



2528-9705



THE EFFECT OF FINANCIAL AUTONOMY ON MEDICAL TREATMENT IN CENTRAL PUBLIC HOSPITALS IN VIETNAM

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ABSTRACT

Although autonomy provides a better opportunity for Vietnamese public agencies to operate more efficiently, many obstacles related to autonomy need to be addressed for the better operation of these agencies. This study analyzes the impact of financial autonomy on medical treatment among central public hospitals of Vietnam. In addition to reviewing autonomy regulations, the research looked at patient care in key public hospitals. The data collected served as an example for the assessments of patients and non-patients on their care and any changes in their health. The result implicates that, the professional level of doctors participating in treatment at central public hospitals is very good; therefore, even though patients have to share a bed with other, the positive change in the patient's health is very positive. However, central public hospitals are facing barriers from current policies; consequently, the ultimate goals of financial autonomy in healthcare sector could not be reached. Discussions and recommendations will be pointed out for the better prospective landscape of central public hospitals.

Keywords: *Autonomy, Hospital, Patient, Policy.*

INTRODUCTION

Medical care is a special activity related to the lives of people in all regions of the country. Like most countries around the world, public hospitals play a key role in medical examination and treatment for people in Vietnam. In the system of public hospitals, central public hospitals are having a team of leading experts in the medical field. They are general and specialized hospitals with the best quality in the country. Central public hospitals are hospitals affiliated-with the Ministry of Health or other central ministries. These hospitals received the best investment from the State in terms of facilities as well as medical equipment to serve medical examination and treatment. Possessing a team of leading medical experts and the best medical equipment are the foundation for these public hospitals to play a leading role in scientific research and development of the medical industry, as well as take on roles and responsibilities on implementing direct-line guidance for lower quality hospitals. However, in the context of socialization and financial autonomy are being promoted in many areas of socio-economic aspects, healthcare field in Vietnam cannot stand out from this trend (Cheng, 2014; Nguyen *et al.*, 2020). The promotion

Geliş tarihi/Received: 14.05.2024 – Kabul tarihi/Accepted: 05.09.2024 – Yayın tarihi/Published: 15.09.2024

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of financial autonomy, on the one hand is being seen as having a positive impact on increasing financial resources for public hospitals. On the other hand, it affects the chance of patients to access healthcare because of high costs for medical examination and treatment. Fees from medical examination and treatment becomes the main source of revenues for these public hospitals. Therefore, it is necessary to research and evaluate the evaluation of views of patients, who come for examination at central public hospitals. Patients' assessments on accessing to the medical equipment system and their health's changes are useful information about the results of implementing the financial autonomy policy in Vietnam, especially are in central public hospitals.

MATERIALS AND METHODS

The hospital's job as a component of the healthcare system is to make sure that patients receive complete medical treatment, including preventative and curative care. In community health care, the hospital serves a broad role that is harmoniously connected to both society and the medical sector; it is neither distinct nor isolated (Cole, 2020). Public health care, however, remains a vital hospital function (Davis *et al.*, 2004; McCarthy, 2010). In order to examine and treat patients, hospitals are frequently furnished with a large number of beds and medical equipment. A group of extremely skilled medical professionals is also available at the hospital to handle both inpatient and outpatient duties. When a doctor schedules an inpatient treatment visit or receives a referral from another medical facility, inpatient therapy is administered. The patient has to be admitted to the hospital in order to get inpatient care (Anguelovski *et al.*, 2020). As opposed to this, outpatient therapy occurs when a patient follows a doctor's order without the necessity for hospitalization (Zhang *et al.*, 2018).

