Situation of the Necessary Human Resources for hospitals of Lorestan Provience in Accordance with Proposed Model by the Iran's Ministry of Health

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ABSTRACT

Background: The human work force is of the most important resources at hospitals, the shortage or excess of which might deteriorate the quality of services being provided. The goal of this study was to estimation of the necessary resources in accordance with proposed model by the Iran's Ministry of Health

Methods: This is a descriptive and cross-sectional study that has been conducted in hospitals affiliated of Lorestan University of Medical Sciences in Iran. Data was collected through questionnaire. Data analysis was performed with SPSS 17.0.

Results: The results showed that only 18 wards (19/56%) out of 92 wards of hospital were consistent with the proposed model and 16 wards (17/4 %) were better than the criteria set by the model and the remaining wards (58%) were worse than the criteria of the model. Organizational dislocation obtained Respectively 16,7,6,2 in Shohadaye Shohadaye Ashayer, Asali, Madani and Imam Reza hospitals.
**Conclusion:** The human resources in different wards of a hospital are not distributed based upon the standards and in most of the cases the wards lack the adequate number of staff. Hence, one could conclude that planning the ways to compensate the shortage of staff, to standardize the different wards and to train the managers of wards on how to manage and program the human resources properly is of great significance and necessity and could increase the efficiency of the wards in a hospital.

**Keywords:** Human resources, standard, hospital, Lorestan

**INTRODUCTION**

Along with the significant developments in today’s world, referred to as the Explosion of Information, Globalization and the like, one can see a change in the approaches toward the workforce and the Human resources as the main elements leading to such changes and developments. Today, the managers no more consider the human resources as simple instruments. The work force is of the most valuable assets of an organization and many scholars have tried to find effective methods for training and maintaining such assets (1-2).

Human resources are the most important factor of efficiency (3-4). The productive workforce is the main element for a lasting success and for the realization of the organizations’ goals (5).

The studies show that Human Capital is an important factor in the productivity. Besides it is a significant element showing the differences between the countries regarding their productivity and development(6). On the other hand, it is the most expensive and valuable capital to an organization. its significance as the most important element in the operational chain of an organization having been proven for a long time, hence due consideration of successful organizations to the matter(7).

The health care system Services are of the divisions which, considering their wide range of services and the importance of their goals in providing as much possible as healthcare and social justice for all, are in need of training and distributing the skillful human resources in the different centers and agents providing health care services(8). This is so because in the health care services the human resources play a very significant role. The appropriate programming of human resources is the most efficient, productive and acceptable step, a step which facilitates the provision of health care services via employing the proper and skillful staff(9). On the other hand, the human work force is of the most important resources of the hospitals, of which the shortage or excess might deteriorate the quality of services being provided(10-11).

The human resources programming can properly predict the future supply and demand of the organization in this regard. The Human Resources ward can, by ensuring the number and type of the staff needed, better predict their employment, training, task programming and the like. The
improper and inappropriate equipment of the organization with improper type and number of staff might lead to its failure in the pursuit of its goals. The executive managers believe that the human resources is the key to success, because the competent staff can facilitate the success of all the plans (12).

Programming the human resources in the health care division aims to provide the necessary competent work force in all fields and to distribute them appropriately based on geography, gender and organization. Any fault in programming would cause an imbalance in the supply and demand and would result in the shortage or excess of the work force(13). Considering this, one could claim the shortage or improper distribution of the work force as the reason for many problems facing the hospitals(14). The studies done in this regard, though limited in number, mostly refer to the shortage of human resources compared to the standard sample. In their study on three hospitals in the city of Ilam, Sadeghifar et al. show that % 77/42 of the units in the hospitals lack the required standard human resources as determined by the Ministry of Health and Medical Education(15).

Hashemi et al., in their study on the human resources of the nursing staff of one of the hospitals in Tehran, showed with a systematic approach that, considering the standard prescribed by the Ministry of Health regarding the human resources, the current health care staff of the hospital is less than what is required by the standard defined by the Ministry of Health and Medical Education, but the hospital had tried to compensate this problem with overtime and buying services. This study showed that the professional and unprofessional staff is not proportionately distributed in different wards of the hospitals and that the professional ones weigh significantly over the other group(16).

A study by Daneshmand in 2010 on different units of the Shahid Cahmran Heart Medical Education Center in Isfahan showed that this hospital, was, on the one hand, faced with shortage of staff in all the units and, on the other hand, with shortage working hour for male and female staff in male internal medicine ward, CCU and ICU(17).

The present paper aims to study the situation of human resources needed by the hospitals under the auspices of the Lorestan University of Medical Sciences based upon the sample of the staff standards proposed by the Ministry of Health and to compare that with the status quo and to calculate the organizational dislocation.

