Evaluating the perspectives of Hospital Workers in Kermanshah on the implementation of validation system in 2015

Sayedeh Sara Hosseiny
MSc of Executive Management, Ayatollah Taleghani Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

Sayedeh Sana Hosseiny
MSc student of health care management, Young Researchers and Elite Club, North Tehran Branch, Islamic Azad University, Tehran, Iran

Dr. Mohammad Mahboubi
Assistant Professor, Abadan School of Medical Sciences, Abadan, Iran

Abstract

Introduction and purpose: Validation is an evaluation that focuses more on the process and outcome of the activities of the hospital and its main purpose is to improve the quality and safety of hospital care and thus leads to empowerment in hospitals. The importance of feedback from staff and managers in terms of the conditions and characteristics of each treatment center was taken into consideration in order to have more effective efforts in this regard, with the implementation of this project. Therefore, given to importance and magnitude of the issue and because of the limited number of studies on this system, the study aims to investigate staff views on implementation of the validation system with an emphasis on the main aspects of this project.

Materials and Methods: This is a cross-sectional study that was conducted in the descriptive method. The populations in this study were all employees of Kermanshah in medical centers that by cluster sampling, 380 of them were selected as the sample. Data collection was performed using a questionnaire which consisted of two parts, a working area and demographic data and the other information about the planning, resources, realism, human resources and process. The collected Information was entered to 18SPSS software and it was analyzed using appropriate statistical test of X2 and Spearman correlation.

Results: The results showed that in all areas, the average of staff views score is more than the total score in that field and in total, the obtained mean score (89/100) is more than the mean total score (68). Also there was not a significant difference between the average score with demographic properties and the working area.

Conclusion: The results of this study show the positive attitude of staff for the implementation of validation system with reforms in the implementation process on the basis of the investigation aspects. Such that the staffs evaluated effectiveness of all important aspects and they believe that providing ground to make this aspects effective is very important. In addition, using personnel’s’ perspectives with influence in their active cooperate provide the ground for the appropriate implementation of this project and can contribute the medical centers in using the advantage of its validation system.

Keywords: validation, perspective, hospital.
Introduction

Validation is a credible evaluation process which the foreign evaluators use to measure the quantity and quality of the provided services at health centers. In fact, validation is a systematic assessment of health service centers using clear standards. This model is from the models which are based on organizational external evaluation on the implementation of service standards (1). Also by considering the issue that in these standards improvement in quality, the importance of patients and the improvement on the patient’s safety in these systems are provided and designed for health care (2).

Validating needs the concept of continuous improvement and it is done for a specified period of time. Therefore, the organization should be periodically re-evaluated so that it can maintain its credit position. About achievements, validation can be referred on issues such as improving the health care system, justifying and supporting the payment mechanism, reducing the difference in the quality of hospital services, and increase in public trust in quality of care and provide the organization (2).

Also basis of validation is formed of health care policy and understanding what quality of care is concerned with and a focus on integrating the fundamental principles for the development of the healthcare system. Its dynamic is checked and it is used to explain the quality of health services as a basis for thinking (3).

Some of the researchers introduce the above model as the most comprehensive model in term of covering the concepts evaluated by quality. This approach is recognized as the optimized quality management model for integrating the health care improvement concepts. It gives not only tools for evaluating the current situation, but also creates commitments and movement toward continuous quality (2).

On one side, the support and commitment by top managers in implementing the models related to quality management systems is very important in health care section and the lack of support by the top manager can be considered as the largest limitation in this regard (4). Also the lack of institutionalizing of systemic perspective in quality management in universities is a barrier in implementing this model. And by the investigations, the subjects such as determining and placing the missions’ policy and the operational purposes in the quality management systems framework are the issues that are neglected in the universities of the country. That means the lack of infrastructure for implementing the complete models (2).

The importance of using the performance assessment system in hospitals and health care centers is the important results of studies in this regard. Selecting each of these systems must be conducted by considering all advantages and disadvantages by which we can avoid any failure (2).

