

Challenge Non-Communicable Diseases Programs in Iran: A Qualitative Study

Fatemeh Ataollahi (✉ ataollahi.f@gmail.com)

Kerman University of Medical Sciences <https://orcid.org/0000-0002-5697-4707>

Leila Vali

Kerman University of Medical Sciences

Mohammadreza Amiresmaili

Kerman University of Medical Sciences

Nouzar Nakhaee

Kerman University of Medical Sciences

Maryam Okhovati

Kerman University of Medical Sciences

Research article

Keywords: health professionals, health policy makers, program, non-communicable disease, development

Posted Date: June 11th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-605318/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Abstract

Background

One of the effective strategies to prevent and control Non-communicable diseases risk factors is to identify priorities and problems of Non-communicable programs. This study was conducted to identify the challenges of non-communicable diseases programs in order to improve programs development.

Methods

This study was a qualitative study which was carried out in 5 universities of medical sciences and the Ministry of Health in 2019 year. The sampling method was purposive and the participants include specialists in the field of NCD who have executive and research experience in this field. Data were collected through 40 individual interviews with health professionals and care providers. Data were analyzed by content analysis using CIPP model.

Results

In the present study, problems of non-communicable disease programs were identified in 4 main categories, 12 sub-categories including inadequate participation of all levels of service delivery in program development, needs assessment, budget allocation, data and program evaluation system.

Conclusions

Some problems of non-communicable diseases programs included inadequacy of needs assessment, lack of prioritization based on local and regional conditions, program evaluation system. Paying attention to the mentioned points will help to solve underlying problems and improve the processes of developing, implementing and evaluating programs.

Background:

Despite many advances in the field of combatting communicable diseases and non-communicable diseases, today the prevalence of diseases has become a major health concern [1]. The overall estimate indicates that Non-communicable diseases are a significant part of the causes of death and disease burden. High rates of non-communicable diseases such as cancer, diabetes, hypertension, and cardiovascular disease are associated with serious problems in policy, governance, and strategic management of health system. Despite the multiplicity of programs in the field of non-communicable diseases, there is no coherent policy-making and governance in the programs of the health system, and there have been no proper measures to reduce the prevalence of diseases [2].

Solving the problems of the health system is possible by providing effective and practical solutions, especially in the early stages that these strategies will lead to early diagnosis and prevention of diseases and prevent the

progression of the disease and reduce the costs imposed on the people and the health system [3]. One of the strategies to improve the services of the health system is proper planning and development. Planning is one of the main tasks of managers to improve the performance of the organization [4]. Health systems can develop appropriate programs to promote health, disease prevention by providing appropriate treatment, effective services in times of disability, and providing cost-effective services according to cultural background [5].

Programs due to items such as lack of appropriate policies, regulatory standards, performance monitoring and impact evaluation system, feedback system and the lack or appropriate levers of governance (such as accreditation or resource allocation with the performance appraisal system) are not very successful in implementation [6]. The appropriate program in all stages of development and implementation is achieved through coordination with other sectors and determining the pattern of individual and social behaviors and attention to comprehensive and sustainable development [7]. Health systems become responsive, safe, competent and valuable systems through development of appropriate programs [8].

In Iran, despite proper and admirable actions have been done to develop comprehensive health plans [9], there is doubt regarding success in achieving goals due to lack of proper knowledge of non-communicable disease planning. In the meantime, identifying and paying attention to the problems of running programs is a helpful factor for efficient and appropriate development of programs [10].

In one study, inappropriate model for planning, selection of inappropriate techniques for applying the program model in practice and inappropriate environment and unpreparedness of the organization for planning, were the three main reasons for the failure of developed program [11].

In fact, without paying enough attention to the problems of the developed programs, planning efforts will be faced with failure and the necessary attention is not paid to all the effective factors in advancing the goals considered in the program and achieving them. Therefore, identifying challenges and providing solutions is a good opportunity for health policy makers and decision makers to make strategic reforms in the health system in order to develop a plan [12]. Therefore, this study was conducted to identify the challenges and problems of non-communicable field programs.

