Re-building the trust relationship between people and the public health system. An Italian explorative study.

Autori: Francesca Pennucci, Anna Maria Murante, Federico Vola, Sabina Nuti.
Scuola Superiore Sant'Anna di Pisa, Laboratorio Management e sanità, Istituto di management

Abstract

The identity of public institutions is nowadays undermined by negative media campaign and societal changes leading to a greater individual autonomy in searching for information without looking at their sources' reliability. Identity and trust are linked concepts and the relationship management practices put in place by the public institutions influence the both of them. The health systems need to work in managing the relation with people in order to have an impact on their trust level and re-value the health system's identity. This work aims at exploring which could be the elements to work on in addressing this challenge, considering both the context and the users behaviors and expectations. To this end, a multilevel ordinal logistic regression model was performed on data based on an Italian sample of 1478 respondents. Results confirm that the experience with high specialized services (like outpatient and diagnostic services) are fundamental to build institutional trust, while living a bad experience with healthcare services loose a large amount of trust in the system shaming on it for the bad experience. To re-build the trust relationship between individuals and the health system should continuously work on the performance and on the quality of the users' experience.

Introduction

This work focuses on the population's trust for the Health System. Available data on trust in public service areas show significant variation in the trust trends, with several democratic systems that experienced a decline of trustworthiness among their citizens (Hardin, 2006). By country and period, this variation may be explained by political and/or societal factors. In particular, the low level of public trust in healthcare institutions (health systems, organizations and professionals) is still an actual critical issue due to the increasing availability of alternative sources of information and to the blaming campaigns coming from mass media. These latter have been significantly altering the landscape in which individuals question the credibility of the health system and the trustworthiness of experts. Hence, these mechanisms are affecting the perception of the Health System identity. In this scenario, trust in the Health System can no longer be taken for granted or expected, but it requires a continuous work and the identification of the factors that are more associated with low levels of trust and of the levers that can increase it.

Trust in health systems is a complex concept to investigate due to both the universal value of "health" itself and the mechanisms that regulate the relationship between people and public institutions. Trust may be considered "the optimistic acceptance of a vulnerable situation in which the trustor believes the trustee will care for the truster's interests" (Hall et al. 2001, p. 615) as well as it "does not depend only on judgements one person makes about another, but also on assumptions that emerge

from the context in which relationships take place, on expectations derived from previous relationships, and on criteria for making judgements that are deemed legitimate by the actors involved" (Wuthnow, 2004, p. 150). Hence, public trust may be analyzed from two perspectives that are linked each other: the institutional and the interpersonal ones. How these relationship works is debated. Giddens (1991) considers that the interpersonal trust is necessary for having institutional trust; while Luhmann states that trust in a social system is highly explained by trust in other social systems and individuals (Luhmann 1979). Additionally, the interpersonal trust itself results from other innumerous interactions. Furthermore, trust is a relevant factor that can be considered as an outcome to reach by working on the identity, strategy, communication (antecedents) (Melewar et al., 2017), and as a mediating variable able to strengthen the consumer loyalty and commitment (Melewar et al., 2017; Morgan & Hunt, 1994). Hence, working on people trust in public institutions is relevant for the several implications that follow. Trust might affect the use of health care and the adherence of patients to the prescribed therapies (individual level) as well as it might have consequences in terms of loyalty and commitment. Additionally, within the context we described before (a decline in public trust due to the "loss of identity" produced by the new mechanisms of knowledge transfer), trust may be considered as a factor to work on for re-valuing the health system identity. We focused our analysis on both antecedent-variables, such as context and people profile, and actionable-variables that consider the user-institutions' relationship. Our research questions are:

