

## Investigating Physician-Induced Demand among Mental Patients in East Azerbaijan, Iran: A Multilevel Approach of Hierarchical Linear Modeling

**Authors :** Hossein Panahi, Firouz Fallahi, Sima Nasibparast

**Abstract :** Background & Aim: Unnecessary growth in health expenditures of developing countries in recent decades, and also the importance of physicians' behavior in health market, have made the theory of physician-induced demand (PID) as one of the most important issues in health economics. Therefore, the main objective of this study is to investigate the hypothesis of induced demand among mental patients who receive services from either psychologists or psychiatrists in East Azerbaijan province. Methods: Using data from questionnaires in 2020 and employing the theoretical model of Jaegher and Jegers (2000) and hierarchical linear modeling (HLM), this study examines the PID hypothesis of selected psychologists and psychiatrists. The sample size of the study, after removing the questionnaires with missing data, is 45 psychologists and 203 people of their patients, as well as 30 psychiatrists and 160 people of their patients. Results: The results show that, although psychiatrists are 'profit-oriented physicians', there is no evidence of inducing unnecessary demand by them (PID), and the difference between the behavior of employers and employee doctors is due to differences in practice style. However, with regard to psychologists, the results indicate that they are 'profit-oriented', and there is a PID effect in this sector. Conclusion: According to the results, it is suggested that in order to reduce competition and eliminate the PID effect, the admission of students in the field of psychology should be reduced, patient information on mental illness should be increased, and government monitoring and control over the national health system must be increased.

**Keywords :** physician-induced demand, national health system, hierarchical linear modeling methods, multilevel models

**Conference Title :** ICHESA 2021 : International Conference on Health Economics and Systems Analysis

**Conference Location :** Singapore, Singapore

**Conference Dates :** March 29-30, 2021