

Exploring the Feasibility of Integrating Mental Health into a Family Planning Program in low-resource settings

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Abstract

Introduction: Mental health challenges remain a pressing issue, underscored by the glaring gap between the elevated demand and the scarce resources. Research has highlighted the effectiveness of integrating mental health services with primary care services, particularly in low-resource settings.

Purpose: The objective of this research was to evaluate the perceived implications and feasibility of integrating basic mental health services into an existing community-based family planning initiative in Pakistan. By adopting a community-driven and co-produced methodology, our study not only ensured a deeper resonance with local needs but also paved the way for a sustainable and transformative uptake of mental health services in low-resource settings. This co-produced strategy, anchored in mutual collaboration and shared expertise with the community, promises a more holistic, enduring, and adaptive integration of essential health services within community frameworks.

Methodology: This study utilized a qualitative research approach to obtain a comprehensive understanding of the program's feasibility and potential for expansion. Interview tools and guides, tailored to the regional language, were developed by the Research Associate to gather insights from the lady health workers involved in delivering the intervention, as well as from the clients. Overall, our team conducted 24 interviews, of which 9 were with the lady health workers and 15 with clients. The interviews were facilitated by the Research Associate and a Psychologist.

Results: Utilizing the socio-ecological model, we thematically analysed factors at individual, interpersonal, and community levels that support or hinder the integration of mental health services with existing community-based programmes. We also examined the intervention's impact on its users and the healthcare providers.

Our analysis underscores the significant potential of integrating mental health services into existing community-based health programmes, such as family planning, in low-resource settings. Predominant themes highlighted women's willingness to use these services, influenced by strong relationships and trust in the lady health workers, ease of access to services, and community support. Identified barriers to integration included prevailing poverty, a preference for direct financial incentives in addition to counselling, confidentiality concerns in tight-knit communities, and the lingering stigma surrounding mental health.

Conclusion: Our findings highlight the value of community collaboration in healthcare, particularly in low-resource settings. The co-production approach blends professional guidance with local insights, fostering community ownership and enhancing program sustainability. As the first to merge mental health with family planning in Pakistan, our

research suggests that future health initiatives can greatly benefit from community-driven methods, leading to more sustainable and transformative health outcomes..

Keywords

Mental health integration, family planning, women, health workers, socio-ecological model, co-production, community-based methodology

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Introduction

Mental health disorders, including anxiety, depression, and bipolar disorder, contribute significantly to the global burden of disease, with heightened risks such as suicide (WHO, 2017). Lower-middle-income countries (LMICs) face particular challenges due to high rates of untreated mental illnesses, resulting in a substantial treatment gap of nearly 90% (Patel et al., 2018). The World Health Organization (WHO) has prioritized mental health as part of global efforts to achieve Sustainable Development Goal #3, aiming to ensure healthy lives and well-being for individuals of all ages by 2030 (United Nations, 2015). However, LMICs encounter numerous obstacles, including violence, poverty, and economic recession, exacerbating the burden of mental health issues and impeding progress toward these goals (Kieling et al., 2011).

Co-production, a burgeoning approach in global health research, refers to the collaborative and participatory process wherein service users and stakeholders work alongside professionals to design, implement, and evaluate services, ensuring a tailored and contextually relevant fit (Bovaird & Loeffler, 2012). This method champions the principle that those who are affected by health services, particularly in resource-limited settings, have a vital role to play in shaping those services (Osborne et al., 2016). Research consistently underscores the transformative potential of co-production in enhancing the sustainability, efficiency, and quality of health service delivery. For instance, a study in Uganda demonstrated that through co-production, community health initiatives

achieved higher user satisfaction, increased community trust, and a stronger sense of ownership, leading to the longevity of health interventions (Nabatchi et al., 2017). Another exploration in Kenya revealed that co-produced health initiatives addressed community-specific needs more adeptly, fostering resilience and adaptability in the face of local challenges (Heaton et al., 2016). Such evidence strongly indicates that harnessing the power of co-production can be instrumental in magnifying the impact and reach of health services in settings with constrained resources.

Community-based interventions have been widely recognized as effective strategies for delivering mental health services to underserved populations, offering enhanced accessibility, flexibility, and sustainability compared to formal healthcare settings (Hobfoll et al., 2017). Additionally, these programs promote social and economic inclusion, which is crucial for LMICs (Patel et al., 2018).

