The Barriers to Implementation of New Public Management Strategies in Public-Private Partnership in Health system

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ABSTRACT

INTRODUCTION: New Public Management (NPM) is a special management philosophy used by governments.

OBJECTIVES: The aim of NPM is increasing efficiency, effectiveness and cost saving through employing private sector characteristics and market mechanisms in public sector. Therefore, aim of NPM is identifying barriers and challenges to understand the limitations of implementing the NPM model.

STUDY DESIGN: A qualitative study

STUDY SETTING: Managers of primary health care (PHC), East Azerbaijan, Iran.

METHODOLOGY: In this study, a qualitative method was conducted. the researchers performed a series of semi-structured interviews with health managers (N=30) and three focus group discussions with policy makers and district health managers (N=9) in 2016. A questionnaire was used for collecting demographic characteristics and managers' perspectives.
RESULTS: Lack of authority, executive bureaucracy, traditional budgeting system, poor payment systems, inadequate resources were considered to be the most common managerial barriers to the implementation of NPM. From the experts' view, the other factors that can affect poor implementation of NPM reforms in public health complexes are as follow: a shortage of trained managers, centralized decision-making process, organization's unwillingness to compete, lack of a customer-oriented culture, lack of supervisor support and feedback, disharmony between employee needs and appraisal goals, absence of clear and independent performance dimensions, and biases in the process of evaluation.
Originality/value: Designing and implementing an NPM reform need to be based on the operational reality and conditions of every country because most of the NPM programs in different countries are suffering from non-implementation syndrome. Therefore, before implementing this reform, identifying managerial barriers and challenges helps managers to execute the NPM in their desired sector properly.
Keywords: New Public Management, Health complex, Primary health care, Quality of care

INTRODUCTION

The role public and private sectors play in providing health services has different patterns in various countries [1]. More generally, health care systems are managed in the form of state-owned, a private ownership, or public-private partnership[1-3]. Furthermore, evidence shows that in some countries private sector owns more than 50% of total health sector resources [4]. In addition, the experience of some countries shows that private sector functions more efficiently in terms of using resources; however, more often than not this sector faces market failure in the provision of health services, which is mainly attributed to particular features of health care organizations [5]. On the other hand, concerning public health sector governments have a variety of problems like inefficiency, lack of productivity, lack of commitment in the organization, bureaucratic behaviors, and customer

dissatisfaction [3, 6]. Therefore, it is essential that two sectors work together to solve these problems through employing each other's capabilities.

Over recent decades, there has been vigorous intention toward expanding new models for organization and management, especially in health services organizations [7, 8]. Many models emphasize the role of public-private partnership in the health sector. New Public Management (NPM) is one of these models [9, 10]. The NPM has emerged as an influential model and has left significant impacts on efficiency and effectiveness in the public sector management [11]. Indeed, it has been developed as a reaction to the traditional model of public administration, a bureaucratic, hierarchical, inflexible, inefficient model, leading to the segregation of government from citizens [12, 13]. In this model, governments try to transfer the characteristics of private sector to public organizations and use of market- mechanisms [14].

therefore, it can be claimed that NPM attempts to present management structures, practices, components and principles that are based on the precepts of freedom to select and freedom to manage [15]. Further, the main components of NPM are downsizing, managerialism, decentralization, de-bureaucratization, privatization, stress on private sector styles of management practice, emphasis on increased competition and creativeness and emphasis on greater discipline and more economical use of resources[16-20].

Many countries have tried to implement NPM reform within their public organizations, but the implementation in some countries, especially in developing countries, has faced a number of challenges and barriers[21-23]. For instance, in Africa, capacity to carry out NPM reform is a main challenge. Studies have shown that in an African country like Ghana, the presence of poor payment systems and the inability to establish clear control over spending manners and human resources are barriers to the implementation of NPM reform [24]. The other factors influencing poor implementation of NPM reforms in Africa are weak capacity to perform this reform, lack of sense of ownership, lack of political desire, depreciation of social values, and coercive conditions associated with the reform[25-27].

It has been found that in Bangladesh, weak political leadership, absence of strategic planning, implementation of reforms, and policies without sufficient analysis of existing culture and structure, high power distance between management and employees, corruption, factionalism, etc. are the major barriers and challenges to the road of NPM-oriented administrative reform in Southeast Asia [28, 29].

