



Assessment of the Training Needs In Health Care Professionals for Better Goals

Lt Col Neeraj Garg*, Dr Ruchi Garg[§], Dr Shakti Kr Gupta@, Brig Sunil Kant, VSM**

* HQ, SWC, [§] Asst Prof, IIHMR University Jaipur

@Medical Superintendent, Dr R.P Centre for Ophthalmic Sciences, AIIMS, New Delhi

** Prof & HOD, Hospital Administration, AFMC, Pune

Corresponding Author: Dr Ruchi Garg, Asst Prof, IIHMR University Jaipur, India.

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Background: Anecdotal evidence suggests the healthcare lags behind others with respect to leadership development practices and other human resources functions, but these issues have not been systematically investigated. There is a requirement to ascertain the training needs of the healthcare leaders, keeping the competencies required for a successful health care leader as a benchmark, and devising the leadership development programmes for the healthcare leaders. This would be of paramount importance in an Op scenario.

Aim: The aim of this study was to assess the training needs in health care professionals for better goals. To achieve this aim the training needs of the Health Care professionals was assessed against the Healthcare Leaders Competency Model (HLCM) version 2.1 of National Centre for Healthcare Leadership (NCHL). The various leadership development programmes being conducted for the health care leaders were also studied.

Methodology: Based on 26 desired competencies, assessment was made among health care professionals to find out the level of competence and the training need to develop that competence. A total of 115 responses with a response rate of 38.3% were received which was subjected

to Cronbach's alpha and internal consistency was > 0.9 in all competencies. Frequency percentage was calculated for all the 26 competencies, to find out the level of competence and the training need to develop that competency. Preferred modalities as well the preferred duration were also ascertained using the frequency percentage. Data was statistically analyzed for existing level of competency, training need to develop the competencies, preferred modality to develop that competency and preferred duration of training to develop that competency. For each of the competency (measured on Likert scale of 1-5) mean and standard deviation was also calculated, for both the categories of Healthcare leaders i.e. those from the forces and other Govt sectors and those from private sectors, and subjected to analysis. Similarly mean of training need was calculated for both the categories of health care leaders and p value was derived using unpaired t-test.

Results: Healthcare leaders are competent in their core field of medical profession and team approach has always be the hallmark of these individuals. This study has brought out what is generally spoken of medical professionals i.e lack of financial, IT and human resource

mgt. The study also brings out that healthcare leaders are poor in the management of processes and projects.

Conclusion: This study suggests that healthcare leaders be given training in various management skills including human resource management and finance in addition to their professional training to make them better leaders.

Keywords: Healthcare leaders, Training needs, Leadership development programme.

Introduction

Leadership and leadership development have been prominent features in the strategic agenda of any organization. Anecdotal evidence suggests the healthcare sector has lagged behind other industries with respect to leadership development practices and other human resources functions, but these issues have not been systematically investigated [1].

In most situations healthcare leaders are selected by virtue of their seniority, and most often the competencies pertaining to their administrative functions have been overlooked. The gap in the existing level of competency and the desired level of competency has been proved by various studies done in past regarding the level of competencies of healthcare leaders[2][3]

There is a felt requirement to train the prospective professionals in military medicine as also healthcare leaders outside the armed forces into various administrative aspects pertaining to day to day hospital functioning, so that they are fully prepared to take up the leadership role in future.

In view of the above, this study has been conceived to ascertain the training needs of the Indian health care professionals for better goals.

AIM

To assess the training needs among healthcare professionals for better goals.

Objective

1. To assess the training needs of the health care leaders in military as well as non-military organisations against the Healthcare Leaders Competency Model (HLCM) of National Centre for Healthcare Leadership (NCHL).
2. To develop the template for the leadership development programme for the health care leaders in India.

Methodology

1. Tools for Data Collection

The NCHL has laid down 26 competencies and divided them under three domains in the HLCM ver 2.1. Fig No 1 depicts the Healthcare Leadership Competency Model (HLCM) of National Centre for Healthcare Leadership (NCHL).

These three domains are transformation, execution and people.[4][5].

