Comprehensive Primary Health Care in South America: contexts, achievements and policy implications

Atención primaria integral en salud en Sudamérica: contexto, logros e implicaciones políticas

Abstract

This article summarizes an extensive review of South American experiences with primary health care since the Declaration of Alma-Ata. It aims to address the following specific questions: What are the enabling and constraining historical and structural conditions for primary health care policies and practices? How has health care reform supported or undermined primary health care? What evidence exists on the effectiveness of primary health care? What strategies are common to best practices? What evidence exists on the roles of citizen participation and intersectoral action? And finally, what are the policy lessons to be learned from these experiences? Narrative synthesis was used to identify and examine patterns in the data consistent with these questions. Conditions that were found to promote successful implementation of primary health care are outlined, together with features of effective primary health care systems that help create more equitable health services and health outcomes.

Primary Health Care; Health Policy; Comprehensive Health Care

Introduction

Diverse interpretations of primary health care have existed since the first international declaration underlining its importance held in Alma-Ata in 1978. The Alma-Ata Declaration on Primary Health Care emphasized that systems should: reflect local needs; integrate social, biomedical and public health activities, including the provision of safe water, food security, local endemic disease control and access to essential drugs; encourage health-related actions across other sectors; work to foster strong community participation. For a number of reasons beyond the scope of this article, other variations on this concept of primary health care quickly arose with emphasis on more selective and basic care approaches. Basic care refers to the gate-keeper model that stresses the importance of general practice or family medicine providers as the point of entry into the health system. Selective primary health care focuses on “a limited number of high-impact services to address some of the most prevalent health challenges in developing countries” (p. 19).

This article summarizes an extensive review of South American experiences with primary health care since the 1978 Declaration of Alma-Ata. It was conducted between 2007 and 2008 as part of the first phase of a four-year international research/capacity building project: Revitalizing Health for All (RHFA). The RHFA project focused on comprehensive primary health care or prima-
ry health care experiences that incorporated a rights-based approach to health that meant providing health care to individuals and families and offered a range of other services including; self-help and health education group activities; community development and organization; social action via community mobilization, social marketing and campaigning; working across sectors to bring about community-wide improvement in health status; advocacy and coalition-building to promote changes in policies that affect health equity and its social determinants.

Methods

The first phase of the review comprised of a comprehensive literature search of seven bibliographic databases conducted by the Canadian research hub using the OVID interface: MEDLINE (1966 to present), EMBASE (1980 to present), HealthStar (1966 to 1998), HealthStar (1999 to present), CINHAL (1982 to present), the Cochrane Central Register of Controlled Trials (1st quarter of 2007) and Socio Abstracts. Search keywords were primary care, comprehensive primary care, primary health care, equity, participatory, intersectoral, multisectoral, access, community capacity, social participation, capacity building, community based research, civil society and social determinants. This search identified 2,059 studies, of which 53 were selected for inclusion in this review using the following criteria: definition of comprehensive primary health care included at least one of the characteristics of comprehensiveness i.e., the system goes beyond the provision of simple primary health care services, programs or policies (incorporation of a rights-based approach, community participation, intersectoral collaboration, comprehensiveness, equity orientation, action on the social determinants of health); the study included empirical data from research processes (i.e., did not just provide a simple commentary); the program or study area was located in Latin America and the date of the program or study was post 1978. Although no methodology or design based criteria were used, the review did assess the robustness of the evidence using norms appropriate to the methodology, which differed for qualitative and for quantitative designs. Of the original 53 studies reviewed, 36 were concerning South America.

The second phase focused on reviewing grey literature obtained through searches of the webpages of regional Ministries of Health, a solicitation to Pan American Health Organization (PAHO) officials and contacts in academic research institutions and Ministries of Health.

The PAHO and Biblioteca Virtual de Salud (BVS) (http://regional.bvsalud.org/php/index.php) databases were also consulted. The original databases identified by the Canadian hub were re-searched using the keywords policy, process, political, plan, planning and implementation. These second phase searches yielded an additional 69 pieces of literature, of which 23 met the inclusion criteria. Fifteen of the total of 59 studies on comprehensive primary health care in South America included in the final review presented here were grey literature (Figure 1).

