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## **ORIGINAL PAPER**

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# Evaluation of Outsourcing in Nursing Services: A Case Study of Kashani Hospital, Isfahan in 2011

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#### **ABSTRACT**

**Background:** Hospitals need to focus on their core activities, thus outsourcing of services may be effective in some instances. However, monitoring and supervision is a vital mechanism to preserving and enhancing the quality of outsourced services, and to identify the benefits and losses occurred. The purpose of this study is evaluation of nursing services outsourced in a general hospital from different point of views. **Methods:** This is a descriptive and applied study done by case study (before and after) method. Outsourcing nursing services of clinical wards (ENT and Neurosurgery) of Kashani Hospital in 2011 has been studied. We extracted data from a handmade questionnaire about internal customer's satisfaction and semi-structured interviews with officials, and also survey of financial and administrative documents and records related to the topic. **Results:** The findings indicate an increased number of graduated nurses per bed to fulfill the main objective of outsourcing in this case. But achieving this objective is accompanied with remarkable increased costs per bed after outsourcing. Besides, we noticed minor changes in internal customer satisfaction rate. **Conclusion:** While outsourcing should bring about staff and patients' satisfaction and increase the efficiency and effectiveness, outsourcing nursing workforce singly, leaded to a loss of efficiency. Therefore, the applied outsourcing has not met the productivity for the hospital. **Key words: Evaluation, Outsourcing, Nursing Services, Hospital.** 

### 1. INTRODUCTION

The process of increasing the costs and decreasing the resources is growing steadily. In addition, it leads to growing gap between the potential and needed resources. In developing countries the share of hospital in the government health sector costs is between 50 to 80 percent. While in developed countries do not exceed from 40 percent because of supervision and regulation of costs (1). Government incumbency in policy making, implementation and monitoring led to high pressure on its body which in turn made hospital system to outsourcing some affairs to non-governmental sector in order to improve efficiency (2). Approaches to outsourcing are varied from simple purchasing services from non-governmental sector to at the other end, privatization and the complete transfer of management and ownership to the non-governmental sector. These methods are:

- Outsourcing;
- Privatization;
- Lease:
- Affiliation;
- Decentralization;
- Quasi Market (1, 2, 3).

Hospitals Like most other governmental organizations, with their insufficient attention to importance of policy making and planning, scarify them for implementation affairs. On the other h and, hospitals waste their resources and these lead to neglect about competition and improvement. Thus, over the recent years "Iranian Ministry of health and Medical Education" in order to the rationale the size of government, strengthening the accountability and enhancing efficiency of health services delivery, has put the strategy of outsourcing in its agenda. (2,4,5).

In addition to the above, there are various reasons for organizations to outsource their internal operations and downsizing. The main reasons for outsourcing are: focusing on their core activities, including quality of services, safety and patient rights, improving the poor performance of internal units within the organization. (6).

Generally, the outsourcing process can be included:

- determine an appropriate decision maker unit;
- determine set of transferable work;
- contractor selection;
- contract management and process control;
- and finally decision about end of outsourcing contract (7, 8).

Undoubtedly the most important step of the process, is managing the outsourcing process to take appropriate decisions in connection with continuing or terminating works.

Based on research results of Lussier (5, 9) using outsourcing methods not only lead to deregulation, reduction of job classes and the hierarchy of superior and inferior, but also have fruitful effect on the efficiency and increasing the production scale and reducing costs by use of timely monitoring. In addition, based on World statistics, more than 90 percent of organizations are outsourcing at least one of its activities. Meanwhile, according to the latest reports, about 30 percent of them after 2 years of outsourcing have expressed dissatisfaction.

Outsourcing includes more than 80 criteria for measuring; this shows how organizations outsourcing their activities should be planned and controlled. (10). Ferdosi et al. in a survey about "Evaluation of Medical Record Services Outsourcing of Kashani Hospital" declared reduction of 4.5 percent in medical costs per case, Down 37.4 percent in case of deficiencies and at last 78.2 percent improvements in the unit processes (2). Also, Tourani et al. in their study about outsourcing in educational hospital pharmacy, saving money in staff cost and purchase of drugs and improve the satisfaction of the department officials have concluded (5). In the field of outsourcing support services, Tabibi et al. in their study on the hospital's country, have been expressed improved efficiency and increased employee and patients satisfaction (11).

It is crystal clear that the implementation of outsourcing strategy would have a significant impact on its effectiveness (6, 7). The purpose of this study is outsourcing evaluation from different point of views. In addition, we are going to determine the main reason for outsourcing and to identify the possible benefits and losses occurred.

### 2. SUBJECTS AND METHODS

This is a descriptive and applied study done by case study (before and after) method. Outsourcing nursing services of clinical departments (ENT and Neurosurgery) of Kashani Hospital has been studied. Data has been extracted from the questionnaire (Internal customer's satisfaction) and semi-structured interviews with officials, and also survey of financial and administrative documents and records related to the topic. Due to the use of various tools, method of study is Triangulation.

In the first phase, with a semi-structured interviews with those involved in outsourcing process (by purposive sampling, continued until data saturation), we determined the primary purposes of outsourcing from their view points.

In the second phase, we evaluated the internal customer satisfaction by an internal customer satisfaction questionnaire (Alpha Chronbach= 83.2 percent and validity confirmed by experts in the field of management).

Eventually in third phase, we extracted data on total cost, and manpower costs (number, qualification, experience), in same and equal to 12 months before and after the outsourcing by reviewing financial records and hospital information system.

