



Preliminary communication

“Someone like us”: Delivering maternal mental health through peers in two South Asian contexts



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ABSTRACT

Background: Peer-led psychosocial interventions are one solution to address the great paucity of skilled mental health human resources in South Asia. The aim of this study was to explore peer-delivered care for maternal depression in two diverse contexts in South Asia.

Methods: The study was carried out in the urban setting of Goa, India and rural setting in Rawalpindi, Pakistan. In total, 61 in-depth interviews (IDIs) and 3 focus group discussions (FGDs), and 38 IDIs and 10 FGDs, were conducted with multiple stakeholders in urban Goa and rural Rawalpindi respectively. We used the framework approach to analyze data.

Results: Peers from the same community were the most preferred delivery agents of a community-based psychosocial intervention in both sites. There were contextual similarities and differences between the two sites. Preferred characteristics among peers included local, middle-aged, educated mothers with similar experiences to participants, good communication skills and a good character. Key differences between the two contexts included a greater emphasis on the peer's family social standing in rural Rawalpindi and financial incentives as motivators for individual peers in urban Goa.

Limitations: Generalizability of our findings is limited to two specific contexts in a vast and diverse region.

Discussion: Our study demonstrates that peers have the potential to deliver maternal psychosocial interventions in low-income settings. There are contextual differences in the preferred characteristics and motivators between the sites, and these should be carefully considered in program implementation.

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Abbreviations: (THP), Thinking Healthy Program; (LHWs), Lady Health Workers; (SHARE), South Asian Hub for Advocacy Research and Education in mental health; (NFHS), National Family Health Survey; (PHCs), primary health centers; (CHCs), community health centers; (PHQ-9), Patient Health Questionnaire; (LSHTM), London School of Hygiene and Tropical Medicine; (CHW), Community Healthcare Worker; (SCP), Specialist Care Provider

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1. Introduction

To meet the challenge of global health inequalities, there has been an emphasis and demand for approaches that harness relevant knowledge, skills, and resources within a community setting (Singh and Sachs, 2013; Takasugi and Lee, 2012). One of the primary strategies to address this problem has been to train community or 'lay' health workers—individuals with no formal professional training—to deliver basic health services to underserved communities (van Ginneken et al., 2013).

This is particularly true in South Asia, the world's most populous region and one of the least resourced mental health systems in the world (Patel et al., 2010). Priority mental health

problems include maternal depression whose prevalence rates are reported among the highest in the world (Patel et al., 2002; Fisher et al., 2012; Rahman et al., 2008). Robust evidence now exists that maternal depression can be effectively managed with psychological treatments delivered by lay health workers, notably through the Thinking Healthy Program (THP) which reported large effects of an adapted cognitive behavioral intervention delivered by community health Workers known as Lady Health Workers (LHWs; Rahman et al., 2008). However, efforts to integrate the intervention in LHWs daily routines were not feasible in Pakistan due to their overburdened and ever expanding job-description (Haq et al., 2008). This poses problems for scaling up effective solutions (Jaskiewicz and Tulenko, 2012); thus, there is a need to explore other human resources to deliver this intervention.

Peer-led interventions may be one community-based resource to address the burden of maternal depression in an acceptable, feasible and cost-effective way. Peer-led education and behavioral interventions have been effective with a number of target populations and health issues in developing countries (Manandhar et al., 2004; Medley et al., 2009; Tripathy et al., 2010). Similar to community health workers, peer-led interventions may be more cost-effective in addressing health issues when compared to those led by highly trained professionals.

Peers and lay health workers may both be members of the local community who share similar characteristics, experiences and health conditions with members of the target population (Fuhr et al., 2014; Simoni et al., 2011); however, unlike peers, community health workers are also members of a formal health workforce and must undergo a prescribed training program, as well as draw a salary. Peers, apart from being more numerous, may be perceived as more approachable and able to identify with other community members (Simoni et al., 2011). This may be particularly relevant for community-oriented settings in South Asia to help improve maternal depression by facilitating a more open discussion of sensitive topics and therefore generate social influence and behavioral change. However, these distinctions are not clear-cut or consistent across contexts. For example, in some settings, peers receive financial remuneration (Greenspan et al., 2013; South et al., 2014), and this topic remains one which is hotly debated (Lehmann and Sanders, 2007; Maes, 2012). Notwithstanding these debates, a 'one-size fits-all' approach may be inappropriate for such diverse contexts (Maes et al., 2010). Delivery agents may differ both within and between contexts in terms of their preferred characteristics, motivations, recruitment, training, type and amount of work and form of remuneration (Greenspan et al., 2013). Unfortunately, little research has compared the heterogeneity of these characteristics between various contexts.

