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Implementation Challenges of Family Physician Program: A Systematic Review on Global Evidence

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Abstract

Background: The family physician program, as one of the core arms of health care systems, has faced various implementation challenges around the world. Experiences in the implementation of family physician program can be helpful for nations that seek to apply for similar programs. The aim of this study is to systematically review the implementation challenges of family physician program across the world.

Methods: A systematic search was conducted from January 2000 to February 2022 across scientific databases of Embase, MEDLINE, Web of Science, Scopus, CINAHL, EBSCO, and Google Scholar. The Framework approach was used to analyze the selected studies. The quality of the included studies was evaluated using the McMaster Critical Review Form for qualitative studies.

Results: 35 studies upon the study inclusion criteria were included. Based on the Six Building Blocks frame, seven themes and 21 subthemes were developed as the implementation challenges of family physician program. 1) Governance: policy guidance, intelligence, coalition, regulation, system design, and accountability; 2) Financing: financing and payment system; 3) Health workforce: education, research, recruitment and motivation opportunities; 4) Service delivery: management of health services, service package, referral system, continuity of care; 5) Health information systems: production and evaluating the health information system; 6) Availability: provision basic health services, maintenance of facilities; and 7) Cultural considerations: behavior and social determinants of health.

Conclusion: Scientific governance, financing, and payment mechanisms, workforce empowerment, designing a strong health information system, and providing access to services with cultural considerations can result in the successful implementation of the family physician program in communities.

Keywords: Family physician program, Health systems, Health Policy, Six Building Blocks, Systematic review

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Introduction

To improve both efficiency and effectiveness, establish justice, and also to provide access to healthcare services, health systems have been experiencing different reforms (1). One of the greatest reforms in health systems is the implementation of the family physician program (FPP) (2). Family physicians emerged after the Second World War and following the decline of the general practitioners and the increase of specialization to restore the relationship between the doctor and the patient, which was damaged after the reduction of general practitioners (3). In the

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↑What is "already known" in this topic:
There is no systematic review specifically focused on the implementation challenges of family physician program on the global scale.

→What this article adds:
Like other policies in the health sector, in the family physician program, there may be gaps between the program and implementation, and in some countries, the lack of proper implementation of the program in various dimensions has made it difficult to achieve its goals.

1960s, public dissatisfaction with lack of physicians, inappropriate access to healthcare services in rural and urban areas, high expenditure on medical and specialized healthcare services, monopolized medicines, and reduced healthcare services resulted in the birth of FPP as a new specialty so that American Board of Medical Specialties approved the family practice as a new specialty (4).

With the expansion of FPP throughout the world, more than 80 countries are currently a member of the World Organization of Family Doctors (WONCA), and this program is included among the most important policies in the majority of nations (5, 6). Pioneering countries in the field of FPP and referral systems have also been able to enhance individual, family, and community health status through a holistic approach to health care and attention to all health-related dimensions (7).

Therefore, due to the variety of experiences in the implementation of FPP across the world, the study of challenges and the solution to this issue can boost and sustain such a program to achieve further success in the future. Moreover, gaining lessons from the challenges of implementing FPP in different countries has been suggested to aid in the development and continuation of such programs in other countries. Furthermore, the study of such experiences can provide insight for policy-makers to strengthen the FPP the main approach to providing high-quality and effective health services. Also, the examination of these experiences can increase the commitment of policymakers to properly implement the FPP through understanding its importance, learning from the experiences of others and subsequently modifying related policies, and ultimately supporting national strategies to achieve universal health coverage (8, 9).

Several studies have been conducted to identify challenges faced by FPP (10, 11). However, to our knowledge, no study has systematically addressed the challenges of implementing FPP in the world. Accordingly, the purpose of this review was to identify the implementation challenges of FPP across the world, along with solutions developed for such challenges and problems.

Methods

Study setting

This study is a systematic review and Enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) statements used to synthesize data (12).

Search strategy

Articles were searched from different international scholarly databases, including Embase, MEDLINE, Web of Science, Scopus, CINAHL, EBSCO, and Google Scholar. References of included articles were searched manually to ensure that all related studies were used. The results of searches were exported into EndNote, and duplicates were removed. Inclusion and exclusion criteria and search strategy is presented in Table 1.

Study quality assessment

The quality of the articles was assessed by two authors independently using the McMaster Critical Review Checklist (13) and studies with medium and high levels of quality were included in the review. Then, a third author examined the included papers to ensure the reliability of the study quality assessment.

