Original Article

The community health impasse: What can family physicians learn about integration of social determinants of health from the challenges, diversity, and worldview of primary healthcare practices located in Southern India?

David Warnky[1], Swathi S. Balachandra[2], Ramakrishna Prasad[2], Kevin J. Sykes[1], Dorothy Lall[3], Upendra M. Bhojani[3]

[1]Department of Family and Community Medicine, University of Kansas Medical Center, Kansas City, United States, [2]Department of Family Medicine, Academy of Family Physicians India, Bangalore, Karnataka, [3]Department of Health Services, Institute of Public Health, Bangalore, Karnataka, India

Abstract

Context: As social position rises, health improves. Alma Ata set the stage for community-oriented primary care (COPC), and family medicine is perfectly positioned to integrate Social Determinants of Health. India presents a unique environment for innovations in family medicine. **Aims:** This study aimed to (1) assess the ability of different primary care practices to address the social determinants of health (SDoH); (2) identify key obstacles and supports; and (3) provide practical insights to family physicians and other primary care providers (PCPs) for the integration of SDoH and clinical primary care. **Settings and Design:** A diverse sample of primary healthcare practices were selected in southern India for investigation. Data collection involved observation and informal interviews. **Methods and Material:** The researchers used general observation and informal interviews to collect data. Investigators used a basic interview guide to structure conversations and formal journal entries were recorded immediately following each visit. **Statistical Analysis Used:** Thematic analysis was conducted with NVIVO software to categorize major themes. **Results:** Seventeen primary healthcare practices were observed; eleven were formally enrolled for interviews. Four inputs and three outputs of socially oriented primary care practices were identified. The inputs include leadership style, appropriate staffing, funding structures, and patient panels. Social interventions, community contact, and treasuring community empowerment were the major outputs. **Conclusions:** Community health lies at the heart of strengthening primary healthcare. Establishing practices that bridge the gap between clinical primary care and SDoH initiatives need to be prioritized. This study fosters agency for family physicians and PCPs to engage with local communities and lead the path toward this integration.

Keywords: Community health workers, community responsibility, complexity leadership, health promotion, primary healthcare practices, social determinants of health

Introduction

As the wealth gap in India continues to grow, fundamental questions about the value of life and the power of money

Address for correspondence: Dr. David Warnky, 2619 S. Jewett St. Wichita, Kansas - 67210, United States. E-mail: dwarnky@kumc.edu

Received: 25-05-2021 **Revised:** 20-07-2021
Accepted: 25-08-2021 **Published:** 29-11-2021

Access this article online

Quick Response Code:

Website: www.jfmpc.com

DOI: 10.4103/jfmpc.jfmpc_971_21

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

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Warnky D, Balachandra SS, Prasad R, Sykes KJ, Lall D, Bhojani UM. The community health impasse: What can family physicians learn about integration of social determinants of health from the challenges, diversity, and worldview of primary healthcare practices located in Southern India? J Family Med Prim Care 2021;10:4253-9.

come to a critical tension.[1] Thomas McKeown's book, "The Role of Medicine," illustrates the historic concept that overall life expectancy is more greatly impacted by improvements in living standards than by modern medicine.[2] Simply put, health improves as social position rises.[3]

Regions focused on supporting strong systems of primary health care have lower healthcare costs and better health outcomes.[4,5] The World Health Organization (WHO) states it plainly, "By providing care in the community as well as care through the community, primary health care addresses not only individual and family health needs, but also the broader issue of public health and the needs of defined populations."[6] The development of community-oriented primary care (COPC) in the 1940s offered an exciting integration between public health and primary care.[7,8] The AAFP further emphasized this need in a recent position paper.[9] The stated aim of family medicine to practice within the 7 "C's" perfectly positions practitioners to lead this charge.[10]

Since the Bhore Committee in 1946, Indian Government has also recognized the need for comprehensive primary health care. The National Health policy 2017 and the recent Ayushman Bharat Program both played a role in introducing Primary care centers or Health and wellness centers (HWCs).[11] The addition of community health workers (ASHAs) and the implementation of Community Action for Health have been key in integrating community health and clinical primary care, especially in the rural areas.

