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Implementation of the primary health care system in various countries: a systematic review

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Abstract

Purpose: Primary health care (PHC) focuses on the community as individuals, families, and communities, which prioritizes health promotion and disease prevention over treatment, rehabilitation, and palliative care. PHC implementation often sacrificed the prevention approach because it was hampered by health medicalization. **Methods:** This Systematic Review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The author searched five databases: EMBASE, ProQuest, ScienceDirect, Scopus, and PubMed, to discover the primary health care system implementation in various countries. **Result:** Searches on the EMBASE database included 193 articles, ProQuest 347 articles, PubMed 589 articles, ScienceDirect 294 articles, and Scopus 293 articles. Reports were assessed for eligibility, the remaining 39 full-text articles were reviewed, and the authors chose ten relevant and suitable articles for further review. **Conclusions:** The medicalization of health, a shortage of skilled health workers, poor services, a weak referral system, treatment that does not meet the needs of the community, a lack of public-private partnerships in the provision of health services, and a lack of stakeholder involvement in policy-making continues to impede PHC implementation. In the future, stakeholders should cover the gap between public health and primary care through integration.

Keywords: primary health care; health system; implementation

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INTRODUCTION

The World Health Organization (WHO) member states declared in the 1978 Alma-Ata Declaration the need for action by all governments, all health and development workers, and the global community to protect and promote the health of all people on the planet. Primary health care (PHC) principle says health is a human right, health is not merely the absence of disease or infirmity, health equity, and the role and responsibility of government for population and community health so people participate in health care planning and implementation in the community [1].

PHC is essential health care that is universally accessible to individuals and families in society through their full participation at a cost that society and the state can sustain. This is an integral part of the national health system; it serves as the central and primary focus, and it serves as the primary contact point for individuals, families, and the general public with the national health system, which helps to ensure that people's health is maintained at all times, regardless of where they live or work, and is the first step in the ongoing health care process [2]. PHC focuses on the needs and preferences of the community as early as possible, starting from health promotion and disease prevention, treatment, rehabilitation, and palliative care, and as close as possible to the daily environment to achieve the highest possible level of health, well-being, and equity [3].

In commemoration of the Alma-Ata Declaration's 40th anniversary, in Kazakhstan produced the Astana Declaration with the vision: The PHC towards universal health coverage (UHC) and the Sustainable Development Goals (SDGs) is a holistic approach to health that combines multisectoral policies and actions; empowered people and communities; and SDGs [1,4].

A strong health system based on a PHC approach has made major gains in population health. Coupled with improved living standards and socio-economic development, people are living longer, healthier lives and premature death has decreased. Primary care is a person's first contact with continuous, comprehensive and coordinated health services, too often focused on treating disease rather than preventing disease, protecting and promoting health, and ensuring the greatest threats to population health [5].

The medicalization of health has frequently hampered PHC implementation at the expense of disease prevention with a whole-person approach. In addition, challenges arise as a result of the lack of political commitment to social justice and health as human rights, the difficulty of effective cross-sectoral collaboration, the separation of health system planning and health service delivery, the lack of adequate human resources, and the volatile macro economy [6].

Due to geography, a shortage of health workers, and weak supply chains, many countries face significant health service access problems. Because of inadequate referral systems, many health conditions have poor continuity of care. The emphasis on hospital-based, disease-based, and self-sustaining curative care models undermines the health system's ability to provide universal, equitable, high-quality, and financially sustainable care. Healthcare providers are frequently not accountable to the populations they serve and are limited in their ability to provide responsive care based on the needs of their users. People are frequently unable to make informed decisions about their own health and health care or exert control over decisions affecting their and their communities' health [7]. Because few articles discuss the implementation of the primary health care system, the goal of this review is to provide a systematic overview of the implementation of the primary health care system in various countries.

METHODS

This study was carried out using the Systematic Review method following the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines, which is a review that employs explicit and systematic methods to compile and synthesize research findings that address how primary health care system implementation in various countries [8].

