

Designing and modeling for quaternary prevention for rural family physician services in Iran

Abstract

Introduction:

Delivery of medical overuse is costly and harmful. The concept of Quaternary prevention was developed to reduce unnecessary health care. Quaternary prevention with an ethical approach while protecting the patient and his benefits can increase the quality of service delivery and reduce the waste of resources and costs. This study was conducted to examine the evidence related to the establishment of quaternary prevention in the services of family doctors and present a model.

Method:

This study was conducted in four steps using a mixed method. Firstly, a systematic review was conducted to identify the available evidence on quaternary prevention practices in family and general practice. Then, in the qualitative part of the study, using a semi-structured interview, the existing situation, challenges, and solutions to implementing the quaternary prevention in the health system for the services of rural family physicians in Iran were investigated. In the next step, using the panel of experts and structural-interpretive modeling, the quaternary preventive practice model in the health system was presented for the services of family doctors in rural Iran. As a final point, the Ames model was used to present the model of implementing quaternary prevention in the Iranian health system for the services of family physicians in rural areas.

Results:

As a result of the systematic review, 28 studies were identified, and finally, seven articles were included in the meta-synthesis, which examined why family doctors provide excessive medical services and identified factors related to patients, doctors, the health system, and technology. As a result of the qualitative study, the causal conditions (physician, patient, health system), primary phenomena (exaltation of quaternary prevention), intervening and background conditions (political, social, technological, cultural, economical), strategies (Internal governance and external leadership), and consequences (Community safety and efficiency) of not providing essential services at the family doctor level were classified into five categories. In the interpretive structural modeling stage, 20 factors were classified into five levels. According to the results, patient and vulnerable group interests are most effective, and officials and policymakers should seriously support family physicians. In MICMAC analysis, factors were grouped into two related and dependent clusters. Finally, the Ames model was presented as the proposed model for this research.

Conclusion:

The main drivers of medical overuse, causes, and solutions are generally outside the responsibility and ability of family physicians alone. The collaboration of family physicians in the management of medical overuse is neglected. Also, the provision of excessive care at higher levels (second and third levels) shows the minimal role of gatekeeping of family doctors in controlling this. Defects in the organizational structure of providing primary care and lack of proper implementation of the primary care system are one of the reasons for overuse in health systems. It is mandatory to prepare guidelines that clearly state the necessary and unnecessary items and explicitly indicate the non-performance of some therapeutic or diagnostic services. The health system needs to make a great effort to strengthen the commitment and personal responsibility of family doctors. This model, which

considers all aspects and presents all elements, has provided policymakers and managers with a comprehensive overview of this field in macro decision-making as well as managers in the field of implementing the quaternary prevention process at the family doctor level, which should result in a reduction in unnecessary services and an improvement in the effectiveness of the essential services provided.

Keywords: quaternary prevention, family physician, qualitative, interpretive structural modeling, vision.



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