Opening the Black Box: The Experiences and Lessons From the Public Hospitals Autonomy Policy in Iran

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Abstract

Introduction: Policy formulation and adoption often happen in a black box. Implementation challenges affect and modify the nature of a policy. We analyzed hospitals' autonomy policy in Iran that was intended to reduce hospitals' financial burden on government and improve their efficiency.

Methods: We followed a retrospective case-study methodology, involving inductive and deductive analyses of parliamentary proceedings, policy documents, gray literature, published papers and interview transcripts. We analyzed data to develop a policy map that included important dates and events leading to the policy process milestones.

Results: We identified four time-periods with distinctive features: 'moving toward the policy' (1989 – 1994), 'disorganized implementation' (1995 – 1997), 'continuing challenges and indecisiveness in hospitals financing' (1998 – 2003), and 'other structural and financial policies in public hospitals' (2004 to date). We found that stakeholders required different and conflicting objectives, which certainly resulted in an unsatisfactory implementation process. The policy led to long-lasting and often negative changes in the hospital sector and the entire Iranian health system.

Conclusion: Hospital autonomy appeared to be an ill-advised policy to remedy the inefficiency problems in low socioeconomic areas of the country. The assumption that hospital autonomy reforms would necessarily result in a better health system, may be a false assumption as their success relies on many contextual, structural and policy implementation factors.

Keywords: Health reform, hospital autonomy, Iran, policy analysis, policy process

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Introduction

In this paper, we describe and analytically assess the story of the development and implementation of a major health policy in Iranian health system, known as 'hospital autonomy' policy. The story covers the intentions of the stakeholders and the direct changes that the policy initiated, as well as the intended and unintended consequences of the policy implementation.

Policy change is 'political, dynamic and highly complex'.¹ The story of a policy has been often the story of important changes that may take different forms. As new problems arise, e.g. in the

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policy environment, powerful interests may weigh in and employ policies with the hope of safeguarding their objectives.² The existing problems, the interests or aspirations of the people whom are subject to those policies may also change, requiring new policies to address them.³ Changes in health policies may happen as a result of changes in other sectors, such as economy or education. Also, due to inherent complexities of health systems, a change in one area of the health system can lead to changes in other areas.⁴

The policy making stages -i.e. agenda setting, policy formulation, implementation and evaluation - are complex, intertwined and interact extensively.¹ Policy formulation, adoption and ratification often happen in a black box not transparent to the public or external observers. The stakeholders, technical experts, interest groups, relevant institutions and other actors evaluate, negotiate and weigh different policy options within this black box. Policy analysts try to shed a beam of light into the box using circumstantial evidence, documents and interviews that are mixed with posthoc interpretations and rationalizations.5 Limited studies have assessed such processes using data that reflects the real deliberations that shaped a policy.⁶ Also implementation is often the neglected phase in the process of making social policies, as many policies fail to achieve pre-determined goals.^{1,7} A policy after implementation may differ substantially from what had been envisaged in the beginning.

The term 'hospital autonomy' generally refers to a situation where hospitals are totally or partially 'self-governing, self-directing and self-financing' and it usually involves revenue generations from insurers or user fees.^{8,9} Hospital autonomy was seen as a

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policy option to solve common problems in public hospitals: e.g. inefficiency, waste, user dissatisfaction, 'brain-drain' of qualified personnel to the private sector or other countries, run-down assets and a failure to serve the poor.¹⁰ Hospital autonomy policies have been implemented across the globe including in Asia (e.g. Hong Kong, India, Indonesia, Vietnam), Africa (e.g. Ghana, Kenya, Uganda, Zambia), Europe (e.g. in central and eastern Europe, the UK), Oceania (New Zealand), and Americas (e.g. Colombia).⁹⁻¹⁵ A perceived shortage in the governmental budget for hospitals looks like to be the most important trigger for hospital autonomy policies worldwide.⁹

As part of a wider economic reform, in 1995, the government of Iran started a policy to grant a greater autonomy to teaching hospitals.¹⁶ It aimed at improving the quality and performance of these hospitals, and more importantly reducing their financial burden on the government budget. This paper has two aims: to understand intentions and motives of policy makers, general consequences of the policy, and the reasons behind the perceived failure in achieving the intended objectives of the hospital autonomy policy in Iran; as well as to draw broader lessons about the viability of hospital autonomy policy, and more generally hospital reform policies in the country and beyond. Before describing the methods, it is important to set the macro scene of the health system in Iran.

