



## Localization of the Picker's Patient-Centered Care Model in Isfahan's Social Security Hospitals

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### ABSTRACT

**Introduction and Objectives:** Nowadays, patient-centeredness is considered as a global issue, and according to American Medical Institute, it is one of the main components of the quality of health care. The purpose of this study was to localize Picker's patient-centered care model in Isfahan's Social Security Hospitals.

**Study Design:** The study design was descriptive, applied and cross-sectional since it was conducted at one point of time (May-August 2018) among 300 experts from Isfahan's Social Security Hospitals.

**Methods:** Initially, after studying different patient-centered models, the American Picker Institute model was selected. Then, using a questionnaire, expert judgment, descriptive and inferential tests, SPSS and AMOS software, a localized model was designed and implemented.

**Results:** In this study, a model was developed with eight main domains and 59 components. Among the dimensions of the model, providing information and education to the patient (0.934) had the highest factor load, while the respect for the patient's choice (0.585) showed the minimum factor load. Among its components, the cleanliness of the WCs for patients (0.849), training of post-discharge services especially in emergency situations (0.829), and regular provision of nursing services to the patients (0.815) had the highest factor load.

**Conclusion:** Presenting a native model can be a rational tool for assessing organizational performance. In addition to child-friendly hospitals, maternity-friendly hospitals and safety-friendly hospitals, patient-centered hospitals should also be considered. Also, by implementing a patient-centered nursing care method, one can provide the necessities of implementing it in hospitals.

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### INTRODUCTION

The patient is the main entity in a hospital. This is the patient that must specify which aspects of the care are the most beneficial and not to specify the provider of the care [1]. The traditional method of making decision of health care was based on the notion that they only know what is best for the

patient [2]. Also, having reviewed recent studies, it was found that:

- Physicians, on average, interrupt patients within the first 23 seconds of their opening comments
- Physicians do not ask patients if they have any questions in more than 50% of outpatient visits

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- Physicians typically spend < 1 minute of a typical visit discussing new prescriptions
- Patients are afraid to ask their questions from the doctor for the fear of appearing to challenge them [3].

While providing health services, the experts of medical ethics believe that the patient is independent and he or she should choose the best options based on the information they receive from different therapies. For example, refusing to receive treatments and using drugs is considered as the patient's rights [4]. In this regard, today, the communication model has changed from the old model with the centrality of the patient (paternalism) and patient-centeredness to the new patient-centered and human-oriented model [5]. Based on this concept, the physician should have a complete understanding about the patient, as the cognition they have from their illness [6]. In other words, in a patient-centered health system, instead of focusing on the doctor's decision and priorities, the focus is on the needs and concerns of the patient [7]. In a broad definition, Kreindler considered patient-centered care focusing on the patient. What is lacking is the evidence on how to actualize this vision. While some studies have assessed interventions to promote patient-centered clinical consultations, the evidence base on how to achieve patient-centered care at the organizational level is very limited [8]. This approach requires greater investment in patient education and health literacy; although much can be done here by fostering civil society involvement [9].

The concept of patient-centered i.e. the provision of health services according to the patients' points of view and preferences, and an attempt to pay more attention to the patient perspectives, is considered a relatively recent issue in health systems [10]. Patient-centered care is the recent development of models of providing nursing care, since the routine-centered care has been consistently replacing the "disease-centered" rather than "patient-centered" approaches in nursing [11, 12]. Picker Institute developed a research focused on patient-centeredness by providing patient-centered services. The idea of patient-centered care is reflected in the following presupposition: 'nothing about me, without me' [13].

The eight principles of Picker for patient-centered care have originated from the seven dimensions of patient-centered care in the book of "From Patients View" in 1993. These dimensions include: 1. Respect for patient's preferences 2. Coordination and integration of care 3. Information and education 4. Physical comfort 5. Emotional support 6. Involvement of family and friends, 7. Continuity and transition. Then, the eighth principal was added to these seven principles which was the principle of having access to care [14].

