# **Pharmacophore**

ISSN-2229-5402

Journal home page: http://www.pharmacophorejournal.com



# THE EFFECT OF IMPLEMENTATION OF HEALTH DEVELOPMENT PLAN ON PATIENT SATISFACTION IN PUBLIC HOSPITALS OF TABRIZ, IRAN

# Hossein Mahmoudi<sup>1</sup>, Saeid Joudi<sup>2\*</sup>

1. MA Executive Management(Marketing), Islamic Azad University Bonab, Iran. 2. General Practitioner, Tabriz University of Medical Sciences, Tabriz, Iran.

#### ARTICLE INFO

Received: 16<sup>th</sup> Nov 2016 Received in revised form: 23 <sup>th</sup> May 2017 Accepted: 22<sup>th</sup> Jun 2017 Available online: 14<sup>th</sup> Aug 2017

**Keywords:** Health Development Plan; Patient Satisfaction.

#### ABSTRACT

Health development plan is implemented with three approaches, namely the financial protection of people, equity in access to health services and improvement of health quality; dissatisfaction with health care services leads to undesirable consequences. The present study intended to investigate the effect of implementation of health development plan on patient satisfaction in the public hospitals of Tabriz, Iran during Feb. 2015 – Jul. 2015. The statistical population included the patients of the public hospitals of Tabriz and the research sample was selected using stratified sampling method. Data collection tool consisted of a questionnaire given to the statistical sample once its validity and reliability were ensured. Descriptive and inferential statistics were used for the analysis of data obtained from the questionnaires. That is, descriptive statistics was used for data classification, summarization, and interpretation; once data normality was determined based on Kolmogorov-Smirnov test, inferential statistics were used for research hypotheses testing and impact determination based on multiple linear regression. According to the results, all research hypotheses were confirmed and it was indicated that health development plan had a significant effect on patient satisfaction. Furthermore, the results of multiple regression showed that patient satisfaction was greatly influenced by health development plan.

Copyright © 2013 - All Rights Reserved - Pharmacophore

**To Cite This Article** Hossein Mahmoudi<sup>1</sup>, Saeid Joudi<sup>2\*</sup>(2017), "The Effect Of Implementation Of Health Development Plan On Patient Satisfaction In Public Hospitals Of Tabriz, Iran", *Pharmacophore*, **8(4)**, *15-19.*.

#### Introduction

Health is a human right i.e. any person has the right to demand it. The main goal of healthcare services provision is maintaining the public health that is achieved by providing demanded satisfactory healthcare services. An efficient healthcare system can accomplish its resolution i.e. public health, through the provision of satisfactory health services; the efficiency of this system is assessed by evaluating the quality of its services. In order to evaluate healthcare services, patients' views should be considered as a reliable source because firstly, patients are a good source of information about the quality of healthcare services and secondly, attention to their views is their right and should not be overlooked while planning and evaluating health services. Patient satisfaction is of utmost importance in healthcare (1).

Dissatisfaction with healthcare services leads to undesirable consequences. People dissatisfaction quits their connection with health system and disengages them from service provision. Moreover, people dissatisfaction reinforces the feeling of inadequacy and dissatisfaction in health personnel and subsequently reduces the efficiency of the health systems. Finally, satisfaction is an aspect of human health. The health system deviates from its resolution i.e. meeting people's health needs, unless it pays attention to people satisfaction. On the one hand, since the purpose of healthcare services is provision and development of the public health and patient satisfaction, as an aspect of health, is an important factor in improving their health status, the health system is accountable for meeting people's health needs. On the other hand, the increasing costs of healthcare and limitation of resources have made the hospitals one of the most important and yet costliest health organization that requires knowledge, expertise, innovative thinking and efficient management. An efficient management builds

Corresponding Author: Saeid Joudi, General Practitioner, Tabriz University of Medical Sciences, Tabriz, Iran.

#### Pharmacophore, 8(4) 2017, Pages:15-19

satisfaction and trust with patients, as the main customers of hospitals, by reducing the costs, increasing efficiency, improving performance and ultimately enhancing service quality (2).

