

ASSESSMENT OF MEDICINE MANAGEMENT AND ITS SUPPLY IN NATIONAL HEALTH INSURANCE AT GENERAL HOSPITALS IN CANTHO CITY IN THE PERIOD OF 2016 - 2017

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SUMMARY

Objectives: Good drug supply management is an essential component of effective health care system. This study investigated the relationship of dependent and independent influential attributes towards overall patient satisfaction in addition to its impact on the quality improvement process of healthcare organizations. Subjects and methods: Face-to-face interviews with doctors about patients' satisfaction (80 doctors and 800 patients) were the main research method and the population of the study was 800 patients in 8 general hospitals. Tables and graphs were used to represent data. Results: The overall satisfaction score with the medicine management in national health insurance was 3.7. This study found that most patients were satisfied with drug supply in the insurance list (95.33% for satisfaction). The highest satisfaction belonged to the cost of drug (97.05%). It showed that patients older than 50 years of age had higher satisfaction than patients under 18 years of age and gender was not a significant predictor of overall patient satisfaction. Conclusions: This research provides the background for organization managers and policy makers to yield a better understanding of patients' opinions and the extent of their involvement in improving the quality of care and services.

** Keywords: Patient satisfaction; Drug management; Drug supply; Quality for healthcare.*

INTRODUCTION

The issue of media in the health sector in recent years has been "Enhancing the quality of medical examination and treatment of basic health insurance". The goal of the strategy was to advance the quality of basic health services, patients satisfaction as well as favorable conditions for people

to receive the best, fastest and most convenient health care, reducing unnecessary fees, practice thrift, concentration investment resources, effective use. Patients' participation in their management, care and treatment is an indispensable trend in the modern health system, which is being done in current health strategies in many countries around the world.

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In order to improve the quality of drug supply management, various interventions have been used to influence the stages of drug supply and management in hospitals such as education knowledge improvement, management and application computer [7]. In 2008, a study by Mubondwa et al at Muhimbili International Hospital in Tanzania on 2,582 patients (inpatients and outpatients) showed that most patients were satisfied with the medical services which they received. The most dissatisfying factor was the attitudes of health staff. Anna Maria Murante's PhD thesis in 2010 focused on the role of patient satisfaction in the management of health services. This study was primarily concerned with surveys, patient experiences and patient satisfaction that had been conducted in Tuscany region [6].

In Vietnam, Tran Vien surveyed drug management at Pharmacy Department, General Hospital at Tinhbien district in 2012. The results of survey in the management of the department showed that the satisfaction accounted for over four fifth of the total, at 84% as opposed to 16% of counterparts due to complex procedures, wait a long time, need to improve the process of health insurance drug distribution [5]. A survey on the satisfaction of inpatients at Namdong Hospital, Hue in 2012, resulted in the convenience of simple administrative procedures and the timelessness of the patient, with 84.3% and 15.7% for satisfaction and dissatisfaction respectively, and 98.21% were satisfied with the treatment and care of health staff. In Nguyen Tuyen's 2012

study at Tay Nguyen University Hospital, patient satisfaction with waiting times at this hospital was 3.5/5 [4].

Cantho, a central city in Mekong Delta region, to the best of our knowledge, there is no comprehensive evaluation of the system of supplying health insurance at the basic level. Therefore, we conducted this study to investigate the problems in eight local hospitals, across rural areas of Cantho city. Our main goal is: *To evaluate patient satisfaction factors and the quality of drug supply at health facilities.*

SUBJECTS AND METHODS

1. Subjects.

The study was conducted in 8 district hospitals, namely: O Mon, Cai Rang, Thot Not, Phong Dien, Thoi Lai, Vinh Thanh, Co Do and Binh Thuy from September 2016 to June 2017.

Research subjects were doctors who directly examined, treated the disease and outpatients who visited health facilities in the research period.

* *Exclusive criteria:* Health facilities, patients who didn't agree with participating in this research and answering all of the questions on the questionnaires or patients move into boarding.

2. Methods.

Using cross-sectional descriptive study, the sample size was 80 doctors and 800 patients that were interviewed equally during the study health facilities [8]. Each sample was analyzed based on two groups of parameters, as followed:

- Survey on management situation: To carry out an assessment of pharmacy personnel, pharmacy infrastructure, the distribution capacity, the list of drugs, the timeliness in supply and the clinical pharmacology through the sociological questionnaire for doctors.

- Survey on supply situation: To conduct a survey on 5 indicators for providing health insurance: transportation convenience, cost, time, facilities and staff attitude through sociological questionnaire for patients.

The scale of the patient's satisfaction with the quality of health care was based on the Likert Score scale with "very dissatisfied" (1 point), "dissatisfied" (2 points), "normal" (3 points), "satisfied" (4 points), "very satisfied" (5 points) [10]. For ethical issues, all processes were approved by Cantho University of Medicine

and Pharmacy (CTUMP) and Medicine Ethics Committee/Ethical Committee on Pharmaceuticals, as well as the Director of hospital.

RESULTS

1. Physician's satisfaction about medicine management of National Health Insurance.

** Medical management indicators of National Health Insurance:*

The satisfaction rate with medicine management at hospitals through the evaluation of 80 doctors at local hospital was 3.72. The highest satisfaction level were about aspects of pharmacy personnel and infrastructure with a mean value of 4.02 and 4.12; followed by the distribution capacity, list of drugs, timely delivery, clinical pharmacology with corresponding values of 3.94, 3.38, 3.71, 3.19, respectively.

