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#### ORIGINAL PAPER

# Medical Student Attitudes Towards People with Mental Illness in China: A Qualitative Study

Audrey Luo<sup>1</sup> · Hongbo He<sup>2</sup> · Somaia Mohamed<sup>3</sup> · Robert Rosenheck<sup>3,4,5</sup>

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**Abstract** Stigma towards people with mental illness is a worldwide concern. A five-nation survey of medical student attitudes towards people with mental illness recently reported far lower levels of social acceptance among Chinese medical students compared to those from the US, Brazil, Ghana, and Nigeria. This qualitative study presented recent Chinese medical school graduates with probes based on questions used in the aforementioned cross-national study to elicit their views of factors underlying the negative attitudes towards social acceptance of people with mental illness. One-hour interviews were conducted with twenty psychiatry residents in June, 2016. Of 241 coded responses concerning negative attitudes, 51.5% were coded as reflecting fear of violent behavior, 22.8% as loss of face (i.e. shame from interpersonal associations), 17.0% lowered social status, 4.98% nonconforming social behavior, and 3.73% the heritability of mental illness. Low levels of social acceptance of individuals with mental illness among medical students in China are largely related to fears of violence of and loss of face. Understanding the attitudes of medical students may inform efforts to reduce stigma through educational initiatives targeted at both medical students and the general public.

**Keywords** Stigma · Culture · Violence · Mental Health in China · Cultural psychiatry



Robert Rosenheck
Robert.Rosenheck@yale.edu

Yale University, New Haven, CT, USA

The Affiliated Brain Hospital of Guangzhou Medical University, Guangzhou, China

<sup>&</sup>lt;sup>3</sup> Yale Medical School, New Haven, CT, USA

<sup>&</sup>lt;sup>4</sup> VA New England MIRECC, Yale Medical School, New Haven, CT, USA

VA Connecticut Health Care System, West Haven, CT 06516, USA

#### Introduction

Stigmatization of people with mental illness is a worldwide public health concern (WHO 2001) characterized by negative labeling, stereotyping, status loss, and discrimination (Link and Phelan 2001). Stigma significantly impedes recovery from mental illness because it causes reluctance to seek help, low self-esteem, depression, and early discontinuation of treatment (Corrigan, Druss, and Perlick 2014). As a result, stigma has been targeted for action by organizations such as the World Health Organization (WHO), the World Psychiatric Association, and the Association for Social Psychiatry.

Sociocultural norms shape the stereotypes and expectations of individuals in a particular society, determining which behaviors are considered acceptable and which behaviors are considered abnormal and unexpected (Helman 2007). Although cultural context is widely believed to affect stigma towards people with mental illness, few studies have empirically assessed the culture-specific features underlying such stigma.

Research in mainland China (Phillips et al. 2013) and Hong Kong (Lee et al. 2005) has identified stigma as a pressing issue that hinders people with mental illness from seeking treatment (Yang 2007). Confucianism, which has been highly influential in China for over two millennia, prizes social harmony, and emphasizes the individual's obligations to comply with social norms to maintain order (Yang 2007). In this society, the behavior of people with mental illness may be seen as unpredictable and socially disruptive, which may be shameful to both patients and their families, but the underlying apprehensions have not been fully articulated.

Stigma also impacts mental health professionals, many of whom both harbor stigma against their own patients and experience stigma as a result of their professional association with people with mental illness (Nordt, Rössler, and Lauber 2006). Even after decades of reform, psychiatry is still perceived as inferior to other medical fields in China, with only 1% of medical graduates entering the profession (Zhang et al. 2013), in part because of limited exposure in medical school, low income prospects, and low status within medicine.

Cross-national studies have shown that Chinese medical students, in particular, harbor stigmatized attitudes towards people with mental illness. One recent study administered a 43-item survey to evaluate the attitudes of medical students toward the causes of mental illness and people with mental illness. Results showed that the sample of Chinese medical students exhibited significantly less social acceptance of people with mental illness than medical students from the United States, Brazil, Nigeria, or Ghana (Stefanovics et al. 2016). American students scored highest out of all participants on social acceptance of people with mental illness, and Chinese students scored lowest. These low ratings of social acceptance were recently confirmed in a large survey of students at 12 leading medical schools in China (Zhu et al. 2017) and suggest that there may be distinctive socio-cultural factors in China that promote stigmatizing attitudes towards people with mental illness, even among medical students.



