# The Roles of the Nurses in Family Physician Team: A Qualitative Systematic Review

#### **Abstract**

Background: There are various approaches in primary health care regarding the key role of nurses. This systematic review investigates the roles of nurses, as part of the family medicine team. Materials and Methods: All published articles related to the role of nurses in the family medicine team from January 2000 to March 2022 were the subjects of this study. The eligibility criteria included original articles published in English or Persian in the last two decades. International credible scholarly databases (PubMed, Scopus, Magiran, IranMedex, and SID) were searched using keywords and syntax. Some of the keywords included "Family Health Nurse," "Nurses in Primary Care," "Family Medicine," "Family Physician Care Program," "General Physician Program," "Role," and "Nurse." Data were extracted based on Sample, Phenomenon of Interest, Design, Evaluation, Research type (SPIDER) technique and reported based on the structure of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Results: Of 147 identified publications by the search strategy, eight eligible empirical studies were included. The results showed that besides providing nursing care, nurses play vital roles in communication and teamwork, assessment, securing health services relevant to communities' needs, education, empowerment, clinical practice, health promotion, prevention, reflective research practice, and counseling. Conclusions: This study identified different roles nurses could play in providing primary health care. These findings are helpful for the replanning or reform of primary health care in countries, which aimed to expand the Family Physician Program (FPP) in their countries, including Iran.

**Keywords:** Health plan implementation, health systems plans, nurses, patient care team, public health

# Introduction

The launch of the "health for all" policy has changed primary healthcare settings, globally, and has resulted in new professional roles.<sup>[1]</sup> World Health Organization (WHO) has emphasized the importance of nurses' roles, as the most critical health workers regarding numbers, close relationships with the population they serve, and awareness of their communities' health issues and needs.<sup>[2]</sup>

The Vienna Declaration stated that governments must help nurses upgrade their roles at all levels and must be significantly involved in health policy development. The Declaration has defined nurses as "strong advocators for policies and programs for health for all" through providing primary healthcare services in line with the public health approach, both independently and in collaboration with colleagues.<sup>[3]</sup>

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow\_reprints@wolterskluwer.com$ 

In recent years, nurses have also become part of the family medicine team, providing health services, alongside other healthcare professionals on the team.[1] Different duties are assigned to the family physician team, including interpersonal communication, screening, diagnosis and treatment of diseases, assessment of psychological, economic, and social determinants of health. and chronic disease management.[4-7] It is vital to clearly define the responsibilities and scope of practice for each member of the family medicine team, including the nurses, to achieve optimal interdisciplinary teamwork. There are controversies over the role and responsibilities of nurses and other members of the family health team.<sup>[1]</sup>

The study by Bailey *et al.*<sup>[8]</sup> stated that one of the barriers to the successful collaboration of nurses and family physicians in the healthcare team could be attributed to the

**How to cite this article:** Heidarzadeh A, Alvandi M, Hedayati B, Rezaei M, Abedi F, Madani ZH, *et al.* The roles of the nurses in family physician team: A qualitative systematic review. Iran J Nurs Midwifery Res 2023;28:361-70.

**Submitted:** 10-Aug-2022. **Revised:** 13-May-2023. **Accepted:** 31-May-2023. **Published:** 24-Jul-2023.

Abtin Heidarzadeh<sup>1</sup>, Mehdi Alvandi<sup>2</sup>, Bita Hedayati<sup>3</sup>, Mostafa Rezaei<sup>4</sup>, Farshid Abedi<sup>5</sup>, Zahra Hamidi Madani<sup>6</sup>, Somayeh Noori Hekmat<sup>7</sup>, Ideh Dadgaran<sup>8</sup>, Roksana Mirkazemi<sup>9</sup>

<sup>1</sup>Department of Community and Family Medicine, School of Medicine, Guilan University of Medical Science and Health Services, Rasht, Iran, <sup>2</sup>Department of Public Administration, Faculty of Management, University of Tehran, Tehran, Iran, 3Farzanegan Nik Andish Institute for the Development of Knowledge and Technology, Tehran, Iran, <sup>4</sup>Deputy of Health, Isfahan University of Medical Sciences, Isfahan, Iran, 5Birjand University of Medical Sciences, Faculty of Medicine, Infectious Diseases Research Center. Birjand, Iran, <sup>6</sup>Reproductive Health Research Center, Department of Obstetrics and Gynecology, Al-Zahra Hospital, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran, 7Management and Leadership in Medical Education Research Center. Kerman University of Medical Sciences, Kerman, Iran, 8Medical Education Research Center Education Development Center, Guilan University of Medical Sciences, Rasht, Iran, <sup>9</sup>Founder and Managing Director of Farzanegan Nik Andish Institute for the Development of Knowledge and Technology, Tehran, Iran

Address for correspondence:

Dr. Roksana Mirkazemi, 16<sup>th</sup>, Mahtab 3<sup>rd</sup>, Abazar Blv., Ayatollah Kashani Blv., Tehran, Iran.