Therefore, due to personnel’s ideas in regard to implementing the validation systems in hospital and also the lack of research in this context, this study has tried to evaluate the personnel’s perspective about validation system and using the results, determine the effective
factors on improvement of validation effectiveness from the personnel’s perspective and at last lead to patient satisfaction. In fact, by recognizing the personnel’s perspectives about validation, we can have plans in order to improve the validation implementation and if it is necessary change the personnel perception, recognize the effectiveness of this plan to them and implement the educational and training planes. We can also create the realistic recognition in personnel. This will create their active cooperation in implementing this plan.

**Methods and Materials**

This is a descriptive study which is cross-sectional. The population includes all educational and health care centers personnel in Kermanshah. The sampling is conducted by cluster method. The sample is considered as cluster in the hospital and 10 percent i.e 380 people with at least 2 years work experience were selected by Kohci and Morgan Method. The data collection consisted of a questionnaire with 2 parts, including: first part: demographic information with 3 question and 3 other questions for working area information. Second part: personnel’s perspective with 34 questions, green answers in 5 contexts (planning with 10 questions, resource with 4 questions, realistic with 8 questions, required human resource with 4 questions and improvement in processes with 8 questions). In fact, it evaluated the validating system indicators from the perspective of educational hospital personnel in Kermanshah. Scoring was conducted using the 5 degree Likret scale, including: completely disagree 4 prints, relatively disagree 3 points, relatively agree 2 points and completely agree with 1 point and no idea 0 points. Questionnaire validity was evaluated by references and instructions and finally with the confirmation of its information contents and matching with health minister instructions. The questionnaire reliability was also evaluated. And after several reviews by experts including the faculty members, in the validation area in 2 weeks’ time from 15 people, the Cronbach’s Alpha was 0.8. The questionnaire was given to the concerned population (Imam Reza Hospital, Imam Ali Hospital, Ayat Allah Talleghani Hospital, Farabi Hospital, Dr.Mohammad Kermanshahi Hospital, Motazedi Hospital). The collected data were coded and entered to SPSS-18 software. To analyze the data the descriptive statistic data, the (Mean, standard deviation, percent, ratio), frequency distribution tables, as well as the appropriate statistical tests such as X2 and Spearman correlation coefficient were used.

**Findings**

In this study, 31.1% were male, 64.9% were female with the average of work experience was 12.5 years. The 1.1% of participants was under diploma, 8.4% diploma, 15% technicians, 4/68% expert, 6/1% MA and 7/4% PHD. 9/78% of sample were working in clinical treatment, 6/12% in para-clinic units and 4/8% were active in administrative units. 8% of samples were responsible for the units departments or hospitals units under study and 6/91% of the samples were section or units personnel.

The results obtained from evaluating 34 questions in this study in relation with the perspectives of personnel in educational health care centers in Kermanshah about implementing the validation system in 5 areas indicates that in all under evaluation factors,
the obtained average in more than the average of each factor and in general the obtained average is more than the total score (table 1). In this regard, there was no significant difference between gender separation activity level, workplace, and education (Table 2-5).

**Conclusion**

The obtained results from this study about all contexts including planning, realistic, human resource and total evaluation of these area, indicated that the average obtained score in all areas was more than the average of total score in the same area and this indicates the positive perspective of personnel for implementing the validation system. So, from the perspective of educational health care centers, the appropriate and efficient implementation of validation system requires the improvement in all area for each treatment center.

Evaluating the relationship between the educational hospital personnel of Kermanshah about validation and gender indicated that the validation score average in female is a bit higher than male, but it wasn’t statistically significant. In this research, by evaluating the difference between personnel about validation for work level, we concluded that the average of validation score was higher but it wasn’t significant.

These results indicated the importance of implementation of validation system and considering the changers in order to reform the current process. It seems that the lack of difference in personnel’s perspective with the respect to having different work condition in term of education, work level and place and also gender can show the integration of all people perspective about implementation of validation system. Also, it can help to the better and more successful implementation of plan.