In India, the convergence of constrained resources, great diversity, and a relatively-collectivist worldview (in contrast to individualism) present a unique environment for innovations in family medicine.[12] The purpose of this project is threefold: (1) to assess the ability of different primary care practices to address the social determinants of health (SDoH) (2) to identify key obstacles and supports to building such practices, and (3) to provide practical insights for family physicians and other primary care providers (PCPs) for the integration of SDoH and clinical primary care.

Subjects and Methods

Study design and sampling

The protocol for this study was approved by two entities: The University of Kansas Medical Center and the Institutional Ethics Committee of the Institute of Public Health in Bangalore, India. The research team selected a descriptive, multiple-case study design to conduct this exploratory inquiry.[13] Approval from the ethics committee was obtained on Monday, December 2, 2019.

In order to survey a diversity of clinic practices, several of the authors--experts in the healthcare system--used their experience to select a purposive sample of cases. Following case selection, the primary investigator (PI) established contact with clinics via email or WhatsApp to schedule opportunities for observation and interview. Over the course of the project, the PI visited 17 different sites; the specific locations are outlined in Figure 1. Of the 17 practices visited, 11 were formally enrolled and interviewed for the study.

Informed consent

In the initial contact conversation, the PI provided basic study information and obtained verbal consent to visit the clinic. Upon arrival to the clinic, the PI obtained formal, written consent using a participant information sheet and a consent form. The consent process explained the study, its aims, and the participant's role; the investigator answered any questions raised by the participant. In every case, English was used for communication.

Data collection

The research methods used for this study were general observation and informal interview.[14] The PI recorded all general observations and interview impressions using field notes. Immediately following data collection, the investigator scripted a formal reflection of the encounter. The formal entries included the following sub-headings: setting, staffing, colleague relationships, workflow, hourly patient load, follow-up, financing structure, nutrition, SDoH, and general reflections. Clinic observations lasted anywhere from several hours to several days.

Following a period of observation, the investigator conducted one informal interview with a healthcare professional at each site. For the purposes of this study, healthcare professionals included: practicing physicians, public health researchers, and program planners. These conversations lasted between fifteen minutes and several hours; time discrepancy was largely dependent on the participant's availability for discussion. The initial minutes of the discussion focused on building rapport with the participant; this included an explanation of the investigator's background, professional goals, and study purpose. The discussion then turned to SDoH more broadly. Questions focused on the provider's general knowledge, local awareness, innate desire, and systemic capacity to address SDoH issues in his/her clinic. Finally, the dialogue covered site-specific topics like funding, staffing, patient population, and other factors.

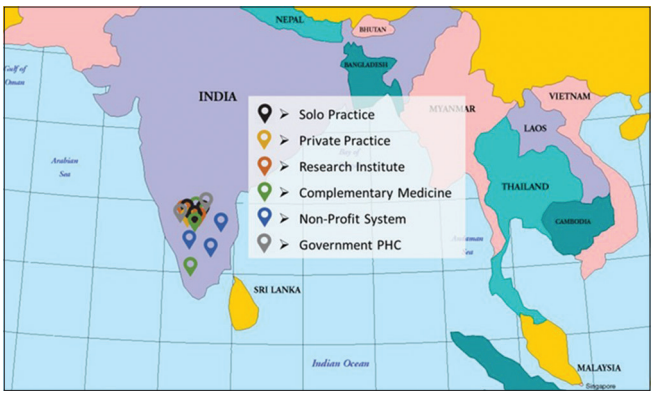

Figure 1: A Map of the general location of the 18 models visited

Data analysis

Three different investigators performed data analysis using the NVivo software.[15] Data entry was originally collected on the computer via Microsoft Word; this data was then imported into NVivo for analysis. A thematic analysis of the data was performed by the PI in six phases: data familiarization, code generation, theme identification, theme review, theme definition, and production of a final report.

Primary healthcare practice descriptions

Based on observations, the seventeen different cases were separated into seven, defined categories, listed by distribution below [Table 1].

