

Informal Payment in Health Settings: A Survey of Teaching Hospitals

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Abstract

Background and Objectives: Informal payment in the health settings is a significant challenge facing the health system with consequences such as inequity in access to healthcare services, distrust to health care system, and dissatisfied customers. Detailed identification of the nature of the problem is prerequisite for developing relevant overcoming strategies. Accordingly, this study aimed at providing information on the frequency of informal payment in teaching hospitals and exploring the factors influencing this phenomenon.

Methods: TA sample of 201 patients was selected from Surgical, Internal, and Emergency departments and ICU and CCU of teaching hospitals of Shiraz University of Medical Sciences to participate in the study. A researcher-designed questionnaire was used as the study tool. Chi-square test was applied for examining the significance of the differences.

Findings: Of the total patients surveyed, 41 (20%) experienced informal payment. Cash offering was the most frequent form of payment (39%). More than half of the payments have occurred in the Emergency department (51.2 %) followed by Internal (17.1 %) and Surgery (12.2 %) departments. Informal payment was found to be significantly more prevalent among the primarily insured patients ($P < 0.05$). No significant relationship between demographic variables and informal payment frequency was identified.

Conclusions: This study identified the Emergency department as the area of focus for controlling informal payment in health care system. The finding that insured patients are more exposed to informal payment request encourages further studies to identify the causative factors.

Keywords: Informal payments, Health care systems, Teaching hospital, Shiraz

Background and Objectives

Health care systems are responsible for improving the health of the society as well as protecting people against expenditure imposed by treatment of the disease [1]. In addition to concerns that policy makers have about the quality of health care [2], evidence shows that the health systems are struggling with increasing costs; this problem is more severe in the developing countries [3]. On the other hand, nowadays, lack of financial protection is considered as illness of

the health care systems; the most prominent sign of this imperfection is the burden that is imposed to families, also known as “catastrophic expenditure”. The data shows that there is a big gap in the expenses of health care between developing and rich countries; and per capital of health care expenses in more developed countries is even 100 times more than in the developing countries. Studies show that although in most of the developing countries, 10 to 45 percent of the government budgets are allocated to healthcare services [4]; however, more than half of the health care expenditures in these countries are paid directly by the patients in the form of “out-of-pocket” [5].

Altogether, another rising issue threatening all countries’ health care system (especially in the developing countries) is *informal payments*. The first

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priority is to define informal payments. In general, informal payments include paying to the service providers and organizations in any form out of the official payment scheme such as buying medicines or any medical instruments by patients where it is not their responsibility [6]. These kinds of payments, also known as “under table” and “non-official payments” [7], are burden especially on lower income families that threaten the accessibility to health care services. These low income families have problems receiving usual healthcare services, and formal payments let alone being charged for informal payments.

Previous studies have shown that informal payment is a challenge to many Asian countries as well as the central and eastern European countries. It is not exactly known where informal payments have emerged from. There is an old belief that physicians act like “Robin Hood”. They charge lower income families less than rich families; however, this concept is changing because of informal payments as unfair relation between patient and clinical staff so that patients have to pay for services, which are defined as *free of charge* [8]. Balabanova and McKee defined these payments as an unfair deal between patients and medical team where the patient is forced to pay for the service that is free [9]. In the European countries, these kinds of payments are known as “bribe” and “appreciation”. Some believe that “appreciation” is not a proper definition for informal payments because, in some situations, the doctors make the suggestion. The word “bribe” is not a good definition too as it implies the corruption of medical staff, which is not always the case [8].

A study done by Liaropoulos using telephone inquiry with people receiving medical services in public hospitals in Egypt showed that 336 out of 1616 patients had been charged for at least one kind of informal payments. 42% of these informal payments were due to the fear of receiving insufficient health care services, and 20% were claimed by the physicians [10]. The results of Szende and Culyer study showed that informal payment is practiced as a routine in Hungary, and low income people experience it more to receive better health care services [8]. Onwujekwe and colleagues reported that there is discrepancy between patients and services providers in Nigeria for malaria. They concluded that many families had experienced the informal payment of any kind [11].

Although this is a big issue in many health care systems, unfortunately no comprehensive studies have been conducted in our country (Iran). Some instances of limited studies include Qiyasipour survey that showed the frequency of informal payments in

Tehran educational hospitals. The results revealed that out of 300 persons, 21% had charged for informal payment, which is a big amount [12]. Therefore, this study was designed to determine the frequency of informal payments in some selected hospitals of Shiraz University of Medical Sciences. We hope that our data will help organizations and managers as well as related unions and NGOs take the necessary steps to eradicate this malpractice.

