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Challenges of the Out-of-Pocket Payment Program in the Health System of Iran: A Qualitative Study

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Abstract

Background: The health transformation plan was implemented in Iran with eight service packages in 2014. However, it has faced various problems and barriers since no pilot programs were launched.
Objectives: The present study aimed to investigate the challenges of the out of pocket payment in the health system of Iran.
Methods: The required data for this applied qualitative study were collected through semi-structured interviews with 30 policymakers and planners of the health system of Iran in 2020. It must be noted that the participants were selected using the purposeful sampling method. The obtained data were entered into MAXQDA software (version 10) and analyzed through the content analysis approach.
Results: The data analysis resulted in five themes: 1) weakness in the structure of health expenditure management, 2) weakness in the structure of policy and plan development, 3) low effectiveness and efficiency of the health system, 4) lack of opportunities to identify the challenges facing the Ministry of Health, 5) consequences of the program. They were categorized into 12 concepts and 79 sub-themes, and the challenges were extracted from them.
Conclusion: By identification of the opportunities and challenges of the out-of-pocket payment, the results of this study can provide a suitable framework for observation and evaluation of the payment reduction program in the health system of Iran. Moreover, the findings offer good suggestions for policymakers and planners in different stages of the program.

Keywords: Challenge, Health system, Hospitalized patients, Out of pocket

1. Background

There is an international tendency to reform health systems in order to achieve fair financing which would lead to universal health access (1). A share of household income is spent on health-related costs; the value of this contribution and its distribution is an important issue and shows the amount of health financial burden on the families (2). In a fair health system, payments must be commensurate with the financial capabilities of families (3).

The out-of-pocket (OOP) payment, which is the easiest and also the least effective method of payment, can be very risky as it does not use a risk pooling mechanism (4). In the OOP payment method, people pay the money directly to the service provider at the time of service delivery. This method can have different consequences, including negligence of the treatment and required services of patients (5), reduction of the ability of patients to pay for other essential goods, such as food and housing, and ultimately decrease of life quality (6). Moreover, the financial burden of OOP payment could force the households to borrow money which leads to an endless cycle of poverty and sickness (7).

According to the statistics, during 2013, the shares of OOP payments for health services of total costs of the health sector were 42.3%, 40.6%, 31.3%, and 21.2% for low-income, lower-middle-income, higher-middle-income, and high-income countries, respectively (8). During the same period, the mean values of this index were 17.9%, 46.6%, and 36% in the world, Middle East and North Africa, and the Asian countries, respectively (9). In addition, in many public hospitals, companions of patients were told to purchase some pharmaceutical items and do laboratory diagnostic tests out of the hospital which led to the dissatisfaction of patients and an increase in OOP payments (10).

This method of payment is also the main source of healthcare financing in most developing countries (6). According to the World Bank statistics, out-of-pocket payment costs for healthcare by Iranian households was 47.8% in 2014 (11). According to the report of Health National Accounts, the OOP payments for health services in Iran underwent an additive process and their share increased from 46.2% in 2003 to 53.79% in 2008 (4).

The reason for the increase in OOP payments was

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explored in different studies. The most important reasons were the socio-economic status, type of insurance (12), lack of formal health insurance, inadequacy of social support networks (3), and specific familial conditions. Existence of some epidemiological determinants, such as non-communicable diseases, affects the amount of OOP payments for health services in a household (12). Low and unrealistic tariffs in Iran have been considered as one of the reasons for the high OOP payments (13).

In any case, it seems that reliance on OOP payments to finance the health system in Iran can be one of the weaknesses of the system. Reduction of the share of such payments to 30% was among the goals of two five-year development plans of the country, i.e. the fourth (2005- 2009) (14) and fifth (2011-2015) plans (15). However, the recurrence of this issue along with other evidence indicates that this goal has not been achieved yet.