Data extraction

Once the articles were selected based on the inclusion

Table 1. Search strategy summary

Inclusion criteria	• Publication between January 2000 to February 2022 • original articles either qualitatively or quantitatively • English language; focused on family physician program • The selected studies addressed at least one challenge encountered following the implementation of the family physician program
Exclusion criteria search string	• letter to the editor, correspondence, brief report, commentary, short communication, and opinion • Papers focused only on the challenges of medical students and did not address the implementation problems • (Family Physician OR Family Medicine OR Family Doctor OR Family Practitioner OR General Practitioner) AND (Challenge* OR Obstacle OR Difficult* OR Problem OR Barrier) AND (Health System OR Healthcare OR Health Centers) AND Health Policy.

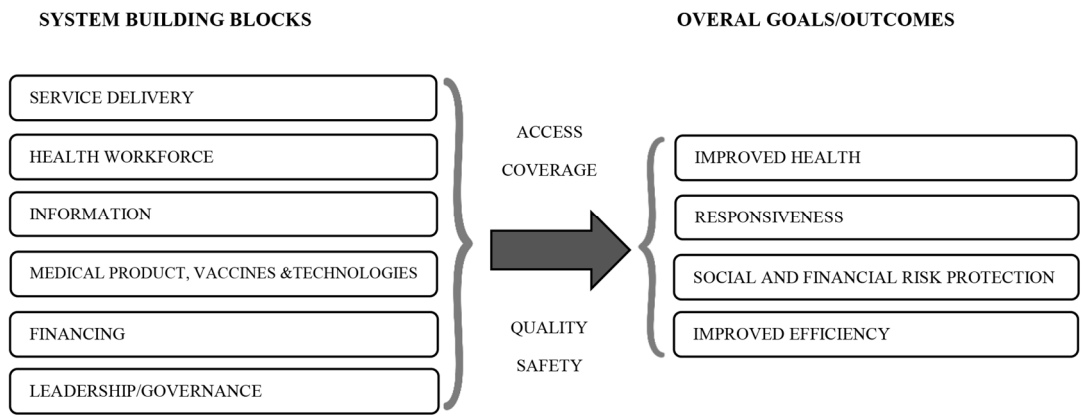

Fig. 1. The WHO health system building blocks framework

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and exclusion criteria, two authors extracted the studies' information including participants, data collection and analysis methods, and the main findings.

Data analysis

The WHO health system building blocks framework (6BBs) was used to analyze the implementation challenges of FPP, which include service delivery, health workforce, information, medical products, vaccines and technologies, financing, and governance (Figure 1) (14). Hence, the classification of the concepts was based on the thematic framework of 6BBs. The findings of included studies were examined carefully. The data were coded based on 6BBs. The process of coding, modifying, and reviewing the initial framework was continued by two authors until no new code or concept emerged. Finally, the data were merged and interpreted and any disagreement was investigated by a third author. This process was facilitated using the MAXQDA (version 12) software.

Results

Systematic literature search

35 studies were included in this review. Figure 2 illustrates the flow of studies through the inclusion process, and Table 2 describes the included studies.

The principal themes

In this study, six principal aspects of the "building blocks" framework were used to brace the findings. By preceding the analysis, a new theme was added to the existing themes and the used framework was revised. Themes, subthemes, and their composing items are shown in Table 3.

As shown in Table 2, the selected studies were published between 2000 and 2022, and all of them were qualitatively conducted. Participants of the studies included key informants and national health professionals, family physicians, academic leaders and researchers, and healthcare staff. Most of the selected studies were of high and medium quality.

Theme 1: Governance

It is argued that governance is linked to the role of governments in providing healthcare services and its relationship with other health-related actors (48). Some developing countries lack transparency in the implementation of the FPP (39, 41) and have rushed to implement the program and have not paid attention to providing the necessary infrastructure (16). Nevertheless, the problem is reported in developed nations as well, where physicians' private practice challenges their accountability (10, 45).