Studies were examined to identify the effect of comprehensive primary health care on access, vulnerability and risk exposure, social participation, intersectoral action and equity in health outcomes. Topical themes were used to review each article. If an article or study did not significantly explore any one of the following it was not included in the review.
1. Key study questions, designs and methods.
2. Program or study’s definition of primary health care.
3. Characteristics of the comprehensive primary health care program or policy;
   i. Incorporation of a rights-based approach to health;
   ii. Citizen participation;
   iii. Intersectoral collaboration;
   iv. Service comprehensiveness;
   v. Equity orientation: effectiveness at reducing health inequities and stimulating action on the social determinants of health.
4. Lessons learned about the implementation of comprehensive primary health care.
5. Lessons learned about comprehensive primary health care research.

Each program or policy was given a rating of 0, 1 or 2 depending on the presence of each of the five comprehensive primary health care characteristics stated above, where: 0 = characteristic not present, 1 = minimally present or implicit, and 2 = strongly present or explicit. A random selection of the articles rated was blindly reviewed and rated by researchers at the University of Ottawa and ratings compared with the South American team’s assessment. Any differences were discussed to reach a consensus and ensure clarity on the allocation of future ratings. The rating system was judged as being sufficiently rigorous for ongoing assessment purposes. Findings of the reviews were then juxtaposed, integrated and interpreted using narrative synthesis involving a systematic review process that focused on answering specific research questions. The resulting summary of findings was used to inform the conclusions of this study.
Results

Features of the studies that met selection criteria

The majority of the studies were carried out in Brazil (25%), Colombia (14%), Chile (8%), Ecuador (8%), Argentina (8%), Bolivia (7%), Peru (7%) and Venezuela (7%). Few studies were carried out in Paraguay (3%) or Uruguay (2%), and some were regional analyses including various countries (10%). The majority of the population served by primary health care programs and policies with some degree of comprehensiveness were marginalized, vulnerable, excluded and/or indigenous. Three general key research questions were explored by the 59 studies selected. The first concerned the health effects of primary health care programs and generated more technical, rigorous or empirical studies (22%). The second explored the dynamics of and changes in national primary health care programs over time (10%). The third question regarded sociopolitical contexts and processes related to primary health care policies and the effects these have on implementation (68%). Empirical data regarding this question was often descriptive and took a broader, theoretical approach in the form of case studies, syntheses and literature reviews (Table 1).

Highlights from the narrative syntheses are organized into the following three discussions: (1) historical and structural processes that influenced the implementation of comprehensive primary health care in South America; (2) how various types of health care reform supported or undermined comprehensive primary health care; (3) evidence on the effectiveness of comprehensive primary health care in terms of increased equity in access, reduced vulnerability and risk exposure and equitable increases in health outcomes.

The experiences described by the studies fall along an effectiveness spectrum that ranges from complete and ideal implementation of comprehensive primary health care to varying degrees of partial implementation. Some studies concerned the structure of the health system as a whole, while others explored a local program or project.
that embodies some of the comprehensive primary health care characteristics of interest.

**Historical and structural processes that influenced definitions of primary health care in South America**

Public health efforts in the region prior to Alma-Ata focused on sanitary measures to control and eradicate infectious disease. Subsequently, primary health care was put in place in Latin America with support from the PAHO. However, with the exception of a few countries such as Cuba and Costa Rica, primary health care largely comprised of basic care with a biomedical orientation. For a brief period of time following Alma-Ata, an integrated community oriented approach with support for families and the environment was widely advocated. However, this more comprehensive approach was closely followed by selective primary health care models associated with neo-liberal health policies. Structural adjustment policies associated with neo-liberal reforms led to mandatory cuts in public spending, government downsizing, increased reliance on the market and political, administrative and fiscal decentralization. The result of this process on health policy was a push to privatize services and the adoption an increasingly market orientated approach with minimum, cost-effective interventions targeted at specific groups. These policies led to a general erosion of support for a more comprehensive primary health care model.

Structural social inequality is common to almost all of the countries in the region. By the 1980s and 1990s, this had resulted in the formation of segmented health systems in the majority of South American countries which favored the inclusion of urban workers and excluded poor and rural populations. At the same time, the challenges facing these health systems increased due in part to the continuing influence of the epidemiological transition (during which rates of chronic disease began to outstrip rates of infectious disease) and the social organization of responses to the determinants of these chronic conditions.

