Adapting and Evaluating a Strategic Disclosure Program to Address Mental Health Stigma Among Chinese

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Abstract

People with mental illness are challenged by self-stigma, leading to a sense of behavioral futility and reduced goal seeking. Honest, Open, Proud (HOP) program is a peer service program that utilizes strategic disclosure to combat self-stigma. HOP was developed and predominantly examined in western culture, leaving unknown its effectiveness in East Asian countries. The current study reports adaptation and evaluation of HOP for Chinese people living with serious mental illness. Adaption underwent a community-based participatory research approach to assure cultural responsiveness. A pilot randomized controlled trial with 135 participants revealed that HOP diminished self-stigma in participants. Satisfaction and feasibility assessments indicated HOP was well received within the focal community. Results suggested HOP had benefits on disclosure self-efficacy and self-stigma for those participating in the program. Future research should further examine cultural mediators of peer support and disclosure on stigma and empowerment.

Keywords Stigma · Selective disclosure · Cultural adaptation · Chinese with mental illness

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The life goals of people with mental illness are hampered by self-stigma; i.e., the degree to which people internalize stereotypes about mental illness undermines options and opportunities. Strategic disclosure is one way to overcome self-stigma, i.e., learn how and to whom people might disclose their mental health challenges and recovery experiences in order to accomplish their personal goals. Honest, Open, Proud (HOP) is a peer service program using strategic disclosure that has been widely supported by research. Most of this work has been done in the Western world (Conley et al., 2020; Corrigan et al., 2015; Mulfinger et al., 2018; Rüsch et al., 2014), begging questions about the effectiveness of strategic disclosure in Eastern cultures. Our paper reviews a community-based participatory research (CBPR) process to adapt and evaluate HOP on a group of people with serious mental illness in China. Evaluation assessed feasibility, fidelity, satisfaction, and preliminary impact.

Research has shown that the self-stigma of mental illness significantly diminishes self-esteem and self-efficacy (Owens, 1994; Pasmatzi et al., 2016; Rosenfield & Neese-Todd, 1993), leading to a "why try effect" (Corrigan et al., 2009). "Why-try effect" describes the behavioral interference (i.e., a sense of futility) after a person develops self-stigma. Experiencing self-stigma lead to feelings of shame and fear of being labeled as mentally ill (Hasson-Ohayon et al., 2012; Link, 1982). As a result, people are motivated to keep their illnesses a secret and avoid situations that may reveal their condition; e.g., they choose not to take psychiatric medicine or see a service provider to avoid the label ("That's Harry coming out of the mental health clinic. He must be Nuts!"). Literature confirms a strong association between self-stigma and reduced help-seeking behaviors (Pattyn et al., 2014; Teh et al., 2014). Hence, self-stigma is a major barrier to personal aspirations and undermines recovery (Cunningham & Lucksted, 2017; Link et al., 2001; Perlick et al., 2001) and empowerment (Vauth et al., 2007).

Research has largely identified two approaches to decreasing self-stigma. The first combines education (reviewing falsities of stigma and veracity of recovery), cognitive therapy (using this information to challenge personally stigmatizing self-statements), and narrative (writing one's life story in ways that promote personal empowerment) (Yanos et al., 2015). The second reflects the power of strategic disclosure. Research shows keeping important life events such as mental illness a secret may undermine self-esteem and self-efficacy (Pasmatzi et al., 2016). Alternatively, people who have, in some way, disclosed their experience with mental illness and recovery report better self-worth (Corrigan & Rao, 2012; Taniguchi, 2021) and well-being (Yokoyama et al., 2019).

Honest, Open, Proud (HOP) is one well-studied approach to strategic disclosure that has positive effects by replacing self-stigma with empowerment (Rüsch & Kösters, 2021). HOP has three components: (1) consider costs and benefits of disclosing, which vary by situation (e.g., disclosure at work is probably different than in one's faith-based community); (2) learn how to test people and situations for disclosure timing; and (3) develop one's personal disclosure story (Scior et al., 2020). Full HOP manual can be accessed at https://hopprogram.org/. Note that choosing not to disclose is also an option. Still, disclosure may bring the benefits of gaining a sense of proud for people to embrace their true identity and minimizing secrecy stress, which mitigates self-stigma effects (Talluri & Corrigan, 2022). A recent meta-analysis of five randomized controlled trials found HOP to have significant benefits in changing self-stigma, stigma stress, and depression (Rüsch & Kösters, 2021). Despite its strengths, researchers have urged HOP to be adapted to meet the needs of constituencies that differ from the adult Westerner (Corrigan et al., 2018). In particular, research has questioned how the disclosure process basic to programs like HOP might be received in more collectivist cultures such as East Asia (Chen et al., 2013; Shi et al., 2020).

