



THE ROLE OF THE IMPLEMENTATION OF THE HEALTH SYSTEM DEVELOPMENT PROJECT IN THE QUALITY OF NURSING ACTIVITIES FROM THE PERSPECTIVE OF THE CLIENTS AND MEDICAL PERSONNEL IN DEHDASHT TOWNSHIP

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ABSTRACT

The aim of this study is to evaluate the role of the implementation of the Health System Development Project in the quality of nursing services from the perspective of clients and the medical personnel in Dehdasht Hometown. The statistical population in this research includes two parts: the first part includes all of the medical personnel of the hospital, selected among the nurses and the second part includes patients who have used the services provided by nurses for at least 24 hours after the Health System Development Project. In this study the nurse and the patient sample size was 230 and 200 respectively. The preliminary data were collected using a questionnaire containing 22 questions in five dimensions (tangibility, reliability, responsiveness, assurance, and empathy). Finally, the collected data were analyzed using SPSS Software and Kolmogorov-Smirnov Test was used for testing the normality of the data and Paired Sample T-test was used for rejecting or confirming the research hypotheses.

Key words: Nurse, Patient, Health System Development Project, SPSS Software.

INTRODUCTION

In the Health System Development Project nurses are one of the most important groups that provide health and medical services, and the efficiency of the health system depends on the favorable activities of this group [1, 2]. Nurses play a very important role in patient care so that patients can become fine and can return back their homes. On the other hand, nurses are the largest group among the health staff and should be legally and

morally responsive to the quality of the services that they provide [3]. The Health System Development Project is a program developed by the 11th government in order to reduce the hospitalized patients' rate of payment and improve the health and medical services in the hospitals affiliated to the Ministry of Health and Medical Education [4]. This document is actually a plan for the health and medical activities of the country and clarifies the path of movement toward the goals of this outlook. The design of this plan will clarify the

macro policies of the country, which will lead to stability in policies, which will in turn improve the Health System of the country [5]. In general, the aim of this plan is to reduce people's concerns and health care costs. The Health System Development Project was implemented in line with the long-term objectives of the country and has had considerable effects in the two arenas of treatment and health [6]. Implementation of the Health System Development Project plays an important role in guaranteeing and providing high-quality services and creating satisfaction [7]. Nowadays, patients' satisfaction has attracted the attention of many healthcare and medical services organizations as an important indicator of health services quality. The further importance of satisfaction in the healthcare system is due to the fact that the disease experience and the necessity of following up the process of treatment and care may increase the patients' vulnerability and need for full support. The healthcare organizations have done many activities to provide good service to the patients and so the patients' satisfaction is nowadays considered one of the important outcomes and indicator of the health care quality and services effectiveness respectively [8]. Satisfaction with health care services will lead to the patients' continued reception of health services and their commitment. Therefore, dissatisfaction will lead to adverse consequences, such as people's stopping their relations with the health care system or at least their lack of participation in presenting the services. Besides, people's dissatisfaction will result in the personnel's sense of inadequacy and dissatisfaction and consequently the reduced efficiency of the health care system, especially with the beginning of the programs of the Health System Development Project [9]. Development in the health system will achieve its goal when patients will have acceptable satisfaction with the new structure in the treatment arena [10]. Service quality and patient satisfaction are among the most controversial managerial aspects of the Health System Development Project, because the aim of this plan is to attract patient satisfaction. Nurses the largest group among the health staff plays a very important role in patient care so that patients can become fine and can return back their homes. Therefore, their views in defining the quality of health care are of particular importance [11]. The most important factor in improving the nursing care quality is quality

measurement, and the most valuable quality measurement is the evaluation of nurses' activities in nursing care [12]. For this purpose, we seek in this research to evaluate the quality of the nurses' services by comparing the present status of their services before and after the project with the ideal status from the patient's perspective so that we can determine this plan's degree of effectiveness and strengths and weaknesses and also provide suggestions for improving and enhancing its quality by analyzing its results.

LITERATURE

The Health System Development Project is a program developed by the 11th government in order to reduce the hospitalized patient's rate of payment and improve the health and medical services in the hospitals affiliated to the Ministry of Health and Medical Education. This project consists of three phases [13].