- (a) **Transformation:** These are those competencies which are required for providing visioning, energizing, and stimulating a change process that coalesces communities, patients, and professionals around new models of healthcare and wellness.
- (b) **Execution:** Those set of competencies which help the healthcare leader in translating vision and strategy into optimal organizational performance.
- (c) **People:** These set of competencies are required for creating an organizational climate that values employees from all backgrounds and provides an energizing environment for them. Also includes the leader's responsibility to understand his or her impact on others and to improve his or her capabilities, as well as the capabilities of others.



Fig 1 : Healthcare Leadership Competency Model (HLCM) of National Centre for Healthcare Leadership (NCHL)

As per HLCM version 2.1 of NCHL the required competencies for health care leaders in Indian Armed Forces and those professionals in the Indian government set up as well as those in private practice were identified and a proforma was prepared, for ascertaining the training needs and modalities of training for these health care executives: The proforma was validated through a focused group discussions, and a final questionnaire based on the HLCM model of NCHL and inputs given by various stakeholders during focused group discussion, was developed.

The health care professionals were grouped into two categories. The government category consisted of these professionals from the Indian Armed Forces and leading government hospitals wherein the officers from the armed forces usually go for training. The private group consisted of leading health care professionals in private practice. These subjects were approached for the structured

interview based on the questionnaire developed for this study.

2. Data collection

Respondents were asked to use a five-point Likert scale—ranging from “strongly agree” to “strongly disagree”—to designate whether they are competent in certain areas and whether there is requirement of training for developing these competencies

3. Analysis

a) Each of the 26 competencies were analysed under four heads as follows:

- i) Existing level of competency
 - ii) Training need to develop the competencies.
 - iii) Preferred modality to develop that competency.
 - iv) Preferred duration of training to develop that competency
- b) For each of the competency Mean± S.D of existing level of competency was calculated, for both the categories of Healthcare leaders i.e. those from Government sector and those from private sector, and p-value was calculated, to find out if there is any significant difference in the level of existing competency in the two categories. Similarly Mean± S.D is ascertained for the training needs and p value was derived.
- c) The correlation was calculated for existing level of competency and the training need, along with p- value
- d) The domain analysis was done to find the requirement of training in three domains, i.e. Transformation, Execution and People.
- e) Paired T test is being done to find the correlation between the level of existing competency and preferred modality of training for that competency.
- f) Lastly number of respondents with felt need of training on more than 50% competency was identified and their percentages were computed.

g) For the study the confidence limit was fixed at 95% while the degree of variability was taken as 0.5. The precision was taken as 10%. The significant sample size satisfying the above parameter was determined to be 100. Hence a total of 115 subjects were interviewed.

Observations

1. The observations regarding the training needs under domain of ‘Transformation’ ‘ Execution’ and ‘ People’ are given in table 1.

Table 1. Domain Analysis for Training Needs

S. No.	Competency	Overall	Government	Private	P value *
		Mean ±S.D	Mean ±S.D	Mean ±S.D	
Transformation					
1	Achievement Orientation	3.5±1.0	3.5±1.0	3.4±1.0	0.63
2	Analytical Thinking	3.4±1.1	3.5±1.1	3.2±1.1	0.33
3	Community Orientation	3.4±1.1	3.3±1.1	3.6±1.1	0.35
4	Financial Skills	4.2±1.0	4.1±1.0	4.4±0.9	0.16
5	Information Seeking	3.5±1.2	3.5±1.1	3.5±1.3	0.91
6	Innovative Thinking	3.7±1.1	3.7±1.1	3.6±1.2	0.54
7	Strategic Orientation	3.9±1.0	3.9±1.0	3.8±1.0	0.50
	Average	3.7±0.7	3.7±0.7	3.7±0.8	0.93
Execution					
8.	Accountability	3.6±1.1	3.7±1.0	3.2±1.1	0.02
9.	Change Leadership	3.7±1.1	3.8±1.1	3.7±1.1	0.72
10.	Collaboration	3.2±1.2	3.3±1.2	3.2±1.3	0.67
11.	Communication Skills	3.6±1.1	3.7±1.0	3.3±1.2	0.18
12.	Impact and Influence	3.3±1.1	3.5±1.1	3.0±1.1	0.05
13.	Information Technology Management	3.9±1.1	3.8±1.1	4.1±1.0	0.25
14.	Initiative	3.4±1.1	3.4±1.1	3.4±1.1	0.99
15.	Organizational Awareness	3.5±1.0	3.6±1.0	3.3±1.2	0.21
16.	Performance Measurement	3.9±0.8	3.9±0.9	4.1±0.8	0.40

