The Household Model as a Tool for Change

Understanding the Importance of Primary Care and Social Connectedness in Health Delivery Systems

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EXECUTIVE SUMMARY

As universal health care remains a globally pressing issue, community health programs provide a hopeful solution. Community health programs, broadly construed, employ unprofessionally trained local health workers to perform a range of tasks under the goals of the program. This paper examines different types of community health programs, emphasizing the benefits of household models that provide horizontal care to all community members, as opposed to vertical approaches that target specific diseases. The aim of this paper is to understand the best practices in structuring and implementing community health programs, in which two are highlighted: primary care and social connectedness. Household models are particularly promising because of their ability to incorporate both of these factors.

Recommendations are proposed based on the examination of three case studies: the Brazil Family Health Strategy Program, the Partners In Health-Liberia household model, and a Bangladesh community volunteer program. From these three models, recommendations can be made at governmental, programmatic, and local levels. Governments should uphold policies to promote accessible and universal health care. They should do this both through declarations and through financial and educational supports. Governments and organizations wanting to implement new community health programs should look to past and ongoing efforts to understand successful components and should thoroughly study the region in which they desire to implement their program to ensure the intervention is best designed to suit the needs of the community. Locally, programs and governments should financially compensate their community health workers and should provide social stipends to patients to ensure access to food and transportation. Programs should support their health workers through clear and consistent supervision and support from local health clinicians. Lastly, community health workers should build trusting and stable relationships with their patients through regular visits, accompaniment to health facilities, and health education.

INTRODUCTION

Community Health Programs

Community health workers have long been appreciated in aims to achieve universal health coverage. Globally, community health workers (CHWs) are seen as a core component to growing population demands in many contexts, not only in low-resource settings.[1] The ability of CHW programs to draw on health workers who are not clinically trained to promote health across underserved areas has been a huge incentive for the use of these programs, particularly in light of the global shortage of fully trained medical professionals.[2]

Historically, and presently, the term "community health worker" has had a very broad definition. Generally, CHWs are frontline public health workers who are trusted members of or have a unique relationship to the community they serve. They act as a link between the community and health services to increase access and quality of care and ensure cultural competence of service delivery.[3] The types of services provided by CHWs and the aims of CHW programs have varied over the years, as different types of CHW programs have existed for decades.[4] Recently, CHW practices have shifted towards more formal training for CHWs with an emphasis on clinical tasks, improved supervision, and strong links to health systems. In these programs, CHWs act as the

[1] Gordon C. McCord, "One Million Community Health Workers Technical Task Force Report," accessed August 14, 2020, https://www.academia.edu/3111113/One_Million_Community_Health_Workers_Technical_Task_Force_Report.

[2] Hilary Watt et al., "Development of a Composite Outcome Score for a Complex Intervention - Measuring the Impact of Community Health Workers," *Trials* 16, no. 1, accessed August 14, 2020, https://www.academia.edu/30483389/Development_of_a_composite_outcome_score_for_a_complex_intervention_measuring_the_impact_of_Community_Health_Workers.

[3] "Community Health Workers," American Public Health Association, accessed August 24, 2020, https://www.apha.org/apha-communities/member-sections/community-health-workers.

[4] Gordon, "One Million Community Health Workers Technical Task Force Report."

first point of contact in their communities and provide primary care services, health

education, and respond to acute needs, linking patients to clinically skilled workers.[5]

Across the varied aims and definitions of community health worker programs, the

benefits of these programs have been widely recognized. Community health worker

programs are community-based interventions that can effectively deliver health care to

underserved populations and bridge outreach and health post services.[6,7] These

programs provide systems for both life-saving and life-sustaining interventions and

reach those who may not otherwise be targeted.[8] Especially in contexts where

unfriendly and inaccessible clinical services exist, CHWs can more readily address the

needs of the community.[9]

Community health workers have been recognized for their ability to engage with

their communities to promote healthy practices. CHWs do this through promoting care

seeking behavior, preventative care, chronic disease management and immunization,

and promoting disease-specific practices.[10,11,12,13] The health promoting behaviors that

CHWs instill have been shown to reduce morbidity and mortality rates in mothers,

[5] Ibid.