Results

Following data analysis, key themes were split into two categories: inputs and outputs [Figure 2]. The following paragraphs highlight the major themes and narrate some of the specific findings.

Input #1: Leadership odel

The authors divided practice leadership into two categories: internal and external. Internal leadership was defined as, "Aims and direction set by one, or several, healthcare providers who spend most of their time at the clinic site." External leadership was the opposite, "Aims and direction set by one, or several, individuals who do not spend most of their time at the actual clinic site." Among this sample, internal leadership was more prevalent.

Solo practices appeared to be the most-pure form of internal leadership. The following summarizes an anecdote from one solo practitioner.

Over the last 40 years, I have acquired a large group of patients; I provide a lot of personal service to each of my patients. As I am getting older, I find that the work is getting to be too much. So, I have decided to cut my patient panel in half so that my workload decreases.

This conversation illustrates the freedom of solo practitioners to make structural decisions. In a similar fashion, private clinics, and non-profits were operated by internal leaders. Larger organizations, regardless of leadership style, did appear to compromise decision-making power. Yet, the ultimate decision-making capacity remained with those who were actively participating in day-to-day care delivery.

The government primary health centers (PHCs) presented the most obvious form of external leadership. While many daily decisions fell to the site staff, the objectives and aims of the clinic were set by local and state public health officials. The following conversation with a PHC provider summarizes this theme:

We have many objectives and targets set by the government. The major aims at this point involve nutrition education at our Kindergartens and Tuberculosis control. As we report information to the overseers, they set the aims for our community health workers.

These categorical leadership models present their own positive and negative features. The clinics most oriented toward COPC outputs varied in their leadership models. While external leadership often provided a comprehensive network for community surveillance and intervention, internal leadership

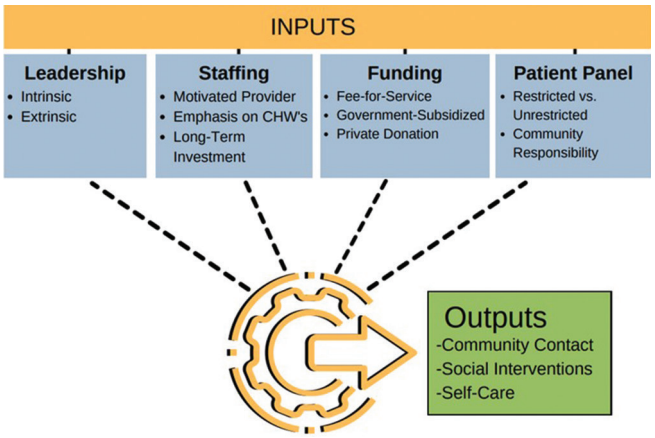

Figure 2: A thematic summary of the inputs and outputs synthesized from the study

Table 1: A general outline and description of the different primary healthcare practices observed in this study

Practice Type	Definition	Sites Enrolled/Sites Visited
Solo Practices	Owned and operated by a single individual.	3/3
Private Clinics	For-profit systems that employ 3-7 different healthcare employees	4/4
Government-Operated Government PHCs	Funded by the government; operated on the ward-designation system; operated directly by the government.	0/1
NGO-Operated Government PHCs	Funded by the government; operated on the ward-designation system; operated by third-party NGOs via a public-private partnership.	2/2
AYUSH* Systems	Healthcare systems that strictly provide AYUSH care, in the form of Ayurveda and Yoga primarily.	1/2
Primary Care Initiatives by Not-for-Profit Organizations	Operate more like healthcare centers, and they receive funding from outside sources.	1/3
Institutes Involved in Primary Healthcare and Public Health Research	Characterized by the absence of direct clinical care but rather actively involved in policy and implementation research.	1/2

*AYUSH: Ayurveda, Yoga, Unani, Siddha, Homeopathy

allowed clinics to be flexible and respond to the needs of their own individual communities.