In Iran, like other countries, there are many problems in public health system. In this country, despite the fact that traditional primary health care (PHC) system has proven to be successful in some areas regarding rural population, there are still plenty of problems in service delivery, political, planning, and management structure in urban areas, especially slum urban areas [30]. In order to tackle these problems, the new government of Iran, Moderation and Development Party, has selected the health complex model as the preferred health reform model. The main aim of this model is using characteristics of the private sector in the health care system. Accordingly, managers tend to use NPM reforms to improve performance, efficiency, satisfaction and management structures [31]. But, it should be noted that designing and implementing NPM reform need to be based on the operational reality and conditions of each country. It is because implementing NPM reform may prove to be effective for a country while may not be of no effectiveness for another country. Therefore, it appears that before implementing NPM in the public sector, recognizing managerial barriers and challenges in the desired sectors may help managers with implementing this reform appropriately and correctly. The aim of NPM is identifying barriers and challenges to understand the limitations of implementing the NPM model.

METHODOLOGY

Study design and Sampling

The present qualitative study was conducted between October 2016 and March 2017 in a selected health complex in Tabriz, Iran. Semi-structured interviews were conducted as the preferred methodology with a purposive sample of participants (n=30). Interviews continued until data saturation was achieved. The method was employed since it permits an in-depth investigation of managers' views about managerial barriers to implement NPM in a health complex. Table I shows the characteristics of the selected health complex.

TABLE I. CHARACTERISTICS OF HEALTH COMPLEX IN TABRIZ

Type of health complex	Health complex			
	Management Center (MC)		Health Center (HC)	
	Frequency	%	Frequency	%
Public	9	45	45	51.72
Private	11	55	42	48.28
Total	20	100	87	100

In addition to the interviews, the researchers conducted three focus group discussions (FGDs) with nine participants. The interviewed participants of the study consisted of 17 health center managers and 13 managers in charge of the management centers of both public and private sectors. As to FGDs, 5 policy makers and 4 district health managers were included to run the discussions. The essential descriptive characteristics of these participants are reported in Table II.

TABLE II. CHARACTERISTICS OF PARICIPANTS

Organzations (n)		Interviews (n)	FGDs (n)
Management Center (MC)	Public	10	-
	Private	3	-
Health Center (HC)	Public	12	-
	Private	5	-
Tabriz University of Medical Seinces (TUOMS)		-	5
Vice Chancellor for Health		-	4
Total		30	9

Data collection

In order to collect the required pertinent data, the interviews were run with health complex managers and in-depth FGDs were conducted with policy-makers and district health managers. The interviews and meetings were held face-to-face. Data were gathered through the use of semi-structured recorded interviews. Each interviews lasted for about 1.5 hours with the aim of exploring the participants' explanation of managerial barriers and challenges through employing a semi-structured topic guide comprised of open ended questions. The interviews proceeded to the point when data saturation was attained. Both the interviews and FGDs were directed by a researcher and one note-taker. the participants were asked to answer the research question: what are the managerial barriers and challenges to implementing NPM in public health complexes?

Analytical approach

Previous knowledge and findings concerning NPM were used to design the structure of this qualitative analysis so as to recognize the barriers and challenges to implemente NPM in public health complexes. The research team executed the deductive content analysis method through coding the

data collected from the interviews and using the theoretical framework of prior studies. the analysis was conducted up to the point where no novel themes emerged. The research team read and reread the texts for multiple times. Then, The data were encoded and classified in accordance with the themes created for analysis. Content analysis was performed and the respective themes regarding each of the pariticipants were compared with each other. Also, the initial findings were presented to some participants so as to increase the reliability of the results. On the other hand, analysis process were reviewed by two independent researchers to minimize bias.

Ethical considerations

Ethical code of this study is: TBZMED.REC.1395.461 the approval of which was obtained from the ethics committee of Tabriz University of Medical Sciences (TUOMS). Further, a verbal agreement was taken from the participants at the beginning of the interviews and FGDs. The study team informed the participants that the voice-recording could be paused in case they wanted to. Moreover, the participants were assured that the information would remain confidential.

RESULTS

Of the 39 partipants,11 (28.20%) were female and 28 (71.80%) were male. Morever, the participants had at least 1 and at most 31 years of healthcare experience. The mean work experience of the participants was 11.17 (8.25) years. The majority of participants were physicians (n=20). (Table III)

TABLE III. PROFILE OF INTERVIEWEES

participants (n = 39)			
Qualitative variables		**Frequency**	**%**
Gender	Female	11	28.20
	Male	28	71.80
Highest level of educational degree	Bachelors (BA)	5	12.82
	Masters (MS)	3	7.70
	Ph.D.	6	15.38
	MD	20	51.28
	MD, Ph.D.	5	12.82
Positions	health center managers	17	43.59
	management center managers	13	33.33
	district health managers	4	10.26