The present study attempts to uncover how Chinese people who are challenged by their mental illness self-stigma in mainland China respond to HOP. This paper reports the adaptation of HOP and its preliminary impact indicated by a randomized controlled trial.

Adaptation

Community-based participatory research (CBPR) is a well-developed approach to creating and evaluating a program like HOP for other cultures and communities (Minkler & Wallerstein, 2011). In CBPR, people with lived experience from a focal community (in this study, Chinese with lived experience of mental illness and self-stigma), join a development and evaluation team as full partners with researchers. This team is charged with adapting a focal program to reflect the values and priorities of the "new" culture. Adaptation is much more than translating programs to an alternative language (e.g., from English to Mandarin). CBPR teams systematically unpack a focal program and its manual, seeking to identify and revise concepts and examples that are alternatively understood in their culture. The first goal of this study is to summarize feedback from CBPR to adapt HOP for China. A cultural relevance intervention often demonstrates the following features: **understandable** materials that are **important** and **applicable** to the focal community (Castro et al., 2010). The current project intended to achieve those aims with CBPR adaptation.

Evaluation

CBPR teams also develop evaluation plans to examine effects of program development efforts. Evaluation targets often include feasibility and satisfaction (are service recipients content with the intervention such that they fully participate in its implementation?), fidelity (do program facilitators implement the program consistent with its manual and guidelines?), and impact (does participating in the program lead to benefits for recipients?). The second goal of this study is to review an evaluation of the Chinese-adapted HOP using a randomized controlled trial. We hypothesize that the CBPR adaptation will show good satisfaction, fidelity, and feasibility. Moreover, it will lead to significant benefits in those assigned to a HOP group compared to a waitlist control.

Methods

Adapting HOP for Chinese People in China

We convened a CBPR team of 7 stakeholders in Chengdu, China that consisted of two people with lived experience of serious mental illness, one family member, and four service providers, who partnered with lead researchers (SQ and LS) using *Inspiring Change* to conduct CBPR (Sheehan et al., 2015). *Inspiring change* is a manualized approach to CBPR specifically developed for people with mental illness. Components include process steps to facilitate group consensus as well as strategies related to program definitions and change. Note that CBPR conceptualizes its team members (i.e., community stakeholders) as researchers rather than research participants.

For the current adaptation, all CBPR team members first familiarized themselves with the existing HOP materials. The team lead, EY, then conducted mock HOP session in the way that it would be presented to the program participants. During or right after each session, CBPR members provided suggestions on adaptation and made consensus decisions on specific changes. Members also exchanged opinions on materials modifications following the in-person meetings when necessary.

Evaluation of Chinese HOP

People living in Chengdu and Zigong, China with serious mental illness and concerns about stigma were eligible to participate in the randomized controlled trial of HOP. Prospective participants were recruited from members at local psychosocial rehabilitation clubhouses and psychiatric outpatient clinics. All programs and evaluations were done in face-to-face meetings at respective facilities. Participants were fully informed of the study and asked to provide written consent. Informed consent and related research materials were reviewed by the Institutional Review Board (IRB) at a southwestern research university in China prior to conducting the study. The research team also obtained IRB approval at a US midwestern university for archival data analyses and reporting.