First phase: It was started from Ordibehesht in 2014 with 8 programs:

The program of reducing the hospitalized patients' payment rate in hospitals:

The main goals of the Health System Development Project is financial protection of citizens against the costs of health, organizing the hospital services and improving their quality and people's just access to medical services. Financial protection of citizens against the health costs with a focus on vulnerable classes of people was executed in 15th of Ordibehesht 2014 in the hospitals affiliated to the Ministry of Health and Medical Education by organizing the supply of hospital services and reduction of the patient's payment share (the Website of the Ministry of Health and Medical Education). According to this project, the villagers, nomads and residents of cities with a population less than 20 thousands who are admitted to public hospitals via the Referral System pay only 5 percent of their medical costs and the government pays the remaining 90 percent. However, the urban hospitalized patients pay only 10 percent of their medical costs. Moreover, patients and their companions will not have to go out of hospitals in order to get medicines, laboratory services, imaging services and other medical requirements [14].

Insuring those who lack the health insurance:

Some 70 lakhs people who had no health insurance received the services of this insurance in order for this vulnerable class of society to make use of the benefits of this project [14].

Supporting doctors to stay in deprived areas of the country:

This is most challenging and important to satisfy the doctors who stay in deprived areas of the country. So, the Health System Development Project implemented package in the deprived regions of the country with the aim of improving and enhancing the health services in these regions and for people's access to doctors in the nearest places to their living places, and paved the way for doctors' stay in these regions through incentive payments [14].

Developing the air emergency services:

Considering the existing facilities and the ground roads and the facilities needed by air emergency, and considering the current standards, criteria, conditions and facilities for 70-percent coverage of the ground roads, the ground emergency is facing serious limitation. Therefore, it is considered essential to construct 44 air emergency bases in order to develop the air medical emergency with good air emergency system. Among the main goals of this program are covering the blind spots (spots not accessible to land ambulance) including rural roads, impassable areas and roads with heavy traffic and passing the traffic caused by accidents in order to reduce the time of patient's arrival in the specialized treatment centers, especially in traffic events [14].

Natural Childbirth Encouragement Program:

Improving mothers and newborns' health status is one of the international commitments of the country in line with the Millennium Development Goals, which is being implemented and justified by concepts such as "improving mothers' health within the framework of reproductive health" and "reducing child mortality". Finding access to these goals involves reducing mothers and newborns' mortality index as a result of pregnancy and childbirth complications, reducing the rate of cesareans without indication and promoting natural childbirth [15]. Free cost of natural childbirth in public hospitals and reconstructing

childbirth departments by creating special spaces in order to create painless natural childbirth environments are among the programs for promoting natural childbirth in the Health System Development Project [14].

Hospitals' Hoteling Quality Enhancement Program:

Enhancing the quality of hospitals' services is another program of the Health System Development Project, based on which the physical face of public hospitals such as the status of their rooms, toilets and damaged beds should be improved and renovated and the hoteling and food services should be promoted. The standardization and improvement of the quality of hoteling services has started simultaneously with the implementation of the Health System Development Project proportionate with the service receiver's needs and expectations in all hospitals affiliated to the Ministry of Health and Medical Education [14].

1. Financial support of incurable, special and needy patients

The Program of Financial Protection of incurable, special and needy patients is another protective package of the Health System Development Project. The patients with special and incurable diseases have both been called special patients and their high costs of disease diagnosis and treatment which is not covered by insurance is supported based on the service package determined for them [14].

1.2 The program of specialized doctors' stay in hospitals

The specialized doctors' round-the-clock presence in public hospitals with over 64 beds will make it possible for people to get access to specialized doctors for emergency patients. Among the features of this support package are patients' timely examination and visit, making fast decisions about emergency patients and 24-hour responsiveness in public hospitals, and the round-the-clock activity of surgery rooms [16].

1.3 The second phase of the Health System Development Project: it started on Khordad 1st 2014 with the following programs

Rural Insurance Program and Family Doctor Programs for villages, nomadic regions and cities with less than 20 thousand population. Health and medical service

programs in suburbs. The pilot continuation program and reform of family doctor program in Fars and Mazandaran provinces. Healthcare Completion and Population Coverage in cities between 20 and 50 thousand population. The program of strengthening and institutionalizing the intersectoral collaboration via the Health and Food Security High Council. The program of improving people's health literacy through public participation and self-care. Establishing the system of monitoring and evaluating the health services management. Completing, equipping and developing the health and medical network of the country.

2.1 The third phase of the Health System Development Project

This plan was started from the 7th of Mehr 2014. As this plan was implemented, hospitalization costs decreased from 10% to 5% for urban people and from 10% to 3% for villagers, and deductible outpatient services decreased from 30% to 15% in the hospitals of the Ministry of Health. It also led to the removal of the additional payment (bribe) phenomenon so that receiving any costs from patients is considered against the law of hospitals and medical centers and payments are to be done only with receipts.