Scaling up peer involvement as part of a strategic response to health inequalities in maternal mental health requires careful examination of who is the most preferred delivery agent along with relevant characteristics, barriers and motivators from multiple community perspectives. Qualitative research, in particular, can be used prior to a health system intervention trial to improve its quality and to help pinpoint relevant outcomes. In the current study, we conducted a qualitative study to address key questions on the characteristics of human resources outside the formal health care system to deliver THP to mothers with depression. To examine potential heterogeneity between contexts, we explored our objectives in two diverse South Asian settings in urban Goa, India and rural Rawalpindi, Pakistan. These data were collected as part of formative research for the South Asian Hub for Advocacy Research and Education in mental health (SHARE) research project which aims to adapt and evaluate the THP delivered by peers.

2. Methods

2.1. Setting

The study was conducted in two locations: the North District of the state of Goa, India and Kallar Syeddan, a sub-district of Rawalpindi in the province of Punjab, Pakistan. The two settings capture some of the diversity within the South Asian region. For example there are much higher rates of poverty in rural Rawalpindi (up to 60%) compared to urban Goa (as low as 4%; Government of India Planning Commission, 2013; World Bank, 2013). Similarly, fewer women in rural Rawalpindi are educated (65%; Pakistan, 2003) than in urban Goa (84%; National Family Health Survey (NFHS-3), 2009) and the total fertility rates in rural Rawalpindi (3.8) are much higher than Goa (1.8; National Family Health Survey (NFHS-3), 2009). Daily lives are known to be different in the two settings. Rawalpindi is generally agrarian, consisting of close-knit communities living in villages and large household sizes (6.2 persons per household) including extended and joint families (Rahman, 2007); as compared to Goa where families are smaller and nuclear (4.2 persons per household; National Family Health Survey (NFHS-3), 2009) and live in predominantly urban dwellings. Health systems in both contexts also vary. In Rawalpindi, village-based health workers (Lady Health Workers), who were once semi-volunteers and now regular government employees, deliver health services in the communities. In Goa, public healthcare is provided through a network of healthcare service in four tiers: urban primary health centers (PHCs), sub-centers, community health centers (CHCs) and a district hospital. The only epidemiological data suggests similar prevalence rates of maternal depression, where 23% of antenatal mothers meet criteria for depression in Goa (Patel et al., 2002) compared with 26% of mothers in rural Rawalpindi (Rahman et al., 2008).

2.2. Participants and data collection

Data collection took place between January 2012 and October 2013 through focus group discussions (FGDs) and in-depth-interviews (IDIs). Participants were recruited purposively using a maximum variation sample to capture the diversity of stakeholders and service providers related to maternal health. These included pregnant mothers (depressed and non-depressed according to a cut-off score of ≥ 10 on the Patient Health Questionnaire-9 (PHQ-9; Kroenke and Spitzer, 2002)); family members including spouses, mothers-in-law and sisters-in-law; community health workers (LHWs in Rawalpindi and anganwadi workers in Goa); and health professionals (family doctors, gynecologists, and nurse). In Goa, participants were identified during their visits to the antenatal clinic and service providers by hospital staff. In Rawalpindi, participants were identified through a medical registry with the assistance of LHWs.

Data were collected in the local languages (primarily Konkani in Goa and Urdu in Rawalpindi) by multilingual research assistants. These data collectors were trained by experienced researchers and followed semi-structured topic guides. Guides included four key themes such as preferred peer characteristics, motivators, barriers and facilitators to program uptake and implementation. In both contexts, topic guides were piloted and appropriate revisions were made. Data collection was conducted at participants' preferred venue. In Rawalpindi, two female researchers (AN and SK) conducted all interviews in the mothers' homes and this venue was less frequently utilized in Goa. In both settings, FGDs were conducted at a field office or health service center. Each FGD lasted 60–90 min and IDIs were between 30 and 45 min. All data were recorded, either via digital audio recorders or, in several cases in

Rawalpindi, six interviewees preferred that the research assistant took notes rather than audio-record the interview.

