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ORIGINAL ARTICLE

Operational Barriers to the performance of Lady Health Workers in District Hangu Khyber Pakhtunkhwa, Pakistan

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ABSTRACT

Background: The lady health workers (LHWs) are key players in saving the life of mother and child. They are the integral part of immunization program along with promotion of reproductive health of childbearing mothers. However, their services are significantly affected by multiple factors and all these are contextualized, hence needed to be addressed for proper planning. This research aims to determine the operational barriers impending the smooth running of LHWs program in district Hangu.

Methods: This was cross sectional study based on questionnaire as tool for data collection. A total of 136 LHWs were being part of this study and the selection of the subject was based on Census approach. All LHWs working in national program in district Hangu have completed their training and been in the field for at least one year. Data was entered in MS excel and transformed to SPSS Version-24 for analysis. Descriptive analysis was performed for all variables and presented in term of mean, frequency and percentages.

Results: Total 136 (mean age was 37.26±10.2 years) lady health workers took part in the study having a mean experience of 5±10 years. Majority (73%) were having monthly income less than 50000 rupees. Out of them 51.85% of LHWs faced social and end community barriers to their work efficiency, 14.1% had personal barriers influencing their work, 14.8% with organizational obstacles and 19.25% had operational barriers.

Conclusion: The study's conclusions is that LHW face enormous challenges in the field, organization and in personal life, which have a negative impact on their work efficiency, these barriers, are affecting the indicators of program and result in failure to achieve national objectives of improved primary health.

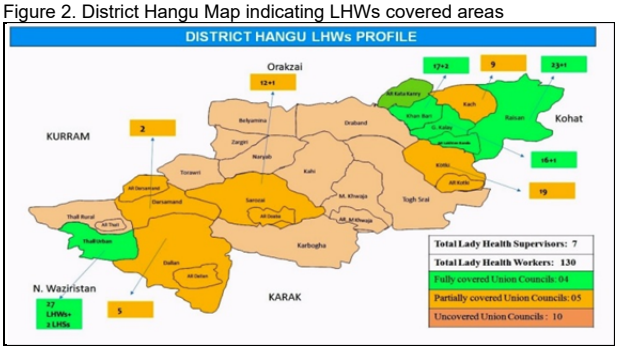
Keywords: Barriers, Lady Health worker, Primery Health care, Vertical Programs.

DISTRICT HANGU PROFILE

Hangu a district of Khyber Pakhtunkhwa and situated in the south West of Pakistan which was formerly a Tehsil of Kohat and was known as a Model Tehsil of the Subcontinent, which was later separated from Kohat in 2001 and became a District after the name of the Hangu City as District Hangu[14-17]..The principle language of the district is 'Pashto'. The total population of the district is about 518798 as per the census report 2017. The district is geographically boarding with tribal areas of Khurram, Orakzai, Waziristan, FR Bannu, District Kohat and Karak.The district is divided into two tehsils namely Tehsil Hangu and Tehsil Thall, a town Doaba and 19 Union Councils as a whole. It is inhabited by a number of tribes including Bangash, Orakzai, Khattaks and Afridis. Afghan refugees have also added to overall population of Hangu. Hangu sheltered a large number of IDPs during military operation against militants in neighboring tribal areas which led to exodus especially from Orakzai Agency. Two sectarian populations of Shias and Sunnis co-exist in Hangu city with different social mindsets and ideology. Most of the population are dependent on the income of family members serving abroad, mainly in Middle East[18]. Working in the environment with a diverse mindset and cultural approach is a challenge for LHW. The overall literacy rate of district is low and people are more inclined towards religious scholars and mullahs[19]. The cultural tradition of Pardha is ingrained by the people of Hangu and its practice surrounds the domestic sphere of work environment. The district is widely scattered and surrounded by a range of mountains with very hard-to-reach areas. The diverse cultural, traditional and geographical background of the

District has its social and territorial restriction for activities of lady Health workers[14]. District Hangu has a total of 129 LHWs and 7 LHS which covers about 25% of the total population. The LHWs mainly cover the densely populated urban areas and some parts of the rural areas. The human resources from the rural area are limited due to cultural restrains and low literacy level particularly in female population. The LHW covered area is mapped below.

Figure 2. District Hangu Map indicating LHWs covered areas



INTRODUCTION

Pakistan struggled hard to develop public health care services to achieve a stable health status of its disadvantaged population through reducing death rates, improving the graph of life expectancy, maintaining a quality health care by reducing morbidity from diseases and improving accessibility of health care services to communities especially those residing in remote areas[12,13]. An initiative was taken by introducing lady health workers cadre into health system. However, the services provided by Lady Health workers had confronted numerous barriers[14,15]. These barriers categorized in terms of financial support, lack of recognition by community and problems related to the organizational setup and policies were considered as barriers

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preventing them from providing quality services to the community which directly affect national goal of achieving health indicators[16]. Assigning additional tasks with poor motivation and training result in camouflaging their routine duties. It is also obvious that the understanding and skill gaps is associated with sub-optimal performance due to lack of trainings[17]. All issues related to the job description of a worker is associated with organization which include financial support, service structure, handiness of facilities and logistics. Acceptance of the 'End Users' is a factor which needs extensive support of administration in building trust, changing attitude of the people, provide security and create a favorable environment to work. The poor performance of Lady Health Worker program is endorsed by the factors mentioned above, though, most of these obstacles are contextual and differ from region to region. The work atmosphere vary across the districts especially in remote areas[18]. Hence these barriers are of dire importance and needs to be addressed in larger interest of the country. Thus evaluating the barriers prejudicing the performance of LHW and to provide recommendations to reorganize the services at respective district is the requisite of time. The only way to reach the goal of MDGs and SDGs is to have a field force of outreach workers who are focused on their goal of achieving the Public health indicators