This review found that 46% of the studies did not include an explicit definition of primary health care. For those that included a definition, the Declaration of Alma-Ata was the most frequently cited (~33% of the studies). However, the employment of this definition varied according to the particular aspects health system reforms and socioeconomic and political circumstances in each country. Some primary health care systems were defined as liberal and neo-liberal models, such as those implemented under Pinochet in Chile in the 1980s and under the Ley nº. 100 in Colombia in 1993. Other selective primary health care models emerged because of the formation of specific programs or projects such as the Comités Locales de Administración de Salud in Peru and cost-effective nutrition programs in Argentina. Other elements identified as important to the shaping of primary health care definitions in South America during this period included model family and community medicine programs or policies with an emphasis on the intercultural capacity of primary health care.

Progressive health system reforms informed only 17% of the definitions of primary health care. Progressive health system reforms across South America show a common pattern in terms of comprehensiveness and universality in health systems and primary health care program design and implementation. The reforms move away from the commercialization and privatization.
of health systems and advocate a stronger role for the state and increased involvement of social movements and community organizations in health services and program decision-making. Such reforms generally occurred in conjunction with democratization processes embedded within wider economic, social and legal or constitutional changes that framed health as a fundamental human right and developed as part of public policies that emphasized social equity and embraced participative democracy. The biopsychosocial and intercultural health models underlying such reforms also implied a stronger role for the family, community, inter-sectoral service provision and policies and social participation. The empowerment ethos described in many of these reforms valued the family, locally autonomous communities and social organizations for their contributions to self-care, planning, administration, monitoring and evaluation of health system activities, and creating greater political accountability and transparency.

Although they represented the minority of the approaches to comprehensive primary health care described in the literature, progressive health system reforms were of particular interest to this study as they tended to fulfill more of the comprehensive primary health care selection criteria and because they were oriented towards achieving health as a right through the creation of equitable access to health services and action on the social determinants of health (Figure 2). These approaches frequently cited Alma-Ata’s emphasis on community and family and generated services organized on a territorial basis where the population was assigned to teams of health professionals and health centers. Human resources were geared towards multidisciplinary team practices, horizontal communication between providers, individuals, families and communities and an intercultural balance between local knowledge and Western medicine. Health services were seen as political and social processes, highlighting the importance of both community participation and intersectoral service provision. Examples of such reforms were found in the following initiatives: the Salud a su Hogar program (2004) in Bogotá, Colombia; the plan Modelo de Salud Familiar Comunitaria Intercultural (2007) in Bolivia; the Programa Saúde da Família (PSF) (1994) and the Health Agents Program in Brazil; the plan AUGE...
In addition to exploring the wider social context behind primary health care development, the purpose of the first phase of the literature review was to derive lessons from past comprehensive primary health care experiences with respect to the five topical themes described above: (1) the incorporation of a rights-based approach to health; (2) citizen participation; (3) intersectoral collaboration; (4) service comprehensiveness, and (5) the equity orientation of health systems: effectiveness at reducing health inequities and stimulating action on the social determinants of health.

The findings for each of these characteristics are discussed below.

- **Incorporation of a rights based approach to health**

Rights-based health policies have been developed within the legal and constitutional frameworks of many countries in the region, responding to processes such as social participation, democratization, decentralization, governance and stewardship and a tradition of external and internal sociopolitical and economic influence. In contexts where the rights-based approach was firmly in place and where health care was considered a universal right for all and organized in a unified rather than segmented and fragmented manner, government stewardship of comprehensive primary health care formulation and implementation was considerably stronger. Health was often seen to be a key political issue and an important source of popular struggle.

The health issue was a driving force during the development of the Brazilian Constitution of 1988 that established health as a right to be guaranteed by the State. This in turn resulted in the establishment of a unified and universal health system organized under the principles of decentralization and comprehensiveness that currently adopts primary health care as a model of service delivery. Another example of where the rights-based approach contributed to the effectiveness of comprehensive primary health care was through Articles 83 and 84 of the 1999 Venezuelan Constitution that declared health a fundamental human right to be guaranteed by the state and created a public health system that provides free health services, prioritizes disease prevention and health promotion and provides for state regulation of both the private and public health sectors. Under this constitutional framework, the comprehensive primary health care program, called Barrio Adentro, grew rapidly in neighborhoods that had up until then been excluded from traditional health care coverage. Initially, health needs and demands under this program were identified informally until the creation of Comités de Salud (health committees). Health policies were also created in response to a focus on social justice and social inclusion as the right to health became part of the social exclusion discourse used to demand access to health services.