Evaluation of patient satisfaction with healthcare services is essential for improving the quality of hospital services. To this end, Ministry of Health and Medical Education, as the main administrator of public health in the country, has begun the implementation of the health development plan after a six-month research period since May 2014 with respect to its general missions, high-level documents esp. Iran's 20-year vision document, general health policies notified by the Supreme Leader of Islamic Republic of Iran, and health-related regulations in the Fifth Development Plan and programs of the eleventh government of Iran (16).

Health development plan is implemented with three approaches, namely financial protection of people, equity in access to health services and improvement of health quality in order to achieve the general health policies notified by the Supreme Leader and attain the desired improvements in the health system gradually in cooperation with the health sector authorities. The general health policies notified by the Supreme Leader accentuates the universality of basic health insurance and full coverage of basic health needs provided by insurance organizations for the public society as well as reduction of healthcare costs so that patients are not concerned with any disturbance expect for illness (11).

The present study intended to investigate the effect of implementation of health development plan on patient satisfaction in the public hospitals of Tabriz, Iran during Feb. 2015 – Jul. 2015.

#### **Materials and Methods**

The statistical population consisted of 382 patients visiting the public hospitals of Tabriz during Feb. 2015 – Jul. 2015.

#### **Research Questions**

Data were collected using a questionnaire based on field study (5); the questionnaire addressed 9 questions on patient satisfaction with health development plan, as follows:

Q1: How much are you satisfied with the admission process in this hospital?

Q2: How much are you satisfied with the medical performance of physicians in this hospital?

Q3: How much are you satisfied with the medical performance of nurses in this hospital?

Q4: How much are you satisfied with the performance of medical team this hospital?

**Q5:** How much are you satisfied with the performance of medical staff in this hospital?

Q6: How much are you satisfied with the physical environment of this hospital?

**Q7:** How much are you satisfied with the complaints management in this hospital?

**Q8:** How much are you satisfied with the patient discharge process in this hospital? **Q9:** How much are you satisfied with the franchises in this hospital?

#### **Scale of Questionnaire**

The 5-point Likert's scale was used ranging from 'very low', 'low', 'medium' to 'high' and 'very high' to evaluate the respondents' satisfaction with the health development plan using a questionnaire.

Face validity was used to estimate the validity of questionnaire. To this end, the developed questionnaire was given to 5 academic and professional experts to be modified and approved (9).

There are several methods in order to estimate the reliability of measurement tools. In the present study, Cronbach's Alpha was used to estimate the reliability of the questionnaire in SPSS statistical software. The value of Cronbach's Alpha was  $\alpha < 0.85 < 0.95$  which was confirmed since it was greater than 0.70 (8).

The questionnaire of patient satisfaction consisted of 9 questions whose reliability was estimated as 0.812 based on Cronbach's Alpha test. The questionnaire of health development plan consisted of 26 questions with Cronbach's Alpha coefficient of 0.884.

#### Data Analysis

SPSS statistical software was used for data classification, summarization, interpretation and analysis in different descriptive and inferential tables.

#### Results

Table (1) presents the demographic features of patients under study based on the information obtained from questionnaires.

## Hossein Mahmoudi et al, 2017

Pharmacophore, 8(4) 2017, Pages:15-19

Variables of Patients	Quantity Type of Response	Frequency	Percentage	Without Response	Total	
Sex	Male	202	52.9			
	Female	180	47.1	5 7 3 5 3 82	100	
Age	Under 25	68	18			
	25-35	71	18.5			
	36-45	102	26.7			
	46-55	93	24.3			
	Above 55	48	12.5			
Education	Undergraduate	90	23.5			
	Diploma	73	19			
	Above Diploma	219	57.5			
Marital Status	Single	102	26.7	]		
	Married	280	73.3			

## Table (1): Demographic features of respondents

Out of total patients, 202 were male (%52.9) and 180 were female (%47.1). In terms of age, %18 aged under 25 years old, %18.5 aged 25-35, %26.7 aged 36-45, %24.3 aged 46-55 and %12.5 aged above 55 years old. In terms of education, %23.5 were undergraduate, %19 had diploma, %24.4 were graduate, %8.5 were postgraduate and above. In terms of marital status, %26.7 were single and %73.3 were married.