Iran's health system at a glance

With over 75 million population (as in 2012), Iran is the most populous country in the southwest Asia. Following nationwide implementation of primary healthcare (PHC) networks since 1985 and general improvements in education and living infrastructures after the Islamic revolution in 1979,^{17–20} the country has achieved substantial progress in general health status and reductions in mortality rates.^{17,21,22} Iran has been identified among few countries to achieve Millennium Development Goals 4 and 5 on maternal and child mortality reduction by 2015.^{23,24}

The Ministry of Health and Medical Education (MOMHE) is responsible both for the health care system and the universities of medical sciences. There is at least one university of medical sciences in each of the 31 provinces. In addition to their teaching and higher education responsibilities, the universities provide healthcare and oversee the private sector in their catchment areas. In recent years, the health system has moved toward a decentralized model. The universities of medical sciences in each province have some degrees of decision-making power in the planning and allocation of resources and the delivery of care.

The MOHME is the sole funder for most of the PHC, teaching, research, and hospital infrastructure expenditures. The rest of the health system is financed from a mixture of public and private sources. While the majority of inpatient care is offered in public hospitals (of which many are teaching hospitals), outpatient care is mainly delivered through the private sector. There are two main funding sources for the MOHME's hospitals: annual budget from the government, and fee-for-service revenues. The insurers and the copayments by the insured, and the uninsured users' payments are the sources of fee-for-service revenues.

The High Council for Health Insurance, with its secretariat located at the Ministry of Cooperation, Labor and Social Welfare (MOW), is the policy making body for health insurance as well as setting medical tariffs. Three major social insurance organizations (Social Security Organization, Health Insurance Organization - formerly Medical Services Insurance Organizations (MSIO) and the Armed Forces Medical Services Organization) are under the MOW and purchase outpatient and inpatient services. The MOHME and MOW (through the insurance organizations) have significant roles in providing and financing health services in Iran.

Material and Methods

We followed a case-study methodology that focused on agenda setting, formulation and implementation processes. We conducted a content analysis of parliamentary sessions' transcripts, policy documents, gray literature and published papers and articles, as well as in-depth exploratory and reflective interviews. Inductive and deductive content analyses were used for analyzing data.

Our research was a retrospective policy analysis. We looked at why and how the 'hospital autonomy' policy paved its way onto the agenda, the policy content and whether it achieved its goals. This study is a case study of a major decision making process in Iran and its subsequent outcomes, investigating the holistic and meaningful dimensions of the policy development process and implementation.²⁵

Exploratory interviews

We first conducted six in-depth exploratory interviews with key individuals about the history of the hospital autonomy policy and the related important events. We used the interviews to extract information about important historical policy-related time-events and key policy documents. The interviews also provided a general picture of the policy development and implementation process.

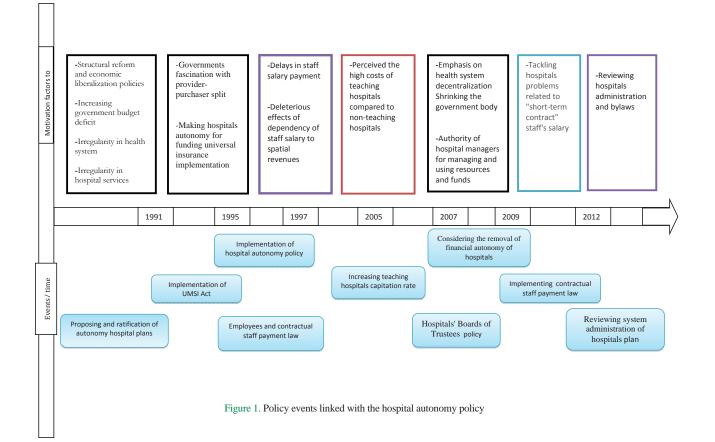
Policy Documents

Alongside conducting the exploratory interviews, and using their results, we comprehensively and purposefully collected the documents. We also used each identified document as a lead for other potentially relevant documents. A large portion of the documents was related to 169 parliamentary proceedings from the 2nd to 9th periods (1984 to 2012) of the parliament of the Islamic Republic of Iran (the 'Majlis'). The proceedings provided a rich source of information on how the hospital autonomy policy entered onto policy agenda, formulated and implemented. The proceedings also reflected the views of the key stakeholder organizations and actors as interpreted and delivered by the members of the parliament (MPs). The MPs also used the parliamentary sessions to raise concerns and questions reflecting their constituents' viewpoints about the policy. The proceedings also reflected technical discussions and formal reports of the relevant Standing Committees of the parliament (i.e. 'Health and Treatment', 'Planning, Budget and Audit', 'Education and Research' and 'Social Affairs'). However, the Standing Committees' internal discussions were not included in the proceedings.