Methods:

This qualitative study was designed and implemented in 2019. In order to explain the challenges of developing programs in the field of non-communicable diseases in Iran.

Study Site

Interviews were conducted with health care providers and professionals who held related experiences of the main topic of research in Iran. The interview sites were the Ministry of Health and 5 universities of medical sciences due to the appropriate infrastructure, the presence of specialists and the implementation of projects in the field of non-communicable diseases applying this strategy provided a heterogeneous group of participants which in turn resulted in fruitful of ideas.

Sampling Method

The sampling method in this study was purposive and the participants of this study comprised of specialists and care providers in the field of non-communicable diseases who had related executive and research experience. Based on inclusion criteria such as specialization in field of non-communicable diseases, executive work experience, research and training in this field, the willingness to participate in research, we recruited informants. The interviews were conducted in a semi-structured manner. Saturation was considered the end point of the interviews. Data of this study were saturated at the 40th interview, i.e. no more new concepts could be identified for classification in the analysis by continuing interviews [13].

Interviews

All interviews were recorded after obtaining written consent prior to the interview process. The time and place of the interview were determined in coordination with each participant and each interview lasted approximately 45 to 60 minutes. Each interview session began with a brief description of the research objectives. At the beginning of the sessions, demographic questions were filled in by the participant. Following a brief introduction, the interviewer began his question. At the end of each session, participants were asked to express every other thought came to their minds that were not asked during the interview or did not mention it.

Ethical Issues

The present study was approved by Ethical Committee of Kerman University of Medical Sciences (IR.KMU.REC.1399.272). When doing this research ethical actions were respected such as introducing the researcher to the participants in all the interviews, obtaining written permission to record voices and stop recording whenever asked, granting participants the right to leave the interview and avoiding mentioning the names of the interviewees in typing and analyzing the interviews.

Analysis

The data of this study were analyzed through content analysis with a conventional approach. Content analysis is a method of analysis which is carried out by examining the experiences and views of individuals as well as analyzing common factors among these perspectives which provides ability to explain the desired concept [14].

Interviews were listened by the principal investigator (FA) to gain a comprehensive understanding and then transcribed verbatim. Data collection and analysis took place almost immediately or at the earliest opportunity after the end of each session. Then the text was read accurately and the semantic units were identified and the semantic units were summarized and coded.

The given codes were examined in terms of similarity and irrelevance. Finally, similar codes were grouped together to form classes and each category was assigned a title that represented the code in that category. To solve problems or make an agreement between the codes and make the final decision meetings were held with the second and third researchers who were familiar with qualitative research and coding. In the stages of data

analysis from the opinions of experts to comment and to approve the content of interviews and guiding researchers used in the construction of the final code and class. In this study, code extraction was done manually. Extracted information based on the CIPP model were placed in 4 main categories including context, input, process and product. Discussion of reliability in accepting qualitative studies to support the claim that the collected data is valuable. This means that the validity and reproducibility of the data is verified [15]. Acceptability in qualitative studies was achieved by considering the four factors of dependence, validity, transferability and validity [16].

During the interviews, if possible, actions such as taking notes in the interview sessions, recording interviews with appropriate quality, and coding were performed by two researchers during the research to observe the dependency factor.

The validity factor was confirmed by providing a summary of the interview and the result of the researcher's interpretation of that section to the participant, providing data analysis and its results to experts in this field, using general and in-depth questions by the interviewer to expand and deepen the answers and to create a suitable communication space. Transferability in this study was observed through the number of interviewees, data collection method, interview duration. Finally, in order to verify the opinions of non-communicable disease, experts from 5 universities of medical sciences and the Ministry of Health participated in the research to answer the question.

