Comparisons of family environment between homeless and non-homeless individuals with schizophrenia in Xiangtan, Hunan

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Background: Homelessness is an increasingly important problem for individuals with serious mental illness in China.

Aims: Identify the characteristics of families that are associated with homelessness among individuals with schizophrenia.

Methods: Participants were 1856 homeless individuals with schizophrenia (defined as those who had no place of residence or involved caregivers for 7 consecutive days) and 1728 non-homeless individuals with schizophrenia from Xiangtan, Hunan. The self-completion Family Environment Scale-Chinese Version (FES-CV) was administered to these participants after their acute psychotic symptoms resolved.

Results: Compared to individuals in the non-homeless group, those in the homeless group were older and more likely to be non-locals (i.e., from outside of Xiangtan), be residents of rural (versus urban) communities, have temporary (versus permanent) jobs, be married, and have a low level of education. After controlling for demographic differences using multivariate logistic regression models, homelessness was independently associated higher scores in the FES-CV intellectual-cultural orientation, organization, achievement orientation, and control subscales and with lower scores in the FES-CV cohesion, moral-religious emphasis, independence, and active-recreational orientation subscales.

Conclusions: After controlling for sociodemographic factors, certain aspects of the family environment are associated with being homeless among patients with schizophrenia in China. Further work is needed to identify interventions that can reduce the risk of homelessness in high-risk individuals.

Key words: homelessness; schizophrenia; family environment; China

1. Introduction

Homelessness among individuals with schizophrenia in China is much less common than in high-income countries but it is, nevertheless, is an increasingly important problem in the country, partly due to increased mobility of the population (so family members are dispersed) and partly due to the one-child per family policy (so there are fewer relatives available to care for a mentally ill family member). The limited number of studies about this issue in mainland China focus on the socio-demographic characteristics and physical health of the homeless mentally ill and on their difficulties in obtaining necessary psychiatric treatment.[1] To the best of our knowledge, there has been no research about the original family environment of homeless individuals with schizophrenia in China, a factor that potentially contributes to their homelessness. Noxious family environments and schizophrenic symptoms can exacerbate each other leading to the ejection or departure of the ill individual; in the absence of other

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family members who can care for the individual or government-supported half-way houses, the ill individual then becomes homeless and, thus, is less likely to receive appropriate treatment.\(^2\) Research about the characteristics of the original families of individuals with mental disorders who become homeless is needed to help characterize high-risk families who should become the focus of preventive interventions aimed at reducing homelessness among patients with serious mental illnesses.

In this study we define homelessness as a period of 7 days or greater in which a person with a confirmed diagnosis of schizophrenia has no place to stay, no source of income, and no social or family support. The study compares the sociodemographic and family characteristics of individuals with schizophrenia who did and did not meet this definition of homelessness.

## 2. Methods

### 2.1 Subjects

The recruitment of participants for this study is shown in the flowchart in Figure 1. All participants were from the Fifth Ren Min Hospital of Xiangtan, the hospital that is the designated center for the treatment of homeless mentally ill in Xiangtan City, a municipality in Hunan Province with a population of 2.8 million, 72% of whom are rural residents. Between April 2011 and April 2014, a sample of 2439 consecutively admitted homeless inpatients and a convenience sample of 2033 non-homeless inpatients with a diagnosis of schizophrenia were screened for enrollment in the study. Among the homeless individuals, 212 (8.7%) refused to participate, 182 (7.5%) were excluded, and 189 (7.7%) had incomplete data, leaving 1856 (76.1%) who completed the study questionnaire. In the non-homeless group, 198 (9.7%) refused, 84 (4.1%) were excluded, and 23 (1.1%) had incomplete data, leaving 1728 (85.0%) who completed the study questionnaire.