In addition, we obtained copies of related parliamentary acts, national programs, cabinet proposed bills, regulations, formal reports of relevant organizations, journal papers and newspapers, as well as website news and articles. A document map was developed at this stage. Table 1 presents the details of the identified documents. The output of analyzing the exploratory interviews and documents was a preliminary 'policy map'. The policy map included trends, important events and dates, the main causes of events leading to the agenda setting and policy formulation, as well as the implementation milestones (Figure 1).

Category	Number	General or main issues	Time period
a) Documents sources and characteristics			
Parliamentary proceedings	169	Hospital self-sufficiency, Hospital autonomy, Hospital corporatization, Teaching hospitals funds, Health system challenges, medical services universal insurance	1989 – 2012
Reports	18	'Planning and Budget' and 'Health and Treatment' Standing Committees reports, Parliament's Research Center reports, Health care financing reports.	1991 – 2012
Online news and analysis outlets or magazine articles	194	Several newspapers and online news outlets	1998 – 2012
Local organizational websites	14	Medical Council, Parliament, Medical Universities, Vice-presidency for Strategic Planning and Supervision	1991 – 2011
Acts	23	Medical Services Universal Insurance, Social Security, Rural Health Insurance, Public Financial Regulation, Five-year Development Plans and related Acts	1991 – 2015
Bills, proposals, bylaws and regulations	18	From the Cabinet, MOHME, MOSSW, MPs and related organizations	1979 – 2012
Academic literature	36	Papers published relevant to different aspects of this reform, mainly published in Farsi	1991 - 2012
b) Interviewee characteristics			
6 interviewees (both exploratory and reflective interviews), 15 interviewees (reflective interviews)	Former MPs, former ministers of health, former and current deputy ministers of health, senior MOHME officials, former MOWSS deputy minister, senior MOWSS officials, former heads of insurance organizations, senior insurance organization officials, senior management and planning organization deputies and officials, academic researchers, members of nursing and medical councils		

Table 1. Document sources and interviewees' characteristics



In-depth reflective interviews

The preliminary policy map was presented face-to-face and individually to 21 key informants that were involved in the development and implementation of the policy or were affected by its implementation (Table 1). The key informants included six individuals who were also interviewed at the exploratory stage. The key informants were requested to study the policy map and then explain their viewpoints on the policy trends and events. Their reflections and interpretation of the events and the underlying causes were recorded. We encouraged the key informants to comment on the policy map if they wanted to propose further events and causes, or if they disagreed with what is presented in the map. The presentation of the preliminary policy map helped the key informants in recounting the events and their underlying causes. It also focused their attention to the policy in question, while they put the events in the wider context of health system reforms at the time. The interviews further clarified the policy making process and the desirable and undesirable effects as perceived by them. They also clarified blind spots and uncertainties that had not been fully captured in the documents and had remained as open questions for the researchers.

Data analysis

The qualitative content analysis involved reading the documents and transcripts, multiple times and coding them inductively and deductively. Two authors (** and **) coded the data, and discussed the analyses in multiple meetings. The analysis was used to update important related events in different years and their categorization. This process resulted in the first analysis output of a document map and a preliminary policy map. Content analysis was repeated on the transcripts of the in-depth reflective interviews.

We analyzed the document contents and interview transcripts in an iterative approach. If the interviews or documents referred to events or issues that we had not fully captured before, we looked for relevant documents for clarification. We continued this process until we were fully satisfied with the timeline of the events and their interpretations. Finally, to ensure credibility of the results, the main analysis outputs were shared with three key informants for comments and feedback.

Ethical considerations

The study was approved by the research ethics committee of the Iran University of Medical Sciences (No:92/n/105/2322). We obtained informed consents from all the interviewees and respected their confidentiality while quoting verbatim.

Findings

Although, its formal implementation did not start until 1995, hospital autonomy was a major reform in public hospitals' financing in Iran, which took a lot of parliamentary sessions from 1989 for over two decades. What was distinguishing in these parliamentary sessions, in which many ministries of health senior officials attended, was the amount of negotiations around its outcomes and policy options for addressing challenges aroused from the implementation of the policy (Figure 2). We categorized the characteristics of the policy formation and implementation in four time periods: moving toward the policy (1989 to 1994), disorganized implementation (1995 to 1997), continuing challenges and indecisiveness in hospital financing (1998 to 2003), and other structural and financial policies in public hospitals (2004 to date).

