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## Empowering Rural Health - Evaluating The Impact of the Lady Health Worker Programme in providing Pharmaceutical care in Pakistan

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### Abstract:

**Objective:** Pakistan is the 6<sup>th</sup> most populous country of the world with almost 70% of its population living in rural areas, but being a LMIC the health care facilities in Pakistan are least developed in rural areas. Due to this inequality, major population of Pakistan is living with poor health conditions. The basic aim of this study is to find out how we can improve the health of rural population and what the impact of vertical health programme like Lady Health worker in Improving the rural health.

**Methodology:** Study is based upon data from different scientific studies, literatures and online article databases like Pubmed, EbscoHost, Medline, Cinhal and google scholar.

**Conclusion:** Lady Health Worker programme can effectively improve the overall health of rural community in Pakistan. However, efficient innovations and interventions are needed focusing on rural population needs.

**Keywords:** Rural health, Maternal health in rural areas, Pakistan, Lady Health Worker

### INTRODUCTION:

Pakistan, predominantly a low- and middle-income country, faces considerable healthcare challenges, particularly in its rural areas, where about 70% of the population lives (1) (2). These regions suffer from a scarcity of medical personnel and facilities, and high treatment costs, which have been further exacerbated by disruptions such as the COVID-19 pandemic (2). Additionally, a significant portion of the population, around 39%, experiences multi-dimensional poverty, and the country has a high maternal mortality rate, ranking 149 out of 179 countries as of 2015 (3). These factors highlight the critical need for effective healthcare interventions in rural Pakistan.

### Policy Overview

To address these healthcare challenges, the Lady Health Worker Programme (LHWP) was initiated in 1994 (4). This initiative targets both rural and urban underserved areas, aiming to improve healthcare quality and accessibility through the placement of 100,000 Lady Health Workers (LHWs) by 2005 (4). These LHWs, who operate across all five provinces of Pakistan, are trained for three months in classrooms, followed by a year of practical, on-the-job training (5). Each LHW reaches approximately 1,000 community members, providing essential health information services, focusing on disease management and health education (6).

The primary goal of the LHWP is to deliver comprehensive primary health care, focusing on curative, promotive, and preventive services, particularly for women and children (7). The program, through its nearly 90,000 LHWs, extends health services to an estimated 115 million people who would otherwise lack access to necessary healthcare (7).

In conclusion, the LHWP plays a crucial role in enhancing healthcare accessibility in Pakistan's rural areas. By prioritizing maternal and child health, the program not only meets immediate health necessities but also contributes to the long-term health and well-being of these communities.

### POLICY DETAILS:

#### Program Description:

Established in 1994, the Lady Health Worker Program (LHWP) targets underserved rural and urban populations across all five provinces in Pakistan, aiming to deliver primary care services (7) (4).

### **Training:**

Lady Health Workers (LHWs) undergo an extensive training regime comprising three months of classroom instruction followed by a year of on-the-job training<sup>12</sup>. The ongoing training includes monthly sessions over a year and an annual 15-day refresher course (7) (4).

### **Responsibilities:**

Operating primarily from their homes, LHWs are linked to local health facilities and report monthly to a supervising Lady Health Worker Supervisor (LHS) (7). Their work involves visiting approximately 27 households weekly, offering consultations to around 22 individuals during these visits (7) (4).

### **Scope of Services:**

Originally focusing on Maternal and Child Health (MCH), the LHWP's scope has broadened to encompass participation in major health campaigns and providing services related to newborn care, tuberculosis management, and HIV/AIDS education (7) (4).

### **Goals and Objectives:**

The program's primary goals include enhancing service quality and extending its reach (7) (4). It aims to boost healthcare access and outcomes, particularly targeting rural and impoverished urban areas with comprehensive primary health care services (7). Objectives also cover improving interactions between patients and providers, facilitating timely service access, increasing contraceptive use, and reducing poverty (7).

### **Impact:**

The LHWP has demonstrated significant impacts such as promoting healthier diets, increasing exclusive breastfeeding rates, reducing smoking, and decreasing childhood infections (8) (9). It also seeks to empower communities, enhancing their capacity to tackle health issues and increasing their control over factors affecting their health (8) .

