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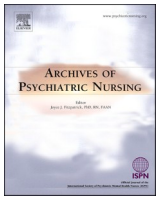

Addressing psychosis stigma in urban Pakistan through participatory forum theatre: A pilot implementation study

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ABSTRACT

Introduction: Stigma remains a major barrier to treatment and recovery for individuals with psychosis, particularly in low- and middle-income countries (LMICs) like Pakistan, where access to mental health services is limited and cultural perceptions of mental illness are often shaped by supernatural beliefs. This pilot study employed Forum Theatre, a participatory, arts-based method rooted in Augusto Boal's Theatre of the Oppressed (TO), to engage communities and reduce psychosis-related stigma through co-created performance and dialogue. The intervention was co-produced with individuals with lived experience of psychosis, caregivers, performers, and TO experts.

Methods: Using a mixed-methods design and guided by the Standards for Reporting Implementation Studies (StaRI) framework, the study evaluated the feasibility and acceptability of Forum Theatre to address psychosis related stigma in urban Pakistan. Phase 1 involved participatory workshops to co-develop a script to be performed to community audiences. Phase 2 included public performances followed by audience interaction. Data were collected via semi-structured interviews, audience intercept "vox pops" and pre/post-performance stigma questionnaires (CAMI-12 and KAP) at three time points.

Results: Overall, the intervention was well-received, with high retention (75 % workshops; 70.5 % follow-up). Quantitative findings showed an increase in psychosis knowledge, though no statistically significant change in stigma scores. Thematic analysis identified eight key themes, from positive impact of workshop participation to calls for expansion, highlighting logistical barriers and power dynamics as areas for further review.

Discussion: Forum Theatre shows potential as a feasible and culturally relevant approach to address stigma in LMICs. Further research with validated measures and wider recruitment is warranted to assess its broader impact and sustainability.

Introduction

Stigma and global disparities in psychosis

Schizophrenia and psychosis are highly stigmatised conditions that significantly impact quality of life (Degnan et al., 2021). Individuals with psychosis often face social exclusion due to negative stereotypes, such as being perceived as violent or unpredictable, which contribute to discrimination, self-stigma and avoidance (Angermeyer et al., 2005; Degnan et al., 2021; Fazel et al., 2009; Witt et al., 2013). Most individuals with schizophrenia live in low- and middle-income countries (LMICs), where a 90 % treatment gap persists due to population growth and aging (Charlson et al., 2018). In South Asia, including Pakistan, stigma mirrors Western attitudes, but cultural differences exist. For example, South Asian students tend to associate psychosis with higher levels of 'dangerousness' and 'anger', leading to greater discrimination and lower willingness to help (Ahmed et al., 2020).

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Cultural and systemic challenges in Pakistan

Pakistan, with 70 % of its population living in rural areas, faces significant mental health challenges, exacerbated by a severe shortage of professionals (Dayani et al., 2024; Javed et al., 2020). Religious and cultural beliefs can foreground a spiritual or supernatural understanding of mental illness, leading individuals to prioritise seeking support from traditional healers (Khan et al., 2023). Although psychiatric services exist, limited financial resources and workforce shortages impact access and quality of care. Initiatives, such as the 'Mental Health Ordinance' and the 'Community Mental Health Programme', have improved accessibility and reduced stigma (Javed et al., 2020; Khalily et al., 2021). However, barriers remain, particularly among groups with low literacy and limited access to accurate information or family support (Haddad et al., 2016; Khan et al., 2023).

Study rationale and aims

Addressing mental health stigma, both internalised and public, requires a collaborative, multifaceted approach (Ahmedani, 2011; Henderson & Gronholm, 2018). In high income settings like the UK, anti-stigma efforts often centre public education campaigns and psychosocial interventions in schools, workplaces, and universities (Maranzan, 2016). However, stigma is often deeply embedded, and macro-level interventions alone are unlikely to be sufficient (Ahmedani, 2011). Ungar et al. (2016) advocate for a human-centred iterative approach that emphasises empathy and co-production. Co-designed interventions are often more relevant, acceptable, and sustainable (Fokuo et al., 2017), particularly when individuals with lived experience are positioned as peers or educators. Participatory Action Research (PAR) provides a collaborative framework for shifting power dynamics, enabling those affected by stigma to shape research and drive change (Brydon-Miller, 1997; Kagan, 2012).

This study piloted a PAR based forum theatre project co-produced with individuals with lived experience of psychosis, caregivers, performers, and experts from Theatre of the Oppressed (TO). Forum Theatre, a branch of TO, invites audiences to challenge oppression and promote social change, particularly in low-literacy LMIC contexts (Boal, 1979; Saeed, 2015). The study explored whether this participatory method could reduce psychosis-related stigma in a community sample in urban Pakistan. A mixed methods design evaluated the pilot's acceptability and feasibility using an implementation framework.

Methods

Study context and design

This pilot study formed part of a global mental health initiative between University College London (UCL) and Interactive Research and Development (IRD), Pakistan. Funded by UCL's Global Engagement Fund, the project aimed to enhance research, education, capacity building and policy engagement. Ethical approval was granted by both UCL (Ref: 23291/001) and IRD (Ref: IRD_IRB_2022_07_001).

Co-designed by UCL and IRD researchers, the mixed-methods study evaluated the acceptability and feasibility of forum theatre as a stigma-reduction intervention for psychosis in community settings in Karachi. The study was guided by the Standards for Reporting Implementation Studies (StaRI) checklist (Pinnock et al., 2017), adopting its dual-strand structure to report on the implementation strategy (participatory workshops) and intervention (performances). Proctor et al.'s (2011) taxonomy was adapted for this study and used to assess implementation outcomes.