	Faculty members		5	12.82
Quantitative variables	**Minimum**	**Maximum**	**Mean**	**SD**
Average age (years)	30	55	42.33	6.69
Average work experience (years)	1	32	11.17	8.25

in order to identify the managerial barriers and challenges to implementing NPM in public health complexes, the recognised problems were categorized into six groups.(Table IV)

so as to implement NPM in public health complexes, managers should be capable of using the characteristics of private sector management in public sector. Therefore, Managerialism is one of the important elements that should be inplemeneted in public health complexes. the researchers recognizaed fourteen barriers and challenges in terms of the implementation of this element in public health complexes. According to two of the participants:

- *"I ,as a manager in public health system, think I'm not a manager. It is because I dont have any power and my employees keep telling me I am a simple employee. they repeat that we know you can not solve our problems at work." (MD)*
- "*In public sector, Managers are not responsive because they just execute commands. Also, many of the managers dont have managerial knowledge while they think management is easy. This belief will cause the organization to face a lot of problems." (Ph.D.)*

Almost all the interviewed managers reported lack of management authority or power in decision making and human resource management. Also, a shortage of trained managers, lack of meritocracy are identified as the most important factors that don't allow public health complex managers to handle the situation like their counterparts in private sector. Furthermore, the dysfunctional payment system and job insecurity are the other limitations that can lead to discouragement and decrease in employees efficiency.

From the perspective of managers, decentralization can help to increase motivation in their organization. Additionally, it is likely to pave the road for developing and putting the abilities of employees to use. Implementation of decentralization programs may be inhibted by barriers like excessive bureaucracy, centralized decision-making process, and six other options having been mentioned in Table IV. Two of the participants stated:

- "*In our system decisions are centralized. Bureaucratic managers and inflexible rules do not allow me to participate in decision making." (MD)*
- "*In my organization, I don't have fiscal authority. let me make one simple example: imagine my employee needs a pencil, I cant buy it!! because I should send my request to the center.Then, after days or mounths!! If they get to recognize my need is vital! they send me a pencil or they allow me to buy it !!! " (MS)*

In NPM, the purpose of using performance management is to contribute to the effective management of individuals and teams in order to attain high levels of organizational performance. Two of the interviewed managers stated:

- "*In public sector, my employee and I don't have motivation to work, because there is not any difference between a good employee and a bad one. Indeed, there is not appropriate performance evaluation. If my employee works well, there is not a good rewarding system and I can't have any expectations from them. Also, there is not a performance-based payment, or if there is any, it is implemented incompletely." (MD)*
- "*In my system, political behaviour is more important than activities. in fact, you should cling yourself to senior managers and you have the power of bargaining. In this system, controls are based*

on input. Therefore, the manager who has more bargaining power and more political influence will receive more resources." (MD)

There are thirteen barriers and challenges regarding performance management that are mentioned in Table IV.

Barriers and challenges in resource allocation and budgeting include traditional budgeting, lack of sufficient financial resources, lack of flexibility in budgeting, and lack of attention to squandering financial resources. One of the participants stated:

- "*In public organizations, traditional budgeting is used and the waste of resources is very much and common. Hence, resistance to implementing operational budgeting is high. In fact, employees are accustomed to the traditional process and are not interested in saving." (MD, Ph.D.)*

in order to increase competition and effeciency in public sector, policy makers endevour to employ market-mechanism type in this sector. In public health complexes, like other organizations, managers prefer to use this mechanism but they are inhibited by challenges like lack of customer awareness about activities of public health complex, lack of financial capital for competition, insufficient infrastructures, and inadequate knowledge of technology. From the percpective of one participants: "*Employees in public sector don't have any tendency to compete because they are formally recruited and receive monthly salary. If they don't work well, they are not afraid of getting fired." (BA)*

Also, another manager said: - *"In our system, we contract with private sector. But, there are many problems with implementing this strategy. For instance, we don't have incomplete contracts 'however, monitoring of contracts is weak. We think that assignment of services to private sector is sufficient and improves performance.But, if the government does not play a supervisory role in the private sector, it will certainly not work for the benefit of the people." (Ph.D.)*

Attracting customers and guaranteeing their satisfaction are of the main principles of NPM. the results of the present study showed that in public health system, employees don't pay attention to customer satisfaction and needs. The other barriers and challenges include lack of plan to achive customer satisfaction, lack of customer awareness of the complaints process, lack of customer-oriented culture, lack of training in customer-oriented behavior, lack of attention to customer needs, lack of motivation in staff, and customer uncertainty.