[6] Ibid.

[7] Karen Weidert et al., "Community Health Workers as Social Marketers of Injectable Contraceptives: A Case Study from Ethiopia," *Global Health: Science and Practice*, March 8, 2017, https://doi.org/10.9745/GHSP-D-16-00344.

[8] Gordon, "One Million Community Health Workers Technical Task Force Report."

[9] Julie M. Feinsilver, "Brazil's Mais Médicos (More Doctors) Program Goes Beyond Just More Doctors to Improve Brazil's Universal Health System," accessed August 14, 2020, https://www.academia.edu/33637895/Brazils_Mais_M%C3%A9dicos_More_Doctors_Program_Goes_Beyond_Just_More_Doctors_to_Improve_Brazils_Universal_Health_System.

[10] Gordon, "One Million Community Health Workers Technical Task Force Report."

[11] Matthew Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way," *London Journal of Primary Care* 4, no. 2 (2012): 126–32.

[12] Simon Lewin et al., "Lay Health Workers in Primary and Community Health Care for Maternal and Child Health and the Management of Infectious Diseases," The Cochrane Database of Systematic Reviews 2010, no. 3 (March 17, 2010), https://doi.org/10.1002/14651858.CD004015.pub3.

[13] Weidert et al., "Community Health Workers as Social Marketers of Injectable Contraceptives: A Case Study from Ethiopia."

newborns, and children, improve tuberculosis (TB) outcomes, and increase preventative

care measures, to name a few outcomes.[14],[15],[16]

Household Models

This paper will focus on community health programs that have a structure akin to

a 'household model'. Tangibly, this means that the community health workers are

assigned patients not based on selection criteria for a particular disease or health issue,

but instead based on where they live – if they are in the CHW's 'catchment area'. These

programs are horizontally structured and aim to address the general health of the entire

population. CHWs engage with individuals with both expressed and unexpressed needs

in a family and community setting.[17] By shifting away from a vertical model, these

programs may be able to provide better and broader health care for entire communities

by building trust with their patients, educating them on healthy practices and

preventative measures, and catching ailments early through routine home visits.

Household model community health programs are holistic and sustainable solutions for

real and lasting primary health care for all.[18]

Household models should be more seriously considered in community health

interventions for a few reasons. The first is primary care. Primary care is at the core of

good health systems and its benefits across all health demographics have been widely

[14] Gordon, "One Million Community Health Workers Technical Task Force Report."

[15] Lewin et al., "Lay Health Workers in Primary and Community Health Care for Maternal and Child Health and the Management of Infectious Diseases."

[16] Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way."

[17] Watt et al., "Development of a Composite Outcome Score for a Complex Intervention - Measuring the Impact of Community Health Workers."

[18] Christopher Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales," *Globalization and Health* 9, no. 1 (n.d.): 25.

studied.[19] Through boosting population access to basic primary care, not only can CHWs provide access to necessary services, but CHWs can also build stronger relationships with their patients, lending better quality of care and higher trust.[20] The next reason that household models should be more widely considered is because of the way the model lends itself to increased social connectedness between health workers and their communities. In the same way that primary care promotes better quality of care, when health workers and their patients feel socially connected, there are better outcomes for both parties.[21,22] Lastly, while the primary focus of health interventions should be the benefit to the patients, financial considerations are important. Community health programs that aim at increasing the uptake of services may be more costly at first, but will ultimately offset long-term costs through preventative measures that disrupt the need for bigger interventions.[23]

ISSUES, EVIDENCE, AND KEY FINDINGS

Health Benefits of Primary Care

Primary care, as in the provision of integrated and accessible health services by clinicians, is consistently associated with better health outcomes.[24] Clinicians in these