METHOD

The present study which is a cross-sectional research has been done with a descriptive methodology on the hospitals under the auspices of the Lorestan University of Medical Sciences. The study covers all their nursing, Para-clinical, administrative, services and maintenance wards. Since all the hospitals which are attached to the Lorestan University of Medical Sciences were under the study, the research sample was statistically selected.
The data was gathered through using the standard questionnaire, prepared based upon the previously done studies, and standards of Health Ministry in Iran. The questionnaire was used only for gathering the information regarding the current situation in the above-mentioned hospitals. The questionnaire was prepared in five parts, with part 1 addressed to the nursing and diagnostic ward (clinical and Para-clinical), part 2 dealing with the medical records ward, part 3 related to the administrative affairs ward of the hospital, filled in by the administrative staff, part 4 addressed to the staff of the hospital, completed by the employment responsible, and part 5 aimed at determining the human resources and the financial situation of the hospital filled in by the financial affairs officer.

On the whole, the information regarding the human resources of the hospitals was gathered through the five questionnaires, then using the proposed standard sample of the Ministry of Health, the human resources needed by the nursing ward, laboratories, radiology, the operation room, emergency ward, CSR, the clinic, administrative ward, the medical record ward, facilities, laundry, dietary and other wards of the hospital was determined. In addition, the study used the proposed standard sample of the Ministry of Health to determine the shortage and excess of human resources and their sample of distribution in different units which clarified the posts to which the shortage or excess belonged. It should be born in mind that all the information gathered regarding the nursing unit was carefully compared with the information existing in the nursing wards’ book. Once the data was gathered, they were analyzed using the SPSS 17.0.

RESULTS

The Shohadaye Ashayer Hospital, consisting of 21 active principal wards, was equipped with 348 licensed and 348 staffed beds, with %92 of them being occupied. The Asali hospital, with 5 active principal wards was equipped with 80 licensed and 75 staffed beds. In this hospitals %53 of the beds were averagely occupied and the patients’ stay normally lasted for 2 days. The Madani Hospital which was consisted of 9 active principal wards contained 128 licensed and 78 staffed beds of which %79 were averagely occupied with the patients’ stay lasting for normally 3.5 days. The Imam Reza psychiatry Hospital, with 2 active principal wards, was equipped with 50 licensed and 45 staffed beds of which %95 were averagely occupied. The patients normally stayed for 26 days (Table 1). Situation of staff employment has identified (Table 2).

In the Shohadaye Ashayer Hospital the largest number of staff belonged to the Emergency ward and the least to the burnings ICU ward, with their number being respectively 42 and 5. In the Asali hospital the largest number of staff, i.e. 30, belonged to the women ward and the least number, i.e. 6, belonged to the Burning ward of the Emergency ward. The largest and the least number of staff belonged respectively to the General ward and the NICU with 19 persons, and the Post ICU with 3 persons. And lastly in the Imam Reza Nerve Hospital, the largest number of staff, i.e. 21, belonged to the Men’s psychiatry ward and the least, i.e. 10, belonged to the Women’s.
From the viewpoint of human resources, out of 39 wards of the Shohadaye Ashayer hospital, 24 units (%62) were below the standard defined by the Ministry of Health regarding the human resources, 7 units (%18) above the standard and 8 units (%20) consistent with the standard. In the Asali Hospital, of the 20 wards, 10 (%50) units were below the standard, 4 units (%20) above the standard and 6 units (%30) consistent with the defined standard. In the Madani hospital out of 25 wards, 17 units (%68) were below the standard, 4 units (%16) above it and 4 units (%16) consistent with the standard. In the Imam Reza hospital, out of 8 wards, 7 units (%78) were below the standard and 1 unit (%13) was above the standard (Table 2, 3).

The situation of shortage of human resources in each hospital is shown in numbers of 1-5, 6-10, 11-15 and more than 15 in table 4. (Table 4)

Table 1: The situation of the licensed and staffed beds and their average of occupation in the hospitals under the study

<table>
<thead>
<tr>
<th>Hospital</th>
<th>active beds</th>
<th>licensed beds</th>
<th>active wards</th>
<th>average of occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashayer</td>
<td>348</td>
<td>348</td>
<td>92</td>
<td>%</td>
</tr>
<tr>
<td>Ashayer</td>
<td>75</td>
<td>80</td>
<td>5</td>
<td>% 53</td>
</tr>
<tr>
<td>Asali</td>
<td>78</td>
<td>128</td>
<td>9</td>
<td>% 79</td>
</tr>
<tr>
<td>Imam Reza</td>
<td>45</td>
<td>50</td>
<td>2</td>
<td>% 95</td>
</tr>
</tbody>
</table>

