The impact of leadership and quality climate on hospital performance†

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Abstract

Objective. To explore the relationship between leadership effectiveness and health-care trust performance, taking into account external quality measures and the number of patient complaints; also, to examine the role of care quality climate as a mediator.

Design. We developed scales for rating leadership effectiveness and care quality climate. We then drew upon UK national indices of health-care trust performance—Commission for Health Improvement star ratings, Clinical Governance Review ratings and the number of patient complaints per thousand. We conducted statistical analysis to examine any significant relationships between predictor and outcome variables.

Setting. The study is based on 86 hospital trusts run by the National Health Service (NHS) in the UK. The data collection is part of an annual staff survey commissioned by the NHS to explore the quality of working life.

Participants. A total of 17,949 employees were randomly surveyed (41% of the total sample).

Results. Leadership effectiveness is associated with higher Clinical Governance Review ratings and Commission for Health Improvement star ratings for our sample ($b = 0.42, P < 0.05; b = 0.37, P < 0.05$, respectively), and lower patient complaints ($b = -0.57, P < 0.05$). In addition, 98% of the relationship between leadership and patient complaints is explained by care quality climate.

Conclusions. Results offer insight into how non-clinical leadership may foster performance outcomes for health-care organizations. A frequently neglected area—patient complaints—may be a valid measure to consider when assessing leadership and quality in a health-care context.

Keywords: leadership, quality climate, hospital trust, patient complaints, performance

Introduction

Health-care systems across the globe face unprecedented pressures as the twenty-first century moves inexorably forward. Building and sustaining health services that reflect the aspirations of the communities they serve has proved a major challenge throughout the developed world, especially in the UK, where such provision is notionally ‘free’ at the point of delivery [1, 2]. Attention in recent years has crystallized on the role of health-care leaders [3, 4]. Indeed, the Department of Health in the UK has made appointing and developing aspiring health-care leaders a goal in its vision for the National Health Service (NHS) [5]. Despite or perhaps because of this, leadership in the NHS has been criticized by some fairly influential figures [6].

The purpose of this paper is 2-fold. First, taking a sample of 86 hospital trusts in the UK, we examine the relationship between perceptions of leadership effectiveness and health-care performance. We draw upon measures arising from the Commission for Health Improvement star-rating system (now replaced by the ‘Annual Health Check’) and the so-called Clinical Governance Review ratings of hospital trust performance. We also focus on an aspect of service quality that has received relatively little attention in the literature—patient complaints as a proportion of patients treated.

A second goal of this paper is to examine the mechanisms by which leadership influences performance. It may be that leaders influence performance outcomes to the extent that they shape employees’ collective belief that patient needs come first. In other words, perhaps the relationship between leadership and performance in a health-care environment is mediated by some factor of climate that reflects a universal determination to achieve high standards of patient care.
Leadership and organizational performance

Cursory reading of the leadership literature reveals that leaders are responsible for creating a vision of where the organization is going and implementing initiatives to achieve the vision. They generate enthusiasm for goal achievement and communicate employees’ roles in contributing to the organization’s strategy. Furthermore, effective leaders engage with the external environment, building collaborative relationships within the wider community, in order to promote the necessary change orientation [7]. In the target-driven NHS where performance and quality indicators determine a health-care trust’s league table position, leaders demonstrating such attributes are likely to be greatly in demand [8, 9]. Indeed, research suggests in high performing trusts, leaders focus on meeting Department of Health performance targets while at the same building collaborative relationships outside their own institutions, whereas lesser performing health-care organizations lack this external orientation [10].

Another factor shaping performance may be the extent to which leaders pay attention to service user perceptions [11]. Making valid use of data on service user perceptions in a health-care context is not straightforward. Patient satisfaction data can be problematic, since those who feel vulnerable may be unwilling to admit to or express genuine feelings [12]. As long as they are interpreted with care, however, patient complaints may provide a useful indicator of performance for health-care leaders. Complaints generally arise because expectations have not been met, therefore, offer an indication the quality of communication even if clinical concerns are not substantiated [13, 14]. One commentator noted that: ‘Repeated complaints about the same units, procedures or individuals are especially important for quality review’ [15].