### **Evidence of Need and Effectiveness:**

Healthcare in rural Pakistan is severely challenged, with about 70% of the population living in underserved areas characterized by a scarcity of medical staff, limited facilities, and high healthcare costs (2). The COVID-19 pandemic further aggravated these issues by disrupting medical supply chains and interrupting the delivery of essential medicines (2).

To combat these difficulties, the Lady Health Worker Program (LHWP) was launched in 1994 with the intent to enhance primary care services in both urban and rural underserved areas (4) (7). The program's strategic goals included improving service quality and expanding outreach through the placement of 100,000 Lady Health Workers (LHWs) by 2005 (4) (7).

LHWs are stationed across all five provinces of Pakistan and operate primarily from their homes, which also serve as Health Houses for emergency treatments and care (7). They are affiliated with local health facilities, ensuring a community-based approach to healthcare (7).

The training for LHWs comprises three months of classroom instruction followed by a year of practical training on the job (4) (7). This training regimen includes monthly training sessions over the year and 15 days of annual refresher courses to keep their knowledge and skills up to date (7).

The range of services offered by LHWs has expanded from focusing mainly on Maternal and Child Health (MCH) to engaging in extensive health campaigns, newborn care, tuberculosis management, and educating communities about HIV/AIDS (7). On average, each LHW visits 27 households weekly, providing consultations to about 22 people during these visits (7).

The LHWP has proven vital in improving healthcare accessibility and affordability, particularly for low-income groups in rural Pakistan (2). It has played a significant role in broadening healthcare access and disseminating important information about disease prevention, especially during the pandemic (2).

In summary, the LHWP has addressed critical healthcare issues in rural Pakistan by delivering essential primary care and health education at the community level. The program has significantly enhanced healthcare quality and access in these disadvantaged areas, although ongoing efforts are necessary to maintain and strengthen the program's impact and sustainability.

### **IMPLEMENTATION STRATEGY:**

The Lady Health Workers (LHWs) Programme, initiated in 1994 in Pakistan, aims to enhance primary care access and bolster health systems at the household and community levels (10). By recruiting LHWs locally, the program ensures culturally sensitive service delivery (10).

Following recruitment, LHWs undergo a comprehensive 15-month training regimen that includes three months in the classroom and twelve months of practical, on-the-job training (10, 11). This training prepares them to address common health issues effectively. Currently, over 110,000 LHWs conduct monthly home visits nationwide, promoting health, screening for diseases, providing basic treatments, and facilitating referrals to healthcare facilities (10).

Stakeholder involvement is pivotal to the program's efficacy. Local communities are integral, both as the primary beneficiaries and as the source of the LHWs, which fosters trust and ensures the cultural relevance of health services (10). Government support is crucial, as it not only spearheaded the program's establishment but also offers ongoing support through training, stipends, and medical supplies (11).

Additionally, international partners contribute significantly. For example, the Sightsavers' study in the Khyber Pakhtunkhwa (KPK) province was funded by Standard Chartered Bank's Seeing is Believing (SiB) initiative, highlighting the role of external funding in research and program implementation (10).

In summary, the LHWs Programme is a key initiative for improving primary healthcare in Pakistan's rural areas through its community-centric approach, thorough training of health workers, and robust stakeholder engagement. This model is noteworthy for other nations aiming to enhance healthcare in similar settings.

### **Challenges and Mitigation Strategies**

Implementing new strategies within an organization can encounter various challenges:

**Funding Constraints:** Limited budgets can restrict the ability to allocate adequate resources for developing and implementing strategies, hindering progress (12).

**Cultural Resistance:** Changes often face opposition from stakeholders who might view them as disruptive or unnecessary, affecting the smooth adoption of new initiatives (13).

**Logistical Hurdles:** Mismatches between short funding and policy cycles and the longer timelines required for full implementation can create difficulties (13).

### **Strategies to Overcome Implementation Barriers:**

**Risk Mitigation:** This proactive approach involves identifying, evaluating, and addressing potential risks to minimize their impact on organizational goals. It includes crafting detailed plans to lessen the likelihood or effects of these risks (14).

**Stakeholder Engagement:** Gathering input from all parties involved in the implementation process helps identify obstacles and understand their underlying causes (15). This engagement is crucial for aligning goals and smoothing the implementation process.