As an LMIC, Pakistan is faced with extreme income inequality. This creates an environment conducive to social disparities experienced by the population, mainly within the housing, education, and health sectors. Despite the high prevalence of mental health disorders in Pakistan, it is one of the most neglected fields in the health sector. Approximately 10-16% of the total population suffers from mild to moderate psychological illnesses (Hussain et al., 2018). Most psychological services offered in the private sector are not affordable for the masses, especially in the lower and middle-income groups.

Additionally, these conditions are made worse for women due to the patriarchal structures existing within Pakistani society; factors such as domestic abuse, child marriages, lack of decision-making power, economic dependence, lack of reproductive rights etc. can adversely affect women's mental health (Ali, 2012). A study conducted with pregnant women in Karachi revealed that 70% of the total participants experienced symptoms of depression and anxiety due to factors such as fear of stillbirth, abortion, miscarriage, role in decision-making, and domestic violence. (Ali et al., 2018)

Efforts have been made in Pakistan to integrate mental health services with community-based programs. For example, a study in Karachi trained nurses to deliver mental health interventions to households and nursing homes, positively impacting participants' mental health and quality of life (Ali et al., 2015). Similarly, in rural Punjab, integrating a cognitive-behavioral therapy (CBT)-based intervention into a community primary health worker model demonstrated improvements in maternal depression, infant health, and perceived social support (Rahman et al., 2008)

In 2014, IRD Pakistan implemented a lay counseling model for mental health, training community members as counselors to provide first-line counseling therapy for mild to moderate anxiety and depression (IRD Pakistan, 2014). This program aimed to bridge the prevalent treatment resource gap in LMICs and has provided free counseling services to thousands of individuals (ibid).

In this pioneering research, we employed a co-produced and community-centric approach to mental health service delivery. Instead of in conventional clinical settings, services were rendered directly within communities. Lady health workers, originally engaged in providing family planning services to women in rural Sanghar, received training in basic mental health counseling. These trained professionals then ventured into the community to offer counseling sessions to their clientele. The feasibility and impact of this innovative approach were assessed using qualitative research methods.

Purpose

This qualitative exploratory study aimed to understand the feasibility of integrating mental health into an already existing family planning program. Another important goal was to examine the reception and perceived impact of mental health integration within an

already existing service. This study is a stepping stone toward scaling up the services in primary care.

Methodology

Study design

Utilizing a qualitative research approach, semi-structured interview guides were prepared and translated to Sindhi, the local language, by the Research Associate. Insights were sought from two pivotal groups: lady health workers and service users. A purposive sampling technique was employed for this study. A total of 24 comprehensive interviews were undertaken, encompassing 9 from key informants and 15 from clients. Prior to the interviews, all participants granted their informed consent. Conducted exclusively in Sindhi to ensure comfort and accuracy, the sessions were audio-recorded, subsequently transcribed verbatim, and then meticulously translated into English. The interviews took place in May 2021, and were conducted by the Research Associate and Psychologist.

Study Participants

The study protocol was reviewed and approved by IRD_IRB_2020_02_013. Written informed consent was obtained from participants. Participants included a randomly selected sample of 15 women from a population of 297 women who had received the mental health intervention. Additionally, the 9 lady health workers that delivered the intervention were also included in the study sample for this research. A compensation of 500 PKR was also provided to both clients and lady health workers who agreed to be a part of the qualitative interview in order to cover transport.

The Intervention

The mental health intervention included initial screening for depression and anxiety using the Patient Health Questionnaire - 4 (PHQ-4) which was administered by lady health workers. These 9 health workers were trained and supervised by a psychologist. Clients who were symptomatic for depression and anxiety or self-reported the need for counselling, were enrolled for 3 to 6 sessions. Baseline and end line screening tools included the Patient Health Questionnaire-9 (PHQ-9) and the Generalized Anxiety Disorder questionnaire-7 (GAD-7). All tools were translated to Sindhi. Each counselling session lasted 30-40 minutes. To monitor quality, weekly supervision and operational discussion with each Lady health worker were

conducted by the Psychologist and Research Associate.

Questionnaire design and outcome measures

To assess the perceived impact, facilitators, and barriers of the mental health intervention, two separate interview guides were designed for clients and lady health workers. The key informant interviews with lady health workers included open ended questions about their experience within the community as a lady health worker, community response to contraceptives and mental health services, barriers in accessing and providing mental health services. They were also asked about the impact of mental health services on their personal lives in addition to the clients' lives.

