

What do Tuberculosis Patients says about Health System responsiveness? (A study in Sistan region; South East of Iran)

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Abstract

Introduction: Responsiveness is the ability of the health system to meet the non-medical but rational expectations of people that is one of the goals of the World Health Organization, it can use to evaluate the health system performance. In recent years, TB still remains a major health problem worldwide with 1.2 million deaths. So this study assessed the responsiveness of the health system in TB patients.

Materials and Methods: A cross-sectional and retrospective study was conducted by applying a WHO standard questionnaire in 2018 and 90 patients were interviewed. Data were analyzed by SPSS 22 software using frequency, percentage, and chi-square tests.

Results: Dignity (91%) and Prompt attention (88%), Confidentially (82%) were very important domains from the patient's view. The best performance of responsiveness in inpatient and outpatient was Dignity and Communication. There was a statistically significant difference between the score of responsiveness in the outpatient and the demographic variables of age, sex, and location. ($p < 0.05$).

Conclusion: Despite the importance of all domains, Confidentiality was one of the domains that were extremely important to patients; So as results showed because satisfaction and treatment of these patients is important, it may be possible to ask the health care provider to Provide private conditions for patients and maintaining the dignity to improve the performance and productivity of health care system.

Keywords: Tuberculosis; Health System; Responsiveness

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Introduction

With 1.2 million tuberculosis (TB) deaths in 2018, the World Health Organization (WHO) continues to identify tuberculosis as one of the top 10(ten) causes of death worldwide [1]. The Relationship between TB and poverty with [2] High direct and indirect costs that even small expenditures can push the household into poverty, are one of the challenges of the health system in treating these patients [3]. In this regard, Iran has tried to maximize satisfaction and increase patient adherence to treatment by implementing DOTS strategy and free treatment; It has also achieved successful results [4]. Implementation of Health System Reform since 2014 also is one of another effort to obtain patient satisfaction and protect people financially [5]. Satisfaction includes both aspect, the clinical [6] and the patient's individual experiences of receiving services that include any interaction of patients with the health system and the environment. The goal of this satisfaction is to reduce the economic impact of the disease. Surveying satisfaction data can provide policymakers valuable information and

guidance on health system performance [7] this assessment also could reflect the health system's responsiveness, which is one of the three goals of the WHO in addition to health and financial justice. responsiveness is the response of health systems to non-medical expectations of people [8] And recently it has been considered as one of the important aspects of the success of the care provider [9] The responsiveness framework was introduced by the WHO in 2000 [10] that includes 8 domains "autonomy", "prompt attention", "confidentiality", "choice of provider", "dignity", "clarity of communication", "quality of basic amenities" were shared between outpatient and inpatient care and two general categories of 'respect for human rights' and 'client orientation' [8] Response level in Iran is 100 and it is 93 in terms of the distribution of responsiveness among countries [5] the result of a survey to assess the importance of each domain for Iranian people showed that the most important areas were prompt attention and dignity with 31 and 21%, respectively [9]. While examining the differences in responsiveness of the health system showed that the overall responsiveness of the health system in China for outpatient was better for inpatient; And prompt



attention and dignity performed better than other domains [7]. in South Africa, prompt attention, autonomy, communication have been identified as priority domains to improve the responsiveness of health services [11]. In Iran, studies showed that communication, autonomy, and quality of basic amenities as priority domains for corrective actions to increase health system responsiveness [5]. in Iran Tuberculosis prevalence is high in Sistan and Baluchestan and Golestan province [12]. In recent years, Sistan has been introduced as TB center in Iran [13] The results of a study on the responsiveness of the health system for patients with Heart Failure showed that the prompt attention was the most important domain for these patients [9]. Although tuberculosis patients are one of the most important patients, no study assessed the importance and performance of responsiveness in this group so we answer this question in this study: Has the health system succeeded in responsiveness in TB patients?

Materials and Methods

Sample and Study Design

Sistan-Balouchestan in the southeast of Iran is one of the wide provinces with 11.5 percent of Iran's total area. Because of geographical distance, it is known as an underdeveloped province (the last rank of undeveloped in Iran) [14,15]. Assessment of the degree of development in this province showed that most of the cities in Sistan are deprived and undeveloped [16]. So a retrospective cross-sectional study was conducted in 2018 in Sistan that includes 5 cities: Zabol, Zahak, Nimrooz, Hamoon, and Hirmand [17] to investigate the performance and importance of each domain of health system responsiveness in all patients with smear-positive pulmonary tuberculosis.

We used the Persian version questionnaire of responsiveness, that Its validity and reliability were assessed by Rashidian et al study [18] this questionnaire includes questions about health care utilization, the importance of the domains of responsiveness, and the patient's perspective on the performance of responsiveness in outpatient and inpatient services. It has four parts: Part 1 includes demographic characteristics, Part 2 is about service consumption and time of health need, Part 3 contains 7 questions about the importance of the domains of responsiveness, each of which is rated on a 1-5 point Likert scale, Part 4 Includes 21 questions about the dimension of responsiveness from the perspective of outpatient and inpatient. Each 5-point Likert scale ranged from 1 to 5 (5 very good, 4 good, 3 average, 2 bad and 1 very bad) [19]. The reminder period was set to one year for inpatient and one month for outpatient services. [5,20].

