A Systematic Review of Primary Healthcare Services: Evaluating Differences and Similarities Between Developed and Developing Nations

Anwar Alrashed MD[1], Hany Ramadan Mohamed[2]

[1]BSc, MBBS, KBFM, MRCGP. (Int.) MSc, (The Corresponding Author) Email: alrashed@doctor.com
2MBBS, MRCGP (Int.)

KEYWORDS

Primary Healthcare, Health System Performance, Developed Countries, Developing Countries, Healthcare Delivery, Governance Structures, Systematic Review, Health Services Research

ABSTRACT

Background: Primary healthcare (PHC) systems play a critical role in ensuring equitable and effective healthcare delivery. However, significant disparities exist in the scope and performance of PHC services between developed and developing countries. Understanding these differences is crucial for improving global health outcomes.

Objective: This systematic review aims to compare the scope and effectiveness of primary healthcare services across developed and developing countries. It seeks to identify key differences in healthcare delivery, system performance, and governance structures and provide insights into enhancing PHC services.

Methods: We conducted a comprehensive search of electronic databases, including PubMed, MEDLINE, and Scopus, and explored grey literature and reports from relevant organizations. Studies were selected based on their comparative data on PHC services in developed and developing countries, published in peer-reviewed journals or reputable sources. Data were extracted on study characteristics, population details, and key outcomes related to service delivery and system performance. Quality assessment was performed using appropriate tools for different study designs.

Results: The review identified significant variations in PHC service scope and effectiveness between developed and developing countries. Key findings include differences in healthcare delivery models, governance structures, and system performance metrics. The review highlights both strengths and challenges in various contexts, providing a comparative overview of PHC services.

Conclusions: The findings emphasize the need for context-specific strategies to improve PHC services. Recommendations include enhancing coordination and governance, addressing gaps in accountability and transparency, and focusing on scalable interventions. This review provides valuable insights for policymakers and health system planners aiming to optimize PHC services globally.

1. Introduction

Primary healthcare (PHC) has come back into relevance as a crucial tactic for enhancing population health and enhancing the efficacy, responsiveness, and efficiency of healthcare systems in recent years (Kruk et al., 2010). The Sustainable Development Goals (SDGs) were ratified by 193 nations in 2016, designating universal health coverage (UHC) as a primary objective for the international health community through 2030 (Chotchoungchatchai et al., 2020). A number of international, national, and subnational organizations agree that attaining UHC will require robust PHC systems (Kringos et al., 2013; Kruk et al., 2010; MacInko et al., 2009; Moosa et al., 2016; Ramli et al., 2019; Starfield et al., 2005).

The United Nations Development Programme defines governance as the exercise of political, economic, and administrative authority in the management of affairs at all levels. A vast array of actors are involved in health systems, including communities, governments, businesses, and non-governmental organizations (Flynn et al., 2021; Solomon, 2023). Each of these actors contributes to the creation of resources, the provision of services, and the execution of policies (Kruk et al., 2010). Current methods to governance have evolved to include market and network-based governance, reflecting the distribution of power in contemporary health systems. Traditional forms of governance were mostly hierarchical (MacInko et al., 2009; Shi, 2012).

Low- and middle-income countries (LMICs), where PHC service delivery frequently meets obstacles such emergent outbreaks, natural catastrophes, and the combined burden of infectious and non-communicable diseases, further exacerbate the complexity of health system administration (Abimbola et al., 2012; Akinola, 2007). In these situations, governance goes beyond what the government can do; communities and non-governmental actors are becoming more and more important in guaranteeing

justice, accountability, and high-quality healthcare (Abimbola et al., 2014).

Even while the significance of governance in health systems is acknowledged, there is still disagreement on how to characterize, quantify, or model it—especially in low- and middle-income countries (Abimbola et al., 2014; Yuan et al., 2017). To address these issues, several frameworks have been put forth. A more in-depth examination of governance dynamics at the PHC level is made possible, for example, by the multi-level governance paradigm, which positions communities, governments, and providers as both practitioners and actors within the health system (Organization, 2007; Who, 2007).

This study examines the multi-level governance structure in relation to PHC in low- and middle-income countries (LMICs), emphasizing the ways in which many actors collaborate to impact health outcomes. This study intends to further our understanding of how efficient governance can improve PHC service delivery and resilience, which will eventually improve health outcomes, by analyzing the governance systems in various settings.

Objective

Comprehensively analyze and compare the scope and effectiveness of primary healthcare (PHC) services in developed and developing countries. This review seeks to identify key differences and similarities in healthcare delivery, system performance, and governance structures between these contexts. By evaluating the effectiveness of various PHC interventions and governance models, the review aims to provide actionable insights and recommendations to enhance primary healthcare services globally.

2. Methodology

Data Collection

To identify relevant studies for this systematic review, we conducted an extensive search of electronic databases including PubMed, MEDLINE, and Scopus, using keywords such as "primary healthcare services," "developed countries," "developing countries," "healthcare delivery," and "health system performance." The search strategy was also expanded to include grey literature and reports from relevant organizations, such as the World Health Organization (WHO) and the World Bank. We utilized a comprehensive search approach, which included exploring ongoing trials and research registries to ensure coverage of recent and emerging studies. Duplicate records were identified and removed using reference management software, ensuring a clean and refined dataset. Initial screening involved reviewing titles and abstracts, followed by a detailed full-text assessment to determine eligibility. Studies meeting our predefined inclusion criteria were selected for the review. Additionally, we manually reviewed the reference lists of included studies to identify any additional relevant research that may have been missed in the initial searches.