Interpretation of quantitative survey data (Stefanovics et al. 2016) is limited by the absence of information on more subjective responses reflecting personal beliefs. While quantitative data from large samples can yield valuable numerical comparisons that can be tested for their statistical significance, open-ended qualitative responses to similar questions, even when elicited from far smaller numbers of informants, can generate rich and nuanced data by providing contextual and emotionally colored information. Qualitative inquiry is needed to decipher the personal meaning of social phenomena (Rosenberg 1988) and to elucidate issues underlying stigma (Steckler et al. 1992).

The present qualitative study used quantitative data from a recently published cross-national study (Stefanovics et al. 2016) that showed strongly contrasting attitudes towards mental illness between American and Chinese medical students as a source of relevant probes in a qualitative interview. We elicited unstructured responses from Chinese medical students to the questions on which survey responses differed most substantially between Chinese and American students. Through this approach, we sought to gain culturally enriched insights into the low levels of social acceptance of people with mental illness among Chinese medical students.

#### Methods

# **Participants**

Qualitative interviews were conducted with recent Chinese medical school graduates (N=20), who are now psychiatry residents. These interviews sought to elucidate medical student beliefs about the causes of mental illness and attitudes towards people who have mental illnesses. The study was conducted at the Affiliated Brain Hospital of Guangzhou Medical University (Guangzhou Huiai Hospital), the oldest psychiatric hospital in China and the major psychiatric institution in China's third largest city.

Participants were recruited through the Director of Research and Education at the Guangzhou Huiai Hospital (HH). Participation in the survey was voluntary. Participants remained anonymous as the investigator did not record any identifying information, such as their names.

We chose to compare the attitudes of US medical students with that of their Chinese counterparts because the qualitative investigator (AL) had an American background with a Chinese heritage and was fluent in Mandarin. The investigator would be better able to understand the differences in the responses of Chinese and American survey participants than the responses of participants from other countries (Ghana, Nigeria, and Brazil) from the Stefanovics et al. (2016) study.

We chose to interview Chinese psychiatry residents because we believed that they would have first-hand knowledge about medical students' attitudes and would respond more candidly about the culturally sensitive topic of attitudes towards people with mental illness if they were asked comment on the attitudes of other medical students rather than on their own. Participants were told to answer the



interview questions as best they could and could skip a question if they believed they did not have enough knowledge to adequately respond.

The study was approved by the local Institutional Review Board in Guangzhou and granted exemption by the IRB of Yale University.

# **Interview Design and Administration**

We developed probes based on data from the previous survey (Stefanovics et al. 2016) that had been translated into Mandarin Chinese by a bilingual researcher (HH) at the Affiliated Brain Hospital of Guangzhou Medical University. Stefanovics et al. (2016) report on a quantitative survey study that compared beliefs about the manifestation, causes, and treatment of mental illness and attitudes toward people with mental illness among health professionals in the United States (n = 289), Brazil (n = 139), Ghana (n = 87), Nigeria (n = 253), and China (n = 363). Specifically, the U.S. sample consisted of first- through fourth-year medical students and students in advanced and combined degree programs at the Yale University School of Medicine. Students were invited to complete the survey through an electronic platform. The Chinese sample was recruited from residents at the Guangzhou Huiai Hospital and was at a similar level of training in comparable educational institutions. Consent to participate in the survey was assumed by the act of completing the questionnaire. Participation in the survey was voluntary and anonymous.

The survey questionnaire consisted of 36 questions assessing students' attitudes towards people with mental illness and beliefs about the causes of mental illness. The questions were developed from the Fear and Behavioral Intentions (FABI) toward the mentally ill questionnaire, the Community Attitudes to Mental Illness (CAMI) scale, and questions from the World Psychiatric Association Program to Reduce Stigma and Discrimination because of Schizophrenia.