Similarly, the client interviews also included questions about their experience and perceptions of lady health workers. To assess the impact of mental health intervention, the clients were asked about benefits and changes they perceived in their individual lives, interpersonal skills, symptom alleviation etc. Moreover, they were also asked about any perceived barriers or facilitators to the mental health intervention.

Analysis

The study results were structured using the socio-ecological framework (SEM) mapped onto individual, interpersonal and community level factors. This framework is used in this study because it helps us understand how different factors at each level interact with each other to shape the experiences and perceptions of the service consumers and providers. The socioecological framework has been utilized widely for health promotion, violence prevention, feasibility and effective implementation studies. (Kilanowski, 2017, Bamuya et al., 2021). Individuals operate in a multi-layered system. The success or failure of a program consequently relates to the system it is operating in. SEM is suitable for this study as it informs about the possible facilitators and barriers of mental health integration at all levels an individual operates in. The interviews were recorded in the local language and later transcribed into English. Each interview was assessed, and themes were identified through the selective coding process. Codes from all the interviews, including clients and lady health workers, were categorized into broader themes according to the SEM model.

Results

The primary purpose of this study was to understand the response to mental health integration and its feasibility. The results have been divided according to various themes in the SEM model.

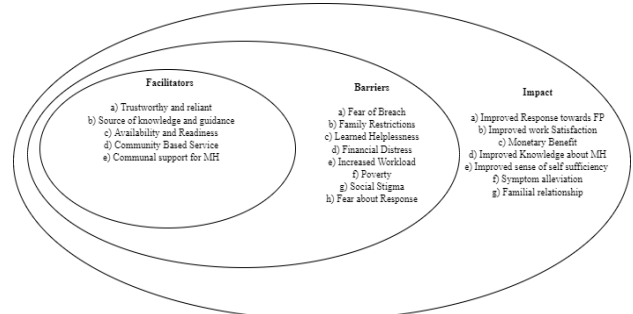


Figure 1: Identified themes mapped onto the Socio-ecological Model. This includes themes identified by the service users (clients) and service providers (Lady Health Workers).

Levels	Themes
Individual	. Positive perception of MH services a. Positive perception of MWs b. Financial distress due to lack of resources c. Fear of peoples' judgment
Interpersonal	a. Familial relationship with MWs b. Fear of breach c. Permission Issues
Community	. Communal support for mental health a. Community needs and expectations around support provided

Table 1: Breakdown of themes and subthemes using Socioecological Model

Facilitators Individual Level.

There were several individual-level factors that were identified that helped in facilitating the mental health intervention with the community.

Marvi Workers are Trustworthy and Reliant. The clients reported that they were able to trust and rely upon the lady health workers because of their experiences of coming to their homes to provide family planning options.

"We were tension free about everything. We said that we trust bajji. She came to us for the first time to inject us, and since that day I have shared every problem with her." (P11)

The clients usually referred to the lady health workers as “baji” (sister) and reported that they felt comfortable in sharing their personal issues with these lady health workers because they were supportive and maintained confidentiality:

“No, no we would trust no one other than sister...whatever problem we face we consult her and she solves it for us. She guides us time and again, we are indebted to her.” (K011)

Marvi Workers are a source of guidance and knowledge. The lady health workers were a source of guidance for these women because they provided guidance about family planning and additional domestic issues,

“We are poor and are barred from going anywhere and also stuck in food scarcity. They've helped us by hearing our problems and providing solutions to them.” (P4)

Clients reported that the lady health workers were helpful and were always readily available for guidance. According to the results, the clients were satisfied with the degree of information and guidance provided by these workers:

“They come to us timely. They give us strength. They brought a change. They give us contraceptive pills. Now we are thankful for them.” (P13)

Interpersonal Level.

An interpersonal level factor was identified by the clients as a facilitator for this mental health intervention.

Availability and Readiness of Lady health workers. Clients found ease of access to lady health workers as they belonged to the same community. At the same time, the willingness of lady health workers to make extra efforts to provide support to the clients helped in not just building trust and relationships, but also comforted the clients.

“Whenever I feel worried, my children come here and tell her about me. She comes and consoles me and tells me that I should not be worried about everything. Everything will be fine.” (P2).

Community level.

Communal Support for Mental health.

Despite the challenges of permission from the family, there is a general community support for mental health intervention. This sense of community seems to facilitate mental health integration.