Period I (1989 – 1994): moving toward self-sufficiency in public hospitals

After the end of Iraq-Iran War in 1988, Iran adopted consecutive 5-year development plans that advocated economic liberalization policies in industries, education and healthcare.²⁶ The intended economic reforms coincided with the World Bank's incentives for the implementation of structural reforms in Iran's public sector.^{27,28} Three specific objectives were required for public hospitals: increasing performance and revenues, separating provider and purchasers roles by establishing a universal medical insurance coverage, as well as establishing a hospital autonomy policy.

Increasing hospitals' fee-for-service revenues

In early 1990s, the MOHME and its affiliated hospitals faced important financial challenges. Parts of governmental budget for MOHME had not materialized while the inflation rate increased from 9% in 1990 to 21% in 1991, leading to a rapid rise in hospitals' running costs. Uninsured disadvantaged people and those who could not afford insurance co-payments could ask hospitals for the abolishment of the costs; and the hospitals were lenient to granting such exemptions. As the hospitals were not seen as 'budgetary units', the hospitals did not have direct claims to their revenues or losses, as these were transferred to the public purse.

On February 1991, while the parliament was discussing the annual budget (fiscal year April 1991 to March 1992), some MPs proposed an amendment to the bill allowing the MOHME facilities to provide out-of-hour care at a higher rate [Feb1991, Gazette No: 13477]. The parliament rejected the proposal, suggesting the

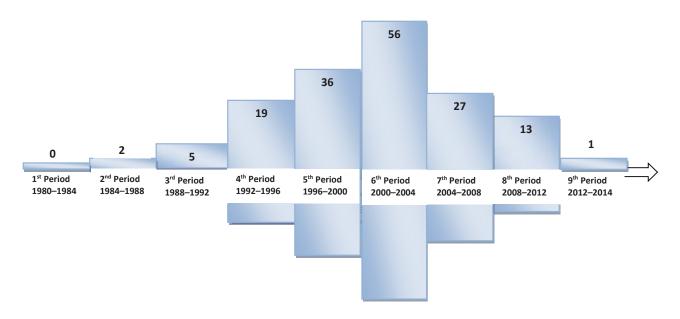


Figure 2. The frequency of hospital autonomy related negotiations and hearing in different parliamentary periods, 1980 – 2012.

MOHME could propose an independent bill for thorough consideration. In March 1991, a new Minister of Health was introduced to the parliament for the vote of confidence. In his speech, he highlighted a program for improving public hospitals' performance consisting of expanding fee-for-service payments to physicians, extending health insurance coverage and increasing the medical tariffs [Mar1991, Gazette No: 13509]. In April, MOHME successfully obtained the Cabinet's approval for using the fee-forservice revenues generated in teaching hospitals for higher payments to physicians and covering hospitals' running costs, based on a 1989 law of "establishing boards of trustee for universities and higher education institutions". This produced an incentive for further provision of care in teaching hospitals. In February 1992, the MOHME asked the parliament to approve an amendment to the annual budget for the current fiscal year. In fact, the MOHME was seeking the parliament's approval for spending the already increased revenue (over 20 Billion Rials, ~14 million USD, over six months), which was granted [Feb1992, Gazette No: 13753]. The Minister of Health and one of the MPs defended the amendment: "it increases efficiency in hospitals and helps financing their costs ... due to budget constraints, it is impossible to outsource all the costs of hospitals and the MOHME is forced to increase the self-sufficiency of hospitals through fee-for-service payment" [Gazette No: 13753]. Acknowledging some of the challenges, a few MPs proposed a further amendment, asking that 20% of all fee-for-services revenues to be allocated to a separate fund for the establishment of universal medical services insurance coverage. The MOHME did not support the amendment on the basis that it needed the whole amount of its revenues to cover the increasing costs. The new fee-for-service payment policy substantially increased the number of surgeries conducted in hospitals and the physicians' earning [Gazette No: 13753].

The proposed reforms had no explicit plans for the disadvantaged and uninsured patients. MOHME argued that such patients could benefit from the Imam Khomeini Relief Foundation and the Welfare Organization's coverage plans [Gazette No: 13509]. The two latter organizations, however, covered those who had been formally registered as the poor after assessing the household's financial status. The MOHME also argued that the hospitals would provide a 30% discount to the uninsured and disadvantaged groups (the insured only paid 10% of the costs as copayment). Prior to the reform, the poor had little financial barriers for using public and teaching hospitals. As a result of the changes in hospitals' revenue generation mechanisms families with no insurance coverage (e.g. the informal sector in urban areas) could then suffer from the financial implications of using hospital services.

