

Measuring Management Training Needs of Hospital Managers in Nepal

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ABSTRACT

Introduction: This is a study of hospital managers in Nepal, measuring their reported capability to undertake management tasks and explore their views about management development.

Methods: A questionnaire was administered through hospitals. Respondents were asked to rate a series of management tasks on a scale according to how important it was, for their role and their capability to perform it. These tasks were grouped into different factors. The sample included government hospital of each district and major private or hospitals run by non-government organizations.

Results: A total of 31 hospitals were visited in 18 districts. Information was obtained from 103 managers from different professions. In most hospitals visited, overall management was provided by the doctors. Few had undergone some training to take on management responsibilities. All types of managers, regardless of profession or type of hospital, reported a 'competence gap' for each factor defined as the difference between reported importance and capability. Non-government managers consistently rated themselves as being more capable than government managers, but the difference was only significant when it concerned managing People. The need for a separate cadre of managers was supported by 85% of respondents but a majority of doctors (57%) felt that the best people to manage hospitals were doctors.

Conclusions: Consistent with other studies from low income countries, there is an urgent need to provide different modalities of management development enabling hospital managers to improve their capabilities. There is widespread need of management training to be made available in Nepal.

Keywords: Hospital management, management competency, management training needs

INTRODUCTION

Hospitals are often managed by doctors who have had little preparation to enable them to perform this role effectively. This has already been noted in the context of Nepal¹ but has been documented in other low income

countries too. The World Health Organisation has said that lack of 'managerial capacity' at all levels of the health system is increasingly cited as a 'binding constraint' to scaling up services and achieving Millennium development goals (MDG) Decentralisation, a health

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policy goal in Nepal, will require greater management capability on the part of staff working at the local level. In reviewing the available literature, it becomes clear that there are few published studies measuring the management capability of hospital managers, and those studies that have been conducted suggested that there was a competence gap between what was expected from managers and their perceived capability.^{3,4} In October 2010, Nick Simons Institute commissioned a study to address three principal questions: (1) who are the managers of hospitals in Nepal; (2) what are their gaps in competence and (3) what are the potential modalities for effectively equipping these managers? This article summarises the results of the study. To the best of our knowledge, this is the first time that a study has been carried out to address this important issue in Nepal.

METHODS

A questionnaire was developed to gain information about current hospital managers. The questionnaire design was based on information obtained from other studies^{3,4} that have been used to measure the competence of hospital managers and included information relating to the four dimensions of the WHO framework for strengthening leadership and management.⁵ The questionnaire was developed in English and pre-tested by three participants. As a result of the pre-testing a number of improvements were made and the questionnaire was translated into Nepali.

Field visits were conducted between February and May 2011. Districts were selected in consultation with the National health training center (NHTC) and covered all five development regions. The questionnaire was made available in both English and Nepali and was given to senior hospital staff by the research team. After an initial briefing, the questionnaire was completed by hospital staff while the members of the research team were available to give clarification whenever required. The target was to interview the district health officer (or medical superintendent), senior nurse and senior administrator at the least. This was not always possible due to the absence of staff at the time of the visit. Some hospitals nominated other senior staff such as senior mid-level health workers to take part in the study.

The questionnaire collected basic demographic data about the member of staff including length of time worked in the health sector, period of time they held a management role and asked clinical staff to estimate the percentage of their time spent on management work. Respondents were asked to rate a series of fifty management tasks. The list of tasks came from the literature^{3, 4, 6} and covered all aspects of hospital

management. For each task, respondents were asked to indicate on a Likert scale how important the task was to their current management role where a score of one meant not important and a score of five meant very important. Respondents were also asked to rate each task according to how capable they felt to perform it where a score of one meant not capable and a score of five meant very capable. The difference between these two scores was used as a measure of the competence gap. Tasks were grouped into factors and covered planning, budgeting and the management of financial, human and material resources.

The questionnaire concluded with a series of statements about attitudes towards management and a series of potential modalities for management development. Respondents were asked to rate these on a scale of agreement and usefulness respectively. Respondents had the opportunity to give their comments and suggestions about how management could be improved in their respective hospitals.

