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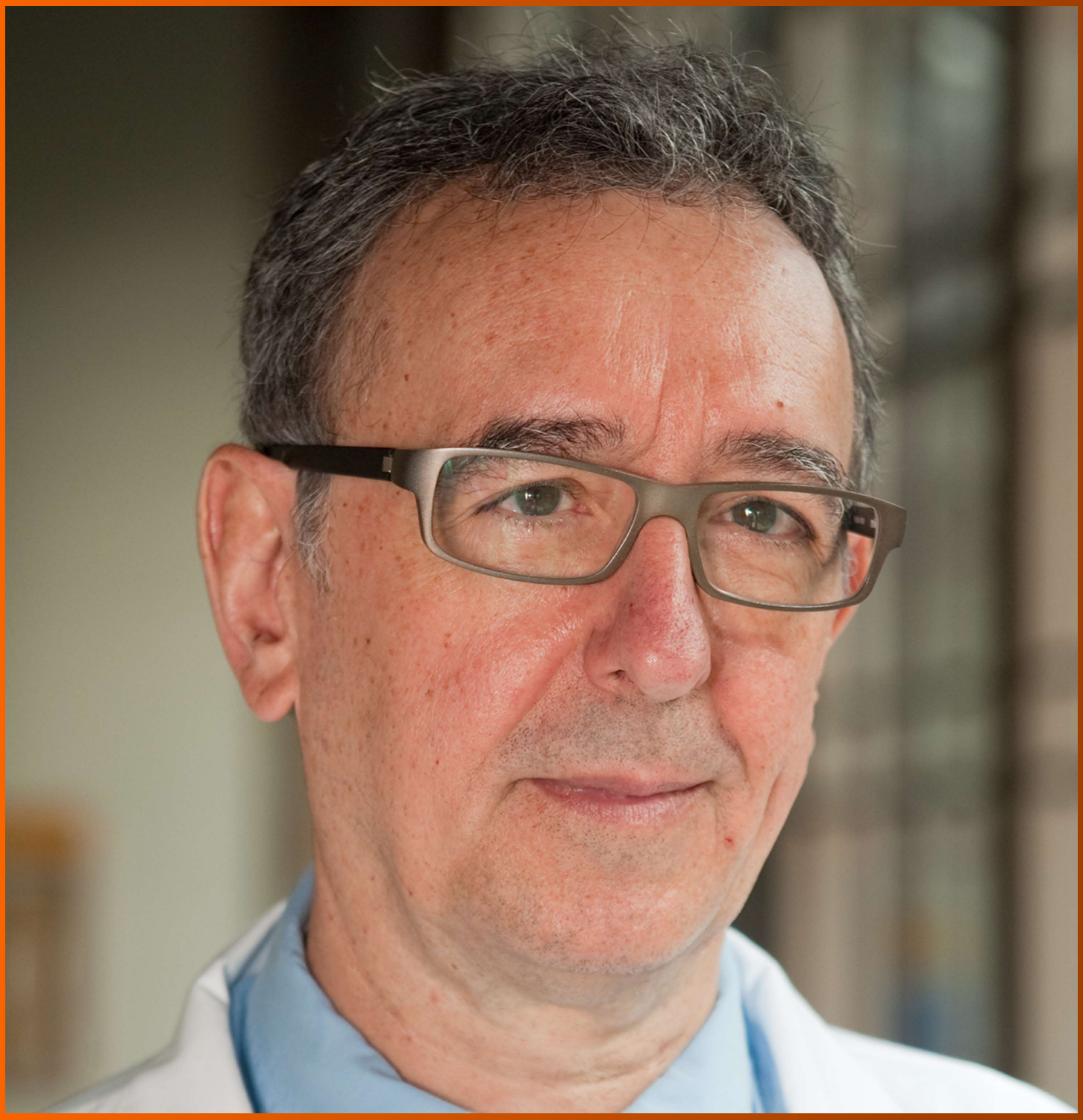

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ORIGINAL ARTICLE

Randomized Controlled Trial

Group psychological intervention for maternal depression: A nested qualitative study from Karachi, Pakistan

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Abstract

AIM

To understand the experience of maternal depression, the factors implicated in accessing health, and the acceptability of the psychosocial intervention.