**Continuous Improvement Cycles:** Organizations should establish mechanisms for ongoing review and feedback, allowing the adaptation of strategies based on real-world experiences and the integration of best practices and lessons learned into future plans (15).

**Leadership Support:** Effective leadership and dedicated champions are essential for driving change and countering resistance (16).

**Well-Designed Strategies and Resources:** Developing thorough strategies and maintaining robust protocols and resources are vital for managing operational risks and ensuring a resilient supply chain (14).

**Sufficient Resources and Timing:** Allocating adequate resources and allowing enough time are key to overcoming financial and logistical constraints (16).

In summary, successfully overcoming implementation barriers in an organization demands a comprehensive approach that includes detailed risk management, active stakeholder involvement, continuous feedback mechanisms, strong leadership, strategic planning, and appropriate resourcing. These elements, when customized to the organization's specific circumstances, are fundamental to ensuring effective implementation.

### **Monitoring and Evaluation:**

The effectiveness of the Lady Health Worker (LHW) program is assessed through various performance indicators (7) (4). Key among these are:

- **Selection Process:** Ensuring that LHWs are selected based on merit is vital. This criterion guarantees that only the most qualified candidates are chosen to fulfill the responsibilities of the role (4).
- **Professional Training:** The level of professional knowledge and skills LHWs receive is crucial. Proper training ensures that LHWs are adequately prepared to execute their duties (4).
- **Supply Management:** A reliable supply of necessary medicines and other essential resources is another significant indicator. This ensures LHWs can deliver the required care to their communities (4).
- **Support and Compensation:** Adequate remuneration and systematic performance management and supervision are critical. These factors help maintain motivation and ensure the LHWs' effectiveness in their roles (4).

### **Continuous Improvement Measures:**

The program incorporates several mechanisms to facilitate ongoing improvement and adaptability (7) (17):

- **Customized Care:** LHWs evaluate the specific needs of individuals to tailor their interventions appropriately. This adaptability helps the program meet the distinct needs of various communities (17).
- **Ongoing Assessments:** Regular program reviews and evaluations are essential to identify potential improvements. These evaluations are guided by the performance indicators (4).
- **Community and Worker Feedback:** Insights from LHWs and the communities they serve form a crucial feedback loop. This feedback is instrumental in gauging the program's impact and identifying areas for enhancement (17).

These metrics and feedback systems collectively ensure the LHW program remains responsive and effective in addressing the healthcare needs of communities it serves.

## **Conclusion and Recommendations**

Since its establishment in 1994, the Lady Health Worker Program (LHWP) has been a transformative force in enhancing healthcare access in Pakistan, particularly in rural areas. The program was initially launched to extend primary care services to the underserved communities across both rural and urban settings. Over the years, it has effectively brought health services directly to the doorsteps of communities, significantly aiding about 100 households previously deprived of basic health and nutrition services. The LHWP has been a cornerstone in Pakistan's broader goals to diminish poverty, boost health outcomes, and move towards achieving Universal Health Coverage.

As the program looks to the future, several potential areas for research and expansion could further improve healthcare delivery in these rural environments. One immediate area of focus is the enhancement of primary healthcare access in rural communities. This could be achieved through a variety of innovative strategies. Among them are implementing community health programs and community-directed interventions that directly engage with the needs and customs of local populations. Additionally, the introduction of school-based and student-led healthcare services could promote health education and preventive measures from an early age, thereby ingraining a culture of health awareness.

Expanding outreach services and mobile clinics could also play a crucial role in reaching remote or isolated areas, ensuring that comprehensive healthcare is accessible to all segments of the population. Similarly, the development of family health programs and the application of community health funding schemes could provide a sustainable foundation for ongoing health support. Furthermore, embracing telemedicine could bridge the gap between rural residents and advanced medical advice, which is typically concentrated in urban centers. Collaborations with traditional healers and partnerships with non-profit private sectors and non-governmental organizations could also enrich the program's effectiveness and reach.

Another vital strategy involves addressing the specific challenges faced by rural healthcare providers, particularly in recruiting and retaining a knowledgeable and well-supported nursing workforce. There is a pressing need for policies that attract healthcare professionals to rural areas and ensure they are well-supported in their roles. Innovative payment and delivery models that integrate Emergency Departments into local healthcare systems could also significantly improve the efficiency of rural healthcare services. Such integration would enhance patient access, streamline care coordination, and potentially reduce healthcare costs.