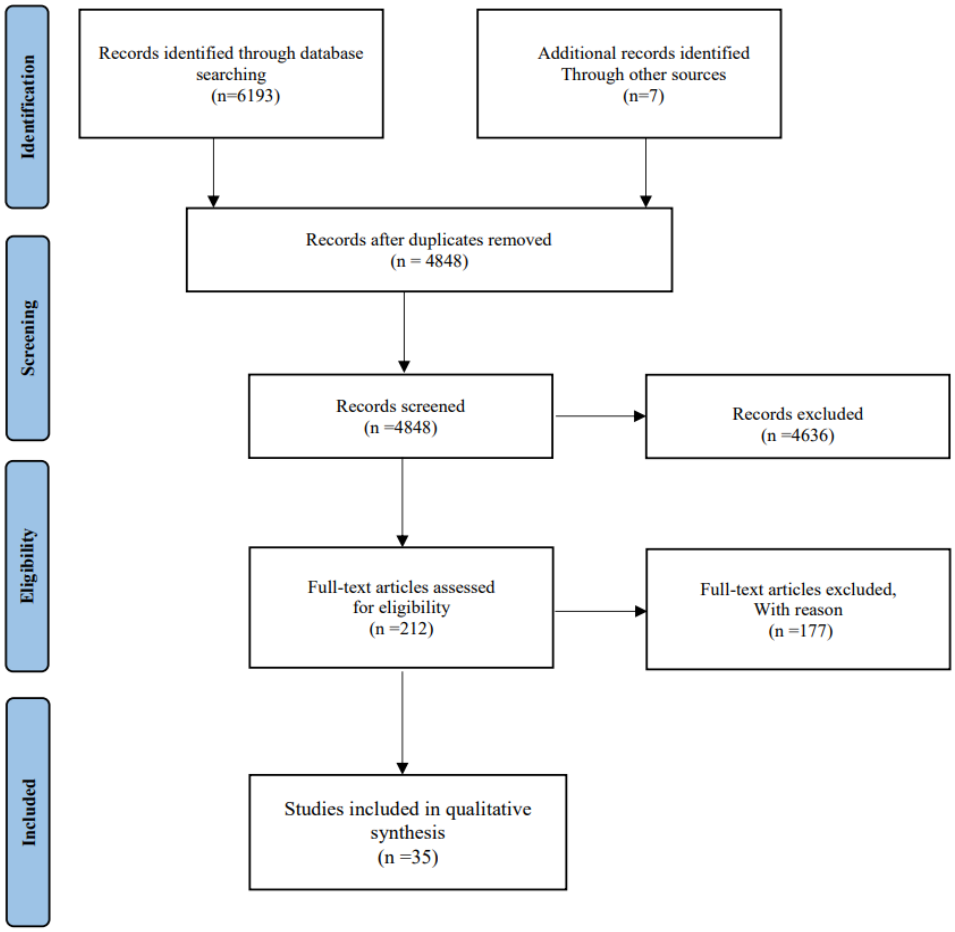

Fig. 2. PRISMA flow diagram for included studies

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Table 2. Characteristics of the selected studies

Author, Year	Scope	Country	Study participants	Data collection method	Analysis method	Main findings	Paper quality
Hueston, 2000 (15)	Challenges to academic family medicine in the healthcare environment	USA	Family physicians, leadership positions	Semi-structured interviews	Thematic analysis	Recruiting and retaining problems, financial restraint, lack of research training	Medium
Minana, 2000 (16)	Factors related to the family physician work's effectiveness and efficiency	Spain	Health center coordinators, directors of district primary care services, and chairmen of internal medicine hospital services	Delphi technique	Thematic analysis	Poor relationship between primary and secondary care levels, lack of incentives, political influences in management, excessive bureaucracy, deficiencies in continuing medical education, limited access to diagnostic tests	Medium
Smith, 2000 (17)	Inhibitors and facilitators of Primary Care Groups' (PCGs) implementation and development	UK	GPs, health authority (HA) managers, pilot managers, nurses, social services officers, and community health council officers	Semi-structured interviews and focus group discussions	Framework analysis	Challenges of government policy regarding primary care, high workload, the pilots' relationship with the local HA, and challenge of information management and technology (IM&T)	High
Tabenkin 2000 (18)	The role of primary care physician in the Israeli health care system as a 'gatekeeper'	Israeli	Policy makers	Semi-structured interviews	Content analysis	Loss of faith in PCPs by the general population, poor training, low stature of family physicians, lack of availability throughout the day, resistance by specialists against family physicians and gatekeeping, strong competition between the sick funds, behavior and culture problems.	Medium
Smith 2005 (19)	Barriers facing junior doctors in rural practice	Australia	Medical educators, junior doctors, rural practitioners, academic rural practitioners, and medical administrators	Semi-structured interviews	Thematic analysis	Lack of supervision and on-site support, inadequate orientation and uninformed expectations, limited access to relevant education, isolation, lack professional and personal preparation.	Medium
Manca, 2007 (20)	Rewards and challenges of family practice	Canada	Family physicians	Web-based, using the Delphi method	Thematic analysis	High workload, inappropriate reward system, high overhead costs and income inequities, lack of resources, high paperwork, maintaining and acquiring skills and knowledge, medico-legal issues.	High
Manca, 2008 (21)	Challenge of gaining more respect for family physicians from other specialists	Canada	Family physicians	Delphi technique, web-based survey	Thematic content analysis	Lack of understanding about family physician role among specialists, weakness in the communication between family physicians and specialists.	Medium

