**Systematic Review** 

### Public-Private Partnership Experiences and Achievements in Providing Primary Health Care to the Elderly: A Scoping Review

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#### Abstract

Context: Given the expansion of public-private partnership (PPP) policy in providing primary health care to the elderly in different countries, this study aimed to investigate the experiences and achievements of PPP in this field following a scoping review approach.

Methods: This scoping review study was conducted in 2019 following the Arkesy and O'Malley framework. We systematically searched Google Scholar from January 2000 to October 2019. Also, to increase the chance of finding potentially relevant studies references of identified studies, some journals, government reports and documents, websites, and other sources of information were searched.

Results: In total, 10 articles and reports were included, mostly from high-income countries. Twenty-five positive outcomes (12 for the elderly, four for their families, seven for the public sector, and two for the private sector) and three negative outcomes (all for the private sector) were extracted. The most important achievements included improving quality and access to services as well as reducing service costs.

Conclusions: This study demonstrated that the PPP policy has had many positive results. Therefore, as a major and effective policy, it can be considered by policymakers and officials. In this regard, greater support for the private sector and a rigorous and scientific evaluation of this policy's achievements are recommended.

Keywords: Elderly; Primary Health Care; Public-Private Partnership; Scoping Review

#### 1. Context

As a result of previous health approaches during the past two decades, life expectancy has continuously increased all the way up the age range, which in combination with declined fertility, has led to population aging in several countries. Hence, sooner or later, countries will face the challenge of the aged population and its consequences (1). Therefore, aging, a permanent process in human life, has been introduced as a crucial phenomenon of the twentieth century (2, 3). Normally, human aging starts at the age of 60, and its occurrence is unavoidable due to body's natural process. Aging causes problems for outdoor communications (2). According to statistics, the population over the age of 60 rose from 6.6% in 1996 to 8.2% in 2011 (1) and is expected to reach two billion by 2025. For low and middle-income countries, while, in 2015, the number of elders was about 900 million (4), it is estimated that by 2050, about 80% of the world's elders will live in these countries (5).

Aging is associated with increased risk of various diseases, such as cardiovascular diseases, diabetes, cancers, urinary incontinence, dementia (1), obstructive pulmonary disease, hearing loss, and vision problems (6), mainly because biological changes associated with aging cause a series of limitations and problems in different organs and tissues. Currently, developed countries not only have defined their goals, needs, and priorities regarding aging but also have developed programs to meet the needs of elders (7). In addition, it is considered an important social phenomenon by all countries. Hence, they are continuously trying to implement social support programs intended to address the needs of elders (8). Creating supportive environments to promote people's health requires multi-level actions, which may include political efforts to develop and enforce protective laws and policies,



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sustainable economic development of communities, and various social measures (9). The most important aspects that the health sector should emphasize include concepts such as cost, quality, and access to the services needed by elders (10). Since most public services have deficiencies in these three areas, it is necessary to use the private sector's potential alongside the public sector, which not only will reduce costs but also would lead to increased quality and improved access to services needed by elders (11). Public-private partnership (PPP) is one of the most common forms of public sector cooperation with the private sector. According to the literature, the benefits of healthrelated PPP projects include lower costs, more longevity, better access to capital, risk sharing, better focus on service delivery, innovation, and accountability, which, ultimately, will lead to increased productivity. Also, it is reported that PPP is associated with increased utilization of healthcare services, which indicates the necessity of using the potentials of PPP in the health sector (12-16).

PPP is a mechanism in which the public sector (the government or governmental institutions) uses the capacities of the private sector (e.g., cooperatives, charity organizations, and non-governmental organizations) in order to provide basic services such as water and sewage, transportation, health, and education. In other words, the private sector contributes to some responsibilities of the public sector. PPP contains signing a contract between the public and the private sectors to share the

#### 2. Objectives

The current study aimed to review the experiences and achievements of public-private partnerships in provid-

#### 3. Methods

The current systematic review study, which was conducted following a scoping review approach in 2019, intended to investigate the global experiences and achievements of PPPs in providing PHC to elders. The Arkesy and O'Malley framework was used to conduct an extensive review, which included the following six steps: identification of the research question, identification of relevant studies, selection/screening of studies (study selection), data charting, summarization, data analysis, and reporting the results, and consultation exercise and providing recommendations.