Two of the interviews held:

- *"People prefer private sector more than public sector, because they think that in private sector, services are better and employees pay attention to their needs. They think that employees in private sector are more humble than public sector." (Ph.D.)*

- *"In public sector, customer satisfaction is not important because we don't have customer-oriented culture. We think when we wake up at 6 o'clock in the morning and come to office,we are entitled to get salary.!!! Employees in this sector think that customers are not always right. They say that we are internal customers too. And, nobody pays attention to our needs. Then, why customers should be important to us." (MD)*

TABLE IV. SYNTHESIS MANAGERIAL BARRIERS TO THE IMPEMENTATION OF NPM

Main themes	Managerial barriers
Managerialism	1. Poor motivation in manageres and employees; 2. Lack of management authority; 3. Dysfunctional payment system; 4. Lack of health resource; 5. Lack of reward system; 6. Manpower shortage and heavy workload; 7. Instrumental appraoch to human resource; 8. Job insecurity for managers and contractual employee; 9. Lack of a clear job description; 10. Lack of face-to-face meetings with the seniro managers; 11. Lack of meritocracy; 12. Lack of qualified employees; 13. A shortage of trained managers; 14. Lack of awareness of the reform.
Decentralization	1. Excessive bureaucracy; 2. Commands and Instructions from top to bottom; 3. Collaboration Issues; 4. Centralized decision making process; 5. Inflexible rules; 6. Lack of delegation; 7. Distrust between senior managers and subordinates; 8. Unclear authority relationship.
Performance management and new model of control	1. Input control; 2. Absence of appropriate performance evaluation; 3. Absence of accreditation programs or provider certification; 4. Weak contract enforcement mechanisms; 5. Lack of real commitment to the PM by managers; 6. Lack of reward for good performance; 7. Poor information system; 8. Resistance to performance measurement; 9. Political behaviour is important more than activities; 10. Biases in the process of evaluation; 11. Disharmony between employee needs and appraisal goals; 12. Absence of clear and independent performance dimensions; 13. Absence of effective control techniques.
Discipline and parsimony budgetary process	1.Lack of attention to squander financial resources in the public sector; 2. Poor funding to health complex programs; 3. Traditional budgeting; 4. Lack of flexibility in the budgeting; 5. Lack sufficient financial resources; 6.lack of managerial accounting systems
Market-type mechanisms	1. Lack of customer awareness about activities of public health complex; 2. Lack of financial capital for compitition; 3. Insufficient infrastructure; 4. Insufficient knowledge of technology; 5. Incomplete contracts; 6. Lack of complaints system; 7. Poor monitoring of contracts; 8. Organization's reluctance to compete.
Customer orientation	1. Lack of attention to customer satisfaction; 2. Lack of attention to customer needs; 3. Lack of motivation in staff ; 4. customer uncertainty; 5. Lack of training in customer-oriented behavior; 6. Lack of customer-oriented culture; 7. Lack of complaint management; 8. Lack of supervisor support and feedback.

DISCUSSION

Reforms in public sector are to be taken into account for socioeconomic improvements in countries [24]. The NPM is one of these reforms that can be employed in public sector. This reform has been accepted in many countries with the aim of moving traditional bureaucracies toward a new period characterized by a market orientation and a higher level of efficiency, flexibility, and responsiveness to citizens [4, 15, 32]. In most countries, NPM policies have been applied in health sector to obtain various goals including decreasing health care expenditures, increasing efficiency and effectiveness, cost cutting and improving the quality of public services. For example in the UK, provider / funder dichotomy was expanded as a radical market-based mechanism.. In Singapore and some other countries, it is emphasized on the rule of law, market-based mechanisms and contract-like arrangements [21, 33]. Implementation of NPM in majority of developed countries was successful. implementation of NPM in majority of developing countries had mixed results. this reform was successful in implementing of some principles and it has failed in the some principles too. With regard to the issues mentioned, while the NPM approach has been created in some developed countries and spread to the rest of the world, it appears that there are still limitations to implementing it, especially in developing countries and in particular in the health sector [34, 35].

Studies have shown that developing countries cannot provide resources and managerial capacity to adopt NPM reforms [36]. In such countries, weak administrative and implementation capacity and resource constraints have been main barriers to public administration and management reforms [37, 38]. These barriers have restricted the development of NPM reform in developing countries [37]. For example, in low-income countries, the limited development in introducing and implementing NPM reforms is partly explained by limitations due to the governance and institutional environment [35, 39]. Furthermore, the unstable economic situation, defect in institutional and governance body, lack of suitable relationships between managers and employee, weak contract enforcement mechanisms, bureaucratic culture, poor public sector salary and reward systems and lack of resources are some of the constraints of the health sector in these countries [40-43].

Since 2007, Iran's health policy makers ratified and performed various laws to achieve ‘Health for All’ since 1979, But the primary health care system (PHC) in this country have had some remaining problems including low accessibility in urban areas, low availability of expert human resources, lack of effective performance standards, and insufficient quality of health care [31] . Also, The World Bank in 2007, in a report on the Iranian health system, clarified some existing problems including the problems of structure,management, strong focus on decision making, variety of service delivery systems and the fragmentation of this system [44]. In Iran, NPM reforms have been implemented in public sector. policy-makers and managers in public health sector like other sectors attempt to solved problems that exposed with them in this sector. Therefore they tend to implement this reform to achieve efficiency and effectiveness in public health sector. However, before implementing this reform, they have to deal with and get rid of a number of barriers and consider the challenges inherent in this sector.