All respondents were assured of the confidentiality of their responses and signed a declaration to take part in the study as part of the questionnaire. Prior approval for the study was sought and obtained from Nepal Health Research Council.

Data from the questionnaires was entered into SPSS for analysis. This was used to calculate percentages and the mean total scores for importance and capability assigned to the management tasks. Fifty management tasks were combined into six factors namely; managing strategy, managing finance, managing services, managing people, managing information and managing self. Managing Strategy relates to planning and understanding of internal and factors/environment of the organization. Managing finance relates to budgets and its use in monitoring income and expenditure. Managing services relates to managing material resources such as equipment, vehicles and facilities. It also includes setting and monitoring standards of clinical care therefore covering aspects of quality management. Managing people relates to all activities involved in planning, recruiting, retaining and training human resources. Managing information relates to the use of information in making decisions, preparing reports and attending meetings. Managing self relates to self-awareness, personal development and time management.

Reliability of scales was estimated by assessing the internal consistency of the scales using Cronbach's Alpha. For each of the six factors, paired t-tests were used to measure the significance of the difference between the means of perceived importance and

self-assessed capability. One way analysis of variance (ANOVA) was used to test the difference in capability for each factor between hospital managers working in government and non-government hospitals.

RESULTS

Responses were received from a total of 103 individuals working in 31 hospitals from 18 districts. The sample included the government hospital in each district and major private or NGO hospitals (total 13). The districts covered all five development regions and included a mixture of mountain (n=3), hill (n=7) and terai (n=8) districts.

Doctors made up 38% of the sample, nurses 22%, administrators 21% and 18% other staff. Basic characteristics of the respondents are given in Table 1.

Table 1. Respondent Characteristics

Gender	N (%)	
Male	77	(74.7)
Female	26	(25.3)
Total	103	(100)
Profession		
Doctor	39	(37.9%)
Nurse	23	(22.3%)
Administrator	22	(21.4%)
Other	19	(18.4%)
Total	103	(100)
Type of Hospital		
Government	59	(57.3%)
Mission/NGO	27	(26.2%)
Private Hospital/Medical College	17	(16.5%)
Total	103	(100)
Years in a management position		
< 2 years	32	
2 – 5 years	22	
5 – 10 years	12	
+ 10 years	23	
Total	89	
	Mean	Median
Doctor	6.0	2.75
Nurse	8.4	7.0
Administrator	6.8	2.0
Others	3.57	3.0

In 17 out of 18 government hospitals visited, the overall persons responsible were medical doctors. For non-government hospitals, the corresponding figure was 10 out of 13. These doctors (designated as District Health Officer, Medical Superintendent or Hospital Director) reported that their time was split between clinical and management responsibilities. The time spent on management was 55% (mean) but responses ranged from 5% to as much as 95% in some cases.

In case of nurse managers, the corresponding figure was 53% (range 5 – 95). Doctors and nurses reported receiving little or no formal management training up to this point in their career. The only exception to this was government doctors who had received some orientation from NHTC (1 – 2 weeks), one senior doctor who had attended the Health Executive Development Programme (HEDP) which was formerly run by WHO in conjunction with Nepal Administrative Staff College (NASC) and short courses in India. Thirty six percent (32/89) of all managers reported that they had held managerial responsibility for less than 2 years.

The Cronbach's Alpha for all the scales was at an acceptable level of reliability, all over 0.845 (Table 2). A consistent gap between the mean scores for importance and capability was demonstrated across all management areas and all types of staff (Figures 1 – 3).