#### 3.1. Step 1: Identification of the Research Question

The main research question of the present study was "What are the Experiences and Achievements of Public-Private Partnerships in Providing Primary Health Care to the Elderly in Different Countries?"

Inclusion and exclusion criteria: All articles and reports related to the experiences and achievements of PPP in providing PHC to the elderly published in Persian and English between 2000 and 2019 were included in the

risk, responsibility, and interests. It also causes increased synergy of resources and combines the expertise of both sectors in the provision of infrastructure services (17). Hence, for public institutions, PPP is the shift from investment, implementation, and operation in infrastructure projects to policy-making, regulation, and monitoring the quality and quantity of services (18, 19). PPP can be presented as a bilateral partnership and win-win policy, which increases the abilities of both sides to achieve common goals (20).

Primary health care (PHC) is the core of the country's strategies to meet the broad health needs of elders (21). PHC includes basic health care services provided by the health system with a pragmatic and acceptable method in terms of provision and technology, which is affordable (for both countries and communities) and is based on the full participation of and self-reliant spirit of individuals and families at the community level (22). According to the World Health Organization, PHC should be accessible for all individuals and families (23).

Despite the importance and contribution of PHC in meeting the broad health needs of elders and the expansion of PPP policy in different countries, no comprehensive review has investigated the experiences and achievements of the PPP approach in providing PHC to the elderly. Furthermore, it is worth noting that the experiences of countries in this field should be investigated to provide information for decision-making and planning.

ing primary health care to the elderly in different countries.

present study. Articles in other languages, those that investigated services other than PHC (i.e., specialized hospital care or rehabilitation services) were excluded. It is worth noting that studies related to the hospital environment containing PHC services were included. In addition, studies whose target group was not elderly and those that did not investigate the effects of PPP (e.g., full privatization) were also excluded.

#### 3.2. Step 2: Identification of Relevant Studies

We systematically searched Scopus, Web of Sciences (ISI), and PubMed, as well as national databases (i.e., MagIran) to identify relevant studies from January 2000 to October 2019 using the following keywords: Public-Private Partnership, privatization, public-private cooperation, public-private participation, public-private mix, mixed system, public-private coordination, public-private, collaboration, public-private initiatives, public-private initiative, Elderly, "elderly health care", "aging health care", "older health care", and aging and their Persian equivalents.

In addition to hand-searching the list of selected articles, Google Scholar was also mined to increase the chance of finding potentially relevant studies related to the topic under scrutiny.

3.3. Step 3: Selection/Screening of Studies (Study Selection)

Study selection and screening were performed by two independent researchers. In case of a disagreement, a consensus was reached through discussion or, if necessary, the third reviewer was consulted. At first, the titles of all the articles were reviewed, and non-relevant studies were excluded. Afterward, abstracts and full texts of the articles were studied to identify eligible studies. Endnote X5 software was used to manage the search strategy. The selection and screening process of preferred reporting items for systematic reviews and meta-analyses-PRISMA was used to report the results (Figure 1) (24).