In this qualitative study, the selection of probes for the semi-structured interviews was based on the responses to the items in the questionnaire to which Chinese medical students responded most differently from US medical students. Ten questionnaire items from above were selected that showed the most extreme differences in score between Chinese and American students. For five questionnaire items, a greater proportion of Chinese students responded "yes" than US students. For example, 36% of Chinese medical students responded yes to the "negative" question "Would you object to having mentally ill people living in your neighborhood?" compared to only 2.8% of American students, a difference of 33.2%. On five other questions reflecting positive acceptance, more American students responded "yes" than Chinese students (Table 1).

The questionnaire items and the differences in response to these ten questions were explained to individuals who had consented to participate. The participants were then asked the following questions: (a) On the basis of your experience, knowledge of fellow medical students, and your beliefs, why do you think students responded strongly to the following questions? (b) What thoughts and feelings would have shaped this response? (c) What concerns might lead students to respond this way? Additional probes in the form of open-ended questions were asked to



% Yes (USA)	% Yes (Chinese)	% Difference	Question
95.50	44.32	- 51.18	Would you invite somebody into your home if you knew they suffered from mental illness?
95.15	44.75	- 50.40	People with mental illness have for too long been the subject of ridicule
94.81	48.75	- 46.06	Would you be willing to work with somebody with a mental illness?
98.27	58.29	- 39.98	Would you have casual conversations with neighbors who had suffered from mental illness?
52.25	15.51	- 36.74	In interacting with someone with mental illness, I could marry someone with a mental illness
7.27	49.40	42.13	I am afraid of people with mental illness
2.77	48.20	45.43	Would you object to having mentally ill people living in your neighborhood?
5.19	49.90	44.71	As soon as a person shows signs of mental disturbance, he should be hospitalized
1.38	50.05	48.67	People with mental illness tend to be mentally retarded
6.92	49.25	42.33	People with mental illness are a public nuisance

Table 1 Responses of Chinese and American Medical Students to Probes (Stefanovics et al. 2016)

encourage the Chinese medical students to give examples and clarifications of their responses.

All interviews were conducted in Mandarin Chinese by the American qualitative investigator (AL) who is bilingual in Mandarin Chinese and English. The researcher audiotaped the interviews, transcribed the interviews verbatim, and then translated the transcription into English.

# **Analysis**

This study used a conventional approach to content analysis, as outlined by Hsieh and Shannon (2005). Conventional content analysis is often used when existing theory or research literature on a phenomenon is limited. Rather than using preconceived categories, we allowed the categories and concept development to emerge directly from the data. This approach is most appropriate for this study because there are few, if any, qualitative studies of attitudes towards mental illness among Chinese medical students. A conventional content analysis approach allowed us to identify recurring themes in the responses to each question.

According to the four steps in conventional content analysis outlined by Hsieh and Shannon (2005), the researcher first repeatedly read the English translation of each interview to achieve immersion and a holistic sense of the data. Second, the researcher reviewed the transcripts line by line and made notes documenting impressions, thoughts, and initial analysis. Words and phrases that emerged repeatedly were highlighted. These words and phrases were then used to derive



codes or themes. Third, the researcher merged and relabeled codes to create an initial coding scheme that could be applied to all the interview responses. Lastly, the codes were sorted into categories and grouped to into meaningful clusters.

Following conventional content analysis, the researchers combined overlapping themes across the different questionnaires. Eleven themes were initially generated. Overlapping codes were then combined, potential subcategories were identified, and the interview transcripts were reviewed again to ensure that the new coding was consistent with the interview content. The eleven themes were condensed to five.

Finally, the proportion of all responses that embodied each of the five themes was calculated. In addition, the number and proportion of responses embodying each theme for each questionnaire item was computed. In summary, we identified the proportion of all responses across all interviews that reflected each theme and the proportion of responses to each question that reflected each theme.

#### Results

The average age of the 20 participants was 25.8 (SD = 1.80) years, with 17 (85%) first-year residents and 3 (15%) second- year or later residents. Ten (50%) participants were women. Seven (35%) participants were raised in rural areas, whereas 13 (65%) participants were raised in cities.