Care quality climate as a predictor of trust performance

Climate represents a collective consensus held about certain facets of organizational functioning; for example, the extent of external orientation, employee well-being, opportunities for innovation or focus on safety. Culture, in contrast, is generally believed to encompass deeper elements such as stories and myths, acceptable ways of behaving and interacting and ‘the way things are done around here’. Climate is similar but not identical to culture—although many confuse the two [16]. Thus, a study of 265 hospitals from the USA, Canada and the UK demonstrated that performance outcomes were achieved to the extent that the prevailing culture actively endorsed their accomplishment; in other words, better quality care could be achieved where there was collective consensus around the achievement of high-quality patient care [17]. Our depiction of care quality climate represents a collective commitment to put the needs of the patient first, regardless of other operational pressures. Care quality climate could impact on hospital performance in a variety of ways; for example, through employees responding more sensitively to patient concerns and therefore identifying clinical issues more rapidly, or through generating a sense of well-being in the patient, thereby precipitating his or her recovery.

The mediating role of care quality climate

The idea that leadership fosters performance through shaping climate is not new. Indeed, it has been stated that ‘climate (is) . . . the organisational phenomenon through which leadership works’ [18]. We suggest that one of the key tasks of leadership in a health-care context may be to create a care quality climate. There are many ways in which this could be achieved: for example, communicating the purpose and objectives of the vision, and implementing performance management, reward and training systems to reflect the required focus. Consensus around this priority should enable health-care organizations to achieve high ratings by Commission for Health Improvement star and Clinical Governance Review panels and relatively low complaints as a proportion of patients treated, given that the quality of patient care is an overriding factor captured for each outcome variable.

In sum, our research propositions are as follows:
(i) that effective leadership will be significantly and positively related to a range of outcomes, including Commission for Health Improvement star and Clinical Governance Review ratings and patient complaints per thousand;
(ii) that relationships between care quality climate and the various outcomes described above will be significant and positive, as will associations between effective leadership and care quality climate;
(iii) that care quality climate will mediate relationships between leadership and the three outcome variables examined in this study.

Methods

Sample

Data on leadership effectiveness and care quality climate were part of a larger study designed to uncover staff perceptions about work and management. During 2001/02, questionnaires were distributed to a sample of 500 staff in each of 86 acute trusts. In total, self-report questionnaires were completed by 17,799 respondents from the 86 acute trusts. This represented a response rate of just over 41%. Because of changes in the management of patient complaints processes, there were 25 health-care organizations for which we had usable data on patient complaints. Thirty-four organizations were sampled for Clinical Governance Review ratings (40% of the total sample).

Measures

Full details of scales used in this study are provided in the Appendix.

Leadership effectiveness. Six items were used to measure leadership, based on existing scales tailored to take account of the health-care context; for example, health-care leadership ‘describes exciting new opportunities for the organisation’. Responses were coded on a five-point scale, with 1 representing ‘not at all’ and 5 representing ‘a great deal’. The scale was reliable, with Cronbach’s alpha of 0.92.
Governance Review ratings are also taken into account.

Submitted to the Strategic Health Authority and Clinical Commission for Health Improvement star and Clinical Governance Review ratings.

Trust performance. Trust performance was assessed using three indicators: the number of complaints per 1000 patients, Commission for Health Improvement star ratings.

Patient complaints. The patient complaints measures were accessed from the Department of Health website. The number of complaints is calculated from the number of written complaints received by the trust in a year, from patients who were treated as in-patients, outpatients or in Accident and Emergency units. These complaints are divided by the total number of patients in the above categories.

Commission for Health Improvement star ratings. These were awarded to each trust annually by the Healthcare Commission (formerly the Commission for Health Improvement). Trusts in this study were awarded a rating of 0, 1, 2 or 3 stars, 3 being the highest, on the basis of a trust’s performance on a range of indicators (such as waiting times, deaths after surgery, readmission rates). Self-assessment returns submitted to the Strategic Health Authority and Clinical Governance Review ratings are also taken into account.