2.3. Ethics

Ethical clearance was obtained from Institutional Review Boards (IRB) in India and Pakistan, the Indian Council of Medical Research and from the institutional ethics boards at the London School of Hygiene and Tropical Medicine (LSHTM) and the University of Liverpool. Participants were provided with comprehensive information about the study and illiterate participants were read aloud this information. Informed consent was obtained from all participants prior to conducting any data collection.

2.4. Data analysis

In both settings, we used a framework analysis approach (Ritchie and Spencer, 1994), involving five stages of analysis: familiarization with the data, identification of a thematic framework, indexing (coding raw data), charting and finally interpretation. Three researchers in both contexts (DS, AL, and UB in Goa, and NA, SK and AN in Rawalpindi) independently carried out the first two stages. The transcribed data for each interview was read and reread to gain familiarity with the raw data. During this process of familiarization, the emerging codes were highlighted. These emerging codes were compared and contrasted with each other to identify themes in the raw data. A coding index (also known as a thematic table) was developed to organize the emerging codes into themes and sub-themes. The researchers then met with the rest of the research team in their respective site to agree upon a common thematic framework, and re-coding was carried out where necessary. Three to four research assistants in each context were then trained to translate and independently code the raw data, which was supervised by several authors (DS and AL in Goa and NA in Rawalpindi). Cross-site engagement between the two settings occurred once the India team had collected all of its data to discuss similarities and differences in the coding index.

Once interviews were coded, charting was conducted to categorize the raw data according to their appropriate theme and sub-theme. DS, AS and UB in India and NA in Rawalpindi collaborated in the final two stages, charting, mapping and interpreting the codes to formalize emerging themes and subthemes. Specifically, sub-themes were analyzed along with the supporting data (quotes) to fit together in a meaningful way in order to develop and interpret the raw data. Frequencies for each code were eventually calculated and ranked according to their frequency by setting. These rankings were then used to compare results between the two sites.

3. Results

No participants from either context refused to participate in the study. See Table 1 for the sampling matrix according to setting and data source.

The results were triangulated across the diverse stakeholders' perspectives in four broad themes: who would be the most appropriate peer; what characteristics were most acceptable in this individual; perceived barriers and facilitators in taking on the role of a delivery agent; and motivators to sustain this role. Examples of emerging themes, along with differences across the two contexts are presented in Table 2 and described in detail in the text below.

Table 1
Number of FGDs and IDIs per data source by setting.

	Urban Goa, India		Rural Rawalpindi, Pakistan	
	IDIs	FGDs	IDIs	FGDs
Depressed mothers	23		16	4
Non-depressed mothers	16		4	
Family members	15		4	2
Community health workers	4	2	10	4
Specialist care providers	3	1	8	
Total	61	3	38	10

Table 2
Similarities and differences between rural Rawalpindi and urban Goa^a.

Theme	Rural Rawalpindi	Urban Goa
Peer as delivery agent	+++	+++
Involvement of other stakeholders	-	+
Preferred characteristics		
Kinship and family status	++	-
Middle to older age	++	++
Educated	++	+++
Motherhood	+++	+++
Trustworthy	+++	+
Good character	+	+++
Barriers and motivators		
Husband's or family's approval	+++	-
Time and other commitments	-	+++
Financial remuneration	+	+++
Doing good for community	+++	+

'-'=no endorsement of theme.

'+' some participants in this context endorsed this theme ($x < 20\%$).

'++' a good portion of participants in this context endorsed this theme ($21\% < x < 59\%$).

'+++ ' wide majority ($x > 60\%$) of participants in this context endorsed this theme.

^a Percentage of participants (x) who endorsed themes.

3.1. Preference for peers

This theme identifies who, among all community members, would be the preferred individual to deliver a program for mothers suffering from maternal depression. In both settings, the majority response across all respondent groups suggested local, female members of the community, including family members. All stakeholders preferred peers over community health workers.

