Establishing clinical governance model in primary health care: A systematic review

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Abstract:
Clinical governance is a systematic approach to enhancing the quality of primary health care and ensuring high clinical standards, responsiveness to performance, and continuous improvement in service quality. The objective of the current study was to investigate the global experiences of clinical governance in primary health care. In the present systematic review, relevant articles from different countries were searched in various databases such as MD PubMed from Medline portal, Emerald Springer link, ProQuest, Cochrane, Scopus, Web of Science, and Consult until April 2019. The searched articles were checked through CASP and PRISMA checklists, and their results were extracted. Of the 17 selected studies, 16 belonged to developed countries, including England (13), Australia, Italy, and New Zealand, and one was from Turkey. The findings were divided into three general categories: (1) principles of effectiveness and risk management, (2) deployment requirements such as structural and organizational needs, resource and communication, and information management, and (3) barriers of clinical governance toward providing primary health care. it is recommended that a suitable framework or model be developed and designed adapted to the local culture and taking into account all effective dimensions for a proper establishment and implementation of clinical governance in primary health care.

Keywords:
Clinical governance, health promotion, primary health care, systematic review

Introduction

As a basic need, health is an indispensable right of all human beings, playing a pivotal role in sustainable development and paving the way for social and economic development.[1] The ultimate goal of a health care system is to provide a fair level of health for people and society so they can participate in economic and socio-political activities with adequate health.[2,3]

One of the most important historical events in the evolution of health care is the decision of the international community to adopt primary health care to achieve goals such as equity in access to health care and make serious efforts toward improving the health-care status. Primary health services are provided for the benefit of the rural population of developing countries.[4,5]

The concept of primary health care came to prominence in 1978 following an international conference in Almata, USSR. The concept is defined as providing "essential health care based on scientifically acceptable and practical and socially acceptable methods and technologies and through the participation of individuals and families in the community;" this concept further involves "considering the amount of cost so that communities and countries can make their own decisions at every stage of development."[6,7]

The primary health-care approach is based on social justice, universal health coverage, self-reliance, inter-sectoral collaboration, and community participation in the planning and implementation of health programs and the pursuit of common health goals. This approach is defined as "health by the people" and "putting people's health into their own hands." Primary health care was accepted by the WHO member states as the key to achieving health goals for all by the year 2000. The Alamata Declaration emphasizes that primary health care should at least include public education on common health problems and ways to prevent and control them, improvement in the quality of food and nutrition, provision of adequate and safe water, prenatal and child health care, immunization against infectious diseases, prevention and control of endemic diseases, appropriate treatment of common diseases and events, and provision of essential medicines.[8]

Primary health care is accountable to a wide range of communities, ministry of health, recipients of services, patients and professional monitoring organizations.[9] Challenges in the field of primary health care include financial problems, information development, emerging technologies, concerns of patients with complex needs, staff and organizational errors, diagnostic and pharmaceutical errors in service delivery, and hospitals.[8] Any of the foregoing obstacles will entail inevitable ramifications, hence the necessity of continuous improvement in health quality and measures such as clinical governance in primary health care.[9]

Clinical governance is defined as "a framework that obliges health service providers to adhere to the principles of clinical service excellence, thereby holding them accountable for maintaining and enhancing the quality of the services they provide."[10-12]

Clinical governance is a mechanism that ensures high clinical standards, performance accountability, and continuous quality improvement. Noteworthy, clinical governance provides a framework comprised of defined elements and components for achieving standards. In addition, this systematic approach can be regarded as a cultural change in an entire system, enabling organizations to provide continuous, responsive, patient-centered, and quality assured services.[13,14]

On the other hand, clinical governance is a framework based on which clinical service organizations are responsive to continuous improvement in quality and ensure high standards of service through creating an environment which that encourages excellence in clinical service. Simultaneously, clinical governance focuses on maintaining the current level of care and improving the quality of future care. It is also a concept that seeks to integrate old methods and tools in measuring and enhancing the quality of care. In fact, clinical governance is a unified and comprehensive strategy that has introduced a continuous quality improvement in the UK NHS system as a systematic model.[15]