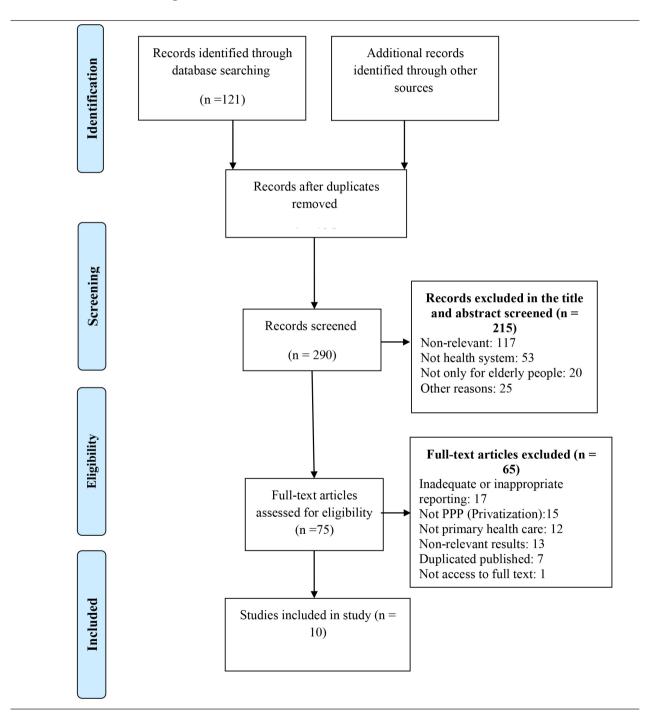


Figure 1. Study selection

#### 3.4. Step 4: Data Charting

Initially, a data extraction form was developed in Microsoft Office MS Word (2010 version), including author(s) name, publication year, country or region, objectives, methodology, and results. In order to evaluate the appropriateness of the form, initially, the data of three articles were extracted by two independent reviewers, and discrepancies were resolved through discussion with the research team.

# 3.5. Step 5: Summarization and Reporting the Results

Extracted data were analyzed, summarized, and reported using the content analysis method, which intends to identify, analyze, and report identified themes. It is worth noting that this method is commonly used by qualitative studies (25-28). Data encoding was performed independently by two researchers. The processes of analyzing and encoding were as follows: data familiarization (immersion), identification and extraction of primary areas

(identification of more relevant articles), placing articles in the specified areas, revision and completion of each area using the results of the articles, and ensuring the reliability of the extracted data (agreement between the two reviewers and resolving discrepancies).

## 3.6. Step 6: Consultation Exercise and Providing Recommendations

In this stage, based on the obtained results and opinions of the research team, a series of recommendations were developed.

#### 4. Results

Of 476 identified articles and documents, 186 were excluded due to duplication, and 215 were removed after reviewing titles and abstracts. Seventy-five articles were also removed after a full-text review. Eventually, 10 articles were included in the final review (Figure 1).

The characteristics of the eligible articles are summarized in Table 1.

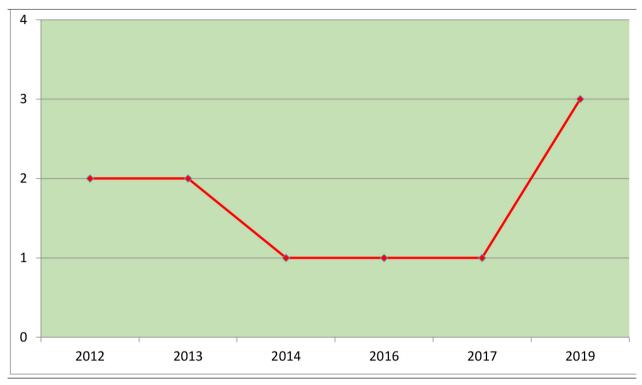
**Table 1.** Outcomes of Public-Private Partnership Projects in Providing Primary Health Care to the Elderly