The OOP payments for health services is influenced by various factors that mutually interact with each other; therefore, to predict the increase or decrease of OOP payments in the future, we should consider the interactions of these factors. These interactions show that some of these factors are more influential and some are more susceptible. Accordingly, each of these factors can play a different role in explaining OOP payments and should be considered in policies and plans; therefore, it will be possible to reduce and modify them and also prioritize the most influential factors.

The increase in the cost of health systems around the world has become one of the main concerns of health system managers and decision-makers (16). All countries rely on OOP payment to help fund their health care systems (17, 18, 19). Reduction program guidelines can have strengths and weaknesses that can be evaluated, identified, and introduced to policymakers and implementers in order to help eliminate these shortcomings and achieve the goals of the program.

Therefore, by recognition of the current situation of the OOP payment of patients and related challenges, especially with regard to treatment, we can help overcome or eliminate weaknesses, facilitate the achievement of the goals of this program, and provide quality health services.

2. Objectives

The present study aimed to explain the achievements and challenges of the payment reduction program in the health system of Iran.

3. Methods

This qualitative study was conducted based on the qualitative content analysis method. The included participants had at least 10 years of experience in policymaking and planning in the health system in the field of payment reduction and were professionals with specialized doctorates and specialized physicians in the health system of Iran. In total, 30 subjects were selected using the snowball sampling method and sampling continued until the collected data were sufficient.

Interviews were conducted via Skype, telephone, and video call with 10 specialist practitioners, 12 health economists, and 8 health service managers. The participants in this study were officials and managers of the Deputy Ministry of Health and Medical Education in Iran. Duration of the interviews was 30-45 min. At the beginning of each interview, the objectives of the research were explained to the participants and, with their agreement, the interview was recorded.

Moreover, in order to respect the ethical considerations, participation in the study was voluntary and the confidentiality of information was guaranteed. The required data were collected using semi-structured interviews. The interview guide included three pivotal questions and 11 supplementary questions regarding the challenges of OOP payment for patients admitted to the health system (Table 1).

Table 1. Semi-structured interview questions

Major questions	Specific questions
What are the challenges of the inpatient payment reduction program?	-What are the challenges of the implementation of a pay reduction program? -What are the challenges of planning the payment reduction program? -What are the policy challenges in the payment reduction program? -What are the challenges in terms of ethics and spirituality in the payment reduction program? -What are the challenges of the lack of codified and sustainable planning in the payment reduction program?
What are the opportunities of the inpatient payment reduction program?	-What are the factors that create opportunities in the payment reduction program? -What are the amplifying opportunities of implementing the payment reduction program regarding the satisfaction and trust of people? -What are the necessary opportunities for the achievement of the goals of the payment reduction program?
What are the most important solutions offered by policymakers in the program of payment reduction of hospitalized patients	- What are the solutions for the maintenance of the payment reduction program in different governments? -What are the solutions for the identification of the fixed suppliers and participants in the payment reduction program? -What is the basis of the solutions for the provision of codified and sustainable plans and policies?

Initial scope of questions was determined by reviewing the sources and information collected by the researchers. Finally, the main questions were designed after the conduction of a number of in-depth interviews with policymakers and experts. It is worth mentioning that the validity of the questions was confirmed by five experts. The collected data were analyzed using content analysis in MAXQDA software (version 10).

4. Results

All participants were professionals and specialized physicians in the health system of Iran. All of them were involved in the development of plans and policies of the health system transformation plan and had more than 10 years of managerial experience. Findings of the interviews were stratified and categorized into 78 sub-themes, 12 concepts, and 5 main components.

1. Factors that cause weakness in the health expenditure management structure

1.1. Increase of the share of health expenses

Participants in this study stated that the unequal distribution and allocation of financial resources are among the major challenges of the payment reduction program in the health system. In addition, wasteful spending and the imposition of a heavy financial burden on insurance companies with high tariff increases were the other challenges of the program. According to most of the participants, the cost challenges in the health expenditure management structure included the regular increase of informal receipts, inefficient human resource management, lack of sustainable resources, lack of resource management allocation, inconsistent tariffs for diagnostic services, lack of financial protection of patients, heterogeneity in the overall structure of the health system, and reduction of the share of credits.