There is no denying the importance of ameliorating patient efficacy, effectiveness, and safety, hence the fact that the responsibility of health-care providers is to be increased so as to reduce the disparity of the services provided for the patients. Furthermore, in clinical governance, medical error has been considered as a contributing factor in eliminating inadequate, poor, and ineffective care. On the other hand, health-care organizations are highly convoluted, and their structure, processes, and management play a major role in promoting clinical care. Clinical service governance recognizes these complexities and seeks to address certain issues through developing an integrated and comprehensive strategy and a continuous drive to improve quality.[10]

In many countries, quality models such as clinical governance are employed to qualitatively evaluate the primary health-care services from the perspective of physicians, patients, health managers, and communities and using various dimensions and approaches.[16,17] Scattered and noncoherent studies have been conducted to discuss the quality of primary health-care services; however, despite the range of activities of family physicians and the importance of their role in health care delivery system, it seems necessary to create a dynamic system to assess the quality of family physicians' performance and executive processes in the referral system; limited studies have been carried out on monitoring and evaluating the provision of primary health care. Therefore, it is important for all parties involved in the delivery of primary health care to be familiar with quality improvement and evaluation approaches such as clinical governance and to use them for accountability and responsibility. Accordingly, this study aimed to establish a model of clinical governance in the primary health-care system.

Methods

In this systematic review, Prisma and CASP checklists were utilized to extract and format the data. We extracted all relevant articles published in different countries with the establishment of clinical governance in primary health care in PubMed databases [Table 1], Cochrane, ProQuest, Emerald Springer link, MD Consult, Web of Science, Scopus, and Google scholar search engine with no time limit until April 1, 2019. Keywords such as MeSH terms and common keywords related to the subject under study included Primary Health Care,

Clinical Governance, Organization, and Health Services Administration. Inclusion criteria were articles published in Farsi and English. Exclusion criteria were lack of full text and copy and review articles. This article is the result of a doctoral dissertation with the code of ethics No. IR.IAU.SEMNAN.REC-1397.005 obtained from the National Ethics Committee of Semnan Branch of Islamic Azad University. Database search strategies were reviewed and performed. For example the search strategy in PubMed is presented in Table 1.

A data extraction form designed based on the purpose of the study. This form contained the profile of the authors, year of publication, country of study, target of study, population of study, and the main findings. The data of three articles were ultimately extracted randomly by a research assistant using the form to test the reliability of the data extraction by the original researcher.

The findings of the reviewed studies were synthesized and categorized according to similar themes in different categories.

To obtain a list of articles, the titles and abstracts of the articles were assessed by the research team according to the inclusion and exclusion criteria. In order to search for gray texts and access to the other related studies, the sources of the articles that met the inclusion criteria were examined.

The SRQR and MMAT checklists were employed to evaluate the quality of the reviewed articles.[18] Articles were rated independently by both researchers using a quality scorecard. Finally, no articles were deleted at this stage.

Results

A total of 4181 articles were extracted, out of which a total of 35 articles were removed because of duplication. Afterward, the title and the abstract of the articles were assessed according to inclusion and exclusion criteria, and irrelevant articles were removed. Subsequently, as far as title and abstract are concerned, 278 articles remained for evaluation. Finally, according to the inclusion criteria, 261 articles were excluded due to their nonrelevance to clinical governance in primary health care, and 17 articles were chosen for the final review, out

Table 1: Search strategy in PubMed

(((((((("Care, primary health"[Title/Abstract]) OR "health care, primary"[Title/Abstract]) OR "primary healthcare"[Title/Abstract]) OR "Healthcare, Primary"[Title/Abstract]) OR "primary care"[Title/Abstract]) OR "care, primary"[Title/Abstract]) AND (("clinical governance"[Title/Abstract]) OR ("organization and administration"[Title/Abstract]) OR "health services administration"[Title/Abstract]))

of which 10 were qualitative and 7 were compilations. All the studies reviewed according to the inclusion criteria were in English. The screening process and the search results are shown in Figure 1.