17.	Process Management / Organizational Design	3.9±1.0	4.0±0.9	3.8±1.2	0.25
18.	Project Management	4.1±1.0	4.2±0.9	4.1±1.0	0.69
	Average	3.7±0.7	3.7±0.7	3.6±0.8	0.32
People					
19.	Human Resources Management	3.9±1.0	4.1±1.0	3.6±1.1	0.03
20.	Interpersonal Understanding	3.2±1.1	3.3±1.1	3.2±1.1	0.58
21.	Professionalism	3.3±1.1	3.3±1.1	3.1±1.1	0.45
22.	Relationship Building	3.6±1.1	3.6±1.1	3.3±1.1	0.20
23.	Self Confidence	3.2±1.2	3.3±1.2	3.0±1.2	0.31
24.	Self-Development	3.5±1.1	3.5±1.1	3.5±1.1	0.97
25.	Talent Development	3.7±1.1	3.7±1.0	3.6±1.2	0.75
26.	Team Leadership	3.5±1.1	3.5±1.1	3.4±1.2	0.77
	Average	3.5±0.8	3.5±0.8	3.3±0.9	0.27

2 .The Correlation between Existing competency and Training Need is as per Table 2 and Fig 2

Table 2. Correlation between Existing competency and Training Need

S. No.	Competency	Training Need	P – value
Transformation			
1.	Achievement Orientation	-0.17	0.0597
2.	Analytical Thinking	-0.34	0.001
3.	Community Orientation	-0.31	0.0007
4.	Financial Skill	-0.44	0.0000
5.	Information Seeking	-0.43	0.0000
6.	Innovative Thinking	-0.35	0.0001
7.	Strategic Orientation	-0.33	0.0002
Execution			
8.	Accountability	-0.36	0.001
9.	Change Leadership	-0.22	0.0161
10.	Collaboration	-0.28	0.0017
11.	Communication Skill	-0.37	0.0000

12.	Impact and Influence	-0.49	0.0000
13.	Information Technology Management	-0.30	0.0010
14.	Initiative	-0.45	0.0000
15.	Organisational Awareness	-0.20	0.0273
16.	Performance Measurement	-0.40	0.0000
17.	Process Management	-0.32	0.0005
18.	Project Management	-0.34	0.0002
PEOPLE			
19.	Human Resource Management	-0.33	0.0003
20.	Interpersonal Understanding	-0.35	0.0001
21.	Professionalism	-0.44	0.0000
22.	Relationship Building	-0.29	0.0016
23.	Self confidence	-0.33	0.0002
24.	Self-Development	-0.30	0.0011
25.	Talent Development	-0.32	0.0004
26.	Team Leadership	-0.26	0.0048