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Table 2. Continued

Author, Year	Scope	Country	Study participants	Data collection method	Analysis method	Main findings	Paper quality
Miedema 2009 (22)	Challenges and rewards of rural family practice	Canada	Physicians	Semi-structured interviews	Thematic analysis	Professional isolation, complex patient profiles, improper maintaining of professional boundaries, tendency to move to bigger centers.	Medium
Sunshine, 2010 (23)	Barriers to training family medicine residents	USA	Family medicine	Open-ended surveys, Grounded Theory	Thematic analysis	Poor governance or poor rules, guidelines, or requirements, administrative complexity, staffing problems, financial problems, lack of knowledge about family physicians' residency and community health centers' partnerships.	Medium
Vroot, 2012 (24)	Challenges hamper family physicians in pursuing their family medicine mandate	Kenya	Family Physicians, nurses, clinical medical officers, interns, physical therapists, lab technicians	Semi-structured, interviews, focus group discussions, observation	Thematic analysis	Lack of awareness about roles of family physicians, lack of funds, leaving the public sector to join private health care, human resource gaps, conflict of interest, financial and infrastructural issues, inappropriate remuneration, and lack of standards in training programs.	Medium
Reeve 2013 (25)	To explore GP perceptions of enablers and constraints for expert generalist care	UK	GPs	Semi-structured interviews and focus-group discussions	Framework Analysis	Lack of a consistent of the distinct expertise of EGP, competing priorities, lack of the consistent development of skills and a lack of resources for monitoring EGP.	Medium
Cole 2014 (26)	Rewards and challenges of community health Center practice	USA	Family physicians	Semi-structured interviews	Grounded theory approach	Poor administrative management at the CHCs, hierarchical administrative structures, and lack of opportunity for physician input into practice, no clear mechanisms to provide input into administration and no opportunities to make changes in the family physician work environment.	High
Moosa, 2014 (27)	Implementation of family medicine: critical role in the district health system	South Africa	Academic and government leaders	Semi-structured interview	Framework analysis	Unclear accountabilities to district managers, conflict of interest, overlapping roles between specialists and family physicians, poor referral systems, payment problems, lack of teamwork skills, problems in family physician training, weakness in human resource management, and migration of family physicians.	High
Dehnavieh2015 (28)	Challenges of implementation of urban family physician plan	Iran	Universities of medical science, health services insurance organizations, the medical system experts	Semi-structured interviews	Content analysis	Problems in policy-making and programming, problems in funding, poor payment systems, difficulties in laws and regulations and monitoring their implementation, problems related to service providers, poor resources, and poor equity.	Medium
Esmaeili, 2015 (29)	Challenges of urban family medicine in the health system	Iran	Policy and decision-makers	Semi-structured interviews	Framework analysis	Improper development of referral system, improper access to health care, poor management of chronic diseases.	Medium

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Table 2. Continued

Author, Year	Scope	Country	Study participants	Data collection method	Analysis method	Main findings	Paper quality
Mumenah, 2015 (30)	Difficulties faced by family physicians	Saudi Arabia	Family physicians	A structured multi-item questionnaire	Content analysis	Unavailability of technologies and equipment, poor access to health care, weakness of electronic medical records system, and poor building maintenance.	Medium
Ogundipe, 2015 (31)	The attitudes of stakeholders to initiation of family medicine training and the future roles of family physicians	Botswana	Key stakeholders in the district health services	Semi-structured interviews	Framework analysis	Inadequate personal welfare facilities, erratic ancillary support services, inadequate complement of mentors and supervisors.	Medium
Breton 2016 (32)	Implementation of the advanced access model	Canada	Family physicians	Semi-structured interviews	Thematic analysis	Poor resource availability and weak team functioning	High
Chew 2016 (33)	A nationwide survey of public healthcare providers' impressions of family medicine specialists	Malaysia	Family physicians	Questionnaires	Thematic analysis	High workload, poor management work, inadequate family physicians, inadequate family physician autonomy	High
Gossa, 2016 (11)	Problems of family medicine training programs in Ethiopia	Ethiopia	Key informants who is involved in the development of family medicine and medical education	Mini-ethnography using the long interview, and field observations, literature review	Framework analysis	Unclear role of family medicine, a limited number of trained family medicine, limited financial resources, conflict of interests, frequent turnover in leadership, burnout and drop out, potential internal and external, brain drain of graduating family medicine specialists.	High
Helou, 2016 (34)	Challenges facing family physicians	Lebanon	Family physicians	Close-ended questionnaire	Thematic analysis	High workload, too many bureaucratic tasks, demanding patients, and being undervalued by the specialists.	Medium
Joschko, 2016 (35)	Factors that influence the ratio of generalists to other specialists	Canada	Individuals who were closely involved in medical education and human health resource	Telephone interviews	Thematic analysis	Poor social perceptions, lower career trajectories, inadequate payment systems, the proliferation of subspecialties, the tendency to focus on a very specific demographic population or type of medicine, and competition in the country's urban centers.	Medium
Nejatzadegan, 2016 (36)	Challenges of rural family physician program	Iran	Family physicians, directors of family physician program	Semi-structured interviews, in-depth interviews	Content analysis	Poor medical insurance system, inequitable compensation for services, poor performance evaluation, inadequate welfare facilities, improper recruitment and retaining policies, poor information system, inadequate cultural considerations, poor financing.	Medium

