Assessment of Service Quality in Teaching Hospitals of Yazd University of Medical Sciences: Using Multi-criteria Decision-making Techniques

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Abstract
Objectives: Hospitals, as integrated parts of wide-ranging health care systems, have a dominant focus on health care provision to meet, maintain, and to promote people’s health needs in a community. This study aims to assess the service quality of teaching hospitals of Yazd University of Medical Sciences, Yazd, Iran using fuzzy analytical hierarchy process and Technique for Order Preference by Similarity to Ideal Solution.
Methods: A literature review and a qualitative method were used to obtain experts’ viewpoints about the quality dimensions of hospital services to design a questionnaire. Then, using a self-made questionnaire, perceptions of 300 patients about the quality of delivered services were gathered. Finally, fuzzy analytical hierarchy process was applied to weigh each quality dimension and Technique for Order Preference by Similarity to Ideal Solution method was used to rank hospital wards.
Results: Six dimensions including responsiveness, assurance, security, tangibles, health communication, and patient orientation were identified as affecting aspects of hospital service quality among which security and tangibles had the highest and lowest importance, respectively (0.25406 and 0.06883, respectively). Findings also revealed that in Hospital A, orthopedics and ophthalmology wards obtained the highest score in terms of quality, while the cardiology department got the lowest ranking (0.954 and 0.323, respectively). In Hospital B, the highest and the lowest ranking belonged to the cardiology and surgical wards (0.895 and 0.00, respectively), while in Hospital C, surgical units were rated higher than...