INTERNATIONAL JOURNAL OF HEALTH PLANNING AND MANAGEMENT
Int J Health Plann Mgmt 2011; **26**: e121–e137.
Published online 28 July 2010 in Wiley Online Library
(wileyonlinelibrary.com) **DOI**: 10.1002/hpm.1050

Space or no space for managing public hospitals; a qualitative study of hospital autonomy in Iran

Mehdi Jafari[1,2], Arash Rashidian[2,3], Farid Abolhasani[4], Kazem Mohammad[5], Shahram Yazdani[6], Patricia Parkerton[7], Masud Yunesian[8], Feizollah Akbari[2] and Mohammad Arab[2]*

[1]*Department of Health Services Management, School of Health Services Management, Iran University of Medical Sciences, Tehran, Iran*
[2]*Department of Health Management and Economics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*
[3]*Knowledge Utilization Research Center, Tehran University of Medical Sciences, Tehran, Iran*
[4]*National Institute of Health Research, Tehran University of Medical Sciences, Tehran, Iran*
[5]*Department of Epidemiology and Biostatistics, School of public health, Tehran University of Medical Sciences, Tehran, Iran*
[6]*Educational Development Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran*
[7]*Department of Health Services Management, School of Public Health, University of California Los Angeles, California, USA*
[8]*Center for Environmental Research; Department of Environmental Health Engineering, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*

KEY WORDS: decentralization; organizational reform; hospital autonomy; public hospital; qualitative research

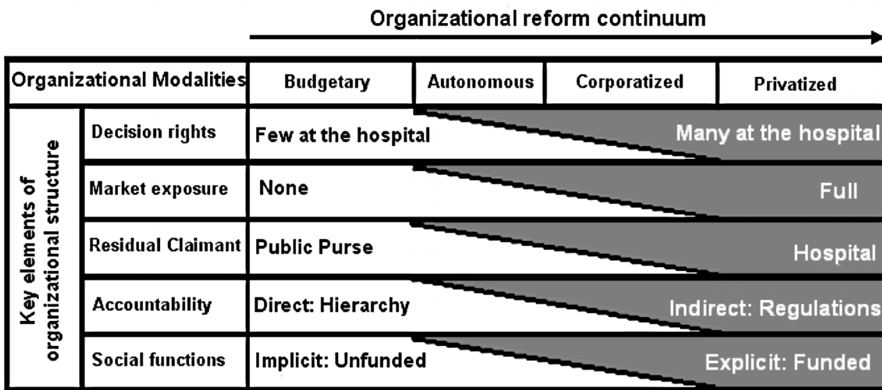
INTRODUCTION

Technical and allocative inefficiency, failure to reach poverty groups, and poor accountability are defined as the main weaknesses of public hospitals performance especially in developing countries (Preker and Harding, 2003). Turning public hospitals into autonomous entities, by reducing the governments' direct control is claimed to improve allocation and management of public resources and to make the hospitals more accountable and responsive to the needs of public (Castano *et al*., 2004).

According to the World Bank, conceptual framework of hospital organizational reforms (Preker and Harding, 2003) (Figure 1), the degrees of autonomy in public

*Correspondence to: M. Arab, Department of Health Management and Economics, School of Public Health, TUMS, Tehran, Islamic Republic of Iran. E-mail: arabmoha@sina.tums.ac.ir

Copyright © 2010 John Wiley & Sons, Ltd.



* Source: adapted from: Preker AS. Harding A. (2003).

Figure 1. Organizational modalitis

hospitals can be defined as a continuum that covers four organizational modalities: (1) budgetary hospitals: administrative units dependent on a higher authority of a regional or national government; (2) autonomous hospitals: 'making managers manage' (Harding and Preker, 2000, p. 14) by granting more responsibility and accountability and exposing hospitals to the market; (3) corporatized hospitals: mimicking the decision-making structure of private corporations while ownership remains with the government; and (4) privatized hospitals, i.e. freestanding organizations owned by private entities (either for or not-for-profit). On the basis of this framework, five organizational elements—see below—are critical in granting diverse levels of autonomy to public hospitals. These are summarized here as: decision rights; market exposure; residual claimant; accountability mechanism; and, the hospital's social functions. These features should be fit into different organizational reform modalities.

Overview of the Iranian health system

Iran is a lower middle-income country with a population of over 70 millions (World Bank, 2007). Total expenditure on health in 2005 is estimated to be over 6% of GDP, and general government expenditure on health is about 52% of total health expenditure (WHO, 2007). The health system in Iran is organized into three levels. Specialty and super-specialty healthcare services (upper level) are mainly located in big cities. The other levels (district general hospitals and primary healthcare networks) are predominantly in small towns, semi-urban, rural, and remote areas (Regional Health Systems Observatory, 2002).

Health system reform in Iran

The legislation for structure and duties of Ministry of Health and Medical Education (MOHME) was approved in 1988. Accordingly, faculties of medical sciences were

Copyright © 2010 John Wiley & Sons, Ltd.

detached from traditional universities, establishing the Universities of Medical Sciences and Health Services at the provincial level under the supervision of MOHME. Each university has a catchment area for which it is responsible for provision of health care. The ownership and administration of all MOHME hospitals were dedicated to the medical universities. However, MOHME remained responsible for policy-making and resources allocation in cooperation with the Ministry of Welfare and Social Security (MWSS). Iran has a novel and potentially unique system for health care provision at the university level which is responsible for provision of health services, monitoring private sector activities as well as medical education and research (Regional Health Systems Observatory, 2002).