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[19] Barbara Starfield, Leiyu Shi, and James Macinko, "Contribution of Primary Care to Health Systems and Health," *The Milbank Quarterly* 83, no. 3 (September 2005): 457–502, https://doi.org/10.1111/j.1468-0009.2005.00409.x.
[20] Ibid.
[21] Catherine Haslam et al., "Social Connectedness and Health," 2015, 1–10, https://doi.org/10.1007/978-981-287-080-3_46-2.
[22] Khurshid Alam and Elizabeth Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study," *Human Resources for Health* 12 (May 20, 2014): 29, https://doi.org/10.1186/1478-4491-12-29.
[23] Watt et al., "Development of a Composite Outcome Score for a Complex Intervention - Measuring the Impact of Community Health Workers."
[24] Starfield et al., "Contribution of Primary Care to Health Systems and Health."

contexts are accountable for addressing the majority of personal health care needs, maintaining a partnership with the patient, and practicing in the context of family and community.[25,26] The cornerstone aspects of primary care are:

- first-contact access for each need that facilitates entry to the health care system

- long term person-focused care

- comprehensive care for most health needs

- coordinated care.[27,28]

Primary care is associated with better health outcomes as it helps prevent illness and death, is associated with more equitable health distributions, and improves access to appropriate services.[29] Primary care practitioners are best positioned to monitor adverse effects of medical interventions, especially drug interventions.[30] The benefits of primary care may be attributed to a few features, including:

- greater access to necessary services

- better quality of care

- more focus on prevention

- early treatment of health issues

- the cumulative effect of main primary care delivery characteristics.[31]

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[25] Ibid.
[26] M. S. Donaldson et al., Primary Care: America's Health in a New Era (National Academies Press, 1996).
[27] Starfield et al., "Contribution of Primary Care to Health Systems and Health."
[28] Barbara Starfield, *Primary Care: Balancing Health Needs, Services, and Technology* (Oxford University Press, 1998).
[29] Starfield et al., "Contribution of Primary Care to Health Systems and Health."
[30] Ibid.
[31] Ibid.

In community health contexts, making primary care accessible to as many members of the population as possible, while making specialist care available when needed, is an efficient way to build health systems. This way, health systems are built for the majority and broad swaths of people are connected to health facilities to receive specialized care when they need it. Many of the aspects that make primary care so beneficial, as listed above, are included in household community health models, suggesting that household models may be especially useful at improving overall population health. Additionally, in Latin America, countries that have reformed their health systems to increase accessibility to primary care, such as Cuba and Costa Rica, have significantly lower mortality rates than their neighboring countries.[32],[33]

Health Benefits of Social Connectedness

Many of the causes of health disparities are social. These are inequalities in education, work, housing, and wealth, all of which affect knowledge, attitudes, beliefs, and behaviours that impact people's responses to illness. These factors also include social ties, living situations, trust, civic and social engagement, and social support.[34] Thus, when people are more socially connected, when they have access to correct information systems and feel trust and support from the people they interact with, they will have better responses to illness.

Social connectedness can be defined as "the sense of belonging and subjective psychological bond that people feel in relation to individuals and groups of others."[35]

[32] Ibid.

[33] H. Waitzkin et al., "Primary Care in Cuba: Low- and High-Technology Developments Pertinent to Family Medicine," *The Journal of Family Practice* 45, no. 3 (September 1997): 250–58.

[34] Ibid.

[35] Haslam et al., "Social Connectedness and Health."

Physiologically, social connectedness increases access to psychological buffers against stress, which compromises the ability of the immune system, thus social connectedness can improve physical, mental, and cognitive health. Additionally, social influence is important. When social networks promote healthy behaviour, it increases individual openness to those new behaviours.[36] When community health programs educate entire communities about healthy behaviours in addition to working with patients individually, people may be more readily willing to change.

One ingredient that is especially important in building connectedness is identification with others. Community health workers are typically from the community that they are working within, allowing them to more easily build a relationship of trust. Because perceived support may be more important than the actual receipt of support in building social connectedness, trust and consistency are extremely important in care models.[37]

The household model becomes very relevant in thinking of ways to incorporate social connectedness in health interventions. The household model incorporates the four tenets of belonging, which are people, place, power, and purpose.[38] The household model inspires the growth of community and trust between people, rooted in a place they already share – their home. The monthly household visits allow CHWs to build trust with their patients so that the patients can believe the CHWs are there for them. It brings patients and health workers power and purpose to participate in and contribute to the growth of their own health and communities.