Nurses have the capacity to support and assist in meaningful improvement and operationalization of patient-centered care. Transformational leadership, innovative practices (e.g., respecting patients' choices), and collaborative approaches have been adopted to meet the needs of patients and improve the provision of health care and consumers' satisfaction with the provided care. These approaches identify the critical humanistic role of nurses in collaborating with patients as well as promoting and advocating for their patients' choices, representing a need to move beyond technical competences in the provision of health care [15].

According to a study conducted by Mr. Hashjin et al., maximum 72% of patient-centered strategies have been implemented in Iranian hospitals. In this regard, the implementation of standards, creation of patient and patient-centered safety culture, increasing organizational accountability, and coordination with patients and their families demand more attention. In a study conducted by Massoudi Asl et al., there was a relationship between consideration of standards of the Joint Commission International and patient-centered care by attracting health tourists in selected hospitals in Tehran [16].

In a study by Farnia et al. in Yazd, the results indicated that family-centered care can affect the satisfaction of patients and their families with received services. Family-centered care, as well as patient-centered care, tries to promote the participation of the patient and their family in decision-making for choosing therapeutic procedures [17]. Also, in a study conducted by Abbasi et al., the readiness of selected hospitals in Isfahan based on the standard performance model of accreditation of the Joint Commission in patient-centered standards was about 64% [18].

In the study of Kane et al., patient-centered care in patients with chronic heart failure reduced the severity of symptoms, improved the health quality of life, reduced the rate of hospitalization of these patients, and increased patients' participation in the treatment process [19]. In the study of Debra et al., the results suggested that patient-centered care was effective in satisfying patients and enhanced their perception from the quality of the service [20]. According to Foley and Steel, a higher proportion of positive experiences of practitioner's empathy and patient-centered care was reported by participants consulting with a naturopath, nutritionist, or homeopath compared to those consulting with a myotherapist or acupuncturist.

Improving the patient-centered condition can increase comfort and people's cooperation in utilizing health services. So, assessing different patient-related dimensions in hospitals from the perspective of different customers could provide

useful information for policy makers [21]. The main goal of this study was to localize Picker's patient-centered care model in Isfahan's Social Security Hospitals.

## METHODOLOGY

This descriptive, applied, and cross-sectional study was conducted among experts in the field of hospitalization services in Isfahan's social security hospitals, including Dr. Shariati Hospital, Dr. Garazi Hospital, and Hazrat Fatemeh Al-Zahra Hospital in Najaf Abad in 2018. In this study, various models in the field of health were studied in order to explain the studied theoretical concepts and to discover a conceptual model. Among them, the model of patient-centered health services developed by the American Picker Institute was selected in eight axes. In order to localize this model, its framework was provided for experts in the field of health services including experts in social security organization as well as the university of Medical Sciences, managers and matrons of Isfahan social security hospitals; the modifications that these experts had in mind were considered and applied in the model. Again, the model was presented to them and finally a questionnaire with 60 questions was designed. A five-section Likert scale (1: totally disagree, to 5: totally agree) was used to measure the items. The reliability was obtained by Cronbach's alpha (0.963). Then, the questionnaire was completed by 300 experts and Personnel of inpatient management of Social Security Hospital in Isfahan Province. KMO index (greater than 0.6) was used to ensure the adequacy of the number, and Bartlett test (significance level less than 0.05) were used to ensure the adequacy and competence of data. In the next step, two factor analyses were performed on the collected data. In the factor analysis of the first turn (exploratory), the eight main factors of the model were discovered and were named further based on the experts' view. Then, each of these eight parts was again investigated by confirmatory factor analysis to extract the factors in each of these eight parts. The results were analyzed by descriptive and inferential statistics using SPSS and AMOS software and the localized pattern was presented; then the feasibility of implementing the localized pattern was measured by the opinion of 30 experts.

## RESULTS

Frequency distribution of demographic characteristics of the participants in the study was in accordance with (Table 1). In the mathematical findings of factor analysis, all the factors of the questionnaire were first analyzed by a single factor analysis; regarding which eight factors were discovered and based on the opinions of experts and pundits as well as according to (Figure 1) they

were named; and then confirmatory factor analysis was performed on each of the eight factors again.