All participants met the following inclusion criteria: a) met the diagnostic criteria for schizophrenia according to the Chinese Classification of Mental Disorders (CCMD-3)\(^3\); b) 18 to 60 years of age; c) had a score of 35 or lower on the Brief Psychiatric Rating Scale (BPRS)\(^4\) (indicating that they were clinically remitted) at the time of the assessment; d) were able to take care of themselves at the time of assessment; e) could comprehend and complete the study questionnaire; and f) signed the informed consent form for the study. Based on their medical records, participants who had organic brain disease, severe physical illness, psychoactive substance dependence, mental retardation, mood disorders, or personality disorders were excluded. ‘Homeless’ was defined as living on the streets, public places, cars, deserted buildings, and so forth, for at least 7 days prior to the index admission.\(^4\) All homeless participants were brought to the hospital by the police; the police were usually notified about the individuals

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**Figure 1. Flowchart of the study**

- **Convenience sample of 2439 from 3251 homeless individuals with schizophrenia who were admitted to the inpatient unit of the Fifth People’s Hospital of Xiangtan, Hunan between April 2011 and April 2014**
  - 212 refused to participate
  - 2227 participated in the survey
  - 182 were excluded:
    - 15 had organic brain disease
    - 48 had severe physical illness
    - 23 had psychoactive substance dependence
    - 51 had mental retardation
    - 24 had mood disorder
    - 21 had personality disorder
  - 189 had incomplete or unclear data
  - **Homeless group: 1856 questionnaires included in the statistical analysis**

- **Convenience sample of 2033 non-homeless individuals with schizophrenia receiving inpatient treatment at the Fifth People’s Hospital of Xiangtan between April 2011 and April 2014**
  - 198 refused to participate
  - 1835 participated in the survey
  - 84 were excluded:
    - 5 had organic brain disease
    - 18 had severe physical illness
    - 10 had psychoactive substance dependence
    - 19 had mental retardation
    - 19 had mood disorder
    - 13 had personality disorder
  - 23 had incomplete or unclear data
  - **Non-homeless group: 1728 questionnaires included in the statistical analysis**
by local community members and unable to rapidly locate the individual's family, so they transported them to the hospital. The non-homeless group consisted of inpatients with schizophrenia who were not homeless at the time of admission.

2.2 Assessment instrument
The Family Environment Scale (FES) was developed by Moss and colleagues in 1981. FES has been used widely in Western countries to assess the change in family environment before and after family interventions. This study used the third version of the Chinese version of the scale (FES-CV) which had good reliability across patient ratings and family-member ratings when assessing family environment, and had good internal consistency and validity. There are 90 true or false questions in FES-CV, divided into ten 9-item subscales that assess different aspects of the family environment.

The internal consistency (Cronbach’s α) of the ten FES-CV subscales was as follows: cohesion 0.75, expressiveness 0.42, conflict 0.67, independence 0.24, achievement orientation 0.55, intellectual-cultural orientation 0.64, active-recreational orientation 0.57, moral-religious emphasis 0.33, organization 0.63, and control 0.53. The definition of each subscale is as follows. Cohesion: the degree of commitment, help and support the family members provide for each other. Expressiveness: how much family members are encouraged to openly express their emotions. Conflict: the extent to which family members openly express anger and disagreements. Independence: the amount of self-esteem, confidence, and autonomy that family members have. Achievement orientation: the degree to which common activities (for example, going to school or working) are considered measures of achievement and the degree of focus on competition-oriented activities. Intellectual-cultural orientation: the level of interest of family members in political, societal, intellectual, and cultural activities. Active-recreational orientation: the degree of family members' participation in social and recreational activities. Moral-religious emphasis: the emphasis on ethics, religion, and value. Organization: the extent to which family activities and responsibilities are organized and structured. Control: the importance of following family rules and procedures to arrange family life.

The items all have dichotomous responses so the range in subscale scores is 0 to 9, with higher scores indicating a greater tendency to have the trait considered by the subscale.

2.3 Assessment procedure
The FES-CV is a self-report scale that takes less than 30 minutes to complete. This was administered an average of 50 days after the index admission (while the patients were still inpatients). Before the administration of the instrument, trained psychiatrists provided participants with standardized instructions about how to complete the scale. For about 100 illiterate participants in each group, trained psychiatrists read the FES-CV and completed the scale based on respondents’ answers. On the same day that the patient completed the FES-CV, a trained clinician administered the Brief Psychiatric Rating Scale (BPRS).