1.2. Execution of the program

Participants stated that lack of the definition of the sources, lack of cross-sectoral cooperation, and lack of support for the payment reduction program of the Ministry of Health were the most important challenges in this area. A participant declared that the design of the payment reduction plan that was on the agenda of the Health Policy Council was under the influence of the upstream. Given the population growth, most of the participants agreed that the lack of cooperation with the health insurance organization and non-coverage of all patients by insurance threatened the OOP program and the financial support of hospitalized patients.

1.3. Economic challenges of the program

The drastically increasing costs have posed a challenge to the health system. According to the participants, one of the economic challenges of the program was payment reduction. The limited public budget has caused issues in the sustainable financing of the payment reduction program. According to the majority of participants, one of the issues was the lack of funding. Another important economic challenge was insurance obligations. The payment reduction program creates a heavy financial burden on insurance organizations with high tariffs and a lack of anticipation programs to control the services provided in government health centers reduced the ability of insurance organizations to repay hospitals and fulfill their obligations.

2. Factors that cause weakness in the policy-making and planning

2.1. Inadequacy of the budget of payment reduction program for the objectives of the health system

Excessive increase in the tariffs of physicians, an imbalance between receipts of physicians, discrimination in the implementation of new tariffs, incompatibility of the budget of services with the health needs of patients, and heavy dependence of the health insurance system on government funds were the challenges mentioned by the participants. One of the participants stated that weak general policies of the economic system, failure to amend the legal materials, and clauses related to the tariff method have created many problems for the OOP payment program.

2.2. Inconsistency of the payment reduction program with the macro policies

Among the other challenges of the program mentioned by the participants were the inconsistency of the health insurance system with the objectives of the program; lack of fair distribution of health services; conflict of interest in policy-making processes; low effectiveness of policies; non-participation of policy-makers, decision-makers, and planners; non-coverage of some medications by insurance; significant disempowerment of insurance mechanisms; lack of establishment of referral system; and allocation of relevant resources on the current costs.

2.3. Failure to modify the structure before the implementation of the payment reduction program

Most of the participants in the study maintained that the structure of OOP payment is not efficient. One of them stated that the health system of Iran has never used a proper payment system. Moreover, the majority of the subjects believed that lack of various factors, such as modification of the comprehensive hospital information system, accurate reform of health technology management, systematic design of the electronic patient health records, and

improvement of the structural process of legislations were the challenges of the payment reduction program for hospitalized patients.

2.4. Lack of attention to the ethics of spirituality

Development of the payment reduction program for all aspects of the health system requires serious attention to the ethics and spirituality issue. According to the participants, one of the most important objectives of medical ethics and spirituality is to reduce harm to patients and physicians. In this regard, it is necessary to implement measures of medical ethics in the health system. Otherwise, the patient will be referred to private clinics, an issue that is common despite the implementation of a payment reduction plan.

3. Factors that cause the effectiveness or low efficiency of the health system

3.1. Imbalance between resources and expenditures

The most important challenges mentioned by the participants in this regard were the lack of a necessary mechanism for fair distribution of sub-budgets, focus on resources and treatment, severe recession and reduction of health resources, lack of money management in the health system, and lack of proper resource management to increase resource effectiveness.

3.2. Uncertainty of stable sources for financing the payment reduction program

The interviewees asserted that the lack of resources, complexity of the health system structure, limitation of financial resources, and lack of a new financial system commensurate with the payment reduction plan were the most important challenges in this regard.

4. Weakness of the opportunities facing the Ministry of Health

4.1. Lack of control over the devastating costs of health by reduction of the payments

Participants stated that the lack of financial security of vulnerable people and populations and lack of attention to low-income groups and incurable patients were the most important challenges in this area.