## **Probes**

The five questionnaire items to which the largest percentages of Chinese students responded "yes" as compared to American students and the five questionnaire items to which the smallest percentage of Chinese students responded "yes" as compared to the American students, (Stefanovics et al. 2016), are presented in Table 1.

For the five probes on which larger proportions of Chinese students responded "yes" than their US counterparts, differences ranged from 42 to 48% (Table 1). For the five probes on which smaller proportions of Chinese students responded "yes" than US students, differences ranged from -36 to -51%. Comparative responses showed substantially less social acceptance of people with mental illness among Chinese as compared to US students.

## **Conventional Content Analysis**

A total of 241 coded responses were categorized into 5 final themes (Table 2) and described further below.

Theme 1. Fear of violent behavior of people with mental illness. The most frequently appearing theme was the fear of people with mental illness because of their perceived aggressive or violent tendencies. This theme appeared in 51.45% of the 241 coded responses (Table 2). Violent images of people with mental illness were described as common in popular media and judged to be important contributors to the association of violence with mental illness. People with mental illness were described by respondents as being perceived by medical students as



**Table 2** Frequency and row percentages each theme appeared as a response to each question (N = 241)

Probes	Fear of violent behavior	Loss of Face	Low social status	Socially nonconforming	Highly heritable
Would you invite somebody into your home if you knew they suffered from mental illness?	35 (61.40%)	13 (22.81%)	6 (10.53%)	0 (0.00%)	3 (5.26%)
People with mental illness have for too long been the subject of ridicule	4 (50.00%)	2 (25.00%)	2 (25.00%)	0 (0.00%)	0 (0.00%)
Would you be willing to work with somebody with a mental illness?	17 (48.57%)	8 (22.86%)	8 (22.86%)	2 (5.71%)	0 (0.00%)
Would you have casual conversations with neighbors who had suffered from mental illness?	4 (22.22%)	9 (50.00%)	5 (27.78%)	0 (0.00%)	0 (0.00%)
In interacting with someone with mental illness, I could marry someone with a mental illness	2 (11.76%)	4 (23.53%)	3 (17.65%)	2 (11.76%)	6 (35.29%)
I am afraid of people with mental illness	13 (72.22%)	3 (16.67%)	2 (11.11%)	0 (0.00%)	0 (0.00%)
Would you object to having mentally ill people living in your neighborhood?	12 (75.00%)	4 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
As soon as a person shows signs of mental disturbance, he should be hospitalized	11 (52.38%)	4 (19.05%)	2 (9.52%)	4 (19.05%)	0 (0.00%)
People with mental illness tend to be mentally retarded.	5 (27.78%)	1 (5.56%)	9 (50.00%)	3 (16.67%)	0 (0.00%)
People with mental illness are a public nuisance	21 (63.64%)	7 (21.21%)	4 (12.12%)	1 (3.03%)	0 (0.00%)
Total times theme appeared in all questions	124	55	41	12	9
Percentage that theme appeared across all questions	51.45%	22.82%	17.01%	4.98%	3.73%



"violent, unstable, and disorganized." Respondents expressed fear of potentially triggering an individual with mental illness to attack. This was given as the likely reason, for example, for why Chinese students would prefer not to invite people with mental illness into their homes, neighborhoods, or workplaces. One respondent stated:

They [medical students] are afraid that someone with mental illness is like a bomb. You never know when he will explode.

Similarly, another respondent described concerns about inviting someone with mental illness into one's home as follows:

The sufferer of mental illness may potentially be dangerous and may hurt family members.

Because of this fear, participants suggested that students would prefer to avoid the company of people with mental illness for their own personal protection. One respondent stated:

[The general public] believe[s] that these people are dangerous. If these people show signs of mental illness, then—this does not sound good—but we should capture them and lock them up in the hospital.