In Iran there are 41 medical universities and independent faculties of medical sciences which include 71% of Iran's public hospitals' beds (Table 1). There are other organizations and institutions which play a leading role in health care management, in terms of policy-making, tariff-setting, and service provision and delivery. The Social Security Organisation and Armed Forces Health Services Insurance are examples but further categories exist (Table 1). Also there is an active and prominent presence of private sector in provision of outpatient care, with significant contribution to inpatient care in large cities.

MOHME (1995) devised and implemented a reform in payment mechanism and allowed public hospitals to fund themselves through revenue-generating fees (fee-for-services). The reform was known as hospital autonomy reform (Khod-Gardani), but in reality, it was only a payment mechanism instruction (Sadaghaini, 1998). Further legislations including articles 1, 2, and 192 of Iran's third development plan (2000–2004), article 88 of the fourth development plan (2005–2009), and other legislations and financial regulatory orders have urged the health system to be more decentralized and to downsize the public sector.

In this context, a comprehensive reform project was initiated by MOHME's Deputy of Management and Resources Development in 2003 to deal with public hospitals organizational reform in six aspects. They included: (a) hospital restructuring; (b) operational budgeting; (c) performance-based management; (d) outsourcing; (e) physical resources maintenance management; and (f) hospital

Table 1. Iranian hospitals according to their ownership*

Hospital affiliated to:	Hospitals	Hospital beds	Hospital beds(%)
MOHME	537	64 168	71
Private	119	8917	10
Social security organization	54	7573	8.5
Armed forces	31	2472	2.8
Charities	25	2315	2.6
National oil company	8	837	1
Ministry of education	8	1097	1.2
Banks	2	218	0.3
Imam Khomeini relief foundation	1	90	0.1
Others	29	2208	2.5
Total	814	89 895	100

**Source*: I.R. Iran, MOHME, 2007. http://www.pooyasamaneh.net/rbp/default/

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

information system. Forty-one public hospitals across the country were selected to pilot the reform and a special governmental budget was allocated to them (Secretariat of hospital economical and management reform, 2003).

Despite the implementation of several reforms in the context of decentralization, payment mechanism, and hospital reorganization in Iran, there is a lack of evidence to demonstrate the impacts of these reforms. This qualitative study was conducted on the basis of the hospital organizational reforms conceptual framework developed by World Bank (Figure 1). In this study, we had two main goals. We aimed to explore whether the conceptual framework proposed by the World Bank (including the five elements of 'decision rights', 'market exposure', 'residual claimant', 'accountability mechanism', and 'hospital social functions') covers all aspects of hospital autonomy in Iran as an example of a low middle income country. We also assessed the views of senior managers in selected hospitals on the amount of autonomy in various management decision areas granted to the hospitals.

METHODS

Hospitals

Tehran province is divided into three regions for health care provision (the catchments areas of three medical universities located in the province including Iran, Shahid Beheshti, and Tehran). A general hospital affiliated to the aforementioned universities was included in the study if:

(1) It had more than 100 active beds,
(2) and had not been involved in any decentralization or organizational reform project.

Accordingly, we made a list of potentially suitable hospitals (eighteen candidate hospitals) for the current study. However due to the lack of time and regarding the research aims and objectives, we selected two hospitals randomly from each university. Invitation letters were sent to the hospital directors. All of the hospitals agreed to participate and allowed the researcher to approach to the staff.

Participants and interviews

All of the 32 senior managers (i.e. hospital director, executive director, nursing manager, financial manager, human resources, and logistics manager and the hospital's deputy of education) were approached. In total twenty-seven participants were interviewed (82% response rate). One of the authors (M.J.) conducted the interviews. All the interviews were audio-recorded and transcribed verbatim. Verbal consent was obtained from each interviewee and the interviews lasted between 60 and 90 min.

Interview protocol

The semi-structured interview protocol was developed based on the World Bank organizational reforms conceptual framework (Preker and Harding, 2003) and four

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

initial in-depth interviews (Arredondo and Orozco, 2008). The protocol was revised continuously to capture opinions and experiences of participants concerning the key elements of autonomy and also their authority in decision-making in the respective elements.

Data analysis

The framework analysis technique was used. The technique consisted of five steps of 'familiarization', 'identifying a thematic framework', 'indexing', 'charting', and 'mapping and interpretation' (Lacey and Luff, 2001). This method has been specifically developed for the analysis of qualitative data for policy-oriented studies. A contact and content summary form was developed for each interview during familiarization (Rashidian *et al*., 2008). The initial thematic framework and codes were developed using the interviews, prior thoughts and literature (Arredondo and Orozco, 2008), research questions, and also the thematic guide. The first author initially indexed the transcriptions using Atlas-Ti software (Arredondo and Orozco, 2008). The indexed text was discussed several times between the authors and was adjusted where appropriate. We compared the interviewees' perspectives on each theme using the analysis chart. The relation between themes and sub-themes were also investigated. The interpretation of the themes followed a process similar to the indexing procedure (Rashidian *et al*., 2008).

We updated the thematic framework during the analysis (Ritchie and Spencer, 1993). The initial framework contained five themes (based on the underlying organizational elements) which increased to nine. The themes provided a suitable combination of the organizational modalities (budgetary, autonomous, corporatized, or privatized) according to the diverse degrees of autonomy that is granted to the selected hospitals in these nine themes.

