

Iranian public trust in health services: evidence from Tabriz, Islamic Republic of Iran

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ثقة الجمهور بالخدمات الصحية في تبريز بجمهورية إيران الإسلامية

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الخلاصة: لقد استقصت هذه الدراسة ثقة الجمهور بالخدمات الصحية في تبريز بجمهورية إيران الإسلامية. حيث أجريت دراسة أسرية مقطعية في عام 2014، استخدم فيها اختبار العينة العشوائي. وقد سُجِّل في الدراسة ما مجموعه 1050 أسرة، واستُخدم استبيان ذو مصدوقية لجمع البيانات عن طريق إجراء مقابلات. فكان متوسط الدرجات المحرزة بخصوص ثقة الجمهور بالخدمات الصحية في تبريز 53.91 ± 13.7 (من كل 100). وقد منح الناس أعلى درجات الثقة للخبرة المهنية وأدنى الدرجات لسياسات الصعيد الكلي. وكان الاختصاصيون ودكاترة الصيدلة والمرضات مقدمي الرعاية الصحية الذين تمتعوا بأعلى مستويات الثقة. يستنتج من ذلك أن ثقة الجمهور بالخدمات الصحية في تبريز منخفضة، وأن صانعي السياسات بحاجة إلى توظيف سياسات مناسبة لتحسين معاناة المرضى من الخدمات الصحية.

ABSTRACT This study investigated public trust in health services in Tabriz, Islamic Republic of Iran. A cross-sectional household study was conducted in 2014, using random cluster sampling. A total of 1050 households were enrolled in the study and a valid questionnaire was used to collect data through interviews. The mean score for public trust in health services in Tabriz (out of 100) was 53.91 ± 13.7 . People had most trust in professional expertise and lowest in macro-level policy. Specialists, pharmacy doctors and nurses were the health providers that enjoyed the highest levels of trust. It is concluded that public trust in health services in Tabriz is low and policy-makers need to employ appropriate policies to improve patients' experience of health services.

Confiance du public iranien dans les services de santé : données recueillies à Tabriz (République islamique d'Iran)

RÉSUMÉ La présente étude visait à étudier la confiance du public dans les services de santé de Tabriz, en République islamique d'Iran. Une étude transversale des ménages a été conduite en 2014, à l'aide d'un sondage aléatoire par grappe. Un total de 1050 ménages ont participé à l'étude, et un questionnaire validé a été utilisé pour collecter des données au cours d'entretiens. Le score moyen de la confiance du public dans les services de santé à Tabriz (sur un échantillon de 100 individus) était de $53,91 \pm 13,7$. Les individus faisaient davantage confiance à l'expertise professionnelle et se fiaient moins aux politiques concernant les soins de santé dans leur ensemble. Les spécialistes, les docteurs en pharmacie et les personnels infirmiers étaient les prestataires de santé qui jouissaient des taux de confiance les plus élevés. En conclusion, on peut dire que la confiance du public dans les services de santé à Tabriz est basse et que les responsables politiques doivent recourir à des politiques appropriées pour améliorer l'expérience des services de santé vécue par les patients.

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Introduction

Trust is a major factor in all human interactions (1), and has long been recognized as a cornerstone of effective relationships between patients and health care providers (2). In the context of health care, there are two forms of trust: interpersonal and public. Interpersonal trust is trust placed by one person in another and can be described as “the optimistic acceptance of a vulnerable situation in which the truster believes the trustee will care for the truster’s interests” (3,4). Public trust is trust placed by a group or a person in a societal institution or system, such as the health system. Public trust in health care has been defined as confidence that those in need of health care will be sufficiently cared for and treated (5,6). It is a general attitude influenced by people’s experiences with the health care system (7).

Public trust can be influenced by the health care system in two ways: through institutional guarantees (regulation of health care providers, protection of patients’ rights, etc.) and through the availability of high quality health care (8,9). Cultural factors and the organization of the health care system may also affect public trust (7).

The health system in the Islamic Republic of Iran, as in other countries, tries to achieve public satisfaction and trust. The Ministry of Health and Medical Education is responsible for this issue. In each province there is a medical university, which is responsible for public health, service provision in public facilities, supervision of health providers (including those in the private sector, charities and Non-Governmental Organization (NGOs)) and medical education. Primary health care services are provided through a nationwide network of facilities. Almost 90% of people have insurance coverage (10). The health achievements of the Iranian health system have been encouraged by WHO (11).

Previous studies have identified six dimensions of public trust in health care: patient centredness, macro-level policies, professional expertise of health care providers, quality of care, information provision and communication, and quality of cooperation between health care providers (6,7). Studies of public trust in the Australian health system found a moderate level of trust, which varied slightly from 3.3 to 3.6 out of 5 over the years (10). A comparative study of public trust in health care in Germany, the Netherlands, and England and Wales showed that the Dutch had the most trust in the “patient focus of providers” and the Germans the least. In all the countries, public trust in macro-level policies was low. German respondents had significantly less trust in “health care providers’ professional expertise” and “quality of care”. The Dutch people had significantly more trust in “information supply and communication” and “quality of cooperation”. Moreover, people in England and Wales placed significantly more trust in family physicians, specialists, dentists and non-medical complementary or alternative therapists than the Dutch and German respondents (7).