Once individuals expressed interest in the program, they would complete the informed consent process, during which they learned about the intervention and waitlist control groups. Simple randomization was applied. Research staff randomly drew from a deck of indexed cards (i.e., equal numbers of cards marked as either control or treatment) to determine participants' group assignments. The Chinese HOP program and manual developed through CBPR was used by five trained facilitators and grounded in the exercises corresponding with the three steps of HOP described above. HOP was provided in three separate lessons for 90 min per lesson every other weekday in face-to-face meetings at the respective service centers. Feasibility was assessed as percent of total participants completing each lesson (Banfield et al., 2020). Participants in the HOP group completed a 6-item measure of satisfaction using a 9-point Likert (1 = very much, 9 = not at all) scale immediately after the third HOP lesson. The satisfaction scale was developed by the CBPR team and was pilot tested with the team members before it was used with participants. Items corresponded with six areas representing HOP training content (i.e., are you satisfied with the HOP program overall?), instruction (i.e., are you satisfied with the HOP lessons delivery format), practicality (i.e., are you satisfied with the usefulness of /or your gaining from HOP?), session arrangement (i.e., are you satisfied with the amount of content covered in each HOP lessons?), effectiveness (i.e., are you satisfied with the effectiveness of HOP?), and recommending HOP to others (i.e., do you want to share HOP lessons with others?). Items were totaled into a single satisfaction score for each of the six areas, with lower scores representing higher satisfaction. Additionally, participants reported their most and least favorite lessons and answered two open-ended questions to describe what they gained from attending HOP and provided suggestions for program improvement.

Fidelity was assessed using the CBPR adapted HOP fidelity checklist (Rüsch & Kösters, 2021). The checklist includes discrete behaviors which facilitators are expected to demonstrate for the materials related to each individual session. A fidelity index was determined for each facilitator representing observed divided by total discrete behaviors. Observations were done for 83% of the session, with more frequent assessments during the first few cohorts.

Research participants in HOP and control groups also completed two measures representing HOP impact. First is the Self-Efficacy Disclosure Scale (SEDS; similar to Conley et al., 2020; Rüsch et al., 2014). This is a two-item measure — (disclosure) "how confident are you in making decisions and handling well all the issues related to disclosing your mental illness?"; (secrecy) "how confident are you in making decisions and handling well all the issues related to keeping your mental illness a secret" — to which research participants respond with a 7-point Likert scale (7 = very much agree). Higher scores mean research participants have greater self-efficacy in terms of disclosing their mental illness. The SEDS has been shown to be a sensitive measure of HOP benefits. The second was the Self-Stigma of Mental Illness Scale (SSMIS [Corrigan et al., 2012]). The SSMIS assesses a four-step, regressive model of self-stigma (Corrigan et al., 2011). (1) Aware: respondents are aware of stereotypes about mental illness; e.g., "most persons with mental illness are unable to take care of themselves." (2) Agree: "I agree: most persons with mental illness are unable to take care of themselves." (3) Apply to self. "Because I have a mental illness, unable to take care of myself." (4) Harm to self-esteem: "I currently respect myself less because I am unable to take care of myself." Research participants respond to individual items with a 9-point Likert Scale (9 = I strongly agree). The entire SSMIS comprises 20 items, with every five items corresponding to one of the four steps. Items for each step are totaled into separate subscale scores with higher scores representing greater self-stigma. Subscales of the SSMIS have been shown to be sensitive to HOP benefits in four studies (Conley et al., 2020; Corrigan et al., 2015; Mulfinger et al., 2018).

SEDS and SSMIS were collected at baseline immediately prior to starting HOP or control group, immediately after completing the last session of HOP, and at 1-week follow-up. Measures were translated into Simplified Chinese with consideration of the communication rules and habits of standard Mandarin using translation and back-translation methods. Adjustments were made to reconcile differences between the source materials and the back translation.

Data Analyses

Data were reviewed for missingness. Listwise deletion strategy was deemed appropriate and applied. Distributions were checked for normality and transformed where appropriate. Demographics were compared across HOP and control groups. HOP satisfaction ratings were determined as means and standard deviation of data collected after the third session for each of the six content areas. Difference in ratings was compared with scale midpoint (midpoint = 5) with a within groups t-test. Feasibility was determined as frequency and percentage of the attendance data for all three lessons across cohorts. Fidelity was determined as frequency and percentage of the data collected for 25 out of 30 sessions. Means and standard deviations of SEDS and SSMIS were determined to assess impact. Interactions for group by trial were determined by mixed factor ANOVAs.

Results

HOP Adaptation

The CBPR team met regularly in August and September 2020 and completed a systematic adaptation of HOP to make it more relevant to Chinese with serious mental illness.