Clinical Governance Review ratings. A Clinical Governance Review assesses the trust across seven components of performance, including: risk management, clinical audit, research and education, patient involvement, information management, staff involvement, education, and training and development. Each component is scored on a scale from 1 to 5, with 5 being the best possible score. The final score which is used as a measure of positive clinical governance is an average of the scores obtained for each of the seven components.

Controls. We controlled for trust size by taking account of the budgetary allocation for each trust in our regression analyses. This was important to rule out the effect of confounding variables—notably the effect of high or low resources within the trust—on the results we report. We also controlled for staff job satisfaction. It is possible that staff satisfied with their work and position may respond positively to questions on leadership and/or care quality climate, and vice versa. Controlling for job satisfaction rules out this possibility.

Six items were used to measure job satisfaction. These items are described in full in the Appendix. The Cronbach alpha score was 0.84.

Statistical analysis strategy

We treated top management leadership and quality climate as group-level variables because we were interested in the effect on the overall performance of the trust. Thus, consistent with previous studies [19], we computed a mean score for each trust for each variable. To justify this approach, we calculated the \( r_{WG(i)} \) index for care quality. This index measures the within-group agreement for multiple-item measures [20]. We also calculated intraclass correlation coefficients (ICC(2)) for climate and leadership effectiveness for the trusts [21]. The ICC(2) is applied to determine the reliability of aggregated group means [22]. According to both measures, these data were suitable for aggregation [23]. We used a ’marker variable’ technique [23] in order to remove as much common source bias from the data as possible. Common source bias refers to the amount of spurious covariance shared among variables because of the common source from which the data were collected. The marker variable used in this study was employee job satisfaction.

The mathematical formula “beta” was used for the analysis. Beta represents the change in dependent variable, expressed in standard deviation units, for a change of one standard deviation in the independent variable. The data were analysed using multiple regression analyses.

Mediation testing. To test our mediation hypothesis, we followed the multiple regression procedure outlined by Baron and Kenny [24] as well as using the Sobel test to confirm our findings [25]. According to Baron and Kenny, the independent variable (i.e. leadership effectiveness) must be significantly related to the dependent variable (e.g. patient complaints, Commission for Health Improvement star rating and Clinical Governance Review rating); further, the independent variable must be significantly related to the proposed mediator (i.e. care quality climate); care quality climate must be significantly related to the outcome variable under consideration and finally, for complete mediation, the relationship between leadership effectiveness and the dependent variable concerned must disappear when care quality climate is introduced into the regression equation.

Results

Table 1 shows the correlation between the predictor, mediating, outcome and control variables; leadership effectiveness, care quality climate, the number of complaints per 1000 patients, Commission for Health Improvement, Clinical Governance Review, job satisfaction and trust budget.

Turning to Table 2, it can be seen that there was a highly significant positive correlation between leadership effectiveness and Commission for Health Improvement star ratings and Clinical Governance Review ratings (\( \beta = 0.37, P < 0.01; \beta = 0.42, P < 0.05 \), respectively). This means that the more positively staff rated their leadership, the better both trust performance ratings. The analysis further revealed a significant negative correlation between leadership effectiveness and patient complaints (\( \beta = -0.57, P < 0.05 \)). There was a significant and positive correlation between leadership effectiveness and the care quality climate of the trust. Thus, the more positively staff rated the leadership effectiveness, the stronger the care quality climate as perceived by staff (Table 2 and Fig. 1a–d). As can be seen in Table 2, these results were substantiated in a regression analysis controlling for trust budget and employee satisfaction at work.
Table 1  Means, standard deviations and correlations for study variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>α</th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>86</td>
<td>0.95</td>
<td>2.76</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>86</td>
<td>0.92</td>
<td>3.40</td>
<td>0.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>25</td>
<td></td>
<td>3.32</td>
<td>1.08</td>
<td>-0.45**</td>
<td>-0.56***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>78</td>
<td>a</td>
<td>2.04</td>
<td>0.84</td>
<td>0.36**</td>
<td>0.34***</td>
<td>-0.48*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>34</td>
<td>a</td>
<td>3.41</td>
<td>0.84</td>
<td>0.45**</td>
<td>0.37*</td>
<td></td>
<td>b</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>86</td>
<td>0.83</td>
<td>3.67</td>
<td>0.13</td>
<td>0.49***</td>
<td>0.40***</td>
<td>0.03</td>
<td>0.20</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>a</td>
<td>82</td>
<td>143.18</td>
<td>-0.17</td>
<td>-0.17</td>
<td>0.02</td>
<td>0.09</td>
<td>0.12</td>
<td>0.02</td>
</tr>
</tbody>
</table>