The LHWs are having a strong professional connection with community in majority of the countries and found effective[4,5]. Their roles are regarded as vital to health of rural communities where accesses to health care services are difficult due to various reasons. However, their performances are influenced by various factors, which may act as threat to the quality health services particularly, and health outcome as whole[6]. Availability of competent and motivated health workers can lead to significant achievement in meeting the health care needs of the population. Thus adding to the slogan of health for all and universal coverage of primary health care services, specially the immunization and reproductive health services[19,20]. Pakistan being developing country still is striving to provide comprehensive health care services to the rural community of the country. The primary health care services provided by the LHWs can improve the health status without undue financial obligations provided that they are facilitated and all barriers to services provision are minimized or eliminated[17]. In the past most of the developing countries including Pakistan worked hard to improve the community based health services along with PHC services[13]. however, the services provided by LHWs in Pakistan had faced various problem in terms of financial lacking (low salaries) unacceptability by the community and problem associated with the management cadre of the services[21]. Furthermore, they were given additional tasks of immunization and other polio eradication responsibilities for which they were not trained formally[12,22]. The health workers of National program are usually disadvantaged by lack of motivation, work burden lack of quality of services result from abrasion of optimal performance[12]. It is evident that lacks of training of LHWs are associated with poor performance. However, there are other factors, which act as barriers are classified as; personal e.g. education level of LHWs, professional development and motivation[23,24]. Secondly, factors associated with organization that include service structure, implementation of services, provision of facilities and logistics[25]. The thirdly, factors associated with community as external environment that include the attitude of community people, economy, socio-cultural, security and physcial environment[26,27]. Health department of Pakistan has accelerated the LHW and CHW program and has inducted the new employees as well. They are given task to provide primary health care to the woment and children. The ratio of one LHW to 1000 population and 200 houses of their catchment area[17.28.29]. The report of program eveluation indicate that the female who have availed the LHWs are more like to use contraceptive methods and take recommended tetanus toxoid vaccination. The vaccination status of such women is 15% higher than those who have not availed their services[30].

The objective of the study was to identify and assess the various barriers encountered by Lady Health Workers (LHWs) in District Hangu, KPK, encompassing personal, management-related, organizational, and community-level factors.

METHODOLOGY

Study Design: It is a cross-sectional study of views on barriers experienced by Lady Health Workers which may influence quality of their work. All the possible barriers related to community end users, management or organizational and personal were the focus of study.

Study Settings: District Hangu is the region of study. Hangu is a district of Khyber Pakhtunkhwa province which in South of the province. It has a geographical importance of sharing borders with tribal areas and a diverse population.

Study Duration: The research was completed in Feb-2023

Sample Size: As we are using 'complete count technique' or 'census technique' we have taken all the filled posts of LHW and LHSs which makes a total of 136 candidates who were interviewed. Therefore, the sample size using the census approach was 136 (n=136).

Sampling Technique: Data collectors composed the lists of all active LHWs and LHSs in district Hangu and approached them individually using census technique. Data was collected from each and every LHW/LHS. Complete count of the present eligible LHWs/LHS was taken in the survey.

Study Population: All the active LHWs and LHS of district Hangu are included in the study which makes a total of 136. These LHWs were deployed in urban and rural areas of the district and represent almost all of the district population.

Inclusion criteria: All Lady health workers and Lady Health Supervisors working in District Hangu were included in the survey who have completed their mandatory training and been in the program for at least 'one' year. The latest LHW recruitment by health department was done in 2017 thus all the LHWs in Hangu fall in the inclusion criteria.

Exclusion Criteria: Keeping the exclusion criteria in mind, the Lady Health workers those were under disciplinary proceeding or on long leave were not taken in the survey. Lady Health Workers who were not willing to participate were also excluded from the survey.

Data collection procedure: Before scheduling the data collection process, a prior approval was taken from AS&RB KMU Peshawar and certificate of approval was acquired from the board. After the approval authorization was taken from District Health Officer Hangu. DHO Hangu provided the list of all registered working LHWs and LHSs of the district. These lists were then organized according to their respective duty station and union councils. The team members (data collectors) contacted the LHWs individually and decided a venue and time for interview. After written and informed consent data was recorded on structure questionnaire (Annexure-I). The questionnaire consists of demographic information, personal factors influencing their performance, management related and community end user barriers to work. Data collectors were trained before proceeding to the field for a quality data collection and data management was carried out by principle investigator himself.

Data analysis procedure: The data was coded and entered into SPSSVersion-24. Statistical data collected was calculated according to the type of data. Whereas comparative analysis was conducted for categorical and continued data through frequency and percentages.

RESULTS

Demographical profile of LHWs: There were 136 participants in this study out of whom, 129 were the lady health workers and 07 Lady Health Supervisors participated and all of the target candidates completed the process of data collection through data

teams. The mean age of the participants (LHWs and LHSs) was 37.26±10.2 years (ranging from 23 to 56 years).

Figure 3. Distribution of participants/LHWs according to their age

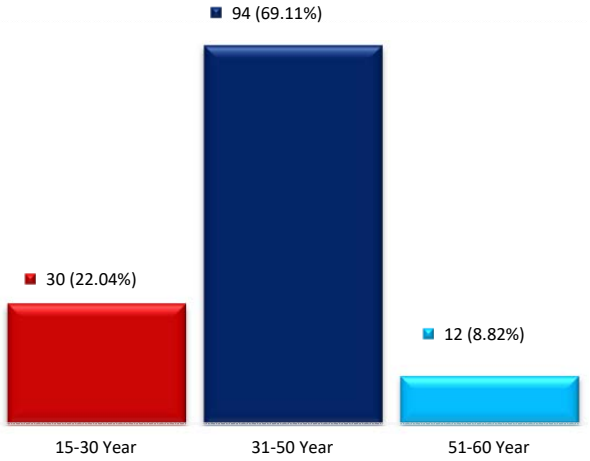
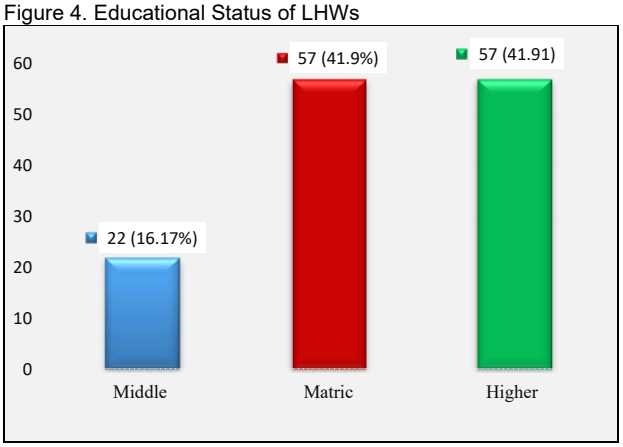
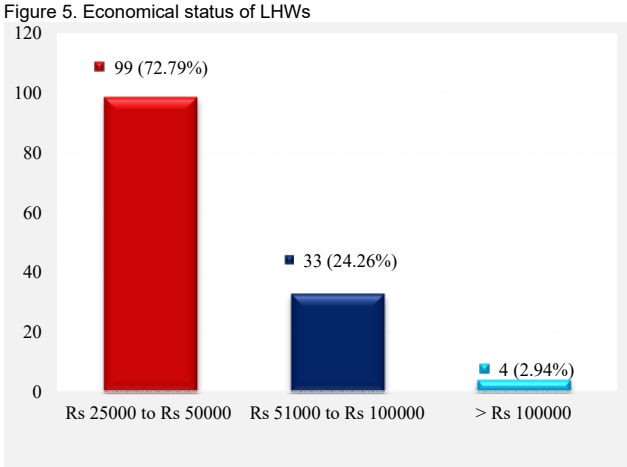