[36] Ibid.
[37] Ibid.
[38] "Global Symposium," Samuel Centre For Social Connectedness, accessed August 14, 2020, https://www.socialconnectedness.org/global-symposium/2019-global-symposium/.

Community Health Program Case Studies

Not all community health programs are created equal. Community health

programs can take on a range of qualities at governmental, clinical, and community

levels. Many recent CHW programs have taken vertical approaches, meaning they

focus on specific health issues and deliver a small number of focused interventions.[39]

While targeting specific diseases is a necessary component of improving population

health, community health programs that target the general health of the entire

population may provide better outcomes.[40] Additionally, there are specific actions that

CHW support systems can take that will improve outcomes both for the program and for

the patients. These include structures that promote primary care and social

connectedness as well as support CHWs through financial and social capital.

Brazil Family Health Strategy Program

One of the most successful community health programs is the Brazil Family

Health Strategy Program (FHP). This program was created in response to the

establishment of the Unified Health System (SUS), which was born out of years of

popular struggles and founded on principles of universality, integrality, and equity.[41]

Following the Constitutional declaration of health as a basic human right and a state

responsibility, the goal of the SUS was to provide free universal care at the point of

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[39] Lewin et al., "Lay Health Workers in Primary and Community Health Care for Maternal and Child Health and the Management of Infectious Diseases."
[40] Starfield et al., "Contribution of Primary Care to Health Systems and Health."
[41] Feinsilver, "Brazil's Mais Médicos (More Doctors) Program Goes Beyond Just More Doctors to Improve Brazil's Universal Health System."

delivery.[42,43] In 2014, the Family Health Strategy Program covered 62% of the

population, as compared to 4% when it began in 1988.[44]

Under the Family Health Strategy Program (FHP), each primary care team

consists of a doctor, nurse, nurse auxiliary, and four to six community health workers,

where each CHW is responsible for 750 people, accounting for 100-150

households.[45,46] CHWs visit each of their households at least once a month irrespective

of expressed need or demand[47] and do not target any specific clinical domains.[48]

Community health workers in the FHP have responsibilities in three domains:

primary care, public health, and community health.[49] They identify risk factors, check

adherence with prescriptions and appointments, follow up on clinical care, and do

community health promotion.[50] Through these domains, the FHP has seen reductions in

infant mortality, hospitalizations, mortality from cardiovascular and cerebrovascular

causes, and complications from chronic conditions, improvements in primary care,

breastfeeding uptake, antenatal care, mental health problems, and immunization

coverage, and has closed some of the health gap between the rich and poor.[51,52,53]

[42] Ibid.
[43] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[44] Feinsilver, "Brazil's Mais Médicos (More Doctors) Program Goes Beyond Just More Doctors to Improve Brazil's Universal Health System."
[45] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[46] Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way."
[47] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[48] Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way."
[49] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[50] Feinsilver, "Brazil's Mais Médicos (More Doctors) Program Goes Beyond Just More Doctors to Improve Brazil's Universal Health System."
[51] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[52] Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way."
[53] James Macinko et al., "Major Expansion of Primary Care in Brazil Linked to Decline in Unnecessary Hospitalization," *Health Affairs (Project Hope)* 29, no. 12 (December 2010): 2149–60, https://doi.org/10.1377/hlthaff.2010.0251.

The Family Health Program is designed to provide accessible and comprehensive care for the whole person, drawing on group-level interventions in support of healthy lifestyles in addition to individualized care.[54] The health teams are proactive and build relationships with their patients, providing "a legitimate liaison role for the broader community, ensuring that their voices are heard within the clinic."[55] The CHWs in the FHP truly provide a holistic model of healthcare for their patients, as they visit them regularly, begin to know their wants and needs, and can council them on topics outside of whatever immediate ailment they may have. The program has been successful not only in its health outcomes, but also in its ability to promote public health action and community empowerment.[56,57]