Table 2: The employment situation of the human resources

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Ashayer</th>
<th>Ashayer</th>
<th>Asali</th>
<th>Asali</th>
<th>Madani</th>
<th>Madani</th>
<th>Imam Reza</th>
<th>Imam Reza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official</td>
<td>323</td>
<td>51.85</td>
<td>111</td>
<td>54.14</td>
<td>115</td>
<td>43.89</td>
<td>13</td>
<td>22.04</td>
</tr>
<tr>
<td>Contractual</td>
<td>177</td>
<td>28.41</td>
<td>44</td>
<td>21.46</td>
<td>85</td>
<td>32.45</td>
<td>12</td>
<td>22.04</td>
</tr>
<tr>
<td>Other</td>
<td>123</td>
<td>19.74</td>
<td>65</td>
<td>31.66</td>
<td>85</td>
<td>32.45</td>
<td>39</td>
<td>66.09</td>
</tr>
<tr>
<td>Total</td>
<td>623</td>
<td>100</td>
<td>205</td>
<td>100</td>
<td>262</td>
<td>100</td>
<td>59</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3: The human resources of hospitals based upon the standard of the Ministry of Health and Medical Sciences regarding the staff

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Ashayer</th>
<th>Ashayer</th>
<th>Asali</th>
<th>Asali</th>
<th>Madani</th>
<th>Madani</th>
<th>Imam Reza</th>
<th>Imam Reza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation of Human</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wards with</td>
<td>8</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td>4</td>
<td>16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Standard number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Human Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Wards with Human Resources above the standard | 7  | 18  | 4  | 20  | 4  | 16 | 1  | 13  \\
Wards with Human Resources below the standard | 24 | 62  | 10 | 50  | 17 | 68 | 7  | 87  \\
Total  | 39 | 100 | 20 | 100 | 25 | 100| 8  | 100 \\

**Table 4:** Units with human resources below the standard of the Ministry of Health and Medical Education

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Ashayer</th>
<th>Asali</th>
<th>Madani</th>
<th>Imam Reza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortage of Human Resources</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1-5 Human Resources needed</td>
<td>14</td>
<td>59</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>5-10 Human Resources needed</td>
<td>7</td>
<td>29</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>10-15 Human Resources needed</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>More than 15 Human Resources needed</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

In conclusion, having evaluated the human resources needed by the hospitals, the study determined the number of staff needed by the hospitals for each position. In all the four hospitals, the mostly needed staff was nurses. Based upon the sample proposed by the Ministry of Health, the Shohadaye Ashayer, Asali, Madani and Imam Reza hospitals respectively needed 97, 25, 41 and 15 people for different positions. In the nursing position they respectively needed 94, 21, 23 and 8 people.

The study showed that the organizational dislocation in the Shohadaye Ashayer, Asali and Madani hospital was 16, 7 and 6 of which the most related to the nursing expert. In the Imam Reza hospital, there was seen no organizational dislocation the hospitalization units as all the medical staff were specialist and worked in their specialty position. But in the other parts the number of organizational dislocation was 2.
DISCUSSION

Programming the human resources in an organization is of significance for two reasons. Firstly, the human workforce is a key factor in the efficiency of the services and secondly, almost 70-75 percent of the financial resources of the Health services are paid to them (18). Today third world countries devote 60-80 percent of their health and medical services to the hospitals, while this amount in the developed countries this amount is only % 38 and the rest is for the non-hospital health and medical services. That is why in these countries the human resources evaluation is very important (19), hence the necessity of attention to their shortage or excess. In the hospitals under the study, more than % 50 of their units had in their service less than the standard human workforce. As Mostafayi showed in his study regarding the situation of human resources in the selected hospitals of Tehran University of Medical Sciences, % 85.1 of the units of the studied hospitals were below the standard from the view point of human resources(20). In Sadeghifar’s study this amount was & 77.42 in studied hospitals (15).

All the three hospitals mostly needed nurses. Well qualified and skillful nurses are necessary factor for the efficient and proper care services. Many studies have referred to the shortage of nurses as a bar to the efficiency and quality of hospitals’ care services (5, 21). Therefore the provision of qualified and adequate workforce for the nursing wards is of utmost importance. Kowkabi stated in his study that the hospitals under the study needed to increase their nursing staff(22). In his study on Imam Khomeini and Razi hospitals in Ahwaz, Sadeghifar showed that they respectively needed 193 and 46 nurses to get to the standard number(23).

In all the 4 hospitals under the study organizational dislocation existed most of which occurred in the nursing unit. Organizational dislocation occurs when someone has been employed for a special position but actually works in another position. Mostafayi has also shown in their studies that organizational dislocation existed in the hospitals under study (20). Considering the utmost importance of skillful and experienced human resources in the organizations especially in the health and medical related ones, it is very necessary for the working staff to be engaged in the position which is consistent with their specialty, otherwise the hospital and its patients would suffer irreparable damages reflected as a decrease in the patients’ satisfaction, increase in the hospital errors and decrease in the quality of caring services.

CONCLUSION

Having in mind the present study and the other similar studies stating that the human resources in different wards of a hospital are not distributed based upon the standards and in most of the cases the wards lack the adequate number of staff, one could conclude that programming about the ways to compensate the shortage of staff, to standardize the different wards and to train the responsible of each ward how to manage and program the human resources properly is of great significance and necessity and could increase the efficiency of the wards in a hospital.
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