E-mail: r.mirkazemi@gmail.com

## Access this article online

Website: https://journals.lww.com/jnmr

DOI: 10.4103/ijnmr.ijnmr\_244\_22

**Quick Response Code:** 



lack of role clarity.<sup>[9]</sup> Some studies suggested that the roles of nurses and family physicians could be interchangeable in remote settings. In such environments, the skills and competencies of those providing health care were proved to be more important than the right to be assigned a particular role.[10] Other studies proposed that the role of nurses in primary health care should be limited to health education and disease prevention.[11] The study by Qomariah showed that the role of nurses in nursing care was affected by intrinsic and extrinsic motivation, personality, age, length of work, and monthly income.[12] Failure to accurately determine the key roles of nurses in the family physician team could lead to confusion, negligence toward some of the duties and responsibilities, and failure to achieve expected outcomes. Due to these different approaches to the key roles of nurses in primary health care, a systematic review was conducted to review and investigate the roles of nurses, as part of the family physician team.

#### **Materials and Methods**

All published articles related to the role of nurses in the family physician team since 2000 were the subject of this study. The eligibility criteria included original articles published in English or Persian in the last two decades (between January 2000 and March 2022). Exclusion criteria were gray literature and studies published in languages other than English or Persian.

In January 2022, international credible scholarly databases and search engines, including Scopus and PubMed, and Iranian databases such as Magiran, IranMedex, and SID, were searched. Also, the references in the selected articles were hand-searched to find relevant studies.

The search strategy was defined based on the defined keywords and the search syntax. Therefore, it was first defined for the PubMed database and then was revised according to each database's specific framework of search method.

The following keywords were used in both English and Persian: "Family Health Nurse," "Community Nurse," "Nurse Practitioners," "Nurses in Primary Care," "General Practice Program," "Family Medicine," "Family Physician Program," "General Practitioner Program," "General Physician Program," "Role," "Task," "Duty," "Nurse."

First, based on the title and abstract of the articles, two reviewers independently selected articles that met the inclusion criteria. Studies were classified into three categories: "excluded," "included," or "probable." The articles that both reviewers did not find qualified for the study were excluded. The two reviewers then reviewed the full text of the articles categorized as "probable," and a list was prepared. The list was examined, and the disputes assigned to either the included or excluded category were resolved based on the vote of a third expert.

The two reviewers independently reviewed the included studies for quality and validity, and the studies without quality and validity were excluded. For the final review, all selected articles were carefully studied, and the following data were extracted and entered in the information extraction form: title, authors, year of publication, name of the magazine, study design, participants, instruments, settings, and the role of nurses.

The roles of nurses in the family physician team were the data items in this study. As the type of systematic review was a systematic qualitative review, the data extraction was based on the Sample, Phenomenon of Interest, Design, Evaluation, and Research type (SPIDER) technique, which described the situation.

Two independent reviewers conducted the systematic review's eligibility, quality assessment, and data extraction stages. They sought the opinion of a third reviewer in case of a difference of opinion. A methodologist checked the validity of studies based on international reporting guidelines, such as CONSORT CARE, Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), and Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). Published articles with low validity were excluded from the study.

#### **Ethical considerations**

Maximum care was taken to avoid any kind of bias in analyzing the data of retrieved from articles. Also, redundant publication and plagiarism were fully avoided.

# **Results**

# **Study selection**

Of 147 potentially relevant articles identified by the search strategy, 129 studies met the inclusion criteria, after examining their title and abstract. After reviewing their full text, 118 studies were excluded due to insufficient relevant data. Another three studies were excluded during data extraction, because they did not meet the inclusion criteria. Therefore, eight eligible empirical studies were included in the present review [Figure 1].

# **Study characteristics**

Table 1 shows the general characteristics of all the final eight included studies. Two studies used the cross-sectional method; others applied the e-Delphi study, systematic review, qualitative study, and anonymous online survey methods. Data were collected by different methods, such as focus groups, interviews, and questionnaires. Data from 45436 individuals from seven countries were included in the studies.