4.2. Lack of step-by-step implementation and the necessary opportunities to identify possible problems in the development, implementation, and reform of the policies

According to the participants, lack of priority of government policy for definitive implementation of the OOP payment, lack of attention to the cooperation of all different agencies for the continuation of the payment reduction program, lack of intermittent development commensurate with the complexities of the health system, lack of accurate and comprehensive plans and attention regarding the community health indicators were the most important challenges in this regard.

5. Consequences

5.1. Negative consequences of the payment reduction program

Participants described the negative consequences of the pay reduction program as discrimination in payments, endangerment of the private sector, and dissatisfaction of service recipients. How to pay in the program in order to reduce the amount of payment is one of the negative consequences of this program.

Table 2. Main axes, themes, and sub-themes extracted from interviews regarding payment from the pockets of hospitalized patients

The main axes	Themes	Sub-theme
Weaknesses of the structure of health expenditure management	Increase of the share of health costs	Unfair distribution of resources and credits, wasted costs, the imposition of a heavy financial burden on organizations, insurance management with high tariff growth, an increase of the regulation of payments at the level of informal receipts, health costs, inefficient management of human resources, lack of sustainable resources to continue the program, lack of resource management allocation, non-uniformity of tariffs for diagnostic and treatment services, lack of financial protection of patients, heterogeneity of the overall structure of the health system, and reduction of the share of infrastructure funds
	Program execution	Lack of a definition of resources; lack of inter-sectoral cooperation for the development of a plan to reduce the amount of payment; lack of program support; lack of attention to upstream documents; lack of market management of medications, consumables, and medical equipment; lack of close cooperation with basic health insurance; lack of universal health insurance coverage; weak referral system and lack of family physicians; non-uniformity of invoices of hospitalization expenses; lack of financial protection; review of health service tariffs; review of the Relative Value of Health Services book; preparation of supervision instructions
	Economic challenges of the program	Financial resources and insurance obligations

Table 2. Continued

Weakness in policy and plan development	Inadequacy of the budget of payment reduction program for the objectives of the health system	Lack of increase of public insurance funds, an excessive increase in the tariffs of physicians, an imbalance between receipts of physicians, discrimination in the implementation of new tariffs, incompatibility of the budget of services with the health needs of patients, the heavy dependence of the health insurance system on government funds, weak general policies of the economic system, failure to amend the articles and legal provisions related to the method of tariff determination and the law of public insurance
	Incompatibility of the payment reduction program with macro policies of the country	Lack of proper understanding of the family physician program; incompatibility of the health insurance system with the goals of the program; lack of fair distribution of health services; conflict of interests in policymaking; low effectiveness of policies; lack of participation of the team of policymakers, decision-makers, and planners; non-coverage of some medications by insurance; significant disempowerment of insurance mechanisms; lack of a referral system; allocation of relevant resources on the current program
	Failure to modify the structure before the implementation of the payment reduction program	Lack of a comprehensive hospital information system, lack of accurate health technology management, lack of a centralized health system, lack of information system infrastructure and its inefficiency, lack of a systematic design for electronic health record, lack of coordination and interaction in the policy-making system regarding the program implementation, lack of revision of the legislative structure of the stewardship lack of proper infrastructure for the reduction of payment
	Lack of attention to the ethics of spirituality	Referral of the patient to a private office and request for informal payment, encouragement of physicians towards materialism with much payments, non-compliance of health services with the essence of professional ethics, lack of serious attention to the ethical and spiritual issues in clinical activities, physicians' view of patients as only a source of income
Reduction of effectiveness and efficiency	Imbalance between resources and expenditures	Orientation of resources and treatment, severe recession and reduction of health resources, lack of money management in the health system, lack of proper management of resources to increase the effectiveness of resources, increased induced demand
	Uncertainty of stable sources for financing the program	Lack of establishment for the provision of resources, complexity of the health structure, allocation of very limited financial resources, lack of a new financial system commensurate with the payment reduction program
Weaknesses of the opportunities facing the Ministry of Health Consequences	Lack of control over the devastating costs of health by the reduction of payments	Lack of ensuring the financial security of vulnerable populations, lack of attention to low-income groups and incurable patients
	Lack of step-by-step implementation and the necessary opportunities to identify possible problems in the development, implementation, and reform of the policies	Lack of priority of government policy for definitive implementation of the payment reduction plan, lack of attention to the cooperation of all different agencies regarding the continuation of the program, lack of intermittent development commensurate with the complexities of the health system, lack of accurate and comprehensive plans and attention regarding the community health indicators
	Negative consequences of the program	Discrimination in payments, threats to the private sector, the dissatisfaction of service recipients