Proposing the Medical Services Insurance (MSI) Bill

Towards the end of 1992, the parliament debated a wide-range of health system issues, including the demand side barriers of access for the poor and the disadvantaged groups. Also, there were discussions about government costs, hospitals' income and expenditures, promoting competition between hospitals, and increasing public hospitals' staff productivity.

Attempting to address these issues, in February 1993 the MSI Bill (including 19 articles) was presented to the parliament. As one MP described '[it intended] to perform a surgery on the health system... in a rather short time, [of] a five-year period'.²⁹

The MSI Bill stipulated that by the end of the Second Five-Year Development Plan (2001/2002) all public hospitals should be-

come autonomous entities. This intended to give public hospitals freedom to make decisions, along with a self-funding responsibility from service provision based on approved fee schedules.

The bill resulted in heated debates in the parliament. Proponents argued, in contrast that hospital autonomy would facilitate rapid implementation of the universal insurance through shifting governmental budget toward the insurance funds. In particular, the hospital autonomy aspect of the MSI Bill was strongly opposed by the MOHME, some MPs, the Medical Council and prominent physicians. Some MPs were concerned that while the proposed MSI still was not in the position of acting as a capable purchaser, expecting the government to make teaching hospitals financially autonomous would be inappropriate. "... if we want to implement medical services insurance, we should not suddenly impose the costs [onto] the hospitals ... and telling them to cover via your revenues because the insurance is being implemented" [Sep1996, Gazette No: 14788]. Another MP, who was an academic gynecologist and later became the first female minister of health in Iran, argued that the autonomy of teaching hospitals was a huge mistake: "conducting rare and complex surgeries is expensive... [autonomous] hospitals would prefer to conduct 20 - 30 simple surgeries... and generate more revenues. This plan is dangerous and will diminish scientific and educational status of teaching hospitals".30

Hospital autonomy: a change of name but not a change of heart?

The MSI bill was examined in several joint meetings of the parliament's standing committees for 'Health and Welfare' and 'Planning, Budget and Audit' attended by MPs, experts, as well as health and welfare officials. The parliament gave its preliminary approval to the bill on April 1994. A major challenge was financing the bill's implementation. There were questions over determining per capita insurance premiums, the actual costs of medical services and the processes for replacing government financing of hospitals with the insurers' purchasing power.

Article 8 of the MSI bill, in particular, mentioned that the medical services tariffs and insurance premiums would be set annually based on 'hospital autonomy principles'. The parliament dropped all references to 'hospital autonomy' or 'self-sufficiency' from the bill, and renamed it as the Universal Medical Services Insurance (UMSI) Act. Despite the changes, many aspects of its content remained intact. Some argued that the final approved Act contained enough reference to the concept: "... [hospital autonomy] was not omitted ... It may appear so; but if you look at the universal medical services insurance package, money must be provided to hospitals by the insurance system [hence the hospitals were meant to generate revenue from service provision]." (former deputy Minister of Health). The bill was finally approved in auspicious of the UMSI Act in September 1994 and the Medical Services Insurance Organization (MSIO) was established to implement it.

Period II (1995 – 1997): Disorganized implementation of hospital autonomy

When the MSIO was established, in 1994, over 60% of Iran's population had no health insurance. At the time, government employees and their dependents were covered by an insurance fund, which was then transferred to the MSIO. The Social Security Organization provided coverage for the formal sector workers and their dependents. The MSIO mandate was to expand health in-

surance coverage to the population who were not covered by the existing funds.

In 1994, a number of public hospitals and clinics started to charge patients for actual costs of medical services. In the absence of an effective insurance package, this led to serious complaints.³¹ In 1995, the MOHME issued a new set of regulations called the "modern administration of hospitals" intended to increase hospitals' revenue generation potentials from non-governmental sources, including the MSIO. The regulations were mainly based on a 1998 law of "establishing boards of trustee for universities and higher education institutions" and had little reference to the UMSI Act. We noted above that in 1991-92 the MOHME used the same legislation to steer their intended policies of fee-for-service payments to hospitals. The "modern administration of hospitals" regulation was a major step toward hospital 'autonomy'. At the same time, in the 1995 budget bill, the hospitals were instructed to allocate their fee-for-service revenues to pay for their expenses. Hence hospitals started the implementation of an unbalanced version of autonomy that only focused on revenue generation. Anecdotal evidence suggested that this coincided with the private hospitals' attempts to increase their service fees and revenues.32 One former MP summarized the conditions as: "medication and treatment challenges of low-income groups aggravated during the first year of implementing the UMSI Act".