A low level of therapeutic success and compliance with treatment advice could lead to low levels of trust (8). Generally, a negative experience in a patient-provider contact may lead to low satisfaction and trust. Measurement of public trust in health care provides the government with information on the performance of the health system from the users’ perspective (12) on two levels. First, on the macro-level, public trust is a supporting indicator for changes in the health system. Secondly, on the micro-level, the level of user trust in health care is likely to affect their attitudes and behaviour in practice (6,13,14).

The aim of this study was to determine public trust in health services in Tabriz, the capital city of East Azerbaijan province of the Islamic Republic of Iran. Governmental, private, charitable

and NGO providers are active in the various levels of health care in Tabriz.

Materials and methods

A cross-sectional household study was conducted in summer 2014, using random cluster sampling. The list of addresses and telephone numbers for Tabriz households in 2013 was used as the sampling framework, and 1050 households (70 clusters of 15 households) were included in the study. Clusters were selected based on probability proportional to size (PPS). The starting-point (household) within each cluster was determined using the sampling framework, and then the next nearest household to the right of the starting-point was included, until a total of 15 was reached. Households that had been established in Tabriz for at least six months and that were willing to participate in the study were considered as eligible. The study objectives were explained to the respondents, then face-to-face interviews were carried out with the head of household, or another member of the household, by a trained questioner.

The questionnaire had two sections: the first dealt with the demographics and socioeconomic situation of the households (6 questions) (15) and the second was a two-part questionnaire about public trust, developed by Van der Schee et al. (7). The questionnaire was translated into Persian using the double forward-backward method. It was validated for reliability through a pilot study of 30 households (Cronbach’s alpha = 0.86) and for validity through a Delphi study of expert opinion (content validity ratio (CVR) = 0.81). The six dimensions of the questionnaire were:

- patient centredness (five questions, including items such as taking patients seriously, attention);

- macro-level policies concerning health care (three questions on cost policies, waiting times and quality);
- professional expertise of health providers (three questions on knowledge, training and education of doctors, and use of new treatments);
- quality of care (six questions on prescribing of the right dose at the right time for patients, testing, etc.);
- information provision and communication (five questions on whether patients are provided with clear information about various treatments, patient education); and
- quality of cooperation between health care providers (three questions).

A four-point Likert scale was used to rank respondents' trust from very low to very high. Respondents were asked to rank their trust based on their general experience with health services (public and private). They also had the option of selecting "no opinion".

Respondents were also given a list of 14 health providers and institutions and asked to grade their trust in them from 1 (very low) to 20 (very high).

Data analysis was done using SPSS 21. Descriptive statistics, as well as the independent *t*-test and one-way analysis of variance (ANOVA), were used, as appropriate. The study was approved by the ethical committee of Tabriz University of Medical Sciences. This paper was a part of larger study, the Tabriz Clinical Governance Research Project (TCGRP), which has been described elsewhere (15).

Results

Most of the respondents (73.8%) were female and 84.2% had no university education. The mean age of the respondents was 38.6 years (range 15–88 years). Only 19.8% of households were renters and 81.1% had social insurance. About half (48.5% and 52%, respectively) of the households evaluated their economic condition and job classification as average for the community. Households' mean self-reported economic capacity (out of 100) was 57.55 ± 18.43 . The mean level of public trust in health services in Tabriz was 53.91 ± 13.7 (out of 100). Table 1 shows the mean level of public trust for the six dimensions.

One-way ANOVA showed a significant difference in public trust on all the dimensions between different economic groups ($P < 0.001$); households with a lower economic capacity had more trust in health services. A significant difference was also observed between age groups, with older people having a higher level of trust (Table 2).

There was also a significant difference in trust ($P < 0.001$) according to education level of the head of household, both in total trust and for each of the dimensions except professional expertise ($P = 0.191$). Individuals with a doctorate, and those who were illiterate or had only elementary education, had the most trust in health services (74.2 ± 11.8 , 56.11 ± 15.21 and 55.42 ± 13.15 , respectively). No significant difference in public trust was seen

in relation to the job of the head of the household.

Having insurance or a history of hospitalization had no significant effect on trust level ($P > 0.05$). One-way ANOVA showed that only in the dimensions of professional expertise ($P = 0.048$) and cooperation between health care providers ($P = 0.002$) there was a significant difference between groups with different job values. As shown in Table 3, the people of Tabriz were most trusting of specialists, pharmacy doctors and nurses.

