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Assessment of the Status of Urban Family Practice Program in Iran from the Perspective of Experts: A Qualitative Study

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ABSTRACT

Objectives: This study aimed to assess the status of urban family practice program in Iran from the perspective of experts.

Methods: This qualitative study with a phenomenological approach was conducted on July 20, 2021. Data were gathered using an interview guide (semi-structured interview), which outlined the urban family practice program in four dimensions program achievements, challenges, assessment indicators, and suggestions for program development.

Results: A total of 19 participants were included in the study, and the mean age was 46.2±7.3 years. The participants reported the achievements of the urban family practice program in six areas of health indicators, financial protection, workforce, referral system, meeting the needs of the community, and universal health coverage. The challenges of this program were reported in five areas of financing, payment system, organization, rules and regulations, and behavior. Furthermore, the assessment indicators of the family practice program were in three sets of input, process, and output. Participants' suggestions for improving the family practice program were divided into financing, payments, organization, rules and regulations, and behavior dimensions.

Conclusion: Urban family practice program in the implemented cities has many strengths and weaknesses. Participants suggested several ways to enhance the family practice program, such as aggregation of health insurance, making general reforms in the financing, raising service tariffs (outside the referral system), equity in paying public and private sector employees, training the required workforce, attracting the cooperation of specialized physicians, and integrating family practice program protocols in physicians' training packages.

Keywords: Family practice, health status indicator, outcome assessment, process assessment

INTRODUCTION

According to the World Organization of Family Doctors, family practice is defined as the "health care services provided by the family physician, characterized by comprehensive, continuous, coordinated, collaborative, personal, and family- and community-oriented services.[1] Comprehensive medical care is characterized by a particular emphasis on the family unit, known as general practice in some countries." The family physician is in charge of the first-level medical services and has at least a doctorate in medical professions and a valid medical license. The family physician is responsible for providing health services within the defined package of services without discriminating (e.g., age, sex, socioeconomic characteristics, and disease risk) the individual, family, and community under his/her care. The family physician can use referrals to

higher levels to maintain and promote health.[2,3] The family physician's history dates back to the post-World War II era when the United States recognized the Family Medicine Board in 1969 to solve the problem of increasing medical specialties and the isolation of general medicine.[4,5] In Iran, one of the first steps toward health system reform was the establishment of health cooperatives in the second half of 1998 with the cooperation of the Ministry of Cooperatives. This was followed by the implementation of the Tabriz Comprehensive Network project, which was established in 2000 in East Azerbaijan province and was visited and approved by the General Director of the World Health Organization and senior experts of the Ministry of Health and Medical Education. It received medical education in 2005, with the establishment of a family practice program for villages and cities with <20,000 populations.

Urban family practice was started in East Azerbaijan province with the development of health complexes in Tabriz in 2015.[6] The family practice program is a patient-centered program that is led by a family practice specialist within a team and aims to identify and provide services to the communities where they are geographically close to family members and are familiar with their relationships, community, environment, and professions. Studies have been done in Iran showing that implementing the family practice program has improved many health indicators; people's access to health services has increased, unnecessary costs have decreased, and service satisfaction has increased. However, despite the progress of the family practice program in these cases, shortcomings in this program are evident, including the formation of health records, referral systems, and culture-building at the community level.[4]

Global experiences have shown that the family physician approach can increase household access to a defined package of services at a reasonable cost through trained and general practitioner-motivated systems, which can guarantee high-quality, continuous, and comprehensive primary care services for individuals and families of all ages and genders.[2] The principles of the family physician and the main elements in various countries are almost the same, but how they are implemented can be largely different. The main features of this program are comprehensive health management (health management of the region by health complexes using all the capabilities of the governmental and non-governmental sectors), changing the orientation of the medical sciences universities from providing services to ensuring the provision of desirable services, increasing responsibility and accountability to the people based on service packages and continuous and comprehensive improvement of the quality of health service processes.