Adaptation involved modifications to both surface and deep program content (Castro et al., 2010). Surface level changes focused on translating language and vocabularies and selecting case scenarios and metaphors that make sense to the focal community. The revised program replaced relatively foreign examples (e.g., church going led by pastor with choir and bible group.) with more everyday activities for Chinese (e.g., dancing, dance instructor, dance partners, etc.). The revised workbook, for instance, included a relatable recovery story to demonstrate how individuals could share their lived experience of mental illness. The original version provided a personal account of Kyle Uphoff-Wasowski who was diagnosed with bipolar disorder, describing her recovery experience in the U.S. The revised program tells the story of Lizhen who, like many in China, grew up in a big family and had a normal childhood and adolescence until onset of mental illness. Lizhen's story showed her experience as a person who faced the challenge of mental illness and stigma but nonetheless followed her pursuits.

Deep level modifications interact with program recipients' cultural, societal, and psychological context to ensure the program effectively supports behavioral change relevant to the focal culture. Collectivist society sees the family (including extended family) as a single entity with strong ties among members (Thornhill & Fincher, 2014). It is not uncommon for people actively seek input from their families regarding disclosure decisions (Fan, 1997). Having a mental illness can be seen as a sign of weakness and the karma of one's past behaviors (Chen et al., 2013; Shi et al., 2020). People who openly share lived experiences may be viewed as bringing shame to the family's reputation; hence disclosure can be discouraged by some family members, leading to conflict. Given the unique considerations of family involvement for this focal community, the CBPR team consulted with the original developer (P.C.) of HOP who recommended adding new sections to assist participants in evaluating the pros and cons with their family during the disclosure. Additionally, it invites participants to consider sharing the familial experience of the illness — for instance, families' changing attitudes, ranging from denial to acceptance to providing support — in their recovery story, through which the whole family is empowered.

HOP Evaluation

One hundred and thirty-five Chinese with mental illness and concerns about self-stigma enrolled in the study and were randomized to HOP ($n=68$) or control group ($n=67$). The CONSORT diagram in Fig. 1 summarizes dropouts at each time point. As evident, responses from six participants were not included in the final analyses. Table 1 summarized demographics for people randomized to HOP versus control group. Overall, the sample was 37.54 (SD = 13.34) years old with more female participants (58.3%). In terms of ethnicity, 98.5% identified as Han. About 64% of participants reported receiving a high school diploma or above. For marital status, 55.1% were never married, 23.6% were married, and the rest were separated, divorced, or widowed. More than 51.9% of participants were either currently employed (e.g., full-time working, part-time working) or have had work experience in a lifetime (e.g., retired, enclave or sheltered, laid-off). The summary of differences in Table 1 showed HOP and control group did not differ significantly for any demographic. Hence, we did not control analyses with covariates.

Means and standard deviations of *Satisfaction* ratings for HOP participation are summarized in Table 2. Note that all scores were significantly higher than the midpoint score at 0.01 level except for *Sharing* ($p=0.046$). Repeated measure ANOVA with Greenhouse–Geisser correction indicated significant mean differences emerged among
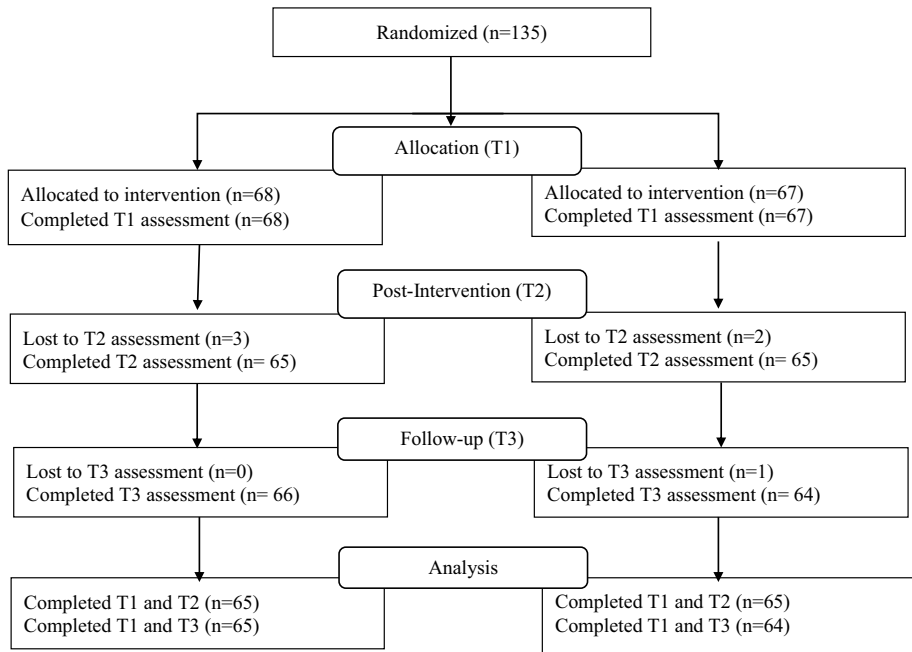
Fig. 1 CONSORT flow chart