5. Discussion

The present study aimed to explain the challenges of the health system payment reduction program from the perspective of policymakers and planners of the Health system in Iran. According to the results, the main problems of this program were the lack of resources and credits, low effectiveness of policies, discrimination in payments, threats to the private sector, dissatisfaction of service recipients, increase in the induced demand, the heavy financial burden for insurance organizations, lack of referral system and family doctor, and raise of informal payments.

Based on the findings of the present research regarding the weaknesses in the structure of health expenditure management, the majority of participants believed that the most important challenges of the payment reduction program were the lack of sustainable and codified plans due to hasty policymaking during various periods.

Results of this research are consistent with those of a study performed by Nematbakhsh. He concluded that a lack of serious implementation of the potential or actual strengths and opportunities of a reform plan will lead to unmethodical planning (20). The non-uniformity of the tariff for diagnostic and medical services, incorrect implementation of the program, and non-obligation of the insurance organizations

during the implementation of the program were also acknowledged.

Moreover, the challenges of the health system transformation plan indicated that limited financial resources and heavy financial burden on insurance organizations impose a heavy financial burden on households and increase the amount of payment (21). According to the participants, the challenges of policymaking and supervising the tariff, tariff structure, methods and principles of the tariff, health sector expenditures, and other related concepts need improvement. They also declared that in case of failure, the OOP payment will pose challenges to the inpatients.

Based on the findings of a study conducted by Doshmangir et al., reforming the franchise situation in the health system by policymakers and planners has led to the control of costs and reduced payment from the pockets of hospitalized patients which is consistent with the results of this study (22).

In general, the findings of this study indicated the inadequacy of the planning budget for the objectives of the health system reform, lack of proper policies, inadequate tariff structure of influencing and challenging factors of the payment reduction plan. Results of this study are consistent with those of the study performed by Doshmangeir et al. He found that the issue of tariffs in Iran was one of the most sensitive issues every year; accordingly, it seemed impossible to follow a single pattern in tariffs (23).

Aton et al. in their study investigated the views of experts on healthcare reform and insurance coverage in Latin America. They found that lack of increase of the public insurance funds, an excessive increase in the tariffs of physicians, heterogeneity of the incomes of physicians, discrimination in the implementation of new tariffs, incompatibility of the budget of services with the health needs of patients, and heavy dependence of the health insurance system on government funds were the challenges that have caused great dissatisfaction among physicians and patients (24).

Based on the results obtained from the experiences of the participants in the present study regarding the weaknesses in the general policies of the economic system, the challenge was the lack of amendment of materials and legal clauses related to tariffs and the public insurance law. These sub-themes are consistent with the results of a study carried out by Sajadi et al. (25).

According to the findings, the other challenges were the inconsistency of the health insurance system with the goals of the program, lack of fair distribution of health services, conflict of interest in policymaking, low effectiveness of policies, and lack of participation of policymakers, decision-makers, and program designers.

Trend of the health policy index has not been able to make a significant change to improve equity in financial access (26). Participants also cited the non-coverage of some medications by insurance and the significant disempowerment of insurance mechanisms as the challenges of the payment reduction program. Delays of insurance organizations and the limitation of their credits as well as the non-transfer of credits related to the payment reduction program to insurance organizations caused a crisis in these organizations, dissatisfaction of patients, and delay in the payment of medication and medical equipment expenses by relevant companies (27).