Study Selection

Studies were included in the review if they provided comparative data on primary healthcare services in both developed and developing countries, were published in peer-reviewed journals or reputable sources, and included relevant outcomes related to service delivery and system performance. Studies were excluded if they did not offer comparative insights, were not published in peer-reviewed outlets, or were limited to non-comparative data such as case studies or editorials.

Data Extraction

Data were extracted using a standardized extraction form, capturing study characteristics (author, year, location, design), population details (sample size, demographics, healthcare setting), and key outcomes related to primary healthcare services (scope, effectiveness, access, quality). The extracted data were analyzed to provide a comparative overview of PHC services across developed and developing countries.

Quality Assessment

The quality of the included randomized controlled trials (RCTs) was assessed using Cochrane's risk-of-bias tool (version 1), as detailed in Chapter 8.5 of the Cochrane Handbook of Systematic Reviews of Interventions 5.1.0. This tool evaluates domains such as sequence generation (selection bias), allocation sequence concealment (selection bias), blinding of participants and personnel (performance bias), blinding of outcome assessors (detection bias), incomplete outcome data (attrition bias), selective outcome reporting (reporting bias), and other biases, with judgments categorized as low, unclear, or high risk of bias for each domain. For cohort and case-control studies, quality was assessed using the National Heart, Lung, and Blood Institute quality assessment tools, which consist of validated questions evaluating risk of bias and confounders. Responses to these questions were categorized as "yes," "no," "not applicable," "cannot be determined," or "not reported," with each study assigned an overall quality rating of "good," "fair," or "poor."

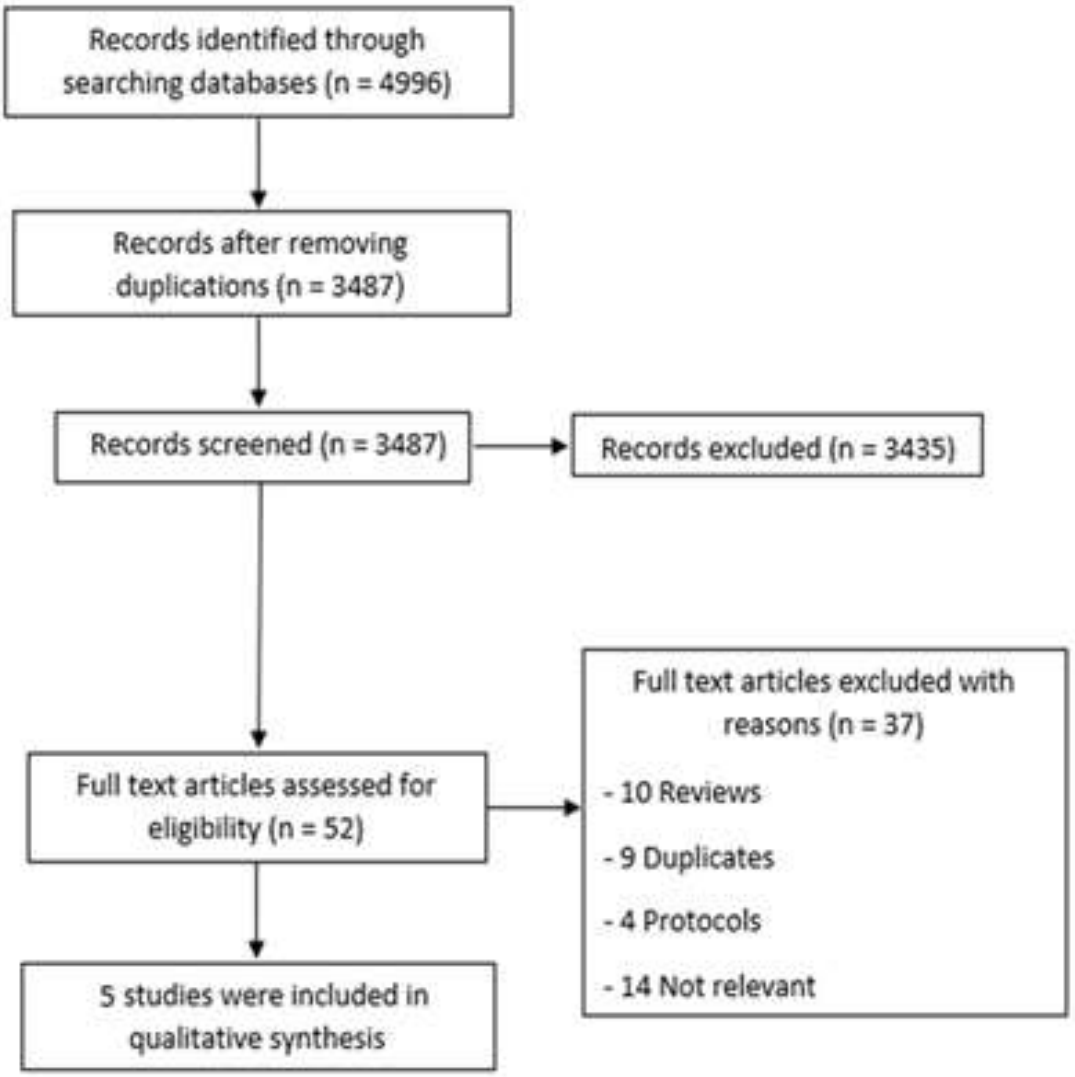

Figure 1. PRISMA flow diagram PRISMA: Preferred reporting items for systematic reviews and meta-analyses