the six satisfaction ratings [$F(2.90, 117.03) = 13.30$, $p < 0.00$, $\eta^2 = 0.18$]. Post hoc contrasts with Bonferroni correction revealed that *Sharing* was scored significantly higher than all other items ($p < 0.00$), indicating that *Sharing* was rated less satisfactory than the other five HOP areas.

Table 3 summarizes attendance data as an index of feasibility. Specifically, it represents the percentage of participants who completed just one, two, or three sessions. Over 90% participants achieved full completion (attended all 3 lessons) of the program. Results of a chi-square analysis indicated the difference between full completion and partial completion (attended less than 3 lessons) was significant, χ^2 (1, $N = 68) = 68$, $p < 0.00$.

Table 4 lists fidelity checklist scores separately for Chengdu and Zigong. Six cohorts took place in Chengdu, while four cohorts were in Zigong; random sessions were chosen for fidelity ratings. Both locations had fidelity scores above 90%, indicating facilitators followed closely with program manuals and protocols. Hence, fidelity to the HOP program was at a satisfactory level.

Means and standard deviations for the SEDS scores, and the four SSMIS subscale scores, are summarized in Table 5 at pre, post, and follow-up for the HOP and the control groups. The Table also includes findings representing interaction effects from the 2×3 (group by trial) ANOVAs. A significant trend was observed between groups from pre and follow-up on SEDS-disclosure ($p < 0.10$). As expected, participants from HOP group reported higher self-efficacy in disclosing their mental illness compared to those in the control group. This effect maintained after the HOP intervention ended. For SSMIS subscales, an interaction effect was observed for the application stage, F $(2,254) = 5.40$, $p = 0.005$. Participants who attended HOP group reported less likely to apply negative stereotypes of

Table 1 Demographics of participants by group

		HOP M (SD)/N (%)	Waitlist M (SD)/N (%)	df	F/χ2	p
		n = 68	n = 67			
Location		73 (54.1)	62 (45.9)	1	.01	.94
	Chengdu	37 (54.4)	36 (53.7)			
	Zigong	31 (45.6)	31 (46.3)			
Age		38.07 (16.3)	37.52 (15.0)	1	.04	.84
Gender				1	.39	.53
	Male	30 (44.1)	26 (38.8)			
	Female	38 (55.9)	41 (61.2)			
Ethnicity						
	Han	66 (97.1)	67 (100)			
	Man	1 (1.5)	0 (0)			
	Yi	1 (1.5)	0 (0)			
Education				1	.08	.78
	Advanced degree	1 (1.5)	3 (4.5)			
	College	27 (39.7)	23 (34.3)			
	Some college	3 (4.4)	5 (7.5)			
	High school	11 (16.2)	13 (19.4)			
	Some high school	2 (2.9)	5 (7.5)			
	Junior high school	17 (25.0)	8 (11.9)			
	Some junior high school	0 (0)	1 (.5)			
	Elementary school	2 (2.9)	1 (1.5)			
	Other	5 (7.4)	4 (6.0)			

Table 1 (continued)

