

Outsourcing Pharmacies of Integrated Healthcare Centers: Advantages, Disadvantages, and Solutions

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Abstract

Introduction: Pharmaceutical services are of the vital components of primary healthcare, some part of which have been outsourced to the private sector to increase quality and reduce costs. The purpose of the study was to evaluate the advantages, disadvantages, and operational strategies of outsourcing pharmacies of Ahvaz Jundishapur University of Medical Sciences. **Methods:** This qualitative study was conducted in 2018. The population was 122 heads of health centers and experts in network development, pharmaceutical affairs of family physician program, and rural insurance. Data collection tool was three open-ended questions (1- Advantages of pharmacy outsourcing, 2- disadvantages of pharmacy outsourcing, and 3- operational strategies for providing appropriate pharmacy services to people in form of family physician and rural insurance programs). Data was analyzed using the content analysis method. **Results:** The advantages of outsourcing pharmacies of comprehensive university healthcare centers were 4 main themes and 9 sub-themes. The main themes were quality, optimal use of existing software systems, downsizing, and financial management. The disadvantages of outsourcing pharmacies of comprehensive university healthcare centers were 3 main themes and 8 sub-themes. The main themes were control and evaluation, flexibility, and the outsourcing process. **Conclusion:** It is necessary to close contracts with newer contractors each year, emphasize using pharmacist forces in contracts, organize a team to monitor contracts legally and legally, and finally, ongoing monitoring over outsourcing pharmacies and implementation of legal (according to the contract) tools to improve processes and activities for enhancing the services of the outsourcing pharmacies of comprehensive healthcare centers.

Keywords: Pharmacy, outsourcing, comprehensive healthcare centers, Ahvaz Jundishapur

INTRODUCTION

Like other health systems, the Iranian health system faces the challenge of a sharp rise in costs as well. While the overall cost index in Iran has risen by 30 times in the last 20 years, this has been 71 times in health sector costs ^[1]. A glance at healthcare organizations indicates that the public sector providing healthcare is experiencing many challenges and shortcomings like low efficiency, poor quality of the service provided, and cost pressures ^[2, 3].

Medicines account for 20-60% of healthcare costs in developing countries, whereas it is about 18% of the members of the Organization for Economic Co-operation and Development. About 90% of the people in developing countries purchase medicines on their own, so the pharmacies can ensure timely access, safety, and cost-effective use of the drugs for patients and employees by controlling and supervision over the drug use process ^[4, 5].

Implementing a family physician plan is a major step and a significant change in health insurance for people, provision

of healthcare and referral system in Iran, whose most significant results are eliminating confusion in the people admitted to a physician and increasing public satisfaction with health services ^[6]. The family physician program has been designed and implemented in the Iran healthcare system since 2005 for reducing distances, everyone's use of the available facilities, promoting social justice and health status, especially in rural and urban areas with a population below

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20,000. The annual average per capita level of first level services is determined to be 1210000 Riyals, with 13.5% of per capita allocated to pharmaceutical services and 4% to supply pharmaceutical supplements. With the implementation of a family physician program, a framework has been determined for prescribing medicines and physicians are not allowed to prescribe medicines out of the list [7].

Outsourcing in pharmaceutical organizations means pharmacies outsourcing to the cooperative by contracts for doing pharmaceutical affairs [8]. Outsourcing is a motivational strategy and creating competition is one of the significant advantages of outsourcing and it is in the context of competition that the organizations reach excellence. The goals (efficiency, quality, adequacy, justice, and accountability) must be considered in outsourcing services and supplication of resources [9]. The most significant reasons for outsourcing activities in the organization are the possibility of paying more attention to critical activities, reducing costs, poor performance of internal units, lack of criticality of the outsourced activity, better quality, cost, and less time to work outside the organization, insufficient expertise in the organization to provide or to produce a product and finally to improve activities and the services not relevant to the organization in long term [10].

Pharmacy management based on management methods can enhance the efficiency, productivity, and effectiveness of the units and can have a significant effect on planning, organizing, leadership, motivation, communication, human resource management and financial management and information [11]. For different reasons, the organizations try to outsource their internal activities and make their body size as little as possible [12]. Moreover, the outsourcing approach in pharmaceutical services of the healthcare centers has led to significant delegation of some parts of cares to private sector to enhance the quality of healthcare services, increase patient satisfaction, access to more innovative ideas in the light of interaction with other units and organizations, and to reduce public services costs [13].

