Identification of Public Policy Implementation Barriers (Health System Reform Plan)

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**Background & Aims of the Study:** One of the main concerns of policymakers is the establishment of health equity and access to health services. Health system reform plan is one of the most important tools of policy makers in the health system. The health system, as any other plan has had some problems during implementation. Therefore, the purpose of this study is to identify the obstacles to the development of the health system from the perspective of the project implementers.

**Materials & Methods:** This study is a Practical study using descriptive- correlational method. In this study, 52 people were selected by Convenience Sampling method. The data collection tool was a researcher-made questionnaire containing 33 items. Statistical analysis was performed using SPSS21 and LISREL8.8 software. To test the hypotheses, one-sample t-test and Friedman test were used.

**Results:** The results showed that among the three barriers introduced (policymakers, executive organization, and implementers), the implementers and users with the average score of 4.12, had the highest priority, and the policymakers with an average of 3.08, had the lowest dedicated priority. In other words, respondents have selected administrators’ barriers as the most important barrier to the failure to implement the health system reform plan.

**Conclusion:** The results of the research indicate that the conceptual model of this research is compatible with the collected data and the barriers related to the policy makers, executive organization, and implementers, are related with health system reform plan. In other words, all of the research hypotheses have been approved.

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**Background**

Public policy measures are a set of relatively stable, steady and purposeful actions of the government to solve public problems or concerns (1). Public policy measures have many consequences in daily life and can be considered as an effective government effort. In spite of the growing importance of Public policy measures in the efficient and effective governance of governments, what we are faced with in practice is that governments generally do not succeed in enforcing public policy. One of the most important issues which both developed and developing countries are facing, is the unsuccessful implementation of Public policy measures. Implementation of Public policy measures in Iran was unsuccessful in some cases that is not satisfactory. So far, some of the codified policies have been flawed in the implementation phase, and executives have implemented many of them incompletely and inefficiently, or have not performed part of it. In some cases, the implemented policy has a significant and meaningful difference with codified policies (2). In the case of unsuccessful or incomplete policy...
implementation, executives are considered to be the main perpetrators. Despite the fact that policy codification is: a process in which a valid decision is made, while implementation is defined as the process of bringing these decisions to work. Nakumora and Smallwood (1980) pointed out that there is an overlap between the stage of codification and successful implementation. Persman and Wilaldowski (1973) consider policy implementation as an integrated set of processes for interacting between targeting and trying to achieve goals, and they believed that implementation should not be separated from the codification and they consider the neglect of taking specific measures at the codification stage as the biggest problem for implementing the policy. Problems at the stage of codification and implementing a policy, ultimately leads to unsuccessful implementation of public policy measures. Otol suggests that policy implementation should be considered as part of the research strategy in the policy research (2).

As shown in Figure 1, policy making is a process that involves several activities and steps. Steps 1 to 6 Focus on policy development: Identification and measurement of the problem that is solved by public health policies. Reviewing effective options, assessing current local policy, Viewpoint of stakeholders, and drafting a proposal, are steps 7-9, focusing on policy implementation and stakeholder relations. Step 10 is to assess the implementation of the policy and its impact. Even though the steps are presented linearly, they are interconnected in practice, and some of the steps may occur in parallel, or they could be in circles that results of a step leads to reviewing or modification of previous results (3).

Almost the majority of society insists on the necessity of reforms in the health system. lots of these Sectional reforms in the health system are likely to result from this public demand. However, the growing emphasize on health system reform is not Limited to our country, and with a brief review of some studies on the changes in the health system, it can be seen that most countries in the world are somehow changing, completing or reforming their health system (4).

Figure 1) Stages of development, implementation and evaluation of public health policy

In many studies on health system reform, the use of monitoring and control leverages such as financing, payment, organization, regulation and behavior, is one of the most commonly used methods. But these levers alone cannot be used to reform the health system. Therefore, one of the basic principles for implementing any change is infrastructure preparation, especially human resources, financing, regulation and planning. Because the infrastructure will increase activities, reduce costs, ultimately increase efficiency, and thus affect the economic growth of the health system (5).