The author searched five databases, namely: EMBASE, ProQuest, ScienceDirect, Scopus, and PubMed, using the keywords primary health care, health system, and implementation, with the criteria for articles published between 2018-2022. Search the EMBASE database with combination keywords: title or abstract (primary health care) and title, abstract or author keywords (implementation) and title, abstract or author keywords (health system), and year (2018-2022). Search the ProQuest database with combination keywords: title (primary health care) and summary (implementation) and (health system) and at exact (article) and publication date (20180101-20221231). Search the ScienceDirect database with combination keywords: find articles with these terms (primary health care); title (implement); title, abstract, keywords (system health); refine by (subscribed journals); year (2018-2022). Search the Scopus database with combined keywords: title (primary and health and care) and title, abstract, keywords (implementation) and title, abstract, keywords (health AND system) and limit to (OA, "all") and publication year 2022 or 2021 or 2020 or 2019 or 2018 and document type (article)) and source type (journal). Search the PubMed database with combined keywords: title/abstract (primary health care) and title/abstract (implementation) and (health system); filters applied: free full text, from 2018-2022.

Search results and filtering from each database are downloaded in RIS format, then the data is managed and stored by Mendeley Desktop version 1.19.8. The author sets the criteria: Population is primary health care facilities, Intervention is the implementation of the primary health care system, Comparison is the primary health care systems in various countries, and Outcome is an overview of the implementation of primary health care. The initial selection of studies was carried out using titles and abstracts, and in some cases where the information was insufficient, the full document was analyzed. Studies included in the review are taken based on conditions that meet the criteria and are described using PRISMA flow diagrams for systematic reviews.

Search and filtering applied to the EMBASE database of 193 articles, ProQuest of 347 articles, PubMed 589 articles, ScienceDirect 294 articles, Scopus 293 articles, and all databases are 1.716 articles. At the Identification stage, many records were marked as ineligible by automation tools 110 articles, and Duplicate records were removed as many as 325 articles. Screening contains as many Records excluded (title irrelevant) at this stage. 1.138 articles and reports not retrieved (abstract not relevant). One hundred four

articles, so the Reports assessed for eligibility remain 39 articles. Of the 39 full texts reviewed, 29 articles were irrelevant because they did not discuss implementing the primary health care system in various countries. Finally, the writer chose ten relevant and suitable articles for further review. The search and screening results for this study can be seen in Figure 1.

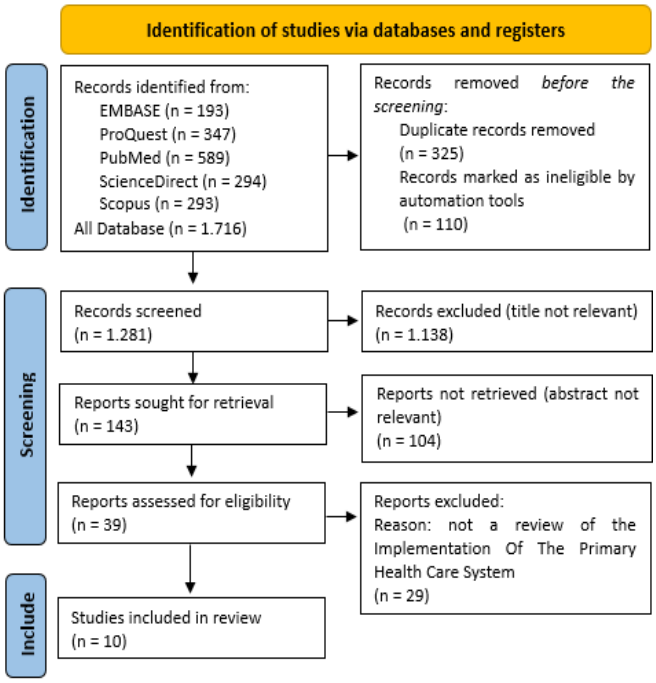

Figure 1. PRISMA flow diagram for systematic reviews

RESULTS

The 10 articles under review are shown in summary matrix by entering the study title, author, year, country, study design, result, and recommendation (see Table 1). The characteristics of this study came from various countries: Australia, Ghana, India, South Africa, Japan, Nepal, Iran, China, Uganda, and Saudi Arabia. The study design consisted of a qualitative (n = 4), Framework for community- oriented primary care (COPC) (n = 1), compares and analysis (n = 1), a narrative synthesis of the literature (n = 1), protocol study (n = 1), descriptive analysis and ordinary least squares (OLS) (n = 1), not mentioned (n = 1).

