EBHPME

Website: http: jebhpme.ssu.ac.ir
EBHPME 2021; 5(4): 276-89 EISSN: 2538-4716

REVIEW ARTICLE

Evidence Based Health Policy, Management & Economics

Satisfaction Level with the Health Transformation Plan in Iran: A Systematic Review

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ARTICLEINFO

Article History:
Received: 27 Nov 2020
Revised: 15 May 2021
Accepted: 21 Dec 2021

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ABSTRACT

Background: The Health Transformation Plan (HTP) had been one of the most significant recent reforms in the Iranian health system. Notwithstanding, it has strengths and weaknesses that should be assessed. One of the most important aspects of assessing programs is the people and the personnel's satisfaction. Consequently, this study has reviewed studies that have measured satisfaction with HTP.

Methods: In this systematic review, databases of Web of Science, Scopus, PubMed, Google Scholar were searched until May 2019. The Ministry of Health website, and the National Institutes of Health Research website were also searched. All studies that evaluated HTP satisfaction were included. Data were collected and analyzed utilizing a data extraction form and reported by narrative review.

Results: 20 studies were included that were conducted in the period 2014 to 2017. The overall results of the studies indicate that nurses and physicians have not been satisfied with HTP, while retaining physicians in disadvantaged regions and patients have been approximately satisfied with HTP. Only three before and after studies have been conducted, and the rest studies are related to after HTP. Two before and after studies concluded that patients and nurses 'satisfaction is decreased and one study concluded that mothers' satisfaction is increased. Nurses and physicians dissatisfaction was due to the causes such as increasing the number of clients, injustice in payments, unbalanced workload and salary and other working conditions.

Conclusion: Influential, comprehensive, and national studies, including satisfactory before- and after-studies, are still not available to draw definite conclusions about public and employee satisfaction with HTP. It appears that despite the expensive cost of HTP and relative satisfaction of patients, the government did not meet all the demands of nurses and some physicians.

Key words: Health transformation plan, Job satisfaction, Patient satisfaction, Systematic review, Iran

Citation

This paper should be cited as: Hashempour R, Bouzarjomehri H, Hadian-Shiva E, Chivaee D, Mokhtari-Payam M, Herandi Y. **Satisfaction Level with the Health Transformation Plan in Iran: A Systematic Review.** Evidence Based Health Policy, Management & Economics. 2021; 5(4): 276-89.

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[DOI: 10.18502/jebhpme.v5i4.8163]

Introduction

In recent decades, factors such as changes in people's lifestyles, epidemiological transition, development of new sciences and technologies, and increasing of healthcare costs, have directed policymakers to respect health system care reforms (1, 2). The Health Transformation Plan (HTP) was among these programs which implemented in 2014 with three main approaches to promote people's health, decrease out-of-pocket payments and improving public health indices. HTP covered the following eight programs: 1) decreasing out-of-pocket costs for hospitalized patients in the MoH's hospitals, 2) permanent existance of specialist physicians in hospitals, 3) supporting the retaining physicians in deprived areas, 4) improving the quality of docotors' visits in hospitals, 5) improving the quality of hospital hoteling, 6) financial protection of patients with fatal diseases, 7) promoting natural childbirth, and 8) controlling the proper implementation of HTP (3). Among these eight programs, at least six programs should naturally result in increased satisfaction, consequently, it is essential to measure the influence of this plan on patients' and personnel's satisfaction.

The health system has been essentially developed for the welfare of more and more human beings, and reflecting the demands and satisfaction related to the people and health operators in health system reform programs is a requisite part of accomplishing people's health and well-being (4) and If people's appraisals are not considered, the health system has operated contrary to its principal objectives (5) because, as the WHO Framework for the health system mentions, one of the final objectives of health systems is to meet their non-medical needs (6). Satisfaction level indicates a positive or negative attitude towards the executive system in clinics and hospitals, which is affected by new changes in the health system (2).