IRD field team

The IRD field team oversaw the local implementation of workshops and performances in Karachi. This group included research assistants, volunteers, community mental health workers, the research manager, on-site psychologist, and trained theatre performers. Their responsibilities covered workshop facilitation, recruitment, on-site data collection, record keeping, and logistics such as venue setup and transportation coordination.

Study participants

Inclusion and exclusion criteria

English or Urdu speaking participants aged 18 years old or above and able to provide informed consent were considered eligible to participate in the study. Participants were not required to be literate as surveys had the option to be administered verbally. See supplementary materials for specific inclusion and exclusion criteria according to participant group.

Two participant groups were involved, reflecting the two-phase structure of the study (see Fig. 1).

Production team (Phase 1 Implementation Strategy: Workshops)

The production team included trained theatre performers, individuals with lived experience of psychosis, and caregivers. Participants were purposively recruited from the NIHR-funded Improving Outcomes for People with Psychosis in Pakistan and India 'PIECEs' project (NIHR200824), which had an existing pool of trained performers, individuals with psychosis, and caregivers previously involved with IRD. All participants received information sheets, consent forms, and opportunities to contact researchers with questions (refer to Table 1).

Audience (Phase 2 Intervention Delivery: Performances)

The audience included community members and venue staff unfamiliar with the production team, recruited through purposive, self-selection, and snowball sampling facilitated by local outreach. The field team partnered with community stakeholders to secure three venues; a school, a community centre, and a healthcare facility, which supported recruitment by promoting the performances (refer to Table 2).

Phase 1 Implementation Strategy: Workshops

Phase 1 involved the coproduction of a Forum Theatre intervention through a series of participatory workshops. Drawing on Boal's *Theatre of the Oppressed* methodology (Boal, 1979, 1992), the process brought together trained performers, individuals with lived experience of psychosis, and caregivers to co-produce a script grounded in real experiences of stigma. Participants were remunerated for their contribution.

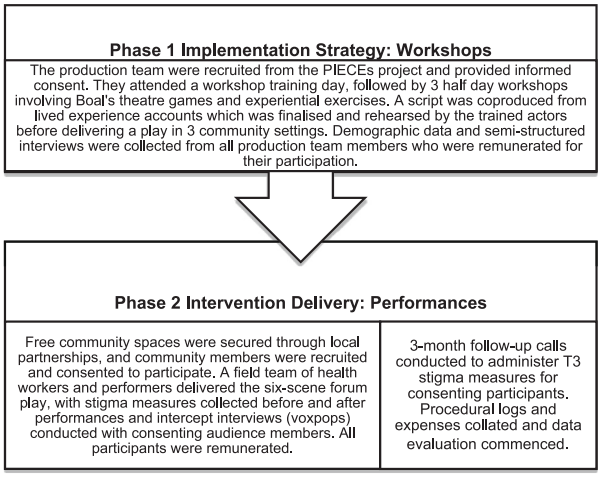

Fig. 1. Summary of implementation strategy and intervention process.

Table 1
Procedure for Phase 1 Implementation Strategy: Workshops.

Step	Procedure
1. Recruitment	Participants (≥18 years old; Urdu/English-speaking) were recruited from the PIECEs project. All provided informed consent.
2. Forum Theatre Training	A one-day training session on Boal's methodology was delivered by two TO-trained performers and a research assistant.
3. Workshop Delivery	Three half-day participatory action research (PAR)-informed workshops included experiential theatre games, image work, movement, and storytelling to build trust and facilitate co-creation.
4. Support Logistics	Transportation was arranged for participants with lived experience and caregivers. An on-site psychologist was available throughout.
5. Script Development	Participants co-developed the play's narrative during the final workshop based on lived experience of psychosis and mental health stigma. The script was finalised and refined in subsequent rehearsals.
6. Data Collection	Demographic data and semi-structured interviews (in Urdu) were collected from all production team members.

Table 2
Procedure for Phase 2 Intervention Delivery: Performances.

Step	Procedure
7. Venue Coordination	Performance sites (a community centre, school, and healthcare facility) were secured through local stakeholder collaboration.
8. Audience Recruitment	Community members and venue staff unfamiliar with the production team were recruited using purposive, self-selection, and snowball sampling. All participants provided informed consent and were remunerated.
9. Field Team Formation and Rehearsals	Following the workshops, a field team comprised of trained community health workers (from PIECEs) and performers (from the production team) from IRD was assembled to perform the forum play in identified community settings. The theatre team finalised the script and conducted rehearsals before delivering the performance.
10. Performance Format	The performers delivered a six-scene forum play (approx.15 min per scene) with an introductory explanation and icebreaker activities. The "joker" facilitated audience reflection and participation in line with Boal's model.
11. Post-Performance Engagement	Demographic surveys, pre- and post-intervention stigma questionnaires (CAMI-12, KAP), and intercept interviews (vox pops) were conducted on-site by the field team.
11. Three month follow up (telephone)	The field team conducted follow-up telephone calls with consenting participants to re-administer stigma measures 3 months after the performance. Detailed contact logs were used to support retention.

Phase 2 Intervention Delivery: Performances

In Phase 2, the co-produced Forum Theatre intervention was performed in local community settings. A neutral "joker" facilitated audience participation, inviting "spect-actors" to reflect on the scenarios, intervene, and propose alternative responses to oppressive dynamics (Ferrand, 1995). Each performance began with an introduction to the project and its aims, followed by icebreaker theatre games to make the audience more comfortable. Audiences were made aware of the interactive format of the play as well as the themes it would explore prior to the performance.