RESULTS

Based on the current study we found that the five organizational elements mentioned by World Bank organizational reform framework (Figure 1) are useful for studying organizational reforms, however, the framework may not illustrate all the issues relevant to hospital organizational reforms in a low middle income country. As a result of our qualitative study, nine themes and thirty-five sub-themes were identified (Table.2). We also assessed the degree of autonomy that was granted to the hospitals on the basis of these nine themes as nine organizational elements.

Theme I: decision rights in strategic management

In budgetary units, the government controls all the strategic issues and most of the daily decisions as Harding and Preker, 2000 reported. According to Bossert *et al*., 1998 and Green *et al*., 2007 this usually follows a 'command and control' mechanism. In our study, however, the interviewees complained about limited power for decision making; *'We are not strategic managers when we don't have any rights*

Copyright © 2010 John Wiley & Sons, Ltd.
DOI: 10.1002/hpm

to determine the hospital's strategic issues' (P[1]13).'The medical university determines the strategic issues and enforces them [to the hospitals] in the form of rules and regulations' (P26).

In centralized health systems, dissociation and poor coordination between policy-making and implementation can be observed (Bossert *et al.*, 1998). The interviewees believed that the university plans cannot be implemented at the executive levels: *'the persons who plan in the central organisation [medical university] have no knowledge of our real problems' (P7).*

Theme II: decision rights in human resources management

Flessa (2005) believed the hospital should be able to develop an organizational chart and the job descriptions for all the staff. In this context, the interviewees insisted that *'our organisational structure and job descriptions have been designed centrally by the central government and we had no participation in this process' (P1).* Some hospitals tackled this formal rigidity by bending the rules via informal and potentially illegal approaches: *'Our informal chart is different with the formal chart which is on the paper' (P5).* These tactics were not always effective. As a result of the formal rigidity of the organizational charts, some staff were forced to work in unrelated fields. *'Some of our employees are not in their formal positions' (P22).*

Hospitals lacked explicit power to hire new permanent staff. Interviewees implied that *'Unfortunately, the hiring process is under the university's control; they select and hire the personnel for us' (P20).* The interviewees argued that the hiring process was time-consuming and in many cases they were not satisfied with the selection process outcomes. *'[New personnel] aren't qualified and don't meet the hospital needs' (P9).* On the other hand, they complained that *'we have no authority in firing the permanent personnel' (P24)*; and that they required university approval for firing the staff (P17). Similar problems have been reported from public hospitals in other low and middle income countries (Chawla and Govindaraj, 1996, McPake, 1996).

Interviewees argued that *'Our payment mechanism (of distributing the fee-for-services) is not fair' (P23)* and the most personnel complained of their low salaries especially compared with physicians' incomes: *'in this hospital [some non-physician] personnel's monthly income is 5 million Rials (∼600 US$) and the other one's [some physicians] is 150 million Rials' (P2).* They criticized that *'the payment mechanism has been designed and enforced by MOHME and we have no right to change or modify it' (P9).*

Theme III: decision rights in financial management

Budgeting is conducted usually in the last month of each fiscal year. Theoretically, the hospitals are budgeted according to certain criteria and weights (e.g. size, workload, staff), as well as their operational plans. In practice, participants believed the budgets followed incremental budgeting approaches. *'This is historic budgeting and we only do some useless paperwork' (P16).* Public hospitals were required to get budget approval from medical universities (MOHME, 2007). Personal contacts and

[1]P stands for participant

Copyright © 2010 John Wiley & Sons, Ltd.
DOI: 10.1002/hpm

lobbying affected the budgets granted to the hospitals. *'Budgeting requires special lobbying and informal relations' (P1).*

Autonomous hospitals are usually financed by a mixture of funding approaches (Ozgulbas and Koyuncugil, 2009). Since the 1995 reforms in Iran (Health Deputy of MOHME, 1995), civil servants personnel's salaries (excluding their overtime and benefits), development budgets, and some subsidizes for hospitals' social functions are paid by the government. For the rest (including the majority of service costs), the hospitals are expected to generate their own income. *'Hospital managers are allowed and expected to generate revenues' (P24).* Castano *et al.* (2004) reported that in many low and middle income countries hospital autonomy is used as method to mobilize resources for hospitals through fee collection. Interviewees insisted that *'user fees and health insurance payments formed the main part of our revenues' (P2).* This is despite recent literature on negative impacts of user fees especially as it results in reducing access for low socio-economic households (Arredondo and Orozco, 2008). In Iran, governmental budgets are produced in line-item format that reduces hospital managers' autonomy in using the budget. *'[Hospital managers] have no autonomy, no autonomy in spending governmental budget' (P22).* The Supreme Audit Court (SAC) of Iran (2008) is responsible to audit the spending of governmental budget and expects the budgets are implemented as prescribed. Hospitals have more flexibility on the way they spend their generated income through user fees and insurance payments. *'We are more authorised in spending these revenues [than governmental budget]' (P16).* The hospitals are expected to transfer all the generated income to the public purse at the end of each month. The money is then transferred to the university account, and the hospitals claim it back from the university. This will give power to the university to supervise the hospitals and to some extent steer the hospitals' conduct and restrict this further 'authority'. *'We are obliged to spend the generated fees on the basis of the hospital and university agreed budgeting plans' (P18).*