“Yes our entire village knows about it.....they help us in attending more sessions.” (P2)

Suggested Support Mode.

The clients mentioned a preference for community-based services rather than hospital-based mental health sessions. The reason behind it seems to be the easy accessibility of services and overcoming the permission issues by family members.

“Home-based is far better.....Because, our guardians will not allow us to go to the hospital.....Yes, as soon as husband goes for work, marvi workers should come here for sessions.” (P1)

Barriers

Individual level.

In addition to facilitators, participants also recognised certain factors as barriers for the mental health intervention and provided suggestions.

Financial Distress due to Lack of Resources.

Financial distress was a frequently reported problem by the clients. Mental health was secondary to them as their basic survival needs were not met. They mentioned how the lack of basic necessities such as food, money, housing caused emotional distress but it would get them all consumed and they would not get mental health help,

“Sister, there is a worrisome situation at home. Poverty, illness, day to day affairs and sometimes there is nothing to eat. Sometimes, we eat one meal and wait for another. These are our daily worries. Poor people face such types of tensions. If there is something to eat for today, then we start worrying about tomorrow.” (A0418)

This theme was also present in lady health workers interviews as an expectation from the clients. Lady health workers reflected on their experiences with the clients and reported that clients expect compensation in the form of money, jobs, basic resources with the mental health intervention:

“They see it (counseling) as hoping to get some kind of (monetary) help..... That’s because previously organizations often came to them and gave them monetary funds so they can’t help but hope for the same from us.” (LHW 01)

Some clients were also skeptical of the benefits from the mental health intervention because they didn’t think only talk therapy could help their issues:

“Some of them said what benefit would come to them by talking, unless I was giving them something” - (LHW-05)

Increased Workload. Lady health workers reported an increase in workload due to the mental health intervention alongside family planning sessions. Data management was particularly an issue because they had to maintain forms and registers which required extra time. As a suggestion, LHW said that there should be limited sessions in one month to make the work more manageable:

“So, due to this we were not getting time for paperwork as we had to maintain registers which you gave us. In this context our workload had increased.” (LHW F09)

Interpersonal level.

A few barriers were mentioned by the lady health workers and clients that hindered the uptake of mental health services.

Fear of Breach. One of the main reasons for initial resistance towards counseling was that women thought their confidentiality would be breached by the LHW. While discussing why more women do not choose to take counseling despite the community having so many fundamental life issues, a LHW said that:

“Sister, they did not want to share anything. They had a fear that people would come to know about their problems and mock them.” (LHW 05).

Familial Issues /Restrictions. Familial issues was a common barrier in both lady health workers and clients interviews as both of these groups faces restrictions and lack of permission restrictions from family members especially husbands. Other familial issues included their children and other responsibilities at home.

“Men said their women shouldn’t go anywhere, to anyone but should remain home.” (LHW 01)

This finding corroborates with client interviews as well where the restriction from family decreased their mental health service uptake,

“Because husbands of such women don’t allow their wives to attend sessions at home,” (S0323)

Learned Helplessness. This theme was not commonly reported, however, it gives important information about barriers on an interpersonal level. Lady health workers suggested a lack of initiative and a sense of learned helplessness in the community members that hinders their ability to seek mental health assistance,

“They are always hoping to extract money from here and there. Never do they think of earning money by labor. Always thinking of getting it from an institution and then letting us do the work.” (LHW 01)

Community level.

Social Stigma. Social stigma was a common but less frequently reported factor as a community level barrier to mental health services. People seeking mental health support were perceived differently by some community members. It prevented them to seek help initially,

“Baji at the initial stage they said to us that we are not mental to attend these sessions” (LHW 03)

Clients also shared that some community members either consider it useless or make fun of the mental health services,

“Each neighbor has its own way of thinking. Some people are laughing at it and some consider it right. And some are saying that if they are asking from you then they are making a joke out of it.” (P13)

Poverty. A hindrance pointed out by lady health workers and clients was poverty. The clients seemed to have an expectation of material support with counseling to overcome their financial challenges. This poverty seems to be one hindrance for them in seeking support.