Data collection and analysis

Implementation outcomes (Phase 1: Workshops)

Retention and cost analysis. Implementation feasibility was assessed through participant retention and cost analysis. Retention was measured by workshop completion, with 50 %, 60 %, and 70 % considered adequate, good, and very good, respectively (Babbie, 1973). Cost-effectiveness was evaluated based on expenditures related to personnel, travel, training, and operational logistics, excluding project funding. All costs were recorded using IRD's internal financial reporting procedures.

Semi-structured interviews. To assess the acceptability, feasibility, and cultural appropriateness of the co-production process, semi-structured interviews were conducted with all workshop participants. The interview schedule explored experiences of collaboration, perceived support, barriers and facilitators to participation, emotional responses, and perceived shifts in understanding of psychosis. Interviews were conducted in Urdu and later translated into English by a professional translator.

Qualitative analysis. Interviews were analysed using Braun and Clarke's (2006) six-phase thematic analysis, guided by a phenomenological approach. Open coding and mind maps supported inductive pattern identification, without relying on pre-existing theories. Transcripts were reviewed semantically and interpretively, attending to both surface meaning and emotional context. Workshop field notes and audio recordings were revisited to capture affective tone. NVivo software supported coding and theme development. Analysis was led by the primary researcher, in collaboration with a Pakistan-based co-researcher to enhance cultural relevance and reflexivity.

Intervention outcomes (Phase 2: Performances)

Data collection. Audience participants completed demographic forms and two stigma related measures (CAMI-12 and KAP) at three time-points: before the performance (T1), immediately after (T2), and at three-month follow-up (T3, via telephone). Questionnaires were administered verbally for those who were illiterate (n = 2). Short video-recorded intercept interviews (vox pops) were also conducted post-performance with consenting audience members.

Quantitative analysis. Changes in audience perceptions of psychosis over time were assessed using repeated measures ANOVA across T1, T2, and T3. Partial eta squared (η^2) was used to estimate effect sizes, and Bonferroni corrections were applied for multiple comparisons. Analyses were conducted using SPSS Version 29. An a priori power analysis ($d = 0.80$, $\alpha = 0.05$, power = 0.95) indicated a minimum sample size of 27 participants. Feasibility was assessed by calculating retention rates at three-month follow-up, with ≥50 %, 60 %, and 70 % classified as adequate, good, and very good, respectively (Babbie, 1973).

Measures

Community Attitudes towards the Mentally Ill – Short Form (CAMI-12). A 12-item Likert scale assessing general attitudes towards mental illness. Although adapted from the validated 40-item version (Taylor & Dear, 1981), the short form has not been formally validated.

Knowledge, Attitudes, and Prejudice (KAP) Questionnaire. A 10-item measure developed for this study, adapted from the Stigma in Global Context–Mental Health Study (Pescosolido, 2013). It includes two subscales: Knowledge (4 items on causes and treatment of psychosis) and Stigma/Prejudice (6 items on attitudes towards individuals with psychosis). One additional multiple-choice item asked participants to identify perceived causes of psychosis from a culturally relevant list (e.g., "stress or tension," "brain disease," "God's will," "magic or spirit possession," "genetics").

Qualitative analysis (Voxpops). Intercept interviews (vox pops) conducted at T2 were translated using Google Translate and OpenAI tools

and analysed thematically using the same Braun and Clarke (2006) approach. To support credibility, a second rater reviewed a subset of transcripts during the coding process.

Results

Fig. 2 demonstrates flow of participants from the implementation phase through to the intervention phase and follow-up.

Sample characteristics

Production team sample

Eight individuals were recruited to the production team, including three performers and five individuals with lived experience of psychosis or caregiving. Two participants withdrew after the first day, resulting in a final sample of six (75 % retention). The group was predominantly male (67 %), with an average age of 32 years; 50 % were married. Half had vocational training (Peshawarana), 33 % had GCSE-level education, and 17 % had A-Level equivalence.

Audience sample

The final audience sample included 61 women (mean age = 31, range = 18–57). Most were Urdu-speaking (97 %) and identified as housewives (44 %), students (20 %), or employed full-time (16 %). Education levels included O Levels (38 %), A Levels (31 %), and university degrees (13 %). See Table 3.

Implementation and intervention outcomes (proctor framework)

Thematic outcomes from qualitative analysis (production team & audience)

A combined thematic analysis of implementation (production team) and intervention (audience) interview data was conducted and mapped onto Proctor et al.'s (2011) implementation outcomes (see Table 6). Eight key themes were identified: *Positive Impact of the Workshop Activities; Co-constructing the Narrative: Considering the Role of Trust and Power in Scriptwriting; Community Engagement; Changing Stigmatising Attitudes towards Mental Illness; 'Good Doctors, Bad Doctors': The Importance of Empathy and Sensitivity; Practical Challenges Faced; Theatre as a Medium for Meaningful Change; and Call for Expansion.* Themes, summaries, and illustrative quotations are provided in Table 4.