		HOP M (SD)/N (%)	Waitlist M (SD)/N (%)	df	F/χ2	p
		$n = 68$	$n = 67$			
Marital status				1	.07	.79
	Married	17 (25)	14 (20.9)			
	Long-term relationship	1 (1.5)	0 (0)			
	Separated	1 (1.5)	3 (4.5)			
	Divorced	9 (13.2)	12 (17.9)			
	Widowed	2 (2.9)	0 (0)			
	Never married	37 (54.4)	38 (56.7)			
	Other	1 (1.5)	0 (0)			
Residence				1	.18	.67
	Self	7 (10.3)	12 (17.9)			
	Living with significant other	1 (1.5)	0 (0)			
	With spouse or child (self place)	14 (20.6)	14 (20.9)			
	With parents or child (their place)	42 (61.8)	39 (58.2)			
	Siblings or relatives	1 (1.5)	0 (0)			
	Distant relatives or friends (rent)	3 (4.4)	2 (3.0)			
	Nursing home	0 (0)	0 (0)			
Employment				1	1.38	.24

Table 1 (continued)

	HOP	Waitlist	df	F/χ2	p
	M (SD)/N (%)	M (SD)/N (%)			
	n = 68	n = 67			
Full time	5 (7.4)	5 (7.5)			
Part time	2 (2.9)	7 (10.4)			
Unemployed	37 (54.4)	30 (44.7)			
Laid off	8 (11.8)	8 (11.9)			
Retired	14 (20.6)	14 (20.9)			
Enclave or sheltered Work	2 (2.9)	5 (7.5)			
Attending school	3 (4.4)	3 (4.5)			
Other	5 (7.4)	3 (4.5)			
Family mental Dx history		13 (19.4)	1	.18	.67
Onset year (years)	15 (22.1)	12.1 (9.9)	1	.05	.82
Dx onset age	12.5 (10.0)	26.7 (14.8)	1	.01	.91
	27.0 (15.4)				
Diagnosis					
Schizophrenia	41 (60.3)	38 (56.7)	1	.18	.67
Bipolar	8 (11.8)	5 (7.5)	1	.72	.40
Depression	17 (25.0)	17 (25.4)	1	.00	.96
Adjustment disorder	0 (0)	1 (1.5)			
Anxiety disorder	2 (2.9)	4 (6.0)			
Mood disorder	0 (0)	1 (1.5)			
Other	0 (0)	1 (1.5)			

Table 1 (continued)

	HOP M (SD)/N (%)	Waitlist M (SD)/N (%)	df	F/χ2	p
	n = 68	n = 67			
Times of hospitalization	3.2 (3.4)	2.9 (1.9)	1	.35	.55
Service/treatment					
Medications	63 (92.6)	65 (97.0)	1	2.31	.25
Rehabilitation facility	23 (33.8)	23 (34.3)	1	.00	.95
Case management	16 (23.5)	13 (19.4)	1	.34	.56
Traditional med	2 (2.9)	1 (1.5)			
Psychotherapy	18 (26.5)	14 (20.9)	1	.58	.45
Physical therapy	18 (26.5)	19 (28.4)	1	.06	.81
Other service	1 (1.5)	0 (0)			
Independent level					
Assisted	8 (11.8)	8 (11.9)	1	.00	.08
Self	38 (55.9)	45 (47.2)	1	1.81	.18
Help families (involuntary)	12 (17.6)	11 (16.4)	1	.04	.85
Help families (voluntary)	16 (23.5)	22 (32.8)	1	1.45	.23

Table 2 Summary of satisfaction ratings

HOP area	Satisfaction		Difference from midpoint
	M	SD	
Content	2.31	1.70	$t(61) = -10.63, p < .001$
Instruction	2.34	1.71	$t(61) = -9.68, p < .001$
Practicality	2.67	1.98	$t(61) = -6.54, p < .001$
Session arrangement	2.56	1.77	$t(61) = -8.58, p < .001$
Effectiveness	2.57	1.89	$t(61) = -8.15, p < .001$
Sharing	3.66	2.22	$t(61) = -1.71, p = .046$

Table 3 Summary of attendance as a measure of feasibility

Number of sessions attended	Number of participants	Ratio with total number of participants
1	2	2.9%
2	3	4.4%
3	63	92.6%

Table 4 Summary of fidelity checklist scores

Chengdu				
Cohort 1	Lesson 1	Lesson 2	Lesson 3	Average
	0.92	0.89	*	0.90
Cohort 2	0.93	0.85	0.93	0.91
Cohort 3	0.95	0.95	0.99	0.96
Cohort 4	0.92	*	*	0.92
Cohort 5	0.97	*	0.99	0.98
Cohort 6	0.97	*	*	0.97
	Zigong			
Cohort 1	1.00	1.00	1.00	1.00
Cohort 2	1.00	1.00	1.00	1.00
Cohort 3	1.00	1.00	1.00	1.00
Cohort 4	1.00	1.00	1.00	1.00

*No data was collected at this time

mental illness to themselves than those in waitlist control; however, HOP effect diminished after intervention ended.