Figure 4. Educational Status of LHWs



Economical Status of LHWs: Economical statistics showed that 99 (73%) were having monthly income less than 50000 PKR and 37(27%) were having 50000 or above monthly income.

Figure 5. Economical status of LHWs



The marital status of Lady Health Workers indicate that majority of LHWs 102 were married (75%) and 22 LHWs were single (16%) and 12 LHWs were widows (9%). Similarly the educational status showed that 23 LHWs (17%) were middle education, 57 LHWs (42%) were matriculate, 38 LHWs (28%) had intermediate qualification and 18 LHWs (13%) had higher education.

Figure 6. Marital Status of LHWs

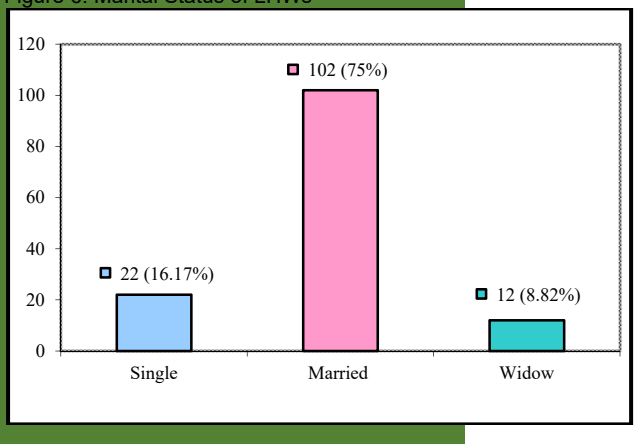
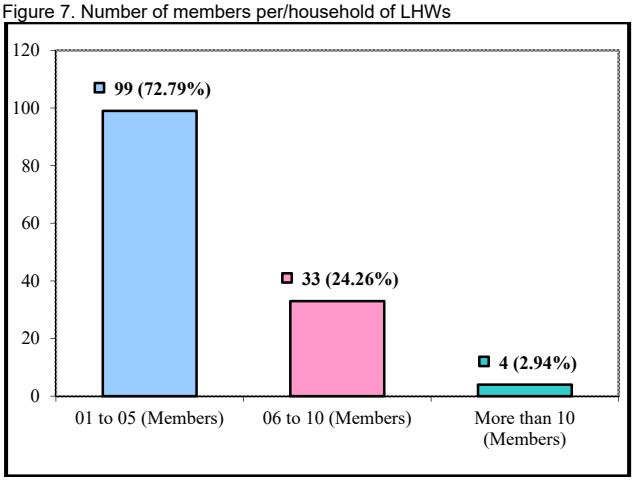


Figure 7. Number of members per/household of LHWs



Community End User Related Barriers for LHWs: After analyzing the data regarding the community barriers it was found that the social recognition as a barrier was proportionally higher as compared to other barrier under the said study. Among the study sample 56(41%) had faced obstacles influencing their performance and 80(59%) had no problem with the attitude, conservative mindset and social prestige rendered to LHWs within their community setting. The social status of LHWs in the community were mostly faced by LHWs in the rural population and to lesser extends in urban areas. The study revealed that urban populations having a higher literacy rate recognized the importance of PHC whereas in rural areas LHWs were not considered an important health pillar and thought to promote Family planning which is always looked down by the rural community. Due to the geographical terrain of the rural areas, the houses are located away from each other which has enhanced the work load and was influencing the performance of LHWs. Work load element was experienced by 33 LHWs (24%) and 103 LHWs (76%) could handle the workload reasonably. LHWs of urban areas had a judicious work autonomy, they themselves determined how to work and manage accordingly which makes a figure of 102(75%) and 34(25%) LHWs faced social hurdles due to biradri system which mostly belonged to rural areas.

Table 1. Community End User Related Barriers for LHWs

What you think the following had acted as barrier in your routine job performance?	Frequency	%
Social recognition/ Social prestige		
No	80	58.8
Yes	56	41.2
Work Load		
No	103	75.7
Yes	33	24.3
Work Autonomy		
No	102	75.0
Yes	34	25.0

System Related Operational Barriers for LHWs: The health system is at times harsh for some workers who are facing difficulty to manage quality work while facing financial instability, lack of supportive supervision, fulfillment of job requirements as described in their TORs and supply of logistics which is required for executing their responsibilities. It was determined that lack of supervision influenced the work standard of 52%) LHWs whereas 48% had no impact on the quality of work. Almost all of the LHWs exhibited the importance of financial support and their impacts on their outcome were of the same opinion. Health policy and information system was not a barrier to the performance of LHWs as 96%didn't face any Policy related barrier and only 04% LHWs faced it as barrier due to (Non-Resident) policy where LHW is considered terminated if she is been migrated from her initial deployment area due to any reason. As the job description of LHWs is multi-dimensional and the energy to carry it out varies from one worker to another 05%were influenced by the job description whereas 95% LHWs didn't link it with their performance barrier. All of the LHWs shared the same effect of timely supply of logistics and were of the view that it has influenced their performance in periods of stock out thus statistical analysis demonstrate that all LHWs were affected by it. Human resource management is the managerial quality of a system in which workers are adjusted in a way to obtain extra output of their existing ability. Lady Health workers especially those working in remote rural area were influenced by human resource management which states that individual LHWs should work in their catchment area. There is no concept of a buddy system which could be of assistance in improving quality of work. Thus 15% found HR a barrier to their performance whereas 85% didn't find any restraining influence on their work quality.