The results of Seddighi's study showed that during establishing and implementing a family physician plan, economic problems, environmental problems, welfare and educational problems, inter-organizational problems, and socio-cultural problems had a significant effect on dissatisfaction and abandonment of family physicians which led to the failure in Establishment of this plan (6). Borgermans and et al. (2017), in their study, considered the issues of providing integrated health services policy, including: 1. Patients' view; 2. The view of service providers; 3. The
view of health managers and insurers; 4. The viewpoint of legislators (policymakers) (7).

Alidadi et al., in their study entitled "The Opportunities and Challenges of the Ministry of Health and Medical Education in implementing Health System Reforms", identified the opportunities and challenges faced by the Health System reform Executors. The main challenges presented in this research are: weakness in the structures, policy making, lack of sustainable planning, failure to pay attention to threats about human resources, disproportionate budget of the project stages with the goals of health system reform and the inconsistency of the plan with major policies of country (8).

Some of the facing challenges in healthcare reform plan mentioned in the study of Ghanbari et al. are the lack of human resources, inadequate equipment, and the lack of regular funding (9).

As it is clear, most of experts and scholars have identified many factors in explaining the health system's policy making issues in general, and the implementation of the policy in particular. In fact, public affairs that particularly means the existed problems and constraints in society, which affects the community negatively, are issues that concern the areas of general welfare, health, and so on. To solve these issues, the government needs guidelines and policies that make it responsible for the elaboration of precise policies and the selection of appropriate tools for implementing these policies. The Health care system mapping by policymakers in order to increase responsibility and improve health level is the first step towards achieving health equity. Accordingly, the first hypothesis is:

Hypothesis 1: Barriers involving policy makers are related to the implementation of the health system reform plan.

It should be noted that if an efficient bureaucratic structure does not exist, the success of the implementation will not be guaranteed. Structural factors are those factors that are related to the structure of decision-making and policy implementation centers. Lack of sufficient independency in the executive branch, lack of clarity in duties and responsibilities, lack of proper allocation of resources and inadequate time are factors that have a significant impact on the implementation of the health system reform plan. The second hypothesis is:

Hypothesis 2: The obstacles related to the executive organization are related to the implementation of the health system reform plan.

Public policies should be implemented by competent and strong executives after approval. Employees must have adequate motivation, interest in their organization, and a sense of excellence to increase the quantity and quality of work, and they should consider themselves to be affiliated with the organization. Generally, the problems and bottlenecks of policy-makers and policy executers, as vital elements of the organization, will have a major impact on policy implementation outcomes (10). Therefore, the third hypothesis is:

Hypothesis 3: Barriers to policy executers are related to the implementation of the health system reform plan.

Aims of the study:

Health system reform plan is one of the most important tools of policymakers in the health system of Iran. In this research, key variables of challenges and obstacles faced by custodians of the Health System reform Plan are identified and explained.

Materials & Methods

This study is a Practical study using descriptive-correlational method. The information has been collected by library and field method using a research checklist tool in a library method, and a researcher-made questionnaire in the field method. The research community was consisted of some directors of treatment deputy, health deputy, heads of hospitals and head nurses, who were from various cities of Sistan-Baluchestan province and were involved in the health promotion project, of which 52 people were
selected by Convenience Sampling method. The data gathering tool was a researcher-made questionnaire consisting of 33 items, which are given in Table 1. However, the content validity of the entire questionnaire was evaluated and approved by five experts of health system design using Delphi method. In order to increase the validity of the questionnaire, the construct validity was also used. At this stage, for each dimension, a confirmatory factor analysis was used separately.

