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The Iranian Health System Responsiveness after Implementation of Health Transformation Plan: A Study of Jahrom County in Southern Iran

Yaser Sarikhani,[1] Seyed Taghi Heydari,[2,*] Shafaq Razmjou,[3] and Sousan Zare[3]

[1]Research Center for Social Determinants of Health, Jahrom University of Medical Sciences, Jahrom, IR Iran
[2]Health Policy Research Center, Shiraz University of Medical Sciences, Shiraz, IR Iran
[3]Student Research Committee, Jahrom University of Medical Sciences, Jahrom, IR Iran

[*]*Corresponding author*: Seyed Taghi Heydari, Health Policy Research Center, Building No.2, 8th Floor, School of Medicine, Zand Avenue, Shiraz, IR Iran. Tel: +98-7112309615, Fax: +98-7112309615, E-mail: heydari.st@gmail.com

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Abstract

Background: Healthcare systems have an intrinsic responsibility to meet medial and non-medical expectations of people.
Objectives: The aim of this study was to investigate the Iranian health system responsiveness in the city of Jahrom.
Methods: This study comprised of 600 patients from 6 health centers in Jahrom County. Data were gathered via a standard self-report questionnaire. Logistic regression analysis was used to evaluate data.
Results: Responsiveness of Jahrom health system was reported to be higher than average (3.32 ± 0.41). Being female, being from low income families, and patients on inpatient services were factors directly associated with higher rate of good responsiveness ($P < 0.001$).
Conclusions: The Iranian health evolution plan is expected to have potential to promote responsiveness and quality of healthcare services, an area deserving more investigations.

Keywords: Healthcare System, Responsiveness, Patients Satisfaction, Health Transformation Plan

1. Background

The world health report 2000 focuses on 3 important objectives of health systems including good health, responsiveness to the non-medical expectations of patients, and fairness in financing (1). These objectives should be considered in Health Transformation Plan (2). In this regard, the Iranian Ministry of Health launched a reform program in the public sector of thee health system in May 2104. Therefore it is necessary to investigate achievements and shortcomings of the plan in different levels.

2. Objectives

This study was designed to evaluate Iranian health system responsiveness to the patients' non-medical needs after implementation of Iranian Health Transformation Plan (HTP) in the Jahrom county of the Fars province in southern Iran.

3. Methods

This cross-sectional study was conducted in university affiliated hospitals and outpatient polyclinics of Jahrom city in southern Iran. The study comprised of 600 participants from 6 centers and stratified random sampling method was used to collect samples. The sample size in each of the outpatient and inpatient services was estimated as 273.

The data collection was carried out via a standard 5 point Likert scale questionnaire developed by WHO (3). The mean score of less than 2.5 indicated as low and greater values were considered as high responsiveness. Data were analyzed using SPSS 17.0. Chi-square test, odds ratio (OR), and corresponding 95% confidence interval (95% C.I) were used to evaluate the univariate and adjusted relationship between independent variables and level of responsiveness. This study was approved by the Ethical Committee of Jahrom University of Medical Sciences under code IR.JUMS.REC.1394.049.

Table 1. Univariate and Adjusted Associations of Demographic Variables with the Health System Responsiveness