The participants included European experts in family and community nursing (nursing academics, regulatory board members, nursing service directors, and experts in family and community nursing), nurse managers, nurses, family

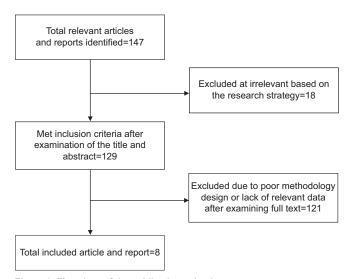


Figure 1: Flowchart of the publication selection

physicians, patients, and nurse practitioners. The subject of two of seven studies was community health nurses, three studies investigated family health nurses, one study investigated the role of nurses in primary care, one study investigated the role of nurses in the family medicine team, and two studies investigated nurse clinicians and nurse practitioners, respectively.

Table 2 shows the main findings of seven studies regarding the role of nurses in the family medicine team.

Table 3 shows nurses' main roles, responsibilities, and activities in the family medicine team. These roles, responsibilities, and activities can be categorized into the following groups: communication and teamwork, assessment, securing health services relevant to community needs, education and empowerment, caring, clinical practice, health promotion, prevention, reflective research practice, and counseling.

# Communication and teamwork

Some studies elaborated on the roles and responsibilities of nurses in terms of communication and teamwork, including team-based delivery of health promotion, disease prevention and continuity of care, enhancement of care for patients with multiple comorbidities via care management team, inter- and intra-professional communication, and health communication.<sup>[13-15]</sup> Intra-professional communication has been done for hospital discharge planning, referral, and facilitating patients' access to other services.<sup>[14]</sup>

One of the reviewed studies discussed the supportive role of nurses to ensure meeting professional standards, as an example of interprofessional communication. <sup>[13]</sup> Building and maintaining professional therapeutic relationships with patients via effective, safe, and appropriate communication, ability to discuss, plan, and implement care in close collaboration with patients and their families, friends, or caregivers in a nonjudgmental and respectful manner, and

managing alternative and conflicting views of the families, caregivers, and friends to ensure that focus remains on the patient's well-being were mentioned by some studies, as the health communication roles and responsibilities of nurses.<sup>[13-15]</sup>

#### Assessment

Some studies identified some factors related to assessment, including practice evaluation, health status, and need assessment, on the individual, family, and community levels and considering the social, cultural, and economic context, setting priorities for local population needs, and health promotion policies, as one of the main roles of nurses.<sup>[13,14]</sup>

The included studies showed that multidimensional community health need assessment is essential to implement appropriate clinical interventions and care management.<sup>[13]</sup> Also, correctly, identifying and setting priorities for local population needs were identified as necessary to adjust care to the social and occupational determinants of health and provide health services relevant to the population's needs.<sup>[14]</sup>

Some studies mentioned the evaluation of nursing care to meet the needs of individuals, families, and communities, as examples of the assessment role of nurses. The studies confirmed that nurses should use the best scientific evidence to develop evidence-based strategies and services in line with the needs of individuals, families, and the community. The nurses must assess the type and intensity of the provided services to ensure timely, essential, safe, and effective care.<sup>[13,14]</sup>

# Education, empowerment, and counseling

The nurses in the family medicine team were assigned to use educational strategies to promote the health and safety of individuals and families. Their role in this category included developing and delivering evidence-based learning materials for health promotion and disease prevention, educating the patients, supporting self-care, empowering individuals and communities to improve the outcomes of the social and occupational determinants of health, and involving individuals and families in the decision-making process.[16-19] The reviewed studies discussed some examples of self-care support provided by nurses, such as educating patients on self-care for chronic illness and education, improving health literacy, and self-management to minimize the adverse effects of risk factors and diseases.[16-18] Also, nurses provided counseling on medical conditions and behavior changes. The counseling was conducted in different ways, including phone calls and home visits.[3,17]

# Caring

The caring role of nurses included providing long-term care, palliative care, family care, and ambulatory care in