Among the dimensions of the conceptual pattern discovered in the exploratory factor analysis, the factor of providing information and education to the patient (0.934) had the largest factor load, while the factor of respect for patient's choice (0.585) showed the minimum factor load. Also, all the factors defined influenced localization of picker patient-centered care model in Isfahan Social Security Hospitals. Accordingly, the research model was approved (Table 2).

Regarding the factors affecting coordination and service integration, the item of the effect of the patients' toilet cleanliness in patient-centered with a coefficient of 0.849, had more solidarity and the item of the effect of follow-up on the cause of delay in physician's presence on the patient's bedside in emergency patient-centered with the coefficient of 0.995, had the lowest weight. Regarding the effective factors on the accessibility and continuity of services, the item investigating the effect of education on how to provide services and care after discharge, especially in emergency situations, in patient-centered having 0.829 coefficient, had more solidarity, and item of the effect of helping patients regardless of the gender of the stuff in emergency situations in patient-centered approach having the coefficient of 0.452, had the lowest weight.

In investigating the affecting factors on providing information and training to patient factor, the item of the effect of introduction between physician and nurse and patient in patient-centered, having the correlation of 0.760, had more solidarity. And the item of the effect of access right to the file information by patients on patient-centered approach having the correlation of 0.485, had the lowest weight. In investigating the affecting factors on the physical comfort factor of the patient and his / her family, the item of the effect of patient access to the phone in room, in the patient-centered, with a coefficient of 0.751, had more solidarity. The item of the effect of the lack of decisive and unilateral of physician decisions on the patient in patient-centered approach having the coefficient of 0.515, had the lowest weight.

In investigating the affecting factors on the respect for the values and privacy of the patient and his/her family, the item of the effect of providing regular and coordinated nursing services (professional care) to the patients in patient-centered approach with a correlation of 0.815, had more solidarity. And the item of the effect of doing any actions for the patient only after coordination with him in patient-centered approach having the coefficient of 0.474, had the lowest weight. In investigating the affecting factors on the patient and family support factors, the item of the effect of the role of the patient's nurse as a patient's protector against

other people (therapeutic and non-therapeutic in the patient-centered approach having the coefficient of 0.776, had more solidarity. And the item of the effect of giving food to the patient's accompanist in patient-centered approach having the coefficient of 0.221, had the lowest weigh.

In investigating the affecting factors on patient rights, the item of the effect of informing patient on hospital services, criteria and costs, insurance and support systems in patient-centered approach having the coefficient of 0.789, had more solidarity. The item of the effect of existence of patient rights billboard and the relevant unit in the exposed to clients in the patient-centered approach having the coefficient of 0.487, had the lowest weigh. In the study of the affecting factors on the respect for the patient's choice factors, the item of the effect of the possibility of consulting the second physician by the patient, in patient-centered approach having the correlation of 0.744 and questionnaire item of the effect of observing the right of the patient to choose a doctor and nurse in the patient-centered approach having the correlation of 0/676, had the lowest weigh.

Descriptive analysis of the questionnaire items revealed that among the items, the highest mean belonged to the item thirty-seven, which was the effect of patients' toilet cleanliness in patient-centered approach having the value of 4.69 and standard deviation of 0.52 and the lowest mean belonged to the item thirty-five, which was the effect of patient access on smoking room in patient-centered approach having the mean of 3.72 and the a standard deviation of 1.15. According to the experts, the possibility of running this model in the factor of respect for patient choice with 39.2%, had the lowest percentage and accessibility and continuity factor with 73.9% had the greatest percentage. (Table 3)

## DISCUSSION

The eight principles obtained in this study were very similar to the eight principles affecting patient-centered care by Picker Institute. The first and third factors were entirely consistent with the factors of Picker Institute, while after re-examining the factors by experts, the factor of involvement of family and friends and the continuity and transition designed by the Picker Institute were merged into other factors including the integration of the continuity and transition in the access to care factor and the design of a new factor called access and continuity of care. It also seemed that given the mentality in the staff of hospitalization centers in the past suggesting physician-centered culture and indisputable implementation of physician orders in hospitals, the involvement of the patient's family in their affairs was not obtained as a separate factor; it was rather designed as integrated in other factors.