2. Patient satisfaction with drug supply of the National Health Insurance.

Table 1: Calculation of level of satisfaction in terms of different domains of patient satisfaction with drug supply of the National Health Insurance.

Domain of satisfaction	Result (n = 800)	
	Mean	Percentage (%)
Transportation convenient	4.11	95.0
Medication costs	3.85	97.5
Time spent for drug supply	3.91	95.4
Drugs distribution	4.10	95.3
Attitudes and guidance of staff	4.07	95.3
Overall satisfaction	3.99 ± 0.02	95.5

The average satisfaction index of 800 patients was 4.0 and 95.5% satisfied with the drug distribution.

The highest satisfaction of patient was medicine costs (97.5%), followed by transportation convenience, time spent for drug supply, drugs distribution, attitudes and guidance of staff (approximately 95.0%).

3. Relation of overall satisfaction with variables.

Table 2: Distribution of study population according to age groups of patient satisfaction.

Age groups	Disatisfaction	Satisfaction	OR; 95%CI	p
< 18	1 (1.2%)	86 (98.9%)	-	-
18 - 29	4 (10.8%)	33 (89.2%)	1.922 (0.21 - 17.45)	0.562
30 - 49	4 (2.2%)	179 (97.8%)	0.386 (0.13 - 1.12)	0.079
≥ 50	27 (3.5%)	466 (96.5%)	0.184 (0.044 - 0.774)	0.021
Total	36 (4.5%)	764 (95.5%)		

Logistic regression analysis between the overall satisfaction and age of patients. The patients older than 50 years old had disatisfaction rate less than 0.184 times compared to patients under 18 years of age, which was statistically significant at $p < 0.05$. The satisfaction rate among the remaining age groups and the under 18 age group was not statistically significant with $p > 0.05$.

Table 3: Distribution of study population according to gender in terms of patient satisfaction.

Gender	Disatisfaction	Satisfaction	OR; 95%CI	p
Male	16 (4.7%)	327 (95.3%)	1.069 (0.546 - 2.095)	0.846
Female	20 (4.4%)	457 (95.6%)		
Total	36 (4.5%)	764 (95.5%)		

In another case, gender and patient satisfaction were not correlated ($p = 0.846 > 0.05$).

DISCUSSIONS

1. Physician’s satisfaction with medicine management of National Health Insurance

According to the report by Agency of Health Examination and Treatment, Ministry of Health in 2015, the pharmacy personnel reached 2.5 pharmacists per 10,000 population and has been on the increase in recent years [1]. This showed the attention of organization managers to human resource development and facilities. The drug distribution, the list of drugs, timely delivery, clinical pharmacology were lower satisfaction factors with increasing

scores of 3.19 to 3.94. Besides, time for drug delivery was too long. Doctors thought that medical supply ability was not as good as their aspect, the clinical pharmacy activity was mainly medical information and rational medicine use.

The results of the interview on physicians satisfaction showed a mean score of 3.71, lower than the “satisfied” level (4.0). Hospitals should review the results of their application in practice, continue to develop good points from experience and propose the solution to the improvement in the services and strategic goals for all healthcare organizations.

2. Patient's satisfaction about the drug supply of National Health Insurance.

Results showed the overall satisfaction scores ranged from 3.85 to 4.11, with a mean score of 3.99 and 95.5% for satisfaction. The overall satisfaction rate of the patients in Tran Thanh Thang's study at Hatinh General Hospital was 90.98%, lower than in our study (95.5%) [3]. The satisfaction rate was 97.5% higher than that in Truong Thi Thanh Quy's study at Hanoi Medical University Hospital (94.9%) [2]. Patients were highly satisfied with medication costs because the National Health Insurance system supports them the cost of medical examination and treatment.

The results were similar to Mubondwa et al's findings (2008) at Muhimbili International Hospital in Tanzania on 2,582 patients. They were particularly dissatisfied with the high costs of treatment and investigations charged and negative attitudes of staff towards patients [7].

3. Relationship of overall satisfaction with variables.

Many medical literatures pointed out the relationship between demographic factors such as age, gender, health status and level of education with patient satisfaction. The results showed that patients aged ≥ 50 had a lower dissatisfaction rate of 0.184 times than patients under 18 years of age but gender was not a significant predictor of overall patient satisfaction ($p < 0.05$). The rate of satisfaction was 95.3% for women and 95.6% for men. This difference was not statistically significant with $p = 0.85$. This study was

similar to Tonio Schoenfelde's research in 2011 on 39 health centers in Germany, patients' age was related to level of satisfaction ($p < 0.001$) and Nguyen Manh Tuyen in Hospital University of Tay Nguyen in 2012: the female's satisfaction rate was lower than male's, this difference was not statistically significant with $p > 0.05$ [4, 9]. The high satisfaction rate was likely that the older were served more carefully than the younger.

CONCLUSIONS

This study investigated the drug management and supplement in National Health Insurance and identified determinants of physician and patient satisfaction. Findings were based on data collected from a large number of patients in district hospitals. The level of satisfied patients was different in age, while gender was not related to satisfaction. Variables provide implications for health providers aiming at improving the service quality and quality of care: standardizing the management and delivery drug for patients; publishing and updating drug information, treatment costs; improving facilities.

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