The media, including news reports and movies, was cited as a major contributor to perceptions that people with mental illness are violent. It was notable that no respondent referred to any direct observation of violent behavior a person with mental illness. In contrast, multiple respondents mentioned news reports in which innocent individuals were stabbed or hacked by someone suffering from mental illness. Sample responses include the following:

In the media, we often see news of an individual on the street hacking people or arguing with not only their family, but also with neighbors and those around him.

The media gives a very biased impression to the public. Sometimes [the media] will publish that someone attacked someone else because of mental disease...and [is] very dangerous.

Theme 2. Social involvement with people with mental illness leads to "loss of face" "Face" is an important cultural concept in China (Hu 1944) reflecting personal reputation, dignity, prestige, and/or social standing. Responses reflecting concern that socializing with people with mental illness would result in "loss of face" represented 22.82% of the 241 coded responses (Table 2). These responses indicate that "loss of face" could result from even limited interaction or association with people with mental illness. Loss of face occurs in part because of a perceived "social contagion" of mental illness, regardless of the interpersonal depth of involvement.

As one respondent noted:

Chinese people care about face. If that person's status is higher than yours, then you might want to interact with them. But if it is someone with mental



illness, their status is lower than the average person. People see them as crazy. So, people will not want to interact with them.

One major consequence of the loss of face associated with mental illness is the devaluation of the field of psychiatry. Psychiatry was reported to be "poorly taught" and undervalued in medical school. Respondents felt that they had lost face as a result of choosing psychiatry as a medical specialty. Medical students, according to respondents, often visit underdeveloped rural psychiatric hospitals during their training and leave with a negative impression of people with mental illness because of the dilapidated facilities. The negligent care of people with mental illness in these facilities leads to loss of face from associating with mental illness, the relegation of psychiatry to low status, and ultimately, the de-emphasis of psychiatric education. As one respondent explained:

In medical school, psychiatry is poorly taught compared to other fields, like internal medicine. When I was in medical school, I hardly encountered any psychiatric education. Psychiatry seems to have a low status compared to other fields. Psychiatry is seen as a weaker field.

Another respondent described negative experiences with psychiatric education in medical school and the deplorable conditions of some Chinese psychiatric hospitals, which the respondent indicated reinforced shameful perceptions of people with mental illness:

When I was in medical school, we visited a psychiatric hospital, a lower-grade hospital. When they looked at you, the expressions in their eyes were strange. The patients wore gray uniforms and stood at the metal doors, looking at you. Their hands and feet were chained. It feels like you've walked into a prison. That kind of experience is terrible. When you speak to the patients, the women cried and the men were irascible or laughed eccentrically at you.

Association with people with mental illness, even as a physician, is perceived to lead to loss of status and even to the suspicion that one could also develop mental illness as a result of a "social contagion."

When I first chose this specialty (psychiatry), my family did not approve. They thought I would lose face if I pursued psychiatry. Why should I pursue psychiatry out of all the medical fields? [They said that] you cannot hang onto your face (脸上挂不住; *lianshangguabuzhu*)... People think that [those who practice psychiatry] don't have much talent or ambition. If you are interacting with them every day, perhaps you will be affected by the mentally ill. Some people worry that you will become more like the people you treat... People discriminate against psychiatrists.

Theme 3. People with mental illness have low social status because they are perceived to be socially and vocationally incompetent, often vagrant, difficult to communicate with, and disorderly. This theme comprised 17.01% of the coded responses (Table 2). Respondents believed that medical students, like the general



public in China, perceive people with mental illness to have difficulty working and even holding a meaningful conversation. As one respondent said:

Those who are affected often say things that are strange that no one understands. They might talk to someone who doesn't exist, and say things that are bewildering... [Their behavior is] an unfathomable mystery (莫名其妙; momingqimiao).

A respondent described communicating with people with mental illness as being as pointless as, to use a Chinese idiom, "playing piano to a cow" (对牛弹琴; duiniutangin)."

People with mental illness were characterized by inappropriate behavior and uncleanliness. Respondents described medical students' perceptions of people with mental illness as those who "roam the streets and pick up trash and eat it" or "take off one's clothes" and "shout." One respondent stated:

People's perception of mental illness is that those people are strange and have peculiar ways of thinking. Everyone's first instinct is to think that people with mental illness are lunatics who are sloppy and roam about leading vagrant lives.