The second attempt toward hospital autonomy and self-sufficiency

The UMSI Act implementation gradually increased MSIO's insurance coverage (from six millions in 1994 to 29 million in 1998). A large proportion of the newly insured lived in rural areas, paid zero-premium and was only partially covered. It took a decade to become evident that rural inhabitants needed further coverage to improve their access to care.^{18,19,33}

While a substantial proportion of the population remained uninsured or partially insured, policies further moved towards hospital autonomy. The government line-item budget for the public hospitals' staff salary and running costs zeroed in the budget bill for 1995-1996 fiscal years. The argument was that such costs would be covered from the fee-for-service revenues paid by the users and mainly the insurers. This puts a lot of pressure on public hospitals. Some hospitals in small towns argued that they were close to the point of stopping their operations as the households' ability to pay was limited and many people were uninsured. To cover such costs, the MOHME diverted a substantial amount of budget set for medicines' provision toward hospitals [Jan1997, Gazette No: 15146]. In the following fiscal year (1996 – 1997), the MOHME 'borrowed' from the MSIO's fund to cover hospital costs, and reduce MSIO's capacity to implement universal coverage [Gazette No: 15146]. Also, the MSIO's premiums were subject to tax payments - a policy that ended in 1997 -, which further diminished the insurers' fiscal capacity [Jan1998, Gazette No: 15553]. In a nutshell, the program suffered significant financial deficits from its first year of implementation that also affected the universal coverage plans.

MPs criticized, yet more strongly, the soundness of the hospital autonomy policies, and asked for a review of the policy. The concerns over the burden of the policies on disadvantaged groups were substantiated.

Reversing the hospital autonomy policy

In 1996, the parliament revitalized a 30303 article in the annual budget acts that covered hospitals' staff salaries [Dec1996, Gazette No: 15148]. This approval can be marked as the formal end of the hospital autonomy plan. During the parliamentary discussions, the proponents argued that they wanted the 30303 article to survive until the end of the 2nd National Development Plan (2001/2002, the target time for the completion of UMSI implementation) [Oct1996, Gazette No: 15074]. Despite this, the approval contained no time limit and has been in place ever since.

This also meant that the purchaser-provider separation in hospital financing faced further challenges. As a result, the hospitals had three sources of income: 1) governmental budgets that covered staff salaries and non-recurrent costs; 2) fee-for-service payments from the insurance organizations, and 3) out-of-pocket fee-for-service payments by the households that included insurance co-payments or the total costs if uninsured. A few interviewees mentioned that the period 1994 - 1997 were among the worst years for the health system in Iran. One interviewee claimed that the policies "wrecked everything, and resulted in nothing good" [health policy researcher].

Period III (1998 – 2003): continuing challenges and indecisiveness in hospital financing

Structural reform policies did not remedy the financing challenges of the public and teaching hospitals. Despite the adoption of the article 30303 in the annual budgets, the government still faced difficulties in paying staff's salaries. The hospitals collected fee-for-service payments to cover their running costs, physicians expected fee-for-service payments as top-ups on their usual salaries, and the insurance organizations substantially delayed the payments to the hospitals. The annual budgets, year after the year, allowed the hospital to generate a bigger share of their income from fee-for-service revenues; and still many people lacked health insurance. Within this period, the share of households out-of-pocket payment in total health care expenditures increased continuously [Feb2002, Gazette No:16619]. "... Hospitals faced continuous challenges in obtaining the required equipments, medicines and teaching facilities. This is so that the hospital chief or manager's main concerns, instead of quality improvement, are preventing a bankruptcy." (An MP)

Since 1998, several attempts were made to remove the remaining elements of the hospital autonomy plan (i.e. the feefor-service revenue generation by hospitals), all of which were to no avail. The government's 2002-2003 proposed budget bill expected that the hospital should earn 48% of their revenues from their services. In 2002 the parliament observed some of the most heated sessions on the complete removal of the hospital autonomy plan. 'The alluring façade of hospital autonomy, the [weak] foundations of social security, the [status of] income per capita and employment rates [in Iran] have resulted in making medical services inaccessible for many Iranians' [Feb2002, Gazette No: 16615]. Another noted 'the inconsistency between this plan and the Principles of the Constitution ... in 1994 the government was supposed to implement two plans... the universal health insurance was not implemented... and the hospital autonomy is raging on ...' [May2002, Gazette No:16661]. It was proposed that the public hospitals should stop collecting fee-for-service payments and the costs should be covered in the national budget [Gazette No: 16619]. The issue was later raised during the Minister of Health's question time in the parliament. In response, the Minister argued that what was happening was based on previous parliamentary decisions, that he had no financing sources to tackle it, and that the MOHME intended to do something to cover those who were uninsured or could not bear the hospital services copayments [Gazette No:16661].