In cases with a weak rights-based approach, it was more difficult to implement and coordinate primary health care. Fragmented efforts were made through a limited number of initiatives undertaken by progressive local governments such as experiences in Bogotá, Colombia and Rosario, Argentina.

- **Citizen participation**

Rights-based approaches to health system reform were adopted alongside increased social and citizen mobilization and participation. This movement was the impulse for many of the changes made to social and health policy in the 1980s, 1990s and 2000s as community participation in primary health care contributed to enhanced community capacities and resilience. These changes in primary health care were part of a general surge of progressive social, economic and political reforms that provided further leverage for community autonomy, organization and participation, and led to increasing popular demands for government accountability. Brazil and Venezuela provide rich examples of bottom-up approaches with strong community participation and empowerment that had a concrete effect on the formulation, implementation and evaluation of health policies and programs.

In contrast, where community participation occurred within a top-down approach, often as a part of externally mandated funding initiatives, citizen contributions to decision-making were less meaningful and programs did not necessarily lead to an improvement in the match between needs and services. For example, although neoliberal health reforms implemented in Colombia since 1993 viewed participation as instrumental to the goals of health insurance or
provider organizations and to identifying needs and subsequent marketing of services, participation was neither conceived as a community right nor as a means for decision making 45.

Improvements in governance, understood as the symmetric and regulated interaction between civil society and government in the process of identifying problems and solutions, is an important factor in the implementation of a more comprehensive primary health care in South America 46. Various examples from South America suggested that good governance requires the democratization of institutional processes and decision-making and the strengthening of citizen and community autonomy 47,48. Decentralization is one of the approaches to ensure improved democratization. The concept of decentralization took on different meanings in different settings. However, when accompanied by a transfer of power and resources to local communities its presence generally favored more comprehensive primary health care throughout the region, thus enabling better needs identification, priority assignment, decision-making and equitable resource distribution 26,49. In the case of the health agents program in the State of Ceará, Brazil in the 1990s, for example, decentralization served to strengthen community capacity to voice local needs and interests and made primary health care and health services more accessible, equitable and culturally appropriate 41 (Figure 3).

However, some models of decentralization, can constrain community involvement in a number of ways. One study found that the Chilean approach, which adopted a vertical model, failed to build local capacity and knowledge. The more horizontal Brazilian approach, while showing better results in strengthening local capacity to identify, plan and implement activities based on local needs, encountered problems in terms of awareness due to the absence of managerial (hierarchical) controls 50. In Chile it was shown that the mandatory components of prevention and promotion were less integrated into the health system at local level, whereas in Brazil these components were found to be an integral part of the reorientation of the system, informing cultural changes in the health service.

- **Intersectoral collaboration**

Intersectoral collaboration involves various sectors (e.g., health, housing, education, environment and agriculture) working together to solve problems and prevent their causes in a way that no one sector can manage alone. Research on intersectoral action in relation to primary health care was found to be almost absent in this region. However, where examples of intersectoral collaboration were documented, it was found to be combined with citizen participation in joint actions as a response to concerns and interests of both government sectors and community groups. Intersectoral action contributed to the creation of horizontal organizational structures related to, management practices and communication. Several studies 51,52,53 concluded that primary health care programs undertaken within an intersectoral approach, such as *Municipios Saludables* (Healthy Municipalities) and others that included participative approaches to budget design and allocation, were more successful at engaging community in policy formulation and program planning, implementation and evaluation. These types of actions also had a greater capacity to contribute to actions that addressed social determinants of health and it was found that in-depth community participation and enhanced community empowerment ensured that policy changes were sustainable. The effectiveness of intersectoral actions appeared to be dependent on the level of coordination between primary health care and other social policies or equity-based health promotion strategies. For example, in Bogotá, the “healthy habitat” subsidies component of the *Salud a Su Hogar* primary health care program, implemented between 2004-2007, brought together various institutions to coordinate improvements in housing and sanitary conditions of experienced by most vulnerable families 33. In 2006, 466 families were covered by this intersectoral program. New forms of intersectoral action which focus on social risk management are currently being developed in Colombia, albeit not through social assistance programs, but through primary health care programs called *Red Juntos y Familias* and *Acción* that adopt a selective approach to primary health care with economic transfer schemes to support poor and vulnerable families. Another example in Venezuela found that state support facilitated coordination between the MBA primary health care program and other state social policies and programs directed at eliminating social inequalities. This allowed greater state responsiveness to various social movements and their demands for services resulting in the *Misión Robinson* literacy program and *Las Casas de Alimentación* nutrition program 34.

