

Does outsourcing paramedical departments of teaching hospitals affect educational status of the students?

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Received: 2 September 2015

Accepted: 28 June 2016

Published: 2 August 2016

Abstract

Background: There is an increasing trend of outsourcing public departments. Teaching hospitals also outsourced some of their departments to private sectors. The aim of this study was to investigate and compare the educational status of students in public and outsourced departments of teaching hospitals affiliated to Iran University of Medical Sciences.

Methods: This study was conducted in six teaching hospitals of Iran University of Medical Sciences, which had public and outsourced teaching departments in 2015. One hundred fifty students from the departments of radiology, physiotherapy and laboratory participated in this study and their perceptions about their educational status were assessed. A valid and reliable questionnaire was used; participation in the study was voluntary. Descriptive statistics such as mean (SD), t-test and Kolmogorov-Smirnov were used.

Results: No difference was detected between the educational status of students in public and outsourced departments of radiology, physiotherapy and laboratory ($p>0.05$).

Conclusion: Based on the students' perception, the private sectors could maintain the educational level of the teaching departments similar to the public departments. It is recommended to involve all the stakeholders such as hospital administrators, academic staff and students in the decision-making process when changes in teaching environments are being considered.

Keywords: Outsourcing, Public Private Partnership, Education, Teaching Hospitals.

Cite this article as: Moslehi Sh, Atefimanesh P, Sarabi Asiabar A, Ahmadzadeh N, Kafaeimehr M, Emamgholizadeh S. Does outsourcing paramedical departments of teaching hospitals affect educational status of the students?. *Med J Islam Repub Iran* 2016 (2 August). Vol. 30:404.

Introduction

The rising expenditures of the hospitals cause cost crisis and create challenges on resource allocation and budgeting (1-3). To control and decrease the costs and increase the quality of services, governments use outsourcing methods (4,5). The reasons hospitals' administrators choose to outsource healthcare services is to decrease operating costs (6,7), improve quality (8,9), encourage investments in medical equipment and

new technologies, increase patients' satisfaction (9,10) and employ effective staff (4,5).

Hospital administrators may outsource clinic, para clinic and support services and departments to the private sector through different methods. Public- Private Partnership (PPP) is one of the outsourcing methods widely used in hospitals (7). PPP is an agreement between a public and a private sector (5), in which the public sector as-

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signs the specific services or operations to the private sector (7,11) in return for a benefit (5). Recently, many radiology, laboratories, physiotherapy, dialysis and pharmacies have been outsourced (9,12).

Teaching hospitals may also use outsourcing methods to increase the quality of care and decrease the costs (3). Teaching hospitals are affiliated to medical sciences universities and have the mission of distributing medical knowledge to medical and paramedical students in addition to health care delivery. Thus, these hospitals may face more challenges caused by outsourcing the services or departments to a private sector (3,13).

Teaching hospitals should make available educational environments for the students while they are outsourcing some services and departments (14-16). Assessing the educational environment comprehensively shows what is happening (17,18) within the class, department, faculty or hospital (14-16,19). There are many studies assessing the students' perceptions of their educational environment (18,20-23), as many medical universities and teaching hospitals believe that the students are the main stakeholders in their own education (18,24).

To our knowledge, the literature has not discussed the differences between educational status in public and outsourced departments.

Iran University of Medical Sciences, like other medical universities, outsourced some services and departments in hospitals. The aim of this study was to study and compare the educational status of students in public and outsourced departments of radiology, physiotherapy and laboratory in Iran University of Medical Sciences.

Methods

In this study, students studying in public radiology, physiotherapy and laboratory were compared to those working in outsourced departments. Iran University of Medical Sciences had outsourced some teaching departments of its teaching hospi-

tals to increase the quality of services and decrease the costs. This study was conducted to examine whether or not this outsourcing affects the quality of educational status of the students. Educational status is defined as the level of education or skill obtained in a profession.

This study was conducted in six teaching hospitals of Iran University of Medical Sciences, which had public and outsourced teaching departments in 2015. One hundred fifty students participated in this study and their perceptions of their educational status were assessed. The students studying in the departments of radiology, physiotherapy and laboratory at six teaching hospitals in the second semester of 2014-2015 were included in the study.