Theme IV: decision rights in physical resources management

As stated earlier since 1988, medical universities took over the responsibility and ownership of 66% of public hospital beds in Iran. All the physical assets within the hospitals labelled with 'government property codes' and are registered in governmental forms. There is a 'properties office' in all hospitals and any change in these assets including moving the assets in or out of the hospital must be under the permission of this office. This meticulous practice results in a lot of bureaucratic paperwork, if and when the hospital decides to get rid of the asset that is of no use anymore: *'we can do anything about any assets that is labeled, even the assets that are out of order' (P1). 'we can't do anything without their permission and this is logical, they are the owner' (P15).*

Interviewees insisted any changes in the hospital building and physical assets must be done under the control and with permission of the 'technical office' of the university. *'Any mergers, repairs, sales or any change concerning with the hospital building and assets must be done under the control and permission of the university' (P15). 'We even have no rights for painting or changing a wall in the hospital' (P1). 'The main problem is time, there are 4–5 persons in this office and they don't have enough time to control our projects and put us on the waiting list that means the project should be stopped until their permission is granted' (P10).*

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

Theme V: product market exposure

Market exposure refers to the situation in which public hospitals are expected to behave like typical profit maximizing firms (Castano *et al*., 2004). Additionally, Chawla and Govindaraj (1996) believed that market exposure similar to private sector is a vital element in any successful hospital autonomy programme. As a result of the reforms, the hospitals faced market exposure via competing for attracting patients. *'In case of attracting patients we are in a competitive market' (P7).* Nevertheless, the interviewees argued that *'the market is not a fair market and we often encounter with some problems in the competiitive market' (P11).* The main problems highlighted were:

a) Unrealistic healthcare tariffs: According to the Universal Health Insurance Law (Parliament (Majles) of I.R.Iran, 1994), the tariff levels for public hospitals is decided upon on the basis of the proposals that the MOHME and MWSS's send to the High Council of Health Insurance for approval. The interviewees argued that *'the prices are below our costs and we are faced with serious problems' (P20).*
b) Private sector cream skimming: Private hospitals, seem to treat only specific diseases and better-off patients and *'All complicated, poor and end-stage patients are referred to this [public] hospital, it is the last station here' (P7).* Cream-skimming resulting from the way the tariffs are set is also observed. *'Services with [relatively] higher tariffs are routed towards private sector. . .and those with lower tariffs are "sent" to public hospitals' (P17).* Moreover, they reported about the existence of an active cream skimming undercurrent: *'some people including some physicians who are engaged in the private sector [as well as the public sector] . . .are almost always interested in transferring the rich, better-off and uncomplicated patients [from the public sector] to the private sector' (P8).* This is a serious fraud issue that some public hospitals face in the country.
c) Demand-oriented private providers: Interviewees argued that the private hospitals were free to use all the options they had for generating revenue, e.g. by setting wards that generate more revenue or closing down the wards that do not make much profit. These options were not available to the public hospitals. *'We aren't allowed to deal with them [revenue generating options]; we are public hospitals' (P23).*
d) Informal Under-the-table fees: The interviewees stated that they face some problem dealing with under-the-table payments, although the problem was not perceived to be widespread. Some interviewees suggested that occasionally there were informal unwritten agreements between hospitals, physicians, and patients. On the basis of these 'agreements' *'physicians can transfer their private office patients to public hospitals and use hospitals facilities. Thus, the hotelling cost will be based on a public hospital's regulated prices, but the physicians will receive their fees as in private sector' (P16).* This extra payment to physician is covered out-of-pocket. Despite these feelings, the evidence on the extent of under-the-table payments in Iran (especially in hospitals affiliated to medical universities) is patchy and these payments may be much lower than what reported from certain developing countries (e.g. see Ensor and Savelyeva 1998, Ensor 2004).

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

Theme VI: procurement market exposure

The article 57 of the medical universities financial and trade-off regulations (2007) categorizes procurement practices into three categories: (a) small transactions: below 20 million rials (~2200$), (b) medium transactions: between 20–200 million rials; and (c) large transactions: above 200 million rials. Decision right is granted to public hospitals within the limit of small transactions. In this context interviewees argued that *'I don't know what kind of manager I am, when I have no right to deal with transactions over 20 Million Rials?' (P18)*. In case of urging hospitals to buy from a selected supplier, interviewees stated that they are free to choose suppliers but also argued that *'we prefer to buy from public or government recommended suppliers in order to avoid very rigid financial accountability' (P11).*

Interviewees argued that *'our procurement needs (above 2200$) and some service contracts (e.g. hospital sanitation, food, transportation, or laboratory services) require bidding [authorized by] the university' (P11)).* According to the article 59, the university's chancellor, deputy chancellor for logistics, and the manager of finance are members of bid committees and the lowest bid is normally the winner. Interviewees criticized that *'They [the bid committee]...ignore quality' (P11) and 'bidding process is time consuming'* (P17) Some interviewees also stated that in order to avoid the time-consuming paperwork *'we usually ask suppliers to break our bills into two or more small bills' (P7).*

Theme VII: residual claimant

Allowing surplus to be spent in hospital is usually considered a complementary factor for managers' autonomy (Preker and Harding, 2003). In Iran, all hospitals' generated revenues have to go to the treasury. The money then is transferred to the medical universities which initially keep about 5% of the money for overhead costs (Theme III). The rest is supposed to be transferred to the original hospital. Interviewees argued that *'we are not sure about receiving our money back' (P20). 'it is likely that the university spend our surpluses in other places' (P13).* In essence, central university budget acts as the residual claimant.