Respondents also described a possible professional setting in which co-workers are biased against people with mental illness, even if they are competent. According to one respondent,

If someone with mental illness has no handicap in working ability and even works better than a healthy employee, then other people will compare the mentally ill employee to the healthy one...Someone with mental illness is supposed to be lower than you, but yet he works better than you. So that means you must be really unskilled.

Theme 4. Disapproval for the socially nonconforming behavior of people with mental illness. Because China has a collectivist society that values individuals "adhering to the norm," behavior that breaches the norm is especially condemned. People with mental illness often are disparaged for exhibiting socially inappropriate behavior in public. The following responses, which represent 4.98% of all responses (Table 2), exemplify disapproval of the public towards unconventional behavior of people suffering from mental illness:

If your verbal expression is jumbled, and your moods are not stable, and you exhibit violent behavior, then people will think you are abnormal. In our culture, we do not like to interact with abnormal people.

The public thinks that the mentally ill are not normal people, and the public has demonized these people.

A respondent conjectured that the difference in attitudes between American and Chinese medical students in their acceptance of people with mental illness could be explained as follows:



In America, individuals are given priority. In China, the whole group is given priority. In whatever one does, one does for the greater good and should sacrifice "little me." One doesn't work for oneself. One works for the collective, and the collective works for the country. This is different from the way my friends from other countries think... Chinese society has become rigid. Everyone is like this: whatever other people do, so must I. If you don't do it, it will be very bad. Chinese people care about face, but foreigners don't care so much about face. I think foreigners care about individual freedom and I think they are not afraid to speak up and express what they really think.

Responses from other participants supported the idea that socially nonconforming behavior is looked down upon in China, as in the following:

People expect things to be a certain way, and if someone breaches the norm, they will think there is something wrong with him.

In China, people value adhering to the norm and not doing any unconventional.

Theme 5. Mental illness is highly heritable, and its heritability negatively impacts marriage prospects. The heritability of mental illness was a major concern when addressing the question of whether one would marry someone with mental illness. This theme appeared in 3.73% of the coded responses (Table 2). As one respondent stated:

No one will want to marry someone with mental illness because illnesses like schizophrenia are highly heritable, and the risk is high, so if you get married, you might have a monster.

Having mental illness, according to some respondents, may negatively impact an individual's marriage prospects. Respondents claimed that people avoid marrying those who suffer from mental illness, as in the following comment:

If someone finds out their boyfriend or girlfriend has mental illness, they may refuse to marry them.

## **Item Responses**

In the responses to all but three items, violence was the most frequent concern (Table 2). Loss of face was the second most frequent response to the remaining items with two exceptions. The probe stating "People with mental illness tend to be mentally retarded" most frequently elicited responses coded as reflecting low social status, reflecting further stigma against people who are intellectually compromised. The probe concerning marriage to someone with mental illness elicited concerns about heritability because individuals feared prospects of having a child with mental illness.



## Discussion

In this qualitative study of Chinese medical school student attitudes towards mental illness, recent Chinese medical school graduates who are now psychiatry residents were asked to account for the comparatively low levels of social acceptance of people with mental illness in China. Fear of violence and loss of face were the most frequently and emphatically expressed concerns. Other themes associated with low social acceptance included nonconforming social behavior, low social status, incompetence, and vagrancy of people with mental illness as well as the perceived heritability of mental illness.

Recent theory on the foundations of stigma has emphasized the combination of psychological (stigmatizing cognitions and beliefs), emotional (affective reactions to such stigmatizing cognitions), and social processes affecting behavior of individuals (Cheng et al. 2015; Yang et al. 2014). Such processes at the individual level can lead to conditions restricting life opportunities at the societal level, for instance by limiting employment and housing options. Our qualitative exploration of the stigmatizing features underlying medical student attitudes towards mental illness in China reveals the workings of factors at each of these levels.