Ethical issues

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Methods

Setting and samples

This cross sectional descriptive – analytical study was carried out in 2012 in the surgical ward, internal medicine ward, emergency ward, ICU, and CCU of two educational hospitals of Shiraz University of Medical Sciences using stratified sampling. So each hospital was considered as one separate class, and then two hospitals were finally selected. Each hospital's number of samples were calculated based on the number of discharges from the same hospital; this was done separately for each ward. All samples were selected randomly.

Data collection

A valid and reliable questionnaire was used to gather the information, which was previously confirmed in Qiyasipour's study [12]. They used Content Analysis method to determine the validity and reliability of the questioners. For the questionnaire validity, they utilized repeated test; then the questionnaire was distributed among 25 persons of the experimental group. It was repeated in a 10 days interval. Finally, the calculated correlation between these two phases was estimated as above 94%. The questionnaire consisted of three parts: the first one dedicated to the information regarding the hospital wards and demographic characteristic of the patients; the second and the third parts were filled out by the patients who had experienced informal payments and those who had not, respectively. These questionnaires were filled out by either the patients themselves or their families.

Statistical analysis

These collected data were analysed using Chi-square and the SPSS software (ver.15).

Results

Findings related to the demographic characteristics of participants

The experimental group consisted of 44.8% men, and the youngest people were in the 30-39 age group (19.4%). 26.9% of the sample members were single (54 persons) and most of them were from cities (75.7%). Regarding the educational status, the majority of the respondents were illiterate (28.9%) or categorized in lower educational groups, and only 22.4% had university degrees. Other demographic characteristics of the participants are shown in Table 1.

Findings related to informal payments

Overall, out of 41 persons who experienced informal payments had paid it in cash, and 4 persons (9.8%) bought the medicines or medical instruments, though legally they had no commitment for provision of them. 16 persons (39%) bought gifts such as flowers, pastries, etc. as a sign of appreciation to the hospital staff, and 5 persons (12.2%) were made to do commitments out of the hospital for the medical staff (Table 2).

Out of the 127 patient receiving services from emergency ward, 21 persons had informal payments, which were 51.2% of the total informal payments. The ICU patients had the least informal payments (7.3%). From 28 patients in internal ward 7 persons (17.1%) had experienced informal payments. Also in the Surgery ward, from 22 patients being questioned, 5 persons (12.2%) were charged for informal payments. In the ICU ward, 5 persons had the same experience, which comes to 12.2% of the total informal payments ($P = 0.0135$) (Table 3).

The findings also indicated no significant relation between the frequency of informal payment and gender of the sample population ($P = 0.352$). For other variables such as age ($P = 0.442$), marital status ($P = 0.807$), education and place of residency ($P = 0.897$), no significant differences were observed. However, there was a significant difference between the frequency of informal payments and employment situation ($P = 0.001$) so that unemployed people and students showed greater amounts, and self-employed people had been charged for the least frequency. Also there was a significant difference between the

Table 1 Relative frequency distribution of patients in terms of demographic characteristics

characteristics	N	%
Gender ($n=201$)		
Male	90	44.8
Female	111	55.2
Age ($n=201$)		
< 20	24	11.9
20-29	37	18.4
30-39	39	19.4
40-49	33	16.4
50-59	31	15.4
> 60	37	18.4
Marital status ($n=201$)		
Single	54	26.9
Married	112	55.7
(Divorced-widowed)	34	17.4
Place of residence ($n=201$)		
Shiraz	94	46.8
Other cities	58	28.9
Rural area	49	24.3
Level of education ($n=201$)		
Illiterate	58	28.9
Primary school	23	11.4
Guidance school	32	15.9
High school	43	21.4
University degree	45	22.4
Employment status ($n=201$)		
Salaried	47	23.4
Worker	27	13.4
Self-employed	20	10
Unemployed - student	107	53.2
Primary insurance status ($n=201$)		
Insured	130	64.7
Not-insured	71	35.3
Supplementary insurance status ($n=201$)		
Supplementary insured	0	24.9
No-supplemental insurance	151	75.1

frequency of informal payments and insurance status ($P = 0.006$) such that insured patients had experienced informal payments more than uninsured ones (Table 4).

In addition, the length of hospitalization showed a significant difference with informal payments ($P = 0.043$); the more hospitalization length, the greater chance to be charged for informal payments (Table 5).