Data Collection

The initial search across all databases yielded a total of 4,996 articles. After removing 1,509 duplicates, the titles and abstracts of the remaining 3,487 articles were screened. Out of these, 3,435 articles were excluded because they did not meeسسt the inclusion criteria. The remaining 52 articles were subjected

to full-text screening, during which 37 were further excluded. Consequently, 5 articles were deemed eligible and included in the systematic review (Abd El Fatah et al., 2019; Abimbola et al., 2014; Bitton et al., 2019; Saif-Ur-Rahman et al., 2019; Smith et al., 2012). The study selection process is illustrated in the PRISMA flow diagram shown in **Figure 1**. This comprehensive search and screening process ensured that only relevant and high-quality studies were included in the review, providing a robust basis for analyzing the effectiveness of the interventions under investigation.

Quality Assessment of the Included Studies

The overall quality of the included randomized controlled trials (RCTs) was assessed as high using the Cochrane risk-of-bias tool. For observational cohort studies, as evaluated by the NIH quality assessment tool, only one study was rated as good, while the remaining seven studies were deemed to have fair quality. Additionally, one case-control study was classified as fair quality according to the NIH quality assessment tool for case-control studies.

3. Result and Discussion

Table 1: Study Characteristics

STUDY	STUDY DESIGN	FOCUS	LOCATION	POPULATION	SAMPLE SIZE
Peter2010	Comparative Analysis	Health System Governance	Australia, England, Germany, Netherlands, Norway, Sweden, Switzerland	Government and health system data	Not specified
Razib2019	Systematic Reviews & Impact Evaluations	Policy and Governance in PHC	Various LMICs	Various PHC interventions	Not specified
Seye2014	Descriptive Analysis	PHC Governance in LMICs	Nigeria	Health system actors, PHC governance structures	Not specified
Thoraya	Cross-sectional Study	Clinical Governance in Primary Care	Egypt	Directors, providers, experts, utilizers	Not specified
Asaf2019	Comparative Analysis and Synthesis	PHC Systems in LMICs	Various LMICs	Various studies and interventions	Not specified

This table provides an overview of the study designs, focus areas, and populations covered in the reviewed studies. It highlights the diverse methodologies, from comparative analyses to systematic reviews, and the various geographical contexts, including both developed and developing countries. Notably, the studies span different regions and governance structures, reflecting a broad range of health system characteristics and challenges. Table 1

Table 2: Study Summaries

STUDY NAME	SUMMARY
Peter2010	Explores diverse governance structures in health systems across seven developed countries. Highlights variations in priority setting, performance monitoring, and accountability mechanisms. Recommendations include harmonizing strategies and enhancing coordination between agencies.
Razib2019	Reviews policy and governance interventions for primary healthcare (PHC) in LMICs. Identifies gaps in accountability, social responsibility, and public-private partnerships. Recommendations include improving accountability and transparency, and enhancing public-private partnerships.
Seye2014	Analyzes centralization versus polycentricity in PHC governance in LMICs. Highlights that centralization can streamline operations but may reduce local

	engagement. Recommendations include blending centralized policies with community-based governance.
Thoraya2019	Examines clinical governance in primary care settings, identifying discrepancies in governance indicators among different groups. Recommendations include addressing governance discrepancies, enhancing community involvement, and improving training and transparency.
Asaf2019	Assesses PHC system performance in LMICs from 2010 to 2017. Finds evidence on PHC policies, payment mechanisms, and workforce management, with emerging innovations lacking scalability evidence. Recommendations include focusing on implementation science and optimizing PHC strategies.

This table summarizes the main findings and recommendations from each study. It covers diverse topics such as governance structures, policy interventions, and clinical governance. Key takeaways include the need for harmonized strategies and enhanced community involvement, as well as addressing gaps in accountability and transparency. Each study contributes valuable insights into improving health systems and addressing existing inefficiencies. Table 2

Table 3: Recommendations for Improving Healthcare Systems

STUDY NAME	**RECOMMENDATIONS**
Peter2010	Harmonize strategies and enhance coordination between national and local agencies to address conflicts, improve data collection, and enforce regulations.
Razib2019	Improve accountability and transparency in local governance; enhance public-private partnerships; address gaps in evidence through targeted implementation research.
Seye2014	Blend centralized policies with active community-based governance to ensure responsive and effective health systems; address information asymmetry and exclusion of marginalized groups.
Thoraya2019	Address discrepancies in governance indicators; enhance community involvement; improve training and transparency to boost the quality and efficiency of primary care services.
Asaf2019	Increase emphasis on implementation science and research on PHC capacities; focus on optimizing PHC strategies; conduct rigorous evaluations; adapt interventions across different contexts.