Since the early 1980s, public sector hospitals around the world have been subject to close scrutiny from the public agencies. The public sector's financial obligations have led to expectations for efficiency and effectiveness under centralized government supervision, in addition to the public sector's complicated bureaucracy. Giving public hospitals more authority to manage the operations of public health facilities is one policy choice that governments are very fond of. Because of this, "hospital autonomy" efforts have been put forth as a crucial component of the health sector reform process in several affluent nations (like Denmark, France, Singapore) and numerous developing nations (like Ghana, Indonesia, Kenya). Research was done in India and Indonesia outside of Africa, as well as in Ghana, Kenya, and Zimbabwe in sub-Saharan Africa. The main goals of the studies were to: a) describe and analyze the experiences of public sector hospitals with hospital autonomy in each of these countries; and b) draw wider lessons on hospital autonomy maintenance from the experiences of these countries. Hospitals are categorized as budget units, autonomous units, cooperative units, and private units based on their financial autonomy; each type of hospital has varying degrees of autonomy, which are expressed in the following aspects: the right to decide; market access; ultimate beneficiary; social responsibility and function. This classification was made by Nhung Thach Phuong *et al.* (2023) in I study Improving Hospital's Quality of Service in Vietnam: The Patient Satisfaction Evaluation in Multiple Health Facilities. The study Autonomy and Responsibility in Japanese hospitals by Kodera and Yoneda (2019) analyzed the process of deep and extensive reform of Japan's public hospital financial system in recent times. The goal of the reform is to increase the autonomy and



responsibility of public hospitals. Through analysis, the author has pointed out the factors that determine the success of public health system reform and drawn lessons for lower middle-income countries in implementing this activity. The author's research has practical significance not only for Japan but also for countries that are reforming their public hospital financing systems. Numerous cutting-edge medical gadgets are created as technology develops. Faster and more accurate patient examinations and treatments are made possible by it.

Medical examination and treatment are directly impacted by medical equipment, a specific commodity. Because it helps doctors diagnose and treat patients precisely, promptly, safely, and efficiently, it is one of the key elements influencing the efficacy and quality of medical practice. For this reason, hospitals always value having access to a system of specialized and contemporary medical supplies, equipment, and instruments.

System is a concept used to refer to whole entities, that is, things and phenomena with a unified and complete structure, arranged according to certain principles and relationships, and governed by some general rules. The system consists of components that interact with each other to perform necessary functions. Changes in this part will impact more or less, directly or indirectly, on other parts in the system. The health system, therefore, is a complex of people, organizations and resources arranged and linked together to promote, restore and maintain health for the community (Pham Tien *et al.*, 2023). The healthcare system contains people who "buy" medical services and people who "sell" medical services, and there are rules that control that "buying" and "selling" process. The basic difference between this "buying" and "selling" and other service market systems is that the "buyer" is not completely knowledgeable about the "goods" he or she intends to buy (it is difficult for the patient to know that he or she has the disease). What to do, how to treat it and how much it will cost), and the "seller" does not have the right to maximize profit on the "goods" they sell. There is an ethical bond between medical service providers and medical service users.

The medical facility system is a component of the medical system. The medical facility system is classified by economic sector, by medical level and by fields of activity. Operating mostly on public or nonprofit donations for funding, public medical institutions are facilities that the state has invested in both facilities and finances. In order to provide public health care units with complete autonomy and responsibility to grow and develop their operations and enhance their performance, the operational and financial mechanisms of the units are being reinvented. High quality medical examination and treatment. Central level hospitals are hospitals at the highest level in the health sector organization system. Hospitals at the central health level and a part of the hospitals at the local health level (province and city health lines directly under the central government) form specialized medical areas with the task of using high technology, spearhead, focusing on scientific research activities, scientific and technical direction and support for local medical services.

In order to gather information for evaluating the state of medical equipment at several central public hospitals, the study looked at 162 individuals receiving care at seven different central hospitals: Bach Mai, Viet Duc, K Tan Trieu, E. Thai Nguyen, Lung Central, and Central Endocrinology. There were both inpatient and outpatient patient groups among the interviewees. Certain patients will possess health insurance cards, while others will not, as a result of the random survey method's selection. In order for these individuals to evaluate "the current level of medical equipment serving the treatment/treatment process at the hospital," questions based



on the Likert scale will be posed to them (C12). The patient's instinctive appraisal of hospitals' cutting-edge medical technology is persuasive, despite the fact that their evaluation lacks professional credibility. The details on the condition of medical examination and treatment equipment in hospitals are quite helpful.