Authors	Publication	Study design	Data collection	s of the included studies Participants	Sample size	Location	Type of nurses
Authors	year	Study design					
Bagnasco et al.[13]	2022	e-Delphi study	Template	European experts in family and community nursing (nursing academics, regulatory board members, nursing service directors, and experts of family and community nursing)		European Union	Community and family nurse
Langins and Borgermans <sup>[14]</sup>	2016	Systematic review	Template	-	-	-	Nurses working in primary care
Elliott et al.[15]	2012	Qualitative study	Focus group and interview	Nurse managers and nurses	75	Scotland	Community health nurse
Hennessy et al.[3]	2006	Cross-national research	Two tools including a Standard Questionnaire and a Comprehensive Questionnaire with detailed completion guidelines for each	Scotland, Slovenia, Finland, Armenia, Tajikistan, Portugal, Moldova	7 countries	Scotland, Slovenia, Finland, Armenia, Tajikistan, Portugal, Moldova	Family health nurse
Maheux et al.[20]	2014	Anonymous online survey	Questionnaire	Graduated family physicians: the University of Montreal and Laval University in Quebec	186	Canada	Nurse clinicians
Askari-Majdabadi et al. <sup>[21]</sup>	2020	Cross-sectional descriptive—analytical study		All the nurses who were working under the supervision of Semnan University of Medical Sciences	150	Iran	Nurses in family physician team
Dahrouge et al.[16]	2014	Cross-sectional study	Data form	Patients, family physicians, nurse practitioners	44849 patients, 82 family physicians, 60 nurse practitioners	Canada	Nurse practitioners
World Health Organization <sup>[17]</sup>	2000	-	-	-	-	-	Family health nurse

health centers. One of the duties of nurses was providing long-term care for people suffering from chronic and rare illnesses in collaboration with other health team members. Some studies indicated that palliative care and pain control for the terminally ill were provided in different ways, such as home palliative care. Another main task of the nurses was providing family care, including supervising the health status of the pregnant women and their newly born, giving prescribed drugs, paying follow-up visits to patients, home visits for health promotion, providing care for families where the mother has breast cancer, providing care for families dealing with mental health and alcohol-related problems, providing care for elderly couples with poor health, providing care for families where the father is a heavy smoker to quit, providing care for families preparing for the birth of their first child, providing care for pregnant single parents who are drug abusers, and providing care for ethnic minority refugee families.[3,13,17,20,21]

Other nursing roles categorized in the caring group were managing communicable and noncommunicable diseases and providing medical assistance. Studies mentioned that nurses were expected to manage noncommunicable diseases such as diabetes, hypertension, and asthma and review treatment based on relevant protocols. Diabetes management included adjusting medications, teaching, and supervising injection techniques, and preventing and treating diabetes-related complications and wounds. In addition, the nurses were assigned to initiate the treatment via a medical directive for routine hormonal contraception, acne, uncomplicated cystitis, and sexually transmitted infections. The ability to work independently, in triage, assessment, planning, implementation, and evaluation of acute and chronic care were other tasks assigned to nurses. Nurses also provided medical assistance via diagnosis-based interventions, treatment prescriptions, and therapeutic procedures.[14,20]

364

# Table 2: Main findings of the included studies regarding the role of nurses in family physician team

# Writer (year)

#### The role of nurses

Bagnasco et al. (2022)

Use the best scientific evidence available

Systematically document and evaluate their own practices

Plan, implement, and assess nursing care to ensure the provided care satisfies the health needs of the individuals,

families, and the community within their scope of competence

Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities

Provide patients with health education and build a therapeutic relationship with patients, informal careers, and their families

Collaborate with the multidisciplinary team to prevent disease and promote and maintain health

Apply educational strategies to promote the health and safety of individuals and families

Involve individuals and families in decisions concerning their own health and well-being

Monitoring and providing long-term care to people affected by chronic and rare illnesses in collaboration with other multidisciplinary team members

Communication competencies based on evidence about a specific context

Promote the health of individuals, families, and communities and mentor students to involve in the health promotion process

Make decisions based on professional and ethical standards

Maintain professional and interprofessional relationships and support colleagues to ensure professional standards are met

Conduct a multidimensional community health need assessment to implement appropriate clinical interventions and care management

Ability to discuss and negotiate healthcare issues with patients and their families, the multidisciplinary team, and healthcare management

Assess the social, cultural, and economic context of the community they serve

Accountability for coordination and attribution of community healthcare activities to support workers Accountability for the outcomes of the health care they provide to individuals, families, and the community

Development of nurse leadership and decision-making skills to ensure the provision of effective and appropriate clinical and health care

Alleviate the patients' pain and discomfort

Participate in the prioritization of multidisciplinary team activities to address problems related to health and illness Set standards and evaluate the outcomes of the provided healthcare services

Managing diversity and fostering inclusiveness

Ability to conduct an analytical assessment, and program planning, being cultural competence, and understand the social dimensions of healthcare practice to pursue community health promotion goals within the multidisciplinary community team

Manage change and act as agents for change to improve family and community nursing practice