Partners In Health-Liberia Household Model

A promising new community health program is underway in Maryland, Liberia. Partners In Health (PIH)-Liberia initially began their community health program following the Ebola epidemic in May 2015 and has recently piloted a new household model in Harper, Maryland. Following their initial support in the Ebola epidemic, PIH partnered with the Maryland County Health Team to strengthen the health system in Maryland, which had been severely impacted, and lost trust through two civil wars and the Ebola epidemic.[58] The initial community health programs that were created focused on TB,

[54] Macinko et al., "Major Expansion of Primary Care in Brazil Linked to Decline in Unnecessary Hospitalization."
[55] Harris, "Integrating Primary Care and Public Health: Learning from the Brazilian Way."
[56] Ibid.
[57] Johnson et al., "Learning from the Brazilian Community Health Worker Model in North Wales."
[58] Julia H. Rogers et al., "Impact of Community-Based Adherence Support on Treatment Outcomes for Tuberculosis, Leprosy and HIV/AIDS-Infected Individuals in Post-Ebola Liberia," *Global Health Action* 11, no. 1 (January 1, 2018): 1522150, https://doi.org/10.1080/16549716.2018.1522150.

human immunodeficiency virus (HIV), leprosy, and mental health.[59,60] In the fall of 2019, PIH-Liberia and the Maryland County Health Team launched the household model in an effort to provide robust health care to all in the community.

In this new program, CHWs are assigned to catchment areas located within five kilometres of the health facility in Harper, Maryland. Each CHW is responsible for approximately 46 households, which they visit at least once a month. The CHWs have five core responsibilities:

- active case finding

- referral and escort

- ongoing support and treatment adherence

- community health education

- lost-to-follow-up tracing.[61]

Additionally, CHWs are supervised by their CHW-Supervisor, who has additional duties to:

- supervise and mentor CHWs

- coordinate with health facility-based services

- collect sputum and provide HIV testing

- trace outstanding patients

- report and troubleshoot CHWs in the field.[62]

[59] Ibid.
[60] Garmai Cyrus et al., "Care and Community Reintegration of Homeless People Living with Severe Mental Disorders: A Community-Based Mental Health Programme in Maryland County, Liberia," The Lancet Global Health, CUGH 11th annual conference, 8 (April 1, 2020): S4, https://doi.org/10.1016/S2214-109X(20)30145-5.
[61] PIH-Liberia internal records.
[62] Ibid.

The CHWs are also supported by a community health nurse (CHN), who works within the local clinic and trains and mentors CHWs and CHW-Supervisors.[63]

This program is especially promising because of the ways it incorporates primary care and social connectedness into its model. The CHWs build trust with their patients by visiting them regularly, accompanying them to the health clinic, and giving them at-home health talks. The CHWs are given monthly health topics that they educate their patients about, ensuring that the communities become well-educated on a variety of health topics over time. Because the household model allows CHWs to see a fuller picture of their patients' lives, they can pick up on their patients' needs from a wholescale perspective and address health needs that may go unchecked in targeted interventions. Through these relationships, the CHWs can also ensure that patients are getting correct and updated information. With the support of supervisors and CHNs, they can deliver trusted information and care to patients in their homes, removing obstacles to care.

Bangladesh Community Health Worker Retention Factors

When CHW programs are being designed, it is useful to look to past studies and programs to understand what worked and what did not. A number of studies have documented supports for CWHs under different structures.

In one study of a Bangladesh CHW program, financial supports were the main factor linked to CHW retention, where those with an expectation of income were almost twice as likely to stay with the program.[64] Other factors included expectations of better

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[63] Ibid.
[64] Alam and Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study."

jobs, support from families, and support from supervisors.[65,66] Additionally, reasons for

dropping out of the program included insufficient earnings, time constraints, and social

disapproval.[67,68,69] Time constraints were especially relevant for female CHWs who were

expected to also carry a heavier burden of household responsibilities.[70]

In their relationships with the communities they serve, CHWs were more likely to

stay in their positions when they felt a sense of social prestige and were accepted and

recognized by their community. This could be because in their role as a CHW they built

social networks and felt increased social cohesion.[71]

At a clinical and ground level, CHWs have been found most effective when

supported by a clinically skilled health force, including skilled birth attendants, nursing

staff, and emergency personnel, and when they have supportive supervision.[72,73,74,75]