Managerialism is one of the challenges that managers and policy- makers come across with. This element means much more than the usage of managerial practices in organizations [45]. In this element, the idea is that all public organizations can work properly if decision-making is centralized in the hands of trained and objective professional managers [46]. Therefore, we need to give managers the required power to implement NPM properly. however, our findings showed that managers in public health complexes don’t have enough authority, which leads to poor motivation in managers. Also, the results showed that managers are inhibited by the lack of authority in human resources management. Therefore, they can not design a good reward system and can not use pay for performance system and monitor subordinates, which leads to poor motivation and inefficiency of employees. The other

significant point is that public health complex managers do not have any interference in the recruitment or transfer of human resources. Also, some of the participant managers mentioned that there is a limited relationship between senior managers and them.

The participants stated that the burucratic culture is strong and hence senior managers do not like to share their power with them. They think that senior managers do not trust them. Indeed, they are considred to be like machines that just have to implement the announced programs. From the perspectives of managers, public health complexes suffer lack of qualified employees and trained managers. However, it can be said that training managers can not definitely be very effective in public health system and cannot guarantee optimal performance. In Sri Lanka, like Iran, low-skilled administrators, lack of meritocracy and politicization of the public service have been the main obstacles to the smooth functioning of the NPM-based reform 22. Further, evidence shows that NPM success in Bulgaria needs some essential changes in qualification and training of senior civil servants because there is not sufficient level of adequacy between the requirements of NPM and the managerial skills and knowledge of these employees [42]. Our participants stated that, in Iran, to increase efficiency, more power and freedom to manage must be given to public health complex managers. In addition to that, accountability mechanisms must be institutionalized in order to control financial expenditure and the achievement of primary health care in provincial level.

Decentralization is one of the important elements in NPM since it functions as a means to ensure greater transparency and accountability and to provide customer responsive services [28]. From a theoretical viewpoint, decentralization includes deconcentration, delegation, devolution and privatization [24]. It is reported that all the four mentioned types of decentralization are implemented in Africa [25]. However, there are still challenges within privatization process in most African countries. for example, in Tanzanian, privatization is just constrained to recurrent expenditure instead of being funded by capital investment for economic growth [47].

moreover, in developed countries, implementing decentralization programs have faced challenges and barriers as well. The governments in these countries often retain centralized decision making in all public organizations and still senior public managers have authority for making all decisions within their organization [23, 48].

In our study, the participant managers stated that excessive bureaucracy, poor financial and human resource management system, lack of sufficient preparation for managing the reform, weak capacity and political instability, lack of delegation, political instability and weak position of public health complex managers in decision making lead to disinterest of managers to manage. Also, they mentioned that top-down hierarchy leads to increased decision-making time and customer dissatisfaction. From the perspectives of participants, bureaucracy is much and decision-making process is centralised. In addition, power distance is high and there is a wide gap between senior managers, operational managers and subordinates. Hence, excessive number of inflexible rules do not allow managers to manage well, which leads to a decrease in creativity of managing. They mentiond that senior managers should change their management style and make use of participatory management in public health system. The participants emphasized that fiscal decentralization is an important management tool for public health managers, which leads to flexibility in public health system. Managers emphasized that they don't have any participation in budgeting and resource allocation. Furthermore, they suggested that to improve performance and increase motivation in managers, health networks can create independent public health complexes through reducing central administrative controls and empowering managers to acquire human and technological resources to meet the strategic goals.

as an instnce, implementing performance management system was the first challenge that Zimbabwe faced in the NPM adoption [49]. It was reported that in this country lack of effective communication between politicians and public managers, insufficient training and input control by management instead of improving performance led to resistance of staff against change. Further, due to the lack of budget support and absence of appropriate performance evaluation, performance incentives have been too weak to produce tangible impacts [50]. Our study findings revealed that in order to correctly apply the performance measurement in public health complexes, managers should consider barriers and challenges like the poor information system, absence of accreditation programs, and resistance to performance measurement and lack of real commitment in managers. In addition, our findings showed that disharmony between staff needs and appraisal objectives, biases in the process of evaluation and the lack of obvious and independent performance dimensions lead to increase in dissatisfaction, lack of motivation and resistance, especially on the part of the appraiser/staff. The participant managers stated that if we would like to implement performance measurment, we should design pay for quality based on fixed payment, individual, team and organization performance and also managerial appraisal. Also, they prefered the evaluations to be based on output.