2-2. Services

Due to diversity of services, it is difficult to define them properly. What makes this issue more complicated is that due to intangibility of most of the data and outputs, it is often difficult to make out and identify the ways of doing and supplying services. Kotler believes that service is an intangible activity or benefit supplied by an organization and followed by ownership of something. Poor goods and services with a lower quality than expected cause customers to lose their trust in the commodity suppliers and service providers. Customers or service receivers keep evaluating service quality by comparing their perceptions and expectations of the service that they receive [9].

2-3. Quality

Quality has a pragmatic interpretation as the non-inferiority or superiority of something; it is also defined as fitness for purpose. It means a product's ability in achieving its goal with the least possible cost. According to another definition, quality is something which is proportionate with customers' needs and which

has a reasonable price, rather than the best thing that one can buy with money. Quality is some kind of perception which everything and everyone has [17]. Finally, quality refers to the continuous fulfillment of the expectations agreed on by customers and all beneficiaries so that it can create value for all.

2-4. Service quality

Service quality is in general the overall evaluation of the services by customers. Service quality has been defined as the difference between customers' expectations of performance and their perception of real performance. Horowitz has defined service quality based on its three distinct features: 1. Service quality is consumed at the same time when it is produced. Therefore, consumers know all problems with the service quality; 2. Service quality is a set of advantages, but it is often achievement of an experience, and 3. The quality of relations between the service providers and consumers has been defined as one of the needed aspects of service quality [18]. Service quality should be regarded as a combination of multiple characteristics. It should include not only tangible characteristics, but also intangible characteristics such as security, comfort and satisfaction, which are hard to measure [19].

2-5. Nursing services quality

Since nurses play an important role in taking care of patients, improving their service quality in nursing care is the most important factor that can accelerate the patient's recovery and return to their homes. On the other hand, nurses are the largest group among the health staff and should be legally and morally responsive to the quality of the services that they provide. Nursing activities generally includes direct care of patients such as the activities directed toward patient care, and indirect care such as the activities related to registering or reviewing the patient's information, the activities related to the medical unit and individual activities [20, 21].

RESEARCH METHOD

Since the aim of the present research is to investigate the role of the Health Development Project in the nursing service quality from the perspective of the clients and the medical staff, this research is a

descriptive-practical research. The study population includes two parts: the first part includes all the medical staff of the hospital, among whom nurses have been selected as they play the most important part in the Health Development Project, and the second part, including patients who have used the services provided by nurses at least 24 hours after the Health System Development Project. The size of the former group (nurses) was 230, among whom 140 nurses were selected as the sample using Morgan's Table and simple random sampling method. In order to select the sample out of the second community, we used the formula $n \geq z_{1-\alpha} \sqrt{2pq/d}$ and considered $d=0.05$, and the sample

size was determined as 200 people with the level of confidence of 95 percent. The initial data were collected using a questionnaire with 22 items in five dimensions (tangibles, reliability, responsiveness, assurance and empathy), but as the nursing service quality had no relation with tangible factors, this dimension was omitted and the reliability of its variables have been shown in Table 1. Finally, the collected data were analyzed using SPSS Software, and Kolmogorov-Smirnov Test paired T-test were used for data normality and rejection or confirmation of the research hypotheses respectively.

Table 1
Cronbach's alpha of patients and nurses questionnaires

Dimensions of patients Questionnaire	Aloha s'Cronbach Coefficient	Dimensions of Nursing Questionnaire	s alpha 'Cronbach Coefficient
reliability	0.75	reliability	0.81
responsiveness	0.79	responsiveness	0.79
assurance	0.82	assurance	0.83
empathy	0.84	empathy	0.76
The total questionnaire	0.80	questionnaire The total	0.79

FINDINGS

4-1. Testing the normality of the data. Before testing the relations among the variables, the normality of the variables should be tested. A way

of doing so is to use Kolmogorov-Smirnov Test. The results of this test are presented in the following table.

Table 2
The normal distribution of variables

nurses questionnaire				patients questionnaire			
significance	Smirnov -Kolmogorov Test	Before and after the project	dimensions	significance	Smirnov-Kolmogorov	e Befor and after the project	dimensions
0.059	0.251	before the project	reliability	0.075	0.215	before the project	reliability
0.055	0.264	after the project		0.072	0.241	before the project	
0.061	0.625	before the project	responsiveness	0.058	0.514	before the project	responsiveness
0.067	0.633	after the project		0.053	0.565	after the project	
0.073	0.748	before the project	assurance	0.061	0.741	before the project	assurance
0.071	0.723	after the project		0.069	0.753	after the project	
0.059	0.623	before the project	empathy	0.072	0.651	before the project	empathy
0.063	0.659	after the project		0.076	0.663	after the project	

4-2. Determining the service quality score before and after the implementation of the Health System Development Project

4-2-1. Determining the service quality score before and after the implementation of the Health System

Development Project from the perspective of patients. The patient's degree of satisfaction with the quality of the nursing services before and after the project are presented in the following table separately for each dimension.