Innovative financial and administrative strategies are crucial for these improvements. Policymakers must consider new models that not only provide incentives for healthcare workers to serve in rural areas but also ensure that these areas are equipped with the necessary infrastructure to support complex healthcare services. Moreover, the integration of emergency care with routine health services could ensure a comprehensive approach to health management, catering to both immediate and preventive care needs.

In summary, while the LHWP has made substantial progress in revolutionizing rural healthcare in Pakistan, continuous efforts are needed to sustain and expand these gains. The future of the program lies in its ability to adapt to the evolving healthcare landscape and the specific needs of rural populations. By focusing on innovative strategies that encompass technology, community involvement, professional training, and infrastructural enhancements, the LHWP can continue to play a pivotal role in advancing healthcare delivery across Pakistan's rural settings. This ongoing commitment will be crucial in maintaining the momentum towards achieving Universal Health Coverage and enhancing the overall health status of the Pakistani population.

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## **References:**

1. Khan SU, Hussain IJBph. Inequalities in health and health-related indicators: a spatial geographic analysis of Pakistan. 2020;20(1):1800.
2. Khan JZI. Expected challenges in e-health implementation: A case of rural hospitals in Pakistan. 2019.
3. Khan SU, Hussain I. Inequalities in health and health-related indicators: a spatial geographic analysis of Pakistan. BMC Public Health. 2020;20(1):1800.
4. Zulliger R. Pakistan's lady health worker program. CWH Central A global resource for and about community Health Workers. 2017.
5. Afsar HA, Younus M. Recommendations to strengthen the role of lady health workers in the national program for family planning and primary health care in Pakistan: the health workers perspective. Journal of Ayub Medical College. 2005;17(1):48.
6. Williams P. Criminalising the other: Challenging the race-gang nexus. Race & Class. 2015;56(3):18-35.
7. Hafeez A, Mohamud BK, Shiekh MR, Shah SAI, Jooma R. Lady health workers programme in Pakistan: challenges, achievements and the way forward. JPMA The Journal of the Pakistan Medical Association. 2011;61(3):210.
8. D'Arcy C, Tacket A, Hanna L. Implementing empowerment-based Lay Health Worker programs: a preliminary study. Health Promotion International. 2018;34(4):726-34.
9. Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: a qualitative evidence synthesis. Cochrane Database of Systematic Reviews. 2013(10).

10. Bechange S, Schmidt E, Ruddock A, Khan IK, Gillani M, Roca A, et al. Understanding the role of lady health workers in improving access to eye health services in rural Pakistan—findings from a qualitative study. *Archives of Public Health*. 2021;79:1-12.
11. Zhu N, Allen E, Kearns A, Caglia J, Atun R. *Lady health workers in Pakistan: improving access to health care for rural women and families*. Boston: Harvard School of Public Health. 2014.
12. Alesch DJ, Petak WJ. *Overcoming obstacles to implementing earthquake hazard mitigation policies: stage 1 report*. 2001.
13. Moser SC, Ekstrom JA. A framework to diagnose barriers to climate change adaptation. *Proceedings of the national academy of sciences*. 2010;107(51):22026-31.
14. Talluri S, Kull TJ, Yildiz H, Yoon J. Assessing the efficiency of risk mitigation strategies in supply chains. *Journal of Business logistics*. 2013;34(4):253-69.
15. Barnidge EK, Radvanyi C, Duggan K, Motton F, Wiggs I, Baker EA, et al. Understanding and addressing barriers to implementation of environmental and policy interventions to support physical activity and healthy eating in rural communities. *The Journal of Rural Health*. 2013;29(1):97-105.
16. McArthur C, Bai Y, Hewston P, Giangregorio L, Straus S, Papaioannou A. Barriers and facilitators to implementing evidence-based guidelines in long-term care: a qualitative evidence synthesis. *Implementation Science*. 2021;16(1):70.
17. Hodgins F, Gnich W, Ross AJ, Sherriff A, Worledge-Andrew H. How lay health workers tailor in effective health behaviour change interventions: a protocol for a systematic review. *Systematic Reviews*. 2016;5(1):102.