Medicine, Chief Dental Officer 2004-6. Retired)

## References

- Almeida, C.M., Emílio, M.C., Möller, I. and Marthaller, T. (1990a): 1º Inquérito Nacional Explorador de prevalência das doenças e necessidades de tratamento na cavidade oral. (1ª parte) Revista Portuguesa de Estomatologia e Cirurgia Maxilofacial 31:137-149
- Almeida, C.M., Emílio, M.C., Möller, I. and Marthaller, T. (1990b): 1º Inquérito Nacional Explorador de prevalência das doenças e necessidades de tratamento na cavidade oral. (2ª parte) Revista Portuguesa de Estomatologia e Cirurgia Maxilofacial 31:215-230.
- Almeida, C.M., Emílio, M.C., Möller, I. and Marthaller, T. (1991): 1º Inquérito Nacional Explorador de prevalência das doenças e necessidades de tratamento na cavidade oral. (3ª parte) *Revista Portuguesa de Estomatologia e Cirurgia Maxilofacial* 32:9-22
- Almeida, C. (1997): As doenças da cavidade oral nos jovens portugueses: estudo epidemiológico (dissertation). Arquivos do Instituto Nacional de Saúde 23: 5-178.
- Almeida, C.M., Sónia, J. and Toscano, A. (2002): Patologia dentária nos jovens do continente português em 1999. Prevalências, gravidade, tendências e associações significativas. Lisbon: Edição do Centro de Estudos Epidemiológicos da Disciplina de Medicina Dentária Preventiva da FMDUL, ISBN 972-9071-32-2.
- Almeida, C.M., Petersen, P.E., André, S.J. and Toscano A. (2003): Changing oral health status of 6- and 12-year-old schoolchildren in Portugal. *Community Dental Health* **20**:211-216.
- Möller, I. and Marthaler, T.M. (1985) *Oral health in Portugal*. Copenhagen: WHO Regional Office for Europe, POR/ORH 001, 2716H.

## Response from the authors, Drs. Rui Calado and Paulo Melo

First, we would like to acknowledge our respect for Dr. Mexia de Almeida and all who collaborated with him in the Pathfinder Surveys. Their contribution to the understanding of oral health in Portugal was very useful at that time.

The WHO's (2013) *Oral Health Surveys – Basic Methods*, says: "Where there is no opportunity to conduct probability sample size estimates, a non-probability sampling method is applied." (page 19, item *1.1.5 Pathfinder surveys*). Our study used a national random sample, representative of the populational groups being studied. This methodology distinguishes our study from those conducted by Dr. Mexia de Almeida. Our study used *Probability proportional to size sampling*. Item *1.1.4.4* in the WHO document states that "In this method of sample selection, the probability of a person being sampled is proportional to the number of persons within a particular group" – which clearly does not occur in the Pathfinder Surveys.

Based on this information, we believe that, in Portugal, only 3 national cross-sectional studies have been conducted, of which ours is the most recent.

Rui Calado and Paulo Melo

## References

World Health Organisation (2013) *Oral Health Surveys – Basic Methods* Geneva, 5<sup>th</sup> Edition.