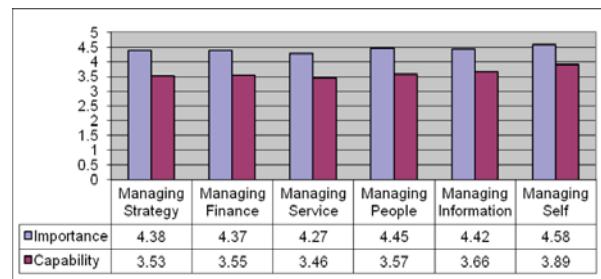


Figure 1. Difference between mean score for reported Importance and Capability for Doctors (n = 39)

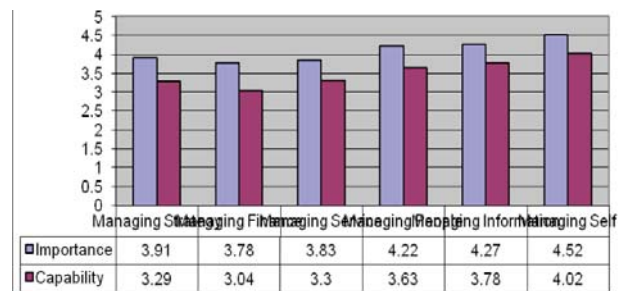


Figure 2. Difference between mean score for reported Importance and Capability for Nurses (n = 23)

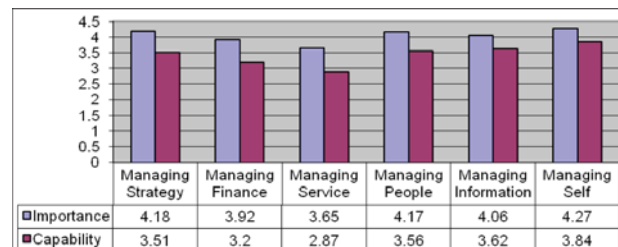


Figure 3. Difference between mean score for reported Importance and Capability for Administrators (n = 22)

A paired t-test showed that the difference between the mean scores of importance and capability was significant for doctors, nurses and administrators ($p < 0.015$). The difference was also significant when considering government managers and non-government managers separately (Table 3). Overall, managers felt relatively more capable at managing self (3.919) and managing information (3.707) whilst feeling least competent in managing finance (3.310) and managing services (3.187).

Analysis of variance test was applied to determine whether there was a significant difference between the management capabilities reported by managers in government hospitals versus non-government hospitals (Table 4).

Non-government hospital managers rated themselves as more capable than government managers for all factors. However, this was only significant in the case of managing people with a mean score of 3.79 for non-government managers compared to 3.42 for government managers ($p = 0.034$).

On different statements about management and their working environment, the level of agreement to the statements was very high. In order to distinguish between statements, attention was focused on the percentage who reported 'strongly agreed' with the statement. Analysis by type of hospitals showed significant differences between government and non-government managers (Table 5).

Table 2. Reliability of reported importance and capability scores by factor using Cronbach's alpha

Importance			
Factor	No of items	Cronbach's Alpha	Mean Total Score (out of 5)
Managing strategy	8	0.873	4.148
Managing finance	6	0.945	4.043
Managing service	8	0.948	3.914
Managing people	11	0.845	4.282
Managing information	10	0.899	4.271
Managing self	7	0.885	4.437
Capability			
Factor	No of items	Cronbach's Alpha	Mean Total Score (out of 5)
Managing strategy	8	0.889	3.506
Managing finance	6	0.915	3.310
Managing service	8	0.925	3.187
Managing people	11	0.933	3.582
Managing information	10	0.910	3.707
Managing self	7	0.895	3.919

Table 3. Mean difference between reported importance and capability scores – Student's t statistics and two-tailed significance for Government and non-government managers

Factor	Government Managers (n = 59)				Non-government Managers (n = 44)			
	Difference of mean	t	Df	p- value (2-tailed)	Difference of mean	t	Df	p- value (2-tailed)
Managing strategy	.63017	6.211	57	.000	.74545	6.953	43	.000
Managing finance	.64482	4.840	55	.000	.79977	5.084	43	.000
Managing service	.64431	5.100	57	.000	.72205	4.973	43	.000
Managing people	.68431	5.312	57	.000	.63955	5.213	43	.000
Managing information	.50603	4.185	57	.000	.65364	5.487	43	.000
Managing self	.49707	4.929	57	.000	.58636	5.053	43	.000