Discussion

The results of this survey indicated that there is no significant difference between the frequency of infor-

mal payments and different hospital wards. This was also stated in Qiyasi's study [12]. On the other hand, the results showed that cash, gift, flower and pastry type of payments had the highest frequencies, respectively; similar findings were obtained by Balobonova in Hungary. Balobonova reported that out of 100 persons being interviewed, 19% of men and 22% of women had experienced at least one type of informal payment mostly in the form of gift in comparison with in cash payment [9]. Contrary to Balobonova, the results of Qiyasi's survey showed that cash payment was the most frequent type of informal payments [12]; Tatar and Ozgen reported similar results [13, 14]. Overall, findings in different countries indicate that the cash and gift types of payments are the two most frequent types of informal payments. Based on cultural, economic and social situations in some regions, informal payments could be changed into gifts. The important subject to be considered is "the motivation" for paying informally. In many studies, the main purpose of the patient for informal payments was to "receive better services" or to be "afraid of receiving improper services" [10]. In another study carried out by the University of Glasgow, the researchers in four Eastern European countries' (Ukraine, Bulgaria, Czech Republic and Slovakia) health care staff stated that the main reason they receive informal payment was the patients' insistence to do so, but from the patients' point of view, that was the fear of receiving improper service [15]. The question is whether the informal payments could bring about more satisfaction to the person who pays? Although there is insufficient data answering this question, Liaropoulos believes there exists no significant difference between informal payments and satisfaction caused by services received. In other words, those who had experienced informal payments for the better services were not sat-

Table 2 Absolute and relative frequency of informal payment based on type

Types of informal payment	N	%
Cash	16	39
Pastry, flower, gift	16	39
Commodity-medical instrument	4	9.8
Commitment	5	12.2
Total	41	100

isfied [10].

Our study showed no significant difference between the demographic characteristics such as gender, age, marital status and level of education, and informal payments, which corresponds with the results of Liaropoulos and Ozgen and Qiyasi but not with those of Szende. Szende believes that informal payments have different distribution among various age groups so that aged persons of middle social level have experienced more informal payments [8, 10, 12 -13].

There was a significant relationship in this study between employment situation and frequency of informal payments. This implies that low income people in comparison to others have more informal payments. However, there is controversy between researchers about the relationship between socio-economical characteristic and informal payments. For example, Liaropolous and Beazoglou found no significant relationship between socio-economical characteristics and informal payments while Szende and Vian reported that economical characteristics such as the level of income influences informal payments so that low-income people have the highest informal payments [8, 10, 16-17]. It is important to note that patients'

Table 3 Relationship between the frequency of informal payments and hospital's different wards

Ward		Informal payment		Total	Results
		Yes	No		
Emergency	N	21	106	201	X ² = 7.012 P = 0.135
	%	51.2	63.2	100	
Internal ward	N	7	21	201	
	%	17.1	13.9	100	
Surgery ward	N	5	17	201	
	%	12.2	10.9	100	
ICU	N	3	11	201	
	%	7.3	7.0	100	
CCU	N	5	5	201	
	%	12.2	5.0	100	

Table 4 Relationship between the frequency of informal payment and demographic characteristics of the patients

Demographic characteristics	Yes		No		Total		Results
	N	%	N	%	N	%	
Gender							
Male	21	23.3	69	76.7	90	55.2	X ² =0.865
Female	20	18	91	82	111	44.8	P=0.352
Age							
< 20	5	20.8	19	79.2	24	11.9	
20-29	4	10.8	33	89.2	37	18.4	X ² =4.791
30-39	8	20.5	31	79.5	39	19.4	P= 0.442
40-49	10	30.3	23	69.7	33	16.4	
50-59	5	16.1	26	83.9	31	15.4	
> 60	9	24.3	28	75.5	37	18.4	
Married status							
Single	12	22.2	42	77.8	54	26.9	X ² =0.428
Married	21	18.8	91	81.3	112	55.7	P= 0.807
Other(widow, divorced)	8	22.9	27	77.1	35	17.4	
Level of education							
Illiterate	15	25.9	43	74.2	58	28.9	X ² =2.752
Primary school	3	13	20	87	23	11.4	P= 0.6
Guidance school	6	18.8	26	81.3	32	15.9	
High school	10	23.3	33	76.7	43	21.4	
University degree	7	15.6	38	84.4	45	22.4	
Employment status							
Salaried	5	10.6	42	89.4	47	23.4	X ² =16.933
Worker	13	48.11	14	51.9	27	13.4	P= 0.001
Self-employed	2	10	18	90	20	10.0	
Unemployed -student	21	19.6	86	80.4	107	35.2	
Place of residence							
Shiraz	18	19.1	76	80.9	94	46.8	X ² =0.22
Other cities	12	20.7	46	79.3	58	28.9	P= 0.896
Rural area	11	22.4	38	77.6	49	24.4	
Primary insurance							
Insured	34	26.2	96	73.8	130	64.7	X ² =7.509
Non-insured	7	9.9	64	90.1	71	35.3	P= 0.006
Supplementary insurance							
Supplementary insured	34	26.2	96	73.8	130	64.7	X ² =0.006
No supplementary insurance	31	20.5	120	79.5	151	75.1	P= 0.936

unfamiliarity provides opportunity for providers to take the desired advantage. In other words, it can be concluded that low income people have the resultant ignorance that makes good situation for some staff to impose them to informal payments.