Intersectoral collaborations often started through personal contacts, but were only sustained at an institutional level through formal mechanisms. One municipality in urban Chile showed strong intersectoral collaboration between the environment and education sectors in which formal local government support and
informal personal contacts were important features of interventions\(^\text{30}\). The main obstacle to intersectoral action was the limited capacity of health systems, generally due to the following factors: segmentation and fragmentation of health systems; lack of coordination between health authorities, insurance organizations, levels of care and social services; incapacity of staff to work in an interdisciplinary fashion or across institutional boundaries\(^\text{35,41}\). In Argentina, primary health care delivery sites called Centros de Atención Primaria en Salud (CAPS) are well developed and serve as a good point of entry into the health system. But studies undertaken by the country’s Ministry of Health found a lack of coordination and collaboration in resolving health needs and argued that there is a need to improve links between the CAPS and external health sector services to be able to address the social determinants of health in a more effective manner. Deficiencies in coordination between different sectors and levels of care were addressed through modifications to the national primary health care policy with the establishment of a specific program, Programa de Fortalecimiento de la Atención Primaria a la Salud\(^\text{54}\).

- **Comprehensiveness of primary health care services**

Comprehensiveness of health care services is defined here as the degree to which health promotion, disease prevention, treatment and rehabilitation services are integrated to respond to individual and collective health needs. A high degree of comprehensiveness occurred where the biomedical, hospital-oriented paradigm had been replaced with a community-based approach oriented towards health promotion and disease prevention, guided by more holistic and intercultural notions of health and action on the social determinants of health\(^\text{21,34,55}\). Other factors related to comprehensiveness included the professional development and cultural competency of health staff\(^\text{56}\). Primary health care strategies aimed at improving comprehensiveness of services were most effective when the following factors were present: multidisciplinary teams rendered various types of care at the point of service; differing conceptions of health and illness were successfully promoted; coordinated care through all stages of life was provided\(^\text{57,58}\). For example, the Makewe-Palale Hospital in Chile,

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**Figure 3**

Health agents program in the State of Ceará, Brazil.

The creation of the Health Agents Program in the state of Ceará, Brazil was promoted by social and political changes at macro level that included social mobilization, the elaboration of the new Brazilian Constitution of 1988 that made health a social right to be guaranteed by the state and the decentralization of health sector authorities and funding\(^\text{26,41}\). Within this wider context, a democratic reformist government was elected in the state of Ceará in 1986 and created new health, education and social welfare programs based on statewide maternal and child health surveys that had been conducted in 1987 and 1990. New services included the health agents program that sought universal coverage for priority concerns with an emphasis on health promotion and education.

As popular demand for the program grew, more municipalities in Ceará began to receive state funds for agents’ salaries so that by 1994, all 183 inland municipalities had joined the program and, by the end of 1996, 55% of the state capital’s poorest residents were receiving care. Coverage has continued to grow since that time. The Health Agents Program in the state of Ceará has been associated with improvements in maternal and child health indicators between 1987 and 1994\(^\text{26,41}\). During this time, coverage of growth monitoring and oral rehydration more than doubled and prenatal visits and institutional births rose by 19% a year resulting in coverage of more than 80% of the target population. The growth of immunization coverage in Ceará was the largest shown by any of Brazil’s 27 states over the same time period. Malnutrition, infant mortality and the proportion of infant deaths due to diarrhea all declined rapidly during this period. Representative surveys showed a 10% decline in national infant mortality between 1987 and 1990 (from 52 to 47 deaths per 1,000 live births) while in Ceará, this decline was 32% (from 95 to 65 deaths per 1,000 live births). The success of the health agents program in Ceará has been related to its high levels of coverage of basic protective measures, decentralized supervision and the monthly generation of local population-based health indicators that fuel social mobilization and service planning at the municipal level.
a primary health care level site administered by a local Mapuche indigenous association, developed the Intercultural Health Care Model that supports the use of Western medicine to complement the indigenous medical systems already in place. Specific programs at the hospital are based on Mapuche concepts of health and illness and include strengthening cultural identity. Services are tailored to community and culture-specific needs, thereby increasing health service equity by enhancing the acceptability and utilization of services (Figure 4).

