Comparison of the results of developing standards for health promotion hospitals in public and private medical centers

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Introduction
Global changes have created new health challenges, particularly to the hospitals.1 Today, medical centers and hospitals feel responsible for patients' lives before and after referrals and emphasize other levels of health care and the Society as a whole.2 In 1988, the World Health Organization (WHO) introduced the Health Promotion Hospitals (HPH) model to improve health and prevent diseases.3 This model includes 5 dimensions: management policy, patient evaluation, patient information, and interventions, providing a healthy workplace, and continuity in treatment and cooperation.4 The current condition of health promotion services in Iranian hospitals is equivocal and there is a lack of a specific program to provide health promotion services in hospitals. However, some health-promoting activities, such as nutrition counseling, are sporadically available in some hospitals. However, there has not been a definite HPH structure in Iranian hospitals, yet.5 Regarding the importance of developing standards for HPH in all hospitals and the limitation of study at the level of hospitals of Tabriz University of Medical on this topic, and given HPH notion as one of the organizational needs of these hospitals, the current study endeavors to draw a comparison between the results of developing HPH standards in public and private medical centers affiliated with the Tabriz University of Medical Sciences (TUOMS) in 2021.

Materials and Methods
Data were collected using a checklist for developing HPH standards. This checklist was previously developed in other studies for evaluating health-promoting standards in hospitals, and its validity and reliability have been confirmed. The study found that the standards for patients' data and interventions (77.38%), continuity in treatment and cooperation (69.38%), management policy (61.92%), patient evaluation (60.76%), and providing a healthy workplace (42.7%) had the highest scores, respectively. Private hospitals scored higher than public hospitals in all dimensions. There was a significant difference between public and private hospitals regarding the total score (P = 0.001), management policy (P = 0.01), patient information and interventions (P = 0.003), and continuity in treatment and cooperation (P = 0.002).

Conclusion: The competitive atmosphere among private hospitals appears to have improved their status in HPP, while public hospitals were less concerned with competition and improving their performance in this field. Additionally, ignoring human resource management policies has made the managers of all hospitals feel the need for further upgrading in terms of standards for promoting a healthy work setting.
The checklist has 67 questions to cover essential dimensions of HPH and was completed by observing and interviewing hospital officials from all hospitals in Tabriz, except three military hospitals that refused to participate. In this research, the sampling was performed using a full number. The criteria for entering the study were all hospitals affiliated with Tabriz University of Medical Sciences, and the exclusion criteria included hospitals that were reluctant to participate in the study for any reason. To ensure comparability, all numbers were converted to 100, and all results, both in total and on each axis, were reported using a scale of 100. The data were analyzed using SPSS software version 19.

To analyze the data, the normality of the data distribution was measured using the Kolmogorov-Smirnov test. The descriptive findings of the data collected in the five dimensions of HPH standards were presented using descriptive statistics such as frequency, mean, standard deviation, and distribution tables. To compare the means, parametric tests were used with a significance level of less than 0.05 due to the normality of the data.

**Results and Discussion**

The hospitals in Tabriz achieved an average total score of (121.33 ± 17.61) for HPH standards, which translates to following 61.82% of the standards. This suggests that while the hospitals have succeeded in meeting the goals of HPH standards to some extent, especially in patient information and interventions (77.38%), continuity in treatment and cooperation (69.38%), and management policy (61.92%), there is still much to be done, particularly in providing a healthy workplace (42.7%) (Table 1). Studies by Lin et al., Delobelle et al., and Groene et al., have also reported the highest score in patient information and interventions. On the other hand, the standard for providing a healthy workplace gained the lowest score, according to the studies of Hamidi et al. and Pezeshki et al. These hospitals require further improvement in this aspect due to loose human resource management policies. Table analyses indicate higher scores in private hospitals than those in public hospitals when evaluated in any aspect of HPH standards. This can be attributed to the competitive atmosphere in private hospitals, as they strive to meet higher standards and achieve more patient satisfaction, thereby leading to increased profits. Differences between public and private hospitals were significant in the dimensions of management policy, patient information and interventions, and continuity in treatment and cooperation ($P < 0.05$), according to the study by Amiri et al.

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**Authors’ Contribution**
Conceptualization: Rahim Khodayari Zarnagh.
Data curation: Akbar Javan Biparva, Hamed Baghayi.
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Supervision: Rahim Khodayari Zarnagh.
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Writing–review & editing: Rahim Khodayari Zarnagh.

**Competing Interests**
The authors declare no conflict of interests.

**Ethical Approval**
The current study was approved by the ethics committee of Tabriz University of Medical Sciences (TUOMS) coded (IR.TBZMED.REC.1399.712).

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**References**
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**Table 1.** Classification and evaluation of scores and relevance of health promotion standards based on the type of hospitals

<table>
<thead>
<tr>
<th>Variable</th>
<th>Management policy</th>
<th>Patient evaluation</th>
<th>Patient information and interventions</th>
<th>Providing a healthy workplace</th>
<th>Cooperation and continuity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The average total score of hospitals</td>
<td>31.58 ± 5.7</td>
<td>14.58 ± 3.5</td>
<td>16.25 ± 3.11</td>
<td>20.5 ± 6.23</td>
<td>38.4 ± 6.23</td>
<td>121.33 ± 17.61</td>
</tr>
<tr>
<td>Score adjusted to 100%</td>
<td>61.92%</td>
<td>60.76%</td>
<td>77.38%</td>
<td>42.7%</td>
<td>69.38%</td>
<td>60.36%</td>
</tr>
<tr>
<td>Average score based on hospital type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governmental</td>
<td>29.4 ± 4.5</td>
<td>13.6 ± 3.2</td>
<td>15 ± 11.3</td>
<td>18.75 ± 3.5</td>
<td>35.6 ± 5.4</td>
<td>112.3 ± 14.25</td>
</tr>
<tr>
<td>Score adjusted to 100%</td>
<td>57.67%</td>
<td>56.6%</td>
<td>71.42%</td>
<td>39.02%</td>
<td>62.45%</td>
<td>55.87%</td>
</tr>
<tr>
<td>Non-governmental</td>
<td>35.22 ± 6.24</td>
<td>16.22 ± 3.38</td>
<td>18.3 ± 1.73</td>
<td>23.04 ± 6.63</td>
<td>43.11 ± 4.5</td>
<td>136.33 ± 11.46</td>
</tr>
<tr>
<td>Score adjusted to 100%</td>
<td>69.05%</td>
<td>67.58%</td>
<td>87.14%</td>
<td>48%</td>
<td>75.63%</td>
<td>67.82%</td>
</tr>
</tbody>
</table>

**P value**
0.01 0.07 0.003 0.1 0.002 0.001