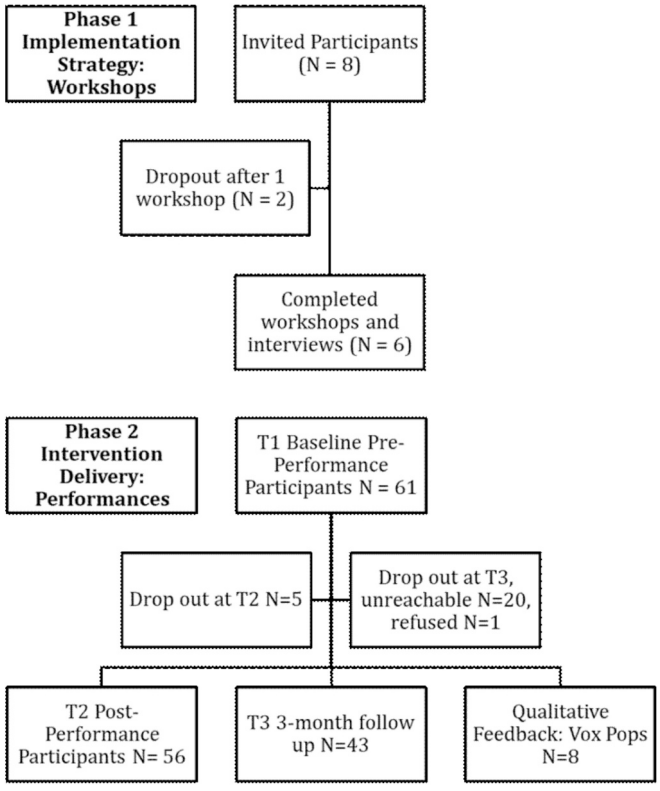

Fig. 2. Flow of participants.
Note: N = number of participants.

Table 3
Audience demographics.

Demographic variable	Category	Total sample N = 61 N (%)	Completer sample N = 43 N (%)
Gender	Women	59 (96.7 %)	42 (97.7 %)
	Men	0 (0.0 %)	0 (0.0 %)
	Missing data	2 (3.3 %)	1 (2.3 %)
Age	18–25	18 (29.5 %)	12 (27.9 %)
	26–30	10 (16.4 %)	9 (20.9 %)
	31–40	17 (27.9 %)	13 (30.2 %)
	41–50	3 (4.9 %)	1 (2.3 %)
	51–60	3 (4.9 %)	2 (4.7 %)
	Missing data	10 (16.4 %)	6 (13.9 %)
Marital Status	Married	26 (42.6 %)	21 (49 %)
	Unmarried	31 (50.8 %)	20 (47 %)
	Divorced	1 (1.6 %)	1 (2.3 %)
	Widowed	2 (3.3 %)	1 (2.3 %)
	Missing data	1 (1.6 %)	0 (0.0 %)
Mother Tongue	Urdu	58 (95.1 %)	41 (95.3 %)
	Pashto	1 (1.6 %)	1 (2.3 %)
	Hazara Wale	1 (1.6 %)	0 (0.0 %)
	Missing data	1 (1.6 %)	1 (2.3 %)
Education Level	No education	2 (3.3 %)	1 (2.3 %)
	5th Grade	7 (11.5 %)	6 (13.9 %)
	Matriculation/O levels	23 (37.7 %)	16 (37.2 %)
	Intermediate/A levels	19 (31.1 %)	14 (32.6 %)
	University Education	8 (13.1 %)	5 (11.6 %)
	Religious/Muslim	1 (1.6 %)	1 (2.3 %)
	School	1 (1.6 %)	0 (0.0 %)
	Missing data	0 (0.0 %)	0 (0.0 %)
Occupation	Full time employment	10 (16.4 %)	8 (18.6 %)
	Part-time employment	2 (3.3 %)	1 (2.3 %)
	Unpaid Work	1 (1.6 %)	1 (2.3 %)
	Unemployed	5 (8.2 %)	5 (11.6 %)
	Student	12 (19.7 %)	8 (18.6 %)
	Housewife	27 (44.3 %)	20 (46.5 %)
	Other	2 (3.3 %)	1 (2.3 %)
	Missing data	2 (3.3 %)	0 (0.0 %)
Ethnicity	Sindhi	5 (8.2 %)	3 (6.9 %)
	Pakhtun	1 (1.6 %)	1 (2.3 %)
	Urdu Speaking	52 (85.2 %)	37 (86.0 %)
	Other*Karachi	1 (1.6 %)	1 (2.3 %)
	Hazara	0 (0.0 %)	1 (2.3 %)
	Missing data	2 (3.3 %)	0 (0.0 %)

Acceptability, appropriateness and adoption

Qualitative analysis of production team interviews and audience vox pops indicated high levels of acceptability and perceived cultural appropriateness. Participants valued the workshops for providing respite, emotional expression, and psychoeducation. Trust was a key factor in storytelling, though some noted a need for clearer access to psychological support. Adoption was evidenced by participants' willingness to change their behaviour and advocate for supportive attitudes in their communities.

> *'The most important thing was the information about the psychosis…after learning this information, now I can talk to people in my family about this issue.'*
>
> -P1004

Table 6
Summary of proctor outcomes for implementation and intervention phases.

