

Impact Analysis of a School-Based Oral Health Program in Brazil

Authors : Fabio L. Vieira, Micaelle F. C. Lemos, Luciano C. Lemos, Rafaela S. Oliveira, Ian A. Cunha

Abstract : Brazil has some challenges ahead related to population oral health, most of them associated with the need of expanding into the local level its promotion and prevention activities, offer equal access to services and promote changes in the lifestyle of the population. The program implemented an oral health initiative in public schools in the city of Salvador, Bahia. The mission was to improve oral health among students on primary and secondary education, from 2 to 15 years old, using the school as a pathway to increase access to healthcare. The main actions consisted of a team's visit to the schools with educational sessions for dental cavity prevention and individual assessment. The program incorporated a clinical surveillance component through a dental evaluation of every student searching for dental disease and caries, standardization of the dentists' team to reach uniform classification on the assessments, and the use of an online platform to register data directly from the schools. Sequentially, the students with caries were referred for free clinical treatment on the program's Health Centre. The primary purpose of this study was to analyze the effects and outcomes of this school-based oral health program. The study sample was composed by data of a period of 3 years - 2015 to 2017 - from 13 public schools on the suburb of the city of Salvador with a total number of assessments of 9,278 on this period. From the data collected the prevalence of children with decay on permanent teeth was chosen as the most reliable indicator. The prevalence was calculated for each one of the 13 schools using the number of children with 1 or more dental caries on permanent teeth divided by the total number of students assessed for school each year. Then the percentage change per year was calculated for each school. Some schools presented a higher variation on the total number of assessments in one of the three years, so for these, the percentage change calculation was done using the two years with less variation. The results show that 10 of the 13 schools presented significative improvements for the indicator of caries in permanent teeth. The mean for the number of students with caries percentage reduction on the 13 schools was 26.8%, and the median was 32.2% caries in permanent teeth institution. The highest percentage of improvement reached a decrease of 65.6% on the indicator. Three schools presented a rise in caries prevalence (8.9, 18.9 and 37.2% increase) that, on an initial analysis, seems to be explained with the students' cohort rotation among other schools, as well as absenteeism on the treatment. In conclusion, the program shows a relevant impact on the reduction of caries in permanent teeth among students and the need for the continuity and expansion of this integrated healthcare approach. It has also been evident the significative of the articulation between health and educational systems representing a fundamental approach to improve healthcare access for children especially in scenarios such as presented in Brazil.

Keywords : primary care, public health, oral health, school-based oral health, data management

Conference Title : ICPH 2019 : International Conference on Public Health

Conference Location : London, United Kingdom

Conference Dates : May 23-24, 2019