Recommendations from the studies emphasize enhancing coordination, accountability, and community involvement in health systems. Strategies include harmonizing national and local governance efforts, improving transparency in governance, and blending centralized policies with community-based approaches. These recommendations aim to address identified gaps and improve overall health system effectiveness and equity. Table 3

Table 4: Outcomes of Healthcare System Studies

STUDY NAME	OUTCOMES
Peter2010	-Effective governance depends on clear priority setting, robust performance monitoring, and accountable mechanisms. -Diverse governance structures in different countries affect health system performance.

	-Challenges include conflicts between national and local priorities, data collection difficulties, and regulatory enforcement issues.
Razib2019	-Evidence shows significant insights into workforce management, health system models, and community engagement. -Gaps identified in accountability, social responsibility, and public-private partnerships. - Methodological weaknesses and gaps in evidence on specific governance aspects noted.
Seye2014	-Balancing centralization and polycentricity impacts PHC systems' effectiveness. -Centralized policies may streamline operations but can reduce local community engagement. -External support and challenges related to information asymmetry and exclusion of marginalized groups are significant.
Thoraya2019	-Discrepancies in governance indicators among groups noted, including variability in training and challenges in transparency and accountability. -Issues with low community participation and variability in governance quality.
Asaf2019	-Evidence available on PHC policies, payment mechanisms, and workforce, with emerging innovations lacking scalability evidence. -Community-based PHC systems with supportive policies and financing yield better outcomes and equity. -Variability in service delivery evidence and gaps in social accountability, information and quality management, and facility management identified.

The outcomes presented in this table reveal the effectiveness and challenges associated with different health system governance structures and policies. Key findings include the importance of clear priority setting and robust performance monitoring. Challenges such as conflicts between national and local priorities, variability in governance indicators, and gaps in evidence highlight areas needing further attention and improvement. Table 4

Table 5: Evidence Gaps and Research Needs

STUDY NAME	IDENTIFIED GAPS	SUGGESTED RESEARCH DIRECTIONS	IMPACT ON FIELD
Peter2010	Conflicts between national and local priorities	Harmonize strategies, improve data collection	Enhances understanding of governance structures
Razib2019	Gaps in accountability, social responsibility	Improve transparency and public-private partnerships	Addresses gaps in local governance
Seye2014	Need for external support, information asymmetry	Promote community-based governance	Strengthens local governance effectiveness
Thoraya2019	Variability in training, low community participation	Enhance training, improve community involvement	Improves quality of primary care services
Asaf2019	Variability in service delivery, scalability of innovations	Increase focus on implementation science, conduct rigorous evaluations	Optimizes PHC strategies and interventions

This table identifies significant evidence gaps and suggests future research directions. Key gaps include the need for improved accountability, transparency, and community engagement. Research should focus on harmonizing strategies, addressing local governance issues, and evaluating the scalability of innovations. Addressing these gaps is crucial for advancing understanding and improving health

system performance. Table 5

Table 6: Study Comparisons

STUDY NAME	VARIABLE/OUTCOME	COMPARISON POINTS	SIMILARITIES	DIFFERENCES
Peter2010	Governance Structures	National vs. state-level, centralized vs. decentralized	All studies focus on governance	Different approaches and effectiveness
Razib2019	Policy Interventions	PHC governance and interventions	Common focus on improving governance	Differences in types of interventions and evidence quality
Seye2014	Centralization vs. Polycentricity	Centralized vs. decentralized systems	All studies address governance structures	Focus on specific regional issues
Thoraya2019	Clinical Governance	Training, community participation	Shared focus on improving governance	Variability in governance indicators
Asaf2019	PHC System Performance	Community-based systems, policies	All studies emphasize PHC effectiveness	Variability in evidence strength and scalability

Comparing studies on various aspects of health system governance and performance highlights both commonalities and differences. While all studies focus on improving governance and effectiveness, they differ in their approaches and the specifics of their findings. This comparison underscores the need for tailored solutions and further investigation into how different governance structures impact health system outcomes. Table 6

Table 7: Interventions and Effectiveness

STUDY NAME	INTERVENTION TYPE	TARGET POPULATION	EFFECTIVENESS	IMPLEMENTATION ISSUES
Peter2010	Governance Structures	Various countries	Mixed effectiveness	Coordination challenges
Razib2019	Policy and Governance	LMICs	Varied effectiveness	Gaps in evidence and methodological issues
Seye2014	Centralized vs. Community-based	LMICs	Centralization vs. local engagement	Need for community support
Thoraya2019	Clinical Governance Improvements	Primary care providers	Mixed effectiveness	Training and participation issues
Asaf2019	Community-based PHC Systems	LMICs	Effective with supportive policies	Scalability concerns

This table examines the types of interventions implemented in different studies and their effectiveness. It highlights that while some interventions, like community-based systems, show positive results, others face challenges such as scalability and coordination issues. Understanding these factors is essential for designing effective health system interventions and addressing implementation barriers.