Leadership and development, implementation, and evaluation of health promotion policies for families and the community<sup>[13]</sup>

Langins and Borgermans

Patient advocacy and education (empowering and supporting patients, providing health services in accordance with

the community and population needs)

(2016) Effective communication (interprofessional communication, health communications)

Teamwork and leadership (team-based delivery of care)

People-centered care and clinical practice (understanding individual's needs, clinical practice)
Continuous learning and research (reflective research practice, maintaining professional expertise)<sup>[14]</sup>

Elliott Working directly with individuals and their caregivers

et al. (2012) Adopting public health approaches

Coordinating services Supporting self-care

Multidisciplinary and multiagency teamworking Meeting the health needs of communities

Supporting anticipatory care<sup>[15]</sup>

Hennessy et al. (2006)

Providers' view of the roles and responsibilities of the family health nurse:

Scotland: providing family healthcare services, including a range of services from acute care to health promotion,

leader of the nursing team alongside the GP\*, social workers, and hospital

Slovenia: Mondays-Sundays and evenings, visit 6-8 families per day, covers a population of 2300, contact with other

agencies as required:

Contd...

#### Table 2: Contd...

#### Writer (year)

# The role of nurses

- Team meetings
- Reports
- Personal contact
- Phone contact

Finland: similar to general nurse but with more detailed individual work with the patients and focused on the family patient appointments, acute care open access, medical care, laboratory referrals, telephone advice, teamwork doctors/nurses, booking patients for the doctor, assisting the doctor

Armenia: reception of 10–14 patients per day, provision of health education twice a week for individuals and groups, provision of home visits to chronic patients, rehab, emergencies, treatments, a combination of a social worker and nurse, documentation, working with teenagers, and future fathers

Portugal: focused on families, ambulatory care in health centers

Health extensions and home visits

Nursing visits, implementation of interventions based on the diagnosis, prescribing treatments, and therapeutic procedures

The team visits vulnerable families

Planned schedule for the referred to know what to expect, for example, Monday programmed nursing care/home visits Tuesday team home visits: Wednesday. Risk groups and home visits. Thursday vulnerable groups and nursing visits Group work

Home visits for health promotion health care for dependent users

Documentation

Need assessment and developing interventions

Health promotion relevant to the patients, family, and caregivers

School health

Referral when necessary

Management of material resources

Moldova: documentation; blood pressures and temperatures

Weighing children; providing medical assistance

Supervise pregnant women Deal with secretarial work

Health promotion; vaccination/first aid

Visiting the newborn; visiting invalid patients

Patient counseling: medical conditions

Phone consultations; everyday home visits

Educating self-care for chronic illnesses

Collaborate with NGOs\*\*

Home visits to infants

Giving prescribed drugs; follow-up visits to patients

Making accounts; training people

Home palliative care; postnatal home visits

Support for parents; work with the doctor

Work in manipulations room—do manipulations at patients' home

Collect specimens from bedridden patients at their homes

Work in the diagnostic room; make home visits

Infection care

Supervise child patients

Do electrocardiogram (ECG), eye tests

Cleaning manipulation room<sup>[3]</sup>

Maheux *et al*. (2014)

Nurses could adjust the treatment of patients with diabetes, hypertension, and asthma, as well as regulate medication for pain control in terminally ill patients, according to protocols of clinical guidelines. However, participants did not prefer for nurses to adjust the treatment of patients with depression. More than 80% of the participants agreed or strongly agreed that nurses could initiate treatment via a medical directive for routine hormonal contraception, acne, uncomplicated cystitis, and sexually transmitted infections. The participants' opinions were more divided on nurses initiating treatment for pharyngitis and otitis<sup>[20]</sup>

Contd...

Writer (year)	The role of nurses				
Askari-Majdabadi et al. (2020)	The participants of the study were nurses from the family physician teams who tended to take part in the following activities: support (4.44), care (4.37), management (4.05), counseling (3.93), prevention (3.81), and education (3.78). The results of the study showed that the nurses were more interested in playing a role in supporting and caring for patients, rather than education and preventive activities. Since family physician teams must mainly provide community-based preventive services, the authorities should try to improve the skills and capabilities of nurses to empower them to play a role in preventive and education activities <sup>[21]</sup>				
Dahrouge <i>et al</i> . (2014)	Nurse practitioners and FPs*** dedicated a similar proportion of their time to various face-to-face duties outside the clinic. Still, they tended to be involved in different types of activities. Nurse practitioners provided more walk-in care and fewer same-day appointments compared with FPs. Nurse practitioners also performed more street outreaches. Their appointments were also slightly longer than the FPs. On-call services were considerably more likely to be covered by FPs than NPs ****  Compared with FPs <sup>[16]</sup>				
World Health Organization (2000)	The role of the family health nurse: Chronic disease prevention and management Care of a family where the mother has breast cancer Care of individuals who have metastatic breast cancer Care of a family with mental health and alcohol-related problems Care of a family with a new infant Care of an elderly couple with poor health Care of an elderly widower with multiple disease pathology Care of a family where the father is a heavy smoker with the intention to quit Care of a diabetic woman who has gradually lost her independence and has to be admitted to Residential care Care of a family preparing for the birth of their first child Care of a single parent who is pregnant and a drug abuser Care of a pregnant teenager Care of an ethnic minority refugee family				