Public hospitals in Iran seem to be faced with hard budget constraints. In the case of deficiency, the interviewees reported that *'our debt will be accumulated for future...while we are yet to pay the transport contractor money, or the water and electricity bills' (P25).* In some cases, it is possible that some input providers put the hospital on the black list because of such delays: *'many hospitals are experiencing a pharmaceutical sanction' (P1).* In extreme situations *'the university might sell the bankrupted hospital with accumulated debt' (P26).* In reality such cases are rare.

Theme VIII: governance arrangement and accountability mechanism

It is a characteristic of most public hospitals to use a hierarchical organizational structure (Bossert *et al.*, 1998) and we observed similar situation. *'Our hospitals structure is mainly a centralised hierarchy of command' (P16).* The interviewees added that similar arrangements existed between the university and the hospitals. *'The hospital director is a (medical) specialist who is appointed (and also removed)*

Copyright © 2010 John Wiley & Sons, Ltd.
DOI: 10.1002/hpm

directly by the chancellor of the university' *(P27)*. Interviewees argued that '*[it] granted a right to the hospital director to veto hospital committees*' *decisions and have the last say*' *(P20)*.

In practice, the hospitals were accountable to different authorities within the university or the ministry of health. '*We are accountable to different university deputies*' *(P7)*. The hospitals complained that such authorities did not necessarily provide congruent messages. '*We are confused between several commanders who are confused too, one persuades us to generate revenue and the other presses on quality improvement or teaching and research objectives*' *(P25)* (Theme I).

The medical university's deputy for treatment affairs is responsible for public hospitals' accreditation. Interviewees argued that this accreditation is based on inspection: '*they send uninvited inspectors to hospitals*' *(P17)*. This could be a conflict of interests on the part of inspectors. They were from the university and they inspected and accredited hospitals belonging to the university. This may result in more favourable reports about public hospitals' performance.

Interviewees eyed the financial accountability to be the most rigid accountability in hospitals. They complained that '*we have to be accountable on both the line-item budget and the hospitals' revenue spending, not only to university but also to some external public auditors*' *(P12)*. The Supreme Audit Court of Iran is responsible for 'auditing all accounts of ministries, public companies, institutions and other organisations to ensure that expenditures don't exceed credit allocations and that each sum has been spent for its allotted purpose'. Interviewees criticized that '*[they] faced uninvited inspectors from everywhere...some of them are political and symbolic*' *(P1)*.

Theme IX: the hospital's social functions

To ensure the hospitals respect their social functions and equity objectives, it is essential to consider exemptions from user fees for poor people (Hennock, 2007). In this context, interviewees insisted that '*we have no right to refuse patients who have no money, it is illegal*' *(P14)*. Several subsidized insurance schemes are established to ensure full coverage of health insurances specially for the poor, for example the Medical Services Insurance Organisation (MSIO) law (1995) mandated an inpatient insurance schemes for covering the uninsured urban citizens 'on the bed' (which has recently discontinued), or the MSIO' rural insurance fund. Interviewees argued that '*if they [uninsured] only have an identity card we will put them under the coverage of urban inpatient health insurance scheme*' *(P8)*. Additionally, '*There is a governmental line-item budget to support the poor people and the people with some special diseases such as renal dialysis [chronic renal failure]*' *(P4)*. A special office is located in public hospitals to identify the poor people. It may ask the hospital manager for discount in (or abolishing) the coinsurance.

The government should reimburse hospitals social function's costs. Occasionally, such costs are not fully reimbursed. The interviewees argued that '*it is supposed to be reimbursed by the government but it doesn't in reality (P1)*', '*we have problems with [reimbursing the costs of] patients who don't have any identity [documents] and the poor people who are not able to pay their co-payment*' *(P2)*.

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

FURTHER DISCUSSION

The study provides an illustrative framework (nine key elements) for understanding and analyzing public hospitals organizational reforms in a low middle income country. We conducted the study on the basis of the World Bank's organizational reforms framework that includes five critical organizational elements (Preker and Harding, 2003). We found the framework informative. In our revised framework, we expanded it to include nine organizational elements (Figure 2). The new elements were in fact originated from dividing some of the original elements into more detailed elements. Our data suggested that it was important to divide the 'decision right' element into four elements: strategic management, human resource management, financial management, and physical resources management. We also divided the 'market exposure' element into product market exposure and procurement market exposure. This is in a way an acknowledgement of the fact that it is possible for the hospitals to demonstrate varying levels of progress under these elements. The new framework is also beneficial as it makes the framework more accessible to its users.

Our analysis provides a mixed picture of organizational reforms in public hospitals in Iran. In the context of decision rights in strategic management, we observed no decision right for effective long term strategic planning. Similar limitation in decision rights has been reported in Indonesia and Tunisia (Hawkins and Chris, 2003).