Period IV (2004 to date): other structural and financial policies in public hospitals

In 2004, a new plan was devised to give more decision making powers to the hospitals' boards of trustees [Apr2004, Gazette No: 17254]. Despite its approval in two consecutive 5-year development plans, 'hospital's board of trustees' policy has not been implemented as expected. Insufficient cooperation of insurance companies, limited government support, physicians' lack of confidence in the persistence of the plan, local authorities hesitance in handing over powers, and a premature design for the roles and responsibilities of the board members were among the barriers of its implementation.³⁴ The lack of support from insurers and the government was not surprising. To lure the hospitals into the program, the MOHME promised higher revenues via almost trebling the tariffs as compared to the current relative values, hence the plan would inevitably put more pressures on the insurers and the governmental budgets.^{35, 36}

Problems in hospitals' financing resulted in other challenges. Hospitals began to ask for pre-payments from patients at the time of admission, to ensure the patients can meet the service costs. This, in addition to causing patient dissatisfaction, resulted in instances where the hospitals delayed the treatment of emergency cases. In 2004, the parliament instructed the MOHME to develop guidelines for the immediate admission of emergency cases. The result was an even further financial pressure on hospitals: 'in 2005, about 590 billion Riyals were paid by insurance companies to the MOHME, while in practice 1000 billion Riyals were spent on treating emergency patients'. [Jan2007, Gazette No: 18032] [The Minister of Health]. This resulted in a new policy of covering the treatment costs of patients admitted after traffic accidents from the car insurers as part of the third-party insurance policies.

Apart from concerns over financing emergency care, there were concerns over financing services such as inpatient mental and burns care, and hospitals located in disadvantaged regions as they all faced difficulties in generating enough fee-for-service revenues. To remedy these, the government drafted policies for each of the emerging problems, resulting in temporary improvements and while the financial challenges remained.

In 2012, the MOHME reviewed the regulations for the collection and utilization of fee-for-service revenues, focused on a fairer distribution of revenues among the staff. The new regulations, however, did not tackle the root causes of a financing approach dominated by fee-for-service payments and the insurers lack of capacity to fund hospital care. Despite the debates no significant progress has been achieved to solve the root causes. Even today, when this manuscript is being published, the leftovers of the 'hospital autonomy plan' still overshadow the discussions on hospital financing in Iran.

Discussion

In the 1990s, Iran underwent a period of turbulent health system reforms aimed to improve public hospitals' performance and reduce governmental costs. We demonstrated that the reforms, despite their intended objectives, resulted in a series of new problems and challenges that have remained ever since. The policy reforms started as hospital financial autonomy or self-sufficiency plans, but moved to different directions in response to the perceived effects and emerging problems. We demonstrated how well-intended and theory-oriented reforms might go badly if implementation concerns were not taken into account. We also demonstrated how formal policy measures, i.e. laws and regulations, might result in unintended consequences for the health system.

This study asserted that implementation could be a continuation of conflicts to define a policy, and politics heavily influence the implementation.³⁷ Each reform in the health system, as we observed here, was a stimulus for subsequent reforms.³⁸ However, what the hospital autonomy reforms lacked were a consistency in their operational objectives and a shared vision of improved hospital efficiency and access to health services.

Policy implications and interpretation

Kingdon (1995) argued that the coupling of 'problems', 'policy' and 'politics' streams can lead to a window of opportunity to push a new policy onto the government agenda. We noted that the coupling of 'problems stream' (perceived problems in public hospitals' performance, staff motivation and quality of care), 'politics stream' (MOHME's desire to increase fiscal capacity, lawmakers' intention of implementing universal insurance, government's desire to conduct structural reforms) and 'policy stream' (provider-purchaser split, hospital autonomy and self-financing, universal insurance) opened the window of opportunity to move hospital autonomy policy forward.