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Table 2. Continued

Author, Year	Scope	Country	Study participants	Data collection method	Analysis method	Main findings	Paper quality
Abou Malham 2017 (37)	The factors influencing the implementation of advanced access in family medicine units	Canada	Health professionals and staff	Semi-structured interviews	Thematic analysis	Problems of multiple clinical settings, poor of team resources, high turnover, poor management capacity	High
Doshmangir. 2017 (38)	Infrastructures required for the expansion of urban family physician program	Iran	Key informants and national health experts	The content of health-related national websites transcribed interviews	Thematic analysis	Lose interaction between the main actors of the health system, poor financing and payment system, improper purchasing of services, insurance fragmentation, poor stakeholder commitment, inadequate technical infrastructure, poor referral system, and poor information mechanisms.	Medium
Racic 2017 (39)	Barriers and facilitators for implementation of family medicine-oriented model of primary care	Bosnia and Herzegovina	Family physicians	Focus-group discussions	Content analysis	high workload, problems of contracting, weak collective action of stakeholders, lack of coordination between primary and secondary health care, financing problems, and the high number of registered patients in practice.	High
Sabetsavestani, 2017 (40)	Challenges of the urban family physician program	Iran	Physicians	Semi-structured interviews	Content analysis	Lack of acculturation, failure in expertizing the plan, egoistic manner of medical specialist deviation from the main goal, Soaring expense, poor incentive mechanism, denigration of family physicians.	Medium
Sururu 2017 (41)	To explore the views of key stakeholders on the introduction of postgraduate family medicine training.	Zimbabwe	Key academic, governmental, and professional stakeholders	Semi-structured interviews	Framework analysis	Poor economic conditions, poor remuneration, financing problems, lack of required resources , and conflict of interest with other specialists in the private sector.	High
Szafran, 2017 (42)	To describe factors that facilitate and hinder family physicians' teamwork	Canada	Academic/community-based family physicians	Semi-structured interviews	Thematic analysis	Undefined roles/responsibilities, frequent staff turnover, network boundaries, deficiency of payment mechanisms, and task shifting to other health professionals.	Medium
Abou Malham, 2018 (10)	Challenges of implementing advanced access for residents in family medicine	Canada	Healthcare professionals and clerical staff	Semi-structured interviews	Thematic analysis	The poor balance between timely access and relational continuity of care, the lack of availability of financial and human resources, the lack of involvement in the implementation process problems	Medium

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Table 2. Continued

Author, Year	Scope	Country	Study participants	Data collection method	Analysis method	Main findings	Paper quality
Rouleau, 2018 (43)	Strengthening primary care through family medicine around the World	Canada, Brazil Ethiopia Haiti, Indonesia, Kenya, Mali	Family medicine scholars and experts	Semi-structured interviews	Thematic analysis	Resistance from medical specialties, lack of resources and capabilities, difficulty in sustaining support of champions, challenge in brokering effective partnerships.	Medium
Fardid 2019 (44)	Challenges and strengths of implementing urban family physician program	Iran	FPs and health policy‑makers/top managers, as well as patients.	Focus-group discussions	Framework analysis	Social, financial, and structural challenges.	High
Glonti 2019 (45)	To explore GP training, continuing professional development, the scope of practice, ethical issues and challenges in the working environment	England, Germany, and Spain	General practitioner	Semi-structured interviews	Thematic analysis	Problems in the scope of practice to adapt with community needs, ethical dilemmas, poor coordination between primary and secondary care, complex referral behavior, and lack of professional guidance.	High
Sklar 2019 (46)	To explore the connection between fidelity/adaptation to the PCMH model with implementation successes and challenges	USA	Family and internal medicine PCMH physicians	Semi-structured interviews	Framework Analysis	Poor cohesion in managing care, coordination problems, limited clinic hours, problems of EHR, inadequate providing for all patient care needs, payment system problems and conflicts of interest with insurance, low-quality care, and differences in coverage between payer organizations.	Medium
Mehrolhassani 2021 (47)	Underlying factors and challenges of implementing the urban family physician program in Iran	Iran	Policy-makers and managers	Semi-structured in-depth interviews	Content analysis	Situational, structural, and cultural challenges	Medium