Sometimes it may be possible to see that strategic decision rights have been granted to hospitals 'on paper'. In reality the situation may differ with what presented on paper, or planned and wished by policy makers and those who pushed forward the reforms. In our study, it seemed that the universities acted as owners and occasionally

Organisational elements:		Budgetary	Autonomous	Corporatized	Privatized
Strategic Management		→			
Human resources management		→			
Financial Management	Generating revenues	→	→		
	Spending revenues	→	→		
Physical resources management		→			
Product market exposure		→	→		
Procurement market exposure		→	→		
Residual claimant		→	→		
Governance arrangement & accountability		→			
Hospital social functions		→	→		

Figure 2. The unbalanced autonomy in selected public hospitals in Iran

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

Table 2. Thematic framework: organizational elements critical in granting diverse degrees of autonomy to public hospitals

Themes
Theme I: decision rights in strategic management: ■ Setting vision, missions, and goals ■ Planning rights ■ Implementation of plans ■ Lobbying for hospital plans approvals
Theme II: decision rights in Human resources management: ■ Designing and modifying the organizational structure and job descriptions ■ Informal changes in human resources arrangements and job descriptions ■ Hiring and firing according to hospital needs ■ Designing of modifying the payment mechanism
Theme III: decision rights in financial management: ■ Setting recurrent and capital budget ■ Financing, governmental or revenue generation ■ Spending the generated fees and governmental budget
Theme IV: decision rights in physical resources management: ■ Ownership rights ■ Governmental property labelled codes ■ Selling, merging, and physical improvement
Theme V: product market exposure: ■ Exposure to a competitive market ■ Unfair competitive market ■ Informal under-the-table fees
Theme VI: procurement market exposure: ■ Limit for procurement practices ■ Selected input providers ■ Informal practices for getting rid of limitations
Theme VII: residual Claimant: ■ Medical University as residual claimant ■ Responsibility for un-systemic deficits ■ Hard budget and debt accumulation
Theme VIII: governance arrangement and accountability mechanism: ■ Hierarchical command and control governance ■ Lack of unity of command ■ Vetoing the hospital committees decisions ■ Hierarchical accountability ■ Rigid financial accountability ■ Uninvited inspections for accreditation ■ Fraud in reporting performance ■ Accountability to patients
Theme IX: hospital social functions: ■ Governmental health insurance schemes to cover the poor ■ Reimbursement of social functions. ■ Governmental reimbursement below hospital fees ■ Inadequate depth of insurance coverage

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

were not willing, or able, to grant autonomy to hospitals. On the other hand, if university chancellors and deputies will be held responsible for any shortcoming in hospitals' performance, why should they grant autonomy? A potential solution can be reached by establishing a shared leadership approach via a strategic committee located in hospital in which hospital top managers and the representative of medical universities are members. Such committees should have the power and ability to make important decisions and approve hospital's strategic plans.

The finding of the current study is consistent with Govenderage's finding in which human resources were maintained under diverse degrees of central control. It has been claimed that lack of autonomy in staff management slows down the implementation of autonomy reforms (Collins *et al*., 1999). In developing countries this may be a major reason for 'dysfunctional' hospital reforms (Jakab *et al*., 2002). Many governments may not be willing to grant hospitals full autonomy in human resource management. It may, however, be possible to grant limited powers to the hospitals. For example, some of our interviewees suggested that they would be happy if the university supervised the hiring procedures and let them choose from applicants who met the minimum standards set by the university and the government. In reality, many hospitals adopted an outsourcing scenario, in which some employees were hired via third persons (i.e. companies in contract with the university or hospital).

A shift from line-item budgeting to resource mobilization initiatives has been a main objective of hospital autonomy (decision right in generating revenues). This has been neglected in developing countries organizational reforms (Govindaraj and Chawla, 1996). In Iran, there are further difficulties arising from the bureaucratic flow of financial revenues. Based on Iran's legislature, all public properties incomes (including public hospitals income) should be transferred to the public purse. The money is then transferred back to the university, and then to the hospitals with a delay. This circle seems to be logical for financial accountability but it interferes with hospitals residual claimant. As reported in Uganda's reform (Ssengooba, 2002) and according to our interviewees' recommendations, a direct relationship between hospitals and public purse could be a solution. This solution, however, is unlikely to be welcomed by the universities or the ministry of health. There are also further delays in the circle caused due to financial irregularities in hospitals as well as in mediatory banks.

The interviewees provided little data on physical resources management within the hospitals. Hospitals are mainly considered as 'healthcare industries' in need of healthcare expertize. This has resulted in a general neglect of the need for technical expertize required for physical resources (facility) management. In practice, many hospitals rely on university capacity for the management of their physical resources. At the same time they complained about the type of supervision and support offered by 'technical offices' within the universities.

Our study suggested that public hospitals faced stiff competition in product markets, especially with a private sector that enjoyed more lenient rules and regulations than they did. The main problems in this 'relatively' open market were lower healthcare tariffs set for the public hospitals as opposed to the private hospitals' tariffs, private sector's active cream skimming, and the competition they

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

faced with private hospitals for hiring certain provider groups. This in a summary is a relatively high exposure to the product market. On the opposite side, the public hospitals had limited liberty in procurement markets and faced stiff control and regulation. Market exposure, in summary, was unbalanced.

It is argued that additional revenue opportunities can only motivate better performance if the hospitals are the residual claimants (Harding and Preker, 2000, Rethelyi *et al.*, 2002). The university claims a portion of hospital generated fees (normally about 5 per cent). For the rest, the hospital managers are not sure whether they receive all their money or whether parts of it will be allocated to other hospitals considered 'more in need'. This function in a way provides an opportunity to perform social functions better, e.g. by transferring money from a high earning heart centre to a low earning psychiatry hospital. However, sometimes the hospital managers feel this is a method of punishing those who are more successful.