*P < 0.05; **P < 0.01; ***P < 0.001.

aNot an appropriate procedure with these data.
bCannot be computed because variables do not overlap.

Table 2  Results of regression analysis with leadership effectiveness predicting trust performance

<table>
<thead>
<tr>
<th></th>
<th>Patient complaints, β (95% CI)</th>
<th>CHI star rating, β (95% CI)</th>
<th>CGR rating, β (95% CI)</th>
<th>Care quality climate, β (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust budget</td>
<td>-0.06 (-0.47, 0.34)</td>
<td>0.15 (-0.07, 0.37)</td>
<td>0.17 (-0.16, 0.51)</td>
<td>-0.07 (-0.24, 0.10)</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>0.26 (-0.17, 0.70)</td>
<td>0.02 (-0.23, 0.27)</td>
<td>0.10 (-0.30, 0.51)</td>
<td>0.14 (-0.04, 0.33)</td>
</tr>
<tr>
<td>Leadership effectiveness</td>
<td>-0.57* (-1.01, -0.13)</td>
<td>0.37** (0.12, 0.63)</td>
<td>0.42* (0.01, 0.84)</td>
<td>0.59*** (0.40, 0.78)</td>
</tr>
</tbody>
</table>

*P < 0.05; **P < 0.01; ***P < 0.001.

β represents the standardized regression coefficient.

Figure 1  (a–d) The relationship between leadership effectiveness and outcomes.
Trust budget

Health Improvement star rating and care quality climate detected for the relationship between Commission for employees to be positive. A reverse pattern can be when the care quality climate of the organization is perceived means that there are fewer complaints per 1000 patients

Table 3 Results of regression analysis with care quality climate predicting trust performance

<table>
<thead>
<tr>
<th></th>
<th>Patient complaints, $\beta$ (95% CI)</th>
<th>CHI star rating, $\beta$ (95% CI)</th>
<th>CGR rating, $\beta$ (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust budget</td>
<td>$-0.14 (-0.50, 0.22)$</td>
<td>$0.14 (-0.08, 0.36)$</td>
<td>$0.11 (-0.23, 0.46)$</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>$0.31 (-0.07, 0.69)$</td>
<td>$0.07 (-0.18, 0.32)$</td>
<td>$0.27 (-0.10, 0.64)$</td>
</tr>
<tr>
<td>Care quality climate</td>
<td>$-0.73** (-1.12, -0.34)$</td>
<td>$0.32* (0.07, 0.56)$</td>
<td>$0.23 (-0.14, 0.60)$</td>
</tr>
</tbody>
</table>

* $P < 0.05$; ** $P < 0.01$.

Table 4 Results of regression analysis with leadership effectiveness predicting trust performance, mediated by care quality climate

<table>
<thead>
<tr>
<th></th>
<th>Patient complaints $\beta$ (95% CI)</th>
<th>CHI star rating $\beta$ (95% CI)</th>
<th>CGR $\beta$ (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$-0.14 (-0.51, 0.23)$</td>
<td>$0.16 (-0.06, 0.38)$</td>
<td>$0.17 (-0.17, 0.52)$</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>$0.33 (-0.07, 0.72)$</td>
<td>$-0.00 (-0.26, 0.25)$</td>
<td>$0.11 (-0.31, 0.52)$</td>
</tr>
<tr>
<td>Care quality climate</td>
<td>$-0.65* (-1.21, -0.08)$</td>
<td>$0.42 0.17 (-0.13, 0.26)$</td>
<td>$0.13 (0.02 (-0.44, 0.47$</td>
</tr>
<tr>
<td>Leadership effectiveness</td>
<td>$-0.12 (-0.68, 0.44)$</td>
<td>$0.43 0.28 (-0.03, 0.58)$</td>
<td>$0.17 (0.41 (-0.12, 0.94)</td>
</tr>
<tr>
<td>$\Delta R^2$ due to leadership effectiveness (mediated model)</td>
<td>$0.01$</td>
<td>$0.04$</td>
<td>$0.07$</td>
</tr>
<tr>
<td>$\Delta R^2$ due to leadership effectiveness (unmediated model)</td>
<td>$0.26*$</td>
<td>$0.10**$</td>
<td>$0.11*$</td>
</tr>
</tbody>
</table>