Input #2: Appropriate staffing

In contrast to the dichotomies of leadership, clinics displayed a broad spectrum of staffing structures. The general layout can be visualized in Figure 3. In short, this study identified two key staffing factors: a committed provider and community health workers (CHW).

One of the most obvious signs of a socially oriented clinic was the presence of community health workers (CHWs). This study observed that CHWs are community members who are trained and employed by clinics. They perform a multitude of various healthcare-related responsibilities, oftentimes visiting the homes of patients. Some of the activities included, but were not limited to, treatment follow-up, childhood growth assessments, administration of vaccines, contact tracing, and behavioral education. Several clinics employed CHWs; in most cases, a single CHW would be assigned to a certain subset of a clinic's patient panel.

The other key staffing input observed in this study was provider ownership. Solo practitioners were the greatest example of provider ownership. Oftentimes, these individuals had served their patient panel for 35 + years. On the other hand, government PHCs frequently experienced great difficulty with provider turnover. Generally, the communities that most-desperately needed community health clinics also had the most-difficult time recruiting and retaining motivated providers. Frequently, these providers compromised salary, comfort, and living standard to serve a specific, underserved patient panel. Without the presence of a dedicated provider to invest in community health, clinics defaulted to provision of basic medical services.

Input #3: Funding structures

The cases explored in this study primarily utilized three distinct funding structures: fee-for-service (FFS), government subsidized, and private donation. This study found that insurance did not play any role in funding primary care services.

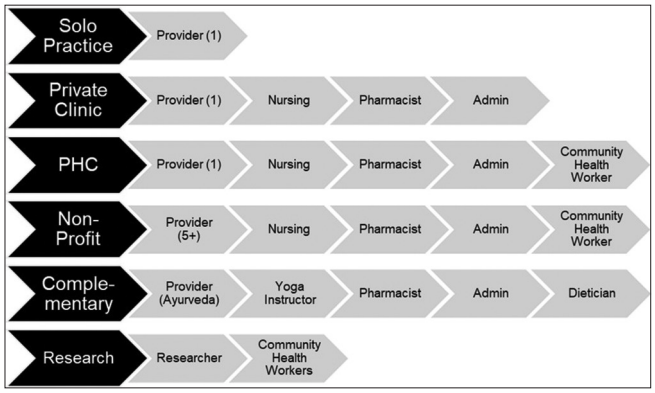

Figure 3: A visual representation of the staffing structures at each clinic model

Solo practices and private clinics employed a fee-for-service model. In short, these clinics charged a set consultation fee; lab draws, pharmaceuticals, and other services were charged separately. Each clinic had a sign out front clearly stating the expected charge. Prices ranged from $1 - $15 for a consultation. Generally, these prices were affordable to the given demographic. This study did not observe an FFS model that employed CHWs or sponsored community health initiatives.

Government PHCs were completely supported by government funds. In theory, PHCs provide free medical care and discounted pharmaceuticals. Consequently, a single provider often attended to 50 + patients in a day. Waiting rooms were often crowded. Several anecdotes also suggest the need to pay extra money to gain priority in the line. However, consistent funding did provide adequate support for interventions outside the clinic. Community health initiatives run by CHWs were integrated into the budget of PHCs.

Similarly, the non-profit clinics were largely supported by private donations. This model appeared to facilitate greater freedom to provide services outside of the clinic. Fixed funding enabled these clinics to sponsor community health activities that may not immediately generate revenue for a clinic. Without this steady revenue, these preventative services seem unlikely to be offered.

Input #4: Patient panels

Patient panel can be divided into two types: restricted and unrestricted. Solo practitioners and private clinics cared for a diverse patient population from many different demographics (unrestricted) while non-profits and PHCs generally restricted their patient panels to a specific demographic population.

This study observed that six clinics made an intentional effort to define, and specifically care for, a given population; this practice was termed, "Community responsibility". A few of the metrics used by clinics to define a community included: income level, tribal status, and spatial distribution. Community responsibility appeared to establish an excellent framework for investing in community health. One clinic employed social workers to screen patients who qualify for clinic care. Another practice charged a very small fee for patients within their given demographic while charging more for those outside of it. Likewise, PHC services were restricted to a certain geographic location. These illustrations are a few examples of a clinic's intentional efforts to service a specific demographic.