Sampling

Sampling was (done as a) full census. First, we obtained the statistics of all smear-positive pulmonary tuberculosis patients who had a definitive diagnosis of smear-positive pulmonary TB in 2018. The number of patients reached 105, After referring to all district health centres for coordination, 15 people were excluded due to migration, or unwillingness to cooperate, and 90 individuals over 18 years of age were interviewed.

After receiving the ethics code, the researcher visits the health centres of each city, the patients with positive smear pulmonary tuberculosis based on inclusion criteria were selected. Inclusion criteria were, older than 15 years, Positive smear pulmonary tuberculosis, diagnosed and treated in 2018, able to collaborate mentally and physically with the researcher and patients were invited to answer questions at the Comprehensive Health Service Centre; Patients who were unable to travel

to the centre for any reason, the researcher went directly to the village and interviewed the patient at the rural health centre.

Before the interview, the researcher provided the necessary explanations about the purpose of the research. The patient was assured that the information would be kept confidential, to ensure that, interviews were conducted in a separate room. For illiterate people; we asked simple and understandable questions as far as possible so each questionnaire took approximately 20 minutes.

In this study, data were analyzed by SPSS 22 and frequency and percentage and chi-square test were used to evaluate the relationship between variables.

Code of Ethics

This research was approved by IR.ZAUMS.REC.1397.432 at Zahedan University of Medical Sciences.

Results

In this study, 90 patients with smear positive pulmonary tuberculosis were interviewed, consisting of 53 females and 37 males with mean age of 57 (SD = 18). 59% of patients (n=54) reported outpatient services (within a month ago) and 43% (39 patient) reported inpatient services within 12 month ago and all these patient used governmental services for hospital services.

As shown in Table 1, most people were illiterate (72%) and the highest age group was 65 and over. The number of married people (69%) was higher than the others. Most of the people were housewives (57%).

Our findings showed that 94% of people said they were able to get the service when they needed health care. In answering the question about the contributions people in decision making about what healthcare to be given and where to receive care, 85% rated it as "very good or good" and 15% selected "bad or very bad". 95 percent

Table 1: Other demographic information showed in.

		Frequency (%)
Sex	Female	53 (58)
	Male	37 (41)
Age	15-24	5 (5)
	25-34	9 (10)
	35-44	4 (4)
	45-54	12 (13)
	55-64	26 (28)
	<65	34 (37)
Marital status	Never married	13 (15)
	Married	62 (69)
	Widow	14 (15)
	Wife died	1 (1)
Education	No formal education	64 (72)
	Elementary fifth	10 (11)
	Third grade middle school	6 (6)
	Diploma or equivalent	10 (11)
Job	Unemployed	10 (11)
	Working in the private sector	5 (5)
	Student / Student	2 (2)
	Housewife	50 (57)
	Retired	2 (2)
	Disabled	7 (7)
	Worker	14 (16)



Table 2: Importance of each eight domains in patients with TB.

	Extremely important	Very important	Important	A little important	No important
Dignity	45 (51)	36(40)	8(8)	1(1)	0(0)
Autonomy	5 (5)	32(36)	47(53)	6(6)	0(0)
Confidentiality	32 (36)	41(46)	16(17)	1(1)	0(0)
Communication	6(6)	57(64)	25(28)	2(2)	0(0)
Prompt attention	32(35)	47(53)	11(12)	0(0)	0(0)
Social support	19(25)	43(55)	15(18)	1(1)	1(1)
Basic amenities	17(18)	42(48)	30(33)	1(1)	0(0)
Choice	8(8)	33(37)	45(51)	4(4)	0(0)

Table 3: Showed the performance score in outpatient and inpatient services.

		Outpatient(n=54)			Inpatient(n=39)		
		Appropriate	medium	Inappropriate	Appropriate	medium	Inappropriate
Prompt attention	Time to get to the clinic	24 (45)	18 (33)	12 (22)	15 (38)	11 (28)	13 (34)
	Waiting time for admission	26 (48)	17 (32)	11 (20)	25 (63)	10 (25)	4 (9)
dignity	Respect physician	47 (88)	5 (9)	2(2)	29 (75)	7 (18)	3 (7)
	Privacy	44 (82)	3 (5)	7 (13)	33 (86)	3 (7)	3 (7)
Communication	The adequacy of the description	43 (81)	3 (5)	8 (14)	33 (86)	4 (9)	2 (5)
	Sufficient time to ask about problems and treatment	41 (76)	5 (9)	8 (14)	26 (67)	11 (28)	2 (5)
Autonomy	Informing about other ways of treatment	38(71)	10 (18)	6 (11)	26 (67)	9 (23)	4 (10)
	Involvement in decision-making about care and treatment	29(55)	16(29)	9(16)	19(49)	16(41)	4(10)
Confidentiality	Privately speaking with your healthcare provider	42(78)	4(8)	8(14)	27(70)	8(20)	4(10)
	Confidentiality of personal information	42(78)	5(9)	7(13)	29(76)	7(17)	3(7)
Choice	Freedom to Choose a Health Care Provider	24(44)	19(36)	11(20)	16(40)	17(45)	6(15)
Basic amenities	Health and Cleaning Clinic	39(74)	12(22)	3(4)	17(45)	12(30)	10(25)
	Insufficient room and space in the examination room	14(77)	6(11)	7(12)	17(47)	10(25)	11(28)
Social support	The convenience of meeting with friends and relatives	*	*	*	29(76)	6(15)	4(9)
	Keeping in touch with outside the hospital				28(73)	8(20)	3(7)