The public hospital reforms in Iran coincided with a series of other public sector reforms that mimicked the same intentions of releasing governmental resources, downsizing the government and implementing purchaser-provider split strategies. We think that although the paradigms of provider-purchaser separation might have been appealing on paper,^{39,40} the reality of complex health systems may impede its intended benefits to be materialized. The provider-purchaser split theory assumes that the 'black box' of adoption and implementation would work as expected by the theory; i.e. if the structural constraints of a health system are 'improved' then the outcomes will also improve. It ignores the fact that in every health system, and in one health system over time, the complex network of interactions and interests inside the black box may be unique. Hence, the results of the policy might be unexpected and unwanted.^{41,42}

Health systems are complex adaptive systems.⁴³ In such systems, well-intentioned efforts to solve pressing problems may create unanticipated effects and modest benefits.⁴⁴ It might be argued that the unplanned and counterintuitive outcomes of a policy occur due to the absence of comprehensive plans that consider all the elements of a viable health system, including: provider payment methods, human resources, regulatory power, fiscal space and financial viability, stakeholder support, competing policies and political timelines. In the case of hospital autonomy policy in Iran, we observed that the 'policy' resulted in unexpected challenges and partial or reactive solutions did not improve hospital care financing in Iran.

We observed signs of policy resistance, defined as 'the tendency for interventions to be defeated by the response of the system to the intervention itself',⁴⁵ in the course of the policy implementation. Similarly, our finding provides evidence for Lewin's pre-

dictions in his force-field theory.⁴⁶ Lewin argued that if a policy ('change') was imposed on stakeholders, there might be initial advances in the direction preferred by the policy maker. Then the opposing stakeholders increase their resistance and reverse the policy effects, resulting in a situation with no clear benefit over what existed before, as well as an increased level of stress and fatigue in the system.⁴⁶ The hospital autonomy related policies in Iran were opposed by the MOHME, insurance organizations and the Medical Council of Iran. While different players had different objectives, on the whole they were unconvinced of financial viability of the policy to run teaching hospitals and hospitals in remote areas. The government of the time liked the policy and maneuvered it through the parliament under different banners. The result appeased none of the main stakeholders. Although the policy enhanced hospitals' throughput and revenues, it resulted in further financial pressures and fiscal deficits. Our extensive search found no evidence of any positive impact on the hospitals' quality of care as a result of hospital autonomy policy.

Rigor of the study

The study ceased a good opportunity, i.e. access to the wordby-word deliberations in Iran's parliament, to shed light on the often black box of health policy making. Exploratory and reflective interviews enhanced our understanding of the policies and ensured a fair description of a highly politicized period of health care reforms in Iran. These together provided a rich description of policy deliberations and an avenue for a better understanding of the dynamics of policy making for complex social issues.

The study has important connotation for global health policies and international paradigms in improving public sector's performance. The policy in question, i.e. hospital self-sufficiency and autonomy and more reliance on user fees, had been strongly promoted by a few international organizations, notably the World Bank.⁴⁷ The study might provide some evidence why such policies did not succeed in achieving their intended aims in low-income and middle-income countries.^{10,14}

Limitations

We occasionally faced difficulties in capturing the exact meaning of the arguments raised by different policy makers. Terms with similar or overlapping meanings (e.g. self-sufficiency and autonomy) were used in the documents, while it was not clear whether the policy makers appreciated the differences in the concepts, or whether the received meaning of the terms had changed through time. Also policy makers used other terms with a technical meaning different from hospital autonomy (fee-for-service revenue, efficient administration, modern administration), but they used the terms as though they meant the same thing, or perhaps disguised what they were asking to avoid negative reactions. We extracted data from the documents based on the time history of events and used the corroborating documents to clarify the meanings. Recalling events occurred one or two decades ago was difficult for some interviewees. We used exploratory and reflective interviews to reduce this limitation.

In conclusions, we observed that the hospital autonomy policy was twisted and reshaped in different directions during the study period. Because various stakeholders sought different and somehow conflicting objectives, the resulting 'adopted' policies did not satisfy any of the main stakeholder groups, while it led to longlasting challenges in the hospital sector and the entire health system.

The health system faced more difficulties in implementing hospital autonomy in disadvantaged areas. Efficiency concerns, e.g. low bed occupancy rates, occurred in small hospitals in disadvantaged areas. Yet, as in many countries universal coverage policies might not exist or have considerable inadequacies, hospital autonomy appears to be an ill-advised policy to improve efficiency in such areas.

Successful implementation of hospital autonomy requires careful assessment of the context, infrastructures and devising a gradual path from budgetary hospitals to hospital autonomy. The assumption that the implementation of such reforms on their own would result in a better health system, may be a deluding mirage. Failure in any element of prudent policy making and implementation is likely to lead to unrealized aspirations.

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