Table 3
Patients degree of satisfaction with the dimensions of SERVQUAL mode before and after the project implementation of the health system development

patient		
mean	the project Before and after	Dimensions
2.31	before the project	reliability
4.38	after the project	
2.75	before the project	responsiveness
2.70	after the project	
3.20	before the project	assurance
4.36	after the project	
2.74	before the project	empathy
4.12	ter the projectaf	

As shown in the above table, the quality of nursing services in three dimensions of reliability, responsiveness and empathy before implementation of the Health System Development Project has an average of less than 3, and the patient's degree of satisfaction before the project is less than the average. After implementation of the Health System Development Project, the dimensions of reliability and empathy have increased and exceeded the average, but responsiveness has decreased. In general, patients are dissatisfied with the nurses' degree of responsiveness before and after execution of the project. In the assurance

dimension, patients are satisfied with the quality of nursing services both before and after implementation of the Health System Development Project and their degree of satisfaction has even increased after implementation of that project.4-2-2.Determining the service quality score before and after the implementation of the Health System Development Project from the perspective of nurses. The degree of satisfaction with the quality of the nursing services before and after the project from the perspective of nurses are presented in the following table separately for each dimension.

Table 4
Degree of satisfactionwith the dimensions of SERVQUAL model before and after the implementationof the Health System Development Project

Patient		
Mean	Before and after the project	Dimensions
3.24	Before the project	Reliability
3.41	After the project	
2.91	Before the project	Responsiveness
2.37	After the project	
3.34	Before the project	Assurance
3.41	After the project	
2.18	Before the project	Empathy
2.31	After the project	

The quality of nursing services in the two dimensions of reliability and assurance before implementation of

the Health System Development Project has an average higher than 3 and the patient's degree of

satisfaction before implementation of the project is higher than the average. These two dimensions have even increased after implementation of the project, whereas the dimensions of responsiveness and assurance have been less than the average before the project and have become even less after the project.

4-3. Testing the research hypotheses

4-3-1. Testing H1: There is a difference between the quality of nursing services before and after the implementation of the Health System Development Project from the perspective of clients.

We have used Paired Sample T-test in order to assess this hypothesis with the following results.

Table 5
Results of testing the first hypothesis

variable	mean	Standard deviation	Mean difference	(sig)Level of significance
Service quality before the project	2.75	0.859	1.14-	0.023
Service quality after the project	3.89	654.		

As shown in the table above, the degree of satisfaction with the service quality before implementation of the project is 2.75, which has had a 3.89% increase after the project. Considering the level of significance (0.023), which is smaller than 5% degree of error, it can be concluded that H0 is rejected and H1 is confirmed. Therefore, there is a difference between

the quality of nursing services before and after the implementation of the Health System Development Project from the perspective of clients.4-3-2. Testing H2: There is a difference between the quality of nursing services before and after the implementation of the Health System Development Project from the perspective of medical personnel.

Table 6
Results of testing the second hypothesis

variable	mean	Standard deviation	Mean difference	(sig)ce Level of significan
Service quality befo projectre	2.91	0.551	0.04	0.079
Service quality after the project	2.87	0.623		

As shown in the table above, the degree of satisfaction with the service quality before implementation of the project is 2.91, which has had a 2.87% decrease after the project. Considering the level of significance (0.015), which is greater than 5% degree of error, it can be concluded that H0 is confirmed. Therefore, there is a difference between the quality of nursing services before and after the implementation of the Health System Development Project from the perspective of medical staff.

SUGGESTIONS

There are following suggestions based on the outcome of the above studies are given below:

Further attempts must be taken to inform patients about the staff's knowledge, information and capabilities so that patients' trust in the staff

increases. Forming quality improvement teams and executing the evaluation process will be very effective in creating the appropriate structure for providing optimal nursing services. In the empathy dimension, one can create a better sense from the perspective of the hospital staff's companion with patients by training psychological methods and how to establish relationships with patients. Improving the skill of the nurses to have appropriate behaviors with patients and training them the psychological methods and ways of establishing relations with patients so that they can have an opportunity to hear the patient's views and express empathy with them. Increasing the nurses' commitment. Increasing the nurses' salary in order to increase their motivation, and Increasing the number of experienced nurses beside the young ones.

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