Table 2. System Related Operational Barriers for LHWs

	Frequency	Percent	Valid%	Cumulative%
Lack of Supportive supervision				
No	65	47.8	47.8	47.8
Yes	71	52.2	52.2	100.0
Total	136	100.0	100.0	
Financial support (Incentives/salary)				
Yes	136	100.0	100.0	100.0
NO				
Information and Policy				
No	131	96.3	96.3	96.3
Yes	5	3.7	3.7	100.0
Total	136	100.0	100.0	
Job description				
No	129	94.9	94.9	94.9
Yes	7	5.1	5.1	100.0
Total	136	100.0	100.0	
Supply of logistic				
Yes	136	100.0	100.0	100.0
No				
Human Resource Management				
No	115	84.6	84.6	84.6
Yes	21	15.4	15.4	100.0
Total	136	100.0	100.0	

Organizational/ Management related Barriers for LHWs: Management intervention is critical for quality assurance and may sometimes be challenging that may become a barrier to better performance of Lady Health Worker. Statistical analysis revealed that supervision influenced the work standards of54% of LHWs whereas 46% said that it has no effect on their performance. Feedback mechanism on monthly reports was considered an important factor by 89% LHWs whereas 11% said that it had no effect. Selection criteria of LHWs and LHSs are purely on a residential basis. These criteria have caused some LHWs to work within their biradri setups where their mobility is restricted due social constraints and family preferences. LHWs of rural areas are more affected by social barrier refraining them more than those in urban areas. LHWs that were not affected by selection criteria are 89% and 11% LHWs faced limitations due to it. LHW program is a multi-dimensional activity program which is focused on several tasks going parallel to each other. The LHWs who lived in a joint family set up and were married faced difficulties in accomplishing their assigned multiple tasks i.e. 37% LHWs experienced multitasking as a barrier to their performance and 63% had not considered it as barrier. Performance appraisal is a booster to workers performance. Lady health workers who are dedicated to work normally necessitate the need of documenting their achievements and progress they have attained. Thus performance appraisal has an influence on outcome of 89% LHWs whereas 11% didn't show any benefit or impact of appraisal on affecting the quality of work. Succession planning and quality assurance are processes through which an organization identifies their employees against their capabilities and shortcomings. An intervention in quality of work can influence the performance of workers which was experienced by 92% LHWs and 08% LHWs had no judicious reason to link quality assurance to their performance. This study revealed that community and health sector links have equal importance in influencing the performance of LHWs. The connection between community and LHWs had improved the performance outcome of all LHWs and showed that the community linkage has an exemplary role in improving population health. Effectiveness of management in resource provision can improve wellbeing and performance of lady health workers. Spending on resources for LHWs may cultivate a sense of prioritizing their work. Almost all of them had experienced that lack of resources and other financial compensation imposed a negative impact on their performance.

Table3: Supervision and Human Resource Management related barriers for LHWs

	Frequency	Percent	Valid%	Cumulative%
Supervision				
No	63	46.3	46.3	46.3
Yes	73	53.7	53.7	
Feed Backs on report submitted by LHWs				
No	15	11.0	11.0	11.0
Yes	121	89.0	89.0	
Selection Criteria				
No	121	89.0	89.0	89.0
Yes	15	11.0	11.0	
Nature of Task (Single or Multi task)				
No	86	63.2	63.2	63.2
Yes	50	36.8	36.8	
Performance appraisal				
No	15	11.0	11.0	11.0
Yes	121	89.0	89.0	
Quality Assurance				
No	11	8.1	8.1	8.1
Yes	125	91.9	91.9	

Intrinsic Barriers and Factors for LHWs: Every assigned responsibility can only be productive and attain a quality presentation when intrinsic barriers are removed or mitigated at least. Self-esteem of the workers has a dire influence on the performance; it was also found to be integrated with other factor as

well such as family's disapproval or support, religious reason and knowledge.

All workers were of the view that self-motivation is always a barrier to their performance. Workers with strong nerves and decision powers were those with greater self-motivation. It is a saying that 'nature and attitude can never be changed' but positive attitude is considered more effective and helpful than a negative attitude in achieving a target.

All Lady Health Workers consider attitude a major barrier for a community based workers. The desired indicators can only be achieved if an effective behavior is adopted which may have influence on the community. However, LHW were of the view that the attitude executed in field is circumstantial, thus end consumer of resources should attain sense of acceptability towards lady health workers. Competency, knowledge and skills were barriers for 13%whereas 87% LHWs thought that their work was non-technical and thus a little knowledge and skill was enough to cope with routine job and didn't affect performance. Those LHWs whose target population was educated considered knowledge a barrier whereas majority of workers in rural area were not affected by it. A good referral system can only be developed where a trust is built between worker and the community. Referral has improved the performance of 78% LHWs whereas, 22% faced no barriers of community referrals which could have influenced their achievements. Consumer referral is indexical to means of communication and communication skills. Modern means of communication can't be availed by some LHWs due to lack of independent work autonomy, cultural restrictions and conservative mind-set of the community. Means of connectivity with community such as WhatsApp groups, mobile contact numbers can't be shared for prompt referrals whereas community is adopted to old methods, thus some of the LHWs didn't necessitate its importance in enhancing their performance. Perceived barrier in adherence to SOPs didn't vary largely among the LHWs, intrinsic barriers to observance with procedures were considerably low with certain exceptional cases which was 13% of rural area who couldn't incorporate the procedures in community especially modern procedures of family planning which directly affected their performance. Almost all of LHWs were capable of accomplishing their job in facilitating community according to the prescribed approach of LHW program. Community facilitation was considered in means of communicating knowledge of diseases, methods of preventions, facilitation in acquiring specialist care etc. All LHWs were satisfied from their job. Even those not satisfied or being less satisfied from the job, gave 100% performance and job gratification had no influence over their performance. A few LHWs who had reasonable support from family making it 88% and a few had a little support which had a negative impact on their performance.