Unfortunately, FFS payment models presented unique challenges to caring for a restricted patient panel. To make ends meet, providers generated their entire revenue from patient fees. This model provides very little incentive to restrict the size/demographic of a patient panel. In lower-income areas, providers either needed to see a tremendous number of patients or increase

fees. The former inevitably compromises patient care while the latter would alienate the targeted community.

Output #1: Social interventions

The first major sign of a community-oriented clinic was an asserted effort to impact upstream determinants of health outside the clinic. The non-profit clinics were the clear leaders of these initiatives. One clinic leader recounted their efforts to organize a farming collective:

We noticed that many of our patients were traveling to cities to seek construction jobs when their farms were not generating enough money or food. We worked to organize the farmers into a coalition for organic farming. Not only do these crops sell for higher prices, but they also provide healthier food for the community. In doing this, we have limited migratory labor and positively impacted the health of our community.

That same clinic founded a women's craft initiative. The clinic leadership spearheaded a movement to produce handmade textiles that could be sold in the markets of large cities. This effort often helped to generate an extra income for families while preserving traditions held dear among many of the women in the community.

Another clinic established a nursing school. Their aim was to employ local women to run the hospital. The effects of this effort were two-fold. First, it provided young women with the ability to earn an income. Second, it guaranteed that the care provided at the clinic would be culturally appropriate. These and other efforts were clear signs that a clinic was invested in the roots of community health.

Output #2: Community contact

Similarly, community-oriented clinics engaged in frequent contact with community members. The government PHCs and Non-Profit clinics were most proficient in their contact with the community. The major role of community health workers revolved around scheduled visits to specific neighborhoods and families. Generally, schedules determined that each family be visited several times a year. Not only does this type of follow-up deliver better patient care, it also provides a framework for identifying and addressing social needs.

Output #3: Treasuring local community empowerment

The ultimate endpoint among community-oriented clinics was the empowerment of the local community to care for itself. One interviewee referenced the words of Lao Tzu, "With the best leaders, when the work is done, the task accomplished, the people will say 'We have done this ourselves.'"

Two clinics in this study demonstrated a strong commitment to community empowerment. These providers sponsored scholarships for higher education among community members, providing families with much-needed access to social mobility. One clinic's vision statement asserts that it is run by locals for locals. The training and employment of local health professionals was a major contributor to this aim. Not only did these jobs increase general health literacy among families, but they also provided a sense of ownership and investment in the clinic as a beacon of health to the community.

The most potent example of community self-care was observed at the political level. After serving the community for 20 + years, one clinic decided to support a nurse in running for local office. She ran on a platform of anti-corruption, putting much-needed money toward community improvement. This was a momentous occasion for the local healthcare providers.

Discussion

The integration of public health and clinical care is an essential part of creating affordable and effective healthcare. This study distills a year of observation into salient, practical learning points for PCPs. While this study is, by no means, a comprehensive guide to COPC, it does give physicians a place to start as they consider the following discussion.

The role of complexity leadership

In her collection of articles that introduce complexity leadership into the health system, Dr. Greenhalgh defines complexity leadership as "A dynamic and constantly emerging set of processes and objects that not only interact with each other, but come to be defined by those interactions."[16] While extrinsic leadership models provide the network required to provide community health, they are often too rigid and detached to adapt to the intricacies of individual communities. Family physicians and primary care providers must begin to consider their practices as complex adaptive systems. This framework generates knowledge from the ground up.

Practical approaches for family physicians and PCPs to begin incorporating a complexity leadership model involve the following recommendations. First, seek to understand your patient panel. As a family physician, you are a microcosm leader of community health. Where are your patients coming from? What are the major needs in the area? How can the clinic wield its influence and investments to impact your patients' community? Who are the major players already invested in this area?