METHODS

The participants were recruited from the paediatrics outpatient department of Civil Hospital Karachi, Pakistan. The study started in December 2009 and completed in December 2010. Women with maternal depression, aged 18-44 years with children aged 0-30 mo who had received nutritional supplements, and participated in the intervention programme [called Learning through Play (LTP) plus] were included in the study. Qualitative interviews were conducted with 8 participants before the intervention and 7 participants after the intervention. A semi structured topic guide was used to conduct the interviews.

RESULTS

Framework analysis procedures were used to analyse the qualitative data. Four themes emerged: (1) the women's contextual environment: Interpersonal conflicts, lack of social support and financial issues being the major barriers in assessing healthcare; (2) women's isolation and powerlessness within the environment: Sense of loneliness was identified as a restricting factor to access healthcare; (3) the impact of the intervention (LTP-Plus): Women felt "listened to" and seemed empowered; and (4) empowered transformed women within the same contextual environment: The facilitator provided a "gardening role" in nurturing the women resulting in a positive transformation within the same environment. The women's homes seemed to be more happy homes and there was a positive change in their behaviour towards their children.

CONCLUSION

Findings informed the further development and testing of culturally-appropriate psychosocial intervention (LTP^{+}) for addressing maternal depression.

Key words: Low income Country; Thinking Healthy Program; Learning through play; Maternal depression; Framework analysis; Exploratory analysis

Core tip: To our knowledge this is the first qualitative study from Pakistan exploring the experiences of depressed mothers participating in a group psychosocial intervention trial. This was part of a randomized control trial testing the acceptability and feasibility of a parenting intervention Learning through Play (LTP)-Plus among depressed women in a low-income setting. The LTP^{+} intervention focused on two key objectives. First was to stimulate early child development through a pictorial calendar among children from birth to 3 years. Second was to change negative thoughts patterns of mothers through culturally adapted cognitive behavioural therapy intervention. The intervention was acceptable and the qualitative data informed the further development of the intervention.

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INTRODUCTION

Childbirth has been recognized as an important life event that alters responsibilities of a woman permanently[1]. The transition to motherhood is characterized by rituals, prohibitions, and guidelines that facilitate mothers' adaptation to their new roles[2]. However, lack of social support and stressful life events during this significant transition may lead to depression[3,4]. In the West, 10%-15% of women are affected by maternal depression[4] and its prevalence is much higher in developing countries such as India (28%)[5] and South Africa (34.7%)[6]. The prevalence rate is even higher among Pakistani women, *i.e.*, 36%[3]. Increased psychological distresses during the antenatal period[3,5], worry about debt[7] poverty, and disturbed marital relationships[5] have been identified as risk factors for maternal depression.

Furthermore, a phenomenological study in Hong Kong highlighted feelings of "being trapped" in women with postnatal depression and explained that lack of support in the form of uncaring husbands and controlling in-laws were emergent themes along with mothers' ambivalent feelings of love and hate towards their baby[8]. The mother is responsible for breastfeeding, maintaining hygiene for the child, and immunization. She is expected not only to recognize illness, but also to seek appropriate care and treatment for her child[9]. Symptoms of maternal depression such as tiredness, inability to concentrate, preoccupation with guilt, worthlessness, and hopelessness adversely affect a mother's ability to provide adequate care[10]. This may have a long-term impact on the child's physical as well as psychological and cognitive well-being[11]. Results of cohort studies from developing countries including South Africa, Pakistan and India report strong associations between maternal depression and stunted growth[5,12,13]. Similarly, the damaging effects of maternal depression on intellectual and psychological development are also well documented[14,15].

The effectiveness of different psychological interventions such as cognitive behavioural therapy (CBT), interpersonal psychotherapy, and problem-solving therapy is well

established in the treatment of depression in developed[16] as well as developing countries[17]. A multicomponent intervention that involved psychoeducational treatment adherence, support, and pharmacotherapy was found to be effective in reducing depression in women with postnatal depression in Santiago[18]. In Pakistan, intervention based on the principles of CBT was found to be effective in reducing depression and disability and in improving social functioning[19].

A qualitative systematic review by Dennis and Chung-Lee[20] highlighted inability to disclose feelings, the presence of myths and lack of knowledge as barriers to help-seeking behaviours in women suffering from depression. Furthermore, this review also reported a preference for "talking therapies" for the treatment of postnatal depression[20].