Health systems have always sought to make effective improvements to their structures and processes to achieve better results.[7,8] According to experts, investing in reforms based on primary care has always been highly efficient and effective. Therefore, a detailed investigation of this program and modification of its structure and implementation processes seem necessary. Like all programs implemented in health systems, the family medicine program needs to be evaluated and improved to enhance performance. Many studies in the country have evaluated the rural family medicine program. Regarding the evaluation of the urban family medical program in Iran, limited studies have been conducted, each of which addressed some of the issues. For example, a study conducted to evaluate the urban family physician plan in six pilot cities under the supervision of Ahwaz Jundishapur University in 2011 showed that the workforce required covering the population's health needs was not provided, and the greatest shortage was related to the nutritionist, nurse, and physician, respectively. At the second level of referral, the plan was not well welcomed by specialist physicians with offices. In Mahshahr, only five specialist physicians and in the third level, only 28.5% of eligible physicians enrolled in the mentioned plan.[9] Kabir et al.[10] showed that the satisfaction of service providers was 3.5 out of 5 points. In another study, Abedi et al.[11] explained the strengths of the urban family physician program in areas such as easy access to services, leveling services, and reducing unnecessary costs. Weaknesses of the program were also observed in management, human and physical resources, referral system, electronic health record, payment mechanism, internal coordination and control, and evaluation system. Senior managers and policymakers of the health system need information based on scientific and comprehensive evidence of the status of the implementation of the family physician program. This information provides the basis for making the right decisions and policies regarding the continuation or modification of this program. However, few studies have evaluated the urban family physician program in the country in terms of chain and process content.[12,13] Therefore, this study aims to answer the program's achievements, challenges, and assessment indicators, and propose solutions to improve the current status of the family practice program in the cities implementing the program in the East Azerbaijan Health Department.

METHODS

This qualitative study with a phenomenological approach was conducted on July 20, 2021, with 19 faculty members, managers, and program experts in the provincial and city health centers selected through the purposive sampling

Table 1. Sociodemographic and working features of the participants

	Mean±Standard deviation
Age (years)	43.2±7.3
Work experience (years)	19.1±8.4
	n (%)
Gender	
Female	7 (36.8)
Male	12 (63.2)
Degree of education	
BSc	8 (42.1)
MSc	4 (21.1)
GP	4 (21.1)
PhD	3 (15.7)

BSc: Bachelor of sciences; GP: General practitioner; MSc: Master of science; PhD: Doctor of philosophy.

method.[14] Faculty members, managers, and relevant experts in the provincial health center and the cities of Tabriz, Ahar, Marand, Hashtrood, Horand, and Varzeqan (the implementing cities of the family practice program in East Azerbaijan Province) were selected. The inclusion criteria for experts in the study consisted of at least 5 years of experience and activity in the field of family practice programs.

Data were collected using an interview guide that assessed achievements, challenges, dimensions, evaluation indicators, and proposed strategies for improving the urban family practice program. After selecting the participants, semi-structured interviews were conducted to achieve data saturation.[15] Acceptance, determination, and similarity criteria were used to determine the validity, accuracy, and robustness of the interview sessions.[16] All interviews were recorded with the consent of participants, and important notes were taken immediately. The data were implemented immediately after the interview, followed by data processing. It should be noted that all procedures in this research were carried out following the relevant guidelines.

Descriptive statistics and SPSS version 19 software were used, and frequency, percentage, mean, and standard deviation were used as descriptive statistical methods. Qualitative data were analyzed by content analysis method and manually.

RESULTS

A total of 19 participants were included in the study, and the mean age of them was 46.2±7.3 years. The sociodemographic and working features of the participants are summarized in Table 1.

Participants expressed the program's achievements in six areas, including health indicators of financial protection, workforce, referral system, meeting the needs of society, and universal health coverage. One of the program's achievements is related to improving the status of health indicators. Participant number two stated that "*the performance of the urban family practice program is good in quality indicators because the same defined service package is implemented, and this package is comprehensive enough to improve health indicators*." Concerning the urban family's practice achievement, participant number three indicated that "*the main achievement of the program is to increase health coverage*."

The fourth participant acknowledged that "*Family practice achievements include reducing the costs of the health system, eliminating unnecessary costs, raising health indicators, increasing patient illness diagnosis and care, employment of medical and paramedical graduates, helping universal health coverage, identifying the poor people and helping them, reducing out-of-pocket payments, breaking the resistance of people and using health services, increasing the covered population, and increasing access to health services*."