Proctor (2011) outcome	Adapted definition	Implementation phase	Intervention phase
Acceptability	The degree to which the implementation strategy and intervention is considered reasonable and satisfactory given current context.	Workshops were supportive and beneficial, but some felt rushed. Positive impact and trust-building noted. **Themes:** ○ *Positive impact of the workshop activities,* ○ *Co-constructing the Narrative: considering the role of trust and power in script writing* **Data Source**: Semi-structured interviews with the production team.	Intervention was well-received and culturally relevant. Increased knowledge about psychosis indicates engagement and acceptability. **Themes:** ○ *Co-constructing the Narrative: Trust and Power,* ○ *Community Engagement,* ○ *Changing Stigmatising Attitudes towards Mental Illness,* ○ *Theatre as a Medium for Meaningful Change* **Data Source**: Intercept interviews with audience members
Appropriateness	The perceived fit (i.e. face validity) of the implementation strategy and intervention within the existing context.	Intervention fit well within cultural context, aligning with local values and needs. **Themes:** ○ *Co-constructing the Narrative: considering the role of trust and power in script writing* **Data Source**: Semi-structured interviews with the production team.	Addressed relevant cultural and social issues sensitively. Participants related content to their cultural beliefs and social context. **Themes:** ○ *Co-constructing the Narrative: Trust and Power,* ○ *Community Engagement,* ○ *Changing Stigmatising Attitudes towards Mental Illness,* ○ *Theatre as a Medium for Meaningful Change* **Data Source**: Intercept interviews with audience members, Descriptive statistics showing alignment with cultural beliefs about causes of psychosis.
Adoption	The level of uptake of psychoeducation and psychosis awareness including perceived benefits and barriers.	High uptake and willingness to adopt new attitudes and practices. **Themes:** ○ Positive impact of the Workshop Activities, ○ Community Engagement, ○ Changing Stigmatising Attitudes towards Mental Illness **Data Source**: Semi-structured interviews with the production team.	Participants sought to disseminate messages within communities. Consistent delivery indicated strong initial adoption. **Themes:** ○ *Co-constructing the Narrative: Trust and Power,* ○ *Community Engagement,* ○ *'Good Doctors, Bad Doctors': Empathy and Sensitivity,* ○ *Call for Expansion* **Data Source**: Intercept interviews with audience members.
Fidelity	The degree to which the intervention was implemented as intended.	Adherence to intended plan, though some deviations noted. **Themes:** ○ *Co-constructing the Narrative: considering the role of trust and power in script writing* **Data Source**: Semi-structured interviews with the production team, workshop logs.	Consistent delivery in line with forum theatre principles. Core messages led to positive attitude changes, indicating high fidelity. **Themes:** ○ *Changing Stigmatising Attitudes towards Mental Illness,* ○ *'Good Doctors, Bad Doctors': Empathy and Sensitivity* **Data Source**: Procedural logs and video recordings confirming consistent delivery, intercept interviews with audience members, questionnaire data.
Feasibility	The degree to which training, environmental, financial and logistical processes functioned as intended.	Effective functioning despite challenges. High retention rates indicate feasibility. **Themes:** ○ *Practical challenges faced* **Data Source**: Semi-structured interviews with the production team, recruitment	High completion rate and cost-effectiveness suggest manageability and financial feasibility. **Themes:** ○ *Call for Expansion* **Data Source**: Financial logs of monetary costs, recruitment and retention data, intercept

(*continued on next page*)

Table 6 (*continued*)

Proctor (2011) outcome	Adapted definition	Implementation phase	Intervention phase
		and retention data.	interviews with audience members.
Sustainability	The degree to which the implementation strategy and intervention might be scalable and sustainable.	Potential for scalability and sustainability indicated by participants' advocacy for expansion. **Themes:** ○ *Theatre as a Medium for Meaningful Change,* ○ *Call for Expansion,* ○ *'Good Doctors, Bad Doctors' the importance of Empathy and Sensitivity when supporting people with psychosis* **Data Source**: Semi-structured interviews with the production team.	Commitment to ongoing application and low-cost implementation suggest sustainability, though stigma reduction needs improvement. **Themes:** ○ *Call for Expansion* **Data Source**: Financial logs of monetary costs, recruitment and retention data, intercept interviews with audience members.

Fidelity

Procedural and conceptual fidelity. The intervention, Someone to Support Me (Urdu: Koi toh saath de), was delivered consistently across three events, adhering to Boal's Forum Theatre structure. The play followed a mother navigating her daughter's psychosis and community stigma, with a "joker" facilitating audience reflection. Observational logs and recordings confirmed fidelity to the intervention model.

Participant responsiveness and outcome measures. Audience reflections indicated that core messages including stigma reduction, compassion, and systemic change were understood and retained:

> "Something I learned today and want to take with me is that if there is any patient of this type, we should treat them with love and compassion. We should understand people's roles."
>
> VP4

> "First, I say to them that they should seek proper treatment, and wise sages (doctors) cure them, not anyone else."
>
> VP6

Quantitative analysis showed a statistically significant increase in psychosis-related knowledge at 3-month follow-up (KAP knowledge subscale: $F(2, 68) = 3.783$, $p = .028$, $\eta^2 = 0.10$). No significant changes were found in general stigma attitudes (CAMI-12), ($F(2, 58) = 2.013$, $p = .143$, partial $\eta^2 = 0.07$) or the KAP Stigma subscale, ($F(2, 66) = 1.460$, $p = .240$, partial $\eta^2 = 0.04$). See Table 5.

Beliefs about psychosis causes shifted slightly post-intervention. "Stress or tension" remained the most frequently endorsed cause, while endorsement of "brain disease" and "God's will" declined. However, high rates of missing responses (29–36 %) were observed.

Feasibility and sustainability

Attrition. Eight production team members (3 performers, 5 with lived experience or carers) began the workshop, with two dropping out after day one, resulting in a 25 % attrition rate (75 % retention). Of the 61 audience participants who completed baseline measures, 56 (91.8 % retention) completed post-intervention and 43 (70.5 % retention) completed 3-month follow-up, corresponding to attrition rates of 8.2 % and 29.5 %, respectively.