[65] Syed Masud Ahmed, "Taking Healthcare Where the Community Is: The Story of the Shasthya Sebikas of BRAC in Bangladesh," 2008, http://dspace.bracu.ac.bd/xmlui/handle/10361/415.
[66] Syed Moshfiqur Rahman et al., "Factors Affecting Recruitment and Retention of Community Health Workers in a Newborn Care Intervention in Bangladesh," *Human Resources for Health* 8 (May 3, 2010): 12, https://doi.org/10.1186/1478-4491-8-12.
[67] Alam and Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study."
[68] S. H. Khan et al., "Training and Retaining Shasthyo Shebika: Reasons for Turnover of Community Health Workers in Bangladesh," *The Health Care Supervisor* 17, no. 1 (September 1998): 37–47.
[69] Amina Mahbub, "A Documentation on BRAC's Shastho Shebika: Exploring the Possibilities of Institutionalisation," October 2000, http://dspace.bracu.ac.bd/xmlui/handle/10361/13421.
[70] Alam and Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study."
[71] Ibid.
[72] Ibid.
[73] Yuuki Suehiro and Penny Altman, "Female Volunteers: An Asset to the Reproductive Health Sector in Rural Cambodia," *Development in Practice* 13, no. 4 (August 1, 2003): 346–60, https://doi.org/10.1080/0961452032000112400.
[74] Andy Haines et al., "Achieving Child Survival Goals: Potential Contribution of Community Health Workers," *Lancet (London, England)* 369, no. 9579 (June 23, 2007): 2121–31, https://doi.org/10.1016/S0140-6736(07)60325-0.
[75] Rahman et al., "Factors Affecting Recruitment and Retention of Community Health Workers in a Newborn Care Intervention in Bangladesh."

Another positive impact for CHWs is clear communication both in terms of job

description and income expectation.[76,77]

RECOMMENDATIONS

These recommendations are most relevant for governmental and

nongovernmental actors. As health systems, nongovernmental, and local organizations

build their own community health programs, they should evaluate the global health field

to draw on existing models and examine their own community to understand what the

local needs are.

Governmental Recommendations

At a broad level, supportive government policies have been linked to good

delivery of primary care services.[78] Specifically, these policies must aim to distribute

health services equitably and universally and ensure public oversight. Clear government

guidelines that stipulate health as a human right imply that programs should provide

financial coverage and funding for social support for patients. Governments should

provide financial assistance for physicians to practice in rural or underserved areas and

should partner with medical schools to offer incentives such as credits to students who

work in underserved areas for a period of time.[79]

Governments should take care to study the context in which they plan to

implement the program. Community health programs have been found to be effective

[76] Alam and Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study."
[77] Haines et al., "Achieving Child Survival Goals: Potential Contribution of Community Health Workers."
[78] Starfield et al., "Contribution of Primary Care to Health Systems and Health."
[79] Ibid.

when they engage with existing community health outreach structures and maintain community-level availability.[80] Understanding how many households in an area have members at risk or with preexisting conditions can help develop and advocate for household approaches. Additionally, understanding the specific health needs of the community is important to create appropriately targeted interventions.

Programmatic Recommendations

While community health models can take on any combination of programs and practices, the household model is especially useful in thinking about how to broaden primary care access and increase social connectedness. As seen in Brazil, the household model has contributed to incredible health outcomes and health coverage. Additionally, aside from patient outcomes, the characteristic of the household model to attend to every community member, irrespective of expressed need, is a tremendous step towards universal health care and preventative care, ultimately lowering costs in the long-run.[81]

Within local community health programs, community health workers should be compensated for their time and should be supported to attend refresher training courses.[82] This will both improve the CHW retention rate and improve the quality of the program. The managers of the program should maintain clear communication with the health workers in discussions of pay, roles, and responsibilities. Additionally, there should be sufficient and regular training for CHWs and strong support from the local