Satisfaction is an emotional state that is produced as a result of individual experience and can considerably help individuals' physical and mental health (7). Employee dissatisfaction influences the quality of services and eventually drives patient dissatisfaction in health care organizations. Hospital services should improve satisfaction because this is one of the main indices of the effectiveness and quality of services. When the patient is satisfied, he/she cooperates more with the providers, and his/her recovery process is expedited (8, 9). Dissatisfaction with services can have inappropriate outcomes. For example, it can cause to end of the patients' cooperation or non-cooperation in providing the services (10). As the results of studies explain, patients' dissatisfaction can decrease their recovery (11).

Many studies have been conducted on HTP satisfaction in Iran. Some of these studies have been conducted before and after the transformation plan and some have been conducted only after the transformation plan and some others have been conducted only before HTP (12, 13). These studies have also estimated a range of satisfaction that includes job satisfaction of employee, client and companion satisfaction with HTP, client and companion satisfaction with employees, hence, this study has been conducted in order to perform a systematic review of these studies. In this study, the population includes all patients, physicians, companions, and health system personnel; intervention was HTP and outcome was satisfaction. This study has been conducted in order to measure satisfaction with HTP, but supplementary data such as causes and factors of satisfaction and dissatisfaction, if available, have been collected, analyzed, and reported.

Materials and Methods

Search strategy

This study focuses on HTP satisfaction, which can mean job satisfaction, employee satisfaction, or other kind of satisfaction. Accordingly, the Web of Science, Scopus, PubMed, and Google Scholar databases were searched in May 2019. The Ministry of Health website, and the National Institutes of Health Research website were also searched. The keywords were extracted by reviewing the texts as well as the MeSH database. The keywords and search strategy have been listed

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[DOI: 10.18502/jebhpme.v5i4.8163]

in Appendix 1. The refrences of related review articles and also the refrences of articles included in the final analysis were manually examined.

Study selection criteria

Inclusion criteria were all studies that evaluated HTP satisfaction. That is all studies that evaluated the satisfaction of patients, physicians, nurses, and other personnel with HTP were included in the study. Exclusion criteria cover all studies that have measured any index other than satisfaction, measured the satisfaction index in a time period other than the transformation plan, and measured the satisfaction index solely before HTP. Furthermore, other types of papers than the original studies, such as letters to the editor, and conference posters have been excluded from the study. Only full-text studies included in the final analysis. In addition, the studies that reported the main variables, such as year, design, tools, sample size, target population, satisfaction score, maximum satisfaction, and minimum satisfaction, were included in the final analysis.

Screening

Duplicate studies were initially excluded. In the next steps, the titles of the studies and eventually the abstract and full text of the papers were examined, respectively. All studies that investigated HTP satisfaction were included and other studies were excluded. The two researchers screened the studies separately. In the next stage, the inconsistency between the two authors was settled through discussion, and the contradictions that were not resolved through discussion were settled through the third researcher.

Data collection and analysis

An electronic form was utilized to collect the data, which included all the specified variables. The collected data were combined with each other and compared and analyzed in terms of different variables and subsequently reported in a method of narrative review. The results of the studies present a very high heterogeneity. Accordingly, in this study, statistical tests have not been employed to combine the results and have been analyzed and presented in a narrative manner.

Quality assessment

The Newcastle-Ottawa Scale checklist was employed to assess quality (14). This checklist holds three domains, which include selection, comparability, and outcome. A star is applied to score that each star represents a score. The maximum scores in these three fields are five, two, and three, respectively. Consequently, the overall score on this tool is between zero and ten. Scores below five were recognized poor and were excluded from the study. 5 to 8 were estimated average and 9 and 10 studies were evaluated as good quality. Quality was assessed by two authors separately. Any disagreement between the two authors was resolved through discussion, otherwise, the third author was employed to settle the problem. Overall quality scores have been reported in separate tables.

Results

Flowchart 1 presents the screening steps and the number of papers in each step. Among the related papers that were excluded from this study, 3 of them were only abstracts of the conference paper and their full text was not available (15-17). One of them was an article about a set of HTP effects and did not have acceptable information about satisfaction (18), and a paper was published in a fake scientific journal (19). Ultimately, 20 studies were selected that Table 1 shows their results.