In a federal government system such as Australia, the federal government is responsible for funding primary medical care, and the states oversee tertiary care. In addition, 140 Aboriginal community-controlled services operate as non-governmental organizations that receive federal and state funding [9]. Each state has its health department and regional bodies known as Local Health Networks LHNs, Local Hospital Networks, Local Health Districts, Health Service Regions, Health Organizations, or Hospitals and Health Services (hereafter LHNs) [10]. Mental health, Aboriginal and Torres Strait Islander health, population health, health workforce, digital health, aged care, and alcohol and other drugs are primary health networks focusing on clinical services. Population health planning and relationships with state health systems and departments remain in the mandate. PHNs are implemented systematically across the country in various fields of state PHC and collaborate with PHC actors. State PHC activities range from normative commitments to funding public health services or health promotion, with some states funding both. The private, fee-for-service general practice still hinders a more integrated and coordinated PHC system, which is symptomatic of the neoliberal approach of applying private sector mechanisms to the public sector. Within the PHN's goal of the Federal government being able to compensate for state PHC deficiencies, PHN's role may risk prioritizing competition over collaboration between services [11].

Evidence from Ghana, the medical system heavily influences the application of PHC in practice, with effects that catalyze success in disease control programs and drug-based interventions. A medical system focused on curative care, and services lack community ownership, participation, and empowerment in PHC. PHC can gradually transform into an unexpected mini-clinic, namely as a community-based promotional service adopted by Alma Ata to achieve UHC. The findings show how, gradually, PHC is used to describe first-rate or basic hospital-based care rather than as a primary health facility that addresses health problems with promotive, preventive, and community-based approaches [12].

Primary health centers in India are expected to be the main facilities that provide integrated care close to people's homes as part of implementing the PHC in service delivery. Underfunding and verticalization, on the other hand, have resulted in poor infrastructure, and service delivery is hampered by physician disinterest in the primary care role, which promotes risk aversion and neglect of outpatient care. Because the CHC did not meet community expectations for services, medicines, and attention, private practitioners were preferred. As a result, while Community Health Centers currently have a primary-level care unit structure, the ideals of PHC have not yet been realized [13].

Meanwhile, the combined experience of the PHC in Australia, Malaysia, Mongolia, Myanmar, Thailand, and Vietnam, has encountered challenges such as a workforce that is less trained and competent, particularly in rural and remote communities, and a lack of coordination in PHC as well as between primary and secondary care [14].

Table 1. Article summary matrix

Author, year, country, study design	Results	Recommendations
Freeman, Toby, et al. 2021, Australia, Qualitative	Australia's policy initiative is a federated state that forms Primary Health Networks (PHNs), which are regional PHC organizations that collaborate with state PHCs. The resources and support of collaboration mechanisms and increased flexibility of local funding will increase the potential of local organizations to successfully overcome ambiguity in responsibilities and promote an integrated and cohesive PHC system. However, the role of PHNs can run the risk of prioritizing competition over collaboration between services.	National uniformity must be balanced with the flexibility to reap the benefits of a multilevel federated health system, namely equipping national health systems with greater population responsiveness. Federal and state governments are creating a more cooperative policy environment encouraging collaboration to improve population health.
Appiah- Agyekum, Nana Nimo, et al., 2022, Ghana, Qualitative	Ghana did not establish a health system following the Alma-Ata Declaration and the Ottawa Charter; PHC was transferred to a medical system focused on medical-based disease management, concentrating on curative care and services. Finally, PHC transforms into mini-clinics and fails to address existing health problems through preventive, promotional, and community-based approaches	Through public policies, PHC must shift from the utilization of health services to the ability of people to make healthy life choices. More research into practical ways to reduce the influence of the medical system is needed
Ramani, Sudha, et al, 2019, India, Reviewed seminal policy documents and Qualitative	Underfunding and verticalization result in poor infrastructure at the macro level. Primary health care centers are solely concerned with national and international priority programs. Micro: Despite having a primary-level care unit structure, the PHC does not meet community expectations in terms of services, medicines, and care provided, so private practitioners are preferred	Focus on the PHC principles of UHC by providing comprehensive care that is close to the community environment, and consideration of community needs
Mash, R, et al., 2020, South Africa, Framework for community-oriented primary care (COPC)	The Metropolitan Health Service formed a task force. The COPC framework is made up of ten interconnected elements: geographic delineation of the Community Health Centers (CHCs) team, team composition, facility-based and community-based teamwork, governmental and non-governmental organization partnerships, the scope of practice, information systems, community engagement, stakeholder engagement, training and PHC team development, system preparation, and change management.	Conduct further evaluation of COPC implementation and report in the future
Kassai, R, et al., 2020 Japan Compares and analyzes	The maturity of a country's primary healthcare system, including the extent to which family doctors contribute to care delivery, varies. Challenges include a workforce that is insufficiently trained and competent, particularly in rural and remote communities, as well as a lack of coordination within primary health care and between primary and secondary care.	Improved collaboration between the public and private sectors; development of a system for evaluating and improving service quality; and promotion of high-quality community-based training programs.