* $P < 0.05$; ** $P < 0.01$.

$\beta$ represents the standardized regression coefficient.

Table 3 shows the results of the regression analysis in which care quality climate predicts patient complaints, Commission for Health Improvement star rating and Clinical Governance Review ratings. There was a highly significant negative association between care quality climate and patient complaints ($\beta = -0.73$, $P < 0.01$). This negative effect means that there are fewer complaints per 1000 patients when the care quality climate of the organization is perceived by employees to be positive. A reverse pattern can be detected for the relationship between Commission for Health Improvement star rating and care quality climate ($\beta = 0.32$, $P < 0.05$). Although we anticipated that the relationship between care quality climate and Clinical Governance Review rating would be similarly positive, we did not find support for this proposal in our data.

Table 4 shows the results of the analysis where the variable measuring leadership effectiveness was entered into a regression analysis with patient complaints Clinical Governance Review rating and Commission for Health Improvement star rating. To test for mediation [24], we followed the procedure advocated by Baron and Kenny (described above). We input the variable measuring leadership effectiveness into a regression analysis, together with our measure of care quality climate. With ‘patient complaints’ as the dependent variable, the analysis revealed that although care quality climate remained a significant predictor ($P = 0.03$), leadership did not. The large reductions in both the standardized coefficients of the leadership effectiveness variable ($-0.57$ to $-0.12$) and the changes in $R^2$ ($\Delta R^2 = 0.01$) demonstrate almost complete mediation. The Sobel test yielded a test score of $t = 2.24$ ($P < 0.05$), further supporting our results.

For the dependent variable Clinical Governance Review rating, included in the same table, there is no statistically significant relationship between leadership effectiveness and this outcome, so it would be inappropriate to test for mediation. There is no evidence of mediation for our other outcome measure, Commission for Health Improvement star rating, since ‘care quality climate’ no longer achieves significance when entered into a regression analysis together with the variable capturing leadership effectiveness (Table 4). (See above discussion of Baron and Kenny to explain the statistical requirements for mediation.)

**Discussion**

Health-care organizations across the world have to deal with escalating demands in the face of limited resources. Against this backdrop, attention in the UK and elsewhere has focused on the role and contribution of health-care leaders [1, 3, 5, 6]. Here, we have examined the extent to which leadership effectiveness is linked with various measures of health-care trust performance, taking account not just of Department of Health indicators—Commission for Health Improvement star and Clinical Governance Review
ratings—but also of complaints as a proportion of patients treated. In an analysis of 86 health-care trusts, we found that the higher the rating of leadership effectiveness, the more highly each health-care organization was rated. In our analysis of patient complaints (with a smaller sample of 25 trusts), we found significant and negative relationships between leadership effectiveness and the number of complaints per thousand patients for the organizations in our sample.

Although we are unable to attribute causality, the results we report are in line with theoretical reasoning outlined in the introductory section. Effective leaders shape organizational outcomes through creating a vision and building the allegiance of individuals and teams. Their external orientation, also reflected in our scale, enables organizations to anticipate and respond appropriately to change—an important attribute for health-care organizations in the UK, given the dynamic landscape within which they operate.