2.4 Statistical analysis
All data analyses were conducted using SPSS 17.0. FES-CV subscale scores were continuous measures that approximated normal distributions, so the mean scores of the two groups (i.e., homeless and non-homeless patients) were compared using t-tests. Categorical variables were compared using chi-squared tests.

In order to explore variables that were independently associated with homelessness, two unconditional multivariate logistic regression models were performed. The first model used a backward stepwise procedure to identify socio-demographic variables independently associated with homelessness. The nine socio-demographic variables considered included age, gender (male v. female), occupation (stable job, temporary job, and unemployed), residence (urban vs. rural residence), place of origin (Xiangtan vs. other), marital status (unmarried, married, and divorced or widowed), level of educational (high school or above, middle school, and primary school or below), ethnicity (Han versus other), and severity of psychotic symptoms at the time of the assessment of family functioning (as assessed by the total BPRS score). The second logistic regression entered all 10 subscale scores of the FES-CV after forcing all significant variables from the first model into the expanded model; the goal was to determine which family environment variables were associated with homelessness after adjusting for socio-demographic variables. In the second analysis two variables (residence and place of origin) had to be dropped from the model due to collinearity. The statistical significance level was set at p<0.05 (two-sided).

3. Results
3.1 Comparison of demographic variables and FES-CV subscale scores
The basic characteristics of participants are shown in Table 1. The gender distribution was similar in both groups and the severity of psychiatric symptoms at the time of the FES-CV evaluation was similar between the two groups, but all the other characteristics were significantly different between the groups. Compared to the non-homeless group, those in the homeless group were older and they were more likely to be rural residents, from outside of Xiangtan, to have a lower level of education, and to be married. The proportion of individuals who had temporary jobs was higher in the homeless group, but the proportion of unemployed individuals was higher in the non-homeless group.

As shown in Table 2, with the exception of the expressiveness subscale, all of the FES-CV subscale scores differed significantly between the two groups.
Table 1. Comparison of basic characteristics of two groups

| characteristics                                      | homeless group (n=1856) | non-homeless group (n=1728) | statistic | p   |
|------------------------------------------------------|-------------------------|-----------------------------|-----------|-----|
| male [n (%)]                                         | 1216 (65.5%)            | 1088 (63.0%)                | $\chi^2=2.54$ | 0.111 |
| mean (sd) age                                        | 39.1 (7.9)              | 36.5 (8.7)                  | $t=9.49$  | <0.001 |
| rural residency [n (%)]$^a$                          | 1598 (86.6%)            | 1215 (70.3%)                | $\chi^2=140.68$ | <0.001 |
| from Xiangtan [n (%)]                                | 704 (37.9%)             | 1536 (88.9%)                | $\chi^2=991.44$ | <0.001 |
| Educational level [n (%)]                            |                         |                             |           |     |
| primary school or illiterate                         | 1765 (95.1%)            | 912 (52.8%)                 | $\chi^2=852.45$ | <0.001 |
| middle school                                        | 64 (3.4%)               | 413 (23.9%)                 |           |     |
| high school or above                                 | 27 (1.5%)               | 403 (23.3%)                 |           |     |
| Marital status [n (%)]                               |                         |                             |           |     |
| single                                               | 1152 (62.1%)            | 1152 (66.7%)                | $\chi^2=16.78$ | <0.001 |
| married or remarried                                 | 448 (24.1%)             | 320 (18.5%)                 |           |     |
| divorced or widowed                                  | 256 (13.8%)             | 256 (14.8%)                 |           |     |
| Occupation [n (%)]                                   |                         |                             |           |     |
| stable job                                           | 320 (17.2%)             | 256 (14.8%)                 | $\chi^2=113.23$ | <0.001 |
| temporary job                                        | 960 (51.7%)             | 640 (37.0%)                 |           |     |
| unemployed                                           | 576 (31.0%)             | 832 (48.1%)                 |           |     |
| non-Han ethnicity [n (%)]                            | 190 (10.2%)             | 59 (3.4%)                   | $\chi^2=64.43$ | <0.001 |
| mean (sd) total BPRS score at time of evaluating family functioning | 27.9 (2.8)               | 28.0 (3.2)                  | $t=1.00$  | 0.317 |