Harding and Preker (2000) recommended reduction in using traditional, hierarchical governance arrangements and accountability mechanisms while moving towards autonomy. Our study, however, illustrated that despite granting autonomy to public hospitals, the governance and accountability mechanisms remained hierarchical. More participatory arrangements, as stated for decision rights in strategic management, can improve this situation. In terms of accountability, it is essential for the government to ensure that quality and social functions objectives are clearly defined as hospitals move towards further autonomy. Performance assessment can be improved by using third parties to conduct assessments and necessary inspections, e.g. via contracts (Preker and Harding, 2003).

If as a result of organizational reforms hospitals face more financial pressures, hospital services to the poor population and other social functions may suffer (Rethelyi *et al.*, 2002). Iran's private expenditure on health as a percentage of total expenditures had been around 53% in 2003 (of which 95% was out-of-pocket payments) (WHO, 2006). Given that the equity is among the most important policy goals of the governments, it is important to ensure all reform initiatives are planned and implemented in a way that the poor are protected from potential adverse consequences. In Iran, with limited depth of social health insurance packages, the country should either change the hospitals' financing and payment mechanisms (by reducing hospitals market exposure, i.e. reversing the autonomy reform) or implement universal health insurance with a rational service package. Such insurance reforms should precede hospital reforms.

Chawla and Govindaraj (1996) believed that hospital autonomy can be secured via different routes: making public hospital legally distinct from the state (Kenya, India), placing them under independent board of directors (Ghana, Kenya, India, Indonesia, Zimbabwe), excluding their employees from civil service rules and privileges (Kenya), and allowing them to operate own bank accounts (Ghana, Kenya, India, Indonesia, Zimbabwe) and retain surpluses (Kenya, Zimbabwe). The evidence for the efficiency and effectiveness of these options is not sufficient and further studies are required to assess these and other options.

Ideally, one should assess the outcomes of such reforms using suitable methods. We recommend that carefully designed quasi-experimental studies (e.g. interrupted time series designs) to be conducted to assess the impacts of the reforms on

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

effectiveness and efficiency outcomes. There are problems with routine data quality and the fact the way they are collected or reported might be affected as a result of the reforms. Such limitations should be taken into account in future studies.

Our study has some limitations. Small number of included hospitals could reduce the validity of our findings. We defined some inclusion criteria for public hospitals; then selected six hospitals randomly and interviewed anybody who was in the position of 'top management' with at least 6months working experience. In two cases that the managers were appointed recently we found the ex-managers and interviewed them. We called all the participants 'senior manager'. In reality they were not in the same position. Hospital directors were in upper position and their views might have affected the views of other interviewees in the same hospital. We tried to reduce this limitation by conducting individual interviews and ensuring that the views remained confidential. Another important limitation was that we directly assessed only the views of those from hospitals and not other important stakeholders such as university, insurance organizations, ministry, and service users.

In summary, we observed an unbalanced and inconsistent autonomy. There was important 'progress' in some elements but little in others. Therefore, the hospitals could be seriously at risk of dysfunction. Unbalanced organizational structures have been reported from eleven eastern European countries (Rethelyi *et al*., 2002, Jakab *et al*., 2003). Depending on a country's political and health system, it may be easier to grant more autonomy to some aspects e.g. financial management or procurement market exposure than it is to human resource management. In Iran's case, it seems that healthcare policy makers started the reforms in financial management and failed to properly balance other aspects with these reforms. The reasons may have been political changes at the government level, the rigidity of regulatory context for certain elements of organization (such as human resources), or lack of required resource to move the reforms forward. It may also have happened because of lack of planning the reforms comprehensively.

In this context, it will be wrong and harmful to think of hospital reform as a jump from one position to a new position (e.g. from budgetary to autonomous). Rather, the policy makers should think of reforms as continuums and acknowledge reforms in different elements of organizations, alongside each other. Magnussen (2007) suggested that 'reforms could be the result of fashionable policy trends, rather than being based on the knowledge of what works' (p. 2129). Unbalanced reforms may cause more harm than they produce benefits. Jakab *et al*., (2000) recommended that if one cannot balance all elements in moving towards autonomy, it may be advisable to re-balance the organization in a budgetary style. These kind of 'back to front' reforms are reported from Norway (Magnussen, 2007) and may be beneficial in Iran, if achieving balanced hospital autonomy proves difficult.

ACKNOWLEDGEMENTS

The authors are grateful for those interviewed and also for comments, insights and other helps provided by S. Azami, H. Salarianzadeh, S. Tofighi, H. Pourasghari, and M. Najafi. This article was supported by a TUMS research grant 85-03-4352.

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm

REFERENCES

Arredondo A, Orozco E. 2008. Equity, governance and financing after health care reform: lessons from Mexico. *Int J Health Plann Manage* **23**: 37–49.

Bossert T, Hsiao W, Barrera M, Alarcon L, Leo M, Casares C. 1998. Transformation of ministries of health in the era of health reform: the case of Colombia. *Health Policy Plan* **13**(1): 59–77.

Castano R, Bitran RA, Giedion U. 2004. *Monitoring and Evaluating Hospital Autonomization and its Effects on Priority Health Services*. Partners for Health Reform Plus. Abt Associates: Bethesda, Maryland.

Chawla M, Govindaraj R. 1996. *Improving hospital performance through policies to increase hospital autonomy*. Harvard School of Public Health: Boston.

Collins D, Nieru G, Meme J, Newbrander W. 1999. Hospital autonomy: the experience of Kenyatta national hospital. *Int J Health Plann Manage* **14**: 129–153.

Ensor T. 2004. Informal payments for health care in transition economies. *Soc Sci Med* **58**: 237–246.