Costs. The total expenditure for three forum theatre performances was £1401, equating to £467 per performance and £22.96 per audience participant (N = 61). This estimate did not include indirect costs such as salaries for senior researchers and facilitators which would have significantly raised the overall cost. A similar intervention delivered by IRD (PIECEs project) was costed at approximately 30,000 PKR per performance, equivalent to £83.55 using the GBP to PKR exchange rate of 359.036 on 31 December 2023. Free community spaces were utilised for project facilitation.

Perceived sustainability. Participants saw theatre as a culturally relevant, powerful medium to engage and educate communities about mental health and support gradual attitude change. They expressed a need for wider collaboration and sustained commitment to these initiatives, warning against expecting quick results.

> '*We have been doing theatre for a long time, but we never expect any immediate result. You just put a thought in people's minds, send them a message and a question. They go home with this question in mind. Then the change that takes place takes some time*'
>
> -P1014

Discussion

The study used a mixed methods design within an implementation framework to explore whether this participatory approach could reduce psychosis-related stigma in a community sample in urban Pakistan. The findings offer partial support for the intervention's effectiveness in a low- and middle-income country (LMIC) context. However, due to study limitations, conclusions are tentative, and piloting is recommended for future research.

Acceptability, appropriateness and adoption

Evidence of acceptability, appropriateness, and adoption was drawn from production team interviews and audience voxpop feedback post-performance. The intervention was widely seen as acceptable, with participants describing the workshops as supportive, emotionally engaging, and safe to share. Those with lived experience felt heard and respected, while performers reported increased empathy and understanding of psychosis. These responses also affirmed appropriateness, highlighting cultural relevance and alignment with local values. Adoption was evident through uptake of psychoeducation and increased awareness, with participants describing personal reflection, behavioural change, and community advocacy. Interaction with individuals with psychosis appeared to foster empathy and reduce stigma, consistent with evidence that direct contact lessens stigmatising attitudes (Fokuo et al., 2017; Koike et al., 2018; Yap et al., 2012).

Participants highlighted negative experiences with mental health professionals, along with male-dominated caregiving roles and the requirement for women to attend healthcare with male chaperones, as key barriers contributing to social isolation and stigma (Garwood, 2006; Mumtaz, 2012). These factors help explain broader challenges to the intervention's acceptability, appropriateness, and adoption within the wider community, and underscore the need for greater investment in trained, culturally responsive professionals (Khan et al., 2023; Naeem & Ayub, 2004; Naqvi et al., 2012).

Concerns about power dynamics emerged during the scriptwriting

Table 4
Key themes, summaries, and illustrative quotations mapped to proctor outcomes.

Theme	Summary	Illustrative quotations: production team (implementation strategy)	Illustrative quotations: audience (intervention)	Mapped proctor outcomes
Positive Impact of Workshops	Participants reported increased awareness, confidence, and emotional expression through engagement in the theatre process.	"The activities and plays we have done so far in the workshop were all good and were related to our lives. The plays are from our own life. When we do all this here, then we feel good. Then we do it at home as well."- P1004	[no relevant quotations]	ACC, ADP
Co-constructing the Narrative	Script development underscored the need for equitable collaboration and careful handling of personal stories, with audience responses reflecting the iterative nature of co-constructing meaning.	"When I was working as a facilitator then I thought that there should be a person with us like your psychologist, who could have talked to them at a separate place, that they can share anything with us, in group or in confidentiality."- P1010	"We learned how to raise our children and not leave it to others. If our husbands are not supporting us, we should give our children enough power and raise them in a way that they can stand on their own." -VP3	ACC, ADP, APR, FID
Community Engagement	The performances fostered meaningful dialogue and emotional resonance within the local community with participants connecting what they saw in the play to their Islamic values.	"She [audience member] got so emotional and started crying after seeing the theatre and then she shared her personal experience"-P1002	"We said to the people, 'Don't do it for yourself, but for your children.' Masha Allah, I have seen all this and have a lot of feelings inside me. I will take the parents to this side and change their attitude towards children." -VP5	ACC, ADP, APR
Changing Stigmatising Attitudes towards Mental Illness	Participant feedback suggested shifts in perception and reduced stigma around psychosis.	"They told us that through today's play they learned that this is a disease, and this can be treated. Thus, for the first time, they got the message that it is a disease; and the second message that it can be treated; and thirdly, they asked us where its treatment is possible? We referred them straight to the solution. This goes as a message to them that what they are perceiving as a supernatural or spiritual matter (that is also sometimes the case), is actually a medical problem."-P1014	"Something I learned today and want to take with me is that if there is any patient of this type, we should treat them with love and compassion. We should understand people's roles. This has given me the courage to move forward in life, and you will help me until further. It means that in the afterlife, you will forget this pain here." -VP4	ACC, ADP, APR, FID
'Good Doctors, Bad Doctors': The Importance of Empathy and Sensitivity	Participants emphasised the contrast in healthcare experiences, underscoring the need for compassionate practice.	"We are afraid to go to a doctor in this situation and feel uncomfortable because when we go to them, they do not deal with us normally and do not talk and behave with us in a gentle manner."-P1000	"I want to advise everyone around me, whether guests or others, to seek advice from a doctor with compassion." -VP6	ADP, SUS, FID
Practical Challenges Faced	Issues included time constraints, travel disruption, choice of environment and logistical difficulties during production.	"Besides the limited number of people, the other issue was the environmental problem because there was some work going on… Then the weather condition was another difficulty. It was raining heavily, and roads were blocked during those days."-P1014	[no relevant quotations]	FSB, SUS
Theatre as a Medium for Meaningful Change	Theatre was valued for its emotional and cultural resonance, some drawing links to storytelling in the Quran, accessibility, and ability to provoke thought.	"We humans get inspired by stories. In history, you see the same thing. Even in the holy Quran we are told things through stories. So, we understand things through stories in a better manner" -P1010	"The [play] was very good. We learned a lot. I learned that one should treat mentally ill people well, as torturing them makes them worse and they cannot recover. It was very great. We learned a lot from it." -VP1	APR, SUS
Call for Expansion	Participants called for scaling and sustaining the intervention through broader partnerships, while also expressing a desire to continue their personal growth.	"My takeaway message is that we need to expand our approach and vision as we seem to be working too narrowly…We should approach all of them [other institutions] and work together because no one else has been using our Theatre approach except IRD."- P1014	"For those who are mentally ill, I want to take these things with me and continue to work on them, so that if I see someone in need, I can help them as much as possible." -VP1	FSB, SUS, ADP