Table 7

Table 8: Geographic and Contextual Differences

STUDY NAME	GEOGRAPHIC LOCATION	CONTEXTUAL FACTORS	REGIONAL VARIATIONS IN FINDINGS
Peter2010	Australia, England, Germany, Netherlands, Norway, Sweden, Switzerland	National and state-level governance	Differences in governance structures and effectiveness
Razib2019	Various LMICs	Health system models, community engagement	Variability in evidence and interventions
Seye2014	Nigeria	Centralization vs. polycentric governance	Focus on specific regional challenges
Thoraya2019	Egypt	Clinical governance, community participation	Variability in governance indicators
Asaf2019	Various LMICs	Community-based systems, policy support	Variability in service delivery and scalability

Geographic and contextual factors play a significant role in health system performance and governance. The variations in findings across different regions reflect the impact of local challenges and governance structures. This table emphasizes the need for context-specific solutions and the consideration of regional differences when implementing health system improvements. Table 8

Table 9: Policy Implications

STUDY NAME	POLICY RECOMMENDATIONS	POTENTIAL IMPACT	IMPLEMENTATION CONSIDERATIONS
Peter2010	Harmonize strategies, enhance coordination	Improved health system performance	Need for inter-agency collaboration
Razib2019	Improve accountability, enhance partnerships	Better local governance	Requires targeted implementation research
Seye2014	Blend centralized and community-based governance	Effective health systems	Address external support needs
Thoraya2019	Address governance discrepancies, improve training	Higher quality primary care services	Focus on training and community involvement
Asaf2019	Increase emphasis on implementation science, optimize strategies	Improved PHC outcomes and equity	Conduct rigorous evaluations and adapt strategies

The policy recommendations derived from the studies stress the importance of improving coordination, accountability, and community involvement. Effective implementation of these recommendations could enhance health system performance and equity. However, successful application requires careful consideration of contextual factors and targeted research to address specific implementation challenges. Table 9

Qualitative assessment

Study Characteristics and Focus

The reviewed studies offer a rich tapestry of insights into health system governance and primary healthcare (PHC) across various contexts. The diversity in study designs—ranging from comparative analyses to systematic reviews and descriptive analyses—reflects a broad spectrum of methodological approaches. This variety is evident in the geographical scope, including both developed countries (PETER2010) and low- and middle-income countries (LMICs) (RAZIB2019, SEYE2014, ASAF2019), which highlights the varying governance structures and health system challenges faced globally. The focus on different aspects, such as clinical governance (THORAYA2019) and centralization versus community-based approaches (SEYE2014), underscores the complex and multifaceted nature of health system performance.

Summary of Findings

The studies collectively reveal significant themes in health system governance and effectiveness. PETER2010's examination of governance structures across developed countries underscores the need for harmonized strategies and improved coordination among health agencies. The review by RAZIB2019 highlights critical gaps in accountability and public-private partnerships in LMICs, suggesting a need for increased transparency and targeted research. SEYE2014's analysis of centralization versus polycentricity illustrates how centralization can streamline operations but potentially hinder local engagement. THORAYA2019 identifies discrepancies in clinical governance indicators, advocating for enhanced community involvement and improved training. ASAF2019's synthesis of PHC systems from 2010 to 2017 emphasizes the effectiveness of community-based systems but points to challenges in scalability and evidence gaps.

Recommendations for Healthcare Systems

The recommendations emerging from these studies emphasize several key areas for improvement. PETER2010 advocates for greater coordination and strategy harmonization between national and local agencies. RAZIB2019 calls for enhanced transparency and public-private partnerships to address governance gaps. SEYE2014 suggests blending centralized policies with community-based approaches to improve responsiveness and effectiveness. THORAYA2019 highlights the need to address discrepancies in governance and enhance training and community involvement. ASAF2019 stresses the importance of implementation science and rigorous evaluations to optimize PHC strategies and address scalability issues.

Outcomes and Implications

The outcomes from these studies indicate that effective governance requires clear priority setting, robust performance monitoring, and addressing challenges such as conflicts between national and local priorities. Variability in governance indicators and gaps in evidence reveal the need for continued research and refinement of health system policies. The effectiveness of different interventions varies, with some demonstrating positive outcomes, while others face challenges such as scalability and implementation issues.

Evidence Gaps and Research Directions

Several evidence gaps are evident from the studies. PETER2010 identifies the need to harmonize

national and local priorities. RAZIB2019 points out gaps in accountability and transparency. SEYE2014 highlights the need for community-based governance and addressing information asymmetry. THORAYA2019 emphasizes the importance of improving training and community involvement. ASAF2019 calls for a greater focus on implementation science and rigorous evaluations. Addressing these gaps is crucial for advancing our understanding and improving the effectiveness of health systems.

Comparative Analysis and Policy Implications

Comparing the studies reveals both commonalities and differences in approaches to health system governance. While all studies focus on improving governance and effectiveness, they differ in their specific recommendations and the contextual factors influencing outcomes. The policy implications stress the need for context-specific solutions, improved coordination, and enhanced community involvement. Implementing these recommendations requires careful consideration of local contexts and targeted research to address specific challenges.