'Someone within the family, someone like us. If someone who is trained for it, like someone who she trusts like her own sister or her own mother because it's difficult for her to open up in front of a stranger rather than her own people who they are close to.' (Specialist Care Provider (SCP), urban Goa)

3.2. Preferred characteristics among peers

3.2.1. Sociodemographic characteristics

Some similarities for preferred sociodemographic characteristics emerged, notably a preference for educated, middle- to older-aged women. The reasons for this preferred age range were related to the prospective peer's relevant experiences and communication skills.

'Peers should be middle aged, younger peers may have immaturity and elders may have low literacy skills'. (LHW, rural Rawalpindi).

'She should be an older lady, and an experienced woman. I should feel free to talk to her.' (Non-depressed Mother, urban Goa)

Marital status was assessed but not reported as important in either setting. Instead, all respondents in both sites emphasized a preference for a peer with similar experiences related to motherhood and health conditions.

If a peer is a mother, she will be able to give better advice.' (Husband, rural Rawalpindi)

'A mother who has undergone similar situations and she has overcome them. She will know how to overcome these situations and so she can explain that to a mother who is experiencing the same things in her life.' (CHW, urban Goa)

The majority of respondents reported a preference for an educated woman because she would be more able to guide participants and communicate effectively. This referred to a woman with intermediate to graduate-level education (i.e., 7th to 12th grade). In addition, a minority of respondents from rural Rawalpindi expressed reservations among prospective peers having 'too much education'.

'She should be educated. If she has good education, she can explain better. What can an uneducated mother tell others?' (Depressed Mother, urban Goa)

'Girls who are overeducated become ill-mannered and arrogant.' (Depressed Mother, rural Rawalpindi)

Differences between the two settings emerged around themes related to preferred socioeconomic status. In rural Rawalpindi, an individual's social standing and *Biradari* (community kinship groupings based on vocation) were reported as essential characteristics with a preference for the same religion and a higher social background than peers. The latter highlights the emphasis among participants in rural Rawalpindi on the prospective peer's family status within their community. In contrast, in urban Goa, all participants reported caste or religion as 'not important' and described a woman's status as the amount of respect she commands within her family.

'Whoever you are going to select should be locally-based and should have a very good reputation. Otherwise, families can object.' (Mother-in-law, rural Rawalpindi)

'Peers should have relatively better economic background.' (Depressed Mother, rural Rawalpindi)

'It happens a lot here that if someone is from a relatively lower caste and is trying to tell something, they will say 'who is she to tell us.' (Non-depressed Mother, rural Rawalpindi)

'You can't tell caste by looking at someone's face.' (Mother-in-law, urban Goa)

'She should come from a good family, no abusive language used and a pleasant environment. Any other family status is fine.' (Non-depressed Mother, urban Goa)

3.2.2. Personal characteristics

Many personal characteristics emerged as common subthemes in both settings. In rural Rawalpindi, there was a notable preference for peers to be considered 'trustworthy', as defined by being well-known in the community and respecting a neighbor's confidentiality. In urban Goa, the majority response reflected a preference for 'a good character' as 'doing good for others'.

'Whoever you select should be local and should have a very good reputation, otherwise families will object.' (Family Member, rural Rawalpindi)

'First, they must do good to others, then they will be able to do good for themselves.' (Family Member, urban Goa)

Respondents in both settings next emphasized good communication and listening skills as a means of developing a good rapport with other community members.

'Someone who takes interest in you and listens to you attentively.' (Depressed Mother, rural Rawalpindi)

'It all depends on talking...if you directly start talking to me about personal issues, then I may not be open. Slowly, slowly you have to start.' (Depressed Mother, urban Goa)

3.3. Barriers and facilitators

3.3.1. Barriers

While the majority of respondents in both settings reported practical challenges such as a woman's domestic responsibilities (e.g., housework and child care) as a potential barrier, second-level analysis revealed differences between contexts. In Goa, domestic responsibilities were linked to a woman's time as compared to rural Rawalpindi, where this barrier was linked to restrictions from the family to work outside of the home. Cultural expectations for a woman to not work outside of the home were not reported in Goa.

'I am happy to volunteer but my husband doesn't give me permission. He says stay at home, there is no need to go outside and I can't do anything without his permission.' (Non-depressed Mother, rural Rawalpindi)

'My wife won't do this work as she has to take care of her in-laws and do the housework.' (Family Member, rural Rawalpindi)

'Nowadays, people don't have time. Time is very precious!' (Family Member, urban Goa)

'If she has a small child at home, then it will not be possible for her to give time.' (CHW, urban Goa)

Across participants, family members were also reported as the most common barrier to program delivery. Restrictions imposed by family members were explained by family members' perceived suspicions of the peer to potentially challenge existing family norms and sociocultural hierarchies.