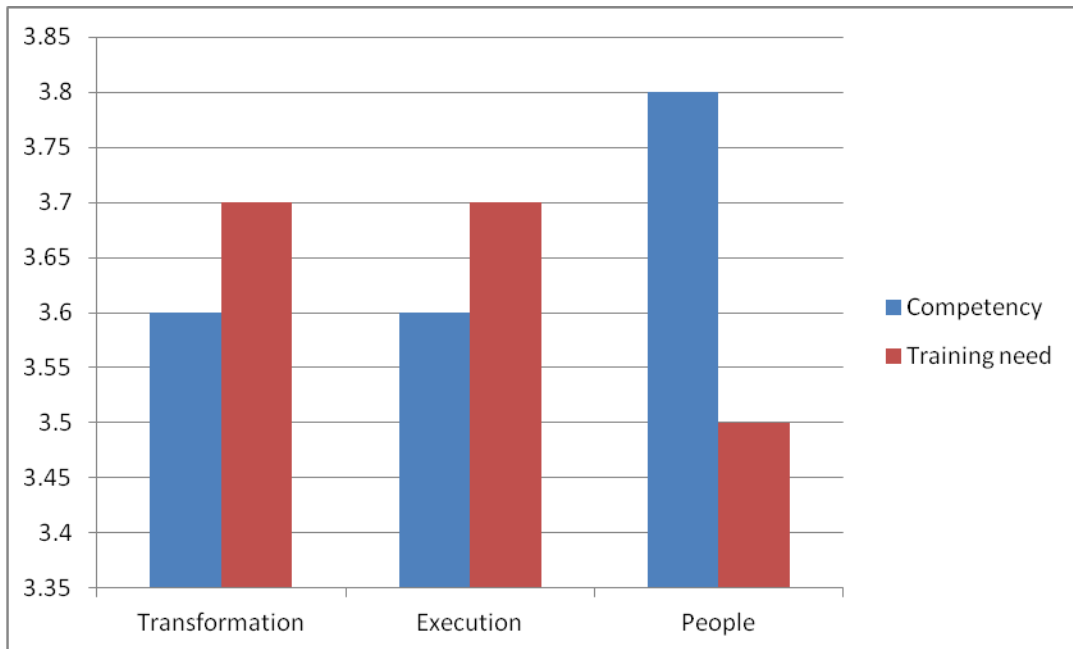


Fig 2: Domain analysis for level of competency and training need

3. The preferred Modality of Training against level of existing Competency is as per table3.

Table 3. Preferred Modality of Training against level of existing Competency

Preferred Modality of training		Existing Competence					Total
		Not competent	Below Average	Average	Above average	Highly competent	
No modality suggested	n	0	0	2	62	107	171
	%	.0%	.0%	.2%	5.0%	19.2%	5.7%
Lectures/Demos	n	18	75	245	364	128	830
	%	32.7%	28.5%	27.7%	29.6%	23.0%	27.8%
Skill Based Train.	n	7	82	263	273	109	734
	%	12.7%	31.2%	29.8%	22.2%	19.6%	24.5%
Job assign./action learn.	n	17	77	251	332	130	807
	%	30.9%	29.3%	28.4%	27.0%	23.3%	27.0%
Developmental relationship	n	12	20	110	159	59	360
	%	21.8%	7.6%	12.4%	12.9%	10.6%	12.0%
360 Deg. Feedback	n	1	9	13	41	24	88
	%	1.8%	3.4%	1.5%	3.3%	4.3%	2.9%
Total	n	55	263	884	1231	557	2990
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

a) The preferred modality of training in those perceiving themselves as Not Competent (Level 1) and above average (Level 4) is lectures/demos.

b) The preferred modality of training in those perceiving themselves as Below average (Level 2) and Average (Level 3) is skill based training.

c) The preferred modality of training in those perceiving themselves as Highly competent (Level 5) is job oriented training

4. Summary of observations: (Table 4)

a) The competencies in which more than 50 % of the respondents have labeled themselves not competent are.

- Financial skills
- Project management
- Information technology management
- Strategic orientation
- Performance measurement
- Process management

b. Training Need. The competencies wherein training need was felt were as follows(Percentage of respondents who have recommended training strongly)

- Financial skills, 81.7%
- Project management, 80%
- Performance measurement, 79.1%

- Information technology management, 79%
- Human resource management, 75.4 %

c)Modality of Training. The preferred modality of training in which healthcare leaders have asked for more training are

- Financial skill : Job assignment
- Human resource management: Skill based training / Job assignment
- Information technology management: Job assignment.
- Performance measurement; Lectures/ Demos.
- Process management: Skill based training.
- Project management: Job assignment

- Strategic orientation : Lectures/Demos
- Total 74% of Health care leaders have recommended training in more than 50% of the competencies. The evidence is conclusive of the need for training in the Indian healthcare leaders. The preferred modality of training for those competencies in which training need requirement is more is either job assignment or skill based training. Preferred duration of training is either half day or 1 day for all the competencies except financial skills, project management and information technology management where preferred duration is 2-3 days.

Table 4 Summary of observations

S No.	Competency	% of Rec for training	Type of training	Duration of training
1.	Financial skill	81.7	Job assignment	2-3 days
2.	Project management	80	Job assignment	2-3 days
3.	Performance measurement	79.1	Lectures/ Demos	½ – 01 day
4.	Information technology management	79	Job assignment	2-3 days
5.	Human resource management:	75.4	Skill based training / Job assignment	½ – 01 day

d) Duration of Training

- The preferred duration of training for most of the competencies washalf day or 1 day..
- For none of the competencies the preferred duration was 2 Hrs or more than 3 days.
- The competencies in which preferred duration is 2-3 days are.
- Financial skills.
- Information technology management.
- Project management.