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Table 3. Challenges of family medicine plans across the selected studies

Theme	Subtheme	Items
Health workforce	Family physicians' education and research	Lack of appropriate educational standards and training content
		Hospital-based rather than community-based training of family physician
		Unmatched curriculum and community needs
		Poor teamwork skills
		Lack of capacity and opportunity for research
		Lack of opportunity to acquire new knowledge and expertise
	Family physicians recruitment	Shortage of workforce
		Lack of a suitable career path
		Poor family physician organization
		Resistance of GPs to join the family physician plans
		Inappropriate distribution of family physicians
		Continuous displacement of family physicians and specialists
	Family physicians motivation	High workload and intense bureaucracy
		Ambiguity in tasks and roles
		Specialists' and auxiliary staff's negative perception of the role of family physician
		Lack of incentive policies and inappropriate welfare facilities
		Lack of effective compensatory policies
Service delivery	Management of health services	Poor physical infrastructure
		Disproportion of supply and demand
		Distributive health services
		Weak community involvement
		Inadequate coverage of services
		Low quality of services
		Low safety of services
	Service package	Lack of evidence-based family physician health services package
		Out-dated family physician health services package
		Incompatibility between family physician health services package and community
	Referral system	Lack of knowledge and attitude of patients, physicians, and specialists to the referral system
		Inappropriate referrals
		Self-referral
		Patient confusion in the referral path
		Absence of accurate patient triage system at specialized levels
	Continuity of care	Lack of patient follow up
		Lack of feedback on services
Health information systems/ Electronic Health Records	Production and use of HIS/EHR	Lack of electronic records
		Out-dated health information system
		Lack of information integrity among referral system layers
	Monitoring and evaluating HIS/HER	Lack of accurate monitoring and evaluation system
		Lack of key indicators for monitoring HIS/EHR
Availability and Access	Providing medicines and basic health services	Shortage of basic health services
		lack of availability on all of a day
		Excessive use and prescription of medicines
		Lack of evidence-based use of medicines and tests
	Maintenance of facilities and technologies	Poor facilities and technologies
		Expensive and complex facilities and technologies
		Facilities and technologies that do not fit the community needs
Cultural considerations	Behavior	Specialization in physicians and patients
		Lack of cooperation with family physicians
		Stakeholders' conflict of interest
		Poor doctor-patient relationship
		Induced demand
		Mistrust of the society to family physicians
		Medical care habits of the population and refer to numerous physicians
	Social determinants of health (SDH)	Poor information and education to physicians and families
		Lack of using the capacity of other health-related organizations
		The weak of use of mass media in information and culture

Theme 2: Health Financing and countries that recently implemented this program have faced many financial problems.

A good health financing system is critical to the implementation of health system reform (11, 39). In this study, many of the low and middle-income countries and countries that recently implemented this program have faced many financial problems (15, 27). Shortage of financial resources as well as lack of transparency in payment systems, could also cause serious troubles in the continuity of FPP (24, 28, 31, 42). However, whether developed or developing, corruption in financing and payment mechanisms of nations can prohibit patients from accessing essential services. Although developed nations, such as the UK and Canada (10, 25) had fewer financing issues, the United States encountered more problems due to the prevalence of private financing and the culture of specialization (15, 49).

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Theme 3: Health workforce

Knowledge, skills, and motivation of healthcare staff are key factors for the success of any health system reform (21). The findings show that educating family physicians and designing motivational programs for them are one of the main challenges across both developed (19, 23) and developing countries (34, 36).

It should be noted that shortages of family physicians, high workloads, and unwilling of medical students to choose a family physician as a specialty could further lead to the weaknesses of FFPs (21, 50). Altogether, family physician seems a rather less attractive career for those who study medicine (26, 27, 31).

Theme 4: Service delivery

Good health services refer to services that are provided in a safe, effective, and quality manner (14). Management of such services, service packages, and referral systems are the most important factors for service delivery. Weaknesses in service packages, population coverage, safety, and quality of care are barriers for certain countries at the onset of establishing FPPs (27, 31). A lack of positive attitudes among family physicians and specialists towards referral systems could further result in a denial of the gatekeeping role of family physicians and disrupt the continuity of care (45, 46).

