"I don't need a dentist" - Oral health literacy in Germany

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Health is important in its own right and it promotes social and economic well-being. An important and increasingly recognized requirement for a person's use of a modern complex health care system is health literacy. This concept includes the competence to apply health information, to take reasonable decisions concerning healthcare and disease prevention and to take responsibility for one's own health as well as one's family health (Sørensen et al., 2012). The degree of a person's health literacy is linked to his or her social status and social environment (Bauer, 2019). Health literacy is equally important in relation to oral health. People with a good level of oral health literacy show better adherence to medical instructions, skills needed for self-management and improved treatment outcomes (Baskaradoss, 2018). Oral health literacy includes knowledge about the meaning of regular check-ups by a dentist (Jordan & Micheelis, 2016). In Germany the field of health literacy research was taken up with a time lag. Therefore, only a few studies on health literacy and oral health literacy are available up to now (Ernstmann et al., 2020; Schaeffer & Pelikan, 2017).

This study investigates oral health literacy in Germany and focuses on the utilization of checkups by a dentist and reasons of inadequate utilization of this preventive measure. In many countries preventive dental care is covered by health insurance, including regular (annual) visits at the dentist to prevent deterioration of oral health status and the development of several oral diseases. Nevertheless, research showed several factors and reasons, why people do not go to regular preventive visits at the dentist. Recent studies underline that family background, social circumstances and experiences with dentists in the past have effects on the way people think about oral health and dental care (Brzoska et al., 2017; Macek et al., 2010; van der Zande et al., 2021)). Barriers to planned dental visits include a perceived lower importance of oral health or of dental care ("I don't need a dentist"), considering good oral health as given, lack of available resources, trust in dentists, dental anxiety and embarrassment. The divers factors and barriers are complex, combine together, grow more difficult and change over time (van der Zande et al., 2021). We want to investigate which variables have influence on a person's attitude towards oral health and whether they utilize dental care.

For our analysis we used data from the latest wave of SHARE – the Survey of Health, Ageing and Retirement in Europe – with approximately seventy-seven thousand participants across 28 European countries. Pre analysis with different individual-related demographic and socioeconomic variables showed high correlations to the continuity of regular dentist visits with for example sex and marital status, though no significant linkage to total household income or age.

Following a logistic Regression approach aforementioned findings could be proven in part – for example "having siblings" showed no significant impact adjusted for the other variables (OR=1.04; 95% CI [0.88, 1.23]). However, regular dentist visits in Childhood proved to be one of the best indicators of continuity of regular dentist visits (OR=2.4; 95% CI [2.16, 2.72]) in age 50+ as well as being female (OR=1.52 (95% CI [1.37, 1.68]). Comparing other European countries to Germany the results indicate less regular utilization of dentist visits especially for countries in eastern Europe. Although pre analysis variables showed high effects on the dependent variable, statistical prerequisites were mostly met and the model proved statistically significant, the model showed poor goodness of fit - just shy of 10%. Apart from the possibility of an under- or rather overfitting model one of the main problems of the provided analysis is the high number of missings caused by our focused approach on the continuity of regular appointments rather than "if ever regular dentist appointments".

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