Table 4: Intrinsic Barriers and Factors for LHWs

	Frequency	Percent	Valid%	Cumulative%
Self Esteem				
No	108	79.4	79.4	79.4
Yes	28	20.6	20.6	
Self Motivation				
No	109	80.1	80.1	80.1
Yes	27	19.9	19.9	
Attitude				
No	2	1.5	1.5	1.5
Yes	134	98.5	98.5	
Competency				
No	118	86.8	86.8	86.8
Yes	18	13.2	13.2	
Knowledge				
No	118	86.8	86.8	86.8
Yes	18	13.2	13.2	
Skills				
No	118	86.8	86.8	86.8
Yes	18	13.2	13.2	

Table 5: Intrinsic Barriers and Factors for LHWs

	Frequency	Percent	Valid%	Cumulative%
Communication				
No	105	77.2	77.2	77.2
Yes	31	22.8	22.8	
Referral				
No	106	77.9	77.9	77.9
Yes	30	22.1	22.1	
Total	136	100.0	100.0	
Adherence with the standards and Procedure				
No	119	87.5	87.5	87.5
Yes	17	12.5	12.5	
Capacity to facilitate community				
Yes	--	--	--	--
No	136	100.0	100.0	
job satisfaction				
Yes	--	--	--	--
No	136	100.0	100.0	
Family support				
No	119	87.5	87.5	87.5
Yes	17	12.5	12.5	

DISCUSSION

Lady health worker's program considered the back born of primary health care is the only means to achieve SDGs and MDGs. Departmental focus to remove the barriers to LHWs will be of great significance. A change in policies and capacity building is present-day need of the program. There are contextual factors impeding the smooth running of services provided by them. This was cross sectional study conducted among Lady Health Workers (LHWs) to see their perspectives about the operational barriers of their services in the study areas. Majority of them were married. Similarly the educational status showed that 17% LHWs were middle education, 42% LHWs were matriculate, 28% LHWs had intermediate qualification and 13% LHWs had higher education whereas majority were from middle income (<50000 PKR/month)family. The barriers are divided into three categories namely; the community end user related barriers, organizational and personal (intrinsic) factors.

According to the study, social recognition was proportionally more of a barrier than other types of barriers. In the study sample, 59% had no issue with the attitude, conservative mindset, and social prestige accorded to LHWs in their community environment, while 41% had challenges that hindered their performance. The same is reported by other researches where they found that the workers encountered social and community barriers more frequently in rural populations and to a lesser extent in urban ones. According to the study, urban residents with greater literacy rates understood the value of PHC, whereas LHWs in rural areas were viewed as promoting family planning, which is always looked down upon by the rural community[3].

In rural areas, the houses are located away from each other which has enhanced the work load and was influencing the performance of LHWs. Secondly, high workload was experienced by 24% LHWs. Those from urban areas had a judicious work autonomy, they themselves determined how to work and manage accordingly however, 25% LHWs faced social hurdles due to biradri system which mostly belonged to rural areas. A similar study from Gujjar Khan revealed that 69% of the LHWs faced resistance from religious leaders and 58% also faced cultural and social barriers. The transportation problems were reported by 54% of them out of them 25% encountered with economical burden. It is further reported, that 54% subjects also reported the communication barriers. Among the individual level barrier, lack of experience, low educational attainment, high workload, frequent immunization program and delayed salary and stock supply was the common problems faced by the LHWs. On other hand, being female posed them at high risk where stock scarcity, issues with recommended clients, and a lack of appropriate incentives were system-level hurdles[33]. Lack of knowledge and poor referral system was the common barrier reported in Sind Karachi[40]. The

present study indicate that the healthcare system can be incompatible for some employees who struggle to manage quality work while dealing with financial instability, a lack of supportive supervision, the fulfillment of their job requirements as outlined in their TORs, due to lack of logistics support necessary for carrying out their duties. It was found, that 52% of LHWs had worse work standards due to a lack of supervision, compared to 48% of LHWs who had no effect on the grade of their work. In a qualitative study it was recommended that financial incentives, flexible scheduling, and the chance to improve skills were among the reasons people joined the LHWs program[41].

Although the clinical experience was disliked due to doctors' attitudes, the training was nevertheless judged sufficient. Additional training requirements indicated that fundamental knowledge of common illnesses, problems with reproduction, and fundamental clinical abilities should be included in the curriculum[41]. The job's contractual nature, low compensation, erratic payment, lack of career advancement, and inadequate logistical assistance were listed as weaknesses[41]. Giving LHWs formal governmental employment status and a pay increase might improve their performance. It was further recommended that incentive programs should be offered to qualified LHWs and the community must be made aware of the given roles and obligations[41,42].

We found that nearly all of the LHWs demonstrated the value of financial help and how it affected their results. Some LHWs were deployed in region other than their native districts due to their marriage but it was not problem for majority of them, only 4% LHWs encountered it as a barrier that they had come across after marriage. Health policy and information system had not acted as barrier to the performance of LHWs as majority (96%) LHWs encountered no policy-related barriers. Since each LHW's job description is unique and requires a different level of energy, only 5% LHWs linked their poor performance to their job description, the impact of timely supply of logistic was the same for all of the LHWs. It is known that each LHW provides services to 1,000 residents of the community and expands her reach by making monthly home visits to residents in the catchment area. The average annual cost for each employee is PKR 44,000 which is very low as compared to the other employees of the health department. As they serve about 60% of Pakistan's total population, most of whom live in rural areas. In the communities that the LHWs serve, the health indices are far better than the national average. Thus, establishment of a highly strategically located cadre that connects first-level care institutions to the community as a result of the LHW initiative has improved the provision of primary health care[16]. it was found that 58-69% of them still facing socio-cultural barriers and resilience from religious scholars[33]. The administrative function of a system in which employees are modified to produce more work than they are currently capable of is called human resource management. Individual LHWs should work in their catchment area, according to human resource management, which has an impact on lady health workers, particularly those working in distant rural areas. In the current study, 85% of LHWs reported that there was lack of companion type of health system, which may help improve job quality. They observed no restraining impact on the quality of their job, whereas 15% considered HR to be a performance barrier. Other researches also acknowledged the impact of services provided by LHWs as part of the health system but still there are multiple problem from administrative point of views[34,43]. There should be context specific planning to tackle out the problem and improve the services[44].