Second, consider partnership programs with larger systems. While it is true that broad, reaching public health initiatives are difficult for a single clinic to implement, individual practitioners do possess an understanding of the population that is essential for proper program implementation. Partnership with other clinics in the area or the public health sector may do well to preserve internal leadership while reaping the benefits of collective structure.

Third, involve the community in implementation. Frequently, well-intentioned community-health initiatives get lost in

translation. As a primary health care provider, you have the opportunity to partner with patients to create and inform public health programs that are both needed and desired by the local population. Assemble patient panels [a board of advisors consisting of clinic patients], conduct interest surveys, and involve CHWs in these conversations.

Appropriate financing for community health

As the proverbial saying goes, "Money talks." The reality is that funding often drives the type of care that can be provided. In this study, the financing structure of a practice largely determined its staffing structure, services provided, and cost to patients.

This study highlights various difficulties in financing community health. First, requiring individuals to pay for SDoH services is an almost comic contradiction. Because so many community health issues are rooted in finances, requiring communities to pay for these services essentially defeats the purpose. Second, the communities who most need SDoH services are also least likely to be able to afford them. This study illustrates that clinics invested in SDoH issues will likely be dependent on some degree of outside funding.

The follow-up question is this: where do we go for this outside funding? This study identified two major sources. PHCs relied on government funds, and non-profits relied on private donations. The presence of outside resources empowered these clinics to provide services that may not present any immediate financial gain. Unfortunately, government funded systems tend to present problems of top-down leadership. Similarly, clinics funded by outside donations are often forced to meet the objectives set by these outside stakeholders.

The following paragraph will offer some considerations for local practitioners who seek to invest in community health. First, approach outside funding with great caution. This study provides several anecdotes of compromised leadership secondary to funding oversight. Second, consider research grants in the direction of community-based participatory research. Seek to secure funds that will benefit those being investigated equally, if not more, than the investigators. Third, be willing to be creative. Several clinics financed community health work from earnings on specialty procedures or high-income visits. This may not work for your community, but take time to consider how your efforts and abilities may be used to redirect financing toward SDoH aims.

The imperative of individual innovation and local adaptation: Listen to the community

In the words of Dr. Campos-Outcalt, "The reality is that many public health activities do involve limiting individual choices."[17] How do healthcare providers consider individual autonomy in their aim for community health? On one hand, individual choice is a foundational principal of human existence. On the other hand, choices aren't really choices when the chains of income and environment force one's hand.

The authors will recommend a few practices to help providers navigate this tension. One, partner with the community every step of the way. Take time to listen to your patients in the clinic and through focus groups. Attend local political meetings and interest groups. Meet with community leaders, invest in the education system, and communicate your aims clearly. Second, be patient. Community transformation can take a great deal of time and trust. The social interventions observed in this study emerged from 30+ year investments by providers in the area. Take small steps and understand that your early efforts and investments are not wasted time.

Study limitations

The sample of this population was restricted, with intention, to Southern India. This limitation may introduce some selection bias, missing the many differences between Northern and Southern India. In addition, the sample size was not large enough to reach saturation. Cross-cultural barriers include limitations of language and context. Fortunately, extensive local partnerships helped to illuminate nuanced insights and give cultural context. Please note, each state in India has unique variations on account of diversity and a comparison with any other part of India was not deemed warranted. Southern India in our paper is simply mentioned as a geographical descriptor.

Future directions

This study aims to identify practical considerations for family physicians and PCPs for the integration of SDoH and clinical medicine. Future directions should include the following: (1) a similar analysis among other regions, (2) measure and compare common, key health outcomes between the different practices, (3) begin to study implementation of salient themes addressed in this manuscript.

Conclusion

The stated purposed of the Academy of Family Physicians of India (AFPI) is to empower primary care physicians and strengthen healthcare delivery system in India for better healthcare outcomes. Addressing SDoH lies at the heart of this. Establishing practices that bridge the gap between clinical primary care and SDoH initiatives need to be prioritized. Specific factors to consider include leadership, funding, staffing, and patient panel. This study fosters agency for family physicians and PCPs to engage with local communities and lead the path toward this integration. Keys to achieving these aims include grassroots leadership, alternative funding sources, and incorporating community voice.