Statistical results proved a significant relationship between the frequency of informal payments and duration of hospitalization so that the more the patients stay in the hospital, the more payments they might be charged for,

which corresponds to the results of Qiyasi [12].

Conclusions

As informal payments are illegal in nature, it is difficult to collect accurate information about them. Patients are afraid of being hospitalized again, and hospital employees have the fear of being caught for such these illegal actions; therefore, they refuse to bring

about exact information. On the other hand, because of bureaucracy in health care systems, patients cannot recognize informal from formal payments. This makes it difficult to have an accurate estimation about informal payments.

Considering many studies, informal payments are common in many countries all around the world. However, it is worth noting that if there are such illegal payments in a health care system, the low income people are mostly at risk. Therefore, there should be more comprehensive supervision on the healthcare providers, especially on the areas where people are economically under pressure. People believe that in some situations, there is no direct request from the physicians but they imply it indirectly to receive better services.

Our study had some limitations, similar to other studies, in the topic of informal payments. The most important limitation was “the unreliability of the information”; because those who had experienced informal payments not only had lost money but also had committed to an illegal action. Therefore, they were not eager to be interviewed. On the other hand, it seems that these types of payments are regularly practiced, and have gained some sort of acceptance in the public mind; hence, we should not expect the people to talk about their peers’ faults freely.

Competing Interests

The authors declare that they have no competing interests.

Authors’ Contributions

All authors have been contributed equally.

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References

1. Knaul FM, Arreola-Ornelas H, Mendez-Carniado O, Bryson-Cahn C, Barofsky J, Maguire R, Miranda M, Sesma S. Evidence is good for your health system: policy reform to remedy catastrophic and impoverishing health spending in Mexico. *Lancet* 2006, 368(9549):1828-41.
2. Afsharinia A, Bagherpour M, Farahmand K. Efficiency measurement of clinical units using integrated independent component analysis-DEA Model under Fuzzy conditions. *Int J Hosp Res* 2013, 2(3):108-17.
3. Riahi N, Hosseini-Motlagh S-M, Teimourpour B. Three-phase Hybrid Times Series Modeling Framework for Improved Hospital Inventory Demand Forecast. *Int J Hosp Res* 2013, 2(3):130-8.
4. Tavakoli N, Taherizade AR, Tahmasbi A, Amini M, Ghafurian N. A survey on factors contributing to hospital patient readmission. *Int J Hosp Res* 2013, 2(2):85-90.
5. Feldstein P. *Health care economics*. New York: Cengage Learning; 2011.
6. Roberts M, Hsiao W, Berman P, Reich M. *Getting health reform right: a guide to improving performance and equity*. New York: Oxford University Press; 2008.
7. Ensor T, Savelyeva L. Informal payments for health care in the Former Soviet Union: some evidence from Kazakhstan. *Health Policy Plan* 1998, 13(1):41-9.
8. Szende A, Culyer AJ. The inequity of informal payments for health care: the case of Hungary. *Health Policy* 2006, 75(3):262-71.
9. Balabanova D, McKee M. Understanding informal payments for health care: the example of Bulgaria. *Health Policy* 2002, 62(3):243-73.
10. Liropoulos L, Siskou O, Kaitelidou D, Theodorou M, Kastouras T. Informal payments in public hospitals in Greece. *Health Policy* 2008, 87(1):72-81.
11. Onwujekwe O, Dike N, Uzochukwu B, Ezeoke O. Informal payments for healthcare: differences in expenditures from consumers and providers perspectives for treatment of malaria in Nigeria. *Health Policy* 2010, 96(1):72-9.
12. Ghiasipour M, Abolghasem P, Arab M, Mahmoodi M, Abutorabi A. The Analysis of Informal Payments among Hospitals Covered under Tehran University of Medical Sciences (TUMS) 2009. *Hosp Quart* 2011, 10:1-14.
13. Ozgen H, Sahin B, Belli P, Tatar M, Berman P. Predictors of informal health payments: the example from Turkey. *J Med Syst* 2010, 34(3):387-96.
14. Tatar M, Ozgen H, Sahin B, Belli P, Berman P. Informal payments in the health sector: a case study from Turkey. *Health Aff (Millwood)* 2007, 26(4):1029-39.
15. Miller W, Rollnick S, Moyers T. *Motivational Interviewing: University of New Mexico*. New Mexico: 1998.
16. Anderson GF, Hussey PS, Frogner BK, Waters HR. Health spending in the United States and the rest of the industrialized world. *Health Aff (Millwood)* 2005, 24(4):903-14.
17. Vian T, Gryboski K, Sinoimeri Z, Hall R. Informal payments in government health facilities in Albania: results of a qualitative study. *Soc Sci Med* 2006, 62(4):877-87.

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