'Family can object and community can raise issues about peer visiting mothers.' (Husband, rural Rawalpindi)

'Husband or the in-laws may not give permission to a woman to visit. Some husbands won't like their wives to get involved with others.' (Husband, urban Goa)

3.3.2. Facilitators

Participants suggested enhancing the support of families by introducing the peer to family members by key persons in the community (e.g., anganwadi or LHWs). Specific techniques to communicate with families included direct face to face communication in urban Goa and an information sheet to outline the identity and role of the peer in rural Rawalpindi. Furthermore, in Goa only, interviewees suggested the involvement of other stakeholders (i.e., other family members, community health workers, and specialist care provider) to facilitate larger, more integrative systems of support for depressed mothers. Finally, the careful selection of peers to be consistent with the characteristics described earlier was reported an important facilitator.

'Explain to the family members that the work is good and she needs to balance her housework with the work of a peer...try to make family members understand the program.' (Family Member, urban Goa)

3.4. Motivators

Among all respondent categories in both settings, material incentives were reported as an important motivator to elicit and sustain motivation among peers. Respondents in both settings indicated that it would be challenging to find women who are willing to work purely on a volunteer basis to deliver the program. The definition of material incentives varied, however, between the two settings. In urban Goa, all respondents expressed the need of a structured, pre-established incentive (e.g., 100 to 150 rupees per session or 5000–8000 rupees per month) as well as financial bonuses to motivate peers. In rural Rawalpindi, however, a monetary-based salary was not explicitly mentioned and respondents suggested supplementary items such as travel expenses, mobile top-ups, gifts for children and small household items as potential motivators. Altruistic motivation or 'doing good for one's community' was a more common motivator reported among participants in rural Rawalpindi than urban Goa.

Recognition of the potential peer's status was also an important motivator. Respondents in both settings suggested badges and certificates to acknowledge the position of the peer, as well as the rewarding feeling of helping others and contributing to the community. In addition, some respondents in the rural Rawalpindi setting mentioned the development of skills and relevant knowledge to assist other mothers as a potential motivator.

'A salary of 100 rupees per session or 7000 per month plus bonuses...People won't work voluntarily.' (Non-Depressed Mother, urban Goa)

'I have got this will in me to help others in any way possible.' (Non-Depressed Mother, rural Rawalpindi)

'Whatever can be provided to them, it may be a certificate or travel allowance.' (Family Member, rural Rawalpindi)

4. Discussion

This study explored who, among various community members, would be the most suitable to deliver the Thinking Healthy Program (THP), a community-based intervention for mothers suffering from maternal depression, in urban Goa and rural Rawalpindi. We also examined preferred characteristics, barriers and facilitators as well as motivators. Overall, our results showed similarities and differences in the findings between these two South Asian settings.

Our primary finding showed that, in both settings, all stakeholders preferred peers as the most acceptable delivery agents for one community-based psychosocial intervention for maternal depression. The current study confirmed that peers, particularly mothers of the local community with relevant experiences, were preferred over community health workers; thus, disentangling peers from lay health workers in these contexts and highlighting the notion of peers serving as an important work force in a resource-limited setting. This finding also aligns with many studies advocating and demonstrating the acceptability of peers to promote and treat health issues in low-resource settings (Simoni et al., 2011). Peers have been especially valued when operating in settings that traditional health care workers find difficult to access or navigate (Baksi et al., 2008). This includes research from South Asia (Alcock et al., 2009; de Souza, 2014) and other settings in sub-Saharan Africa (Jack et al., 2012) where peers are accepted and operate within a range of settings through informal networks and homes.

The current study also aimed to explore the potential heterogeneity related to the acceptability and feasibility among peers by comparing data from two widely diverse contexts: urban Goa, India and rural Rawalpindi, Pakistan. Qualitative data allows for a critical exploration of specific areas in order to enhance the acceptability and feasibility of utilizing the peer model in different settings (Glenton et al., 2011). In doing so, our results highlighted contextually-relevant similarities and differences.