Generally, considering the main subject of the study, with the review of existing literature and theoretical topics, the following components and indicators were considered for it.

| Concept          | Dimensions | Components                                                                 | Indicator                                                                 |
|------------------|------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Policy makers    | Foresight  | Strategic error in planning                                                  | Segmental and unplanned decisions                                          |
|                  |            | The tendency to make decisions that meet early needs                        |                                                                           |
| Evaluation       |            | Inappropriate policy and lack of adequate supervision on good execution     |                                                                           |
| system           |            | Unusual relation between authority and responsibilities of decision makers  |                                                                           |
|                  |            | Failure to coordinate and interact between executive organs                 |                                                                           |
| Executive        | Bureaucracy| The lack of clarity in duties of various levels of service provision and in |                                                                           |
| Organization     |            | the relationship between levels                                             |                                                                           |
|                  |            | Use of obsolete and traditional methods                                     |                                                                           |
|                  |            | Physician focused and backward managerial planning system                   |                                                                           |
|                  |            | Prolonged path of the steps and the processes of implementing               |                                                                           |
|                  |            | Centralized and non-flexible administrative structure                       |                                                                           |
| Resources and    |            | Lack of required technology to implement the plan                           |                                                                           |
| tools            |            | Focusing on spending resources on treatment                                 |                                                                           |
|                  |            | Lack of beds and space                                                      |                                                                           |
|                  |            | Lack of optimal use of available resources and capacities                   |                                                                           |
|                  |            | Weak financial mechanisms                                                   |                                                                           |
| Substructure      |            | Lack of proper infrastructure to provide services for target groups         |                                                                           |
|                  |            | Lack of a systematic design for patient's electronic health file            |                                                                           |
|                  |            | Lack of infrastructure for information system and its inefficiency           |                                                                           |
|                  |            | Multiple transaction costs                                                  |                                                                           |
|                  |            | Lack of a responding mechanism for patient needs                            |                                                                           |
|                  |            | Lack of access to patient health records                                    |                                                                           |
|                  |            | Lack of regular data due to lack of guidelines for the treatment in the     |                                                                           |
|                  |            | program                                                                     |                                                                           |
| Project          | Expertise  | Lack of proper and well-timed training for the awareness of the executives  |                                                                           |
| executives       | and skills | Shortage of manpower                                                        |                                                                           |
|                  |            | Workload on project executives                                              |                                                                           |
|                  |            | Inadequate time for executers to implement the plan                         |                                                                           |
| Cultural         |            | Shirking by some administrators                                             |                                                                           |
|                  |            | Pushing physicians toward monetarism by Huge payments                       |                                                                           |
|                  |            | Discontinuity of health services to professional ethics                     |                                                                           |
|                  |            | Discrimination and increased distance between physician and non-physician  |                                                                           |
|                  |            | Economic viewpoint of Physician’s to the patient as an income source        |                                                                           |
|                  |            | Lack of teamwork spirit                                                     |                                                                           |

Statistical analysis was done using SPSS 21 and LISREL8.8 software. Validity and reliability were evaluated using the confirmatory factor analysis (factor load and mean extracted
variance) and Cronbach's alpha. One-sample t-test and Friedman test were used to test the hypotheses. Because the research variables are a combination of multi-clauses, they are considered as spatial variables (Pseudo-spatial) with a few tolerances, and in inferential statistics, the tests related to variables at the interval level were used. The maximum alpha error level for testing was 0.05 (P ≤ 0.05).

Results

To assess the convergent validity, the AVE (Average Variance Extracted) and CR (Composite Reliability) were used. The results of this criterion for the dimensions of the three variables of research are shown in Table 2. Composite reliability higher than 0.7 and mean of variance higher than 0.5 are two prerequisites for convergent validity and structural correlation (11). As shown in Table 2, all composite reliability values are higher than 0.7 and the mean values of the variance is higher than 0.5, which confirms that the convergent validity of the current questionnaire is acceptable.

Table 2) Results of the variance average extracted from research structures

| Variable | Policy makers | Executive Organization | Project executives |
|----------|---------------|------------------------|--------------------|
| AVE      | 0.661         | 0.613                  | 0.602              |
| CR       | 0.854         | 0.856                  | 0.738              |

In the divergent validity, the difference between the indicators of a structure and the indicators of other structures in the model was compared. This was done by calculating square root of AVE for each structure and comparing it with the values of the correlation coefficients between the structures. For this, a matrix must be constructed that the values of the main diameter are the matrix of the square roots of AVE for each structure, and the lower values of the main diameter are the coefficients of correlation between each structure with other structures. This matrix is shown in Table 3. As shown in Table 3, the square root of AVE for each structure has been more than its correlation coefficients with other structures, which indicates the acceptability of the divergent validity of structures.