BPRS, Brief Psychiatric Rating Scale
$^a$ there were 10 homeless patients for whom the location of residence was not determined so the denominator for this measure in the homeless group was 1846.

Table 2. Comparison of subscale scores of the Chinese version of the Family Environment Scale (FES-CV) between homeless and non-homeless inpatients with schizophrenia

| subscale                              | homeless group (n=1856) mean (sd) | non-homeless group (n=1728) mean (sd) | t       | p     |
|---------------------------------------|-------------------------------------|---------------------------------------|---------|-------|
| Cohesion                              | 5.34 (2.50)                         | 5.98 (2.47)                           | 7.67    | <0.001|
| Expressiveness                        | 4.72 (1.59)                         | 4.72 (1.98)                           | 0.03    | 0.975 |
| Conflict                              | 4.48 (1.48)                         | 5.31 (1.62)                           | 16.08   | <0.001|
| Independence                          | 5.00 (1.49)                         | 5.91 (1.47)                           | 18.37   | <0.001|
| Achievement orientation               | 5.45 (1.94)                         | 5.16 (2.50)                           | 3.91    | <0.001|
| Intellectual-cultural orientation     | 4.03 (2.31)                         | 3.58 (2.31)                           | 5.83    | <0.001|
| Active-recreational orientation       | 4.03 (1.83)                         | 4.43 (2.37)                           | 5.69    | <0.001|
| Moral-religious emphasis              | 4.48 (1.48)                         | 5.33 (1.60)                           | 16.52   | <0.001|
| Organization                          | 6.03 (1.96)                         | 5.21 (2.19)                           | 11.86   | <0.001|
| Control                               | 4.52 (1.73)                         | 3.84 (2.29)                           | 9.97    | <0.001|
Compared to respondents in the non-homeless group, those in the homeless group reported that their original families had greater achievement orientation, intellectual-cultural orientation, organization, and control; they also reported that their original families had lower levels of cohesion, conflict, independence, active-recreational orientation, and moral-religious emphasis.

### 3.2 Logistic regression of demographic and family environment risk factors for homelessness in patients with schizophrenia

To identify variables independently associated with homelessness, the aforementioned demographic variables were entered into a logistic regression model, the results of which are shown in Table 3. Eight of the nine variables considered (in Table 1) were significant in the multivariate model. Among this sample of 3574 inpatients with schizophrenia, being homeless at the time of admission was associated with older age, female gender, more severe psychiatric symptoms (at the time of assessing family functioning), rural residence, low educational achievement, residence outside of Xiangtan, being marriage or divorced, and working on a temporary job. There were three differences between the univariate and multivariate results: gender (being female) and severity of psychiatric symptoms became significantly related to homelessness after adjustment for other demographic variables while ethnicity was no longer associated with homelessness after adjustment for the other variables.

The key question for this paper is the extent to which prior family environmental factors are associated with homelessness after controlling for the demographic differences between homeless and non-homeless individuals with schizophrenia. To assess this, the results of all ten FES-CV subscale were entered into a logistic regression model after adjusting for six of the eight socio-demographic variables that were significantly associated with homelessness (shown above). Two variables, urban versus rural residence and living outside of Xiangtan, could not be entered as covariates in the model because of collinearity. As shown in Table 4, with the exception of the conflict and expressiveness subscales, after adjustment of socio-demographic factors all of the other 8 subscale scores were significantly associated with homelessness. Specifically, homelessness was associated with greater organization, intellectual-cultural orientation,