Based on the conducted studies about personnel’s perspective in implementing the validation studies, we concluded that there is no other study like this and as a result it is not possible to compare this study with other studies.

In a study by Abdallahi et al. about the required infrastructures for implementing the validation from the perspective of hospital top managers in eastern Azarbaijan, 80% of people stated the culture and the required resources 54% of people stated the support of top managers and 77% of people stated the low required data for implementing the validation in hospitals; 55% of people stated the successful implementation of validation plan more than the medium level (5). The review study by Siavashi et al. indicated that the validation process leads to improvement in quality of health care at the time of implementing and after validation and also the factor leads to improvement in structure and infection control in hospitals. The participation of personnel was one of the important factors leading to a better quality especially in small hospitals (6).

Karimi et al. on a study on proving the service concluded that appropriate validation leads to increase in people safety, decrease in medical costs and errors, increase in satisfaction and group work and improvement in patient treatment. And the other factors such as religious factors, the organizational problems, the resistance and implementing the other
standards in hospital and change in knowledge level and personal information can be effective on validation results (7). Some studies, outside Iran, also consider the validation as an effective factor in service quality (8-1). In the study by Awa-Al Bahjat in 2011, the validation was considered as a factor leading to improvement of operational indicators (increase in the bed replacement coefficient, in the number of operations, in the acceptance of emergency part and infants ICU section, and in releasing patients) (12). The other studies also indicated that the validation is effective on the relationship and internal and external cooperation of teams and will increase the positive results on patients (13). According to the different studies on validation effect in hospitals in different areas, it can be concluded that if the validation is conducted in an appropriate and correct method, it will have the positive effect on service quality, cooperation of groups and the operational indicators in hospital.

On the other hand, research of this kind can help the University of Medical Sciences in recognition of personnel view who are in direct contact with patients and recipients of services, to have more comprehensive and more realistic plan. Also it will be effective in identifying and providing resources and required human resource, changing the attitude of the personnel to continue implementation of validation in hospitals and identifying the strengths and weaknesses of this system.

Given that the factors are emphasized in the questions presented in this study according to discussions with experts related to the effectiveness of the system, as well as by evaluating other accomplished studies in this regard, important aspects of the reform and upgrading of main area in the success of the validation system can be considered for any of the hospitals. This can be discussed as bellow:

A. Planning area:
1. Considering the comprehensive program as a source and reference
2. At least 3-year and 5-year planning period in the process of validation
3. Considering implementing alongside regular and consistent documentation
4. Creating perfect background for the project based on specialized medical centers
5. Providing adequate training to staff in the project
6. Providing guidelines of ministry macro
7. considering Training of validation implementation in the curriculum of Schools
8. completing plan based on gained experiences in for the prevention of dealing with new problems
9. Planning and implementation of corrective actions
10. Efforts to create a positive attitude in managers and directors with respect to change in any organization from the top of the organization

B. Resource area:
1. Considering volume force at any treatment center for project
2. Planning in accordance with the time and opportunity in each sector separately
3. The availability of adequate space and equipment to implement the plan in sections
4. Providing sufficient resources to implement the plan for effectiveness

C. Realistic area:
1. Considering the realities of the health centers
2. Fortifying the achievements of the project for patients
3. Considering the localization of plan implantation
4. Considering the ability of sectors to implement the plan
5. Using this plan to promote the indicators of health centers
6. Considering the weaknesses in the plan for the future
7. Considering culture of patients and staff in the planning and implementation of the plan
8. Make minor changes in some parts of the plan

D. Human Resource area
1. Using specialized forces in this plan in hospitals
2. Planning in order to create motivation for staff
3. Increase in administrative force in implementation of the scheme for the training and supervision of plan implementation and audit scheme
4. Providing adequate nursing workforce and reducing the number of patients per nurse per shift

E. Process area
1. Considering the positive challenge for nurses for implementing the project
2. Considering the positive challenges for doctors for implementing the project
3. Considering guarantee for continuous improvement in quality of hospital services for the project
4. Using this project to promote the hospital process
5. Considering impact of this project on improving the quality of health care, especially in Nursing Services
6. Using this plan as a tool to gain more comfort for patients.