Discussion

1. Mean score of perceived level of competency in Healthcare leaders from Government sector is 3.6 while

from private sector it is 3.7 which shows that the competency levels are almost same.

2. Mean score of requirement of training in various competencies is 3.6 for health care leaders from government sector while it is 3.5 for healthcare leaders from private sector. This is also similar to the level of competencies.

3. The competencies in which healthcare leaders have rated themselves competent are as follows:

- a) Government: Collaboration, Self Confidence, Team leadership, Communication skills and Achievement orientation

b) Private: Collaboration, Self Confidence, Team Leadership, Professionalism, and Interpersonal understanding.

It is worth noting that the professionals in the government sector felt competent about communication skills and achievement orientation which speak well of the armed forces personnel. Surprisingly professionals in the private sector felt competent in interpersonal understanding.

4. The competencies in which healthcare leaders have rated themselves lower are as follows:

a) **Government:** Project management, Financial skills, Information Tech management, Strategic orientation and Human resource management.

b) **Private:** Project management, Financial skills, Information Tech management, Strategic orientation and Performance measurement.

Both groups which means that all health care professionals have issues with financial management and IT management. Increasing medical care avenues with increase in the procedures, inventory of drugs and investigations have resulted in increased financial issues. Those in the government sector particularly those in the services are involved in medical procurement which is increasing by the day. The most significant issue with service professionals appears to be the management of human resources. This aspect needs to be approached as the services are a group of well and uniformly trained personnel and human resources need to be developed well to retain this costly corpus.

The leaders in the private sector have limited means for assessment of performance and this has been reflected.

5. Top five areas in which healthcare leaders have asked for training.

a) **Government:** Project Management, Financial Skills, Process Management, Performance Measurement and Human Resource Management,

b) **Private:** Project Management, Financial Skills, Process Management Performance Measurement and Information Technology Management.

Conclusion

Provisioning of safe and quality healthcare is always of paramount importance for any nation. In the armed forces it is all the more important with role of not only providing quality medical care but also acting as a morale booster for the troops. The role of the leader in health care management is paramount. A competent leader who is able to manage all the competencies mentioned in the HLCM document is able to leave his clinical team free to pursue their core function which is finally the most important requirement in healthcare. This work brings out the domains in which the healthcare professionals are not competent and require training. The present leaders have been educated couple of decades back when computers were available only in labs and sorbitrates were the main management in coronary artery disease wherein physicians would debate if ST segment was raised or not and if so how much in a single strip ECG. The military professional leaders were happy with a chopper evacuation and excellence in physical tests by their troops. But every aspect of medicine and military medicine has changed. The commanders have now to tackle a lot of financial matters in the course of their duty and IT has crept into all aspects of military administration-from patient management to that of personnel. Same is true of healthcare leaders in other fields. So training in these aspects is as important as training in medicine.

References

1. Hardacre JE, Keep J. From intent to impact: developing clinical leaders for service improvement. Learning in Health and Social Care [Internet]. Blackwell Publishing Ltd.; 2003 Sep 1 [cited 2013 Jul 2];2(3):169-76. Available from:

<http://onlinelibrary.wiley.com/doi/10.1046/j.1473-6861.2003.00046.x/full>

2. Pillay R. Managerial competencies of hospital managers in South Africa: a survey of managers in the public and private sectors. *Human resources for health* [Internet]. 2008 Jan [cited 2013 Jun 4];6(1):4. Available from: <http://www.human-resources-health.com/content/6/1/4>
3. Patnaik.S. To evaluate the competencies of Indian Healthcare Leaders. AIIMS; 2010. p. 123–42.
4. Marita Decker, Judith G. Calhoun MES. Competency integration in health management education in health management education [Internet]. 2006. p. 13–44. Available from: www.nchl.org
5. NHL. NHL competency model [Internet]. 2006. p. 1–4. Available from: www.nchl.org