Discussion

The study revealed a low level of public trust. The people of Tabriz had the highest mean level of trust in professional expertise and the lowest in macro-level policies. Meyer (16) reported that people were distrustful of the government role in the health system, and suggested that a low level of public trust might be a result of the increasing cost of health services and the weak and inequitable performance of health insurance. The existence of informal payments and disregard for patients' right could be other reasons. Public trust in health services is measured regularly in various countries (17). It is used as an indicator of public support and an important factor in policy-making and governance, to orient the future performance of the health care system (6,7). A comparative study of three countries showed that the inhabitants of England and Wales

Table 1. Mean level of public trust in the six dimensions of health care services, Tabriz

Dimension	Mean trust ^a	Standard deviation
Patient focus of health providers	52.46	23.32
Macro-level policies	34.71	19.08
Professional expertise	61.76	20.70
Quality of care	59.36	16.57
Information provision and communication	53.40	21.59
Quality of cooperation between health care providers	58.13	17.69

^a Out of 100.

Table 2. Public trust in health services according to household's economic capacity and age group of respondent

Household economic capacity	Mean trust ^a	Standard deviation	P value ^b
Very low	65.73	11.40	
Low	55.07	13.51	
Average	55.65	12.99	< 0.001
Good	52.14	15.12	
Excellent	47.49	14.39	
Age of respondent (years)			
<20	52.86	14.77	
21–40	51.44	13.80	
41–60	54.33	13.84	< 0.001
61–80	59.57	13.10	

^a Out of 100.^b Based on one-way ANOVA.

had most trust in the health care system, followed by the Dutch. People in Germany generally had the least trust in health care (7). The Dutch respondents rated their trust in the health services as 7 out of 10, which is higher than the level found in our study. The study by Van der Schee et al. revealed a mean level of public trust of 5.05 in the Netherlands (18). It was suggested that the level of trust is related to patients' compliance with medical advice and therapeutic success (8).

In the health sector, trust has long been recognized as crucial in the patient–provider relationship. In this

regard, a low level of public trust could be a result of low patient satisfaction and poor performance of health care organizations (19). Moreover, as a study of 33 countries concluded (20), a low level of trust may stem from the incapacity of the health system to employ proper policies to improve public health. This study, and the Dutch study showed that older people have significantly more trust in health services than younger people (20). Furthermore, in the Netherlands, individuals with lower education had a higher level of trust (6). Our results were similar, although people with a postgraduate degree had

the highest level of trust. This might be related to sample size, since the number of individuals with this level of education was very low.

The people of Tabriz had most trust in specialists, pharmacy doctors, nurses and general physicians. This is similar to the findings in England and Wales, Germany and the Netherlands, where it was also found that therapists who were not doctors had the lowest trust of all health care providers (7). Tabriz is a medical tourism destination for people from the north-west of the Islamic Republic of Iran, Azerbaijan and Turkey. It is possible that the high occurrence of

Table 3. Level of public trust in specific health care providers

Health care provider	Mean trust ^a	Standard deviation
Public hospital	12.20	5.55
Private hospital	12.59	6.39
Social security hospital	11.23	7.0
Urban health centre	10.83	7.01
Private clinic	12.87	5.99
Medical university clinic	7.68	7.59
General physician	13.11	5.34
Specialist	14.94	5.39
Nurse	13.28	6.09
Dentist	12.70	6.37
Pharmacy doctor	14.20	5.30
Physiotherapist	9.62	7.99
Herbal apothecary	10.80	7.51
Traditional provider (e.g. bonesetter)	9.08	7.70

^a Out of 20.

medical tourism involving the specialists in Tabriz has created more trust in them. In addition, the poor performance of the referral system means that many patients go directly to specialists. It is also common in Tabriz for patients to go directly to a pharmacy, where they can explain their problem and receive the drugs they need. This might be a result of the high cost of a visit to a doctor, long waiting times or absence of insurance coverage, and could be the reason why a high level of trust is placed in pharmacy doctors.

A qualitative study in South Australia concluded that patients had the same level of trust in public and private hospitals (21). Similarly, our study revealed the same trust in private and public hospitals. These results are in contrast with those of Hardie & Crichley, which showed different levels of trust between public and private hospitals (22).

Trust is the cornerstone of an effective patient–physician relationship (2,23). In communication between patients and physicians, patients must be given important medical information

and have opportunities to influence care decisions. This results in a patient-centred approach and more trust in health care providers (24,25). Provision of information and communication in health services was ranked fifth of the six dimensions of public trust. This suggests that people in Tabriz have poor experiences of communication in health service facilities. Since trust is a result of patient satisfaction and may affect other aspects of the health services, decision-makers need to consider the factors that affect trust and establish plans to increase public trust in health care.

Limitations of the study

To the best of our knowledge, this study is one of the first on public trust in health care in the Islamic Republic of Iran. It relied on self-reported information of households, which might be biased.

Conclusion and recommendation

The level of public trust in health services was low in Tabriz. This might

have further implications for trust in the health system and in government. A high level of public trust is desirable because of the universal value of health. It is suggested that a national study should be conducted on public trust and its determinants, to identify the challenges and develop appropriate strategies. A focus on professional ethics, observation of patients' rights and the establishment of an electronic health records system in order to improve cooperation among physicians could be useful.

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