Types of studies conducted in terms of year

The years of conducting the studies have been in the period 2014 to 2017. Four studies have been conducted in 2014 (5, 20, 21, 22). Nine studies have been conducted in 2015 (2, 8, 23-29), six studies in 2016 (6, 30-34), and one study in 2017 (35).

Types of community studies and research samples

The research population was patients and clients in 14 studies . At the next order, medical personnel such as nurses, doctors, managers, etc. Created the most research populations. The lowest number was related to patients' companions. In some studies, the research population was more than one group. For example, patient, client, and nurse's

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[DOI: 10.18502/jebhpme.v5i4.8163]

satisfaction with HTP was measured in a study. Furthermore, the sample size in the studies ranges from 94 to 3665 people.

Types of studies in terms of a research environment

Seven studies have been conducted in one hospital (8, 22-24, 27, 29, 32), two studies in two or three clinics or hospitals (2, 30), and eleven studies in a set of hospitals or health centers of a province or university of medical sciences (including Iran, Tehran, Shahid Beheshti, Birjand, Shiraz, Qom, Ahvaz, Azerbaijan, Mazandaran, Yazd, and Urmia medical universities) (5, 6, 20, 21, 25, 26, 28, 31, 33-35). Among the studies there was no national and comprehensive study.

Types of studies in terms of data collection tools

The satisfaction measuring tool was a questionnaire that was either researcher-made or provided by the Ministry of Health, the National Institutes of Health Research, or the respective University of Medical Sciences, or questionnaires applied in the international scientific literature. Accordingly, the domains studied for measuring satisfaction were highly variable and had high heterogeneity results, which caused the results of studies not to be quantitatively comparable and to be reported validly.

Satisfaction based on the study plan

In terms of design, the three study groups are separable that have different analytical value. The first group consists of studies that have estimated satisfaction comparatively before and after HTP, which have more analytical value and include three studies (6, 22, 35). The second group, which includes most of the studies (n = 11), is a set of studies that assessed participants' satisfaction specificly with the HTP and has a moderate analytical value. The third group is studies that have measured the participants' satisfaction with the hospital or clinic after the HTP and have not accurately measured people's satisfaction with HTP (n = 6). Notwithstanding, they have assigned the results of their study to HTP and they have less analytical value (this group of studies has been identified with a star mark in the results table) (2, 24, 27, 30, 32, 34).

Among the three before and after studies, a study conducted on nurses in hospitals of Tehran University of Medical Sciences concludes that job satisfaction related to the nurses has decreased and the tendency to leave their work has increased after the implementation of HTP (6). Another study on the emergency patients' satisfaction at Shohada Tajrish Hospital in Tehran has been shown that their satisfaction significantly decreased after the HTP (22), and the third study shows that mothers who had served in community health centers under the control of Iran University of Medical Sciences after the HTP have had more satisfaction and advantage (35). One study has also evaluated patients' satisfaction with HTP longitudinally after the first and second phase of the plan and concluded that the satisfaction level in the second phase had been significantly lower than satisfaction in the first phase (5). The results of other cross-sectional studies ranged from dissatisfaction (23) to complete satisfaction (31).

Results of studies conducted on the overall satisfaction of medical personnel with HTP

In general, the results of most studies explain that nurses are not satisfied with HTP (6, 20, 26, 30), notwithstanding, nurses in one study have been moderately satisfied (23). Faculty physicians (21) and non-faculty physicians (23) have not also satisfied with HTP, while retaining physicians in the HTP-deprived area were satisfied (33).

The most distinguished satisfaction of nurses with the HTP was related to the instructions given the details of the plan (20) and the highest dissatisfaction was related to the number of clients (20, 29) income, and benefits (29, 30), working conditions (30), amenities and patients' companions' behavior (29). In the case of physicians, in one study, they have been most satisfied with the change in their income (21), and in another study, 47.1 % of retaining physicians were absolutely satisfied with their income (33).