Discussion

Honest, Open, Proud (HOP) is a disclosure-based approach meant to help people harmed by the self-stigma of mental illness. In this study, HOP was successfully implemented in both mental-health centers housed in developed (i.e., second tier city) and less developed (i.e., fifth tier city) areas. Certain social settings may expose individuals

Table 5 Means and standard deviations of impact measures at pre, post, and follow-up

Self-stigma impact	HOP group						Control group						Full interaction test 2×3 ANOVA
	Pre		Post		Follow-up		Pre		Post		Follow-up		
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
SEDS-Disclosure	3.89	2.17	4.57	1.94	4.72	1.83	4.33	1.96	4.36	1.94	4.42	1.83	$F(1.80, 229.00) = 2.74$ $p = .07$
SEDS-Secrecy	4.46	2.05	4.91	1.81	4.98	1.68	4.97	1.75	5.34	1.57	5.05	1.68	$F(2, 254) = 1.02$, n.s
SSMIS Aware	25.89	8.21	24.77	9.16	25.58	9.36	24.33	8.59	23.84	9.09	24.52	9.80	$F(1.88, 239.30) = .102$, n.s
SSMIS Agree	21.65	7.95	20.05	8.01	19.26	8.30	22.27	8.78	20.73	8.98	20.49	8.96	$F(2,254) = .114$, n.s
SSMIS Apply	19.05	8.63	15.40	7.07	18.05	9.04	17.39	8.18	17.11	8.43	15.86	7.48	$F(2,254) = 5.40$, $p = .005$
SSMIS Harm	14.75	8.84	14.35	9.06	15.66	10.30	13.92	8.52	14.00	8.89	13.92	8.24	$F(2,252) = .590$, n.s

to high risks of developing self-stigma and prompt them to disclose or conceal their mental illness status. Of particular note is that more than half of the participants were either currently working or had a job in the past, which presented them with a greater need to contemplate the disclosure decisions than their unemployed peers. A similar situation also applied to those who were attending school. Hence, this program might appear more appealing to these subpopulations. Feasibility of the program, as reflected by attendance, was extremely high at both sites, as was fidelity to the curriculum. This suggests that the program effectively engaged participants and maintained their interest throughout the launching period. Overall, participants were satisfied with the intervention content, delivery format, usefulness, and perceived effectiveness. However, participants were less likely to want to share HOP lessons with other people. Sharing lessons often requires disclosing one's mental illness status, which understandably may encounter more hesitation among participants resulting in a relatively lower endorsement.

As expected, HOP participants had higher disclosure self-efficacy scores than the control group, when comparing pre-intervention to follow-up. Those who completed the HOP group were less likely to apply stereotypes to themselves than the control from pre-intervention to post-intervention, suggesting that HOP can alleviate self-stigma. However, this effect failed to maintain during the follow-up period. Those with mental illness internalize the public stigma (i.e., how the public stigmatizes people with mental illness) and develop self-stigma. Participants may resume applying negative stereotypes to themselves (a process of self-stigma) because they continued to be exposed to public stigma in their social environment. RCTs in Western populations highlight the benefits of HOP in reducing self-stigma, stigma-related stress, and depression (Rüsch & Kösters, 2021). An RCT of HOP with adolescents in Germany found reduced self-stigma, depressive symptoms, stigma-related stress, and desire for secrecy in HOP participants (Mulfinger et al., 2018). HOP participants also reported high levels of recovery and quality of life than those in the control. In comparison to previous findings, positive impact in the Chinese population was modest. Group differences were only observed for the application stage of self-stigma and disclosure self-efficacy. We speculate that muted effects—nonsignificant results of aware, agree, and harm stages of self-stigma and secrecy self-efficacy—in this study may be rooted in the cultural differences. For instance, the self-stigma process and secrecy experience might be unpacked differently in Chinese culture. Therefore, they may alter the positive impacts observed in past trials: peer support, challenging self-stigma through cognitive behavioral strategies, and guidance on strategic disclosure.