An important factor in capacity building for comprehensive service provision has been training and/or orientation for health care staff and management. Appropriate training and orientation for health care staff and management result in effective gains in capacity to deliver equitable services. In Malvinas, Argentina, the successful implementation of a primary health care intervention was attributed to the provision of primary health care orientation for local health workers who had previously viewed their work as charity. The importance of qualified health workers in creating a more equitable distribution of health resources and ensuring that previously excluded groups have access was demonstrated, notably by the Barrio Adentro program in Venezuela. This program’s success relied in large part on the availability of capable health care professionals willing to work and live in poor communities. In another example, a family medicine training program, organized by the Ministry of Health in Paraguay, played a critical role in strengthening primary health care. A study conducted between 1993 and 2000 in Cajamarca, Peru, similarly showed that the successful implementation of a program designed to increase access to primary health care services, promote community development, improve basic sanitation and guarantee safe water was based upon the development of human resources at local and regional level.

The principal challenge to achieving comprehensiveness involves the simultaneous integration of diagnosis, treatment and rehabilitation at an individual case level with specific strategies for prevention and promotion at the collective level. Capacity building for multidisciplinary and multi-sector service provision, promotion of community participation, horizontal communication and integrated resource management at the administrative level were also noted to be challenges. D’Ávila Viana et al. found that only 12 (or 20%) of the 72 municipalities in the State of São Paulo, Brazil, were achieving comprehensiveness in service provision, citing concentration of technology and mid-level services in few urban areas, while other areas did not have the necessary infrastructure. In Bogotá, Colombia, the dominant biomedical culture posed challenges to developing and sustaining the necessary skills in health workers required to provide comprehensive care within a primary health care framework. Different aspects related to specific characteristics of the health systems and

Figure 4
Equity, interculturality and indigenous health: the “harmonization” of Western and Indigenous medicine.

| Forty-three million indigenous persons in the Americas are affected by inequities in health status and lack of access to basic care owing to geographical, economic, and cultural barriers. They also experience high rates of morbidity and mortality from avoidable causes. The Pan-American Health Organization’s (PAHO) approach to systematically address these challenges includes a holistic approach to health, right to self-determination, respect and vitalization of indigenous cultures, reciprocity in relations and the right of indigenous peoples to systematic participation. This approach recognizes the importance of: epidemiological and socio-demographic characterization of specific populations; indigenous knowledge, practice and health resources; the multiple dimensions of ethnicity, culture and the cosmic vision of indigenous peoples in relation to health; the knowledge of past and present historical processes and the asymmetrical relations that have given rise to barriers. Primary health care is emphasized as the health services model best able to incorporate these considerations and is associated with more equitable health services access and outcomes amongst indigenous groups. Since 1999 the Hospital Makewe-Palele, a primary level service provider that espouses comprehensive primary health care in Mapuche territory in Chile, has been administered by a Mapuche organization called the Asociación Indígena para la Salud de Makewe-Palele. This indigenous association has directive authority and works in consultation with health experts from the community called Nielukuyfikaimun. |
the South American context in which they are set have also hindered the achievement of comprehensiveness in primary health care. Despite the Unified National Health System (SUS) in Brazil, that favors the development of comprehensive primary health care, a biomedical and hospital based orientation still persists. Other problems include conflicts between actors due to different political, institutional and ideological interests, inequality in coverage and quality, and barriers to access to services at all levels. A common challenge to effective comprehensive primary health care implementation is the existence of segmented and fragmented health systems that involve public sector, social security and private sector provision, as reported in Argentina, Chile, Colombia, Peru and Ecuador.