The inclusion criterion for selecting hospitals was as follows: Hospitals, which had students in teaching departments of radiology, physiotherapy and the laboratory. The hospitals that did not have the mentioned departments, or did not have students in these three departments were excluded.

The authors used a five-point Likert type scale questionnaire, whose validity and reliability have been confirmed. The validity and reliability were measured by experts. The content validity of this instrument was 83.5 and Cronbach's alpha was 0.86.

The demographic questions were also used to collect data on age, sex and level of education. Involvement in the study was voluntary and participants could decide not to participate at any time.

Data entry and analysis were done using the Statistical Program for Social Sciences (SPSS) Version 19.0. Descriptive statistics such as mean (SD), t-test and Kolmogorov-Smirnov (for testing the normality) were used in this study. A $p < 0.05$ was considered as statistically significant.

Results

About 39.4% (n=59) of the participants were male and 60.6% (n=91) were female. About 63.3% (n=95) of the students were studying in outsourced departments while 36.7% (n=55) were studying in public de-

Table 1. The Association between Students' Educational Status in Public and Outsourced Departments of Physiotherapy, Radiology and Laboratory

Department	Status	Mean	SD	p
Physiotherapy	Outsourced	4	0.63	0.575
	Public	4.09	0.33	
Radiology	Outsourced	3.31	0.72	0.696
	Public	3.41	0.52	
Laboratory	Outsourced	3.25	0.56	0.399
	Public	3.41	0.53	

departments. About 26.7% (n=40) of the students were in physiology, 37.3% (n=56) in radiology and 36% (n=54) in laboratory department.

The Kolmogorov-Smirnov test was used to assess the normality of the data (Table 1). Data followed the normal distribution ($p > 0.05$).

No association was detected between students' educational status in public physiotherapy departments and outsourced ones ($p > 0.05$). This means that there were no meaningful differences between the educational statuses of students in public or outsourced physiotherapy departments (Table 1). Furthermore, no association was found between the educational status of students in public and outsourced radiology and laboratory departments (Table 1).

Discussion

The results of this study revealed no difference between the educational status of students in public and outsourced departments.

Nowadays, there is an increasing trend of outsourcing public departments (9,25); and many hospital departments have been outsourced during the years (9,12). However, there is a little knowledge about how students in public and outsourced educational departments of hospitals differ from each other (25-27).

Many surveys had been done on the educational status and environments in different countries, but they did not compare the scores nor assessed the relations between the public and outsourced departments (18, 28-35). To the authors' knowledge, this study was the first of its kind in Iran, which aimed to assess and compare the educational status of the students in public and out-

sourced teaching departments of hospitals.

The results of this study are in line with Diwan and et al. (25) survey, which assessed the Indian medical students in public and private sectors of medical schools in 2013. The authors found no differences between the students in public and private medical schools.

Sarfraz Khan and et al. in 2009 (36) found a difference in the medical education between the private and public sectors. On the other hand, another study showed some differences between public and private departments and found that the private education departments had a higher success rate and greater prestige when compared to their public sector in Pakistan (36,37). The authors argued that it could be due to their financial resources.

The limitations of this study include its relatively small sample size; also, participants were only from three departments of physiotherapy, radiology and laboratory of Iran University of Medical Sciences. It is not clear whether the results of this study reflect the opinion of the entire Iranian students in all public and outsourced departments. The authors believe that nationwide surveys are needed.

Conclusion

This study found no difference in the educational status of students in public and outsourced paramedical departments of teaching hospitals at Iran University of Medical Sciences. Although this means that private sectors could maintain the educational level of the teaching departments like the public departments, more studies are needed.

While the public sector could not afford to purchase the new technologies, it is criti-

cal for public teaching hospitals to benefit from the private sector investments in medical equipments and new technologies to develop the educational status of the students.

It is recommended to assess the educational status of the students before outsourcing a teaching department to help the decision makers have a comparison before and after outsourcing a unique department. Moreover, this is useful to define the same educational packages for students in public and outsourced departments of teaching hospitals. Sharing the same teaching methodologies, curriculum and examination could help the researchers to assess the educational status of the students with less bias.

The results of this study are important for academia, healthcare managers, decision makers and the managers of departments in teaching hospitals. It is recommended to involve all the stakeholders such as hospital administrators, academic staff and students in the decision-making process when changes in teaching environments are being considered.

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