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Overall, the personnel was most dissatisfied with the increase in the number of patients and the workload, and discriminatory and disproportionate payments (23).

Overall satisfaction of companions and patients with HTP

All studies that have estimated the satisfaction of patients and their companions have concluded that these individuals have been satisfied with HTP; nevertheless, only one study has concluded that patients' satisfaction has been decreased (22). In this study, which has been conducted with the help of before and after HTP data, although most patients have been satisfied with the HTP, their satisfaction was significantly lower than before HTP. As illustrated in the "Satisfaction Based on Study Plan" section, this finding can make doubt on the conclusions of other studies that measured patients' satisfaction with hospitals or clinics after HTP.

Patients and their companions were highly satisfied with HTP in the fields of nursing staff, personnel, medical personnel, low payment, education, provision of medicines, franchises and decrease in informal payment to physicians, non-receipt of out-of-fund money, provision of items and equipment, nursing services, paraclinical services, information and accountability, and welfare services. Patients and their companions were least satisfied with HTP in terms of food quality, amenities, number of clients, complaint management, discharge process, medical services, and training by physician and nurse.

Relationship between demographic variables and HTP satisfaction

There were conflicting results with high heterogeneity concerning the effect of various demographic variables on HTP satisfaction. The satisfaction index was assessed once for patients and companions and again for medical personnel in order to reduce heterogeneity. There was a significant relationship between physicians' satisfaction and marital status, so that satisfaction was higher among married physicians than single physicians (23). There was no significant relationship between age (23), education (23), working status (23), and physicians' satisfaction with HTP. There was a significant difference between the satisfaction of male and female physicians and female physicians were more satisfied (21). Residents are also more satisfied than physicians (21).

There was no significant relationship between managers' and supervisors' satisfaction with gender, marital status, education, employment status, age, experience, and service (23). In some studies, there was a significant relationship between nurses' satisfaction and the type of employment (30), age (20, 26, 30), work experience (30), and gender (29), while in other studies, there was no significant relationship between nurses' satisfaction with gender (20, 30), marital status (20, 30), nurse degree (20, 30), work status (20), work experience (29), age (29) and shift types.

In some studies, there is a significant relationship between patients' satisfaction with HTP and gender (women were more satisfied than men) (24, 26), occupation (24, 25), age (direct relationship) (24, 26, 31), type of residence (24), education (reverse relationship) (23, 25, 31), economic status (reverse relationship) (31), marriage (people whose spouse has died are more satisfied and single people are less than all) (25) and how to get informed with HTP (26). In others, there was no significant relationship between the patient satisfaction and gender (23, 25, 31), marital status (23, 31), employment status (23), age (23), service history (23), and economic status (25). In addition, There was a significant relationship between patients' companions' satisfaction with HTP and age (direct), their relationship with the patient, and the reason for discharge (26).

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[DOI: 10.18502/jebhpme.v5i4.8163]