1. **Which is the role of the context (regional dimension) on the people's trust in health system?** Different levels of institutional trust may be observed across countries for several reasons (e.g. culture, health systems' characteristics, etc.). We want to test this evidence in a federal health system like the Italian one that manages and delivers the healthcare services through the regional health systems.
2. **Which are the individual characteristics that are positively associated with high level of trust?** Literature reports that the population socio-demographic dimensions may influence the people experience and expectancies, with an impact on their trust in the public institutions. We want to investigate whether and how the population profile is associated with the levels of institutional trusts.
3. **Is benefiting of voluntary insurance, welfare funds, etc. associated with the public trust in health systems?** Access to the national health systems' services may be covered through public or private resources: we want to investigate if having alternative mechanisms to access to healthcare (like voluntary insurance, company healthcare funds, etc.) is associated with higher level of trust in the health system.
4. **Which are the healthcare service requirements that may determinate higher level of trust in the health system?** The actual availability of good quality healthcare is stated to contribute to the peoples' trust in public health. We want to investigate, among a list of factors, which are those associated with higher level of trust.

1. Methods

The data used for the analysis come from a web-based survey conducted in Italy. The survey sample was stratified in three geographical areas (North, Center, and South) considering the distribution of gender and age among the Italian population. 1478

answers were collected. In order to answer to our research questions, we performed a multilevel mixed-effects ordered logistic regression using the software STATA 15. The model includes “trust” as the dependent variable and the following variables as independent: socio-demographics, mechanism used for covering the access to healthcare services, used services, reasons for choosing the services provided by the public system, which are services perceived of scarce quality. Four models have been estimated, incrementally including the independent variables.

2. Results

The distribution of age and gender of the respondents are in line with the national statistical data, with a majority of females and people aged 65 or more, while the educational level distribution is unbalanced on the higher classes (53% with a high school diploma; 23% with a bachelor’s or master’s degree). A third of the respondents is retired (21%) or work as an entrepreneur/freelance professional/artisan (13%). Most of the respondents (65%) perceive their health status as “Good”, “Very good” or “Excellent” and evaluate “Adequate” their family economic resources (54%).

The likelihood ratio of the empty model confirms that part of the trust variation is explained at the regional level ($p<0.05$). Additionally, table 1 reports the ORs that describe the association between our explanatory variables (antecedents and actionable variables) and the people trust in the public health system. Most of the variables related to the people profile (gender, age, educational level and occupational status) have not a statically significant effect on trust; while the less a person perceives his/her family’s economic resources sufficient, the less is the trust in the regional health care system. Considering the context of residence, it results that the people’s trust is higher in the centrum and northern Regions compared with the southern ones. Whoever declares a better health status tends to trust more the regional health care system. The use of alternative mechanisms to access/cover the access to healthcare services is sometimes related with an increasing probability of trusting the public health care system (e.g. when people benefit of complementary funds guaranteed by the collective contracts). Trust also increases if respondents had a specialist consultation or a highly specialized diagnostic exam, while there are not significant association with the access to the other services. As for the expectancies of the quality of the public healthcare services, people’s trust is higher when their choose of access to a public rather than a private service is based on the: the professionals’ skills, the safeness from damages, the freedom of choosing the provider; the efficiency and the service management. Finally, having a negative perception of at least one public health services reduces the probability to trust the public health system. This evidence is especially stronger for people who perceive as scarce the emergency department and the diagnostic services.