#### 3. RESULTS

Interviews with some officials revealed that Manpower shortages and some legal problems was the major causes of outsourcing. Thus, in order to evaluate the outsourcing, we assessed the following indices:

- The cost per bed in clinical departments (ENT and Neurosurgery) before and after the Outsourcing;
- staffing per bed Capita before and after Outsourcing;

 Performance of nursing staff from internal customers view points.

According to the data, hospital costs in both Neurosurgery and ENT department before and after outsourcing are as follows (table 1):

After Outsourcing (Rial)	Before Outsourcing (Rial)	Cost items1
101,330,935	174,360,386	Official personnel salaries
315,593,333	0	Paid to the company
0	92,669	Medical Equipment
416, 924, 268	174,453,037	Total hospital costs
10,168,885	4,254,952	Cost per bed (41 beds in two wards)

Table 1. Average total hospital costs in both Neurosurgery and ENT department in a month

Total staffing per bed in the two departments are as follows: Based on system-oriented approach, Total number of required staff in both departments is 31 people. Before outsourcing 29 people and after outsourcing 38 people has been used to deliver services. The numbers of graduate nurses were 12 people before and 15 after outsourcing (table 2).

After Outsourcing	Before Outsourcing	Cost items <sup>1</sup>
0.92	0.70	Total number of staff per bed
0.36	0.29	The number of graduate nurses per bed

Table 2. Status of Human resources in Neurosurgery and ENT departments before and after of outsourcing

Based on the table, Total number of staff per bed has increased from 0.7 to 0.9 after outsourcing. In addition, the number of graduate nurses per bed increased from 0.29 to 0.36 after outsourcing. Due to the developed questionnaire asking from Chief executive officer, contract manager, Administrative Affairs director, Director of Nursing, Education Supervisor, Neurosurgery and ENT Supervisors, Accounting Officer) results indicate that satisfaction rate is about 63.96 percent before outsourcing and 64.55 percent after outsourcing.

# 4. DISCUSSION

Results of research on costs, staffing per bed and internal customer satisfaction before and after the outsourcing showed the following results:

Due to the fact revealed from interviews that the main and most important goal of moving toward outsourcing nursing services in this case was the lack of human resources and legal restrictions for applying formal staffs, increased number of staff per bed, indicates that the primary objective is achieved, and reflects the effectiveness of the strategy. This result is similar to Tourani et al. (5) study about efficiency and effectiveness of outsourcing pharmacy of educational hospital. Based on this study, the number of prescriptions and customer and staff satisfaction had been increased after outsourcing. Likewise, in Ferdosi et al. (2) survey about outsourcing medical record unit, improved effectiveness of medical record unit was the most important success which is done. But in the case of Kashani hospital, some problems such as employing inexperienced staff and inadequate number of male staff, emphasizes on the outsourcing contracts to be more precise and clearer. In addition, survey on costs before & after the outsourcing indicates that

cost per bed showed a remarkable increase after outsourcing. On the contrary, Ferdosi et al. (2) reported that outsourcing could be advantageous from the economic view and have an reducing impact on the health services cost (in medical record unit). This result has been approved in Royeentan (12), Tourani (5) and Tabibi (11) study, too. Vaziri and Arabi (13) in their study have pointed out that the main reason of outsourcing is usually decreasing service costs. However, converse results in our study may be due to shortages of staff before outsourcing. Tanhaie (6) claims that human resources are the major element of hospital costs, so outsourcing may lead to cost savings.

Furthermore, by means of questionnaire which indicated the internal customer satisfaction from the performance of nongovernmental staff, the results showed only a subtle growth in their satisfaction rate after outsourcing (63.96 percent before VS. 64.55 percent after). Although this difference is not tangible, it is consistent with study of Ferdosi (2), Tabibi (11), Tourani (5) and Joudati (14). Maschuris and Kondylis (15) in their study about outsourcing in public hospitals, claim that cost savings and customer satisfaction are the most important factors influencing the decision to outsourcing. In our case study, increasing costs and insignificant changes in satisfaction made authorities to terminate the contract after one year.

Outsourcing clinical services is a challenging area and further studies are necessary. The results of Barati and Joudaki (16) in their comparative study to provide suitable model for Iran about Privatization with contract method, pointed out that contract method is acceptable in the field of supportive services and Para clinic ones, primary health care, specific disease and disease control. But, they did not recommend it for clinical services. This result is consistent with study of Tabibi (11), Joudati (14), Torani (5), Ferdosi (2) and Roointan (12).

Based on Preker and Harding organizational model (17, 18) when public hospitals are moved towards the market, the key decision for policy makers is the degree and extent of this displacement.

In general, it seems that despite the effectiveness of outsourcing the clinical services to achieve its primary objective (shortage of manpower in this case), this strategy do not make a high efficiency and finally the productivity is decreased. Cost-benefit analysis, cost accounting of services, contracts performance records and monitoring the quality of provided services has always been a vital factors in the effectiveness and efficiency of outsourcing strategy. On the other hand, hospitals must pay full attention to organizational culture and reactions to which are results of presence of non-governmental sector in a public organization; because subjects like equity in payment could bring new problems in our hospitals. Non-government sector can be put under an effective management or not. The discussion about the roles and responsibilities in public and Non-government sectors is dependent to "appropriate framework and infrastructure" (19).

In general, lack of a fully developed mechanism for outsourcings (including three key elements: comprehensive law, strong regulatory institutions and independent administrative institution) may bring up some problems. The basic solution in this regard is taking advantage of the experiences of successful countries, adopting scientific approach, comprehensive legislation which defined the boundaries of outsourcing, supervisory and executive bodies (20).

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