In peer support groups such as HOP, participants have an opportunity to share their own lived experiences and get support from one another. Mutual support can increase feelings of purpose, self-worth, and stress. As a relatively new concept in China, peer support might be uncomfortable for Chinese service users who are more oriented towards medical models of health care. In addition, HOP curriculum guides participants in recognizing and confronting both public stigma and self-stigma by replacing self-stigmatizing cognitions with more affirming beliefs (e.g., replacing the cognition "I'm stupid for getting so depressed" with "I'm strong for surviving through this depression."). These cognitive-behavioral strategies may be more familiar to Western service users, or may have more intuitive sense for individualistic cultures than those oriented towards collectivism where it may be less comfortable to challenge what others think of you. Finally, HOP challenges negative attitudes through teaching individuals with mental illness to strategically disclose, so they minimize risks and maximize costs. In a society that is less open about mental health, risks of disclosure may often outweigh benefits, leaving HOP participants feeling less empowered from

lack of viable disclosure options ("I learned about all these ways to disclose, but don't think my disclosures will be well-received so why bother?").

Limitations

This was a preliminary study of HOP in a Chinese context and had several limitations. First, individuals who elected to participate in the study are likely not representative of the general population of people with mental illness in China. To participate, individuals needed to be comfortable attending a group and disclosing their mental health struggles within the group setting. Measures were translated from English only. Thus, some of the self-stigma or disclosure self-efficacy items might not have been understandable or culturally relevant to the Chinese participants. Furthermore, in this study the intervention was held with a condensed period of less than one week, whereas in other trials, the intervention has typically spanned one class per week over several weeks. Those limitations mentioned above might have affected the internal and external validity of the current research. Additional studies are needed to replicate and revalidate the findings (see Future research). Finally, we did not collect qualitative data regarding participant reactions and experiences with the program which might have provided richer insight into the current results.

Clinical Implications

Implementation of peer services is newer in China than in the USA, and still relatively unfamiliar to most Chinese mental health settings. More work is needed to determine how peer support interventions such as HOP can coexist with more traditional services. Given the importance of family involvement in China, peer services might be preferred when they include family components or higher levels of family involvement than those in the US or other Western countries. While our study participants expressed satisfaction with the face-to-face format of HOP, other formats (e.g., virtual, hybrid, self-study) might appeal to a different subset of individuals. HOP might be adapted as a guide for individualized work with a therapist or counselor for those less comfortable with a group setting. Further, clinicians may need additional training to help service users navigate issues related to stigma and disclosure. HOP could also be used to address other stigmatized conditions that intersect with mental illness such as substance use, trauma, or suicidality.

Future Research

Talking about one's mental health with family, friends, neighbors, or healthcare providers can elicit helpful responses but also carry the risk of stigmatizing or coercive treatments. Future research on self-stigma and disclosure in China might explore cultural differences in disclosure attitudes and barriers, and how to prepare others (e.g., family members and healthcare providers) to supportively respond to disclosures. Research might also examine the applicability of the progressive model of self-stigma in China. Finally, longitudinal research, with a larger sample size, would allow for examination of specific populations (e.g., adolescents) that may particularly benefit from a disclosure intervention.

Conclusion

This study presents the adaptation and evaluation of HOP for the Chinese population. It was unique and innovative as it utilized community-based participatory research (CBPR) approach. Importantly, the CBPR team that adapted the curriculum and directed the study included Chinese individuals with lived experience of mental illness. The Chinese version of HOP contained culturally relevant examples and disclosure stories, along with a recognition of family involvement in disclosure-related decision-making and the impact of disclosure on the family unit. Evaluation results indicated that the program was well-received in the focal community and demonstrated effectiveness in reducing self-stigma and improving disclosure self-efficacy, albeit for a relatively short term.

Data Availability All data for this study can be downloaded for no charge from www.ncse1.org.

Declarations

Informed Consent All procedures were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all people before being included in the study.

Conflict of Interest The authors declare no competing interests.

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