Of the 17 reviewed studies, 16 pertained to developed countries, namely Britain (13 studies), Australia, Italy, and New Zealand, and one was conducted in Turkey. The findings of the current review are presented in two general categories. Table 2 shows the combination of principles, dimensions, prerequisites, and infrastructures proposed for the implementation of clinical governance in light of the studies reviewed. Moreover, Table 3 presents the obstacles of clinical governance in primary health care with respect to the evaluated studies. The research findings are summarized in Tables 2 and 3.

Discussion

The findings of the present study were divided into two general groups: (i) the requirements of establishing clinical governance in five categories, namely effectiveness, risk management, structural and organizational components, resource and communication management; (ii) information and findings related to the barriers of clinical governance in providing primary health care.

Regarding the effectiveness of the principles and prerequisites of clinical governance in primary health care, our results showed that quality assurance and improvement should be the focus of all health-care systems and providers.[19,25,27,29,30] Other principles of clinical governance included in accountability studies were patient and community participation, patient satisfaction and empowerment, and reduced burden of complaints.[13,19,21,24-29,34] On the other hand, in some studies, focusing on principles such as clinical evaluation,[20,26,28,29] training,[19] providing feedback on clinical errors and
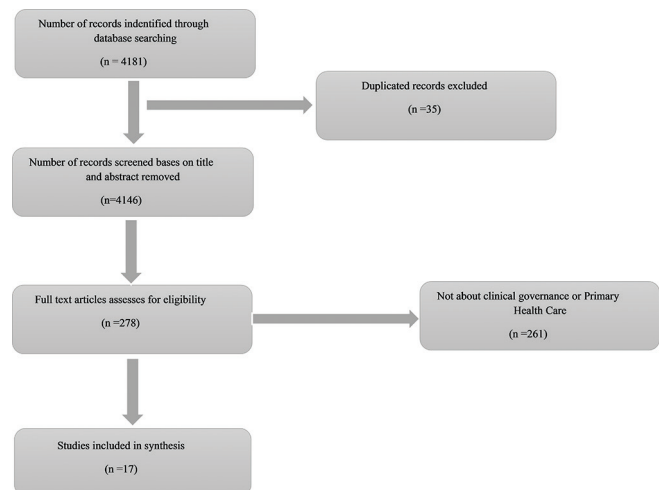
Figure 1: Study selection process

Table 2: Principles and Prerequisites for Clinical Governance in Primary Health Care

Known prerequisites for clinical governance establishment	Title	Country	Author and year
Attention to the local values of each region and patients, responsiveness to population needs, quality assurance, risk management, appropriate organizational management, resource management, evidence-based practice, research, vocational training, information infrastructure, patient satisfaction and empowerment, patient participation, technology and communication evaluation	Developing a new clinical governance framework for chronic diseases in primary care: An umbrella review	Italy	Buja *et al*. (2018)[19]
Clinical audit, attention to organizational learning and evidence-based measures, emphasis on burden reduction, collective responsibility and responsibility for quality care, information and data quality, dissemination of ideas and innovations	Clinical governance	England	Jaggs-Fowler (2011)[20]
Attention to organizational learning, safety improvement, performance improvement, inter-departmental collaboration, research on safety, quality and accountability, patient engagement	Can clinical governance deliver quality improvement in Australian general practice and primary care? A systematic review of the evidence	Australia	Phillips *et al*. (2010)[21]
Promotion of safety, attention to organizational learning, team development to improve quality, communication, provision of feedback on clinical errors and errors	A survey on patient safety culture in primary healthcare services in Turkey	Turkey	Bodur and Filiz (2009)[22]
Emphasizing reduction in side effects and attention to evidence-based measures of clinical standards	Beyond the limits of clinical governance? The case of mental health in English primary care	England	Gask *et al*. (2008)[23]
risk management, patient satisfaction, quality assurance, definition of tasks and appropriate framework for implementing clinical governance system, standardization and electronicization of clinical records, documentation and development of a clinical error and complaints reporting system, defining the roles and responsibilities of staff, provision of management infrastructures	The development of a model and implementation process for clinical governance in primary dental care	England	Holden and Moore (2004)[24]
Utilization of staff capabilities, improvement in quality, patient and community engagement, patient-service interactions, changing cultures, changing the perspective of three groups: health care professionals, patients, and service providers.	Clinical governance in primary care: a literature review	England	Tait (2004)[25]
Attention to reducing the disparities in access to health services, emphasizing evidence-based measures and reduction in complaints, continued focus on professional development, clinical governance and evaluation, crisis management, development of key clinical indicators, creation of personal development and personal learning programs, design of complaint cases	How are primary care groups approaching clinical governance? A review of clinical governance plans from primary care groups in London	England	Godden *et al*. (2002)[26]
Collaborative approach to improving service quality, attention to organizational learning, risk management, emphasis on reducing complaints	Implementing clinical governance in English primary care groups/trusts: Reconciling quality improvement and quality assurance	England	Campbell and Sweeney (2002)[27]
Attention to organizational learning and accountability, defining the role and responsibility of staff, quality assurance, teamwork	The role of clinical governance as a strategy for quality improvement in primary care	England	Campbell and Sweeney (2002)[27]
Attention to organizational learning, building accountability, focusing on employees' abilities and self-esteem, learning from mistakes, emphasizing team development to improve quality	A qualitative study of the cultural changes in primary care organisations needed to implement clinical governance	England	Marshall *et al*. (2002)[13]
Clinical audit, attention to organizational learning and evidence-based measures, emphasizing reduced complaints, encouraging and responding to training, emphasizing patient care and safety, creation of a compliance and validation reporting system, increasing people's commitment to develop and improve services, establishing a patient survey system	Clinical governance in primary care: Participating in clinical governance	England	Pringle (2000)[28]