Target Group	Positive Outcomes	Negative Outcomes
Elders	(1) Increased access of elders to integrated care; (2) Increased access of elders to comprehensive trauma care; (3) Improved trauma-related outcomes among elders; (4) Improving nutritional care provided to the elders; (5) Increased access of elders to appropriate and adequate food; (6) Increased provision of healthcare services; (7) Reduced out-of-pocket of poor elders; (8) Increased access of elders to needed care and services in their homes; (9) Increased independence and dignity of elders; (10) Timely identification of patients with the participation of different organizations; (11) Improved quality of services; (12) Improved status of the local economy.	
Families of elders	(1) Empowering families and caregivers of the elderly; (2) Increased independence and dignity of their families; (3) Increased skills and abilities of families to gain a source of support; (4) Improved status of the local economy.	
Public sector	(1) Promotion of managerial and policy-making potentials to provide integrated aging care;(2) Development and promotion of capacities of public-private partnerships to provide integrated elderly care; (3) Increased cooperation of universities and hospital centers to provide better and more comprehensive care; (4) Expanding research on improving the nutritional status of elders; (5) Increased attention and scientific production in the field of elderly care; (6) Improved performance of public sector; (7)Improved efficiency.	
Private sector	(1) Development and promotion of capacities of public-private partnerships to provide integrated elderly care; (2) Increased cooperation of universities and hospital centers to provide better and more comprehensive care.	<ul><li>(1) Dissatisfaction of private providers; (2)</li><li>Low referral of elders to private centers:</li><li>(3) Uncertainty over costs and quality of services in the private sector.</li></ul>

#### 4.1. Time Trend of Published Articles

Investigating the time trend of eligible articles indicat-

ed that all are published after 2012, mostly in 2019 (n = 3) (Figure 2).



**Figure 2.** Distribution of studies on the implementation of public-private partnership for provision of PHC to the elderly based on the year of publication of the study.

#### 4.2. Geographical Distribution of Studies

Four articles were published in the United States, two in Bangladesh, two in Finland, one in China, and one in Hong Kong. According to the last categorization of the world trade bank in 2019 - 2020 (29), 7 articles were conducted in high-income countries, two in lower-middle-income economics, and one in upper-Middle-income countries.

# 4.3. Objectives of Public-Private Partnership Projects in the Provision of PHC to the Elderly

Using a content analysis approach, 13 objectives were extracted, five of which were related to the health care system in the public and private sectors, and eight were related to the elderly themselves and their families (Figure 3).

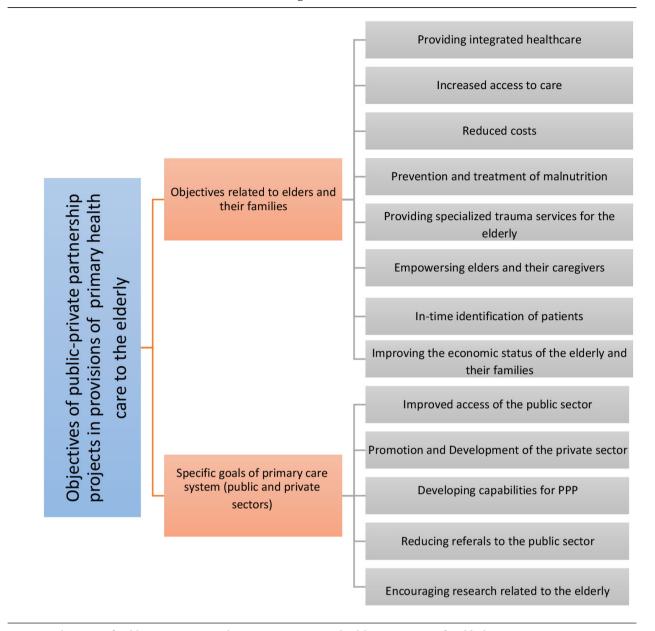


Figure 3. Objectives of public-private partnership projects in primary health care provision for elderly

Outcomes of public-private partnership projects in providing primary health care to the elderly

Our analysis revealed 25 positive outcomes (12 for the

elderly, four for their families, seven for the public sector, and two for the private sector) as well as three negative outcomes (all for the private sector) (Table 2).