Concerning challenges of the urban family practice program in the cities implementing the program in the East Azerbaijan health deputy, participants expressed the challenges of the family practice program in five areas of the organization, financing, payment systems, regulations, and behavior (health system control knobs). The main themes and subthemes of achievements of family practice programs from the perspective of experts are summarized in Table 2. The third participant reminded us about the challenges of the family practice program, saying: "*The problem of financing and payment system is lack of strong monitoring and assurance system, the formality of monitoring, not following the referral system by people, staff and doctors, the high workload of health care providers, lack of a consistent physician in the program, high expectations of physicians, lack of appropriate and practical training courses for health team members, and low willingness of nurses and midwives to work in Family practice Program*."

Participant number five said: "*Part of the people chooses their own physician; for example, they prefer the private sector. Maybe they go straight to the second level or spend a lot of money, which hurts the program*."

Participant number seven said: "*We have a problem with program policy. Content items, presenters, the definition of the executive process, evaluation system, requirements and infrastructure, and physical and human resources must be defined properly*."

Table 2. Main themes and sub-themes of achievements of family practice program from the perspective of experts

Main themes	Sub-themes
Health indicators	Quality of services
	Service coverage /population coverage
	Community access to required services
	System performance
	Quality of visits
	Fair community access to needed medical services
	Customer satisfaction
	Improving equity indicators
Financial protection	Reducing out-of-pocket rate
	Identifying the weak sections of the society (in terms of economic issues(and supporting them
	Reducing unnecessary costs through a family physician
	Reducing the heavy costs of disease care and treatment
	Improving access to health services for marginalized and disadvantaged areas
Human resource	Increasing the employment rate of family medicine graduates
	Equitable distribiton of human resourse in different regiouse
Refrral system	Reducing unnecessary costs of providing parallel services at different levels
	Improving the status of the refrral system
	Improving the status of referral feedback
Meeting the needs of society	Providing educational services regarding different parts of the program
	Increasing the provision of diagnostic and care services to the population
	Taking care of high-risk groups
	Using the power of the private sector to meet the needs of the population
Universal health coverage	Helping to achieve universal health coverage
	Redusing unnecessery costs
	Increasing population coverage to required services

The main themes and sub-themes of challenges of family practice program from the perspective of the expert are summarized in Table 3.

Participants expressed their ideas on program evaluation indicators within three areas of input, process, and output indicators. Output indicators were divided into quality, equity, and performance indicators. The main and sub-themes of the dimensions and indicators for evaluating the urban family practice program are summarized in Table 4. Regarding the evaluation indicators, participant number 7 stated the following: "*The final indicators of the region's health should be covered, such as life expectancy, birth rate and mortality rate, and indicators of mothers and the performance of the family physician and his team. Intermediate indicators should be examined. Is the coverage effective? How has it been before? Is it better now? Does it provide prevention and social services? Does it have effective coverage? How well were we able to provide prevention and social services in the covered area?*

Participant number nine also considered the indicators of "*quality, equity, and financial protection*."

Participants suggested strategies to improve the family practice program according to the health system control knobs in five areas of the organization, financing, payment systems, regulations, and behavior.

"*We need comprehensive action to make reforms in a broad and long set in which many problems are institutionalized, and sometimes the same issues and problems are accepted as a fact. One of the most popular models today is the use of control knobs.*" (Participant number 11)

The main and sub-themes of strategies for promoting family practice programs in the cities implementing the program are summarized in Table 5.

DISCUSSION

Our results indicated that the implementation of the urban family practice program had reached achievements such as improving health services coverage, increasing population coverage, improving community access to required services, increasing patient satisfaction, reducing out-of-pocket payments, and the access of marginalized and deprived areas to health services. Abedi et al.[17] evaluated the implementation of the family practice program in urban and ru-

Table 3. The main themes and sub-themes of challenges of family practice program from the perspective of the expert