Note: * - Social support not used in out patient services

of respondents described all aspect of responsiveness as “very or fairly satisfied”.

In table 2 we showed the importance of each domain:

From the patient’s point of view, all domains of responsiveness were important to patients. dignity (91%) confidentiality (82%), prompt attention (88%), Social support (80%) were extremely important or very important to patient, other aspects: Autonomy (89%), communication (92%), Basic amenities (81%), choice (88%) ranked as very important or important.

Discussion

This study is the first research on health system responsiveness in TB patients in Sistan with the highest TB prevalence in Iran. The results showed that dignity, Prompt attention & confidentiality were extremely important from the patients’ point of view. In outpatient and inpatient services, dignity and communication was the best performing.

Considering that there is no study on health system responsiveness in TB patients; so there was no study to compare, but many studies have discussed the health system responsiveness in different diseases, Due to the similarity of the questionnaire used here, we review the above studies.

The percentage of illiterates people (71%) was higher than others, because of the relationship between illiteracy and lack of awareness [21]

Table 4: Relationship between the level of responsiveness in outpatient and demographic variables (n=54).

		Medium n(%)	Appropriate n(%)	P
Sex	Female	29(87)	5(13)	0/001
	Male	17(80)	4(20)	
Location	Village	9(64)	5(36)	0.01
	City	37(92)	3(8)	
Age	18-45	8(80)	2(20)	0.001
	+46	38(86)	6(14)	

health policymakers have to increase the suitable awareness programs for all educational Degrees; A task that requires health care planners to pay particular attention.

Rural patients (84%) were more than urban, maybe poverty, lack of awareness about the symptoms [21], Dust storms [13], underdevelopment and borderline risks [14] contribute to this potential; Therefore treatment and prevention plans must be configured to apply to any context and location. (According to the characteristics of each living area). In a study of health system responsiveness in patients with heart failure, the results showed that the most important domains from the patient’s point of view were Prompt attention and dignity. In our study, the status of dignity and then Prompt attention and confidentiality were extremely important, which was similar to the results of our study. Of course, the confidentiality domain has also been



important in our study from patients' perspective, perhaps because of tuberculosis is a contagious disease and the number of female patients is higher than men (because of the sensitivity of women to keeping their information confidential), and the heart disease is not contagious this domain was also important to the patient. In the study mentioned, the worst performance in outpatient services was choice and Prompt attention; that if we consider performance as the best and worst; the worst performance was in choose and Prompt attention in our study; Keep in mind that most people have outpatient visits to health care facilities and they had not any choices because in Iran, every person is referred to the nearest health care centre for treatment and monitoring, therefore choice domain has the worst performance. Like our study in the study mentioned, hospital services had the worst performance in terms of inpatient services. Therefore, it is better than the health team that by reassessing patients' needs and hospital facilities improve the quality of the hospital environment [9].

Also, a study on responsiveness in public and private hospitals in Isfahan showed that the level of responsiveness was moderate [22]. A study comparing the Importance of health System responsiveness in high and low income areas in Mashhad, it showed that in general, respondents selected the "quality of basic amenities" as the most important domain and the "social support" was the least important domain. Autonomy was the least important factor in our study. As we mentioned, these two studies were conducted for different patients with different goals, and in the study mentioned there was a significant difference between education and age and income with the importance level of each area. Also, there was a difference in our study between responsiveness scores and age, location, and gender [23].

A study assessed the importance of each responsiveness domain before and after the health system reform in Iran, and the results showed that the best and worst performance for domains was dignity and autonomy. Of course, the purpose of the study mentioned is different from our study, and both of them only used the same questionnaire [24].

Some studies only examined the performance of outpatient services, whose results showed that the best performance was related to confidentiality and dignity domains that in our study dignity and communication had the best performance [19]. as we mentioned, all patient is referred to the nearest health centre and the staff place living is in the same area and even in village Behvarz live in the same village; so this proximity of the patient's location and health care provider, make good communication [19].

Conclusion

In our study; Dignity, Prompt attention and confidently were very important domains from patient's view. The best performance was related to confidentiality and dignity domains in outpatient and inpatient services. The worst performance was in choose and Prompt attention, and in inpatient services was hospital services. Good communication in both types of services represent successful outcomes for the health team

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Conflict of interest

The authors reported no conflict of interest.

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