<sup>\*</sup>General practitioner. \*\*Nongovernmental organization. \*\*\*Family physicians. \*\*\*\*Nurse practitioners

# **Health promotion**

Promoting the health of individuals, families, and communities and mentoring students to be involved in the health promotion process were among the nursing roles categorized in the health promotion category.<sup>[13]</sup>

# **Prevention**

The nurses' role in prevention included preventing chronic diseases, accident prevention, and vaccination.<sup>[13,17,21]</sup>

# Reflective research practice

The nurses' role in reflective research practice included developing policies to improve the care provided by nurses, identifying health risk factors and facilitating possible solutions, and developing and supporting clinical research.<sup>[3,14]</sup>

#### **Discussion**

This study aimed to review and investigate the roles of nurses as part of the family medicine team. This systematic review identified communication and teamwork as one of the major roles of the nurses in the family medicine team. Interprofessional communication was among the roles categorized in this group. Way *et al.*<sup>[18]</sup> confirmed that the communication between family physicians and

nurses could include content and relationship; they should share their professional opinions and critical information regarding the patients and any content necessary for the decision-making process. The study elaborated on the main elements vital to collaboration and teamwork, such as responsibility and accountability, coordination, communication, cooperation, assertiveness, and mutual trust and respect.<sup>[22]</sup>

Communication and teamwork roles also included health communication roles. The study by Taua *et al.* discussed that therapeutic communication skills with patients and their families were the main duty in all areas of nursing. The collaboration of the family and caregivers was essential for effective treatment. [19] Therefore, nurses should be equipped with the required skills. Also, necessary mechanisms should be in place to enable nurses to engage in effective communication and teamwork.

Health status and need assessment, on the individual, family, and community levels, were also defined as a role for nurses in the family medicine team. A study by Taua *et al.* emphasized the importance of the comprehensive skills needed for patient assessment and community assessment considering the social, cultural, and economic contexts. This study pointed out that nurse practitioners should acquire skills to perform the physical

Table 3: Role of nurses in family physician team					
Theme	Subtheme				
Communication and	Team-based delivery of health promotion, disease prevention, and continuity of care				
teamwork	Enhancement of care for patients with multiple comorbidities via care management team				
	Interprofessional communication				
	Intra-professional communication				
	Health communication				
Assessment	Assessment of the social, cultural, and economic context				
	Health status and need assessment, on the individual, family, and community level				
	Social health assessment				
	Assessment to set priorities for local population needs				
	Own practice assessment				
	Assessment of health promotion policies on the individual, family, and community level				
Education, empowerment,	Develop and deliver evidence-based learning materials for health promotion and disease prevention				
and counseling	Educating the patients				
	Supporting self-care				
	Empowering individuals and communities to improve the outcomes of the social and occupational				
	determinants of health				
	Involving individuals and families in the decision-making process				
	Providing counsel on medical conditions				
	Providing counsel and support for behavior change				
Caring	Long-term care				
	Palliative care				
	Family care				
	Ambulatory care in health centers				
	Managing communicable and noncommunicable diseases				
TT 1d d	Providing medical assistance				
Health promotion	Promoting the health of individuals, families, and communities				
-	Mentoring students to involve in the health promotion process				
Prevention	Chronic disease prevention				
	Accident prevention				
	Vaccination				
Reflective research practice	Developing policies to improve nursing care				
	Identify health risk factors and facilitate possible solutions				
	Developing and supporting clinical research and improving the quality of activities				

assessment and analysis of individuals, considering the context and utilizing advanced human sciences.<sup>[19]</sup>

Providing the necessary training to perform the required health need assessments would enable nurses to perform their role in the family medicine team and would help them achieve the goals of the FFP.