The need for management involvement in quality assurance is essential, but it can occasionally be difficult, which might hinder a lady health worker from performing at her best. According to findings, 54% LHWs had their work standards modified by supervision, whereas 46% LHWs had no influence on the value of their work. It is found that 89% perceived that lack of constructive feedback on reports has influenced their performance. They also critiqued the selection process of LHWs and LHSs which has caused some LHWs to work within their biradri setups where their mobility is restricted due social constraints and family preferences but is was not in greater proportion only 11%faced this problem. The program is a multi-dimensional activity program which is focused on several tasks going parallel to each other. The LHWs who lived in a joint family set up and were married had mostly faced difficulties in accomplishing their assigned multiple tasks. Nearly 37% of them experienced multitasking as a barrier to their performance. Thus, performance appraisal has an influence on outcome of 89% of LHWs. Succession planning and quality assurances are processes through which an organization identifies their employees against their capabilities and shortcomings. A qualitative study conducted in Pakistan demonstrate that selection criteria along with poor training and gap in curriculum was the core issues to be addressed by the stakeholders. The LHWs recommended adding lessons in their curriculum on new health conditions, newborn resuscitation, mental health, and rehabilitation. Participants saw a lack of leadership, communication, and practical abilities. A gap in the present curriculum was found by experts to address the recently discovered community-based treatments. For the Essential Package of Health Services for Pakistan, LHWs' existing curricula need to be revised. Knowledge of new health concerns, newborn resuscitation, teenage issues, mental health, and rehabilitation services are among the proposed areas for development[31]. it is further found that supportive supervision has improved the clinical performance of LHWs in terms if case detection and recommended management according to their responsibilities. It was suggested that a supportive supervision intervention through LHSs have the potential to reduce pediatric pneumonia and diarrhea. This can be used as a guide when the intervention is scaled back at the provincial level[14].

Factors acting as intrinsic barriers reveal that 79% of LHWs were impacted by their self-confidence, while 21% were not in control of their internal sentiments of self-reliance, indicating that self-esteem is a component that has to be addressed for raising the quality of performance. This seems that every assigned responsibility can only be productive and attain a quality presentation when intrinsic barriers are removed or mitigated at least. Employee self-esteem has a significant impact on performance; it was also discovered to be intertwined with other factors, including familial acceptance or disapproval, religious justification, and knowledge[8]. Strong-willed and decisive workers had higher levels of self-motivation[17]. The result shown that almost all LHWs in this study considered that attitude a major barrier for a community based workers. The desired indicators can only be achieved if an effective behavior is adopted which may have influence on the community. However, LHW were of the view that the attitude executed in field is circumstantial, thus end consumer of resources should attain sense of acceptability towards lady health workers[45].

Lack of knowledge and skills were barriers for only 13% of LHWs whereas 87% of them thought that their work was non-technical and thus a little knowledge and skill was enough to cope with routine job and didn’t affect performance. Those LHWs whose target population was educated considered knowledge a barrier whereas majority of workers in rural area were not affected by it. The research in this regards varies and depending on the nature of job provided by the LHWs[46]. They were given responsibility of Immunization, contraceptive services, eye health services and in some area they were also given to provide mental health services[46,47]. Thus, their competency may act as barrier in some area but may acts as facilitator in other areas[48-50].

A good referral system can only be developed where a trust is built between worker and the community. Referral has improved the performance of 78% LHWs. The importance of referral system and adherence of the customer to the protocol of the system[15]. Consumer referral is indexical to means of communication and communication skills. Modern means of communication can’t be availed by some LHWs due to lack of independent work autonomy,

cultural restrictions and conservative mind-set of the community. Means of connectivity with community such as WhatsApp groups, mobile contact numbers can't be shared for prompt referrals whereas community is adopted to old methods, thus some of the LHWs didn't necessitate its importance in enhance their performance[46].

Although LHWs were capable of accomplishing their job in facilitating community according to the prescribed approach of LHW program but perceived barrier in adherence to SOPs didn't vary largely among the LHWs, intrinsic barriers to observance with procedures were considerably low with certain exceptional cases which was 13% in rural area. Lack of reasonable support from family making was reported by 88% and a few had a little support which had a negative impact on their performance. It is found that the personal and professional life is effected by lack of proper referrals mechanism in from the health system and their own gender[25]. however there are other factors which compel the patients not to follow the protocol of referral system. Among these the common reported factors were; cost, long waiting, and rude behavior of the staff at hospital. These factors needed to be considered when integrating the referral system with LHWs program[42].

Health system is deemed to influence the ability of LHW in obtaining desired results through supervisory support, better incentive plan, and feedbacks for performance's remedy, capacity building and appraisals. System should be worker friendly and offer assistances where ever required. A process of setting a goal for worker and providing supervisory support through a directed path way for achieving it may be helpful in long run of improvement. The worker's incentives should be based on geographical terrain of the area and more benefits may be provided to those in hard to reach area which will enhance the interest in performing their duty with more zeal and zest. Performance feedback may be communicated through defined processes and use of modern means of communication may be utilized for early response. Organization may focus on career development and skills of the worker. Training needs may be identified to fill the gaps in skills that prevent them from effectively achieving targeted results, enhance knowledge of treating common ailments and basic clinical skills. A major weakness of the program was poor logistical support. Effective Primary Health care service provision in third world country like Pakistan is always linked to availability and accessibility of logistics, especially those which are needed in accomplishing the key message of program like family planning etc. Need base planning for making logistics availability will pave a path for achieving the objectives of LHW program.

Performance of LHWs is affected by intrinsic factors which could be limited through trainings, personality building and provision of necessary psychological aids by boosting their self-esteem. The education of general public about the program may be helpful in acknowledging the roles and responsibilities of LHWs. This will lead to extension of support and cooperation from the community to LHWs.