Discussion

Governance Structures and Effectiveness

One of the key insights from this review is the impact of governance on PHC effectiveness. Developed countries benefit from well-defined governance structures that include clear priority-setting, performance monitoring, and accountability mechanisms. In contrast, developing countries often struggle with poor accountability, transparency, and governance discrepancies. These issues can hinder the effectiveness of PHC services and highlight the need for improved coordination between national and local agencies. For instance, the need for harmonized strategies and enhanced transparency is emphasized, suggesting that governance improvements could significantly impact service delivery in these settings.

Centralization vs. Decentralization

The review also explores the centralization versus decentralization debate. Centralized systems can standardize and streamline services, but they may lack local responsiveness and fail to address specific community needs effectively. A blended approach, combining centralized policies with decentralized local governance, appears to be more effective. This approach allows for the standardization of essential services while ensuring that local issues and needs are addressed, thus improving overall PHC outcomes.

Challenges and Recommendations

Several challenges are identified, including variability in training, community participation, and the scalability of innovations. Recommendations include enhancing coordination between national and local levels, improving community involvement, and focusing on evidence-based strategies. Addressing these challenges through targeted policies and interventions can improve the quality and effectiveness of PHC services. For instance, improving training and community engagement can lead to better service delivery and more effective governance.

Evidence Gaps and Future Research

The review also identifies key evidence gaps, such as the need for better data collection, accountability, and transparency. Future research should focus on developing and evaluating governance models, exploring community-based approaches, and advancing implementation science. By addressing these gaps, researchers can provide more nuanced insights into the effectiveness of different PHC systems and interventions, ultimately leading to better-informed policies and practices.

Policy Implications

The policy implications of this review underscore the importance of context-specific solutions. Policies should aim to enhance coordination, transparency, and public-private partnerships while being adaptable to local contexts. Implementing these recommendations could improve PHC effectiveness and equity globally. Successful policy implementation will require careful consideration of local needs and challenges, as well as targeted research to address specific gaps identified in the review.

The researchers reported that impact evaluations predominantly assessed the effects of community engagement interventions. Additionally, some evaluations focused on contracting out PHC services, workforce management interventions, and the introduction of new health system models (Alhassan et al., 2015; Heard et al., 2013; Santos et al., 2017; Sudhipongpracha, 2013).

The authors observed that policies that explicitly support a system-wide emphasis and higher public spending on PHC are linked to better outcomes and equity, drawing from the substantial research on PHC policies, finance, workforce, performance measurement, and quality (Anselmi et al., 2015; Macinko et al., 2010; Pesec et al., 2017). They underlined that the goal of these policies should be to combine the provision of care with other community-level initiatives that promote health. Although a single best financing model for PHC could not be found, it was noted that user fees have a detrimental effect on access and use (Lagarde et al., 2012; Lagarde & Palmer, 2011). Furthermore, the study revealed that fee-for-service (FFS) by itself does not produce superior results when contrasted with alternative financing methods. The authors also discovered that community-based PHC programs are generally more successful when they involve the public and private sectors, actively monitor and connect with selected populations, and make use of well-managed interdisciplinary teams (Freeman et al., 2012; Iwelunmor et al., 2016; Lê et al., 2016; Perry et al., 2014). Furthermore, they noted that encouraging providers with both intrinsic and extrinsic rewards leads to a decrease in provider burnout and maybe improved results (Aninanya et al., 2016).

Strengths and Limitations

This systematic review offers significant strengths by providing a comprehensive comparative analysis of primary healthcare (PHC) services across developed and developing countries, utilizing a robust methodology that includes diverse data sources and rigorous quality assessments. The inclusion of multiple study designs and the broad geographic scope enhance the generalizability and relevance of the findings, offering valuable insights into variations in healthcare delivery and governance. However, the study also has limitations. The reliance on published data and the exclusion of non-peer-reviewed sources may introduce publication bias, potentially overlooking relevant grey literature. Additionally, the variability in study quality and methodological approaches across the included studies may affect the consistency and comparability of the results. The limited number of high-quality studies available for some regions and aspects further constrains the comprehensiveness of the review, highlighting the need for further research to address these gaps and provide a more nuanced understanding of PHC systems globally. In conclusion, developed countries generally have more effective and well-resourced PHC systems compared to developing nations, which face resource constraints and inconsistent service delivery. Effective governance, balancing centralization with local responsiveness, and addressing gaps in data and transparency are crucial for improving PHC outcomes globally.

4. Conclusion and future scope

1. PHC Systems: Generally, developing countries have ineffective, ill-equipped PHC systems, while those in developed countries are more effective and well-resourced; the former face inadequate resources and variable patterns of service delivery.

2. Impact of Governance: The influence of good governance on PHC cannot be overemphasized; it is characterized by priority-setting and coordination. Most developing countries have been plagued with issues such as poor accountability and quality differences in governance. Improved transparency and coordination are recommended.

3. Centralization vs. Decentralization: A centralized system is needed to standardize services, and

on the other hand, it may lose local responsiveness. A combined approach with centralized policies and local governance can be recommended to achieve better outcomes in PHC.

4. Challenges and Recommendations: Some of the challenges to be addressed are variability in training and community participation. Improved coordination, community involvement, and evidence-based strategies are some of the recommendations.