Results:

Forty people participated in the study whose demographic information in detail are listed in Table 1. Challenges of non-communicable field programs according to the CIPP model were extracted including context, input, process and product for whom twelve subcategories and 37 codes were identified. Summary of categories, subcategories and a number of selected codes are provided in Table 2.

Table 1
Demographic of interviews

Variable		Frequency	Percentage			Frequency	Percentage
Participants							
Gender	Female	10	25%	education	B.Sc.	7	17.5%
	man	30	75%		MSc	2	5%
Department / Faculty	faculty	13	32.5%	Specialty	PhD	10	25%
	Non-faculty	27	67.5%		General Practitioner	16	40%
					specialist	3	7.5%
Age			49.5 Average				
work experience			17.5 Average year				

Table 2
Summary classes and subcategories based on the CIPP model

Category main	Sub-categories	Summary of codes
context	Environmentally related requirements	lack of proper environmental analysis
		not paying attention to disease-related indicators
		absence of pilot programs
		reduction of evidence-based programs
		insufficient attention to group development
	Prioritization and needs assessment	poor prioritization in health system
		neglecting sustainable development
		lack of holistic approach to diseases
		inadequate needs assessment
	People's attitude	public misconception toward diseases
lack of attention to cultural and regional dimensions		
input	Existence financial Problems	lack of budget allocation through sustainable and independent resources
		improper payment system
		inadequate health per capita
		ineffective cost of some programs
	Existence of problems in human resources	instability of managers
		inadequate distribution of manpower
	Existence of problems of process and physical structure	inadequate infrastructure due to the expansion of the program
		inappropriate organizational structure
		lack of proper documentation in the process of developing and implementing the program
	Existence of problems in the structure of technology	lack of attention to the applicability and usefulness of technology
		lack of sufficient data
	Problems in the structure of rules and programs	excessive changes in policies, rules and protocols
		inappropriate advertising regarding the reduction of risk factors
	Process	Problems in providing services

Category main	Sub-categories	Summary of codes
		incomplete implementation of referral system
		removing some basic processes in the program
		improper performance of decision-making units
	Existence of problems in communication and motivational system	lack of full participation of stakeholders
	Existence of educational problems	reduced access
		lack of necessary and efficient training in the system for providing services
product	Existence of evaluation problems	lack of attention to the holistic evaluation system
		lack of full participation in the evaluation process
		failure to perform product evaluation by the expert team
		inadequate development of self-assessment
		inadequate feedback on evaluation
		the Ministry of Health responsible for providing and evaluating services

The first dimension in the CIPP model is context. In this dimension challenges such as lack of proper environmental analysis, not paying attention to disease-related indicators, absence of pilot programs, reduction of evidence-based programs, insufficient attention to group development, poor prioritization in health system, neglecting sustainable development, lack of holistic approach to diseases, inadequate needs assessment, public misconception toward diseases, lack of attention to cultural and regional dimensions were identified [Table 2].

In this regard, lack of proper environmental analysis in the development of some programs is one of the components of non-compliance with the principles of program development. In this regard, a participant believed "... Programs are designed and developed at the ministry level and do not receive information from the environment and it is one of the weaknesses ... "(first participant) or another interviewee stated that "...The challenges are not seeing the environmental levels. Consulting environmental experts is an appropriate action that policymakers in the ministry should pay attention to this point which does not happen in practice..."(ninth participant) or another interviewee stated that "...The same is true about national campaign of measuring blood pressure, we had a good program but its main structure was problematic. If they have had consulted the staff experts before implementing the plan, they would have achieved a better result ... "(nineteenth participant).

Failure to run the program as a pilot is one of the problems of the health system in non-communicable domain programs. In this regard, the participants said "...programs require zero studies to implement and their feasibility to be done which is not done correctly ..." (first participant) or another interviewee stated that "... In our country, there is no belief in zero study and there is no zero study in society, and this discussion is not addressed in non-communicable programs ..."(second participant).