As far as we are aware, the present study is the first qualitative research in Pakistan which explores the experiences of women suffering from maternal depression in Pakistan and their related experiences of participation in a group psychosocial intervention trial. A mixed-method study was conducted that comprised a randomized controlled trial (RCT) to test a psychosocial intervention for reducing maternal depression and improve child outcomes. A qualitative method was also used to understand the experience of maternal depression, factors implicated in accessing help, and the acceptability of the group psychosocial intervention in the participants.

MATERIALS AND METHODS

A qualitative approach was adopted as the research design. This approach was chosen in order to understand the experience of maternal depression in the cultural context of these participants, and to explore the antecedents, manifestation, and consequences of depression. Another area that was targeted in this study was the experience of participation in a group psychosocial intervention by particularly focusing on the helpful parts of the intervention, and the difficulties faced by the participants. The participants were interviewed before and after taking part in the intervention. Data was analysed using framework analysis principles[21,22]. All the mothers aged 18-44 years with children between 0-30 mo, diagnosed with depression on Edinburgh Postnatal Depression Scale (EPDS score $\geqslant$ 14) and residents in the trial catchment site were included in the study. Mothers with a medical disorder that could prevent their participation in the trial and those with active suicidal ideation or any other severe physical/mental disorder were excluded.

Ethical approval for the study was sought from the Institutional Review Board of Dow University of Health Sciences, Karachi, Pakistan. A Participant Information Sheet was provided to all participants at the time of recruitment and queries were addressed. After providing a detailed description of the study, written informed consent was obtained from all participants. Participants were assured of confidentiality and permission was obtained to audio record interviews. Codes were assigned to each participant and all transcripts were anonymised during transcription to keep personal data confidential. Data was kept safe on encrypted and password protected computers and were transferred electronically using encrypted files. A Lone Working Policy was used by Pakistan-based researchers in order to ensure their safety in the field. Furthermore, a Distress Policy was in place to enable the researchers to have a framework for accessing further support for participants when it was clear that someone could be at risk. The participants were interviewed at Civil Hospital Karachi, because it was a convenient place for the participants.

This study was a part of an RCT in which the acceptability and feasibility of a group psychosocial intervention [Learning through Play (LTP) Plus] was tested to reduce maternal depression and improve child outcomes. The LTP program focuses on the strategies to stimulate early child development. A pictorial calendar is the main feature of this program that is designed for parents and includes eight successive stages of child development from birth to 3 years. The second component of the psychosocial intervention was cognitive behaviour therapy (CBT) that was aimed at changing negative thought patterns. This study comprised of 98 participants; half of whom were randomized into the intervention group (n = 49) and half into the control group (n = 49). Participants were included in an in-depth interview study through convenient sampling. Interviews were conducted with 7 participants from the routine treatment group and 8 participants from the LTP plus in addition to routine treatment. Initially, 25 participants were invited at random to participate in qualitative interviews; 10 refused to participate because they did not want their interviews to be recorded whereas 15 participants consented. In-depth, semi-structured interviews were conducted by trained researchers. All were trained psychologists and received additional training on qualitative research and data analysis. All interviews were audio recorded after obtaining participant consent. Two separate topic guides were prepared for pre-intervention interviews and post-intervention interviews. The purpose of the interviews with the routine treatment group was to explore experience of maternal depression, its causes and manifestation, and the state of available treatment options. However, interviews conducted with the LTP Plus group were focused on exploring the experience of participation in a group psychosocial intervention, and to identify facilitators and barriers to accessing the intervention. After each interview, field notes were made by the researcher to document the body language of the participant in response to questions along with any other relevant information.

All interviews were transcribed verbatim in Urdu and then translated into English for data analysis. The routine treatment group data and LTP plus group data were analysed separately and then integrated during the mapping and interpretation phases[23]. The five stages of

