Research Article

‘KAYAKALP’ PEER ASSESSMENT OF PHC’s- INFECTION CONTROL AND HYGIENE PROMOTION AT FIRST POINT OF CONTACT FOR CARE

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ABSTRACT

Health care facilities mainstay objective is to treat the patients and thereby, disease and infection but in addition to that health care personnel are supposed to ‘do no harm’ to patients. To complement this effort, the Ministry of Health & Family Welfare, Government of India launched a National Initiative ‘KAYAKALP’, to give awards to those public health facilities that demonstrate highest standards and levels of cleanliness, hygiene and infection control. This process is completed in three steps, at first an internal assessment is made by health facility and later on peer assessment is done. This was an observational cross sectional study done as peer assessor in the month of August 2016 for the year 2016-17, for the nominated primary health centers (PHC’s) of district Solan, Himachal Pradesh. All four PHC’s were analyzed on the basis of the standard ‘KAYAKALP’ check list. Out of the 4 PHC assessed PHC ‘Domehar’ had the highest aggregate score of 66.3%. PHC ‘BAINJ KI HATTI’ had the lowest score of 18.6%. All 4 PHC’s scores in thematic section of infection control was found to be less than mandatory minimum 70%. PHC wise mean score in infection control thematic section was found to be 26±12 out of 60. Except for the best performing PHC, other PHC’s scored 50% or less in the sub section of sanitation and hygiene. Thematic scores in our study were found to be more than the thematic scores in a study done by Mallappa SB et al. Kayakalp assessment of PHCs is a right initiative for hygiene promotion and infection control at first point of contact at primary care level. Peer assessment is an integral component of internal validation of scores along with shared experiences, gaps identified and innovations for further improvement at all institutions. Periodic evaluation like these will serve larger objective of infection control and apt medical care from grass root health care facilities at peripheral level.

INTRODUCTION

Health care facilities mainstay objective is to treat the patients and thereby, disease and infection but in addition to that health care personnel are supposed to ‘do no harm’ to patients and other relatives visiting the health care facilities. Clean and hygienic health care facility environment is a vital factor in prevention of hospital based infections which further lays foundation for a positive experience to patients and visitors.

With a focus on promoting cleanliness in public spaces ‘Swachh Bharat Abhiyaan’ was launched by the Prime Minister on 2nd October 2014 with Swachhta Guidelines for Public Health Facilities being issued separately. Public health care facilities are a major mechanism of social protection to meet the health care needs of large segments of the population and cleanliness cum hygiene in hospitals are critical in prevention of infection. To complement this effort, the Ministry of Health & Family Welfare, Government of India launched a National Initiative ‘KAYAKALP’, to give awards to those public health facilities that demonstrate highest standards and levels of cleanliness, hygiene and infection control. This initiative was launched with objective to promote cleanliness, hygiene and infection control practices, incentivize and recognize such public healthcare facilities that show exemplary performance and inculcate a culture of ongoing assessment and peer review of performance.¹

Each year under Kayakalp, tertiary care hospitals, district/zonal hospitals, community health centers and primary health centers are assessed as per formulated guidelines under the program. This process is completed in three steps, at first an internal assessment is made by health facility and later on peer assessment is done for the same facility to validate internal assessment. At final
step external assessment is followed and winners of the best performing hospitals of different categories in the states are declared\(^2\).

**METHODOLOGY**

This was an observational cross sectional study done as peer assessor in the month of the August 2016 for the year 2016-17, for the nominated primary health centers of district Solan. As per directions from Chief Medical Officer, Solan, assessment was conducted using the Kayakalp Assessment tool available from the national health system resource centre\(^3\). Checklist for the external assessment included the following thematic scoring areas for each facility with maximum score being 300.

1. Hospital upkeep 60 pts
2. Sanitation & hygiene 60 pts
3. Waste Management 60 pts
4. Infection Control 60 pts
5. Hospital support services 30 pts
6. Hygiene Promotion 30 pts

Different thematic areas were further divided into different criteria points to reach a consolidated score for that thematic section. Each criterion there upon was further assessed on the basis of check point, means of verification and assessment method as per guidelines. The assessment methods used were direct observation (OB), staff interview (SI), and review of records and documents (RR). The scores were applied as fully Compliant (2), partially Compliant (1) and non-compliant (0).

**RESULTS**

All four PHC’s scores were analyzed on the basis of the standard check list and the results are summarized in the table 1 below. The data scores was entered and analyzed in Microsoft Excel 2010. Out of the 4 PHC assessed PHC Domehar had the highest aggregate score of 66.3%. PHC Bainj ki hatti had the lowest score of 18.6%.