Mortazavi and Hajebi indicated that the current pharmacy services and pharmacy management system have several shortcomings and abnormalities that lead to the loss of financial and human capital and significantly reduce the efficiency and safety of the pharmacy and drug distribution system in service centers that calls for a deep and thorough revision [14]. Other studies conducted in the world show the inefficiency of public agencies managing medication systems and the efficiency of the private sector, and that outsourcing enhances the performance of health services like increased patient satisfaction, the effectiveness of service delivery by adapting it to local conditions and the need and integration of local demands [15, 16]. As a profitable unit, the pharmacies can bring more profits to organizations besides not changing the quality of service and reducing the cost involved in providing resources if outsourced to the private sector [17]. However, Iran is at its infancy regarding outsourcing, especially in the

field of health, and does not have precise experience and knowledge of what is happening. Given the necessity of evaluating the realization of outsourcing objectives in outsourced units like pharmacies and determining the type of appropriate contract for outsourcing [18], the study was conducted to examine the advantages, disadvantages, and operational strategies of outsourcing pharmacies of comprehensive university healthcare centers of Ahvaz Jundishapur University of Medical Sciences.

METHODOLOGY:

The study was qualitative that was done in 2018. The population was 122 heads of health centers and experts of network development, pharmaceutical affairs of family physician program and rural insurance of Jundishapur University of Medical Sciences. To increase the quality of the study, the inclusion criterion was to have at least 10 years of work experience and sufficient knowledge and experience at various levels of the healthcare system.

Data collection tool was three open-ended questions (1- Advantages of pharmacy outsourcing, 2- disadvantages of pharmacy outsourcing, and 3- operational strategies for providing appropriate pharmacy services to people in form of family physician and rural insurance programs).

In the present study, textual data was reported and analyzed using the content analysis method. According to this method, the main domains and various domains were extracted and encoded from the raw data. The questions were prepared handwritten immediately after implementation and used for qualitative content analysis. Before encoding the concepts, the entire text was read several times, so that the researchers became fully familiar with the data. Semantic units and initial codes were then extracted from raw data. After encoding, the initial codes were classified and similar codes were placed in sub-classes. The main and sub-themes were examined by the Expert Panel and consensus was finally reached in cases where there were disagreements.

In the present study, ethical principles like information confidentiality, gaining informed consent for questions, and the right to withdraw from the study at any stage were heeded by researchers. The results were categorized and analyzed manually without software.

RESULTS:

The advantages of outsourced pharmacies:

After eliminating the repetitive codes and merging the similar ones, finally, 56 codes were obtained that were placed in four main and 9 sub-themes to obtain the advantages of the outsourced pharmacies of the comprehensive healthcare centers of Ahvaz Jundishapur University of Medical Sciences in the analysis of the three open-ended questions. These are explained separately in accordance with Table 1:

Table 1: The advantages of the outsourced pharmacies of comprehensive university healthcare centers

Main themes	Sub-themes	Frequency
Quality	Increasing the quality of pharmaceutical services	55
	Timely supply of needed medicines	45
	Upgrading technical supervision	45
Optimal use of existing software systems	Registration of the electronic health insurance system	60
	Using skilled and familiar forces in electronic systems	48
	Accurate and timely recording of inbound and outbound drugs	53
Financial Management	Costs reduction	55
	Increasing profit	58
Downsizing	Providing human resources from the private sector	53

Quality:

Improving the quality of outsourcing pharmacies of comprehensive university healthcare centers included improving the quality of the pharmaceutical services, timely supply of needed medicines, and upgrading technical supervision.

Respondent 21 stated that “The state-owned pharmacies that outsourced have a better quality of services.”

Another respondent ^[13] stated that “Outsourced pharmacies provide their medicines in a timely manner and deal with the pharmacy and its problems faster.”

Respondent 59 stated that “Outsourced pharmacies are technically supervised more.”

Optimal use of the existing software systems:

Optimal use of the existing software systems included the existence of an accurate and precise system for accurate and timely recording of inbound and outbound medicines and using skilled forces familiar with the electronic systems.