Table 1 - Estimated models

		Model 1		Model 2		Model 3		Model 4	
		Odds ratio	***pVal***	***Odds ratio***	***pVal***	***Odds ratio***	***pVal***	***Odds ratio***	***pVal***
Socio-demographics	*North (vs South)*	3.59	<0.001	3.36	<0.001	3.44	<0.001	3.02	<0.001
	Center (vs South)	1.50	<0.10	1.45	<0.10	1.49	0.056	1.45	<0.05
	Male	-	-	-	-	-	-	-	-
	Age	-	-	-	-	-	-	-	-
	Education	-	-	-	-	-	-	-	-
	Worker	-	-	-	-	-	-	-	-
	Economic resources (Adequate)	0.37	<0.001	0.38	<0.001	0.34	<0.001	0.33	<0.001
	Economic resources (Scarce)	0.26	<0.001	0.27	<0.001	0.24	<0.001	0.23	<0.001
	Economic resources (Insufficient)	0.16	<0.001	0.17	<0.001	0.14	<0.001	0.14	<0.001
	Health status (Discrete)	-	-	-	-	-	-	-	-
	Health status (Good)	1.91	<0.01	2.15	<0.002	2.12	<0.003	1.80	<0.02
	Health status (Very good)	3.57	<0.001	4.16	<0.001	3.88	<0.001	3.18	<0.001
	Health status (Excellent)	3.64	<0.001	4.40	<0.001	4.10	<0.001	3.49	<0.001
Alternative mechanisms to cover the service access	*Private insurance*			-	-	-	-	1.32	<0.10
	Complementary funds from the collective contracts			1.48	<0.02	1.58	<0.005	1.80	<0.001
	Complementary funds from the company			-	-	-	-	-	-
Accessed services	*General practitioner*			-	-	-	-	-	-
	Surgical procedures			-	-	-	-	-	-
	Diagnostic exams			-	-	-	-	-	-
	Highly specialized diagnostic exams			1.28	<0.05	1.22	0.104	1.25	<0.10
	Specialist visits			1.42	<0.003	1.33	<0.02	1.42	<0.005
	Emergency department			-	-	-	-	-	-
	Maternal pathway services			-	-	-	-	-	-
	Physiotherapy			-	-	-	-	-	-
Reasons for choosing public health services	*Physicians' skills*					1.76	<0.001	1.75	<0.001
	Quality of the offered service					1.40	<0.03	-	-
	Use of advanced tools					-	-	-	-
	Respect for patients' dignity					-	-	-	-
	Proximity of building/physician					-	-	-	-
	Cleanliness of the building					-	-	-	-
	Brief waiting times					-	-	-	-
	Safeness from damages					1.52	<0.03	1.69	<0.006
	Freedom of choosing the provider					1.69	<0.004	1.78	<0.002
	Freedom of choosing the physician					-	-	-	-
	Welcoming place					-	-	-	-
	Ease of access					-	-	-	-
	Efficiency and organization of the services					1.86	<0.03	1.73	<0.05
	It is cheaper than the private health care					-	-	-	-
Services with a perceived scarce quality	*Health prevention services*							0.72	<0.005
	Medical Practitioner							0.61	<0.002
	Hospital stay							0.61	<0.001
	Diagnostic exams							0.59	<0.001
	Specialized visits							0.70	<0.002
	Emergency department							0.57	<0.001
	Rehabilitative services							0.80	<0.10
Multilevel effect *(Regions of residence)* VAR = 0.45 SE = 0.04 LR test vs Ordinal Logit Model chibar2(01) = 4.66 Prob >=chibar2 = 0.0154									

Discussion and conclusions

The above-described analysis shows how much it is important for the health care system to work on the factors that build "customer relationship" both at the individual and systemic level. Firstly, contextual factors, like the characteristics of the regional health systems (e.g. their performance) and both the population economic status and health status (that influence individuals' expectances), may have a significant role in strengthening the trust relationship. Moreover, the availability of additionally mechanisms/resources that support the access to the services (e.g. complementary funds) make people more confident in the positive outcome of care and facilitate the trust consolidation. Finally, results confirm that the experience with high specialized services (like outpatient and diagnostic services) are fundamental to build institutional trust, while living a bad experience with healthcare services loose a large amount of trust in the system shaming on it for the bad experience.

Hence, institutional trust can be affected from different elements related to users' experience with the health care system and to the context. The health care system should put more effort to improve the quality of the relationship between users and institutions (organization, professionals, etc) and work on quality improvement, in terms of effectiveness, efficiency, and safety, so to give a better image to the system and lead to a great amount of trust.

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