Theme 5: Health information systems/ Electronic health record

An accurate health information system (HIS) can guarantee the production and use of timely and reliable information on health system performance and the health status of the population (30). Inaccurate information about physician performance, incomplete EHRs, and lack of full access to such information by officials have been among the obstacles that many health systems have faced in implementing FFP. Lack of access by some healthcare levels to this information or incomplete records has led to inconsistencies in the HIS at various levels and consequently, access to health information at higher levels has become more difficult (36, 38).

Theme 6: Availability and Access

An efficient health system should guarantee fair access to care by providing high-quality, safe, and cost-effective medications and technologies (14). Our review revealed that the lack of necessary medicines, tests, and equipment has been a critical threat to FPPs (16, 20). On the other hand, extravagant use and prescription of medicines also challenge health systems in managing the costs of FPPs and, so the continuity of fair access in the long term (10).

Theme 7: Cultural considerations

Implementation of FPPs will be successful only if such programs are acceptable to the involved physicians and people. The over-specialization trend in communities affects both patients and caregivers and can fail FPPs to reach a cost-effective and fair healthcare system (51, 52).

Discussion

We aimed to systematically review articles conducted to investigate challenges when establishing FPPs across the world. Hence, the health systems Building Blocks framework, developed by the WHO, was used to categorize experiences and understandings of what hinders health systems in establishing and running FPPs (14).

Based on the evidence, ineffective governance of health systems has been one of the most important challenges of FPP implementation in some countries (43). In these countries, the FFP program has suffered from the lack of participation of some key stakeholders, such as specialty physicians in policy development and implementation (11, 27). Also, from the perspective of WHO, negligence of policy-making principles, such as lobbying and negotiation, are among the obstacles to governance, especially in developing countries (53). These problems are less observed in developed countries.(10, 16, 37, 45) For example, in Canada, governance strategies are critical to the success or failure of implementation (35). Indeed, it should be noted that the realization of governance requires the adoption of policies based on scientific evidence from the context of each community and an increase in stakeholders' participation in the implementation of the policy (10, 54).

Another challenge to the FPP was appropriate financing and payment systems (10, 50). However, financing challenges are often the case in countries where the services are not publicly funded (55, 56) or are funded largely by the private sector where the role of health insurance institutes is poor (57, 58).

Payment schemes also have challenged FPPs, as family physicians tend to earn less than hospital specialists (18, 59). Moreover, using fee-for-service payment (FFS) instead of prospective payment systems has resulted in induced demands (56, 59). Accordingly, new methods of financing and payment systems can be utilized depending on the circumstances of each country. The use of a mix of public and private resources, pay-for-performance initiatives, and increased monitoring by governments can be very effective in reducing expenditures (60, 61).

Some studies have also shown that the lack of managerial stability and continuous changes in governments or policymakers have hindered the implementation of healthcare programs such as FPP or removed them from the implementation priority (62, 63). Moreover, the concurrency of implementation of FPP and political and economic instability, such as sanctions and inflation, can disrupt the expansion of the FPP in low-income and developing countries (63). Weaknesses in providing primary health care could often result from political and economic crises (64). Therefore, a new global strategy to strengthen primary healthcare services is needed, especially in developing nations. This necessitates collaboration between ministries, universities, non-governmental organizations and donors in the health sector to compensate for limited resources, including inadequate funding (65).

Some countries, both developed and developing, have faced the challenge of a lack of family physicians (10, 11, 17). This problem has some of its roots in the classic lack of renown between medical students and junior physicians

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(66). The general practice workforce in England is faced with several crises including education, recruitment, and retention, while the demand for services has also increased (67). This reflects a worldwide trend toward specialism rather than generalism, such as in the USA and Canada (42, 46). It should be noted that the selection of family physicians as a specialty by medical students is a complex issue. Students who choose a specialty career tend to be more influenced by income, prestige, faculty status, and research opportunities (59). In most European countries, a family physician is considered a specialty, with postgraduate training similar to this in other specialties (59, 68). According to the protocols in the European countries as well as the WHO guidelines, encouragement of family physician specialists is a major step forward in reforming and achieving European standards. For example, all physicians working in the domain of family physician services in Croatia were required to specialize in family medicine by 2015 (69). Nevertheless, in some countries such as the USA and Malaysia, the issue is not the shortage of family physicians but the organization of services and appropriate distribution of them in different regions of the country (33, 46, 58).

Service delivery was also cited as one of the challenges of the implementation of FPP. Our review showed that some countries have no standard service packages for the FPP (18, 27). Moreover, given that there is no consensus on the definition of healthcare service packages, countries have not covered service packages in the same way (70). In the study by Gillam, it was argued that most developing countries had been unsuccessful in providing essential healthcare service packages (71).