Respondent 49 stated that “The outsourced pharmacies register both their prescriptions on time and their inbound and outbound medicines using specialist forces and overall have a more suitable registration system.”

Financial management:

Financial management included reducing costs and increasing profits.

Respondent 37 stated that “In outsourced pharmacies, the cost of pharmacies, such as the costs of purchasing medicines reduces and the revenue increases (because they purchased from the companies that were both more reputable and offered more discounts).”

Respondent 19 stated that “The costs are reduced in outsourced pharmacies.”

Downsizing:

Downsizing included providing human resources from the private sector.

Respondent 5 stated that “Outsourced pharmacies reduce governmental human resources and the staff of these pharmacies is supplied by the contractors or the contracting parties”.

Disadvantages of outsourced pharmacies:

For obtaining the disadvantages of the outsourced pharmacies of comprehensive healthcare centers of Ahvaz Jundishapur University of Medical Sciences, we finally obtained 37 codes that were divided into 3 main themes and 8 sub-themes that will be explained separately according to Table 2:

Table 2: Disadvantages of Outsourced Pharmacies of comprehensive university healthcare centers

Main themes	Sub-themes	Frequency
Control and evaluation	Challenges related to monitoring contractor contract	43
	Lack of expert and technical forces in the system to monitor and control the performance of the contractor	60
Outsourcing process	Restrictions on the selection of the right contractor	55
	Failure to accurately predict and analyze overhead costs	58
	The contents of the contract not being updated and being inconsistent with new guidelines	48
Inflexibility	Long outsourcing contracts	62
	Changes in the working conditions of the organization over time	42
	Difficulty in returning to pre-outsourcing conditions	44

Control and evaluation:

Control and evaluation included challenges related to contractor supervision and the lack of expert and technical forces in the system to monitor and control contractor performance.

Respondent 28 stated that “The lack of proper supervision over contracts and the lack of specialist staff are among the disadvantages of outsourcing.”

Outsourcing process:

The outsourcing process included the limitations of selecting the right contractor, failure to accurately predict and analyze overhead costs, especially water, electricity, and telephone

costs, and the contents of the contract not being updated and being inconsistent with new guidelines.

Respondent 45 stated that “The lack of anticipation of water, electricity and other costs and the lack of update contracts with the guidelines communicated are among the most important problems of outsourcing.”

Inflexibility:

Inflexibility included long outsourcing contracts, changes in the working conditions of the organization over time, and difficulty in returning to pre-outsourcing conditions.

Respondent 58 stated that “The contracts in outsourcing are very long and difficult to get back to the conditions before.”

Operational strategies to enhance outsourced pharmacies services:

After reviewing the participants' responses, the main strategies were 9 items as follows:

Row	Operational strategies to enhance outsourced pharmacy services
1	Identifying the contractors with better performance
2	Contracts are signed with newer contractors every year.
3	Conducting qualification tests of the forces and their approval by the medical affairs of the university health deputy
4	Emphasizing the use of pharmacist forces in contracts.
5	A detailed analysis of the costs of renting, water, electricity, and telephone according to the rate of inflation in the country and their inclusion in the contracts
6	Announcing a wide-ranging call for more participation of the private sector pharmacies
7	Including guidelines and sections related to medical affairs and family physicians in contract formats
8	Organizing a team to supervise the contracts legally
9	Ongoing supervision of outsourcing pharmacies and implementation of legal (according to the contract) tools to enhance processes and activities.

DISCUSSION:

The study results of the study showed that the good quality of service delivery may be one of the advantages of outsourced pharmacies. This study is in line with the results of Tourani *et al.* [19], Omrani *et al.* [20], Salmani *et al.* [21] and Tan CW *et al.* [22]. However, it is not consistent with the researcher's study. The results of the study by the researcher *et al.* showed that outsourcing of the pharmacies of the rural health centers, despite its promise to enhance care quality like increasing patient satisfaction, may fail [23]. The reason for this inconsistency may be attributed to the population of the study as the population of the researcher study was only rural health centers. Given the good quality of outsourced pharmacy services, managers and policymakers should consider these functions.