 Table (2): Frequency and percentage of patient satisfaction with implementation of health development plan

		Very High		High		Medium		Low		Very Low		
Depend ent Variabl e	Ques tion	Frequ ency	Perce ntage	Total Frequ ency								
Patient	1	210.0	55.0	99.0	25.9	60.0	15.7	8.0	2.1	5.0	1.3	382
satisfacti	2	189.0	49.5	145.0	38.0	21.0	5.5	19.0	5.0	8.0	2.1	382
on with	3	177.0	46.3	139.0	36.4	52.0	13.6	7.0	1.8	7.0	1.8	382
impleme	4	195.0	51.0	125.0	32.7	38.0	9.9	13.0	3.4	11.0	2.9	382
ntation	5	129.0	33.8	175.0	45.8	68.0	17.8	5.0	1.3	5.0	1.3	382
of	6	191.0	50.0	133.0	34.8	51.0	13.4	4.0	1.0	3.0	0.8	382
Health	7	168.0	44.0	124.0	32.5	32.0	8.4	10.0	2.6	12.0	3.1	382
Develop ment	8	176.0	46.1	129.0	33.8	51.0	13.4	15.0	3.9	11.0	2.9	382
Plan	9	212.0	55.0	99.0	25.9	60.0	15.7	8.0	2.1	5.0	1.3	382

Kolmogorov-Smirnov test (K-S test) was used to assess the fitness of normal distribution of data. The results are presented in Table (3).

Variable	Successful Implementation of Health Development Plan	Patient Satisfaction		
K-S test	2/093	2/056		
P-value	0/093	0/104		
Number	556	382		

# **Discussion and Conclusion**

The present study intended to investigate the effect of implementation of health development plan on patient satisfaction in the public hospitals of Tabriz, Iran during Feb. 2015 – Jul. 2015. To this end, performing

#### Pharmacophore, 8(4) 2017, Pages:15-19

documentary studies and selecting the theoretical framework on patient satisfaction, non-parametric tests were determined based on abnormal distribution of data using K-S test and goodness of fit of samples. The present study was a descriptive-correlational research. Regression test was performed aiming at investigating the effect of implementation of health development plan on patient satisfaction. After field study and analysis of data obtained from the questionnaires, the research results were classified into descriptive and inferential statistics as follows. The results of hypotheses testing and calculations showed that out of total patients, 202 were male (%52.9) and 180 were female (%47.1). In terms of age, %18 aged under 25 years old, %18.5 aged 25-35, %26.7 aged 36-45, %24.3 aged 46-55 and %12.5 aged above 55 years old. In terms of education, %23.5 were undergraduate, %19 had diploma, %24.4 were graduate, %8.5 were postgraduate and above. In terms of marital status, %26.7 were single and %73.3 were married.

# Main Hypothesis:

This hypothesis was testified based on the directive of Ministry of Health and Medical Education in seven dimensions in order to investigate the effect of implementation of health development plan on patient satisfaction in the public hospitals of Tabriz. About 26 questions were addressed to assess the implementation of the comprehensive health development plan. Patient satisfaction was analyzed using 9 questions. According to the results, the value of R2 was 0.157. That is, %15.7 of patient satisfaction was achieved by the implementation of health development plan. Furthermore, according to the observed value of  $\beta$  i.e. 0.396 and its P-value that was smaller than the minimum significance level i.e. 0.05, the independent variable of this hypothesis (successful implementation of health development plan) affected the dependent variable (patient satisfaction) by 0.396 percent (%0.396).

## Alternative Hypothesis:

This hypothesis was testified based on the questionnaire of health development plan consisting of 26 questions as well as the questionnaire of patient satisfaction with 9 questions. According to the results, the value of R2 was 0.337. That is, %33.7 of patient satisfaction was achieved by the successful implementation of health development plan in the hospitals of Tabriz. Furthermore, according to the observed value of  $\beta$  i.e. 0.693 and its P-value that was smaller than the minimum significance level i.e. 0.05, the independent variable of this hypothesis (successful implementation of health development plan) affected the dependent variable (patient satisfaction) by 0.693 percent (%0.693). The results of the present study were in line with the findings of Mosadegh Rad (2004), Seydi et al. (2004), Ahmadi et al. (2009), Salehian et al. (2010) and Ansari et al. (2013) on patient satisfaction with the provided healthcare services in public hospitals.