Table 1. Results of studies on the overall satisfaction with HTP

Author. (yr) (ref.)	Sample, population, & environment	Brief results	Conclusion	QLTY
1. Bastani et al. (2015) (23)	278 of personnel and hospitalized patients in Chamran Hospital of Shiraz	The lowest satisfaction had been related to physicians (1.6) and then financial administration (2.8), nurses & medical staff (2.8), managers & head nurses (3.1), and the highest satisfaction had been related to patients (3.4) who their satisfaction has been decreased by increasing their education. Among personnel, 87 % of physicians did not desire to continue the plan, but 73 % of managers and supervisors, 63.3 % of medical personnel and nurses, and 78 % of administrative and financial personnel were enthusiastic to continue the plan. Most of the dissatisfaction had been with the increase in the number of patients, the workload and unfair and disproportionate payments.	Physicians' dissatisfaction and relative satisfaction of other groups	8
2. Shariati et al. (2015) (26)	300 patients, 300 companions, and 300 nurses from Educational Hospitals in Ahvaz	83.1 **%** of nurses were dissatisfied but among patients and their companions, 57.5 and 55.4 % were relatively satisfied, 9 and 9.1 % were satisfied respectively**.**	Nurses' dissatisfaction and relative satisfaction of patients and companions	8
3. Gholipoor et al. (2014) (5)	1050 patients of East Azerbaijan University of Medical Sciences hospitals in the first phase of the HTP and 1031 patients in the second phase	Patients' satisfaction with the spending of revenues from increasing energy carriers to cover health care costs after the first phase of the plan (June 2014) was 76.2 % and after the second phase was 72.3 % (December 2014) and their satisfaction with hospitals was 92.5 and 90.9. Reducing hospital costs had been the main reason for people's satisfaction.	Patient satisfaction	8
4. Ghamarpour et al. (2017) (35)	126 mothers who had served in community health centers under the control of Iran University of Medical Sciences before and after HTP	HTP has raised the frequency of mothers' visits to maternal health care and the level of mothers' satisfaction with waiting for health services. The average score of mothers' satisfaction before and after the transformation plan is 2.7 and 3.6, respectively.	Increasing mothers' satisfaction and benefit	8
5. Kazemeyni et al. (2015) (2)*	1760 patients of three clinics in Yazd	78.1 **%** of patients were satisfied with the clinics. The highest satisfaction had been with the performance of physicians and treatment costs and the lowest satisfaction had been with the waiting time and staff's behavior**.**	Patients's satisfaction	8
6. Goudarzian et al. (2015) (25)	1200 patients admitted to hospitals of Mazandaran University of Medical Sciences	50.2 **%** of patients had good satisfaction with HTP and 16.5 % had excellent satisfaction. The highest satisfaction had been with the nursing staff, low pay, and the lowest satisfaction with the quality of food**.**	Patients's satisfaction	8
7. Mousavi et al. (2015) (28)	414 patients hospitalized during the implementation of the HTP in the educational and medical centers of	83.6 **%** were satisfied with medical services, 85.7 % with nursing services, 51.2 % with hoteling, and 70.2 % with reception services. 69.8 % of patients who had previously been admitted to hospitals of Urmia University of	Satisfaction of hospitalized patients	8

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Author. (yr) (ref.)	Sample, population, & environment	Brief results	Conclusion	QLTY
	Urmia University of Medical Sciences	Medical Sciences stated that they had observed a satisfactory change in service delivery compared to before the HTP**.**		
8. Nakhaie et al. (2016) (30)*	350 nurses working in two hospitals of Birjand	The average satisfaction of nurses with a majority of 75.4 % was moderate. The lowest satisfaction was in the field of working conditions (4.9 %) and pays and benefits (2 %) and the highest satisfaction was in the field of the direct manager and colleagues (49.7 %). Satisfaction was higher in nurses over 40 years than in other age groups.	Nurses' dissatisfaction	8
9. Asadi et al. (2016) (31)	410 patients hospitalized to hospitals of Birjand University of Medical Sciences	51.5 **%** of patients had excellent satisfaction and 37.1 % had good satisfaction with hospitals, and most of them were similarly satisfied with HTP. The highest satisfaction was with the nursing staff, personnel, medical personnel, and the lowest satisfaction had been with the quality of food and welfare facilities**.**	Patient's satisfaction	7
10. Akbari Sari et al. (2015) (8)	386 cancer patients of Imam Khomeini Hospital in Sari	64 % of patients were satisfied with HTP and believed that the highest effect of HTP had been making access to physicians and health services, appropriate provision of health services, and promoting the quality of welfare services, and the least effect had been related to reducing out-of-pocket payments, preventing referral of patients to purchase medicine, medical equipment, and supplies, and diagnostic services outside the hospital and the patient's waiting time to receive services.	Cancer patient's satisfaction	7
11. Shojaei et al. (2016) (34)*	550 patients admitted to hospitals of Qom University of Medical Sciences	Patient satisfaction with Qom hospitals after HTP has been estimated at 72 %. The highest satisfaction was with the availability of medicine, non-informal payment to physicians and franchise, and the lowest satisfaction had been with the management of the complaint and the discharge process.	Patient satisfaction	6
12. Shafizad et al. (2015) (27)*	338 patients of Imam Khomeini Hospital in Sari	43.8 % were satisfied with hospital services, 53.5 % were satisfied with nursing services and 68.1 % were satisfied with physicians' performance.	Patient satisfaction	6
13. Ghorbani-Niya et al. (2015) (29)	195 nurses of Pasteur Hospital in Bam	The nurses were regularly dissatisfied. Most of them were satisfied with the salary base and the least of them were satisfied with the number of clients, rewards and benefits, welfare facilities, and behavior of patient companion.	Dissatisfaction of nurses	6
14. Dehghan et al. (2016) (33)	94 physicians participating in the residency plan in deprived areas of Yazd	52.1 **%** of retaining physicians in the deprived area were completely satisfied and 23.4 % were relatively satisfied. 75.4 % of them were completely satisfied with welfare-accommodation facilities and 47.1 % of their	The satisfaction of physicians in deprived areas	6