Table 4. Bivariate relationship between type of hospital and management capability (ANOVA)

Factor	Type of hospital	Mean score	F	p-value
Managing strategy	Government	3.34	2.666	0.106
	Non-government	3.61		
Managing finance	Government	3.22	1.749	0.189
	Non-government	3.50		
Managing service	Government	3.12	2.870	0.093
	Non-government	3.47		
Managing people	Government	3.42	4.626	0.034
	Non-government	3.79		
Managing information	Government	3.64	0.172	0.679
	Non-government	3.71		
Managing self	Government	3.87	0.099	0.753
	Non-government	3.92		

Table 5. Views about management and working

Two thirds (66%) of government managers 'strongly agreed' that they would work better if they had greater autonomy compared to 36% of non-government managers who already enjoy a considerable amount of autonomy. Verbally, lack of autonomy in the area of human resource management was cited as a major source of frustration by government managers. They were more likely to say that the guidelines and regulations should be clearer (77.9%) and that senior appointments were not based on merit (69.5%) compared to non-government managers. Pearson chi-square tests showed the responses between government and non-government managers, these three statements differed significantly ($p < 0.005$).

Government managers reported lower confidence about good performance being rewarded (20.3% compared to 34.1% for non-government managers, $p = 0.036$). Government managers reported that information about changes in rules and policies are circulated quickly (67.8% 'strongly agreed' compared to 38.6% for non-government managers, $p = 0.006$).

Regarding placement of cadre to manage the results are summarized in Table 6. An overwhelming majority (85%) agreed that separate cadres of hospital or health managers are required in Nepal. At the time of study, management was handled by the senior doctor combining a management and clinical role.

environment (Percentage who responded 'Strongly agree' with the statement)

Statement	Government	Non-government	Total
My role is clear in respect of my management responsibilities	52.5%	34.1%	44.7%
If I had greater autonomy I would be able to work better	66.1%	36.3%	53.4%
There should be clear guidelines and regulations to help me know what my management responsibilities are	77.9%	34.1%	59.2%
My superior appreciates my work and tells me this	22.0%	34.0%	27.2%
When I need advice or support about a management issue I know who to contact	30.5%	50.0%	38.8%
I know that if I perform well I will be rewarded	20.3%	34.1%	26.2%
There should be association or institution for health managers	57.6%	52.3%	55.3%
Information about changes in rules and policies are circulated quickly	67.8%	38.6%	55.3%
Senior appointments and promotions are not based on merit but on other factors	69.5%	38.6%	56.3%

Table 6. Views about health service managers by profession

Does Nepal need a separate cadre of health service managers?					
	Profession of respondent				
	Doctor	Nurse	Administrator	Other	Total
Yes	29	18	21	17	85
No	9	5	-	1	15
Total	38	23	21	18	100

Who are the best people to manage hospitals?					
	Profession of respondent				
	Doctor	Nurse	Administrator	Other	Total
Doctors	21	5	5	5	36
Other health professionals	1	4	-	2	7
Professional health managers	13	12	14	10	49
Other	2	-	2	1	5
Total	37	21	21	18	97

Just over half, (49/97) said that the best people to manage hospitals were professional hospital managers but the answer varied between the professions of the manager. Only 35% (13/37) of doctors felt that the hospitals should be managed by professional managers. Instead, 57% of doctors (21/37) felt that doctors should manage hospitals, compared to 25% (15/60) for other staff.

A number of different modalities for management development were presented to respondents who were asked to say how useful each would be to them.

The most popular modalities (as measured by the percentage reporting 'very useful') were exposure visits to other hospitals (68%), short training courses (60%), workshops on specific subjects (60%) and formal management qualifications (53%). Comparatively less popular modalities were forums to share problems (47%), access to mentors (47% for on-site, 45% for

distant), website for health managers (45%) or a CD with resources (41%). Finally respondents were asked for any further comments about management training.