Consequently, it can be stated that the implementation of health development plan in the public hospitals of Tabriz had an impact on patient satisfaction at %95 confidence level. According to the value of Beta i.e. 0.693, it can be concluded that the independent variable had a crucial role in predicting the regression equation. Therefore, a single increase in the implementation of health development plan increased patient satisfaction by %0.693 in the public hospitals of Tabriz, Iran.

## References

- 1. Ahmadi, B., Zivdar, M. & Rafiei, S. (2009). Evaluation of patient satisfaction in Type I hospitals of Tehran university of medical science. Journal of Paramedicine Faculty of Tehran University of Medical Sciences (Payavard-e-Salamat), 4(1), 45-55.
- Akbari, F. Hosseini, M., Arab, M. & Chouzoukli, N. (2013). Factors affecting patient satisfaction in the hospitals of Tehran university of medical sciences. A Master Thesis in Industrial and Organizational Psychology. Faculty of Educational Sciences and Psychology, Islamic Azad University of Khorasgan, Isfahan.
- Badali, R. (2014). Identification of factors affecting customer satisfaction in real estate registration department of East Azarbaijan province. A Master Thesis in Public Management, Islamic Azad University of Bonab.
- 4. Salehi Sedghiani, J. & Gharaeipour, R. (2010). Evaluation of competence of managers using 360degree feedback. Journal of industrial management, 9.
- 5. Asgari, A. (2002). A quest meaning in workplace (22 keys to job satisfaction). Tadbir, 121, 26-32.
- 6. Fadaeinasab, M. (2004). The relationship between job satisfaction and personality traits and demographic features of administrative and non-administrative staff in Kish Island. A Master Thesis in Consultation. Faculty of Educational Sciences and Psychology. University of Isfahan.
- 7. Farahmand, F. & Sharifian, R. (2005). Evaluation of job satisfaction of the staff of reception department in educational hospitals of Shiraz university of medical sciences and health services. Health information management, 2(2).

Pharmacophore, 8(4) 2017, Pages:15-19

- 8. Ghamari Zare, Z., Pourfarzad, Z., Anousheh, M., Seraji, A. & Ghorbani, M. (2012). Evaluation of the performance and job satisfaction of nurses in the educational hospitals of Arak university of medical sciences. Journal of nursing management, 1(4), 18-29.
- 9. Kaldi, A. & Asgari, G. (2003). Evaluation of job satisfaction of elementary education teachers of Tehran department of education. Journal of educational sciences and psychology, 33(1), 103-120.
- 10. Mohammadifar, Y., Mousapour, N., Delangizan, S. & Ahmadi, M. (2011). Factors affecting customer satisfaction in governmental organizations. Public Management Vision, 7, 119-133.
- 11. Ministry of Health and Medical Education. (2014). Health Development Plan. Department of Health. p. 1-94.
- 12. Abdullah, M. and Hossain, N. (2000), "The service sector for the year 2000", Avalable in www.//apo.tokyo.org/ebooks/01.prodMeasure.
- 13. Akbar, M. M. and Parviz, N. (2009) "Impact of Service Quality, Trust and Customers Satisfaction on Customers Loyalty", ABAC Journal 29(1) :24-38.
- 14. Al-Enezi N. Chowdhury RI. Shah MA. Al-Otabi M. (2009)Job satisfaction of nurses with multicultural backgrounds: a questionnaire survey in Kuwait. Applied Nursing Research.No:22,pp 100–94
- 15. Anderson Subonteng P., McLeay K.J., Swan JE. (1996) "Servqual revisited: A critical review of service quality", Journal of Services marketing 10(6).
- 16. Choozokli N. Determination of performance criteria and patient satisfaction [Thesis in Persian]. School of Public Health ,Tehran University of Medical Sciences; 2004.
- 17. Jamal, A. Nasr, K. (2002), "Customer satification and retail banking, an assessment of some of the key antecedents of customer satification and retail banking", European Jornal of marketing, 4/20, May, pp. 146-160.