Table 3) Comparison Matrix of square root of AVE with Correlation Coefficients of Structures (Divergent Validity)

|       | Policy makers | Executive Organization | Project executives |
|-------|---------------|------------------------|--------------------|
| Policy makers | 0.763         |                        |                    |
| Executive Organization | 0.567         | 0.785                  |                    |
| Project executives | 0.382         | 0.411                  | 0.728              |

To examine the questionnaire reliability, Cronbach's alpha coefficient has been used, and the results presented in Table 4, confirms the reliability of the questionnaire.

Table 4) Cronbach's alpha coefficients

| Research structures | Policy makers | Executive Organization | Project executives |
|---------------------|---------------|------------------------|--------------------|
| Cronbach's alpha coefficients | 0.807         | 0.814                  | 0.739              |

Figure 2 shows the research model in the standardized coefficient state. Analysis of relationships and the conceptual model of research show that all research relationships have been approved at 99% confidence level (P <0.05).
The fitting indicators of the model are listed in Table 5. Generally, with the evaluation of all fitting indicators, it can be concluded that the obtained fitting indicators are acceptable and indicate appropriate data fitting with the model. A single-sample t test was used to test the research hypotheses. Testing Hypothesis 1: Barriers involving policy makers are related to the implementation of the health system reform plan. The results obtained from a single-sample t-test showed that the obtained t value is 5.35 which is at a Significance level less than 0.01 (P <0.01). It can be said that the obtained mean for policy makers (M = 3.63) is more than the determined value which indicates the impact of policy makers' problems with the implementation of health system reform plan in hospitals. As a result, the first hypothesis of the research is confirmed with a confidence level of 99%.

Testing Hypothesis 2: The obstacles related to the executive organization are related to the implementation of the health system reform plan. The results of single-sample t-test (t = 9.07 and P≤0.01) at the confidence level of 99% shows that the obstacles related to the executive organization related to the implementation of health system reform plan. As a result, the second hypothesis of the research is confirmed.
The average achieved for executive organization obstacle is equal to 3.72, which indicates the high impact of the executive organization on the implementation of the reform plan. The results also showed that among the three constraints of the executive organization, the highest average (3.78) was related to resources and tools.

Testing Hypothesis 3: Barriers to policy executers are related to the implementation of the health system reform plan.

The results confirmed the third hypothesis (P <0.01). At a confidence level of 99%, the mean value of policy executers’ barrier (3.58) has a significant difference with 3.5. Accordingly, it could be confirmed that the Barriers to policy executers are related to the implementation of the health system reform plan. The highest average (3.89) obtained was related to the culture component.

Friedman test were used to prioritize the obstacles of health system reform plan. The results of this test showed that, Project executers with the average of 4.12, the executive Organization with the average of 3.48 and the policymakers with the average of 3.08 have been prioritized. The results showed that the most important obstacle to implementing the health system reform plan is the obstacle of policy executers.

**Discussion**

The purpose of this study was to identify the obstacles to the health system reform plan from the perspective of the project implementers. The results of the research showed that among the three barriers introduced (policymakers, executive Organization, and project executers), the barriers to the project executers and users with a mean score of 4.12 were the highest priority. In other words, respondents have chosen executives' barrier as the most important barrier to the failure of health system reform plan.