The Likert scale was employed in the study to enable the patients under investigation to rate their own level of health improvement following hospital treatment. The study compared the evaluation of the change in the patient's health following treatment between the chosen institutions using the estimation with categorical variables approach. Compare the assessment of the quality of medical equipment at these institutions with the variation in the course of the disease. The investigation was also carried out to see whether improvements in the illness status were dependent on social factors such as: choice of a voluntary treatment room (bedroom for treatment with high cost), choice of doctor...

Reviews Polices on Financial Autonomy for Public Hospitals

The Department of Medical Examination and Treatment Management is assigned by the Ministry of Health to be the focal point to establish councils to build a list of technical services and technical processes. The Department is responsible for coordinating with the Department of Financial Planning and experts to develop technical and economic norms as a basis for establishing medical service prices. Up to now, the results have not been achieved, are incomplete and still have many shortcomings because the construction of the technical list is still independent of the construction of medical service prices. Medical service prices are also determined by the opinions of leading doctors from many hospitals across the country. Therefore, out of a total of more than 18,239 technical service categories, only about 947 services are built based on technical and economic norms (Chen, 2013; Nam *et al.*, 2020). More than 4,000 technical service categories have not yet been priced and over 11,000 services have no technical process. At the same time, the service list has not been updated; lack of connectivity; The group list is not reasonable, the price is higher or lower than the actual cost, the same price but different drugs, supplies, chemicals, human resources, time and payment conditions should be implemented at hospitals. There are still many problems and errors so social insurance refuses to pay. A comparison of hospitals in the same class, including Hue Central Hospital, Bach Mai Hospital, and Cho Ray Hospital, reveals that their standards for the use of medications, supplies, and chemicals in the overall expenses of medical examination and treatment varied (Pham *et al.*, 2019).

The price of medical examination and treatment services based on health insurance payments has not been fully calculated according to the current price, and has not kept up with the price calculation roadmap in Decree No. 85/2012/ND-CP and Decree No. 16/2015. /ND-CP;

Up to now, bidding for equipment procurement is still carried out on the basis of general legal documents on capital investment issued by the Government and functional ministries and branches, in other words, there is no document yet. There is no specific document on the procurement of medical equipment for public hospitals that are assigned autonomy. Units that are assigned autonomy, when investing in building facilities using the Public Service Development Fund or loans, not state budget capital, must still fully carry out investment procedures and submit them to competent authorities approval rights. Joint venture activities to install machinery and equipment in hospitals also apply the same process as for public service



units according to the Law on Management and Use of Public Assets No. 15/2017/QH14 dated December 21, June 2017 and the Ministry of Health have drafted a Circular to provide specific guidance, but it has not been agreed upon by ministries and branches.

RESULTS AND DISCUSSION

Of the 162 patients who responded to the questionnaire, there were 34 inpatients and 138 outpatients; Of which only 24 patients answered the number of days of inpatient treatment up to the time they were investigated; 20 people provided information about the estimated number of days remaining in inpatient treatment until discharge. Data processing results show that inpatients had an average number of days in the hospital until the time of interview was nearly 3 weeks; and they are about 2 weeks away from being discharged from the hospital. Outpatient treatment time is generally less, as they only need about 3 weeks to return to their normal health state after seeing a doctor (**Table 1**).