The focal core of NPM reforms up to now has been reconstructing the nature of public provision mainly through using improved resourcing and financial management [51]. According to NPM reformers, budgetary systems should provide flexibility and increase in the responsibility of managers in both resource allocation and performance within those restrictions [52, 53]. Based on our study findings, in order to change the objectives and culture of government budgeting, managers and policy-makers should design a new budgetary system to recreate many of the traditional tools of budgetary politics. According to the participant managers' views, traditional budgeting rules, financial controls and lack of sufficient financial resources function as limitations because they prepares a framework to managers according to which they have to work thus, they are less eager to consider innovations. Additionally, traditional budgeting is time-consuming and costly. Furthermore, they reported that they delt with lack of financial specialists in public health complexes, that the issue which led to weaknesses in using cost management techniques and other financial activities in the public health system. From the perspective of participants, there is no cost saving culture and no incentive to reduce costs. Moreover, there is a weakness with the information systems to provide comprehensive information on available resources.

Other studies related to NPM found that weak administrative and executive capacity and resource constraints in low-income countries have been main obstacles to implementing NPM reforms [37]. Concerning the barriers to the implementation of NPM in Iran, the issues that the participant managers repeatedly pointed to include the weakness in governance structures, unclear relationships between managers and employees, weak contract enforcement mechanisms, bureaucratic culture, poor incentive systems, and lack of resources. .

The introduction of market-type mechanisms within the public sector has been reported to be of the features of NPM. Improvements in public service efficiency is the aim of implementation of this element. As an instance, Italy implemented contracting out in health care but lack of strategic planning and restricted efficiency gains through high transaction costs led to decrease in access and no change in efficiency [54]. It is reported that lack of effective patient charters and complaints system and informal payments had a negative effect on access and efficiency in Czech Republic, Russia, Ukraine, and Armenia health care system [55, 56]. In public health complexes, managers and employees don't have a competitive view. Further, ambiguous and unclear contracts about the rights and duties between the public and private sectors are of the most important challenges in the public sector. Accordingly, public-private partnership is weak and unclear.

The other point is that increase in customer orientation among employees is one of the main goals of introducing NPM in public organizations [57]. Brady and Cronin (2001), in their study, showed that paying attention to customer orientation leads to a better evaluation of comprehensive service quality and hence to higher customer satisfaction and customer loyalty [58]. Therefore, in order to efficiently employ NPM in public health complexes and increase customer satisfaction, organizations must acknowledge customer needs and expand their strategic abilities to fulfill the needs. in addition, these organizations should engage the citizens in policy-making and planning processes. Finally, managers should solve problems like lack of training in customer-oriented behavior and lack of complaint management.

to wrap it up, our findings showed that success of NPM implementation is inhibited by other intervening factors such as political factors, bureaucratic behaviors, corruption and lack of proper planning. Therefore, identifying barriers and challenges helps managers with the required programs like proper strategic planning, adequate and appropriate resource allocation, empowering employees and managers, and implementing NPM in the public health complexes properly.

This paper has a number of direct implications for health policy makers and managers. In the present study, a wide range of managerial barriers were identified and classified. The results of this study can pave the way to broadening the corrective interventions. The findings of this paper may also encourage policymakers and managers to plan on the basis of the realities of the developing countries' primary health care system.

Due to the nature of qualitative studies, the researchers cannot generalize the results to other populations. Also, the findings presented here may not be generalized to developed countries, which may enjoy quite different infrastructures and organizational culture. Subsequent research can compare the successful results of NPM reforms in developing and developed countries and provide a comprehensive solution to developing countries' primary health care system.

Conclusion

Due to its growing costs and operational complexities, health care system is of particular concern to any society. In order to solve these problems, NPM methods have been adopted in the health care systems of most OECD countries with the primary idea of avoiding discrimination and injustice and controlling costs. One of the main goals of the current government in Iran has been to administer a reform in the public health system. Therefore, policy makers in this country, like other countries, tend to use NPM methods in the public health sector. The important point in this debate is that while the barriers and limitations are the same for implementing a new reform in most developing countries; unfortunately, these barriers and limitations have been never taken into account in implementing these reforms. Thus, most of the NPM programs suffer from non-implementation syndrome. The major risk to all reforms and interventions is the ‘non-implementation syndrome ’. It is not the absence of good ideas and policies that binds public sector to inefficiency; it is failure to deliver on the promise. These governments cannot perform reforms correctly because they cannot localize interventions. Also they cannot realize real demands.

Hence, for successful implementation of the reform, before implementing NPM reforms, managers should recognize barriers and challenges that this reform may face in their country. Also, they should employ the experiences of other countries in terms of NPM reforms and barriers and challenges these countries have faced. This can lead to a sound planning based on reality and existing conditions and facilities.