Author, year, country, study design	Results	Recommendations
Adhikar, Bipin, et al., 2022 Nepal A narrative synthesis of the literature	Nepal's health system has been transformed to focus on expanding the country's peripheral healthcare network. Nepal suffers from a shortage of skilled human resources, a lack of public-private partnerships in health services, and a lack of community and stakeholder engagement.	To achieve UHC quality, new health policies must be restructured and adapted to local governments, existing health insurance schemes must be updated and adjusted, and additional research into the costs of providing services across the health sector must be conducted
Tabrizi, Ja far Sa degh, et al., 2019 Iran Protocol study	Tabriz Health Complex (THC) provides integrated care services under district health center policies and regulations. Each health team is made up of general practitioners and family health nurses who work together to provide prevention, promotion, and treatment services, particularly in the field of PTM. The health complex serves as a model of effective and efficient public-private collaboration, as well as a practical solution to many problems in the country's primary care system.	THC can deliver PHC systems and family medicine programs and realize a 20-year national vision for health
Liao, Ran, et al. 2021 China Not Mentioned	25.87% of health service users did not contact PHC facilities first; Public health centers. Referrals from PHC facilities were few, and social health insurance registration and contracts with family doctors were not linked to the user's first contact with care. Recent policies and programs have failed to encourage a patient preference for PHC facilities	Great effort is required in providing qualified general practitioners who function as 'gatekeepers' in society. stakeholders improve the quality of primary healthcare to obfuscate the hierarchical medical system
Waweru, Everlyn, 2019 Uganda Qualitative	Patient-centered care (PCC) has not been fully translated into primary healthcare practice because of individual, community, and health system factors in Uganda. Patients believe that health professionals are responsible for their health. Patients are generally not responsible for their health and are unaware of their legal rights. Nurses and clinicians are the primary providers of primary health care. Communication, caring, empathy, trust, and especially joint decision-making are all lacking in the patient-healthcare worker relationship	Continuous skill development training for health workers is required. Frontline health workers, all actors in the health system, persons in charge, supervisors, and district health teams must all be empowered. To ensure the successful implementation of PCC policies in real life, specific indicators must be developed and contextualized.
Saffer, Quds Al, et al., 2021 Saudi Arabia Descriptive analysis and Ordinary Least Squares (OLS)	Per 10,000 residents, there are 0.74 primary health care centers (PHCC). Rural areas are home to nearly 56% of PHCCs. 22% of PHCC in rural areas operate 24 hours a day, seven days a week, but this is not desirable in rural areas. Accreditation improves the availability of radiology machines, resources, and the number of services available. Because they rely on hospitals, urban areas provide general services but lack specialized services such as burn management and emergency services. Medical records are still kept on paper. The PHCC is primarily staffed by general practitioners, family doctors, and obstetrics and gynecology specialists, who are more concentrated in urban areas.	Accreditation of PHCC should be prioritized because it is positively related to service provision and health worker availability. Because of the high reliance on PHCC and advances in eHealth, PHC 24x7 operations must be considered in rural areas.

The Chinese government has taken significant steps to encourage a patient preference for PHC facilities and to create a hierarchical medical system; however, PHC facilities continue to fail to function as 'guards', with more than a quarter of healthcare users ignoring PHC facilities. Policies and programs for additional social health insurance coverage do not affect health service users' first point of contact for PHC facilities. Care users' first contact with a PHC facility was not related to whether they had a contracted family doctor or not, many patients choose secondary hospitals because they are considered to have a better quality of service than PHC [15].

Sub-Saharan African health systems struggle to provide quality primary health care to all population members [16]. This is due to poor care quality, insufficient and untrustworthy health information systems, and a focus on a small and outdated number of services [17]. PCC allows African healthcare systems to improve care quality [18]. Uganda introduced PCC as a concept in national quality improvement guidelines, but its implementation continues to face challenges due to patients' lack of involvement in health decisions and community health workers' lack of involvement [19].