5. Evidence Gaps and Research: There exist gaps at almost everything, from data collection to accountability and transparency. The governance models, community-based approaches, and implementation science toward PHC system strengthening become the key areas for future research.

6. Policy Implications: This would better coordinate, transparent, and have public-private partnership policies with accommodations to local contexts in order to enhance effectiveness and equity in PHC.

Reference

[1] Abd El Fatah, T. A., Ali, N. A., Elazazy, E. M., Dowidar, N. L., Abd Elgalil, H. M., & Mohamed, S. S. (2019). Assessment of Clinical Governance in Primary Health Care Services: A Case Study on Dakahlia Governorate, Egypt. The Egyptian Journal of Hospital Medicine. https://doi.org/10.21608/ejhm.2019.36899

[2] Abimbola, S., Negin, J., Jan, S., & Martiniuk, A. (2014). Towards people-centred health systems: A multi-level framework for analysing primary health care governance in low-and middle-income countries. Health Policy and Planning, 29, ii29-ii39. https://doi.org/10.1093/heapol/czu069

[3] Abimbola, S., Okoli, U., Olubajo, O., Abdullahi, M. J., & Pate, M. A. (2012). The midwives service scheme in Nigeria. PLoS Medicine, 9(5). https://doi.org/10.1371/journal.pmed.1001211

[4] Akinola, S. R. (2007). Coping with Infrastructural Deprivation through Collective Action among Rural People in Nigeria. Nordic Journal of African Studies, 16(1), 30–46.

[5] Alhassan, R. K., Nketiah-Amponsah, E., Spieker, N., Arhinful, D. K., Ogink, A., Van Ostenberg, P., & Rinke De Wit, T. F. (2015). Effect of community engagement interventions on patient safety and risk reduction efforts in primary health facilities: Evidence from Ghana. PLoS ONE, 10(11). https://doi.org/10.1371/journal.pone.0142389

[6] Aninanya, G. A., Howard, N., Williams, J. E., Apam, B., Prytherch, H., Loukanova, S., Kamara, E. K., & Otupiri, E. (2016). Can performance-based incentives improve motivation of nurses and midwives in primary facilities in northern Ghana? A quasi-experimental study. Global Health Action, 9(1). https://doi.org/10.3402/GHA.V9.32404

[7] Anselmi, L., Lagarde, M., & Hanson, K. (2015). Equity in the allocation of public sector financial resources in low-and middle-income countries: A systematic literature review. In Health Policy and Planning (Vol. 30, Issue 4, pp. 528–545). https://doi.org/10.1093/heapol/czu034

[8] Bitton, A., Fifield, J., Ratcliffe, H., Karlage, A., Wang, H., Veillard, J. H., Schwarz, D., & Hirschhorn, L. R. (2019). Primary healthcare system performance in low-income and middle-income countries: a scoping review of the evidence from 2010 to 2017. BMJ Global Health. https://doi.org/10.1136/bmjgh-2019-001551

[9] Chotchoungchatchai, S., Marshall, A. I., Witthayapipopsakul, W., Panichkriangkrai, W., Patcharanarumol, W., & Tangcharoensathien, V. (2020). Primary health care and sustainable development goals. Bulletin of the World Health Organization, 98(11), 792–800. https://doi.org/10.2471/BLT.19.245613

[10] Flynn, C., Yamasumi, E., Stephen Fisher, Snow, D., Grant, Z., Kirby, M., Browning, P., Rommerskirchen, M., & Russel, I. (2021). United nations development program: Peoples' climate vote. In United Nations Development Programme (Vol. 1). https://www.undp.org/publications/peoples-climate-vote

[11] Freeman, P., Perry, H. B., Gupta, S. K., & Rassekh, B. (2012). Accelerating progress in achieving the millennium development goal for children through community-based approaches. In Global Public Health (Vol. 7, Issue 4, pp. 400–419). https://doi.org/10.1080/17441690903330305

[12] Heard, A., Nath, D. K., & Loevinsohn, B. (2013). Contracting urban primary healthcare services in Bangladesh - effect on use, efficiency, equity and quality of care. Tropical Medicine and International Health, 18(7), 861–870. https://doi.org/10.1111/tmi.12113

[13] Iwelunmor, J., Blackstone, S., Veira, D., Nwaozuru, U., Airhihenbuwa, C., Munodawafa, D., Kalipeni, E., Jutal, A.,

Shelley, D., & Ogedegbe, G. (2016). Toward the sustainability of health interventions implemented in sub-Saharan Africa: A systematic review and conceptual framework. In Implementation Science (Vol. 11, Issue 1). https://doi.org/10.1186/s13012-016-0392-8

[14] Kringos, D. S., Boerma, W., Van Der Zee, J., & Groenewegen, P. (2013). Europe's strong primary care systems are linked to better population health but alsoto higher health spending. Health Affairs, 32(4), 686–694. https://doi.org/10.1377/hlthaff.2012.1242

[15] Kruk, M. E., Porignon, D., Rockers, P. C., & Van Lerberghe, W. (2010). The contribution of primary care to health and health systems in low- and middle-income countries: A critical review of major primary care initiatives. Social Science and Medicine, 70(6), 904–911. https://doi.org/10.1016/j.socscimed.2009.11.025