The input problems were considered in the second dimension of the CIPP model .In this part, challenges such as lack of budget allocation through sustainable and independent resources, improper payment system, inadequate health per capita, ineffective cost of some programs, instability of managers, inadequate distribution of manpower, inadequate infrastructure due to the expansion of the program, inappropriate organizational structure, lack of proper documentation in the process of developing and implementing the program, lack of attention to the applicability and usefulness of technology, lack of sufficient data, excessive changes in policies, rules and protocols, inappropriate advertising regarding the reduction of risk factors were identified [Table 2].

That lack of budget allocation through sustainable and independent resources was identified as one of the challenges. In this regard participants said "... lack of budget in the implementation of some projects causes some goals not to be achieved ..." (Second participant or another interviewee stated that "... lack of budget and financial resources also leads to a decrease in financial motivation of employees ..." (tenth participant).

improper payment system is one of the challenges of the program in the non-communicable field that the participants in this field expressed "... Some payment systems are harmful such as payment system based on employee performance (such as fee for service) leads to reduced service quality and more motivation to visit more patients and to receive the higher salary regardless of the quality of service ..." (second participant)

One of the challenges of the program in the non-communicable field is the inadequate infrastructure due to the expansion of the program, which the participants stated as follows: "... proper infrastructure is not considered in the provision of services and the necessary structures in terms of considering the appropriate organizational structures and physical space are not enough to provide services ..." (twentieth participant).

Inadequate advertisements to reduce risk factors is one of the problems of programs. In this regard, participants stated that "... In advertising, organizations have their own rules that have not necessarily been developed toward health promotion, especially in the field of non-communicable diseases programs. Social marketing has not been predicted for non-communicable diseases and advertising is not effective ..." (Twenty-seventh participant) or another interviewee stated that "... Advertising is underused in the healthcare system. There are lifestyle modifications and effective interventions and advertising also costs a little but it is not advertised in this regard and advertisements are not effective and purposeful ..." (sixth participant).

Excessive changes in policies, rules and protocols are among problems of the program development. In this issue some participants expressed "... policies change very much because most policies depend on people with the change of governments and people, many of the programs are overturned and experience serious changes ..." (Twenty-fifth participant).

In the third-dimension process problems are considered including not paying attention to providing active services in some areas, incomplete implementation of referral system, removing some basic processes in the program, improper performance of decision-making units, lack of full participation of stakeholders, reduced access, lack of necessary and efficient training in the system for providing services. In the process dimension, 3 subcategories and 7 selected codes were identified [Table 2].

Another problem of the program is the lack of attention to the provision of active services in some areas, which the participants stated "... at all levels are not active services. In the cities, services are not provided actively that

sometimes is better to present active service ..." (13th participant) or another interviewee stated that "... due to the provision of inactive services in cities providing laboratory services and public access is not appropriate and complete and the diagnosis is not done properly ..." (ninth participant)

Another challenge of program development is the lack of attention to staff motivation and disregard for job security and timely payment. Some participants stated that "... motivation of employees providing outsourced services is reduced for reasons such as lack of job security and irregular payments ..." (second participant) or another interviewee stated that "... There are no motivating factors at the appropriate levels of care and in the field of non-communicable diseases, benefits and facilities have not been considered separately ..." (ninth participant)