Contd...

Table 2: Contd...

Known prerequisites for clinical governance establishment	Title	Country	Author and year
Attention to developing the existing activities to develop and improve quality, teamwork, patient safety, clinical evaluation, accountability, culture of change, inter-departmental collaboration, partnership culture	Clinical governance in primary care: Improving quality in the changing world of primary care	England	Rosen (2000)[29]
Promotion of safety, attention to evidence-based measures and reduced complaints, teamwork, defining priorities and assessing each area's requirements, sharing experiences and information between primary care providers, quality assurance, monitoring staff progress	Clinical governance in primary care: Knowledge and information for clinical governance	England	McColl and Roland (2000)[30]
Promotion of safety	Clinical governance in primary care groups: The feasibility of deriving evidence-based performance indicators	England	McColl *et al.* (2000)[31]
Attention to resource efficiency	New Zealand's independent practitioner associations: A working model of clinical governance in primary care?	New Zealand	Malcolm and Mays (1999)[32]
Attention to evidence-based action, emphasizing innovation and R and D, emphasizing reduction in complaints, creation of comprehensive systems for communication and decision-making, accountability	A model for clinical governance in primary care groups	England	Baker *et al.* (1999)[33]

Table 3: Known barriers to clinical governance in primary health care in the reviewed studies

Known barriers to clinical governance	Title	Country	Author and year
The unprofessionalism of primary care organizations	Clinical governance in primary care: A literature review	England	Tait (2004)[25]
Paucity of human resources, lack of clarity and transparency of laws, misdivision of staff among employees	Implementing clinical governance in English primary care groups/trusts: Reconciling quality improvement and quality assurance	England	Campbell and Sweeney (2002)[27]
Distrust of health care providers, separation of health from other health sectors, lack of transparency in primary care frameworks, doctors' dominance over health system, staff concerns, lack of external control over primary care organizations, attention to short-term achievements, resource constraints, inadequate leadership, lack of proper learning	The role of clinical governance as a strategy for quality improvement in primary care	England	Campbell and Sweeney (2002)[27]
Lack of staff independence, political pressures	A qualitative study of the cultural changes in primary care organizations required to implement clinical governance	England	Marshall *et al.* (2002)[13]
Hierarchical structure and diverse educational achievements, service providers' sense of disability and weakness, lack of multi-knowledge-based learning (educational discipline)	Clinical governance in primary care: Participating in clinical governance	England	Pringle (2000)[28]
Hierarchical structure, absence of professional management and quality assurance	Clinical governance in primary care: Improving quality in the changing world of primary care	England	Rosen (2000)[29]
Paucity of an encouragement system	Clinical governance in primary care: Knowledge and information for clinical governance	England	McColl and Roland (2000)[30]
Bureaucratic control	New Zealand's independent practitioner associations: A working model of clinical governance in primary care?	New Zealand	Malcolm and Mays (1999)[32]

complication records,[21,22] increased interactions between service providers and recipients, development of clinical indicators, and attention to individual development were considered as essential to the effectiveness of clinical governance in primary health care.[25,26]