On the other hand, respect for the patient's choice and patient's rights was separately and clearly the missing point of patient-centered care in Isfahan's social security hospitals, which prompted its investigation as two separate factors. Finally, due to the importance of religious issues in the province and the emphasis on adaptation plan, the patient's privacy also played a significant role in patient-centered care and claimed the fifth factor along with respect for values. In the research by Javadi et al., the nurses assessed the confidentiality of patient information higher. Similarly, in the study by Rashidian et al., for hospitalization services, the highest score was related to the dimensions of dignity and human dignity as well as confidentiality and trust, while the lowest score was related to the independence and autonomy as well as the quality of physical facilities<sup>2</sup>.

Among the dimensions of the model, providing information and education to the patient had the highest factor load, while respect for the choice of patient showed the minimum factor load. This suggests that due to the emphasis on the accreditation instructions on referral and patient education and serious follow up, from the authorities in this context, this factor is more important in terms of medical personnel. On the other hand, given the traditional method of decision making by physicians for patients without their involvement, the factor of respect for the choice of patient in terms of medical personnel showed less importance. Meanwhile, in the study of Arab and colleagues, among selected hospitals of Tehran University of Medical Sciences, the power of patient choice, environmental quality, and rapid attention were the top priorities for improving patient-centered conditions in these hospitals<sup>2</sup>.

Among the components of the model, it seems that there are no globally-accepted level toilets in hospitals, and the lack of follow-up for patients' needs after discharging from hospital, reduction of the time of providing professional nursing care to the patients' bedside for various reasons, emphasis on introduction process, and the hoteling equipment in the Social Security Organization and the need to have someone who can protect the patient against other people, especially the treatment team, have made the importance of these items more important to hospital staff.

In the study by Alavizadeh et al., it was also found that the highest mean was observed between the dimensions of patient-centered care, in the area of physician-patient relationships and nurse-patient relationships. In this regard, the lowest mean was obtained for the quality of pharmaceutical notification and quality of instruction of transition<sup>20</sup>. In Ugurluoglu and Celik's survey on the level of accountability of the Turkish health system from the point of view of hospital managers, the

confidentiality of patient information claimed the highest score while quick attention to the patient showed the lowest score<sup>2</sup>. The results of the above studies were consistent with the findings of this study in most cases.

### CONCLUSION

This model was a dynamic, result-centered, evidence-based, and applied model, which was localized and implemented with extensive study on the patient-centered model of the American Picker Institute by benefiting from the experts of professors and using a valid research method (exploratory and confirmatory factor analysis). Given that the performance evaluation of hospitals is currently being conducted in the country using 4th generation accreditation standards. The present model could facilitate and accelerate the decision-making on the extent of patient-centered of health Service in each hospital. This model could provide a rational tool for evaluating organizational performance alongside the current classification of hospitals by the Ministry of Health and Medical Education such as: baby-friendly hospitals, mother-friendly hospitals, safety-friendly hospitals; patient-centered hospitals.

The author believes that in order to maintain the dignity and position of the physician and to achieve the general satisfaction of patients, it is necessary to improve the infrastructure of the country's health and treatment system and the patient-centered approach widely in the country. In order to accomplish this, special attention should be given to nurses as a patient advocate. By inserting the title of patient-centered approach in the curriculum of academic studies of therapeutics, especially physicians and nurses, a separate axis named patient-centered approach could be designed in health centers, which can help in the implementation of patient-centered care.

### ETHICAL




This study received the ethics approval of the Islamic Azad University Research Ethics Committee. However, due to the purpose of the study, obtaining informed consent for recruiting study participants was not necessary.

### CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest. The authors are responsible for the writing and content of this paper.