The results showed that the proper use of software systems was one of the advantages of outsourcing pharmacies. Today's organizations consider information technology as one of the most significant organizational functions [24]. Outsourcing organizations services has made information technology one of the organizational strategies for efficient increase and reduction of the cost of executing information systems as well as increasing user satisfaction so that this strategy will help build an intra-organizational system to gain competitive advantage, maintain it, and provide better services at a lower cost if it is done properly [25]. Software systems have been used properly in outsourced pharmacies. Including incentive packages could help increase the motivation of outsourced pharmacy staff and contractors.

The results showed that proper financial management can be an advantage of outsourcing pharmacies. In a study on health care logistics outsourcing in Canada, Bolivia *et al.* (2018) concluded that service outsourcing has always been of significance in improving the performance and reforming the health care financial system. Moreover, the proponents of this strategy (outsourcing) argue that outsourcing will enhance performance, promote health goals, reduce costs and increase revenue by creating competition among the service providers and creating economic incentives [26]. It is necessary to facilitate the sustainability and continuity of the activities of contractors that slow down the process of pharmacy outsourcing to manage the outsourced pharmacy financial resources properly.

The results of the study show that one of the advantages of outsourced pharmacies of comprehensive healthcare centers was downsizing. In a study on outsourcing barriers in hospitals of Jundishapur University of Medical Sciences, Alizadeh and Torabipour (2018) concluded that outsourcing advantages are increased profits, increased quality, downsizing and attracting young forces [27]. Different organizations like health centers may adopt downsizing strategies to reach an appropriate size, restructure, adapt to technological advances, specialize in their main business, become flexible, and reduce costs, to remain in the competition, speed up decisions and speed up the implementation of their ideas [28]. As pharmacy outsourcing reduces the size of the government body and leads to the provision of human resources by the private sector, the delegation of other pharmacies of the healthcare centers to the private sector by the university will be helpful in this regard. The study indicated that a lack of proper control and timely evaluations were among the disadvantages of outsourcing pharmacies. The results of Salmani *et al.* (2013) are not in line with the present study. In a study evaluating the outsourcing experience of health services at Tehran University of Medical Sciences, they concluded that control and regulatory standards had a direct effect on private sector behavior. As the supervisors are more concerned with the physical structure and standards of equipment, the private sector has observed them [21]. An efficient health system is the one that reaches greater gains compared to the resources it consumes and an inefficient health system, even if it has a lot of

achievements, wastes resources and is essential for the control and evaluation of the functioning of the health system [29]. Continuous monitoring and enforcement of legal tools (according to the contract) to enhance processes and activities and using pharmacists in contracts can help enhance the control and evaluation of outsourced pharmacies.

Based on the results obtained, the incompleteness of the outsourcing process was one of the disadvantages of outsourced pharmacies. Hirschheim *et al.* (2004) examined outsourcing services to Indian universities and stated the outsourcing weaknesses as employing forces with unrelated specialty, inadequate staff salaries, and long-term contracts [30]. As the weaknesses in contracts and the challenges in outsourcing have been stated in the two studies, organizing an expert team to oversee the contracts legally and legally and announcing a broad and wide call for more participation of private sector pharmacies will enhance the outsourcing process of outsourced pharmacies.

The results showed that lack of timely flexibility was another disadvantage of outsourced pharmacies. Many studies like Rodríguez and Robaina (2004) and Murrey (2017) have shown that outsourcing enhances flexibility, not all of which is consistent with the present study [31, 32]. The reason for this can be attributed to the place of the study as none of the studies had been done in pharmacies. Given the lack of timely flexibility of outsourced pharmacies, it seems that flexibility in outsourced pharmacies could be enhanced if contracts are closed with newer contractors every year.

Limitations:

One of the main limitations of the study was the impossibility of generalization to other parts of the country. Thus, given the different health, geographical and economic conditions of the provinces and cities of the country, it is suggested that studies be conducted by considering these variables.

CONCLUSION:

Although outsourcing is considered as a mechanism for reaching optimal performance and enhancing service quality, it seems that the type of services and the way outsourcing is done, as well as the ongoing evaluation and monitoring of outsourcing units should be considered by the managers and the authorities as an influential factor. Thus, to enhance the services of the comprehensive healthcare centers outsourcing pharmacies, it is necessary to conclude contract with newer contractors every year, emphasize the use of pharmacist forces in contracts, organize a team to monitor contracts legally, and finally supervise the outsourcing pharmacy continually and apply legal tools (according to the contract) to enhance processes and activities.

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