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Competing interests

The authors declare there are no competing interests.

REFERENCES

1. Buse K, Walt G. Global public-private partnerships: part II-what are the health issues for global governance? Bulletin of the World Health Organization. 2000;78(5):699-709.
2. Mills A, Brugha R, Hanson K, McPake B. What can be done about the private health sector in low-income countries? Bulletin of the World Health Organization. 2002;80(4):325-30.
3. Basu S, Andrews J, Kishore S, Panjabi R, Stuckler D. Comparative performance of private and public healthcare systems in low-and middle-income countries: a systematic review. PLoS medicine. 2012;9(6):e1001244.
4. Kalimullah NA, Alam KMA, Nour MA. New public management: Emergence and principles. Bup Journal. 2012;1(1):1-22.
5. Brugha R, Zwi A. Improving the quality of private sector delivery of public health services: challenges and strategies. Health policy and planning. 1998;13(2):107-20.
6. Therkildsen O. Efficiency, accountability and implementation: public sector reform in East and Southern Africa: United Nations Research Institute for Social Development Geneva; 2001.
7. Janati A, Hasanpoor E, Hajebrahimi S, Sadeghi-Bazargani H. Health care managers' perspectives on the sources of evidence in evidence-based hospital management: A qualitative study in Iran. Ethiopian Journal of Health Sciences. 2017;27(6):659-68.
8. Tabrizi JS, HaghGoshayie E, Doshmangir L, Yousefi M. New public management in Iran's health complex: a management framework for primary health care system. Primary health care research & development. 2018:1-13.
9. McLaughlin K, Osborne SP, Ferlie E. New public management: Current trends and future prospects: Psychology Press; 2002.
10. Ridley FF. The New Public Management in Europe: Compar ative Perspectives. Public policy and administration. 1996;11(1):16-29.
11. Appana S. New public management and public enterprise restructuring in Fiji. Fijian Studies: A Journal of Contemporary Fiji. 2003;1(1):51.
12. Iancu A. Using the New Public Management's instruments to measure the performance of local public transport service (RATB) in Bucharest. PUBLIC ADMINISTRATION IN THE BALKANS. 2011:278.
13. Laegreid P, Christensen T. Transcending new public management: the transformation of public sector reforms: Ashgate Publishing, Ltd.; 2013.
14. Ferlie E. The new public management in action: Oxford University Press, USA; 1996.
15. Vigoda-Gadot E, Meiri S. NEW PUBLIC MANAGEMENT VALUES AND PERSON-ORGANIZATION FIT: A SOCIO-PSYCHOLOGICAL APPROACH AND EMPIRICAL EXAMINATION AMONG PUBLIC SECTOR PERSONNEL. Public Administration. 2008;86(1):111-31.
16. Austin C. The public and private interface in New Zealand primary health care. New Zealand Family Physician. 2004;31(4):271-3.
17. Hood C. A public management for all seasons? Public administration. 1991;69(1):3-19.
18. Vabo M. New public management: The neoliberal way of governance. Félagsvísindastofnun Háskóla Íslands: http://ts hi is/Working% 20Paper. 2009:204-2009.
19. Bakvis H, Jarvis MD. From new public management to new political governance: essays in honour of Peter C. Aucoin: McGill-Queen's Press-MQUP; 2012.
20. Pollitt C, Bouckaert G. Public management reform: A comparative analysis: Oxford University Press, USA; 2004.

