

Abstract

Background and Objectives: In spite of different programs and reforms and also the emphasis of upstream documents, the evidences indicate that the Iranian dental health situation has not improved. So this study aims to assess the challenges of Iran dental health system and present an applicable model to improve it.

Methods: This is an applicable study in terms of the outcomes and is a mixed method study in terms of the implementation process. The quantitative part was performed using systematic review and meta-analyze (study DMFT situation of 12 years old children and also the relationship between the households' socio-economic situation and children dental caries) and a cross-sectional study (determination of out-of-pocket payment and access to the dental services through randomized multi-stage sampling of 1158 people). Then through a comparative study, the dental health system of U.S., U.K., Canada, France and Brazil was assessed and the primary framework was extracted for Iran using expert panel. Lastly, using 2 round of Delphi method, the final model of Iran dental health system was presented.

Results: Odds ratio and mean difference of dental caries between children of high socio-economic households in comparison with low socio-economic ones were 0.41 (CI: 0.30, 0.52) and 0.49 (CI: -0.85, -0.13), so there is an inverse significant relationship between dental caries and socio-economic situation. Being burdensome the dental care costs during 3 years ago (CI (Concentration Index): -0.074, p:0.001), avoid visiting a dentist during 1 (CI: -0.502, p:0.001) and 3 (CI: -0.501, p:0.001) years ago because of its costs, and failure to doing all dentistry recommendations during 3 years ago (CI: -0.516, p:0.001) happen more frequently among the poor. The participants have payed 85.96% of dental care costs directly through out of pocket payment. The highest out-of-pocket payment was for orthodontic services (100%) and the lowest was for periodontal services (73.04%).

About the access dimensions, the participants have stated that there is an unsuitable situation about affordability (3.69) and access ability (3.19) dimensions and there is suitable situation about availability (2.78), accommodation (2.42) and acceptability (2.60) dimensions. The Delphi method resulted in 4 main categories and 44 solutions to encounter with Iran dental care system, which based them the final model of Iran dental system has presented.

Conclusion: By attention to the unsuitable Iran DMFT index, inequality in access to the services in different socio-economic groups and high dental out-of-pocket, it is necessary to be performed major reforms in the Iran dental health system. So, the utilization of the model presented here can improve Iranians dental health situation.

Keywords: Dental caries, Utilization, Dental Health Services, Comparative Study, Delphi technique



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