lack of full participation of stakeholders, including volunteers, foreign and domestic stakeholders, NGOs, the private sector is one of the problems of the program. In this regard the participants expressed "... Stakeholder participation is not appropriate which makes them not accountable for processes and results. As the Minister of Health is not accountable to the Minister of Energy and health issues are so institutionalized in the culture that only the Ministry of Health should solve the problems and other ministries are not aware of the problems ..." (Twenty-four participants), or another interviewee stated that "... The cooperation of organizations is very incomplete and low for example, the municipal organization should consider the promotion of community's health as a priority but a lot of performance in this area is weak. External and internal participation is not suitable also, different ministries prioritize their own affairs and do not prioritize each other and it is better to prioritize organizations to be multi-sectoral ..." (twenty-sixth participant) or another interviewee stated that "... Most of the non-communicable disease agents are outside the Ministry of Health. Therefore, programs must be formulated correctly. Main risk factors should be identified and all institutions should work together to reduce and eliminate risk factors ..." (Thirty-one participant) or another interviewee stated that "... The whole service chain is not seen in the programs. It is one of the dimensions of the external and internal participation chain. A challenge in programs is communication with other stakeholders to control risk factors for non-communicable diseases at the community level. This issue requires the Ministry of Health to coordinate with other organizations and ministries and institutions inside and outside ..." (thirty-two Participant)

lack of necessary and efficient training in the system for providing services is one of the challenges of the program that in this regard the participants stated "... one of the challenges of the program is the lack of complete information by staff to the community. People are not fully aware and because non-communicable diseases take a long time to show their symptoms, people do not pay much attention. In the discussion of education and information, we should be much more colorful and the organizations involved in education have need more participation ..." (Twenty-first participant). Inadequate information available to the community about NCDs is one of the problems that the interviewees also paid attention to "... Cooperate with domestic and foreign stakeholders in the field of education. The Ministry of Health does 20% of the work in the field of diseases and the rest of the work will be completed with the cooperation of stakeholders which is not good now and informing the community well does not happen ..." (fourth participant)

In the fourth dimension of the CIPP model, product challenges were addressed such as lack of attention to the holistic evaluation system, lack of full participation in the evaluation process, failure to perform product evaluation by the expert team, inadequate development of self-assessment, inadequate feedback on evaluation, the Ministry of Health responsible for providing and evaluating services [Table 2].

One of the challenges of the program in dimension of product was the lack of attention to the holistic evaluation system that in this regard the participants stated "...There is no complete expertise to enter a program in the integration system properly, and one of the reasons is the inadequacy of not evaluating the program ..." (Fortieth participant) or another interviewee stated that "... Some programs run for years, but they are not evaluated either by external appraisal or accurate appraisal or no cost-benefit review. We may spend a lot of time just working and inputs and processes are not reviewed and success is not measured ..." (Twenty-eight participants) or another interviewee stated that "...in programs, the evaluation of the program is not well seen but maybe they are well designed and executed Programs but we do not pay much attention to the discussion of evaluation or if the evaluation is considered, it will be evaluated superficially ..." (thirty-fourth Participant)

One of the problems of the programs is the lack of full participation in the evaluation process that in this regard the interviewees expressed "...there is no tool to guarantee participation in the development, implementation and evaluation of the program in particular..." (Thirteenth participant) or another interviewee stated that "... Evaluation requires preconditions such as time, expertise and cooperation, now none of these preconditions exists. For this reason, there is no complete and comprehensive evaluation ..." (Fifth participant (

Failure to perform product evaluation by the expert team is another challenge of the programs. For this, interviewees stated "... NCDs programs should be evaluated by an expert team after the implementation phase to identify strengths, weaknesses and problems. There should be technical and specialized committees in the field of non-communicable planning. Standardization should be done and evaluation should be done professionally which is absent now. ..." (Sixteenth participant) or another interviewee stated that "... In order to evaluate the program, expert issues must be completed and reason for existence or non-existence to become clear and all aspects of a process or activity examine and then determine whether a program should be integrated into the system or not ... "

One of the problems in the evaluation dimension is the Ministry of Health being in charge of providing and evaluating services, which the interviews stated "... being in charge Ministry of Health in treatment, evaluation and doing all this by one institution is a weakness for the health system that leads to a reduction in the quality of services ..." (Sixth participant) or another interviewee stated that "... one is that we work in parallel. A number of activities are performed by several duplicate ministries or units within the Ministry of Health also carry out parallel activities and the weakness of the Ministry of Health is that it is also in charge of providing services and the evaluator that this is not a very professional and appropriate work ..." (Twenty-fifth participant).