Acknowledgements

The authors would like to thank the Fulbright program for sponsoring this endeavor; this study is the fruit of a Fulbright-Nehru research scholarship. In addition, a special thank you is due to the Institute of Public Health for its support of the work and continued guidance.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Key Messages

- Local leadership provides the flexibility needed to understand and adapt to the needs of the community.
- Fee-for-service models present significant challenges to providing community health interventions.
- Community responsibility, the intention of a clinic to care for a defined population, is a key marker of a socially oriented healthcare facility.
- A sense of agency among family physicians and PCPs to engage with local communities needs to be fostered.
- Keys to integrating SDoH and clinical primary care include grassroots leadership, alternative funding sources, and incorporating community voice.

Financial support and sponsorship

This project was funded by the Fulbright-Nehru Research Grant.

Conflicts of interest

There are no conflicts of interest.

References

1. Dang, H.-A.H. & Lanjouw, P. (2018) Inequality in India on the rise. WIDER Policy Brief 2018/6. Helsinki: UNU-WIDER.
2. McKeown T. The Role of Medicine: Dream, Mirage, or Nemesis? Princeton University Press; Princeton, New Jersey. 1979.
3. Braveman P, Gottlieb L. The social determinants of health: It's time to consider the causes of the causes. Public Health Rep 2014;129(Suppl 2):19-31.
4. Shi L. The impact of primary care: A focused review. Scientifica. doi: 10.6064/2012/432892.
5. Lall D, Prabhu P, Balachandra SS, Kumar D, Singh P, Deo S, *et al*. Lessons from primary health care delivery models in India: Primary research findings relevant to universal health coverage. India Health Systems Collaborative 2021;2. Available from: https://ihsc.org/wp-content/uploads/2021/06/IHSC_Policy-Brief_02IPH_26062021.pdf.
6. Primary health care. Available from: https://www.who.int/westernpacific/health-topics/primary-health-care. [Last accessed on 2021 Jul 20].
7. Perry H, Morrow M, Borger S, Weiss J, DeCoster M, Davis T, *et al*. Care groups I: An innovative community-based strategy for improving maternal, neonatal, and child health in resource-constrained settings. Global Health Sci Pract 2015;3:358-69.
8. Abramson JH. Community-oriented primary care--strategy, approaches, and practice: A review. Public Health Rev 1988;16:35-98.
9. Integration of Primary Care and Public Health (Position Paper). Available from: https://www.aafp.org/about/policies/all/integprimarycareandpublichealth.html. [Last accessed on 2020 April 25].
10. Wilson S, Sairenji T. Recruiting, developing, and supporting family medicine faculty for the future: Three "T's" to enable achieving the additional "C" required of family medicine educators. Fam Med 2021;53:644-6.
11. Ministry of Health and Family Welfare, Government of India. National Health Policy 2017. Available from: https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf. [Last accessed on 2021 Jul 15].
12. Simha A, Ahmed S, Prasad R, Dinesh AS, Kandasamy A, Rao NP. Effect of national cultural dimensions and consumption rates on stigma toward alcohol and substance use disorders. Int J Soc Psychiatry 2021:7. doi: 10.1177/00207640211028611.
13. Gustafsson J. Single case studies vs. multiple case studies: A comparative study. Thesis. Halmstad, Sweden: Halmstad University; 2017. p. 15.
14. Cohen D, Crabtree B. RWJF-Qualitative Research Guidelines Project. Informal Interviewing. Available from: http://www.qualres.org/HomeInfo-3631.html. [Last accessed on 2020 Jan 22].
15. NVivo qualitative data analysis software. QSR International. Available from: https://www.qsrinternational.com/nvivo/home. [Last accessed on 2020 Jan 23].
16. Greenhalgh T, Papoutsi C. Studying complexity in health services research: Desperately seeking an overdue paradigm shift. BMC Med 2018;16:95.
17. Campos-Outcalt D. Public health and family medicine: An opportunity. J Am Board Fam Pract 2004;17:207-11.