	Theme	Subthemes
	Financing	• Many visits due to free services • Allocate low financing per capita
	Payment system	• Improper management of payments to employees • Inequity in the payment of employees • Delay in payment of health team salaries • Contradiction of providers' income to inflation rate • Adverse payment to the private sector
Organizing	Planning	• Lack of proper definition of family physician • Change of decision-makers authorities at the level of top managers • Lack of medical services and rehabilitation for needed population • Lack of job security for employees
	Human resources	• Change of service providers/covered population • Insufficient number of physician • Lack of sufficient motivation for physician to continue education and obtain a specialized degree • Lack of effective training for providers • Low willingness of nurses and midwives to work in the program • Low willingness of providers to work with the SIB portal
	Structure	• Low participation of private sector • Unnecessary referrals • Incomplete insurance contributions • Lack of managerial stability in the system • Lack of coordination in the program • Lack of obligation to record clients' information in health record • Inadequate supply of medicine and consumable equipment
	Facility/Equipment	• Existence of discrimination and inequity in the distribution of resources in different provinces • Lack of sufficient equipment
	Regulation	• The weakness of the evaluation system • Lack of appropriate standards for monitoring • The lack of evidence-based indicators for monitoring and evaluation and apply personal views evaluators • High level of administrative bureaucracy and its impact on client responsiveness • Formality of monitoring of the program • Lack of supervision on how to visit and the number of visits
	Behavior	• People's misconception that the public sector is weaker than the private sector • Not regarding of service leveling by clients and providers • Existence of conflict of interest in making effective decisions among policymakers • Existence of induced demand phenomenon and its negative effects • Improper documentation of some physicians • Poor culture building in the community about this program • Negative attitudes of people towards the skills of GPs • Existence of cultural barriers in the society of Iran (non-referral of the population to heterosexual doctors) • Client high expectations • Being treatment-oriented/not teaching health issues by doctors • Prescribing drugs with order of patients by doctors • Mediocracy in the Ministry of Health • Non-referral of people covered by insurance from banks, oil companies, and disconnection from the family practice program. • Compulsory participation of physician (place to study and continue their education) • Lack of acceptance of the program in urban areas

GP: General practitioner; SIB: Integrated health system.

Table 4. Main and sub-themes of the dimensions and indicators of family practice program evaluation from the perspective of experts

Dimension	Indicator
Input indicators	• Awareness and skills of health team members
Process indicators	• Amount of necessary referrals • Reverse reference rate from level 2 • The survival rate of family physicians • Quick and easy access to services while waiting • The level of cooperation of specialists in care
Output indicators	• **Quality:** the level of satisfaction of the covered population, the level of acceptance of family physicians among the population • **Equity:** The extent to which families face back-to-back costs, out-of-pocket payments • **Functional:** life expectancy, birth rate, under-5 mortality rate, maternal mortality rate, actual service coverage, public utilization of services, quality-adjusted life expectancy

Table 5. Strategies for promoting family practice programs in the cities implementing the program

Control knobs	Strategies
Financing	Integration of health insurances, general reforms in financing the health system, raising service tariffs (outside the referral system)
Payments	Equity in the payment of public and private sector employees
Organizing	Providing oral services (add to service package) Contracting with pharmacies and laboratories Requiring physicians and providers to participate in training and empowerment programs Training of required workforce Creating job security for health team members Attracting the cooperation of expert doctors Completing electronic health record Providing medical and rehabilitation services Reviewing medical education courses and creating educational content about family physicians Integration of family practice health protocols in physicians training packages
Rules	Reviewing family policy policies and (what is the purpose of the program? where is it located?) Stabilizing the management structure of senior managers Amending upstream laws
Behavior	Planning to increase public awareness of health Creating a culture of accepting family physician in society

ral areas of Mazandaran province with a process approach. They found that the most important structural dimensions in the urban family practice program were the dimensions of equipment and physical space, respectively. In terms of process, the dimensions of non-communicable disease care and monitoring and evaluation were better, while in terms of results, rational drug administration was better. In the study of Keshavarzi et al.,[9] which was conducted as an evaluation of the urban family practice program from the perspective of managers and executives, it was shown that more than 97% of managers and health professionals in Mazandaran and Fars provinces believe that the performance of urban family practice program is moderate and has been low. In the study by Kabir et al.,[18] the managers and executors indicated that increased disease diagnosis and care reduced out-of-pocket payments, increased access to health services, and under-coverage of the urban population were the most tangible achievements of the implementation of the urban family practice program in Iran. Other studies conducted inside the country also confirm these results.[19,20]

In addition to its achievements, the program faces challenges such as financing, payment system, organization (program, workforce, facility, equipment, and medicine), rules and regulations, and behavior. Abedi et al.[17] showed that the lowest score in urban and rural family practice programs in the structural area was related to receiving

timely and optimal credits required from higher authorities (financing). In the study on the challenges of the family practice plan from the perspective of managers and physicians in North Khorasan province, financing, and payment system were introduced as the most important challenge of the family practice program.[21] Likewise, Mohammadi et al.,[22] indicated that the weakness in the functioning of insurance and weakness in policy-making were challenges. In the study of Kabir et al.,[18] the challenges raised for the urban family practice program included non-timely payments to physicians, administrative problems in the referral system, and an increase in unnecessary referrals due to reduced out-of-pocket payments. According to the World Health Organization, the Donabedin model is one of the appropriate models for evaluating health services.[23] This model focuses on three areas of structure, process, and results. The scope of the structure includes resources such as equipment and workforce that are used in the production and provision of services; the scope of the process comprises actions that lead to the successful use of resources to produce effective services. Other studies conducted inside the country also confirm these results.[24,25]