CONCLUSION

Based on the result of the present study it is concluded that the majority of LHWs face enormous challenges relating to organization (management) community and personal life which negatively influenced their performance and work efficiency. These barriers are affecting the indicators of program and result in failure to achieve national objectives of improved primary health. Secondly the low educational and socio-economical status of LHWs was may also acts as confounder, impending their routine work. Work burden rationalization should be done and allied with trainings on capacity building to improve the outcome of the program. Strengthening of supervision, feedback mechanism, job appraisal process, efficient management of HR and provision of logistics timely.

Recommendations: The result of the present study indicates that there are small impediments that have an impact on LHWs' performance. These obstacles are related to the community end users' educational background and method of obtaining healthcare. Organizational policies further entangle and enclose it. The social obstacles vary depending on the customers' cultural background, religious convictions, and degree of education.

1. Through widespread social mobilization and raising public awareness, these barriers can be overcome.
2. To remove the resentment caused by the community's unpleasant behavior
3. The LHWs should be chosen from the community with the widest possible representation of various communities.
4. They may be used in supportive aspects of health systems in remote areas to cover up social obstacles and loneliness fears.
5. Locals should be encouraged to sign up for the program and directed to take advantage of the opportunity to volunteers.
6. In puts from field workers may be considered during policy formulation and chances may be made for improvement.
7. The barriers which could be removed or otherwise minimized should be addressed at policy level by sharing this report with District Health Officer and other related Govt: organization and non Govt: organization.

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1. Conception and design of or acquisition of data or analysis and interpretation of data.
2. Drafting the manuscript or revising it critically for important intellectual content.
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REFERENCES

1. Kebede M, Adeba E, Chego M. Evaluation of quality and use of health management information system in primary health care units of east Wollega zone, Oromia regional state, Ethiopia. BMC medical informatics and decision making. 2020;20(1):1-12.
2. Sacks E, Morrow M, Story WT, Shelley KD, Shanklin D, Rahimtoola M, et al. Beyond the building blocks: integrating community roles into health systems frameworks to achieve health for all. BMJ global health. 2019;3(Suppl 3):e001384.
3. Mumtaz Z, Salway S, Nykiforuk C, Bhatti A, Ataullahjan A, Ayyalasomayajula B. The role of social geography on Lady Health Workers' mobility and effectiveness in Pakistan. Social science & medicine. 2013;91:48-57.
4. Afzal S, Naeem A, Shahid U, Noor Syed W, Khan U, Misal Zaidi N. Effective role of lady health workers in immunization of children in Pakistan. Pak J Med Sci. 2016;32(6):1500-5. Epub 2017/01/14.
5. Rogers E, Guerrero S, Kumar D, Soofi S, Fazal S, Martinez K, et al. Evaluation of the cost-effectiveness of the treatment of uncomplicated severe acute malnutrition by lady health workers as compared to an outpatient therapeutic feeding programme in Sindh Province, Pakistan. BMC Public Health. 2019;19(1):84. Epub 2019/01/19.
6. Sakina R, Khan SE, Chaudhry AG. Stigma of postpartum depression: The role of lady health workers in health care-A qualitative study. Health care for women international. 2022;43(9):1095-104. Epub 2021/09/15.
7. Euteneuer F. Subjective social status and health. Current opinion in psychiatry. 2014;27(5):337-43.
8. Yousafzai AK, Rasheed MA, Rizvi A, Armstrong R, Bhutta ZA. Effect of integrated responsive stimulation and nutrition interventions in the Lady Health Worker programme in Pakistan on child development, growth, and health outcomes: a cluster-randomised factorial effectiveness trial. Lancet. 2014;384(9950):1282-93. Epub 2014/06/21.
9. Prinja S, Bahuguna P, Gupta A, Nimesh R, Gupta M, Thakur JS. Cost effectiveness of mHealth intervention by community health workers for