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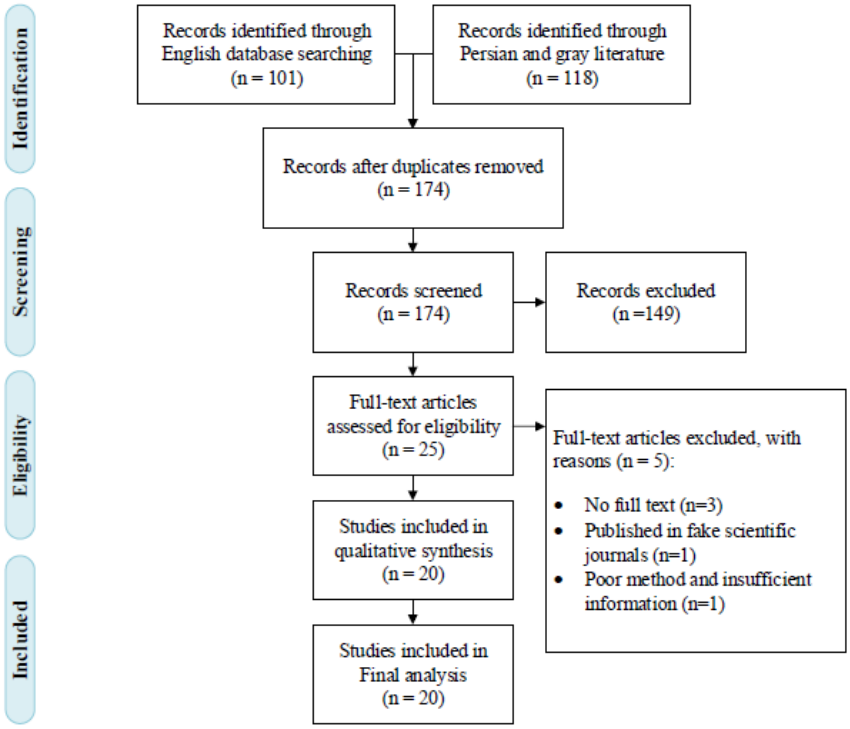
[DOI: 10.18502/jebhpme.v5i4.8163]