[16] Lagarde, M., Barroy, H., & Palmer, N. (2012). Assessing the effects of removing user fees in Zambia and Niger. Journal of Health Services Research and Policy, 17(1), 30–36. https://doi.org/10.1258/jhsrp.2011.010166

[17] Lagarde, M., & Palmer, N. (2011). The impact of user fees on access to health services in low- and middle-income countries. In Cochrane Database of Systematic Reviews (Vol. 2011, Issue 4). https://doi.org/10.1002/14651858.CD009094

[18] Lê, G., Morgan, R., Bestall, J., Featherstone, I., Veale, T., & Ensor, T. (2016). Can service integration work for universal health coverage? Evidence from around the globe. Health Policy, 120(4), 406–419. https://doi.org/10.1016/j.healthpol.2016.02.007

[19] Macinko, J., Dourado, I., Aquino, R., de Fátima Bonolo, P., Lima-Costa, M. F., Medina, M. G., Mota, E., de Oliveira, V. B., & Turci, M. A. (2010). Major expansion of primary care in Brazil linked to decline in unnecessary hospitalization. Health Affairs, 29(12), 2149–2160. https://doi.org/10.1377/hlthaff.2010.0251

[20] MacInko, J., Starfield, B., & Erinosho, T. (2009). The impact of primary healthcare on population health in low- and middle-income countries. In Journal of Ambulatory Care Management (Vol. 32, Issue 2, pp. 150–171). https://doi.org/10.1097/JAC.0b013e3181994221

[21] Moosa, S., Mash, R. B., & Reid, S. (2016). Family medicine in Africa. In Family Medicine: The Classic Papers (pp. 329–335). https://doi.org/10.1201/9781315365305

[22] Organization, W. H. (2007). Everybody's business-strengthening health systems to improve health outcomes: WHO's framework for action. Geneva: World Health Organization. World Health Organization.

[23] Perry, H. B., Zulliger, R., & Rogers, M. M. (2014). Community health workers in low-, middle-, and high-income countries: An overview of their history, recent evolution, and current effectiveness. Annual Review of Public Health, 35, 399–421. https://doi.org/10.1146/annurev-publhealth-032013-182354

[24] Pesec, M., Ratcliffe, H. L., Karlage, A., Hirschhorn, L. R., Gawande, A., & Bitton, A. (2017). Primary health care that works: The Costa Rican experience. Health Affairs, 36(3), 531–538. https://doi.org/10.1377/hlthaff.2016.1319

[25] Ramli, A. S., Taher, S. W., Zakaria, Z. F., Ali, N., Shamsuddin, N. H., Wong, P. F., Talib, N. H., & Ismail, S. B. (2019). The Primary Health Care Performance Initiative (PHCPI): Issues and Challenges for Malaysia as a Trailblazer Country. Journal of Clinical and Health Sciences, 4(1), 4. https://doi.org/10.24191/jchs.v4i1.7278

[26] Saif-Ur-Rahman, K. M., Mamun, R., Nowrin, I., Hossain, S., Islam, K., Rumman, T., Kabir, E., Rahman, A., Dahal, N., & Anwar, I. (2019). Primary healthcare policy and governance in low-income and middle-income countries: an evidence gap map. BMJ Global Health. https://doi.org/10.1136/bmjgh-2019-001453

[27] Santos, L. M. P., Oliveira, A., Trindade, J. S., Barreto, I. C. H. C., Palmeira, P. A., Comes, Y., Santos, F. O. S., Santos, W., Oliveira, J. P. A., Pessoa, V. M., & Shimizu, H. E. (2017). Recherche opérationnelle: Davantage de médecins pour aller vers la couverture sanitaire universelle au Brésil. Bulletin of the World Health Organization, 95(2), 103–112. https://doi.org/10.2471/BLT.16.178236

[28] Shi, L. (2012). The Impact of Primary Care: A Focused Review. Scientifica, 2012, 1–22. https://doi.org/10.6064/2012/432892

[29] Smith, P. C., Anell, A., Busse, R., Crivelli, L., Healy, J., Lindahl, A. K., Westert, G., & Kene, T. (2012). Leadership and governance in seven developed health systems. In Health Policy. https://doi.org/10.1016/j.healthpol.2011.12.009

[30] Solomon, B. D. (2023). United Nations Development Programme (UNDP). In Dictionary of Ecological Economics: Terms for the New Millennium (pp. 564–565). https://doi.org/10.4337/9781788974912.U.6

[31] Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. In Milbank Quarterly (Vol. 83, Issue 3, pp. 457–502). https://doi.org/10.1111/j.1468-0009.2005.00409.x

[32] Sudhipongpracha, T. (2013). Measuring community empowerment as a process and an outcome: preliminary evaluation of the decentralized primary health care programs in northeast Thailand. Community Development, 44(5), 551–566. https://doi.org/10.1080/15575330.2013.849748

[33] Who. (2007). Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. Production, 1–56. https://doi.org/10 July 2012

[34] Yuan, B., Jian, W., He, L., Wang, B., & Balabanova, D. (2017). The role of health system governance in strengthening the rural health insurance system in China. In International Journal for Equity in Health (Vol. 16, Issue 1). https://doi.org/10.1186/s12939-017-0542-x