Discussion:

In this study, using the CIPP model, the problems of non-communicable disease programs were investigated. Challenges such as environmental requirements, people's attitude, financial issues, process and physical structure, service delivery issues, lack of comprehensive evaluation, feedback on the evaluation and custody of the Ministry of Health in providing and evaluating services were identified in this study.

Based on the results obtained in this study context problems including lack of proper environmental analysis and inappropriate needs assessment were one of the challenges in the field of non-communicable diseases programs. The results of a study by the World Health Organization (2014) suggested that needs assessment

activities and setting priorities should be seen in the development of programs. Domains of activity must be identified and to them with adequate funding, resources and infrastructure. However, this part is difficult but without these activities, there will be no proper productivity. There are several methods and techniques for needs assessment each has its own purpose, applications and conditions. It is necessary to perform a correct and valid needs assessment which includes all methods and techniques and patterns of needs assessment and their correct selection and application [17].

Lack of attention to the issue of prioritization is another challenge of programs development in the context realm which was stated in the study of Joy et al (2014) who mentioned that prioritization should be considered in the development of programs based on several criteria such as population, catchment area, rate of diseases in that area, type and prevalence of the disease and variety of equipment as well as local customs and culture. Prioritizing community problems and selecting a prioritized problem take place by involving community members, forming a community evaluation record, reporting and publishing the health assessment record and finally preparing an operational plan [18].

Developing programs which lack related evidence was another challenge of the program's development in this study, similarly Oxman et al suggested that (2009) policymakers and health decision makers need to use credible and reliable research evidence in order to increase the efficiency and effectiveness of their decisions [19].

Challenges related to input were another dimension studied here in this regard, lack of budget allocation through sustainable and independent resources is one of the challenges of non-communicable domain programs. Likewise, Maclennan (2011) and Ivancic (2013) indicated that allocating funds for the program is an important challenge in program development. Program funding must also be accurate. Other studies also highlight the importance of aligning organizational resources with programs and confirmed its proper allocation [20] and lack of resources is an important obstacle to the implementation of programs [21].

In the input dimension, one of the problems was the instability of managers which was stated in the study conducted by Mossadegh Rad (2017) who concluded that instability of hospital managers and their frequent changes leads to the failure of programs [22].

Inadequate distribution of human resources is also one of the challenges of the input dimension, which was mentioned in a study by Zangiabadi et al (2012) who showed that one of the major problems in providing health services in third world countries is lack of health facilities and manpower and their improper distribution between urban and rural areas. Inadequate distribution of manpower in turn is affected by various social, political, cultural and demographic factors which leads to a decline in quality of life and health standards much below the level required for the prevention and control of infectious diseases and maintaining the physical, mental and social health of the people [23].

In the process dimension, one of the problems was the lack of attention to the full participation of stakeholders in program development. In the same way, Martin (2007) indicated that every health system has been created to provide services to the community and decisions related to prioritization in the health system, directly affects all members of society and also members of the community play role in financing health system through taxes,

insurance premiums and out-of-pocket payments. Therefore, society should be considered as a key stakeholder who must play an active role which leads to the promotion of services [24].

Incomplete implementation of referral system and lack of attention to the integration of service was another issue identified in this study. Also, Malek Afzali (2007) concluded that patient referral is not happening properly and the referral system is not fully implemented and problems such as improper referral of patients from level one to level 2, non-referral of qualified patients, untimely referral, unnecessary referral exists [25].

In the product dimension, one of the problems is the lack of attention to the holistic evaluation system. In a study by Babakhani (2009), it was showed that evaluation of health care services can lead to improved decision-making in the allocation of resources in the health system [26]. Also, Maynard (2003) indicated that conducting appropriate and comprehensive evaluations will lead to health care systems moving in a certain way, allocating resources based on costs and benefits and aims of equity [27].