“Yes their lives did change for the better but there was one problem that even we

couldn't consult and that was poverty they always used to tell us that we are only anxious due to poverty". (LHW 06)

They shared how they feel helpless due to poverty and lack of basic resources,

"I have tension for my children and home. My father is disabled and I am nervous about his treatment as well. I am equally tense for my daughters as well. Sometimes we have one meal a day and worry for the next". (P7)

Fear and apprehension about community response. Another important but less frequently reported barrier in the view of lady health workers was their fear of how this intervention is going to be received by the community. The lady health workers were apprehensive about people trusting them with their mental health.

"Whether or not the villagers would listen to us, will treat us well or not. Whether they will say that why are we doing all this. We were bothered by these things." (LHW, 01)

Impact Individual level.

The mental health intervention had a positive impact on both clients and lady health workers.

Improved sense of self-sufficiency. Reportedly, after the mental health intervention, clients were able to establish lifestyles that are more self-sufficient and contributed more effectively to household expenses.

"She told us about methods of survival. She told me that if I continue sewing my life can turn the other way round. I can lead my life in a better way. I get wages and from that I buy flour and that is how we are surviving." (P10)

Clients also reported that these sessions helped them initiate small businesses that further improved their financial situation,

"Yes lady health worker gave us a session that we should start a little business so that our kid's expenses of pens and copies should be met easily... (so) I started a shop using only 500 Rs, so that all the expenses of copies and pens could be paid by the shop." (P9)

Lady health workers also emphasized the role of education in self-reliance because the clients were able to utilize their time more

effectively and develop skills that can help them achieve long term independence. One LHW suggested that basic skills like mathematics can help these women operate their businesses effectively.

Additionally, due to the intervention lady reported that they were able to provide guidance about finance management, mental health, domestic issues which further impacted the clients' ability to make better decisions:

"One lady took a loan from the bank and was worried about how she would return it so I advised her that ... it would be wise to buy a goat. Client bought the goat and she (goat) got pregnant. After the birth, the client sold the goat and kept the offspring. She thanked us a lot" (LHW 1)

Improved Knowledge about Mental Health.

Participants reported that initially there was a lack of awareness about mental health and this often led to confusion and fear about the process. Lady health workers also experienced this in the form of resistance towards counseling sessions:

"In the beginning they were very scared. The kind of questions they had in their minds were "what is this, what is being explained, what if we tell them about our secrets and they share it with others". (LHW 06)

However, once the sessions started and were being delivered by the lady health workers, there was a marked improvement in the clients' knowledge and acceptability of mental health:

"At first, we didn't care much about it. Later, they taught us about it (mental health) and now we understand and are aware of its importance." (P4)

Lay health workers also reported an improvement in their own knowledge and perception about mental health and counseling:

"First we had only heard about these things but when we were in the training we learned a lot about what mental health is. Problems can happen, depression can happen. Tension and depression is a part of every woman's life therefore we do these (counseling) sessions." (LHW 06)

Alleviation of Symptoms. The mental health intervention aided in alleviating symptoms of depression and anxiety through the counseling sessions. Clients reported that by discussing their grievances with the lady health workers, their stress levels reduced and they were able to maintain a healthier lifestyle,

"It (counseling) helped us in life. Especially with mental health. We have started helping ourselves and we do not get depressed very often." (P3)

Moreover, the lady health workers themselves reported that they observed a marked reduction in the clients' stress levels due to the mental health intervention:

"..When at first I used to visit them I didn't see any kind of happiness on their faces and they were not sharing their problems and worries... But now as I meet with them, they talk about their problems, I feel from their eyes that they are now relaxed from every worry." (LHW 09)

Lady health workers also observed an improvement in the clients' physical health due to the mental health sessions:

"Due to depression, anxiety they suffered from low blood pressure.. but now everything's fixed, they say. Earlier their faces or bodies used to be weak ,but after consultation they're taking care of themselves and are now in much better health." (LHW 06)

Improved Work Satisfaction. Lady health workers reported that their work satisfaction improved due to the mental health intervention:

"We felt good that because of us someone else's life was better and with it our lives have improved as well. We are doing much by going out, for others and for ourselves. We liked that I am capable enough to be a Marvi worker and a counselor. So, it has benefited us a lot." (LHW-05)

In addition to work satisfaction, being a part of the mental health intervention improved the lady health workers sense of self because they started receiving the community's respect and gratitude.

Monetary Benefit. The intervention became a source of extra income for the lady health

workers and opened new avenues of earning livelihood.

Interpersonal level.

Family-esque relationship with lady health workers due to mental health sessions. The mental health sessions according to clients have played a great part in forming family-like relationships with lady health workers.