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Row	Au- thor/ Year	Coun- try or Region	Title	Objective(s) of the Article or Report	Methods	Outcomes/Achievements
1	Zeinal- hajlu (head of the project) 2019 (30)	China	Integra- tion of elderly care into the health provi- sion sys- tem and public- private partner- ship	Providing integrated, accessible, and low-cost health care in collaboration with the public and private sectors -integration of aging care with health care	In this project, which was piloted using a 100 million \$ loan of Asian Development Bank to the Guangxi Zhuang Autonomous Region-GZAR, with the participation of the private sector and those in charge of health care services in the municipality, aging care and integrated and accessible care were provided by hospitals, clinics, elderly care centers, and other centers to the elderly living in the in Neyg and Huzhou cities. It is worth noting that, before participation of the private sector, providers were trained.	Increased access of elders to integrated care; Increased managerial and policy-making capabilities to provide integrated elderly care; Development and improvement of capacities of public-private partnerships in order to provide integrated elderly care
2	DuVer- nay (2013) (31)	USA	A public-private trauma center in Florida used a data-driven approach to improve the quality of elderly care	Design and construction of a network of elderly trauma centers in the Florida state in partnership with the University of South Florida-USF and the Hospital Corporation of America-HCA.	In this project, the University of South Florida, as a public sector, and the American Institute of Hospitals agreed to locate, design, build, provide services, do research, and improve the quality of care in different regions of the Florida state. In these trauma centers, which were specialized elderly centers, comprehensive trauma care and primary trauma prevention care were provided. In this project, demographic data and care provided in the centers were provided to the university to design quality improvement and service improvement projects. In addition, a series of projects were designed and performed in this field.	Increased access of elders to comprehensive trauma care; Improved trauma-related outcomes of elders by providing timely and comprehensive care in these centers; Increased provision of specialized care and increased access to advanced facilities and equipment; Increased cooperation of universities and hospital centers to provide better and more comprehensive care.
3	Organization to combat malnutrition: 2017 (4)	USA	National Program for Achiev- ing Qual- ity Care for the Promo- tion and Treat- ment of Malnu- trition in the Elderly	Reducing malnutrition among elders by providing nutritional services to the elderly in com- munities and hospitals	In this major project, Abbott Pharmaceuticals firm, in collaboration with the National Quality Improvement Program, tried to prevent and treat malnutrition among elders. This network has great goals, which formed collaborations in more than 55 countries and states around the world, most Importantly the private sector (e.g. Abbott Pharmaceuticals firm, which has activities in different countries such as America, Canada, China, Vietnam, Taiwan, etc.). In line with the objectives of the National Program, achieving quality care for the promotion and treatment of malnutrition in the elderly contributes.	Improved nutritional care provided to elders; Increased access of elders to appropriate and adequate food; Expanding research related to nutritional improvement among elders; Provision of public health services intended to improve the nutrition status of elders.