Non-establishment of the referral system and the allocation of relevant resources to the current expenses of the program are important challenges of the payment reduction program. Weakness in the comprehensiveness of executive instructions, weakness in per capita adequacy and allocation, and low efficiency of health information management system were the defects in the referral chain (28).

Another sub-theme was the lack of structural reform before the implementation of the payment reduction program. According to the participants, lack of various factors, such as a comprehensive hospital information system, accurate health technology management, a centralized health system, information system infrastructure and its inefficiency, and systematic electronic patient health record design led to the OOP payment in hospitalized patients. Findings of several other relevant studies are in line with those of the present research. Among them are the results of a study performed by Agha which indicated that the use of digital systems leads to a significant reduction in the time and cost of patient care processes (29).

According to the participants, the lack of coordination and interaction between the policy-makers for the proper implementation of the program, lack of revision of the legislative structure of the stewardship, lack of proper infrastructure for payment reduction were the other challenges. In his report on the policy analysis of the Health Transformation Plan, Sajjadi recommended the reform of the policy-making process as necessary (30).

Other findings from the sub-categories of imbalance between resources and expenditures include the lack of a necessary mechanism for fair distribution of sub-budgets, focus on resources and treatment, severe recession and reduction of health resources, and lack of proper management of resources are important challenges. Nouri et al. in their research found that prioritization and allocation of resources in the health system are based on criteria of cost-effectiveness and equitable distribution of resources which is consistent with the results of this study (31). Induced demand leads to uncontrollable cost growth and unnecessary expenses; it also imposes double financial pressure on insurance organizations (32).

According to the findings of this study, lack of attention to ethics and spirituality is one of the most

important obstacles of the payment reduction program. Lack of serious attention to ethics and spirituality in clinical activities, lack of confidentiality, and doctors' view of patients as only a source of income lead to lawlessness (33).

Another challenge found in the present study was the negative consequences of the payment reduction program. According to the participants, the challenges in this regard were discrimination in payments, threats to the private sector, and dissatisfaction of service recipients. Regarding discrimination in payments, the participants expressed that implementation of this program increases the gap between the incomes of doctors and other medical personnel, especially nurses, which leads to discrimination and injustice. This finding is in line with those of a study performed by Nakhaei et al. (34).

Results of a previous study indicated that the implementation of the payment reduction program in the health system can pose a challenge to the private centers (35). This is consistent with the findings of the present study regarding the threat to the private sector. In another research, it was found that the satisfaction of patients who referred to teaching hospitals decreased after the implementation of the payment reduction program, which is consistent with the results of the present study (36).

6. Conclusion

Analysis of the results of this study revealed that the payment reduction program has had positive points and favorable outputs, such as reduction of OOP payments in the public hospital for the health system. However, this program requires further reformations in the insurance system, family doctor plan, referral systems based on electronic health records, supply of medicine and medical equipment, and the related infrastructure in different parts of Iran, especially deprived areas. Moreover, the clinical and para clinical services need to be modified to prevent the increase of induced demand and enable fair access to health services.

Furthermore, it was found that over time, some of the positive effects of this plan which were obtained by exploitation of a lot of resources have taken the opposite trend. The most important problems probably were caused by the challenges that were not overcome through the plan budget and increased government expenses. Therefore, considering the emphasis of experts on a funding plan, the mere injection of financial resources cannot be a proper solution since it may raise future expectations.

Hence, the government should consider sustainable resources to reduce future challenges. Like other plans, the OOP payment method has both advantages and challenges. Obviously, it is easier to investigate the outcomes of plans after their implementation; nevertheless, preparation at the time of planning would help to avoid future challenges. Usage of opinions of individuals involved in the plan at different levels can help overcome the challenges and minimize the criticisms.

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Footnotes

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