# Psychological, Emotional, and Social Processes of Stigma

The predominant psychological, emotional, and social reactions to probes concerning medical student attitudes towards people with mental illness were rooted in fear and shame. The psychological processes of harboring stigmatizing cognitions and beliefs were influenced by Chinese media portrayals of individuals with mental illness as violent and dangerous. Interviewees repeatedly referred to how frightening images of violent behavior in the media shaped the beliefs of medical students and the general public that individuals with mental illness are dangerous. According to participants, Chinese news coverage often reports crimes allegedly committed by people with mental illness, reinforcing stereotypes of dangerous and unpredictable people. Rather than portraying a disorder such as schizophrenia as a serious health issue, media presentations associate mental illness with criminal activity. It was notable that none of the informants reported on violent behavior that they or other medical students had witnessed themselves, but rather their comments addressed perceptions of mental illness resulting from media portrayals.

The emotional reactions to such stigmatizing cognitions was fear of individuals with mental illness and shame as a result of association with individuals perceived to be violent and uncontrollable. These emotional responses seem to underpin the social reactions to individuals with mental illness. In the cited survey study (Stefanovics et al. 2016), probes that generated some of the strongest stigmatizing responses were those that revealed reluctance towards social interaction, such as unwillingness to invite people with mental illness to one's home, to work with them, or even to have them living in the same neighborhood. Participants in our study also described the social contagion of mental illness, in which association with someone



with mental illness leads to both a loss of face and the perceived possibility of developing similar psychiatric symptoms. The concept of social contagion is an example of what Yang describes as the stigma occurring in the "intersubjective space between people" (Yang et al. 2007). The stigmatizing responses described above are consistent with Yang's claim that stigma affects not only the individual, but also families and friends of individuals with mental illness, leading to ostracism from social networks and reduced social status (Yang et al. 2007). The avoidance of social interaction with these individuals and their associates are due to fear and shame, and support Yang's idea that mental illness can be a kind of "social death."

# Structural Consequences of Mental Illness Stigma Among Medical Students

The psychological, emotional, and social reactions towards individuals with mental illness can lead to structural consequences in which stereotypes of such individuals constrain an individual's opportunities, resources, and well-being (Corrigan, Druss, and Perlick, 2014; Hatzenbuehler, Phelan, and Link 2013). Participants described the aversion of medical students to working with, marrying, and socializing with individuals suffering from mental illness. Such aversion may be the manifestation of medical students' fears of individuals with mental illness and avoidance of the social contagion.

Negative reactions of medical students to individuals with mental illness may prevent many students from pursuing psychiatry, exacerbating the shortage of psychiatrists in China (Ng and Li 2010; Wang et al. 2013). Inadequate numbers of mental health care providers can lead to poor access to quality treatment, which can subsequently lead to poor mental health outcomes (Hu et al. 2017). Lack of recovery from mental illness may reinforce negative perceptions of the field of psychiatry being a "weaker field" that cannot effectively treat mental illness. If the public and medical students continue to see psychiatry as an inferior field, even fewer students will pursue psychiatry which would further aggravate the stigmatized, marginal status of both patients and mental health professionals.

# **Implications for Future Policy**

Current Chinese media reports fail to acknowledge that violence is actually rare among people with mental illness and that only a small percentage ever commit any serious crime (WHO 2001). US studies have shown that people with mental disorders are no more violent than their healthy counterparts in the absence of substance use (Monahan 1992; Stuart 2003). Such studies, which might help dispel prejudicial beliefs, have yet to be replicated in China and have not been cited by the media.

On the other hand, the media can be a powerful tool in reducing negative attitudes and educating the public about mental illness. The media is at least partially responsible for increasing stigma through its negative representations of people suffering from mental illness (Corrigan, Powell, and Michaels 2013). According to a study conducted by Corrigan, Powell, and Michaels (2013), a news article focusing on positive aspects of the mental health system was able to reduce



stigma and increase affirming attitudes, whereas a news article focusing on the dysfunctions of the mental health system increased stigma and decreased affirming attitudes. Thus, the media may have sufficient influence to shape public perception of mental illness in the US and may have at least as much influence in China. If the Chinese media can find ways to report stories concerning people with mental illness without framing them in a frightening and negative light, the public may be able to distinguish the real experience of people with mental illness from exaggerated, violent portrayals. For example, the media can show the compatibility of mental illness with normal emotions, social life, and career aspirations. Furthermore, as more individuals seek consultation from psychotherapists or psychiatrists in China (Yang and Kleinman 2008), stigmatizing associations may weaken. Psychiatrists can support de-stigmatization by making themselves available to the media to discuss their work (Stout, Viuegas, and Jennings 1998).