4	International Financing Corporation (IFC) 2019 (32)	Bangla- desh	Stories of PPP; PPPs in Ban- gladesh hospitals	Design, construction, equipping, and maintenance of a 70-bed hospital to provide comprehensive and specialized care to the elderly in Bangladesh	The Bangladesh Ministry of Social Welfare (MSW), with the support and consultation of the International Finance Corporation-IFC, in a 30-year contract with the universal medical college and hospital Ltd-UMCH Bangladesh, designed and constructed a 70-bed hospital to provide basic and specialized services for the elderly. The MSW, with the help of the Center for IFC, could receive private investment. In this project, Bangladesh Medical College and Global Hospital of Bangladesh were tasked to design, manufacture, equip, maintain, provide services, and finance the project (approximately \$5 million) for 30 years. In addition to supporting and advising the MSW, the Center for IFP designed a set of regulations and rules as well as an appropriate PPP model.	The most important achievements of the project were as follow: (1) Doubling the amount of service delivery; (2) Increased access of poor elders to health care services; (3) Declined cost of providing services to the poor elders through tax incentives and enabling private companies to participate in the scheme.
5	Mah- rukh 2019 (33)	Bangla- desh	Abushor: Providing elderly care following a PPP approach in Samangal-Shatt elderly care complex	Increased access of poor elders to specialized health centers to receive basic and specialized health care for treatment of chronic diseases	In this project, the Health and Welfare Services Department of the Bangladesh Ministry of Social Welfare, in a contract with the private sector (i.e., the Bangladesh Medical College and Global Hospital) intended to design, build, provide services, and maintain a long-term care complex for the poor, with a budget of approximately 6 million dollars. This complex is designed to provide long-term care, specialized service, basic care, nursing services, education for the elderly, and other services needed by the elderly. The project has been approved and financed by the economic cabinet of the government.	
6	West- chester Part- nership (Mur- ree On Ko Ko Aarana- ta)2016 (34)	USA	West- chester Public- Private Partner- ship to Provide elderly Care	Providing adequate resources and opportunities for the elderly and their fami- lies to live an independent and have a dignified life	The Westchester Institute (WI) was founded in 2004 by Mary Anne Coo Cuaranta in Westchester, N.Y. The WI uses the funds raised from various institutions such as colleges and universities, charities, public institutions, and private companies to provide elderly care and supporting their families at their homes, mainly through providing facilities and the necessary training and consultations in order to achieve better elderly care Every year, the WI holds ceremonies to bring the elderly	Increased access of elders to healthcare that they need and to meet their needs at home; Empowering families and caregivers of the elderly; Increased independence and dignity of the elderly and their families; Increased attention and scientific production in the field of elderly care

together and paying attention to their needs and improving their spirit. It also collaborates with schools and scientific institutions to produce scientific content related to the elderly and to educate them.

Galvin et al. (2014)(35)

PPP is associated with improved health outcomes in

LISA

people with earlyonset of Alzheimer's disease

Evaluation of the effects of early identification and provision of comprehensive care with the participation of different departments to those who suffer from Alzheimer's disease /dementia and their families in terms of improving the health indicators of patients and their families

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In this non-randomized clinical trial, with the help of local geriatric agencies (Area Agencies on Aging-AAA), 244 elders were screened and identified for dementia and referred to the Alzheimer's association. Referred patients underwent comprehensive intervention (Project Learn MORE-PLM) for two years. These patients were compared A total of 96 patients receiving routine care. The interventions included face-toface consultations with patients and their families as well as financial supports.

The most important results were as follows: (1) Timely and early identification of patients with the participation of different organizations; (2) Significant increase in patient's knowledge about Alzheimer's disease; (3) Significant reduction of depression in patients; (4) Increased knowledge of family members; (5) Increased family's skills and abilities to gain a source of support; (6) Enhanced concerns and sadness of family members due to increased awareness about the consequences of Alzheimer's disease

Tynk-Finkynen land et al. 2 0 1 2 (36)

Framing the decision to derly care and primary

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terns with the contract private secel- tor by local policymakers authorities in health order to outcare ser- source primavices- ry healthcare perspec- services and tives of elderly care locallevel politicians and civil

Researchers conducted 17 semi-structured interviews with local authorities and policymakers from 6 medium and large provinces of Finland (with an experience of outsourcing PHC and elderly care to the private sector) and examined the reasons, how to negotiate, and evaluation of frameworks of the outsourcing (a form of PPP).

Policymakers and health authorities had 5 negotiation pattern: (1) Rational reasoning; (2) Pragmatic realism; (3) Promoting diversity among providers; (4) Good for the municipality; (5) Good for the local people. From the participants' perspective, the main advantages of a partnership with the private sector included: (1) Improved quality of services; (2) Improved performance of the public sector; (3) Enhanced efficiency; (4) Improved status of the local economy. Contracting decisions were mainly based on benefits for urban management, political and ideological commitments, existing resources, and current institutions.