DISCUSSION

This study has shown that those responsible for managing hospitals in Nepal have generally been given very little preparation for the task. Most hospitals surveyed were led by medical doctors and most of those doctors combined a clinical role with the management role. Few had received some types of formal training for management and even where this had been received; those were focused on short-term courses with little follow-up and on-going support in the workplace. Managers of all professions reported a gap between importance and capability for a range of management tasks. The reported gap covers all areas of management and is not restricted to any one specific area. Any management training should therefore be broad-based, addressing number of issues and challenges faced by hospitals in Nepal. Respondents recognized the need for management training, reinforcing the calls for this from elsewhere in Nepal.¹

This study has focused on the characteristics and perceptions of hospital managers. The rating of tasks for importance and capability are subjective and no attempt has been made to match perception against objective criteria for good management. Any future training and development program must focus on the outcome of such programs leading to a demonstrable improvement in hospital performance.

One of the major differences between management training compared to clinical skills training is the lack of an agreed set of competencies for hospital managers for e.g. Skilled birth attendant (SBA) training. This study has shown that it is possible to develop a set of competencies that will be relevant to Nepal. Similar studies from elsewhere has proved it.^{3, 4, 6} The Government policy of decentralization in the health sector will require more management competence to be exercised at the local level (hospital or district). This applies to both the category of hospital staffs, and to the management committees they work with. Non-government hospitals are already highly decentralized, whilst government hospitals will increasingly become so in the future taking on more responsibility for managing their own human resources, facilities and finances.

The study findings are consistent with those carried out in other low income countries. WHO has produced a number of studies mostly relating to Africa^{7, 8, 9} and these highlight that managers are usually doctors who combine a managerial role with a clinical one. Often they

have been poorly prepared for their management role and there are number of wider factors that impinge on their ability to perform, such as policies and procedures of central government.¹⁰ There are a number of potential solutions to help bridge the competence gap and these are discussed below:

1. In-service training

The study showed that current managers have received little in-service training in management. Where it has been delivered, it has tended to be focused on an individual member of staff, as opposed to a team from the hospital, and has been short-term in nature with little follow-up. One notable exception to this was the Results Oriented Leadership Development Programme ran between 2006 and 2008 by Management Sciences for Health (MSH) and partner organizations. The programme followed an established model that MSH has used in a number of countries to improve health service delivery.^{11,12}

This study showed that more practical-based training would be relevant to the managers rather than gaining a formal qualification in management which was not the most important consideration. We believe that the results of this study suggest that different models of in-service training should be tested and evaluated in order to have the largest impact on management capability.

2. Development of a hospital cadre or health managers

This study showed that management positions are dominated by doctors who combine a management role with a clinical one. In developed countries a hospital cadre or health service managers has been introduced in the health systems. We have not found many examples of low income countries where manager posts existed at the local hospital level. There are indications that the situation will change in the future. Nepal has made a commitment to introduce a cadre of professional managers in the government sector¹³ whilst acknowledging that it will take some years. We have made out that some medical personnel will oppose any move deemed to threaten their control over the way hospitals are run. Most doctors (57%) said that the best people to manage hospitals are doctors. The Ministry of Health and those responsible for running non-government hospitals need to carefully consider whether they can afford to lose an average of 55% of senior doctor's time in management when there remains such acute shortage of senior doctors outside Kathmandu Valley. Stewardship of precious human resources might be better served by delegating management tasks to specially trained persons working under the supervision of the senior doctor. The first dimension of the WHO

framework addresses the question of who are the managers. There is a need of sufficient personnel to manage the health system. Currently there are a very few management posts in the government system at the hospital level and these would need to be created prior to recruiting and developing a cadre. To grow a cadre of hospital managers, it will take long years, since it is only with experience that they will be able to assume positions of management.