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Max score (% of Total)</th>
<th>PHC Bainj ki hatti</th>
<th>PHC Bhumi</th>
<th>PHC Domehar</th>
<th>PHC Patta</th>
<th>Mean Score ± S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital upkeep</td>
<td>60</td>
<td>16</td>
<td>31</td>
<td>46</td>
<td>39</td>
<td>33±13</td>
</tr>
<tr>
<td>Sanitation &amp; hygiene</td>
<td>60</td>
<td>10</td>
<td>33</td>
<td>49</td>
<td>24</td>
<td>29±16</td>
</tr>
<tr>
<td>Waste</td>
<td>60</td>
<td>9</td>
<td>20</td>
<td>36</td>
<td>45</td>
<td>28±16</td>
</tr>
<tr>
<td>Management</td>
<td>60</td>
<td>10</td>
<td>28</td>
<td>37</td>
<td>30</td>
<td>26±12</td>
</tr>
<tr>
<td>Infection Control</td>
<td>60</td>
<td>10</td>
<td>28</td>
<td>37</td>
<td>30</td>
<td>26±12</td>
</tr>
<tr>
<td>Hospital Support Services</td>
<td>30</td>
<td>5</td>
<td>14</td>
<td>13</td>
<td>17</td>
<td>12±5</td>
</tr>
<tr>
<td>Hygiene Promotion</td>
<td>30</td>
<td>6</td>
<td>7</td>
<td>18</td>
<td>12</td>
<td>11±5</td>
</tr>
<tr>
<td>Total Scores</td>
<td>300(100%)</td>
<td>56(18.6)</td>
<td>133(44.3)</td>
<td>199(66.3)</td>
<td>167(55.4%)</td>
<td>139±61</td>
</tr>
</tbody>
</table>

All PHC’s scores in infection control (Fig 1) was found to be less than mandatory minimum 70% scores for further qualification in external assessment. PHC wise mean score in infection control thematic section was found to be 26±12 out of 60.

![Infection Control](image)

**DISCUSSION**

This study had evaluated the peer assessment scores of the ‘Kayakalp programme’ (under the stewardship of ‘Swatch Bharat Abhiyaan’ on the upkeep of the primary health care centers in the rural area of Himachal Pradesh. ‘Kayakalp’ programme is pan India implemented program but periodic continuous evaluations and incentivization will lead to desired outcome of infection control as well as active participation of health care providers in achieving the same desired goal. In our assessment best performing PHC had a score of 66.3%. In a study conducted at the district hospital of Kodagu District in South India for ‘Kayakalp’ assessment the maximum score documented to be 64% which is similar to our study\(^4\).

In our assessment, the best performing PHC had a total score of (66.3%) with thematic scores of hospital upkeep (76%), sanitation & hygiene (81%), biomedical waste management (60%), infection control (62%) support services (43%) and hygiene promotion (60%). Thematic scores in our study were found to be more than the thematic scores in a study done by Mallappa SB et al which had aggregated total scores of (46.4%), hospital upkeep (35%), sanitation & hygiene (53%), biomedical waste management (57%), infection control (50%) support services (48%) and hygiene promotion (26%)\(^5\). Infection control is one of the vital thematic area in the assessment tool under ‘Kayakalp’ and critical to avoid iatrogenic infection, but the PHC’s under our study had scored less than 50% in this section with mean score in infection control was found to be 26±12 out of 60. It is pertinent to mention here that Himachal Pradesh government primarily prioritizes infection control in health care facilities as only those PHCs whose score validation is more than 70% in thematic section of infection control are selected/eligible for next level of assessment as per state specific instructions. Emphasis on infection control be given and practices can be improved by staff training and strict adherence to recommended infection control practices\(^6\).

Except for the best performing PHC, other PHC’s scored 50% or less in the sub section of sanitation and hygiene. This could be improved by adopting the WHO guidelines on the same\(^7\). None of the PHC’s assessed in this study could appear for the external assessment as the desired score aggregate of 70% was not validated in peer assessor evaluation. Due to paucity of published literature of similar study conducted at PHCs level, authors had compared results/scores of thematic section with...
scores of district hospitals only. Various factors leading to low scores under infection control can be attributed to, human resource scarcity at PHCs level, low level of dissemination of program objectives at PHC level, as program was launched only in year 2015 and was in its infancy stage of implementation. Particularly, it was observed in one of the PHCs with low scores only pharmacist was posted at time of assessment and in another one, medical officer had recently joined health services after graduation. All gaps identified for critical points about infection control were shared to concerned stakeholders after evaluation.

CONCLUSION

‘Kayakalp’ assessment of PHCs is a right initiative for hygiene promotion and infection control at first point of contact at primary care level. Newer approaches and innovative tools like checklist of ‘Kayakalp’ can make a huge impact in larger objective of infection control as standardized procedures and guidelines for infection control will be adhered by all concerned stakeholders to retain & reclaim incentives and awards. Regular sensitizations and trainings of health care providers is need of hour so that it can play a bigger role for qualification in final assessment. Peer assessment is an integral component of internal validation of scores along with shared experiences, gaps identified and innovations for further improvement at all institutions. Periodic evaluation like these will serve larger objective of infection control and apt medical care from grass root health care facilities at peripheral level.

References


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