Similarities emerged across the two contexts including the preference for local, middle-aged, educated peers. The wide majority of interviewees in both sites also reported similar barriers for peers to deliver the program. However, our qualitative approach highlighted subthemes that were specific to urban Goa and rural Rawalpindi respectively. For example, data from rural Rawalpindi emphasized the peer's family social standing, kinship and reputation within her community. In urban Goa, however, respondents focused on a mother's personal attributes and how she is treated within her own family. Furthermore, our results showed that while both contexts reported family obligations as a barrier for mothers to take on the role of a peer, this was attributed to a family restrictions as the majority response in rural Rawalpindi and a lack of time in urban Goa; therefore, demonstrating the higher level of autonomy attributed to mothers in the Goan context.

These differences may reflect the sociocultural and economic differences between the two contexts. Rawalpindi is largely agrarian with closely related extended families living in tightly knit clans. Incomes are shared, and families are hierarchical, with mothers-in-law as key decision makers within the home and the husband or father-in-law outside the home. Goa, on the other hand, is a transitional society with an established urban population, and recent rural to urban migration. The urban economy is more service- and industry-based, and more families are nuclear with one or both partners contributing to the income. In contrast, women in rural Rawalpindi are mostly confined to domestic work and assist their families with various family expectations. The role of the woman exists within her family reputation which lies within the larger community. This is different from Goa, a highly transitional society that is accepting of many cultures, religions and castes and situated in the rapidly developing, socioeconomic context of India. In this context, individualism—particularly a woman's individual status, traits and autonomy—are much more emphasized over her family's role.

Another key difference related to the theme of motivators sustaining peer participation to deliver the program. While a first-level analysis showed that stakeholders from both contexts reported material incentives as an important motivator, our in-depth analysis showed that the urban context of Goa emphasized the need for a structured financial salary as compared to rural Rawalpindi which focused on incentives as supplemental to the 'altruistic' peer role and commitment to improving the community. This may be related to the value that different communities attach to such helping roles. In more closely knit communities, this form of social investment may be a currency through which people pay each other. In other words, a peer in Rawalpindi would expect less direct financial return but may expect 'in-kind' returns from the community in case of need. It may also be related to the availability of opportunity for women to progress their personal ambition outside of the family home. In rural Rawalpindi, such opportunities are severely limited, and therefore such a role may be seen as a valuable stepping-stone towards greater respect from the community, whereas in Goa, such a role may be competing with other opportunities, some of which might offer greater financial reward.

These sociocultural trends and relevant explanatory models have been described in other studies. Seminal reviews have consistently demonstrated that helping behaviors are higher in smaller communities than urban areas (House et al., 1998; Steblay, 1987), and vary across countries and cultures. Theoretical explanations range from population size, pace of life to cultural values as primary agents to explain these trends. A cross-cultural study across 23 countries, including developing nations such as India, Brazil and Malawi, showed that a country's economic prosperity was the single key factor that was inversely related to helping behavior to strangers (Levine et al., 2001). Similar to the urban and shifting context of Goa, India, this may be because economically prosperous populations require their citizens to be more individualistic in their pursuit of personal needs and to ignore, in general, traditional societal values that prescribe helpfulness towards fellow members of society (Inkeles, 1997). Thus, it could be argued that 'volunteerism' exists along a spectrum that is contextually defined. In relation to our findings, this may explain why relevant stakeholders in Goa emphasize financial remuneration and an individual's status as compared to rural Rawalpindi which reported the 'good of the community' and family socioeconomic status as their respective primary motivators and key characteristics. Our findings are also consistent with other studies arguing that strategies to recruit, motivate and retain this work-force vary between settings (Simoni et al., 2011).

In conclusion, our study shows that local peers are one acceptable and feasible human resource to deliver evidence-based mental health packages in low-resource settings in South Asia. However, settings within South Asia are highly diverse and our study confirms that a 'one size fits all' approach is not appropriate (Maes et al., 2010) and may not benefit the specific community where peers are based and expected to deliver treatments. Local sensitivities must be addressed to enhance the acceptability and feasibility of peers delivering psychosocial interventions in community-based settings.

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Conflict of interest

All authors have read and approved the final manuscript. We report no conflicts of interest.

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