Note: Implementation outcomes are abbreviated as follows: ACC = Acceptability; ADP = Adoption; APR = Appropriateness; FSB = Feasibility; FID = Fidelity; SUS = Sustainability.

Table 5
Mean scores for CAMI 12, KAP knowledge and KAP stigma/prejudice questionnaires.

	Time 1			Time 2			Time 3			
Measure	Mean (SD)	95 % confidence interval for mean		Mean (SD)	95 % confidence interval for mean		Mean (SD)	95 % Confidence interval for mean		p value
		Lower	Upper		Lower	Upper		Lower	Upper	
CAMI-12 (N = 30)	30.367 (5.720)	28.231	32.503	30.367 (7.876)	27.426	33.308	28.333 (5.529)	26.269	30.398	0.143
KAP Knowledge (N = 35)	5.029 (1.706)	4.442	5.615	5.171 (1.948)	4.502	5.840	6.086 (1.991)	5.402	6.770	0.028*
KAP Stigma (N = 34)	15.059 (4.671)	13.429	16.688	14.00 (5.499)	12.081	15.919	15.35 (3.463)	14.145	16.561	0.240

* Statistically significant at $p < .05$ after Bonferroni corrections have been applied.

process, particularly around the retelling of trauma without adequate psychological support. Although many participant themes were included, disagreements over character portrayals raised the risk of marginalising those with lived experience. These issues highlight the difficulty of fully upholding participatory action research (PAR) principles in practice, where equal decision-making is essential for reducing hierarchies (Kagan, 2012: Freire, 1970). While a psychologist was available, a more proactive role could have enhanced psychological safety and encouraged open dialogue (Cornwall, 2008; Dickson-Swift et al., 2008).

Participants also suggested that the process felt rushed, limiting reflection and collaboration. Although framing individuals as 'peers' rather than 'patients' can help reduce hierarchies (Knaak et al., 2014), the performers' responsibility for finalising the script may have inadvertently reinforced power imbalances. These findings suggest that script development processes may need refinement to better align with PAR principles, and researcher reflexivity remains vital in addressing potential bias (Kagan, 2012).

While TO methods typically promote positive social change, Hamel (2013) highlights potential harms, such as inadvertently reinforcing oppression while aiming to empower marginalised groups. Although the current study did not find similar qualitative outcomes, it is plausible that the intended stance did not fully translate in practice. This reinforces the need for equity and empowerment of individuals with lived experience in participatory research to ensure the ethical application of these methodologies (Kagan, 2012).

Fidelity

Fidelity in participatory theatre can be challenging to assess due to the subjective nature of performance and storytelling. Quality of intervention delivery can be an ambiguous element to measure and requires appropriate benchmarks (Carroll et al., 2007). In this study, fidelity was evaluated through adherence to the Forum Theatre protocol, including workshop structure, use of the joker role, and performance delivery, as well as participant responsiveness, captured through feedback and outcome measures, in line with Carroll et al.'s (2007) framework.

While procedural fidelity was strong with good adherence to the model, findings revealed variation across qualitative and quantitative participant responses. The quantitative data showed that the intervention improved psychosis-related knowledge, yet it did not significantly reduce stigmatising attitudes. It's possible that the limited change in stigma scores reflects shortcomings in the KAP and CAMI-SF as measurement tools, rather than a failure of intervention fidelity, highlighting the need for validated measures to accurately capture attitudinal shifts (Gremigni, 2020).

Qualitative feedback indicated an engaged and motivated audience, who received the anti-stigma message as intended. While production team participants suggested that involving a professional scriptwriter and incorporating more diverse voices could have enhanced narrative richness and message clarity. These findings underscore the broader challenge of stigma reduction, which is often difficult to change even in large-scale interventions (Smith, 2013).

Feasibility and sustainability

This study supports the feasibility of Forum Theatre as a low-cost, community-based intervention for psychosis stigma reduction. The total cost of three performances was £1401, equating to £467 per event and £22.96 per audience participant (N = 61), excluding indirect expenses such as staff salaries. While these omissions limit a full cost analysis, the direct costs were substantially lower than the £1404.06 benchmark reported by Fernandez-Blanco et al. (2019) for conventional theatre. However, the cost per performance was higher than that of a similar intervention by IRD, which was approximately £83.55, suggesting that the current model may be less cost-effective. Future projects may benefit from embedding theatre expertise and capacity building within core support costs. This would enable frontline staff training and sustainable, scalable delivery of participatory approaches without additional HR expenses.