Ensor T, Savelyeva L. 1998. Informal payments for health care in the former Soviet Union: some evidence from Kazakstan. *Health Policy Plan* **13**(1): 41–49.

Flessa S. 2005. Hospital development plans: a new tool to break ground for strategic thinking in Tanzanian hospitals. *Eur J Health Econ* **6**(4): 322–326.

Govindaraj R, Chawla M. 1996. *Recent Experiences With Hospital Autonomy in Developing Countries–What Can we Learn? Data for Decision Making Project*. Harvard University: Boston, MA.

Green A, Collins C, Stefanini A, *et al*. 2007. The role of strategic health planning processes in the development of health care reform policies: a comparative study of Eritrea, Mozambique and Zimbabwe. *Int J Health Plann Manage* **22**(2): 113–131.

Harding A, Preker AS. 2000. *Understanding Organisational Reforms*. World Bank: Washington DC.

Hawkins L, Chris H. 2003. *Reviewing the Case Studies: Tentative Lessons and Hypotheses for Further Testing. Innovation in Health Service Delivery*. World Bank: Washington DC.

Hennock M. 2007. China's health insurance system is failing poor people. *Br Med J* **335**(7627): 961.

Jakab M, Harding A, Preker AS, Hawkins L. 2000. Module on Organisational Reform and Management of Public Providers: Focus on Hospitals. 1.

Jakab M, Preker AS, Harding A. 2002. Linking organisational structure to the external environment: experiences from hospital reform in transition economies. In *Hospitals in a Changing Europe*, McKee M, Healy J. (eds). Open University Press: Philadelphia.

Jakab M, Preker AS, Harding A. 2003. *The Missing Link? Hospital Reform in Transition Economies. Innovation in Health Services*. World Bank: Washington DC.

Lacey A, Luff D. 2001. *Trent focus for research and development in primary health care: An introduction to qualitative data analysis*. United Kingdom: Trent Focus Group.

Magnussen J, Hagen TP, Kaarboe OM. 2007. Centralized or Decentralized? A Case Study of Norwegian Hospital Reform. *Soc Sci Med* **64**: 2129–2137.

Mcpake BI. 1996. Public autonomous hospitals in sub-Saharan Africa: trends and issues. *Health Policy* **35**: 155–177.

Ministry of Health and Medical Education (MOHME). *Related laws*. Available at: http://touse.mohme.gov.ir/pages/all-laws.php [23 April 2008].

Ministry of Health and Medical Education (MOHME). 1995. *New payment mechanism instructions (fee-for-services)*. MOHME: Tehran.

Ministry of Health and Medical Education (MOHME). 2007. The financial and trade off regulations of medical universities and colleges. Available at: http://touse.mohme.gov.ir/pages/all-laws.php [6 April 2008].

Ozgulbas N, Koyuncugil AS. 2009. Financial profiling of public hospitals: an application financial profiling of public hospitals: An application by data mining. *Int J Health Plann Manage*. **24**(1): 69–83.

Copyright © 2010 John Wiley & Sons, Ltd.
DOI: 10.1002/hpm

Parliament (Majles) of I.R.Iran. 1994. *Iran universal health insurance law*. Issuing date: 1994. Available at: http://law.majlis.ir/Law/Lawlist.asp?psearch=%E3%D6%C7%DA%DD Accessed: 7 July 2007.

Preker AS, Harding A. 2003. *Innovations in Health Service Delivery: The Corporatization of Public Hospitals*. World Bank: Washington DC.

Rashidian A, Eccles MP, Russell I. 2008. Falling on stony ground: a qualitative study of implementation of clinical guidelines' prescribing recommendations in primary care. *Health Policy* **85**(2): 148–161.

Regional Health Systems Observatory. 2002. *Health Systems Profile, Islamic Republic of Iran*. WHO Regional Office for the Eastern Mediterranean.

Rethelyi JM, Miskovits E, Szocska MK. 2002. *Organisational Reform in the Hungarian Hospital Sector: Institutional Analysis of Hungarian Hospitals and the Possibilities of Corporatization*. World Bank: Washington DC.

Ritchie J, Spencer L. 1993. Qualitative data analysis for applied policy research. In *Analysing Qualitative Data*. Bryman A, Burgess R (eds). Routledge: London.

Sadaghaini, E. 1998. *Hospital Organisation and Management*. Jahan Rayaneh: Tehran.

Secretariat of hospital economical and management reform. 2003. *Introduction of Hospital Economical and Management Reform*. MOHME: Tehran.

Ssengooba F, Atuyambe L, McPake B, Hanson K, Okuonzi S. 2002. What could be achieved with greater public hospital autonomy? Comparison of public and PNFP hospitals in Uganda. *Public Adm Dev* **22**(5): 415–428.

Supreme Audit Court (SAC) of Iran. *Objectives of the SAC according to the Constitution of the Islamic Republic of Iran*. Available at: http://www.dmk.ir/en/default.aspx Accessing date: 2/1/2008.

WHO. 2006. *Working Together for Health, The World Health Report 2006*. World Health Organisation: Geneva.

WHO. 2007. *Iran NHA, Iranian National Health Accounts*. World Health Organisation: Geneva.

World Bank Independent Evaluation Group. 2007. *Development Results in Middle Income Countries, An Evaluation of the World Bank's Support*. World Bank: Washington DC.

Copyright © 2010 John Wiley & Sons, Ltd.

DOI: 10.1002/hpm