Secondly, the stigma towards mental health professionals in China needs to be addressed. Respondents claimed that one's social status would be negatively impacted by one's decision to pursue psychiatry as a career. Participants reported that in China, the field of psychiatry lacks prestige and is low on the hierarchy of medical specialties. This finding is consistent with results from previous studies revealing negative perceptions towards psychiatry in China (Wang et al. 2013; Phillips, The, and Jan 1998). The loss of face due to association with sufferers of mental illness causes medical students to avoid pursuing psychiatry and leads many current psychiatrists to switch to other professions when the opportunity arises. Fostering respect for the field of psychiatry may lead to better recruitment into the field. Increasing the number of psychiatrists in China may improve treatment results and lead to better integration of those recovering from mental illness back into society after treatment. To promote the field of psychiatry, initiatives can be established to expand and improve the teaching of psychiatry in medical school. Study respondents described the poor teaching they encountered in their psychiatric education and that their teachers did not "impart much knowledge" in lectures. Psychiatric education in medical school can be strengthened by being given higher priority, more time in the curriculum, and a respect similar to that given to other medical specialties. Respected psychiatry faculty can be encouraged to take on leadership roles that involve interaction with students. Having psychiatry faculty in leadership positions would communicate that the medical school sees psychiatry as a valued specialty (Verduin 2017). Coupled with current efforts to expand China's psychiatry training system (Hu et al. 2017), these initiatives have the potential to facilitate the recruitment of medical students into psychiatry and the promotion of psychiatry as a medical field.

Lastly, according to respondents in this study, mental illness (精神疾病; jingshenjibing) colloquially refers to severe mental illness. When speaking of "mental illness" in China, participants reported that one is typically assumed to be referring to serious psychotic symptoms rather than symptoms like depression or anxiety. Such a narrow definition of mental illness may be the result of general lack of knowledge of the wide range of disorders that mental illness encompasses. Chinese mental health advocates may find it useful to promote a more inclusive definition to refer to a wider variety of disruption in affect, behavior, and cognition.



This would allow the term to include more than just the most severe cases of mental illness. Broadening the definition of mental illness in China could place a greater emphasis on the role of the mind and psychology which could then lead to greater acceptance of treatments such as psychotherapy and Western medications for psychiatric disorders. Furthermore, Chinese individuals with disorders such as anxiety or depression who may not have previously seen their conditions as mental illnesses may be more willing to seek treatment.

#### Limitations

Several limitations require comment. First, the sample was small, as is characteristic of many qualitative studies. The sample was based in one location and its representativeness of the general medical student population in China is unknown. In addition, as in any cross-cultural study, a discrepancy between the working definition of mental illness in Chinese and American settings must be noted. Unlike in China, in the US, mental illness is typically used to refer to a broader range of problems encompassing conditions that affect cognition, emotion, and behavior (Manderscheid et al. 2010) and includes disorders such as depression and anxiety.

#### Conclusion

Qualitative investigation of the subjective explanation for stigma from the perspective of recent Chinese medical graduates suggests that low levels of social acceptance of individuals with mental illness are related primarily to concerns about violence and loss of face. Understanding the attitudes of medical students can shape initiatives that promote psychiatric education, combat stereotypes, and promote more positive attitudes. Such progress can lead to better access to treatment and greater chances of recovery.

#### Compliance with Ethical Standards

**Conflict of interest** The authors have no conflicts of interest to declare.

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

**Research Involving Human Participants and/or Animals** This study was approved by the Human Investigations Committee of Yale Medical School.



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