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[80] Gordon, "One Million Community Health Workers Technical Task Force Report."
[81] Feinsilver, "Brazil's Mais Médicos (More Doctors) Program Goes Beyond Just More Doctors to Improve Brazil's Universal Health System."
[82] Alam and Oliveras, "Retention of Female Volunteer Community Health Workers in Dhaka Urban Slums: A Prospective Cohort Study."

health professionals and supervisors.[83] Lastly, social supports for patients, such as food or transport support, are important components in making community health models sustainable and accessible. These make it easier for patients to seek and continue treatment, which are indispensable components in sustaining any community health program.[84]

IMPACT

Strong governmental policies are necessary to ensure that smaller actors can effectively implement sustainable community health programs. At a local level, stakeholders such as the Samuel Centre and Partners In Health can provide financial assistance to community health workers and patients, ensuring CHW retention and treatment accessibility.

It would be remiss to neglect the impact that community health workers could have in the current COVID-19 pandemic. CHWs are perfectly poised to liaise between individuals and decision-making bodies about up-to-date information regarding the coronavirus and about best practices to disseminate information and resources to vulnerable populations.[85] Additionally, CHWs carry a unique positionality to disseminate information in culturally appropriate manners and can act as mobilizers and contact tracers, ensuring communities are as equipped as they can be in emergency

[83] Avril Ogrodnick, "Sustaining the Impact of Community Health Workers: Evidence from Health System Assessments," CHW Central, July 2, 2015, https://chwcentral.org/resources/sustaining-the-impact-of-community-health-workers-evidence-from-health-system-assessments/.
[84] Rogers et al., "Impact of Community-Based Adherence Support on Treatment Outcomes for Tuberculosis, Leprosy and HIV/AIDS-Infected Individuals in Post-Ebola Liberia."
[85] Denise O. Smith and Ashley Wennerstrom, "To Strengthen The Public Health Response To COVID-19, We Need Community Health Workers," Health Affairs, May 6, 2020, https://www.healthaffairs.org/do/10.1377/hblog20200504.336184/full/.

situations.[86,87] The value of CHWs stretches beyond low-resource settings. The impact that CHWs can have at local and global levels is huge when strengthening health systems and access to care. This impact is even more salient during pandemics, when information dissemination and preparedness are vital to emergency responses.

The impact of implementing household model community health programs on a broad scale is promising. If done well and with adequate support, these programs could yield large scale achievements in providing universal primary health care. In addition to universal primary health care, household model programs can build connections within communities, promoting social connectedness and fostering belonging for all.

The ongoing pilot household model in Harper, Maryland is intended for scale up at a national level; continuing to monitor the progress of the program and how it thrives will be critical in ensuring its success at a national level and in informing other projects.

CONCLUSION

This paper broadly examined different community health program structures and the importance of primary care and social connectedness in bridging gaps in health care. Through emphasis on primary care and connectedness, programs can ensure that everybody is receiving the treatment they need and that they feel like they are being advocated for within health systems. Especially when health systems may be inaccessible, community health workers are critical in bridging the gap between patients

[86] Ibid.
[87] Matthew R. Boyce and Rebecca Katz, "Community Health Workers and Pandemic Preparedness: Current and Prospective Roles," Frontiers in Public Health 7 (2019), https://doi.org/10.3389/fpubh.2019.00062.

and systems and ensuring the physical and mental health of their patients through routine check ins and preventative care.

Through evaluations of three existing programs: the Brazil Family Health Strategy Program, the Partners In Health-Liberia household model, and a Bangladesh community volunteer program, recommendations were proposed that emphasize the importance of certain policies at local and governmental levels. Specifically, clear government support for accessible and universal health care are fundamental to support smaller programs. In local contexts, primary care and connectedness between health workers and patients is crucial for successful wholescale outcomes. These include routine visits irrespective of expressed need, health education in individual and group contexts, and accompaniment to health facilities. Supports that programs can provide for their workers include clear communication and financial compensation or incentives. It is important that programs or governments also provide social stipends to patients so that they can reliably access food and transportation.

The PIH-Liberia household model will be a useful tool to understand core components in developing successful community health programs that are scalable. These types of programs may be able to legitimately foster universal primary health care and social connectedness.

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