reducing maternal and newborn mortality in rural Uttar Pradesh, India. Cost Effectiveness and Resource Allocation. 2018;16:1-19.
10. Organization WH. Regional meeting to accelerate reduction in newborn and child mortality towards achieving SDG 2030 targets. World Health Organization. Regional Office for South-East Asia, 2020.
11. Perry H, Crigler L, Hodgins S. Developing and strengthening community health worker programs at scale. A reference guide and case studies for program managers and policymakers MCHIP, USAID Jhpiego Corporation. 2013.
12. Bahar S, Khalid R, Khan SA, Naseemullah N, Batool N. Challenges and experiences of lady health workers working in polio campaigns in district Nowshera, Khyber Pakhtunkhwa, Pakistan. Pakistan Journal of Public Health. 2017;7(2):75-8.
13. Mumtaz Z, Salway S, Waseem M, Umer N. Gender-based barriers to primary health care provision in Pakistan: the experience of female providers. Health policy and planning. 2003;18(3):261-9.
14. Aftab W, Piryani S, Rabbani F. Does supportive supervision intervention improve community health worker knowledge and practices for community management of childhood diarrhea and pneumonia? Lessons for scale-up from Nigraan and Nigraan Plus trials in Pakistan. Hum Resour Health. 2021;19(1):99. Epub 2021/08/19.
15. Seyed-Nezhad M, Ahmadi B, Akbari-Sari A. Factors affecting the successful implementation of the referral system: A scoping review. Journal of family medicine and primary care. 2021;10(12):4364-75. Epub 2022/03/15.
16. Hafeez A, Mohamud BK, Shiekh MR, Shah SA, 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):210-5. Epub 2011/04/07.
17. 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):1-12.
18. Lassi Z, Kahn Z, Zulliger R. Pakistan's Lady Health Worker Program. Health for the People: National Community Health Worker Programs from Afghanistan to Zimbabwe. 2020;315.
19. Rabbani F, Shipton L, Aftab W, Sangrasi K, Perveen S, Zahidie A. Inspiring health worker motivation with supportive supervision: a survey of lady health supervisor motivating factors in rural Pakistan. BMC health services research. 2016;16(1):1-8.
20. Akintola O, Chikoko G. Factors influencing motivation and job satisfaction among supervisors of community health workers in marginalized communities in South Africa. Human Resources for Health. 2016;14(1):1-15.
21. Khan MS, Mehboob N, Rahman-Shepherd A, Naureen F, Rashid A, Buzdar N, et al. What can motivate Lady Health Workers in Pakistan to engage more actively in tuberculosis case-finding? BMC Public Health. 2019;19(1):1-9.
22. Afzal S, Naeem A, Shahid U, Syed WN, Khan U, Zaidi NM. Effective role of lady health workers in immunization of children in Pakistan. Pakistan journal of medical sciences. 2016;32(6):1500.
23. Kok MC, Dieleman M, Taegtmeyer M, Broerse JE, Kane SS, Ormel H, et al. Which intervention design factors influence performance of community health workers in low-and middle-income countries? A systematic review. Health policy and planning. 2015;30(9):1207-27.
24. Ndima SD, Sidat M, Give C, Ormel H, Kok MC, Taegtmeyer M. Supervision of community health workers in Mozambique: a qualitative study of factors influencing motivation and programme implementation. Human Resources for Health. 2015;13(1):1-10.
25. Chaudhry A. Lady Health Workers in Pakistan: tracing personal and professional trajectories within a patriarchal context: Queen Margaret University, Edinburgh; 2019.
26. Bhutta ZA, Darmstadt GL, Haws RA, Yakoob MY, Lawn JE. Delivering interventions to reduce the global burden of stillbirths: improving service supply and community demand. BMC pregnancy and childbirth. 2009;9(1):1-37.
27. Shahid M, Ameer W, Malik NI, Alam MB, Ahmed F, Qureshi MG, et al. Distance to Healthcare Facility and Lady Health Workers' Visits Reduce Malnutrition in under Five Children: A Case Study of a Disadvantaged Rural District in Pakistan. International Journal of Environmental Research and Public Health. 2022;19(13):8200.
28. Soofi S, Cousens S, Turab A, Wasan Y, Mohammed S, Ariff S, et al. Effect of provision of home-based curative health services by public sector health-care providers on neonatal survival: a community-based cluster-randomised trial in rural Pakistan. The Lancet Global Health. 2017;5(8):e796-e806.
29. Khan R, Omar J. Lady Health Workers; Agents of Change in Need of Change. Pakistan Journal of Medical Research. 2016;55(2):33.
30. Zulliger R. Pakistan's lady health worker program. CWH Central A global resource for and about community Health Workers. 2017.
31. Sohail S, Wajid G, Chaudhry S. Perceptions of Lady Health Workers and their trainers about their curriculum for implementing the interventions identified for Essential Package of Health Services for Pakistan. Pak J Med Sci. 2021;37(5):1295-301. Epub 2021/09/04.
32. Mumtaz Z. Gender and social geography: impact on Lady Health Workers mobility in Pakistan. BMC Health Serv Res. 2012;12:360. Epub 2012/10/17.
33. Khan AW, Amjad CM, Hafeez A, Shareef R. Perceived individual and community barriers in the provision of family planning services by lady health workers in Tehsil Gujar Khan. JPMA The Journal of the Pakistan Medical Association. 2012;62(12):1318-22. Epub 2013/07/23.
34. Kinshella MW, Sheikh S, Bawani S, La M, Sharma S, Vidler M, et al. "Now You Have Become Doctors": Lady Health Workers' Experiences Implementing an mHealth Application in Rural Pakistan. Frontiers in global women's health. 2021;2:645705. Epub 2021/11/25.
35. Kayani NS, Khalid SN, Kanwal S. A study to assess the workload of lady health workers in Khanpur UC, Pakistan by applying WHO's WISN method. Athens Journal of Health. 2016;3(1):65-78.
36. Islam A, Malik F, Basaria S. Strengthening primary health care and family planning services in Pakistan: some critical issues. Journal of Pakistan Medical Association. 2002;52(1).
37. Imran M, Yasmeen R. Barriers to family planning in Pakistan. Journal of Ayub Medical College Abbottabad. 2020;32(4):588-91.
38. 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.
39. Haq Z, Iqbal Z, Rahman A. Job stress among community health workers: a multi-method study from Pakistan. International journal of mental health systems. 2008;2(1):1-6.
40. Afsar HA, Qureshi AF, Younus M, Gulb A, Mahmood A. Factors affecting unsuccessful referral by the Lady Health Workers in Karachi, Pakistan. JPMA The Journal of the Pakistan Medical Association. 2003;53(11):521-8. Epub 2004/01/24.
41. 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, Abbottabad : JAMC. 2005;17(1):48-53. Epub 2005/06/03.
42. Afsar HA, Younus M, Gul A. Outcome of patient referral made by the lady health workers in Karachi, Pakistan. JPMA The Journal of the Pakistan Medical Association. 2005;55(5):209-11. Epub 2005/06/18.
43. Omer K, Mhatre S, Ansari N, Laucirica J, Andersson N. Evidence-based training of frontline health workers for door-to-door health promotion: a pilot randomized controlled cluster trial with Lady Health Workers in Sindh Province, Pakistan. Patient education and counseling. 2008;72(2):178-85. Epub 2008/04/09.
44. Khan MS, Mehboob N, Rahman-Shepherd A, Naureen F, Rashid A, Buzdar N, et al. What can motivate Lady Health Workers in Pakistan to engage more actively in tuberculosis case-finding? BMC Public Health. 2019;19(1):999. Epub 2019/07/28.
45. Rabbani F, Shipton L, Aftab W, Sangrasi K, Perveen S, Zahidie A. Inspiring health worker motivation with supportive supervision: a survey of lady health supervisor motivating factors in rural Pakistan. BMC Health Serv Res. 2016;16(1):397. Epub 2016/08/19.
46. 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 = Archives belges de sante publique. 2021;79(1):20. Epub 2021/02/19.
47. Panday S, Bissell P, Teijlingen EV, Simkhada P. Perceived barriers to accessing Female Community Health Volunteers' (FCHV) services among ethnic minority women in Nepal: A qualitative study. PloS one. 2019;14(6):e0217070. Epub 2019/06/11.
48. Smith DK, Slack J, Shaw RW, Marteau TM. Lack of knowledge in health professionals: a barrier to providing information to patients? Quality in health care : QHC. 1994;3(2):75-8. Epub 1994/05/08.
49. Trivedi D. Cochrane review summary: Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. Primary health care research & development. 2015;16(4):326-8. Epub 2015/06/19.
50. 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: qualitative evidence synthesis. The Cochrane database of systematic reviews. 2013;2013(10):CD010414. Epub 2013/10/09.

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