Retention rates further indicate feasibility. Of the 61 participants who completed baseline measures, 91.8 % (n = 56) completed the immediate post-intervention questionnaire, and 70.5 % (n = 43) completed the 3-month follow-up. These rates fall within Babbie's (1973) 'very good' range for community-based research, although attrition exceeding 20 % still presents a potential source of bias (Schulz & Grimes, 2002).

Despite these strengths, several logistical barriers were noted. Participants reported long travel times and environmental disruptions that could affect comfort and engagement. These challenges underscore the importance of selecting central, therapeutic venues and extending project timelines—recommendations consistent with findings that reducing travel burden improves participation (Karlawish et al., 2008).

Regarding sustainability, participants advocated for sustained efforts and improving recruitment of stakeholders through stronger outreach and partnerships with trusted organisations to increase impact and credibility. The intervention was perceived as a preliminary step in a long-term strategy to address stigma related to psychosis and mental illness, aligning with research on the necessity of ongoing global efforts (Gremigni, 2020; Smith, 2013).

Methodological and clinical considerations

The findings of this study must be contextualised within several methodological considerations impacting validity, reliability, and generalisability. The early integration of an implementation science (IS) framework was intended to provide practical detail to enhance replication and scalability, addressing a well-documented gap in LMICs studies (Kemp et al., 2019). However, applying IS at the pilot stage may have been premature; prioritising intervention refinement and deeper integration of PAR principles may have been more appropriate. The absence of measurable stigma reduction highlights the need to first establish efficacy, especially for participatory arts-based approaches which are underrepresented in the literature.

Measurement validity presented a notable challenge. Although the CAMI-12 and KAP tools were chosen for their practicality in low-resource, community-based settings, neither has undergone formal validation, limiting the reliability of the quantitative findings (Gremigni, 2020; Kemp et al., 2019). The use of verbally administered surveys, including vox pops, supported inclusive participation across diverse literacy levels. The absence of formalised instruments for assessing acceptability and feasibility further constrained the replicability of the study design. Future research should prioritise the use of robust, validated psychometric tools in LMIC contexts.

The recruitment challenges identified in this study further limited the generalisability of the findings, as low participant numbers may restrict the applicability of results to broader populations. While the sample was modest, this is consistent with the aims of a feasibility design and also reflects the real-world barriers of implementing community-based stigma interventions in a low- and middle-income country context. Engaging a more diverse range of organisations across different regions of Pakistan could enhance recruitment, though this must be balanced against the financial and logistical constraints common in LMIC settings (Khan et al., 2013). A further limitation of this study is that the audience sample in the public performance phase was entirely female. While this provides valuable insights into how women in urban Pakistan perceive and respond to psychosis-related stigma, it limits the generalisability of findings to men. Several contextual factors likely contributed to this outcome. The performances were delivered by female community health workers who, due to cultural norms regarding women's public visibility, were not comfortable performing in front of male audiences. In addition, the venues, a school, a community centre,

and a healthcare facility, may have naturally drawn more women attendees, particularly for community- or school-based events. Cultural expectations around masculinity and mental health may also have made men less willing to engage with discussions of emotion and stigma (O de Visser et al., 2022). Finally, recruitment procedures may have reinforced this dynamic, as female researchers were primarily responsible for inviting audience members to participate, which may have fostered greater trust and engagement among women. Future research should therefore consider strategies to actively involve men, such as adapting recruitment approaches, tailoring facilitation styles, and addressing gender-specific barriers to participation, while also ensuring clear communication and support for community health workers engaged in performance. Notably, no participants identified as transgender or non-binary, highlighting the need for more inclusive recruitment strategies that actively engage underrepresented gender identities to effectively address stigma across multiple levels of society (Kagan, 2012; Smith, 2013).

This study supports the literature advocating for participatory action research (PAR) approaches that centre lived experience and coproduction. Participatory methodology can enhance the acceptability, relevance and sustainability of the intervention (Ungar et al., 2016) while helping to bridge knowledge gaps and facilitate social change. Qualitative findings point to urgent clinical needs in Pakistan, including improved access to medications, social support, carer respite, and more compassionate communication from healthcare professionals, highlighting an urgent need for improved mental health provision and clinician training (Karim et al., 2004; Naeem & Ayub, 2004). This study addresses psychosis-related stigma—a major barrier to recovery—through a participatory, community-led Forum Theatre approach, highlighting culturally sensitive strategies that can inform psychiatric and nursing practice, education, and advocacy, and support equitable mental health care in low- and middle-income settings.

Conclusion

This pilot study provides preliminary evidence for the acceptability and feasibility of Forum Theatre as a participatory, community-based intervention to address psychosis-related stigma in urban Pakistan. Participants found the approach engaging, culturally relevant, and emotionally resonant, with high retention rates supporting its practical viability. However, challenges around power dynamics, measurement limitations, and contextual barriers suggest the need for further refinement. Long-term impact will require stronger institutional support and partnerships, targeted recruitment approaches, and the use of more robust psychometric measures.

CRediT authorship contribution statement

Ashley Boscoe: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis. **Onaiza Qureshi:** Writing – review & editing, Supervision, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Zahra Khan:** Project administration, Methodology, Investigation, Formal analysis, Data curation. **Aneeta Pasha:** Supervision, Project administration. **Ciarán O'Driscoll:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation, Formal analysis. **Madiha Shaikh:** Writing – review & editing, Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author(s) used ChatGPT in order to reduce the word count by producing suggestions for words to omit and therefore improving the readability of the manuscript. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

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