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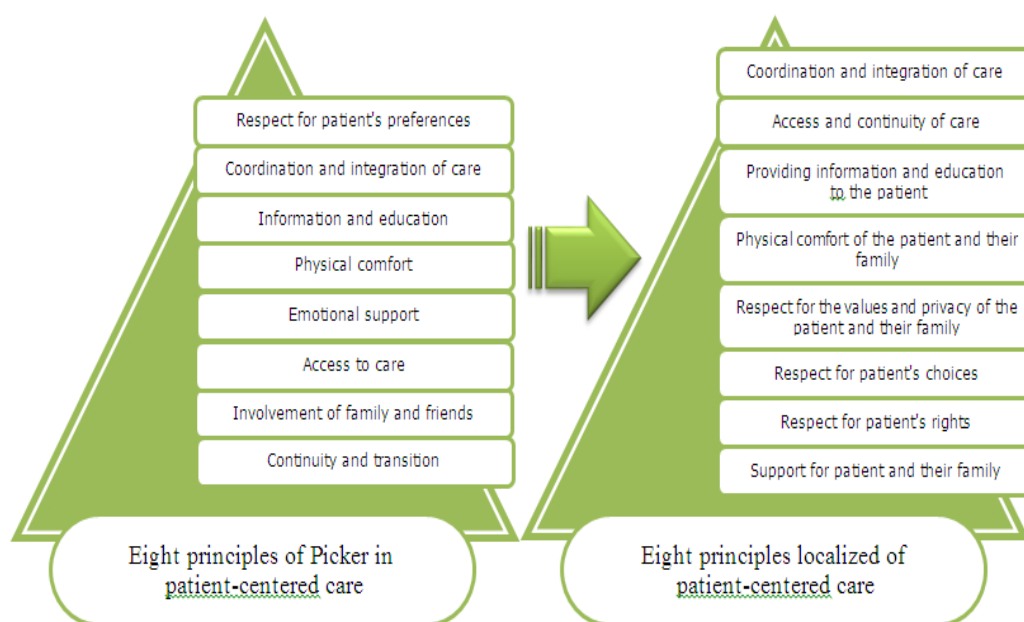
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**Table 1. Frequency distribution in terms of age, gender, education, and activity location.**

Characteristics	Type of participants	Number	Percent
Age	22 to 45	229	76.3
	46 to 65	70	23.3
	More than 65	1	0.3
Gender	Female	166	55.3
	Male	134	44.7
Education	BA	215	71.7
	MA	62	20.7
	Ph.D	15	5
	Physician	4	1.3
	Specialist	4	1.3
Place of activity	Hospital	270	90
	Headquarters of the Social Security Organization	1	0.3
	Headquarters of the province's health management	24	8
	Headquarters of Medical Sciences University	5	1.7



**Fig. 1: Patient-centered care model of Picker Institute<sup>14</sup> and localized model in patient-centered care**

**Table 2. Factor load of localized dimensions of patient-oriented model**

Dependent variable	Independent variable	Standard impact factor	Impact factor	Error	Critical ratio	Significant level
Respect for patient's choice	Patient-centered care	0.585	1.000			
Respect to patient's rights		0.892	1.112	0.189	5.889	***
Support of patient and their family		0.716	1.718	0.290	5.917	***
Respect for values and privacy of patient and their family		0.859	0.764	0.132	5.782	***
Physical comfort of patient and their family		0.766	1.256	0.225	5.588	***
Information and education		0.934	1.116	0.201	5.588	***
Access and continuity of care		0.847	1.068	0.174	6.136	***
Coordination and integration of care		0.893	1.109	0.176	6.317	***

**Table 3. Possibility to implement localized dimensions of patient- centered model.**

Patient-centered localization dimensions	Average	Percentage
Coordination and integration of care	3.37	67.40
Access and continuity of care	3.70	73.90
Information and education	3.28	65.60
Physical comfort of patient and their family	2.43	48.58
Respect for values and privacy of patient and their family	3.47	69.40
Support of patient and their family	3.17	63.38
Respect to patient's rights	3.67	73.35
Respect for patient's choice	1.96	39.20