Author. (yr) (ref.)	Sample, population, & environment	Brief results	Conclusion	QLTY
		income.		
15. Komili et al. (2016) (6)	362 nurses with at least 6 years of experience in hospitals of Tehran University of Medical Sciences	Before and after HTP, nurses' job satisfaction was 3.1 and 3, nurses' tendency to leave work was 1.7 and 2.2, and burnout was 4.6 and 4.6. Nurses' satisfaction has been decreased and the tendency to leave the work has been increased and their job burnout has been consistent.	Decreased nurses' satisfaction	6
16. Bahmanzia ri et al. (2014) (20)	295 nurses of Shiraz educational hospitals	68.9 % of nurses in Shiraz educational hospitals were completely and relatively dissatisfied with the implementation of the HTP and 29.2 % were completely and relatively satisfied with its implementation, and their satisfaction with the HTP was decreased by increasing age. The highest satisfaction of nurses with the HTP was related to the education given concerning the details of the plan and the highest dissatisfaction was related to the number of clients.	Nurses' dissatisfaction	5
17. Tavan et al. (2015) (24) *	350 people satisfied with patients and companions in Shahid Mostafa Khomeini Hospital in Ilam	48 **%** had high satisfaction and 44.6 % had moderate to high satisfaction. Patients were more satisfied than companions and women were more satisfied than men.	Patient satisfaction	5
18. Molavi et al. (2014) (21)	150 physicians and 284 fellowships of Shahid Beheshti University of Medical Sciences	27.3 **%** of physicians and 70.4 % of fellowships were generally satisfied with HTP. 94 % of physicians were willing to continue working and were most satisfied with the change in their income.	Satisfaction of fellowships and dissatisfaction of physicians	5
19. Hashemi et al. (2013-2014) (22)	3665 patients in the emergency department of Shohada Tajrish Hospital in Tehran	This study was conducted before and after the HTP and concluded a significant reduction in patient satisfaction score after HTP in the fields of pre-discharge education, inpatient status, cleanliness, timely visits by physicians, spending time for examinations, recommendations about the patient's recovery and well-being, the status of financial management, the level of observance of religious norms and ethical principles.	Decreased patient satisfaction	5
20. Hashemi et al. (2016) (32)*	900 patients admitted to Shahid Mohammadi Hospital in Bandar Abbas	75 **%** of the hospitals were completely satisfied and 10.6% were relatively satisfied. The highest satisfaction was with non-receipt of out-of-fund and out-of-bill money, providing the needed items and equipment, nursing services, paraclinical services, information and answerability, welfare services and the lowest satisfaction was with medical services and educational services of physicians and nurses.	Patients's satisfaction	5

* These studies have measured patient or staff satisfaction with the hospital or clinic after HTP and have not specifically measured their satisfaction with the HTP; However, they linked the results to the HTP.

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Flowchart 1. Screening steps

Discussion

This study was conducted in order to determine satisfaction with HTP. The results showed very high heterogeneity in the research method and the results of the studies, therefore, the combination of the results is unreasonable and biased. Although 20 studies were discovered in this field, only three studies were conducted before and after the HTP, therefore, there is no strong evidence to draw conclusions about the overall patient and staff's satisfaction, and it is recommended that in future health care reform plans, the required arrangements to measure the plan's effectiveness, including the satisfaction of people and personnel be considered.

The results of this study explain that in general, nurses and faculty and non-faculty physicians were not satisfied with this plan, while retaining physicians in deprived areas and other personnel were moderately satisfied with this plan. Patients were also satisfied with HTP, although a study that has examined before- and after-HTP data explained that despite high post-transformation patient satisfaction, their satisfaction was lower than before HTP (22). Consequently, more data is required to make a definite decision about patient satisfaction, particularly because patients' satisfaction with care had also been very high before HTP. The results of a meta-analysis study at the end of 2011 explained that patients' satisfaction with hospitals is approximately 70 % (12).

Unlike the meta-analysis study that has been published in 2011 and evaluated the satisfaction with hospitals as acceptable, patient satisfaction has been estimated at 14 % in another meta-analysis study conducted by Isfahani and Nezamdoost in 2018 (13). Patient satisfaction has been estimated from 0.2 to 65 % in this study, which has been studied until 2018. The results of the heterogeneity test were significant and were consistent with this study. The heterogeneity factor was the year and sample size. As patients were less satisfied with the larger sample size and newer years, this result may also raise questions about the effect of HTP, however, these results may be biased due to the high heterogeneity of the studies.