21. Elias Sarker A. New public management in developing countries: An analysis of success and failure with particular reference to Singapore and Bangladesh. International Journal of Public Sector Management. 2006;19(2):180-203.
22. Samaratunge R, Bennington L. New public management: challenge for Sri Lanka. Asian Journal of Public Administration. 2002;24(1):87-109.
23. Samaratunge R, Alam Q, Teicher J. The new public management reforms in Asia: A comparison of South and Southeast Asian countries. International Review of Administrative Sciences. 2008;74(1):25-46.
24. Hope KR. The new public management: context and practice in Africa. International Public Management Journal. 2001;4(2):119-34.
25. Dzimbiri LB. Experiences in new public management in Africa: the case of performance management systems in Botswana. Africa Development. 2008;33(4).
26. Oluwu D. New public management: An African reform paradigm. Africa Development: A Quarterly Journal of CODESRIA. 2002;27(3-4):1-16.
27. Chipkin I, Lipietz B. Transforming South Africa's racial bureaucracy: New Public Management and public sector reform in contemporary South Africa: Public Affairs Research Institute; 2012.
28. Ferdousi F, Qiu L. New public management in Bangladesh: Policy and reality. iBusiness. 2013;5(03):150.
29. Sarker AE. New public management, service provision and non-governmental organizations in Bangladesh. Public Organization Review. 2005;5(3):249-71.
30. Mehrdad R. Health system in Iran. JMAJ. 2009;52(1):69-73.
31. Tabrizi JS, Farahbakhsh M, Sadeghi-Bazargani H, Hassanzadeh R, Zakeri A, Abedi L. Effectiveness of the Health complex Model in Iranian primary health care reform: the study protocol. Patient preference and adherence. 2016;10:2063.
32. Gruening G. Origin and theoretical basis of New Public Management. International Public Management Journal. 2001;4(1):1-25.
33. Simonet D. The New Public Management theory and European health-care reforms. Canadian public administration. 2008;51(4):617-35.
34. Manning N. The legacy of the New Public Management in developing countries. International Review of Administrative Sciences. 2001;67(2):297-312.
35. Larbi GA. New public management as a template for reforms in low-income countries: issues and lessons from Ghana. International Journal of Organization Theory and Behavior. 2006;9(3):378.
36. Flynn N. Managerialism and public services: some international trends. New managerialism new welfare. 2000:27-44.
37. Batley R, Larbi G. The changing role of government: The reform of public services in developing countries: Springer; 2004.
38. Fernandez S, Rainey HG. Managing successful organizational change in the public sector. Public administration review. 2006;66(2):168-76.
39. Palmer N. The use of private-sector contracts for primary health care: theory, evidence and lessons for low-income and middle-income countries. Bulletin of the World Health Organization. 2000;78(6):821-9.
40. Larbi GA. Institutional constraints and capacity issues in decentralizing management in public services: the case of health in Ghana. Journal of International Development. 1998;10(3):377-86.
41. Ohemeng FLK. Getting the state right: think tanks and the dissemination of New Public Management ideas in Ghana. The Journal of Modern African Studies. 2005;43(03):443-65.
42. Pavlov P, Katsamunska P, editors. The relationship of leadership and new public management in central government: Bulgarian specifics. 12th Conference of the Network of Institutes and Schools of Public Administration in Central and Eastern Europe; 2004.
43. Russell S, Bennett S, Mills A. Reforming the health sector: towards a healthy new public management. Journal of International Development. 1999;11(5):767.

44. Gressani D, Saba J, Fetini H, Rutkowski M, Maeda A, Langenbrunner J. Islamic Republic of Iran health sector review, volume I: main report. The World Bank Group. Human Development Sector, Middle East and North Africa. 2007:1575-81.
45. Exworthy M. Professionals and New Managerialism: McGraw-Hill Education (UK); 1998.
46. van Berkel R, Knies E, editors. Bureaucracy, professionalism and managerialism in a street-level bureaucracy context: a frontline perspective. 2013: panel.
47. Sulle A. The application of new public management doctrines in the developing world: An exploratory study of the autonomy and control of executive agencies in Tanzania. Public Administration and Development. 2010;30(5):345-54.
48. Polidano C. Why civil service reforms fail. Public management review. 2001;3(3):345-61.
49. Polidano C. The new public management in developing countries: Institute for Development Policy and Management, University of Manchester Manchester; 1999.
50. Chigudu D. Implementing New Public Management in Zimbabwe: Challenges and Obstacles. Journal of Governance and Regulation. 2014;3(2):43-9.
51. Kelly J, Wanna J. New Public Management and the politics of government budgeting. International Public Management Review. 2000;1(1):33-55.
52. De Boer H, Enders J, Schimank U. On the way towards new public management? The governance of university systems in England, the Netherlands, Austria, and Germany. New forms of governance in research organizations. 2007:137-52.
53. Dawkins J. Budget Reform: A Statement of the Government's Achievements and Intentions in Reforming Australian Governmental Financial Administration. Canberra: AGPS. 1984.
54. Dan S, Andrews R. Market-type mechanisms and public service equity in Europe: A review of evidence. 2014.
55. Krůtilová V. Impact of user fees in health care system on health care consumption. Review of Economic Perspectives. 2010;10(4):113-32.
56. Romanov P. Quality evaluation in social services: Challenges for new public management in Russia. Mixes, Matches, and Mistakes New Public Management in Russia and the Former Soviet Republics Budapest: Open Society Institute, OSI/LGI. 2008:9-53.
57. Korunka C, Scharitzer D, Carayon P, Hoonakker P, Sonnek A, Sainfort F. Customer orientation among employees in public administration: A transnational, longitudinal study. Applied ergonomics. 2007;38(3):307-15.
58. Brady MK, Cronin Jr JJ. Customer orientation: Effects on customer service perceptions and outcome behaviors. Journal of service Research. 2001;3(3):241-51.