"We just followed her, whatever she said. Yes they've guided us a lot. We are very thankful and pray for them. since they have started working here for our betterment. We praise them a lot." (P2)

Similar responses were found in LHW interviews,

"Now our relationship with our client is getting better. Previously the woman who used to only talk about contraception now shares her life with us and with that we also get happy that there is a connection of trust building". (LHW 06)

Improved response of clients towards FP due to mental health. Lady health workers found the impact of mental health intervention on improvement in clients' attitudes regarding family planning as well,

"First, we used to go to them at least ten times a day but now they themselves come to us along with their other family members as well." (LHW 09)

Suggestions.

Further Community-Based Program. Lady health workers and clients considered mental health integration to be helpful and wanted this program to go further. They wanted it to be community-based rather than in the hospital due to accessibility and permission issues.

"There must be continuous sessions on health and education as they give us knowledge." (P5)

"Yes ma'am this was a good thing, because the main problem was money because these women whatever happens wouldn't spend money and go to hospitals. " (LHW-05)

Monetary Support. Both lady health workers and clients pointed out the impoverished state of being in the community. They expected and suggested monetary support

along with counselling to overcome this challenge,

“Sister, we don't have a water tap. We don't have a school for a year, where our children can study. They're roaming freely and we don't have any religious academy. We lack roads, we're sick here. Recently, rain poured and our roads deteriorated.....After that, you should help us tackle poverty.” (P2)

Lady health workers also mentioned the expectation of the community for monetary support that also prevented them from seeking mental health support as their basic needs were not met,

“We were visiting them for consultation...after the consultation, their husband would ask them about what they were asked and how they responded and if they are going to help us with our poverty / will they give us anything”. (LHW, 06)

Discussion

Exploring the perceptions of service users and service providers helped us understand the feasibility and impact of introducing a mental health intervention in a community-based family planning program. The dissemination of the mental health intervention through lady health workers was well-received amongst the community. It reduced the amount of effort required to build trust and a working relationship between a health worker and client. One of the major reasons for this seems to be the positive impact in the women's' lives and their families. Improvement in their physical and mental health along with better solutions for their financial issues were found to have been motivating for them to continue the intervention. In addition to that, the lady health workers were readily available and went an extra mile to be helpful. It was further supported by the communal support for the mental health integration, which shows that within a collectivist culture, community support is integral for mental health interventions with individuals. Community based services are often successful because of these existing networks of support that offer an environment of trust for the clients (Ali et al., 2018). This relationship of trust is specifically important for women because they are often restricted by male family members from seeking help from external resources or male health workers. Furthermore, spreading

awareness about mental health through lady health workers was also easier because the community already considered them a source of knowledge regarding sensitive matters such as family planning. Therefore, integrating mental health information into this program increased the acceptability of mental health.

The most significant barriers came out to be on an interpersonal level where most women had difficulty seeking permission to attain mental health intervention. Gender inequality is found to be related to increased mental health burden for women. It comes from a financial distress and low education levels (Collier et al, 2020). When someone's basic survival needs are unmet, all the other needs become secondary. Poverty made it difficult for women to prioritize their mental health needs that led to a difficulty for some women to avail the intervention. The women who received this intervention also suggested that this intervention will be more helpful if coupled with financial incentives to alleviate financial distress. Thus, a psychosocial intervention seems to be an answer for an impoverished community

The mental health intervention helped the clients to be more self-sufficient, and improved their sense of self. This improvement contributed to greater initiatives to improve their finances and increase their family income. This signifies the impact of mental health intervention on a larger scale and helps reduce the major stressor of poverty in the first place. This can be beneficial while introducing a psychosocial support model whereby these women can be further empowered through financial interventions that can help them create sources of income to support themselves and their families.

The intervention was also helpful in increasing the mental health knowledge of women who received the intervention and the lady health workers as well. This improved awareness and seems to have a positive impact on attitudes towards mental health. The most reported improvement was seen in the symptoms of psychological and physical symptoms of mental health problems that the clients experienced. The symptom reduction has been found as a result of community mental health intervention in previous studies as well (Anne et al., 2012).

The mental health integration not only benefited the clients but also had a positive impact on lady health workers work satisfaction. Previous studies also point towards improved sense of efficacy in healthcare providers with mental health

training to be better able to provide help to people with mental health problems (Jenkins, 2010). They felt more connected with their work and felt a sense of satisfaction in it by helping others. This also had a positive impact on their relationship with clients who started seeing them as family members and were more inclined towards mental health interventions.