- **Equity orientation**

Primary health care has played a central role in the construction of universal health systems designed to reduce health inequities. Furthermore, primary health care can also improve health equity by acting on the social determinants of health, including material circumstances, psychosocial factors, behavioral and biological factors, differences in exposure and vulnerability, access to health services and distribution of services. Primary health care is thought to be a mechanism that can transform people’s material, psychosocial and biological conditions.

Improved health status of some disadvantaged populations in South America has been associated with increased access to health and social services, attributed in part to primary health care. Various studies reported that primary health care reduces maternal, infant, post-neonatal and under-five mortality and morbidity; reduces morbidity and mortality due to infectious disease; improves perceived access and service utilization; increases immunization rates and access to family planning. For example, a prospective cohort study of a primary health care intervention in rural Bolivia demonstrated that child mortality rates in intervention areas were 4 times lower than in non-intervention areas. In Brazil, a longitudinal ecological study that constructed a series of statistical models using publicly available data for the period 1990 to 2002, showed a 4.6% decrease in infant mortality rates associated with a 10% increase in PSF. In Bogota, areas with higher health team coverage rates through the Salud a Su Hogar primary health care program showed lower infant mortality, post-neonatal mortality and pneumonia-related mortality rates in children under five. Venezuela has achieved universal coverage and increased the number of medical visits and new visits. Prior to the Barrio Adentro primary health care program, 88.5% of service users reported difficulty in accessing services. With the implementation of the program, 98% of users reported no or very little difficulty in accessing services. Despite political upheaval, recessions, hyperinflation and unemployment in Chile, primary health care policies within the public health system led to sustained reductions in infant mortality rates.

**Lessons learned about comprehensive primary health care implementation and research**

The degree of comprehensiveness of the experiences in primary health care in South America was shaped in large part by the prevalent political, socioeconomic and health policy contexts in each country. A high degree of comprehensiveness in primary health care is associated with the following factors: progressive economic and social development models oriented towards more universal health access and social protection, combined with strong public sector presence; decentralized systems with strong social and community participation; systems where the state guarantees the right to health. More basic/biomedical, selective and targeted approaches to primary health care are characteristic of market-oriented (neoliberal) economic and social development models with strong private sector presence. In these cases, systems are segmented and decentralized, with weak social and community participation and weak health system regulation by the state. In countries where indigenous populations have significant political influence, comprehensive primary health care approaches were used explicitly to develop and implement intercultural health systems. Although studies have not been carried out to demonstrate the advantages of comprehensive primary health care over other primary health care approaches in terms of reduction in health inequities, the evidence reviewed demonstrated that comprehensive primary health care is effective in improving access to health services and other social services, acting on social determinants of health and raising the health status of economically, socially and culturally disadvantaged population groups.

Despite these achievements, the implementation and universalization of comprehensive primary health care have encountered various difficulties:

- One of the main limiting factors is that primary health care is subject to varying interpretations.
and manifestations (i.e., as an intervention strategy, public policy, level of care and/or model of care); and the effects of implementation within segmented and fragmented health systems.

- Problems with primary health care financing include unreliable national sources of funding, lack of sustainability of programs tied to external donors or lenders, and corruption leading to the misuse of funds 17,23,50,68.
- Tension between specialist physicians of differing backgrounds and between medical and non-medical staff, low self-esteem and poor pay among primary health care professionals and difficulty to persuade physicians to work in poor, rural areas serve to constrain primary health care implementation 21,26,34,35.
- When care workers do not receive adequate training and relationships with communities and health system users are not well nurtured, political, cultural and social support for comprehensive primary health care stagnates. When the focus of care worker training is changed from the hospital and private health care market to the individual and community services, programs become more consistent with the goals of primary health care 6,15,35,39,57.
- Tension exists between different conceptual models underlying the health service (i.e., health as holistic and socially determined services vs. biomedical and market determined services), and between horizontal and hierarchical approaches to service organization. The manner in which these tensions are resolved has implications for medical training, health care worker training, health team structure and communication and capacity to incorporate cultural differences and act on the social determinants of health 18,21,26,28,34,35,38.