Improvements in each of the areas can affect the effectiveness of the validation system in healthcare centers. Individuals play an important role in implementation of the plan. On the other hand, their comments can be useful in identifying the weaknesses and eliminating them. Finally, each health centers along with its mission and objectives in validation plan, took effective steps and acquire patients' satisfaction. For this purpose, the promotion of aspects of each of the areas studied in the project must fit the circumstances of each hospital and health care center.
Table 1: Mean and standard deviation of Kermanshah city Health Care personnel perspective based on five factors

<table>
<thead>
<tr>
<th>area</th>
<th>Mean of total score</th>
<th>Obtained average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>planning</td>
<td>20</td>
<td>28/63</td>
<td>4/34</td>
</tr>
<tr>
<td>resource</td>
<td>8</td>
<td>12/52</td>
<td>2/17</td>
</tr>
<tr>
<td>realistic</td>
<td>16</td>
<td>25/68</td>
<td>4/47</td>
</tr>
<tr>
<td>Human resource</td>
<td>8</td>
<td>13/43</td>
<td>2/10</td>
</tr>
<tr>
<td>processes</td>
<td>16</td>
<td>20/63</td>
<td>5/72</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100</td>
<td>0/89</td>
</tr>
</tbody>
</table>

Table 2: Average of Kermanshah Health Care personnel perspective based on gender about validation

<table>
<thead>
<tr>
<th>subject</th>
<th>group</th>
<th>No</th>
<th>mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>validation</td>
<td>male</td>
<td>118</td>
<td>100/37</td>
<td>11/70</td>
<td>0/41</td>
<td>0/67</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>262</td>
<td>101/15</td>
<td>12/09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a difference between the perspective of male and female employees about validation.

To examine this hypothesis, independent t-test was used due to the parametric data. The analysis of data indicated that mean of women perspective is more than men is about the validation but the finding was not statistically significant.

Table 3: Mean of Kermanshah Health Care personnel perspective based on work level about validation

<table>
<thead>
<tr>
<th>subject</th>
<th>group</th>
<th>No</th>
<th>mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>validation</td>
<td>staff</td>
<td>348</td>
<td>100/61</td>
<td>12/25</td>
<td>-1/12</td>
<td>0/26</td>
</tr>
<tr>
<td></td>
<td>responsible</td>
<td>32</td>
<td>104/12</td>
<td>7/48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a difference between officials and staff perspective about validation. Independent groups T-test was used to evaluate the officials and personnel's perspective differences about validation.
Table 4: Comparison of the relationship between workplace and perspective of Health Care personnel in Kermanshah about validation

<table>
<thead>
<tr>
<th>Variable</th>
<th>group</th>
<th>Total squares</th>
<th>Mean square</th>
<th>freedom degree</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>workplace</td>
<td>Between</td>
<td>289/43</td>
<td>144/71</td>
<td>2</td>
<td>1/01</td>
<td>0/36</td>
</tr>
<tr>
<td></td>
<td>groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In groups</td>
<td>26702/04</td>
<td>142/79</td>
<td>187</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>26991/47</td>
<td>–</td>
<td>189</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a difference between the people perspectives based on workplace about validation. The result of one-way analysis of variance to compare validation is used in different places.

Table 5: Comparison of the relationship between education and the perspective of Health Care Workers in Kermanshah about validation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>group</th>
<th>Total squares</th>
<th>Mean square</th>
<th>freedom degree</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>education</td>
<td>Between</td>
<td>1538/38</td>
<td>307/67</td>
<td>5</td>
<td>2/22</td>
<td>0/054</td>
</tr>
<tr>
<td></td>
<td>groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In groups</td>
<td>25453/09</td>
<td>138/33</td>
<td>184</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>26991/47</td>
<td>–</td>
<td>189</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a difference between the perspectives of people in the field of education about validation.

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