framework analysis were used to analyse data[21]. During the initial familiarization stage, three researchers (HF, TK, BF) read through the transcripts and field notes collected during the interviews several times to fully immerse themselves in the data. After all data were familiarized, and in order to identify the key themes, a draft theoretical framework was constructed in which major and minor themes were identified from all interviews. Indexing was then carried out in order to apply the draft theoretical framework systematically to the data. Here the data from transcripts were copied and pasted alongside the relevant themes that were listed in the draft theoretical framework. Data and themes were then compared again and the draft theoretical framework revised. During the charting process, data were summarized into table developed using MS Word software for each theme listed in the draft theoretical framework[24]. This process provided a clear and concise overview of the data. Finally, these tables were reviewed during the mapping and interpretation phase. This enabled all key ideas and the data to be compared and discussed by researchers and supervisors, and to identify the final theoretical framework that synthesized and interpreted the data as a whole. To maintain credibility and trustworthiness of the data and subsequent findings, the researchers in Karachi were supervised by experienced mental health and qualitative researchers (NC, FL, CF) based in the United Kingdom. Regular fortnightly Skype meetings were held to discuss progress with the study team during the data collection and analysis phases. Drafts of analyses were electronically mailed to researchers in the United Kingdom who were able to study these before the Skype meetings. The organization (structure and pace) of the supervision process enabled the Pakistan-based researchers to develop experience, skills and confidence in qualitative methods. Engagement in discussion and regular reviews by all researchers ensured fit of the data to the final analysis, and supported minimization of bias[24]. Team members met for the final review of the theoretical framework, and came up with similar ideas. Furthermore, translations from Urdu to English were back-translated to ensure accuracy. For respondent validation[25], 15 participants were approached for feed-back, out of those 9 agreed to give feedback on accuracy of the data. Researchers and group members agreed on the key themes and interpretations.

RESULTS

All participants were home maker women aged 36-40 years, married, with children aged of 0-36 mo. After completion of data analysis, the following 4 key themes were identified in the final theoretical framework.

Context-the women's environment

This theme identifies the psychosocial factors that co-existed with women suffering from maternal depression. Interpersonal conflict and lack of support from extended family members were highlighted in many interviews. For example, the data suggest that several women were experiencing financial hardship which was the main barrier to accessing healthcare facilities. In this setting, it is common for healthcare to be paid for by the service user as state-funded services are minimal. The following quotes illustrate these points.

My sister-in-law often has arguments with me. She does not take care of my children when they cry (Participant 1). Who will understand? My husband thinks that I am bad. My children also think that I am bad (Participant 3). Participants reported that they were suffering from severe financial hardship because of their partners' unemployment and were unable to access treatment for their ill children which they also had to pay for. My husband stays at home not doing anything. He has not been going to work for the last 2 years (Participant 6). Yes he earns but how much can an ill person earn? (Participant 4). My child falls ill very frequently (Participant 1). There is illness but the actual problem is poverty. We don't have money (Participant 2). Children are becoming timid and frightened; they cry because of the circumstances (Participant 5). Participants were unable to contribute financially to the household because of cultural attitudes against their going out to work[16]. It does not happen in our home (community) that women go for work and men do not go. I will go secretly after my husband will leave for work (Participant 8).

Participants also expressed dissatisfaction with the healthcare services available to them. The participant reported that most of the doctors did not provide adequate attention and appropriate treatment to the patients. She does not provide (proper) treatment; simply gives medicine and injection (Participant 1). Sometimes when a good doctor is available he attends us well, but most of the time they just ignore (Participant 2). He (doctor) does not check properly. Here doctors are just like this. No one checks, they just come and leave (Participant 3). You know well how doctors in the government setup are. They do not listen to us. There are so many patients and doctors do not bother with them (Participant 4). What kind of treatment? I had spiritual treatment but it did not have any benefit; reduced my anger just a little bit (Participant 6). Treatment can be provided by a doctor. He should give medicine and also listen to us (Participant 8).

Women isolated and powerless within the environment

The data suggest that prior to the intervention, women were thinking very little about themselves and felt very alone. They were unable to seek support outside the home and described a sense of "paralysis". Some women reported symptoms of physical illness. They were keeping themselves isolated and felt they had no support. There is no use to share this. Who will understand our problems? (Participant 3). I do work. What can I do? There is no one else who can do my work (Participant 4). Whom should I talk to, who would understand, who