This study showed that education and empowerment are among the nurses' roles in the family medicine team. The report of a pilot study on the evaluation of the WHO multicountry family health nurse also defined empowering individuals, families, and communities to become more self-reliant and take responsibility for their health as one of the roles of nurses.<sup>[3]</sup> Counseling was another role of nurses in the family medicine team. This was confirmed by the study of Wagener *et al.*,<sup>[23]</sup> which investigated the vocational counseling role of nurses providing services for Human Immunodeficiency Virus (HIV)-infected people in the Netherlands, who faced work-related issues like stigma and physical problems. The study suggested the counseling role of nurses was vital in such situations as the nurse–patient relationship was bound by confidentiality.

Caring was another duty of nurses in primary care settings. The study by D'Onofrio pointed out that family nurses spent a long time in the patient's home to help individuals and families suffering from chronic diseases or disabilities and addressed the health issues of the whole family in the early diagnosis stage.<sup>[24]</sup> Palliative care was also among the roles of nurses. The study by Parola *et al.*<sup>[25]</sup> showed that nurses in their palliative care role face challenges such as end-of-life decisions, facing people's suffering and dying, and increased risk of burnout. Nurses may need support to fulfill their caring role, especially in palliative care.

Health promotion was another group of nurses' roles discussed in this review. Similar results were presented by Kemppainen *et al.*,<sup>[26]</sup> who examined that the nurses, as health promoters, had three roles: general health promoters, patient-focused health promoters, and managers of health promotion projects. As general health promoters, the most common intervention of nurses was health education. They were expected to have knowledge of health promotion, perform adequate health promotion activities, and utilize their knowledge in their nursing

practice. As patient-focused health promoters, nurses should focus on the special needs of different patient groups and include health promotion activities in their daily nursing practice relevant to their needs. As managers of health promotion projects, nurses should plan, implement, and assess health promotion interventions and projects. As previously discussed roles, performing the health promotion role requires replanning and defining necessary processes and mechanisms in primary health care, besides knowledge and skills, so that nurses can implement them in their nursing practice with minimum barriers and conflicts.

This study showed that chronic disease prevention was also among the roles of nurses. The study of Alleyne et al.[22] argued that nurses' contribution to chronic disease prevention was significant, as they are the largest group of healthcare workers in close contact with most of the population. The nurses are competent and well trusted by people due to the patient-nurse therapeutic communication. So, they are more likely to identify chronic disease risk factors in individuals and provide information and support regarding disease prevention. McIlfatrick et al.[27] study discussed primary care nurses' role in preventing cancer as a chronic disease. Developing policies to improve nursing care was identified as one of the roles under the reflective research practice group. The report on the evaluation of the WHO multicountry family health nurse pilot study confirmed that contribution to decision-making at all policy levels to improve nursing care was one of the nurses' roles.[3]

The roles of nurses in the family physician team include health promotion, prevention, education, and empowerment of individuals and communities, need assessment, and caring. These are critical in fulfilling the goals of the Family Physician Program (FPP) through the health promotion and prevention-oriented approach of the FPP.

There was no way for the authors to evaluate or justify the credibility of gray literature and unpublished data. Therefore, the current study did not include the gray literature and unpublished data, so some information might be missing in this review. In addition, we did not have access to Institute for Scientific Information (ISI) journals, so some studies might not be included in this article.

# **Conclusion**

The findings of this study identified different roles that nurses can play in providing primary health care in areas such as communication and teamwork, assessment, education, empowerment and counseling, caring, health promotion, prevention, and reflective research practice. The findings of this study can be used for replanning or reforming primary health care in different countries.

# Acknowledgments

We would thank all subjects helped us with this project (grant number: 202640666).

# Financial support and sponsorship

Deputy of Health, Ministry of Health and Medical Education, and the World Health Organization, Iran Office

# **Conflicts of interest**

Nothing to declare.