We feel that analyzing patient complaints offers an interesting and unique insight into trust performance that has rarely been examined in extant literature. Results here suggest that patients respond positively to the service they receive from effectively led organizations by complaining less. This indicates that from the patients’ perspective a better quality service is experienced in such circumstances. The question of why this should be so is compelling. One possibility is that effective leaders create the climate leading to patients’ better experience of care. We discuss below the role of care quality climate as a mediator between leadership effectiveness and complaints per thousand patients.

Indeed, another contribution of this study is to highlight the role of care quality climate as an antecedent of various performance outcomes. Care quality climate represents a collective orientation to put patient needs first and recognition of the organization’s commitment to set high standards for staff in this area. Care quality climate is significantly related to Commission for Health Improvement star rating and patient complaints—but not to Clinical Governance Review rating. This is at first glance surprising. However, Commission for Health Improvement star ratings are largely based upon clinical measures of performance, and patient complaints, as discussed above, reflect the service users’ experience of both clinical and other care provided. Clinical Governance Review ratings, on the other hand, draw on multiple measures of performance including the extent of information management—which may not necessarily be linked with the aspects of patient care central to our measure of care quality climate. Another possibility is that the reduced sample of organizations represented here (40% of total) presented a less accurate depiction of relationships between variables than Commission for Health Improvement star rating.

Research outside health-care demonstrates that when organizations focus their strategies and actions on delivering superior service quality, improved customer satisfaction follows. Here, results suggest that leaders influence patients’ experience of care (i.e. the extent to which complaints are reported) by creating a care quality climate. Patient complaints, rather than being a distraction from the main business of running health-care organizations, offer a unique insight into the patient experience of care quality, may be a valid measure for future studies to take into account when assessing leadership and performance in a health-care context.

We draw on multiple data sources for this study, which is based on a large sample of health-care organizations in the UK. We examine an area that has received relatively little attention in the health-care literature, i.e. the role of non-clinical leadership in shaping organizational climate and performance. Our data are cross-sectional and we are unable to infer causality. Our sample sizes for analyses involving patient complaints and Clinical Governance Review ratings are relatively small, at 25 and 34 organizations, respectively.

Health-care organizations across the developed world face unprecedented challenges to embrace the opportunities that medical advances offer. Here, we show that leaders may play a crucial role in shaping health-care performance across a range of indicators. Through examining care quality climate and the extent of patient complaints, we shed light on intervening and outcome variables that have rarely been investigated before. Our hope is that through combining clinical expertise with managerial excellence, health-care organizations of the future will meet and even surpass the expectations of the communities they serve.

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**Acknowledgement**

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**References**


Appendix

Leadership scale

The scale for leadership asks respondents to reply on a five-point scale to the following statements, indicating that they agree ‘not at all’, ‘just a little’, ‘quite a lot’ or ‘a great deal’.

The top management team in my organization:

(i) describes exciting new opportunities for the organization;
(ii) proposes new and creative ideas for improving services or processes;
(iii) is effectively leading the organization to meet patient needs and care for patient safety;
(iv) takes account of both service requirements and staff needs when implementing major changes;
(v) builds strong and positive relationships with the community;
(vi) builds strong, co-operative links with other organizations.

Scale for care quality climate

Respondents are asked to reply on a five-point scale, indicating whether they ‘strongly disagree’, ‘disagree’, ‘neither agree nor disagree’, ‘agree’ or ‘strongly agree’ with the following statements.

(i) This organization does not have much of a reputation for top quality patient care.
(ii) There is an emphasis on patient-focused care in this organization.
(iii) This organization sets extremely high standards for its staff.
(iv) As a patient, I would be happy to have care provided by this organization.
(v) Quality is taken seriously here.
(vi) Staff in this organization are able to question the basis of what the organization is doing.
(vii) The organization has clear standards which staff try to meet in order to achieve excellence.

Scale for job satisfaction

Staff were asked to rate on five-point scale from ‘very dissatisfied’ to ‘very satisfied’ the following questions: To what extent are you satisfied with:

(i) the recognition I get for good work;
(ii) the support I get from my immediate manager;
(iii) the freedom to I have to choose my own method of working;
(iv) the support I get from work colleagues;
(v) the amount of responsibility I am given;
(vi) the opportunity I have to use my abilities.

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