9 Davies Fin-P. 2013 land (17) The role of the private sector in the context of aid effectiveness

This study aimed to investigate the perspectives of municipal authorities providers of elderly care and PHC, including the following four dimensions: (1) Trust of the authorities of municipalities and the private sector in terms of each other's performance in accordance with the agreement; (2) Trusting each other about providing adequate information about the provision of services; (3) Appropriate design of the service provision method based on the type of participation; (4) Ensuring the evaluation of the contract and how it is implemented

by the parties.

Data were collected using the following methods: (1) Completing a questionnaire by 124 municipal authorities (purchaser of services); (2) Completing a questionnaire by 443 private sector officials (service providers); (3) Six group interviews with the participation of 2 to 6 municipal officials; (4) Five interviews with 1 or 2 private sector officials.

There was a significant difference concerning the perceptions about the cooperation during the partnership period between private providers and municipal authorities; Private providers were not satisfied, while municipalities seemed relatively satisfied; To obtain benefits through contracting, municipalities must invest in contract management and also be active during the contracting period.

10 Liu et Hong al. 2012 kong (37)

Will-The main ingness objectives of project pay this included: (1) for private Increased primary elderly referc a r e ral to private services primary care in Hong centers; (2) Kong: Reduced are the burden of elderly referrals and ready crowding of vices. prito move public from mary care the pub-centers; (3) lic sec-Improved tor? quality of health care services for

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elderly by providing

The project, which is implemented by the collaboration of the Hong Kong Ministry of Health and private primary healthcare centers, is implemented in areas where the elderly were in good economic condition. The main objective was to pay each elderly an annual fee (since 2008) to encourage them to receive the care they need from private facilities. On the other hand, private centers were also committed to provide good quality ser-

Relatively small percentage of the elderly tended to refer to private centers. especially for chronic and preventive care, and most of them preferred to go to public health care centers, leading to problems for the implementation of PPP; One of the most important reasons for not referring to the private sector was the uncertainty about the affordability of costs and quality of services; Providing subsidies is not sufficient to increase the support from the private sector engaged in providing PHC to the elderly. Such measures should be coupled with interventions intended to increase public awareness and trust. Moreover, it is also necessary to pay attention to interventions aimed at strengthening the supply side.

#### 5. Discussion

Of 476 identified articles and reports, 10 were found as eligible. All studies were published after 2012, which indicates the late attention of researchers in considering the importance of improving elders' access to PHC, as providing comprehensive and effective care to the elderly is not a new debate. In addition, the use of the potentials and capacities of non-governmental players in the health systems has a long history, and there are extensive experience in this field in different sectors (15, 38-42). This issue can be attributed to the soaring rate of population aging in recent years and the publication of many reports on the trends and statistics of the elderly (43-45). The other important point is the greater need of the elders for health care services compared to other people, especially regarding PHC services (46-48). Roehrich et al. reviewed about 1,400 articles published during the past two decades on health-related PPP projects and reported that public sector policymakers have paid special attention to the capabilities of the private sector in the development, financing, and provision of health services and infrastructure. They also noted a significant jump in the number of studies on PPP since 2006. Nevertheless, few accurate and reliable empirical studies are published, and the concept of PPP has not yet been clearly analyzed (49).

According to the findings, PPP is associated with improved access of the elderly to health care services (i.e., enhanced utilization). Accessibility is one of the basic principles and issues in PHC.

Dutta and Lahiri, in a study aimed to investigate the impact of the PPP on people's access to healthcare services in two Indian states, reported improved access (both geographical and financial) (50). In a study conducted in Iran, Bakhtiari et al., who investigated the impacts of the PPP policy on the provision of PHC services in Tabriz University of Medical Sciences, mentioned improved financial, physical, and, even, cultural access (i.e., acceptance of services) to PHC (51). In Sweden, both public and private healthcare centers provide PHC to the elderly. In 2009, the Swedish Parliament approved the "Patient's Right to Choice Plan", which to somehow is the transfer of services to the non-governmental sector. The results showed that this plan improved access to services and enhanced the benefits of people, while PHC-related costs were not increased (52).