The range of outcomes also includes expected outcomes such as satisfaction, treatment, and care of disease rates.[26] In this study, Input indicators were the level of knowledge and skills of health team members, while process indicators included the number of necessary referrals, the rate of reverse referral from level 2, the retention rate of family practice, the amount of quick and easy access to services while waiting, and the level of cooperation of care professionals. Output indicators such as quality indicators include the level of satisfaction of the covered population, the level of acceptance of family practice among the population and in the field of equity, indicators of the level of families' exposure to crushing costs, the amount of out-of-pocket payments and performance indicators of life expectancy, birth rate, mortality of children under 5 years old, maternal mortality rate, actual service coverage, people's use of services, and quality-adjusted life expectancy. In the study of Abedi et al.[17] authors conducted to evaluate the implementation of the family practice program in urban and rural areas of Mazandaran province with a process approach, like our studies method. Study of the Mountaineer et al. urban family practice program using the primary care tools included providing care as the main feature, access to services, continuity of care, coordination of caregiver delivery and comprehensiveness of care as a sub-characteristic and geographical access, cultural access, organizational access, financial access, information continuity, longitudinal continuity, interpersonal continuity, inter-level cooperation various care, medical equipment and services as dimensions of patient evaluation and visit, working hours, vacation and non-working hours, home visits, non-medical consultations, payment for services, distance to provider centers, cultural characteristics, use of computer and software, storage of medical information, ability to use information and its analysis, visits per year, the duration of patient-provider relationship, referral system, medical equipment, disease management, treatment procedures and technical skills of counseling and communication with specialists have been evaluated as evaluation indicators.[27] The suggestions of this study to improve the family practice program in the field of financing include a bowl of health insurance, general reforms to the health system's funding, and raising service tariffs (outside the referral system). In the field of payments, equity is also considered in the payment of public and private sector employees.

In the field of organization, concluding cooperation agreements with pharmacies and laboratories, requiring physicians and providers to participate in training and empowerment programs, training the required workforce, creating job security in health team members, attracting the cooperation of specialized physicians, completing electronic health records, providing medical services and rehabilitation, reviewing medical education courses and creating content about family physicians, integrating family practice health protocols in physicians' training packages, providing oral services (adding to the service package) and in the field of laws and regulations, reviewing the policies of the family practice program, stabilizing the management structure of senior managers and amending the upstream laws, and in the field of behavior, planning to increase public awareness of health and culture were suggested concerning the role of the family practice in the community. In the study of Abedi et al.,[17] it is suggested that the processes of the reverse referral system be reviewed, and corrective strategies are used for more participation of specialist physicians and the private sector in the non-communicable disease care program, due to the growth of its risk factors in recent years, more attention from managers is necessary for planning and policymaking based on evidence.

Further, in the study of Kabir et al.,[18] it was suggested that the Ministry of Health, Treatment, and Medical Education, in cooperation with the health deputies of universities and insurance departments, implement intervention projects to increase efficiency and effectiveness and adjust the challenges of urban family practice program, especially in providing resources. Financial sustainability legalizes the referral system and resolves administrative problems. The study of Damari et al.[27] suggested that a specialized pri-

mary health care working group should be formed in the Ministry of Health and that all projects should be designed, piloted, evaluated, and institutionalized in coordination with that working group and the cooperation of all stakeholders. In various studies, the necessity of implementing a referral system in the family physician system has been emphasized.[28-30]

CONCLUSION

To evaluate the urban family practice program, various evaluation models such as the Donabedian model, process approach evaluation, evaluation based on achievements and challenges, and control knobs have been used. Strategies for improving the family medicine program, such as establishing equity in private and public sector payments, unification of insurance and financing, raising tariffs for out-of-referral services, amending upstream rules, training the program's workforce, and reviewing medical science courses about creating the culture and raising public awareness about the urban family practice program should be made.

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