Obstacles identified in the previous researches have had overlap with the results of this study. In the dimension of policy makers, Borgermans and et al. (7) in their study considered the legislatures (policymakers) to be effective in providing integrated health services. In the dimension of the executive organization, Seddighi et al. (6), have been considered organizational-structural problems to be the main reason of family physician Plan Failure. Ghanbari et al. (9) considers lack of continuous financial support to be the facing challenge of the health system reform plan. In the field of project executers, Ghanbari et al. (9), represented the lack of human resources as one of the challenges. Seddighi et al. (6), Described the social and cultural problems as a cause of dissatisfaction and failure of the family physician's plan. Also, Borgermans et al, (7) considered the viewpoint of healthcare providers as one of the most important issues related to integrated health services. Therefore, policy makers should be vigilant to regulate policies with enough incentive for executers to ensure their correctly implementation. This fact should not be forgotten that policies are shaped not only by politicians and policy makers but also by the motivation and interest of the executives, and this point should be Mentioned that policy codification and implementation is not separate and may not be exaggerated if we say the policies are more dependent on the choices and opinions of executives than the goals and viewpoints of policy makers.
For the specialized policies that require specific knowledge and skills, in the absence of such abilities, the implementation will be facing lots of problems and will be done in a different way. When executives cannot implement the policy in the way that must be done, they will implement it in the way that they can and they want. If the correct predictions about identifying the necessary resources and facilities were not made, and the executives were forced to implement the policy, they will implement it in a way that is possible for them, and of course, those results which were considered by politicians will not be obtained. In that case, policies will have implemented either imperfectly or in part, or will be implemented in a short term, and thus they will be far from its original form.

**Conclusion**

Implementation is a complex and research-based process which are the reasons for the success or failure of the policy. During the implementation, issues such as the study of implementation tools, implementation methods, implementation barriers, implementation approaches, resources, executives, and their characteristics, and executive Organizations must be reviewed. Public policies, after approval and codification, must be implemented by competent and expert managers and should be implemented and controlled by a powerful executive organization in the community. Considering the emergence of the healthcare reform plan, it is essential to intervene in its implementation, and it is the responsibility of planners and authorities to provide practical interventions to improve the progress of the health system reform plan, and because of the limited research on the health system reform plan, it is necessary for researchers to take the importance of this issue into account and using the results of this research to develop more comprehensive researches in order to find appropriate solutions for improving the weaknesses of health system reform plan.

**Footnotes**

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**Conflict of Interest:**

The authors declared no conflict of interest.

**References**

1. Anderson James E. Public policy making, New York: Houghton Mifflin; 2000
2. Hajipour E, Forozande H, Danaiifard H, Fani A. Designing the Pathological Model of Implementation of Public Policy in Iran. Res Milit Manag Q 2015;15(58). (Full Text in Persian) Link
3. luck j, Yoon J, Bernel S, Tynan M, Sarai C, Eversole T, Mosbaek C, Beathard C. The Oregon Public Health Policy Institute: Building Competencies for Public Health Practice. Am J Public Health 2015;105(8):1537-43. PubMed
4. Shariati A, Jamshidbeigi Y, Baraz Pardnjati S, Haghhighzadeh MH, Abbasi M. Assessment of nurses, patient satisfaction, patient attendants in educational hospitals in Alhavz city health development plan in 2015. J Clin Nurs Midwifery 2017;6(1):9-18. (Full Text in Persian) Link
5. Mahdi S, Simin G. The impact of Education and Health Infrastructures on Economic Growth of Iran. J Res Economic Growth Dev 2014;5(19):117-36. (Full Text in Persian) Link
6. Seddighi S, Amini M, Pourreza A. Reasons for withdrawal of physicians from rural family physician program in 2013. J Healthcare Manag 2015;5(4):33-43. (Full Text in Persian) Link
7. Borgermans L, Devroey D. A Policy Guide on Integrated Care (PGIC): Lessons Learned from EU Project
INTEGRATE and Beyond. Int J Integr Care 2017;17(4):8.
PubMed
8. Alidadi A, Amerioun A, Sepandi M, Hosseini Shokouh S M, Abedi R, Zibadel L, et al. The Opportunities and Challenges of the Ministry of Health and Medical Education for Improvement of Healthcare System. Health Res J 2016;1(3):173-184. (Full Text in Persian) Link
9. Ghanbari A, Moaddab F, Jafaraghaee F, Heydarzade A, Barari F. Health System Evolution Plan; a New Approach to Health Care Delivery: The Challenge Ahead. Hakim Health Sys Res 2017; 20(1):1-8. (Full Text in Persian) Link
10. Makinde T. The Nigerian experience. J Soc Sci 2005;11(1):63-69. Link
11. Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL. Multivariate data analysis. New Jersy: Pearson Educ; 2010.