Also, the results of the present study showed that the use of PPP policy in providing health care to the elderly, in addition to increasing the effectiveness of the care, has reduced costs for both health systems and the elderly. Sinanovic and Kumaranayake investigated the cost-effectiveness of three different methods of service delivery

(i.e., fully governmental, public-private partnership, and the provision of TB treatment services by the Mines Occupational Health Center in accordance with the National Government Program and at the government's expense) for TB patients in South Africa. They reported that providing services by the PPP method resulted in increased cost-effective compared to the other two methods (53).

Pantoja et al., in a study in the Bengaluru state of India, evaluated the cost and cost-effectiveness of PPP in the treatment and control of tuberculosis (TB) and showed that costs of both healthcare providers and patients were decreased significantly (54). In the same vein, Ferroussier et al., in a study conducted at the Canour region of Kerala state of India, showed that the cost-effectiveness of identification and treatment of TB patients by a public-private provider was higher than public providers (55).

According to the findings, in addition to increasing access to care and reducing costs, PPP resulted in several achievements concerning providing PHC to the elderly. Various studies mentioned several achievements and benefits for PPP, including efficient management of resources, increased satisfaction of customers and the community, creating opportunities to promote accountability of the private sector, reduced government involvement in service provision and increased agility of the public sector, and the possibility of better supervision and control of the private sector (49, 56, 57), which are largely consistent with the results of the current study. Therefore, due to the soaring number of elders all around the world and their increased need for health care services. especially PHC, the use of PPP can be considered a main and effective policy by policymakers and authorities.

One important point concerning the use of PPP in providing health care to the elderly is that the lowest number of achievements is related to the private sector, and also all three identified negative points are related to the private sector, which indicates the insufficient support from the private sector. In addition, this issue indicates that the private sector experienced the most negative outcomes (dissatisfaction of private providers, low referral of elders to private centers and uncertainty over costs and quality of services in the private sector) in the partnership, which is a threat to the long-term applicability of the PPP. PPP paves the way for the private sector to collaborate with the public sector in promoting the health of the community, which means a higher space for working in the health market. Therefore, it is necessary to support the private sector and better secure the interests of this sector.

Limitations: According to the best knowledge of the authors, the current study is the first of its kind on the contribution of PPP in providing PHC to the elders. However, it suffers from some limitations, including limiting the search strategy to articles either in English or Persian. Also, as few studies have focused on the experiences of various countries in terms of PPP, it was not possible to extract more detailed information.

#### 6. Conclusion

This study demonstrated that, in recent years, different countries, although limited, have experienced PPP policy in the provision of PHC to the elderly, which investigating their stories indicated several positive achievements. Therefore, due to the soaring number of elders worldwide and their increased need for health care services, especially PHC, PPP can be considered as a main effective policy by policymakers and authorities. In addition to the administration of this policy in different countries, more support should be provided for the private sector to help them to benefit from this policy. Also, it is necessary to accurately measure the achievements of this policy using reliable scientific methods.

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#### **Authors' Contribution:**

Saber Azami Aghdash, Hiva Sharifzade, and Hojatolah Gharaee designed the project, collected data, and drafted the first version of the manuscript. Khadije Bande-Ehahi and Amjad Mohamadi Bolbanabad collected data and analyzed the data. Saber Azami Aghdash, and Hojatolah Gharaee revised the manuscript.

#### **Conflict of Interests:**

The authors declare no conflict of interest.

**Ethical Approval:** 

The current study is approved by the ethics committee of the Tabriz University of Medical Sciences (code: IR.TBZMED.REC.1398.547). Also, confidentiality and ethical principles were respected when selecting articles, extracting and analyzing data, and reporting the results.

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