With respect to primary health care research, the following findings were made:

- Multidisciplinary research teams were better able to design studies that fostered knowledge of the multiple dimensions of primary health care actions, such as the dynamics of social participation and actions on health determinants, risk factors and belief and value systems 15,25,52.
- Research on the characterization of health and living conditions, belief and value systems, and disease prevalence and incidence was conducive to services that focused on equity and social determinants of health 15,23,38,54,62. Although research on health equity and disparities outcomes is developing, few rigorous studies of this type were found 34,55,69,70.
- Primary health care evaluation should include more than traditional biomedical indicators to measure service achievements. Equity changes, service quality, participative mechanisms, intersectoral action on the social determinants of health, intercultural perspectives of accessibility and acceptability and patient satisfaction should also be evaluated 15,68,71,72,73.
- It is necessary to develop evaluation methods that assess primary health care not only as a provider of basic health services, but also as a stimulant of overall human development and provide orientation and guidance for health system planning and implementation at local and national level 56,57,71,72.

An important research technique not found by this review is Participatory Action Research 74. It has been argued that this technique is a useful tool for developing and implementing needs-based public health strategies because it allows for a more complete understanding of complex problems while creating concerted, participative interventions 25.

Conclusions and recommendations for a policy agenda

By elucidating the characteristic patterns of comprehensive primary health care and their relation to primary health care effectiveness, we tentatively conclude that programs that integrate most (or even some) of these characteristics are more successful in achieving health equity outcomes than selective or first level primary care interventions.

In general, primary health care programs that were successful at improving health status and reducing health inequities were found to have the following common features:

- A strong commitment to health as a fundamental human right.
- Service comprehensiveness.
- Creation and support of an appropriately qualified human resources pool for dealing with family and community health.
- Optimization of intercultural care and interdisciplinary teams.
- Equitable geographical allocation of health teams.
- Information systems comprised of individual, family and community health data.
- Needs-based and intercultural practices that focus on marginalized, excluded and vulnerable families, communities and social groups.
- Participatory needs identification and prioritization, and intersectoral local planning of health actions and formulation of public health policy.
- Empowerment of local communities.
- Development in concordance with universal and equitable national health policies or largescale social policies.
Mechanisms of accountability in place.

Primary health care programs that were less-successful in implementation were found to have the following common features:

- Difficulties in adopting a paradigm shift from curative, hospital-based care to community and preventative care.
- Segmentation and fragmentation of health system actions.
- Lack of political will with regard to social equity and health as a human right.
- Inadequate coordination between local, national and international interests.
- Inadequate use of local data and lack of appropriate human skills.
- Weak community participation, multidisciplinary and/or intersectoral action.
- Volatile macro-economic and socio-political environment.

These findings, in turn, imply several policy directions for comprehensive primary health care development, suggesting which policies should be pursued and which should be avoided. Comprehensive primary health care reforms to maximize health equity should also be accompanied by rigorous implementation studies and outcome evaluations. The existing evidence base on the effectiveness of comprehensive primary health care in South America still tends towards low to middle quality of findings that, while substantial, can be improved.

Study limitations

Attempts were made to capture all appropriate studies undertaken on primary health care in South America since 1978. In order to control selection bias, studies in multiple languages were included, as was grey literature from local journals, universities, research centers and health ministries. However, it is possible that primary health care programs or experiences may not have been included due to the absence of corresponding published or grey literature. The thematic analysis could have been more effective if an evaluation of the quality of evidence cited had been included. This type of quality evaluation was considered initially but was not pursued due to the large volume of case studies and the line of questioning posed by the global study.

Resumen

Este artículo resume una extensa revisión de experiencias de atención primaria en salud en Suramérica desarrolladas desde la Declaración de Alma-Ata. Se abordaron preguntas específicas: ¿Cuáles son las restricciones y facilitadores estructurales y del contexto histórico para las políticas y experiencias de atención primaria en salud? ¿Cómo las reformas en salud las han favorecido o limitado? ¿Qué evidencia existe de la efectividad de la atención primaria en salud? ¿Cuáles son las estrategias comunes de las mejores prácticas? ¿Qué evidencia existe del rol de la participación comunitaria y la acción intersectorial? Y finalmente, ¿Cuáles son las lecciones políticas aprendidas? Se empleó una síntesis narrativa para identificar y examinar las tendencias en los hallazgos a esas preguntas. Se describen las condiciones encontradas que favorecen el éxito de la implementación de la atención primaria en salud y las características que fueron efectivas para lograr servicios y resultados de salud equitativos.

Atención Primaria de Salud; Política de Salud; Atención Integral de Salud
Contributors

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References


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