Variable	Low	High	P Value[a]	OR[b] (%95 C.I)	OR[c] (%95 C.I)
Age, y					
< 30	77 (35.2)	142 (64.8)	< 0.001	1	1
30 - 40	20 (19.8)	81 (80.2)		2.18 (1.25-3.85)	2.55 (1.35 - 4.81)
40 - 50	12 (13.8)	75 (86.2)		3.38 (1.73-6.62)	3.18 (1.47 - 6.85)
> 50	23 (11.9)	170 (88.1)		4.00 (2.40-6.71)	2.12 (1.06 - 4.26)
Gender					
Male	104 (27.0)	281 (73.0)	< 0.001	1	1
Female	28 (13.0)	187 (87.0)		2.47 (1.56-3.90)	2.08 (1.24 - 3.49)
Education					
Illiterate	11 (9.8)	101 (90.2)	< 0.001	6.35(3.06-13.18)	1.94 (0.68 - 5.55)
Primary School	28 (12.3)	200 (87.7)		4.94 (2.85-8.55)	1.87 (0.89 - 3.90)
High School	48 (32.0)	102 (68.0)		1.47 (0.88-2.45)	1.28 (0.68- 2.40)
University	45 (40.9)	65 (59.1)		1	1
Health Related Education					
Yes	19 (42.2)	26 (57.8)	0.001	1	1
No	113 (20.4)	442 (79.6)		2.85 (1.52-5.34)	1.15 (0.47- 2.81)
Health Related Job					
Yes	12 (32.4)	25 (67.6)	0.114	1	1
No	120 (21.3)	443 (78.7)		1.77 (0.86-3.63)	0.40 (0.13 - 1.18)
Living location					
Urban	113 (25.9)	323 (74.1)	< 0.001	1	1
Rural	19 (11.6)	145 (88.4)		2.67 (1.58 - 4.50)	1.33 (0.71 - 2.48)
Family income, Iran Rial (IRR)					
$< 10 \times 10^6$	76 (17.2)	367 (82.8)	< 0.001	2.67 (1.77 - 4.03)	1.66 (1.01 - 2.76)
$> 10 \times 10^6$	56 (35.7)	101 (64.3)		1	1
Health Insurance					
Yes	127 (22.4)	439 (77.6)	0.290	1	1
No	5 (14.7)	29 (85.3)		1.67 (0.63 - 4.42)	1.93 (0.62 - 6.02)
Type of Service					
Outpatient	83 (36.2)	146 (63.8)	< 0.001	1	1
Inpatient	49 (13.2)	322 (86.8)		3.73 (2.49 - 5.59)	2.28 (1.36 - 3.81)

[a] Using chi-square test.
[b] Univariate odds ratio (OR) and corresponding %95 confidence interval (C.I).
[c] Adjusted odds ratio (OR) and corresponding %95 confidence interval (C.I) computed using a multiple logistic regression model.

4. Results

This study comprised of 600 patients, of whom 385 (64%) were males. The participants were between the ages of 18 to 90 years with mean age of 42 $\pm$ 18 years. About 436 (72%) lived in the urban areas, 110 (18%) had university education, and only 45 (7.5%) had a health-related education. About 78% of the participants reported the responsiveness of Jahrom health system as high (3.32 $\pm$ 0.41).

Table 1 indicates the univariate and adjusted association of demographic variables with the health system responsiveness.

5. Discussion

The results of this study showed that the majority of participants reported responsiveness of Jahrom health system after implementation of HTP as high (73% of males and 87% of females). The result was in agreement with the findings of other studies in Iranian public hospitals (4-6). Improvement of service delivery in the Iranian public health sector, after implementation of HTP could be considered as a reason.

Results of univariate and adjusted logistic regression analysis showed that female patients reported higher scores for overall responsiveness and its 2 subcategories. These results are contrary to the findings of Bazzaz et al. (4)

and Sajjadi et al. (6). This discrepancy could result from differences in the expectations of populations studied (7).

Results indicated that low-income families reported higher responsiveness scores than patients from high-income families. The study of Sajjadi in Tehran (6) as well as some overseas studies showed that people from higher economic groups had higher rate of poor HSR (8-10). Increased access to the health services in the public sector after implementation of HTP in Iran could result in increased responsiveness rating.

Results of this study in contrast with Iranian studies (3, 11) indicated that responsiveness of inpatient services was better than outpatient services. In this regard it should be note that improvement of inpatient services are in the core of HESP.

The results of this study, in line with other Iranian studies (4), did not show any significant association between basic health insurance status of patients and their score of responsiveness. In this regard it is noteworthy that after implementation of HTP in Iran, all patients, regardless of their basic health insurance status, have similar access to the health services in public sector by paying a nominal fee of about 10% of the actual cost. It could be suggested that higher accessibility to medical care accompanied by low costs could result in more satisfaction with the health services.

In conclusion, this study showed that responsiveness of Iranian health system was reported to be higher than average. Despite some serious criticism of HTP, it is expected that this reform scheme could improve responsiveness of the health system in Iran.

Footnotes

Competing Interests: None declared.

Authors' Contribution: Yaser Sarikhani, Seyed Taghi Heydari, Shafaq Razmjou, and Sousan Zare participated in all steps of the study from its commencement to write-up.

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