would help? (Participant 7). Because of the lack of support and feelings of helplessness, the participants experienced sadness. Before (intervention) I felt sadness and a lot of anxiety and also felt myself alone (Participant 7). I remained sad and worried all the time before (intervention) and I could not find a solution for any of my problems (Participant 6). Because they were keeping themselves isolated and little support was available to them, the participants expressed this sadness in the form of anger. I get very angry (Participant 1). I cry, remain worried. What else can I do? (Participant 2). I get upset, not knowing what to do. I pray but also get angry (Participant 8). I feel like I want to take poison and kill myself and my children too (Participant 7). I started fighting with others without trying to understand what they were saying. If my husband said anything I would start fighting immediately. I used to say anything in state of anger (Participant 4). Furthermore, because of their emotional state, the participants lost interest in participating in routine activities of their daily life, such as looking after the house and their children. I just sit at home, cannot do anything. I just sit idle (Participant 6). I did not have interest in anything (Participant 1). I do not want to play with my children although I know it's important but still I am not interested in doing this (Participant 5). The disturbed emotional state often provoked them to beat their children which consequently made them feel more upset and guilty. When I was angry, I often used to beat my children (Participant 3). Earlier I used to think bad about myself (Participant 2).

The impact of the intervention

After completing the intervention, the participants were clearly demonstrating a more positive nurturing role. They appeared lesser isolated and were interacting more positively with others. They displayed a sense of empowerment following the intervention and demonstrated that the intervention enabled them to be more confident in their roles.

Now I have become more confident (Participant 2). They appeared now to have the strength and courage to attend to and interact with their children. They were more involved in the care of their children, for example, washing them adequately, teaching them etiquette, and playing with them. Some misconceptions seemed to be present in the community such as mothers believing that showing children their reflection in the mirror will make them ill-that if they showed a mirror to their child, he/she will get mad or get diarrhoea. After participating in the LTP Plus intervention, mothers learned to challenge this belief and appreciate the positive outcomes of using a mirror during child play. These quotes explain these behaviours. Now I feel good, take care of myself and the children as well. Now I do not get obsessed with worries like I was before (Participant 3). Through this program I got more information regarding children; like I did not show mirror to my child before but now I show them mirror (Participant 2).

Yes, we should play with children. They like their parents behaving like a child in front of them. This makes children happy and me as well (Participant 1). What I learned about children is that we should teach them etiquette when they are young. When elders use abusive language children understand that and also repeat that in their mind (Participant 4). I liked the part related to children because I feel happy when my child is happy (Participant 6). I liked the part related to children because before (intervention) I did not treat my children well, dealt with them harshly, but after attending the intervention I learned how to spend time with children and how to understand them (Participant 7). They also developed skills in observing and evaluating others and themselves, and also thinking about others. They were now able to solve problems when faced with difficulties and appeared to be more rational in their thinking about daily life activities. They were now thinking more outwardly, rather than inwardly. My mind has been changed since I participated in the program; now I try to solve my problems myself (Participant 5). We should keep on looking for other solutions; at least one (solution) will definitely work. This encouraged me a lot (Participant 7). Yes, all negative thoughts are gone away (Participant 1).

Empowered, transformed women within the same environment

The facilitator was seen as the catalyst for the change in the women. This was a novel experience for the participants as; previously, many of them did not have anyone to share their personal feelings with. They were happy that the facilitator was a female, and they felt that she provided more support and understood them and their feelings well. The facilitator's role can therefore be likened to a "gardeners role", nurturing the women to enable them to foster and transform within their environment.

She focused on each and every point, talked slowly and thoughtfully (Participant 1). Yes, doctor (interventionist) elaborated things very well and I did not have any problem in understanding. She tried to teach us things very calmly and in a good manner (Participant 2). I liked her style of teaching the most. She used to tell everything very slowly and calmly (Participant 3). No, there was no difficulty (in understanding session) (Participant 5). Sister (interventionist) used to teach us slowly and with love. She repeated the things we did not understand (Participant 6). She tried to teach slowly and with love (Participant 7).

To summarize these findings, the environment that these women lived in before taking part in the intervention can be likened to an "infertile garden landscape" where flora is not able to grow and thrive. Furthermore, the "gardeners", or healthcare providers in this case, are not able to provide any support freely, or to nurture their inhabitants in the surrounding area. When medical help was sought by these women, the assistance was not appropriate and did not meet their needs. This

can be likened to the "gardeners" being somewhat irresponsible and reckless as they did not pay adequate attention to these women and their health concerns. Before the intervention these women can be described metaphorically as "closed, dormant rosebuds in the garden", who were experiencing feelings of loneliness and sadness. However, the data indicate that after participating in the LTP Plus intervention the women can be compared to a "vase of blossoming roses" who are now blooming and prominently emitting confidence, knowledge, and self-assurance. Furthermore, the facilitator or deliverer of the intervention was observed as a nurturer/cultivator who attended to their needs with care, love, and attention. Hence, this role can be likened to a "nurturing gardener" who tends carefully to the plants and foliage in their surrounding landscape. Following the LTP Plus intervention, most of the women's homes (the landscape) were transformed into happy homes where the women were interacting more positively with their children.