Table 1. Responses of interviewees about their treatment times

	N	Minimum	Maximum	Mean	Std. Deviation
Inpatients					
The number of days of inpatient treatment up to the time they were investigated	24	3	90	19.75	17.316
The number of days remaining in inpatient treatment until discharge	20	0	90	14.15	20.459
Outpatients					
The number of days of treatment up to the time they were investigated	127	1	250	13.28	28.540
Estimated number of days of treatment until recovery	108	0	40	7.44	6.240

Source: Data from investigated 162 patients being treated at 7 central hospitals

When comparing the duration of inpatient stays in central hospitals between the patient population with insurance cards and the patient population without insurance cards, according to statistical findings, just 7 patients out of the 155 patients who are still alive do not utilize their health insurance cards. While patients receiving inpatient treatment without a health insurance card sometimes only need to be treated for less than a week before being released from the hospital, patients with cards typically stay for at least three weeks throughout their stay. Those with insurance cards are able to predict how long they will need to stay in the hospital for treatment; however, those without insurance cards are rarely certain of the precise number of days they will need to stay. Until patients are released from the hospital, they might keep receiving treatment (**Table 2**).



Table 2. Patient's treatment time based on insurance card ownership status

	N	Minimum	Maximum	Mean	Std. Deviation
Having insurance card					
The number of days of inpatient treatment up to the time they were investigated	149	1	250	14.43	27.288
The number of days remaining in inpatient treatment until discharge	128	0	90	8.49	10.070
Unhaving insurance card					
The number of days of inpatient treatment up to the time they were investigated	2	4	7	5.50	2.121
The number of days remaining in inpatient treatment until discharge	0				

Source: Data from investigated 162 patients being treated at 7 central hospitals

Based on the outcomes of data processing, the evaluation and impression of the state-of-the-art medical equipment supporting the hospital's examination and treatment procedure for inpatient and outpatient groups differ somewhat. Information from 162 patients, including inpatient and outpatient. Just around 50% of inpatients agree with the evaluation if approximately 65% of them believe that the hospital's medical equipment that supports the examination and treatment procedure is ranked at a good level. This. From lowest to highest, if we compare each pair of inpatient and outpatient evaluations with the degree of modernity of medical equipment supporting the hospital's examination and treatment procedure, the patient Compared to inpatients, outpatients frequently have a more relaxed attitude (**Table 3**).

Table 3. Perceived level of modernity of medical equipment serving the examination/treatment process at the hospital for inpatient and outpatient groups

		Assessments of interviewees					Total	
		1	2	3	4	5		
Code BNNT-NT	Inpatient	Count	1	1	14	9	9	34
		% within Ma BNNT-NT	2.9%	2.9%	41.2%	26.5%	26.5%	100.0%
		% within c12	100.0%	10.0%	28.6%	14.3%	23.1%	21.0%
	% of Total		.6%	.6%	8.6%	5.6%	5.6%	21.0%
	Outpatient	Count	0	9	35	54	30	128
		% within Ma BNNT-NT	.0%	7.0%	27.3%	42.2%	23.4%	100.0%
% within c12		.0%	90.0%	71.4%	85.7%	76.9%	79.0%	
% of Total		.0%	5.6%	21.6%	33.3%	18.5%	79.0%	

	Count	1	10	49	63	39	162
Total	% within Ma BNNT-NT	.6%	6.2%	30.2%	38.9%	24.1%	100.0%
	% within c12	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	.6%	6.2%	30.2%	38.9%	24.1%	100.0%

Source: Data from investigated 162 patients being treated at 7 central hospitals

When considering the evaluation of patients with insurance cards compared to the remaining patients, the data processing results show that people with health insurance cards have a more lenient view of the modernity of medical equipment. Used to examine and treat their diseases; On the contrary, the group that does not use health insurance cards expressed a more strict feeling (Table 4).

Table 4. Perceived level of modernity of medical equipment serving the examination/treatment process at the hospital among patients with health insurance cards

		Assessments of interviewees (c12)					Total	
		1	2	3	4	5		
Ma SHTBH	Having insurance card	Count	1	9	45	63	37	155
		% within Ma SHTBH	.6%	5.8%	29.0%	40.6%	23.9%	100.0%
		% within c12	100.0%	90.0%	91.8%	100.0%	94.9%	95.7%
		% of Total	.6%	5.6%	27.8%	38.9%	22.8%	95.7%
	unhaving insurance card	Count	0	1	4	0	2	7
		% within Ma SHTBH	.0%	14.3%	57.1%	.0%	28.6%	100.0%
		% within c12	.0%	10.0%	8.2%	.0%	5.1%	4.3%
		% of Total	.0%	.6%	2.5%	.0%	1.2%	4.3%
Total	Count	1	10	49	63	39	162	
	% within Ma SHTBH	.6%	6.2%	30.2%	38.9%	24.1%	100.0%	
	% within c12	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	.6%	6.2%	30.2%	38.9%	24.1%	100.0%	