Improper development of evaluation indicators is another challenge of non-communicable domain programs which has been stated by Jiang and et al (2009) who showed that regular determination and monitoring of key performance indicators in the evaluation process plays an important role in the success of programs [28].

Failure to provide proper feedback following evaluations is another challenge of programs development which has been already confirmed by Bahrami et al (2011) who concluded that performance appraisal is a dynamic, developmental and two-way process. Evaluating the performance of the health system requires commitment, enthusiasm and seriousness of individuals and governments, and a sense of the need for feedback. To evaluate health system performance an approach must be taken which is able to identify the strengths and weaknesses of the system, to prioritize the main obstacles and important areas of intervention and to identify potential solutions [29].

Conclusions

The findings of this study led to the identification of problems of non-communicable programs in Iran which showed the development programs in the dimensions of context, input, process and product have problems. The existence of these problems leads to a reduction in the quality and quantity of services, inadequate effectiveness and distrust to the health system and the decline of public health. In the program's development, basic points have not been paid enough attention and the indicators are not well defined. Systemic thinking has not been used in all stages of the program development. Another problem of programs is inability to use intra-sectoral and extra-sectoral participation with the support of policymakers and political power to increase executive power in programs. Appropriate measures have not been taken to address the problems of financial resources, human resources, equipment and infrastructure in the programs. Stakeholder education, which includes internal and external stakeholders is facing challenges which requires the development and presentation of appropriate educational models. Finally, a comprehensive and appropriate evaluation system is not included in the programs, these factors have led to the failure of programs in implementation.

Abbreviations

NCD

Non-communicable programs; CIPP model: context, input, process, product model

Declarations

Ethics approval and consent to participate

The present study was approved by Ethical Committee of Kerman University of Medical Sciences (IR.KMU.REC.1399.272). When doing this research ethical actions were respected such as introducing the researcher to the participants in all the interviews, obtaining written permission to record voices and stop recording whenever asked, granting participants the right to leave the interview and avoiding mentioning the names of the interviewees in typing and analyzing the interviews.

Consent for publication

Authors have permission to publish them alongside the manuscript.

Availability of data and material

Data is available upon request from the corresponding author

Competing interests:

no conflict of interest to declare

Funding:

The authors received no financial support for this study.

Authors' contributions:

FA: provided the conception and design of the study, acquisition of data, analysis and interpretation of data, drafting the article, revised it, and final approval of the version to be submitted; L.V: supplied the acquisition of data, drafting of manuscript analysis and interpretation of data; M.A: supplied the design of study, analysis and interpretation, revised it, and final approval of the version to be submitted; N.N: supplied the acquisition of data; M.O: gave final approval of the version to be submitted. all authors have read and approved the manuscript

Acknowledgements:

The authors would like express their gratitude of participants in this study that have well cooperated.