3. Providing a supportive working environment

This study as well as the WHO framework indicates that adequate number of managers with competencies alone will not deliver the required changes in management. The supporting systems (finance, Human resources, logistics etc.) and the working environment are also important. Although the supporting systems of central government are beyond the scope of this study, it is clearly an issue of concern in the Government sector. Government managers were more likely to express a desire for greater autonomy and less satisfaction with supervision from their superior and less confidence in good performance being rewarded. These attitudes are likely to affect motivation to improve performance. Consideration should be given to incentivizing and supporting managers to perform better. Access to an on-line community of managers has been tried in some countries e.g. South Africa and the global community of LeaderNet of MSH.¹⁴ Such a mechanism could prove useful amongst the younger generation of doctors and other health staff but may not be suitable for staff less familiar with information technology. Some form of 'association' either formal or informal for those managing hospitals may prove useful for sharing resources, ideas and providing support.

The limitation of this study is that it has focused on the perceptions of hospital managers. The rating of tasks for importance and capability are subjective. Further researches are required to measure the impact of management training and development activities on hospital performance, as measured by some objective criteria. Such criteria may be related to some form of accreditation system which is planned to be developed in Nepal.¹⁵

CONCLUSIONS

The literature on this subject is growing and the fact

is that 'something must be done about management' to some potential solutions. There are many challenges faced by those responsible for managing hospitals and health services across the developing world and Nepal is no exception to this. This study sets out to answer three principal questions: (1) who are the managers of hospitals in Nepal; (2) what are the gaps in competence and (3) what are the potential modalities for effectively equipping these managers? The study has shown that doctors dominate management positions in both government, NGO and private hospitals. Hospital managers of all professional backgrounds reported a gap in all areas of management between what is required and they feel capable of at present. Any management training and skill development courses must be broad-based and address the issues faced by hospital managers. The literature has pointed to a number of modalities for equipping hospital managers to improve their performance. The modalities that were most popular according to the respondents of this study were practically-based. In seeking to improve the management and performance of hospitals, attention must be given to the wider working environment. Better support and supervision is required along with incentives and rewards for better performance. This will be a particular challenge in the government sector.

The results of this study are consistent with experiences in other countries. All those engaged in managing hospitals would look seriously at the solutions that have been tried in other countries and test to see whether they can be successfully applied in Nepal.

REFERENCES

1. Mishra R.C. Management for Doctors. *JNMA* 2008; 47: 172 - 173
2. World Health Organisation. Management strengthening in low-income countries. Geneva, WHO. 2005.
3. Pillay R. Managerial Competencies of hospital managers in South Africa: a survey of managers in the public and private sectors. *Human Resources for Health* 2008, 6:4.
4. Pillay R. The skills gap in hospital management: a comparative analysis of hospital managers in the public and private sectors in South Africa. *Health Services Management Research* 2010; 23: 30 - 36.
5. World Health Organisation. Towards Better Leadership and Management in Health. Geneva, WHO. 2007.
6. Filerman GL. Closing the management competence gap. *Human Resources for Health* 2003; 1:7
7. World Health Organisation. Managing the health Millennium Development Goals - the Challenge of Management Strengthening: Lessons from Three Countries. Geneva, WHO. 2007.
8. World Health Organisation. Strengthening Management in low income Countries: Lessons from Uganda. Geneva, WHO. 2007.
9. World Health Organisation. Who are the health managers? Case studies from three African countries. Geneva, WHO. 2009.
10. Conn CP, Jenkins P, Touray SO. Strengthening health management: experience of district teams in The Gambia. *Health Policy and Planning* 1996; 11,1: 64 - 71
11. Management Sciences for Health. The Results Oriented Leadership Development Program. MSH. 2008.
12. Management Sciences for Health. Leadership, management and Sustainability program 2005 - 2010 Final Report. MSH. 2010.
13. Ministry of Health. Strategic Plan for Human Resources for Health 2003 - 2017. Ministry of Health Kathmandu. April 2003.
14. Management Sciences for Health. Leadernet. [Online]. 2011 [cited 2011 Nov 2]. Available from: <http://leadernet.msh.org>
15. Ministry of Health and Population. Policy on Quality Assurance in Health. Government of Nepal Ministry of Health and Population. B.S. 2064