## References

- Bernier A, Champagne M, Lacroix M, Poitras MÈ. The expected, enacted and desired role of family practice nurses in family medicine groups as perceived by nurses and family physicians. Sci Nurs Health Pract 2020;3:1-15.
- World Health Organization. Nursing Beyond the Year, 2000: Report of a WHO Study group (meeting held in Geneva from 12 to 16 July 1993). World Health Organization, 1994.
- Hennessy D, Gladin L, World Health Organization. Report on the Evaluation of the WHO Multi-Country Family Health Nurse Pilot Study. Copenhagen: WHO Regional Office for Europe; 2006.
- Doshmangir L, Bazyar M, Doshmangir P, Mostafavi H, Takian A. Infrastructures required for the expansion of FPP to urban settings in Iran. Arch Iran Med 2017;20:589-97.
- Maftoon A, Farzadi F, Montazeri A, Aeenparast A. Contract performance and training conditions in family physician and referral system: the providers' perspectives. Payesh 2016:15:19-25.
- Aarabi A, Alvandi M, Heidarzadeh A, Rezaei M, Razavi M, Rahbar MR, et al. [Report of the working group of the special mission of family medicine and referral system in family medicine education, 2021]; 2021.
- Ferdosi M, Goli F, Aghili G, Daneshvar SM. A brief history of family medicine development and training in Iran (2005-2018). IJBMC 2018;5:89-93.
- 8. Bailey P, Jones L, Way D. Family physician/nurse practitioner: stories of collaboration. J Adv Nurs 2006;53:381-91.
- Vatankhah S, Khalesi N, Ebadifardazar F, Ferdousi M, Naji H, Farahabadi SM. The role of nurse practitioners in health sector reform in Iran (2011). Iran J Nurs Midwifery Res 2013;18:367-70.
- Reel S, Lauder W, Sharkey S. The development of family health nurses and family nurse practitioners in remote and rural Australia. Aust Fam Physician 2003;32:750-2.
- Campbell S. The newest gatekeepers: Nurses take on the duties of primary care physicians. Health Care Strateg Manage 1997;15:14-15.
- Qomariah SN. Factors influence character of caring nurses' at hospitals in Gresik. Unej e-Proceeding 2018;15:67-75.
- Bagnasco A, Catania G, Zanini M, Pozzi F, Giuseppe Al, Watson R, et al. Core competencies for family and community nurses: A European e-Delphi study. Nurse Educ Pract 2022;60:103296.
- Langins M, Borgermans L. Strengthening a competent health workforce for the provision of coordinated/integrated health services. Int J Integr Care 2016;16:1-2.
- Elliott L, Kennedy C, Rome A, Cameron S, Currie M, Pow J, et al. Study of the implementation of a new community health nurse role in Scotland. Scottish Government Social Research;

- 2012. Report No.: DPPAS12757.
- Dahrouge S, Muldoon L, Ward N, Hogg W, Russell G, Taylor-Sussex R. Roles of nurse practitioners and family physicians in community health centres. Can Fam Physician 2014;60:1020-7.
- World Health Organization. The Family Health Nurse: Context, Conceptual Framework and Curriculum. Copenhagen: WHO Regional Office for Europe; 2000.
- Way D, Jones L, Busing N. Implementation Strategies: Collaboration in Primary Care-Family Doctors and Nurse Practitioners Delivering Shared Care. Ontario College of Family Physicians; 2000.
- Taua C, Hepworth J, Neville C. Nurses' role in caring for people with a comorbidity of mental illness and intellectual disability: A literature review. Int J Ment Health Nurs 2012;21:163-174.
- Maheux B, Côté L, Sobanjo O, Authier L, Lajeunesse J, Leclerc M, et al. Collaboration between family physicians and nurse clinicians: Opinions of graduates in family medicine. Can Fam Physician 2014;60:e416-22.
- Askari-Majdabadi H, Alaei S, Jafarian N, Safari H, Habibian H.
   The preferred role of nurses in family physician team. AIMS

- Public Health 2020;7:213-22.
- Alleyne G, Hancock C, Hughes P. Chronic and noncommunicable diseases: A critical challenge for nurses globally. Int Nurs Rev 2011;58:328-331.
- Wagener MN, Miedema HS, Kleijn LM, van GorpEC, Roelofs PD. Vocational counseling of HIV-infectedpeople: A role for nurses in HIV care. J Assoc NursesAIDS Care 2015;26:330-9.
- D'Onofrio DP. Health protection and territorial healthorganization: The figure of the family and communitynurse (IFeC). Int J Risk Saf Med 2022;7:1-7.
- Parola V, Coelho A, Sandgren A, Ernandes O, Apóstolo J. Caringin palliative care: A phenomenological study of nurses' livedexperiences. J Hosp Palliat Nurs 2018;20:180-186.
- Kemppainen V, Tossavainen K, Turunen H. Nurses' roles inhealth promotion practice: An integrative review. Health PromotInt 2013;28:490-501.
- McIlfatrick S, Keeney S, McKenna H, McCarley N, McIlwee G.Exploring the actual and potential role of the primary care nursein the prevention of cancer: A mixed methods study. Eur JCancer Care (Engl) 2014;23:288-99.