DISCUSSION

The qualitative approach and framework analysis method of data analysis has clearly identified themes that provide a detailed explanation for the participants' feelings of psychological distress before the intervention. The method has also enabled the changes to be identified after participating in the study. The participants' environment was characterized by deprivation of financial and economic support. Worry about the employment of the partner and interpersonal conflict have been reported by the participants as a contributing factor for maternal depression. Social adversity has been reported to be associated strongly with maternal depression in differing contexts in previous studies[7]. A study in India reported economic deprivation as a risk factor for maternal depression[26]. Studies reported that unhealthy social environment and experiencing lack of social support (including difficulties in relation to people: Friends, partners, trusted people, and relatives) have strong associations with maternal depression[27]. Results of a qualitative study conducted in four cities of south-western Finland reported that lack of a caring attitude from the husband and controlling and powerful in-laws were associated factors for symptoms of hopelessness. Helplessness and loss of control were noted among Chinese women in Hong Kong suffering from maternal depression[8]. A previous study conducted in Pakistan reported that social support and stress contributed greatly to postnatal depression compared to poverty and financial issues[3]. Women in the present study reported that they were unable to contribute financially as many women in their culture are not allowed to go out for work. South Asian women are dependent on men socially and economically[28] and are restricted not only in their mobility but also in decision-making and use of resources[29]. A qualitative study of postnatal depression across countries and cultures reported that a universally accepted remedy to deal with postnatal depression was to increase social support from the family and emotional support from the husband[1].

A second theme of this study was related to women being isolated and powerless in their environment. This theme was basically about the expression of depression among women. They expressed their depression in the form of sadness, hopelessness, anger, physical symptoms, and lack of interest in the environment. They also reported that they directed their anger to their children. Depression has been reported to be a debilitating disorder with symptoms of low mood, low self-esteem, tiredness, and lack of interest[30]. Research also supports that depressed mothers are tired and unable to concentrate and they experience feelings of guilt, worthlessness, and hopelessness[10]. As these women were often unable to provide proper attention to their children because of their depression, they directed anger towards their children and ultimately felt guilty. Moreover, medically unexplained symptoms (MUS) have been recognized as the most prevalent type of symptoms in primary care[31]. MUS can be the representation of recognized psychiatric disorders such as depression or anxiety and can be manifested in various forms including chronic fatigue syndrome, irritable bowel syndrome, fibromyalgia, or simply as symptoms that exist in the absence of a defined organic diagnosis. Evidence suggests that MUS being more common in Asian and African cultures[32]. Findings from a previous study conducted in Pakistan reported that although the proportion of MUS (35%) was similar to what is reported in the West, unlike western studies MUS were twice as common in women than in men and these symptoms led to inability to perform work[32]. Results of a previous qualitative study reported that women with postnatal depression felt helpless and they somatised their depression[33].

The third theme was related to women reporting the positive effects of the LTP Plus intervention. They felt that they became more empowered after the intervention and their knowledge about child rearing improved. They reported better ways of dealing with their children and improvement in problem-solving and their feelings after attending the intervention. In an earlier qualitative study assessing the role of psychosocial intervention in postnatal depression, women described the intervention as a positive experience and found it acceptable and successful. They also reported a positive impact of the CBT approach in influencing thought patterns that led to positive and negative feelings[34]. The LTP intervention was reported to be effective in increasing mother's knowledge of child development[35]. Results of a previous study testing the Thinking Healthy Program (THP) based on the principles of CBT reported that rates of depression were reduced among women receiving this intervention compared to those receiving enhanced routine care. Women in the intervention group experienced more symptomatic relief, and better social adjustment than the comparison group[19]. This was the first time a combination of both interventions was tested, *i.e.*, LTP and CBT (THP).

It led to improvement in mother-child interaction and reduction in depression, as reported by the participants.