Saudi Arabia provides primary preventive and curative health care services through PHCC, which provides a wide range of services such as infectious disease control through immunization, child and pregnant women's health, basic dental services, chronic disease management and follow-up, essential medicine in addition to basic dental services, and health education [20]. Although PHCC facilities are adequate, some areas have a severe shortage of health workers. Although general practitioners, family doctors, and obstetrics and gynecology doctors are more concentrated in urban areas, reliance on hospitals remains high. Medical records are still on paper, making it difficult to integrate PHCC records across multiple facilities within the system. Electronic Medical Records (EMR) are not yet in use. Accreditation is important in ensuring service and resource availability and that facilities operate at the same capacity. The focus of the 2030 health system reform vision has shifted to community empowerment [21].

Nepal has a PHCC that covers all rural and urban areas, and health posts and is run by a cadre of health workers that includes doctors, nurses, paramedics, and Women's Community Health Volunteers (FCHV). On the other hand, Nepal is facing a shortage of skilled human resources and public-private partnerships in the delivery of health services, and it still needs to increase community and stakeholder engagement [22].

Iran has become one of the world's leaders in the implementation of PHC through the Public-Private Partnership (PPP), which is a collaboration of public and private organizations formed to finance and provide health services to improve efficiency and health. Iran has also implemented a Family Medicine program to improve the healthcare system's quality, effectiveness, equity, and cost-effectiveness. The Health Complex Model is the Beginning of a New PHC Reform in Iran. It is a healthcare system that provides integrated care services to people in working areas with identified per capita payments governed by district health center policies and regulations. Each health team comprises general practitioners and family health nurses who serve approximately 4000 people by providing prevention, promotion, and treatment services, particularly in NCDs [23].

In South Africa, the national policy on PHC encourages the establishment of ward-based outreach teams composed of community health workers. The COPC approach has been adopted in the Western Cape's 2030 goals as a key strategy for improving district health services. This framework is made up of ten interconnected elements: geographic delineation of the CHCs team, CHCs team composition, facility-based and community-based teamwork, governmental and non-governmental organization partnerships, the scope of practice, information systems, community engagement, stakeholder engagement, PHC team training and development, system preparation, and change management [24].

DISCUSSIONS

The PHC-based health system should result in significant improvements in population health, where people's needs and preferences are prioritized in PHC as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation, palliative care and as close to the everyday community environment as significant gains achieved globally in primary health care implementation, progress has been uneven both between and within countries, posing an ongoing challenge to achieving equity. The field of human resources for health has been a long-standing problem and remains a tremendous challenge in efforts to implement primary health care in most countries. Similarly, even though most countries at all stages of development have increased their funding for primary health care, health financing remains inadequate, not least given the increasing demand for health care, rising health care costs. Despite major advances in information and communication technology, these advances are not always captured and used effectively on a large scale to have a positive impact on health and well-being and,

in many countries, data is of poor quality, limited or non-existent or available but underutilized either as an evidence base to improve the health system as well as to evaluate the implementation PHC.

Political commitment and leadership, governance and policy frameworks, funding and resource allocation, and community and stakeholder engagement are strategic levers for effective PHC implementation. These actions need to be developed by prioritizing inclusive and sustainable policy dialogue involving the community as the main actor, considering the context, system's strengths and weaknesses, and national, subnational and local priorities for universal health coverage.

Primary care is part of PHC which should promote a healthy lifestyle when in contact with the community, namely providing disease promotion and prevention services as a priority in the health services provided. With more health professionals providing early intervention and community health services than interventions for acute illness, it can turn health services into truly comprehensive services that can help achieve and realize UHC. Integrated services can close the gap between primary care and public health, and work together to realize the dream of the Alma-Ata Declaration 40 years ago: health for all.

CONCLUSIONS

This systematic review shows that many challenges remain in PHC implementation, undermining the health system's ability to provide universal, equitable, high-quality, and financially sustainable care. The implementation of PHC is still hampered by the medicalization of health, a shortage of skilled health personnel, poor service, a weak referral system that causes people to miss CHCs as the first point of contact frequently, the treatment that is still insufficient for users' needs, people who frequently cannot make the right decisions about their health and health care or exercise control over decisions about their health and that of their community, and a lack of public-private partnerships. There is still a long way from Astana's Vision Declaration to UHC and SDGs.

Recommendations based on the findings of this review include: collaboration and integration between public health and primary care need to be improved by reducing the ego of each profession; national policies must be balanced with the flexibility to achieve health system benefits; the government must transform the primary health care system by increasing public-private partnerships in the delivery of health services and involving the community in the development of health policies for themselves and their communities; and community empowerment.

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