A short report published by Yaghoubi et al. (36) on a systematic review of satisfaction with

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HTP studies included 14 studies that have examined patient and nurse satisfaction and generally concluded that patients have been satisfied with the plan and nurses have been dissatisfied which was in agreement with this study. Notwithstanding, this study has discovered and included more papers and also investigated the satisfaction related to other occupational groups such as physicians, fellowships, managers, and other employees.

Satisfaction with HTP in Iran can be compared to satisfaction with health care reform programs in other similar countries. For example, reforms were made to establish a family physician and higher financial coverage and other measures to achieve Universal Health Coverage (UHC) in Turkey in 2003. The results of a study conducted on satisfaction with this plan have shown that people's satisfaction has increased considerably (37). Notwithstanding, another study that has assessed the overall plan's effectiveness declares that there are few studies on satisfaction with the plan and more studies are required to be conducted (38). In the United States, most people have been satisfied with the ACA, known as Obamacare, and 61 % of those covered people have said that they had not been able to buy a service before (39) and studies conducted by survey companies explain that 55 % of people agreed with the law and 34 % opposed it by 2020 (40).

Other countries may not have comprehensive and cross-sectional interventions like what happened in Iran's HTP, or they may have performed such comprehensive interventions decades ago and are currently implementing most of their policies gradually. Additionally, the content of the policies of other countries may have significant differences with the HTP of Iran that make it usless to compare. However, there are various surveys on the people's level of satisfaction in other countries with their own health system. For example, in a study, there was 61 % complete satisfaction with the UK health system, and in the France 43 %, Germany 37 %, Canada 34 %, the United States 29 %, and Australia 23 % had complete satisfaction (in the range of complete satisfaction / relative satisfaction / dissatisfaction). Among the rest of the population in the UK 35 %, France 48 %, Canada 54 %, Germany 52 %, Australia 54 %, and the US 42 % have been relatively satisfied and the rest have been dissatisfied (41). In another survey conducted by Ipsos on health satisfaction in 32 countries (in the range of complete satisfaction / relative satisfaction / dissatisfaction), 72 % have had complete satisfaction in Saudi Arabia, and in Singapore, Belgium, the United Kingdom, and China, more than 50 % of people were completely satisfied. On the other side of the range, more than 50 % of people were completely dissatisfied in Colombia, Bulgaria, Chile, Romania, Peru, Russia, Poland, Brazil, Mexico and South Africa (42). Although these statistics cannot be compared with the findings of this research, they can provide perspectives about health system satisfaction.

Conclusion

Overall, there are not available yet enough strong, comprehensive, and national studies, including adequate before- and after- studies to conclude public and staff satisfaction with HTP, but current studies explain that patients have been relatively satisfied with the plan while nurses and physicians were relatively dissatisfied.

Despite the high cost spent on HTP, the government did not satisfy all the medical personnel. Some personnel are dissatisfied with HTP due to increased clients, unfair pay, disproportionate workloads, and salaries, and other working conditions.

Acknowledgments

We appreciate all the people who have accompanied us in the process of this study. We appreciate Dr. Hamid Ravaghi, Professor of Iran University of Medical Sciences, and also Dr. Mahdi Shameli and Dr. Mahdi Abdolhamid, the Head and Vice-Chancellor of the Hekmat Institute of Policy Research and Strategic Studies, for their guidance and support.

Conflict of interests

The authors declared no conflict of interests.

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[DOI: 10.18502/jebhpme.v5i4.8163]

Authors' contributions

Hashempour R, Mokhtari-Payam M, and Chivaee D designed research; Hashempour R, Bouzarjomehri H, and Herandi Y conducted research; Hashempour R, Bouzarjomehri H, and Hadian-Shiva E analyzed data; and Bouzarjomehri H, Herandi Y, Chivaee D, and Hadian-Shiva E wrote manuscript. Bouzarjomehri H had primary responsibility for final content. All authors read and approved the final manuscript.

Funding

This study has been conducted by independent researchers; However, we appreciate supports from the above-mentioned individuals and institutes.

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[DOI: 10.18502/jebhpme.v5i4.8163]