Source: Data from investigated 162 patients being treated at 7 central hospitals

Evaluation of the investigated patient group about health changes after treatment, regression estimation results show whether or not the family personally thanks the treating team of doctors. The condition has no bearing on the course of treatment (Pvalue > 5%); the circumstances are the same regardless of whether the patient selects their physician or the head of the treatment unit prescribes the course of action. In contrast, patients who meet the requirements for medical treatment in volunteer rooms recover more quickly from their illnesses than those who do not utilize voluntary rooms (Pvalue < 5%). Put another way, the regression results demonstrate that: patients do not need to worry about not receiving quality care from a doctor; even sharing a bed with other patients does not prevent the top medical team's treatment from improving their



health; and doctors' conditions are generally very good at central public hospitals. Treatment outcomes will improve when a voluntary chamber is used because it fosters a sense of comfort and individual autonomy (Table 5).

Table 5. Assessments of the patient team on health status changes

Source	SS	df	MS	Number of obs = 162		
Model	5.53994399	4	1.384986	F (4,157)	= 1.77	
Residual	122.9045	157	.782831213	Prob >F.	= 0.1377	
Total	128.44444	161	.79799158	R-squared	= 0.0431	
				Adj R-squared.	= 0.0188	
				Root MSE.	= .88478	
C14		Coef	Std. Err	t	P > t	[95% Conf. Interval]
<i>Code having good relationship with doctor</i>						
Unhaving good relationship with doctor		-.1413963	.1603246	-0.88	0.379	-.4580676 .175275
<i>Code choosing doctor for curing</i>						
unchoosing doctor for curing		.0041026	.1460367	0.03	0.978	-.2863228 .2945279
<i>Code sharing bed with other patients</i>						
Unsharing bed with other patients		-.0714773	.1672415	-0.43	0.670	-.4018108 .2588562
<i>Code using bedroom for treatment with high cost</i>						
Unusing bedroom for treatment with high cost		-.3600138	.16952415	-2.12	0.035	-.6948877 -.0251399
_cons		8.197287	.210376	19.95	0.000	3.781755 4.61282

Source: Data from investigated 162 patients being treated at 7 central hospitals

CONCLUSION

Examination and treatment fees would be seen as the main revenues of hospital, in the context of financial autonomy is being deployed in Vietnam. Patients in difficult economic circumstance are facing barriers to adequate medical care system. In contrast, socialized medical equipment being deployed in public hospital, consequently, brings chances for patients to access better conditions of medical examination and treatment. The entire cost of the patient's care is less than what a patient would have to spend in industrialized nations like the US, Japan, etc. for the identical procedure and protocol. Leading the way in this socialization process are central hospitals. However, there is still work to be done on the financial autonomy mechanism and policy for public non-business groups. It is imperative to finalize the legal documentation system, particularly with regard to joint venture implementation, in order to bolster hospital trust in their ability to foster autonomy, enhance the caliber of medical equipment, and deliver patient care. As a result, Vietnam's health system will perform better in its capacity, enhancing community service energy and people's standard of living.

ACKNOWLEDGMENTS: The authors are grateful to the permanent staff of the seven central public hospitals in Vietnam for their response to our questionnaire.

CONFLICT OF INTEREST: None

FINANCIAL SUPPORT: None

ETHICS STATEMENT: This study adhered to ethical guidelines and principles in research. All procedures involving human participants were conducted by the ethical standards of the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study. Confidentiality and anonymity were strictly maintained throughout the research process.

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