Findings on risk management in the reviewed studies showed that factors such as risk and crisis management, patient safety, and error reporting (to enhance safety) must necessarily be emphasized by health-care providers.[19,21,22,24,26,28-31,34]

As far as structural and organizational clinical governance is concerned, the following were defined as the principles and prerequisites for the implementation of clinical governance: Proper organizational management,[19] creation of appropriate infrastructures for research,[19,21] dissemination of ideas and innovations,[20,33] cross-sectoral collaboration,[21,29] teamwork,[13,22,27-30] implementing cultural changes,[25,29] monitoring the staff progress,[30] establishing a system of encouragement, defining and clarifying the roles and responsibilities of staff,[24,27,28] clarification and review of frameworks and standards,[24] and nearly all studies associated with evidence-based actions and decisions[13,19,20,23,26,28,33] and organizational learning.[13,20-22,26-28,34]

Resource management was another finding of the study on identified principles and prerequisites. Access to and definition of standards for access to health services were identified as one of the important principles in the reviewed studies.[26] Furthermore, the focus and emphasis on self-belief and ability of employees, increased commitment, and attention to resource efficiency were identified as the most important principles in the implementation of optimal clinical governance in primary health care.[13,19,26,28,32] Due to the limited resources in the health sector, paying attention to human resources and increasing their productivity is directly associated with the available resources and the effectiveness of the provider organizations.

The last of the principles and presuppositions of clinical governance were information and communication. In this regard, studies have shown that establishing clinical governance, designing a system for registering and reporting complaints, or surveying patient referrals are crucial to increasing client satisfaction and improving the quality of services.[26,28,33] This can also be an effective step in implementing clinical governance by electronic patient records and the production of high quality information and data sharing.[19,20,24] Finally, to increase the communication and effectiveness of service providers, it was suggested that information be shared among providers.[22,30,33]

The second group of findings was related to the barriers of clinical governance in primary health care. The major identified barriers were as follows: The unprofessionalism of primary health care organizations,[25] paucity of human resources, lack of clarity and transparency in laws, inadequate division of labor,[34] mistrust of health care providers, separation of health from other health sectors, primary care frameworks are not transparent, the dominance of physicians over the health system, staff concerns, lack of external control in primary care organizations, attention to short-term gains, resource constraints, inadequate

leadership, absence of proper learning,[27] lack of staff independence, political pressure, hierarchical structure and diverse educational achievements, feeling of weakness existing in service providers, absence of multi-knowledge-based learning (discipline),[28] paucity of professional management and quality assurance,[29] lack of incentives,[30] and unsuitable structure and bureaucratic control.[32] Given the importance of this category, it is imperative that health care policy makers and planners adopt policies to create an appropriate framework or model which takes into account all aspects of an effective, community-based culture for a proper establishment and implementation of clinical governance in primary health care; moreover, in delivering these cares, a top priority of a health system is to be at the forefront of health services. Education should be further considered as a workaround to reduce communication barriers and challenges, promote knowledge, and reduce resistance. It is also imperative that service providers be more sensitive to governance training and clinical assessments and its importance to health-care providers and make training more academic and tailored to each region.

One of the limitations of this study was that although articles satisfying the inclusion criteria were identified and reviewed, certain unpublished paper studies might have been overlooked. In addition, the present study only reviewed articles published in Farsi or English. This article is the result of a part of the dissertation entitled Establishing Clinical Governance Model in Primary Health Care, in the PhD degree of health services management approved by Semnan Branch of Islamic Azad University in 2019.

Conflicts of interest
There are no conflicts of interest.

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