The final theme was about the satisfaction of the participants with the LTP Plus group facilitator. They reported that the facilitator helped them to feel empowered even within their difficult environment. Participants appreciated the communication style and patience of the facilitator. The relationship between the role of communication and the effectiveness of intervention for reducing depression in primary care has already been explored[36]. It is recommended that all the healthcare providers dealing with maternal depression should adopt a non-judgmental and accepting approach[34].

Strengths and limitations of the study

There was a high participation rate, with 15 out of 25 (60%) eligible women agreeing to participate in the study. The framework analysis process and the integral phases work well when supervising at a distance as each stage provides a logical opportunity for discussion and review with team members. This fostered a thorough and comprehensive consideration of all aspects of the research process. The multidisciplinary backgrounds of the research team (mental health, midwife, clinical psychologist, research) facilitated emergence of key ideas in the data. Because of the small sample size, the findings cannot be generalized. Moreover, female facilitators were more acceptable to the participants. The findings from women with mild to moderate depression may not be extrapolated to women with severe depression. Some interviews were not as detailed as others because women in this context are not used to accessing services and discussing their problems. Seeing health professionals is not a common practice and thus they are not familiar with talking about their feelings. Thus, the interview experience is slightly novel to them.

Reducing child mortality and morbidity has received attention as a Millennium Development Goal worldwide. However, in low and middle-income countries the process of development of cost-effective psychosocial interventions to achieve such a goal is slow. The present study gives direction in developing and testing culturally-appropriate psychosocial interventions for reducing maternal depression in order to work towards the sustainable development goal.

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We want to thank our participants.

COMMENTS

Background

Prevalence is much higher in developing countries such as India (28%) and South Africa (34.7%). The prevalence rate is even higher among Pakistani women, *i.e.*, 36%. Results of cohort studies from developing countries including South Africa, Pakistan and India report strong associations between maternal depression and stunted growth. In Pakistan, intervention based on the principles of cognitive behaviour therapy (CBT) was found to be effective in reducing depression and disability and in improving social functioning. However studies highlighted inability to disclose feelings, the presence of myths and lack of knowledge as barriers to help-seeking behaviours in women suffering from depression.

Research frontiers

Major changes occur during the postnatal period which determines the well-being of mothers and newborns, but unfortunately this is the most neglected period in terms of provision of quality services. Maternal depression accounts for the largest proportion of burden associated with mental or neurological disorders and have strong association with increased child mortality. There is now evidence from some low income countries that effectively delivered psychosocial interventions that are cost effective for improving maternal and child health.

Innovations and breakthroughs

This study was a part of a randomized controlled trial in which the acceptability and feasibility of a group psychosocial intervention [Learning through Play (LTP) Plus] was tested to reduce maternal depression and improve child outcomes. The LTP program focuses on the strategies to stimulate early child development. A pictorial calendar is the main feature of this program that is designed for parents and includes eight successive stages of child development from birth to 3 years. The second component of the psychosocial intervention was CBT that was aimed at changing negative thought patterns. CBT based intervention called Thinking Healthy Program (THP) was successfully tested to reduce postnatal depression in rural area of Pakistan. A parent based intervention LTP was also tested in the same setting that led to the improvement in knowledge, attitude and practices of depressed mothers about child development, however no reduction was found in maternal distress. Therefore the aim of the present study was to explore the acceptability and feasibility of combination of two interventions, *i.e.*, LTP plus THP (LTP Plus) to reduce maternal depression and improve child health.

Applications

The present study is the first qualitative study conducted in Pakistan to explore the role of culturally adapted intervention to improve maternal mental health and child health outcomes for undernourished children brought to paediatric units. There is a need to conduct such studies so that this low cost culturally appropriate intervention can be integrated into the existing health care system to improve maternal and child health in Pakistan and other low income countries.

Terminology

Framework analysis: Framework analysis is a method of qualitative analysis and it is case and theme based approach, reduces data through summarization, retains links to original data, and allows comprehensive and transparent data analysis; THP: THP is based on principles of CBT like listening, identifying and changing negative thoughts and emotions, problem solving skills, *etc.*; Cultural adaptation: Cultural adaptations are changes to intervention content or process that addition, deletion, or alteration to the components, changes in intensity of the intervention and cultural or other contextual modifications.

Peer-review

It is well written.

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