References

1. Organization WH. Making fair choices on the path to universal health coverage: Final report of the WHO Consultative Group on Equity and Universal Health Coverage. 2014.
2. Central Bank of Islamic Republic of Iran. The main economic indicators [Online]. 2012 [cited 2012 May 5]; Available from: URL: www.cbi.ir/.
3. Haghdoost A, Mehrolhassani M, Khajehkazemi R, Fallah M, Dehnavieh R. Monitoring indicators of Iranian health system reform plan. 2013.
4. Minas H. Global mental health and development: a thematic series. Springer; 2014.doi: 10.1186/1752-4458-8-27.
5. Walley T, Haycox A, Boland A. Pharmacoeconomics. Philadelphia: Elsevier Health Sciences; 2004. p. 11–2.
6. Habibzadeh H, Ahmadi F, Vanaki Z. Facilitators and Barriers to the Professionalization of Nursing in Iran. *International Journal of Community Based Nursing Midwifery*. 2013;1(1):16–25.
7. Alexander L. Successfully implementing strategic decisions. *Long Range Plan*. 1991;18:91–7.
8. Davari M, Walley T, Haycox A. Pharmaceutical policy and market in Iran: past experiences and future challenges. *Journal of Pharmaceutical Health Services Research*. 2011;2(1):47–52.
9. Walker KO, Calmes D, Hanna N, Baker R. The impact of public hospital closure on medical and residency education: implications and recommendations. *J Natl Med Assoc*. 2008;100(12):1377–83. [DOI:10.1016/S0027-9684(15)31537-6].
10. Bagheri Lankarani K, Larijani B, Delavari A, Vaseai M, Einollahi A, Dinarvand R, et al. The Scientific and comprehensive map of Health. Tehran: Ministry of Health and Medical Education; 2010.
11. Organization WH. The world health report 2008: primary health care now more than ever: introduction and overview. World Health Organization; 2008.
12. Rajabi F, Esmailzadeh H, Rostamigooran N, Majdzadeh R, Doshmangir L. Future of health care delivery in Iran, opportunities and threats. *Iran J Public Health*. 2013;42(Supple1):23–30.
13. Jensen LA, Allen MN. Meta-synthesis of qualitative findings. *Qual Health Res*. 1996;6:553–60.
14. Kohlbacher F. editor The use of qualitative content analysis in case study research. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*; 2006. Institut für Qualitative Forschung.
15. Holloway I, Galvin K. *Qualitative research in nursing and healthcare*: John Wiley & Sons; 2016.
16. Kvale S, Brinkman S. Thematizing and designing an interview study. *Interviews: Learning the craft of qualitative research interviewing*. 2009:99–121.
17. Organization WH. Ottawa charter for health promotion. *Health promotion*. 1986;1:iii–v.
18. Reed JF, Fleming E. Using community health needs assessments to improve population health. *North Carolina medical journal*. 2014;75(6):403–6.
19. Oxman AD, Lavis JN, Fretheim A, Lewin S. SUPPORT Tools for evidenceinformed health Policymaking (STP). 16. Using research evidence in balancing the pros and cons of policies. *Health Res Policy Syst*. 2009; 16;7(1):16.
20. Maclennan A. *Strategy execution: Translating strategy into action in complex organization*. UK: Routledge; 2011. pp. 115–6.
21. Ivancic V. The biggest failures in managing strategy implementation. *Interdisciplinary Management Research*. 2013;9(1):197–207.

22. Mosadeghrad AM, Ferdosi M, Afshar H, Hosseini-Nejhad M. The impact of top management turnover on quality management implementation. *Medical Archives*. 2013;67:134–40.
23. Zangiabadi A, Amirazodi T, Parizadi T. Spatial analysis healthcare in Kurdistan Development Indicators. *J Geogr*. 2012;10(32):199–215. [In Persian].
24. Martin D. Making hard choices; the key to health system sustainability. *Bioethics*. 2007;2:5–9.
25. Malekafzali H. Lack of Doctors justification family physician plan, Iran ministry of health. Available from: URL: <http://www.qudsdaily.com/archive/2007/page63.html>. [Persian].
26. Babakhani M, Raghfar H. The relationship between income inequality and health in the years 2006 – 1976. *Health Management*. 2009;12(37):16–9. [In Persian].
27. Maynard A, McDaid D. Evaluating health interventions: exploiting the potential. *Health policy*. 2003;63(2):215–26.
28. Jiang H, Lockee C, Bass K, Fraser I, Norwood EP. Board Oversight of Quality: Any Differences in Process of Care. *J Healthc Manag*. 2009;54:15.
29. Bahrami M, Vatankhah S, Tabibi SJ, Tourani S. Designing a Health System Performance Assessment Model for Iran. *Health Information Management*. 2011;8(3):305.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [coreqfinal.docx](#)
- [listfinal.doc](#)