As reflected in the findings, one of the main requirements for comprehensive and continuous care in the FFP is a referral system, which sometimes is not well-promoted in developing countries (27). In contrast, England, Finland, the Netherlands, Australia, Canada, and the United States, use electronic referral systems supported by political will, commitment to standards, use of referral guidelines, exchange of information, and full access to patient information by authorized providers (37, 38). Such referral systems can facilitate continuity of care, improve physician-patient relationships, enhance health outcomes, and reduce the use of emergency departments and hospital admission rates (27, 45).

Lack of strategic production and use of information, as an integral part of health system leadership and governance performance, has been another challenge for the implementation of FPPs. Electronic health records (EHR) are not well-established in some countries (39, 45). According to Tomasi, the use of such systems is desirable but poor in primary healthcare services due to the absence of documented policies in this area, lack of standard educational systems, and shortage of adequate financial resources. Low willingness in physicians towards computerized protocols in primary health care services was also mentioned as an important barrier (72). What is evident is that EHR is used more effectively in developed countries (37, 38).

In spite of the existence of evidence that costs have been reduced following the proper implementation of FPP in successful countries, the lack of standardized guidelines and the failure to implement the referral system can disrupt the gatekeeping function of family physicians, and the goal of reducing costs cannot be achieved (14). Therefore, it is necessary to prevent the occurrence of such problems by developing appropriate clinical guidelines and strengthening the gatekeeper role of the family physician (73).

Cultural considerations were identified as the seventh theme in this study. Resolving cultural and behavioral problems is essential to implementing an FPP (52). The trend of specialization among people and physicians, unnecessary referral to specialists, mistrust of family physicians, and induced demands are the cultural problems of societies, especially in countries where the role of the family physician is not well known (10). Conflict of interests is also reported between family physicians and specialists; there is resistance by specialists against family physicians and their gatekeeping role in some countries like Israel, Ethiopia, Zimbabwe, Iran, and the USA (35, 39, 41, 43, 74). Implementation of any health program is affected by the context and culture of embedding society(52). Recent approaches in health policy have emphasized the important role of cultural and social factors in health programs and interventions (51, 74). Understanding the cultural characteristics of people and the social determinants of health (SDH) can tailor healthcare interventions to the needs of the population (51).

Summary

Our evaluation using the WHO Six Building Blocks framework, in general, showed that implementing FFP around the world and in all its dimensions has faced many challenges. Poor healthcare service packages that fail to meet community needs and ill-designed referral systems, lack of health information systems, and lack of access to healthcare services cause erosion of public trust and hinder the establishment of FPP and its proper function. Therefore, accommodating healthcare program implementation requirements with strong political and operational support, designing unambiguous strategic plans, as well as promoting transparency and accountability, along with developing a system for accurate monitoring and evaluation, can greatly contribute to guaranteeing the success and sustainability of this program.

Countries have many differences in terms of the primary care system and the context of the health system, but GPs and family physicians all over the world face common challenges such as financial limitations, inefficient payment systems, problems in service delivery and access to health services, and difficulties in coordination of services. Therefore, it is necessary to examine the issue of GPs and family physicians and the experiences of countries in this field more and more precisely. Hence, the differences described in this study are related to different ways of organizing and financing the healthcare system in each country.

Strengths and limitations

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Organization can be used as a common reference for researchers and policymakers to identify the obstacles and challenges of the FPPs. Despite these strengths, this study also has limitations. The Building Blocks Framework was developed not as an assessment tool but to guide resource investment in health systems. Nevertheless, we added a seventh block to the original model, as cultural considerations, to catch all barriers encountered by health systems when establishing or running FPPs.

Conclusion

Implementation of FPP requires consideration of political, economic, social, and cultural aspects of any health system. Scientific governance, financing, and appropriate payment mechanisms for the health workforce and strong incentives, designing a strong information system, and providing access to services with considering the common culture of the community can result in the successful implementation of health programs such as family physicians.

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List of abbreviations

6BBs: Six Building Blocks

ENTREQ: Enhancing transparency in reporting the synthesis of qualitative research

EHR: Electronic health record

FFS: Fee for service

FPP: Family physician program

GP: General Practitioner

HIS: Health information system

SDH: Social determinants of health

WHO: World Health Organization

WONCA: World Organization of Family Doctors

Ethical approval

This study received ethical approval from the School of Health Management, Iran University of Medical Sciences. IR.IUMS.REC.1397.920

Conflict of Interests

The authors declare that they have no competing interests.

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