Another interesting finding was a perceived improvement in attitude related to family planning and better uptake. Poor mental health was associated with low contraceptive and family planning measures uptake (Catalao, 2020). This reflects how an improvement in mental health can have a positive impact on contraceptive outcomes as well and further studies can be conducted to investigate the impact of mental health on family planning uptake in lower middle-income communities.

To improve the feasibility and implementation of mental health intervention, suggestions were provided by the clients and lady health workers. Finances and mental health are closely interrelated. Studies have found that people in debt and financial difficulties have more mental health problems and poorer recovery. Financial difficulties and a lack of basic resources seem to have contributed to the mental health problems of the community under study immensely. The clients and lady health workers suggested some monetary or basic resource assistance along with mental health intervention for better outcomes. This is expected to result in better mental health outcomes. Moreover, the intervention was provided on a home/community-based level and was found effective due to accessibility and ease. Thus, continuation of service on the community level rather than in hospital settings was recommended by both lady health workers and clients. This mode of delivery is reliable and sustainable in other studies as well.

Integration of mental health in family planning is supported by multiple factors including the ease of access and communication with the health workers, trust and being a community service. The need of upskilling health workers being the frontline psychosocial support provider has been identified by the World Health Organization to bridge the need and resource gap. However, the current curriculum of lady health workers is missing the mental health curriculum. A commentary on Pakistani context also suggests upskilling lady health workers and

bridge the existing mental health gap (Rabbani, 2023).

Limitations of the Study

A key limitation of the study was that husbands of LHWs and clients were not interviewed. In the cultural context of Pakistan, decision-making power for women often lies with the husband. So, in the future studies it is pivotal to understand their perception of mental health services to ensure more effective integration.

Conclusions

This pioneering study marks a significant advancement in Pakistan's public health research, offering a first-of-its-kind integration of mental health services into an established family planning initiative using a co-produced, community-centred approach. The transformative and sustainable impact observed reaffirms the pivotal role of co-production in ensuring the efficacy and relevancy of health service delivery, particularly in resource-constrained settings (Bovaird & Loeffler, 2012; Osborne et al., 2016). Such a collaborative method, as our study underscores, can bridge persistent treatment gaps, offering a template for diverse health conditions beyond just mental health.

A salient finding of our research is the accentuated comfort and acceptability of community-based sessions over traditional clinical environments. These community sessions provided an ambiance of trust and relatability, fostering improved mental health outcomes and catalysing enhanced service uptake (Ali et al., 2018). The community's implicit trust in the lady health workers, already recognized as repositories of knowledge on sensitive matters, facilitated seamless integration and acceptance of mental health education.

Furthermore, our program ignited a wave of empowerment among women, emblematic of the transformative potential of community-focused interventions. Women, traditionally bound by societal constraints, found an avenue to candidly discuss their challenges, take charge of their mental health, and proactively forge sustainable solutions to elevate their circumstances. This empowerment extends beyond the individual, as evidenced by the broader community effects on family planning and the improved attitudes towards it (Catalao, 2020).

The inclusion of financial support with mental health services in the form of a psychosocial intervention is an avenue warranting future exploration, given the profound linkage between financial distress and mental well-being (Collier et al, 2020). Encouragingly, the community-driven model, underscored by our findings, showcases the potential of delivering vital services at the doorstep, furthering the goals of accessibility and effectiveness.

The World Health Organization’s emphasis on upskilling frontline health workers finds validation in our study’s results. The glaring omission of a mental health curriculum in current training, as highlighted by Rabbani (2023), underscores a crucial opportunity for systemic enhancements.

Our study, while groundbreaking, does come with its limitations, most notably the absence of insights from male family members, a critical stakeholder in the cultural fabric of Pakistan’s decision-making processes. Yet, this very gap also provides direction for subsequent research endeavors, emphasizing the importance of holistic perspectives in understanding health intervention impacts.

In conclusion, this research represents a pivotal moment in public health initiatives within Pakistan, elucidating the transformative potential of co-produced, community-centric health programs.

List of Abbreviations

- Lady Health Workers- LHWs
- Patient- P
- Socioecological Model - SEM
- Low Middle Income Countries -LMICs

Conflict of interest

The authors declare that they have no conflicts of interest.

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