| Variable | odds ratio (OR) | 95% confidence interval of OR |
|----------|----------------|-----------------------------|
| Age      | 1.29           | 1.25 1.32                   |
| Female   | 4.82           | 3.56 6.55                   |
| BPRS total score | 1.84  | 1.68 2.01                   |
| Lives in rural community | 2.74  | 2.00 3.75                   |
| Lives outside of Xiangtan | 69.12 | 48.99 97.53                |
| Educational level |
| primary school illiterate | 1.00 | --- ---                     |
| middle school | 0.14 | 0.10 0.21                   |
| high school or above | 0.02 | 0.01 0.03                   |
| Marital status |
| never married | 1.00 | -- --                       |
| married or remarried | 2.68 | 2.01 3.58                   |
| divorced | 21.61 | 14.21 32.85                 |
| Occupation |
| stable job | 1.00 | -- --                       |
| temporary job | 6.82 | 4.58 10.19                  |
| unemployed | 1.13 | 0.79 1.63                   |

BPRS, Brief Psychiatric Rating Scale

10 individuals whose residency was not determined were excluded from the analysis

*one other variable considered but dropped out of the stepwise analysis was ethnicity (p=0.125)

| Variable | odds ratio (OR) | 95% confidence interval of OR |
|----------|----------------|-----------------------------|
| Coherence | 0.59 | 0.54 0.65                 |
| Expressiveness | 1.01 | 0.93 1.10               |
| Conflict | 0.48 | 0.35 1.66                 |
| Independence | 0.44 | 0.38 0.50             |
| Achievement orientation | 1.31 | 1.18 1.46                |
| Intellectual-cultural orientation | 1.86 | 1.68 2.06              |
| Active-recreational orientation | 0.62 | 0.57 0.67                |
| Moral-religious emphasis | 0.72 | 0.65 0.81                |
| Organization | 1.98 | 1.80 2.19               |
| Control | 1.12 | 1.03 1.23                 |

*Adjusted for age, gender, severity of psychiatric symptoms at time of evaluation, education, marital status, and occupational status. Two variables (urban versus rural residence, and living outside of Xiangtan) could not be included in the model because of collinearity with included variables
achievement orientation, and control; homelessness was also associated with lower levels of independence, cohesion, active-recreational orientation, and moral-religious emphasis. After adjustment the conflict subscale score was no longer significantly associated with homelessness, but the results for all the other subscales were similar to those seen in the univariate analysis (Table 2).

4. Discussion
4.1 Main findings
This study identified a large sample of homeless individuals with schizophrenia and compared them to a sample of individuals with schizophrenia who were not homeless. There were substantial differences in the socio-economic characteristics of homeless and non-homeless patients and in the functioning of their original families — as reported by the patients after their acute psychotic symptoms had resolved.

Homelessness was equally common in men and women but after adjusting for other demographic variables women with schizophrenia were at greater risk of homelessness than men. As expected, homelessness was more common in individuals from rural communities (where social support services are limited), among those who wander away from their communities (i.e., those not from Xiangtan municipality), and among those with limited education (who are less able to mobilize social supports). Homelessness was also associated with greater age; its unclear why this is the case, but it may be that older patients have ‘burned their bridges’ with relatives and, thus, end up on the streets. Those who had never married (and, thus, were probably still living with parents) were less likely to be homeless while those who were currently married were more likely to be homeless. Finally, patients who reported having temporary employment (i.e., those with no stable income) were more likely to be homeless, while those who reported being unemployed were less likely to be homeless; this may be because formally unemployed individuals (typically only urban residents) may have access to social welfare benefits not available to those in temporary jobs.

Our study found that even after controlling for these socio-demographic variables, family environment — as assessed by the patients themselves using the FES-CV after their acute symptoms resolved — is significantly associated with homelessness among patients with schizophrenia. This finding is consistent with a substantial body of research which has found that family environment, particularly the cohesion and organization of the family, is associated with the onset and course of serious mental illness. Patients with schizophrenia grow up in noxious family environments which contribute to the emergence and development of their illness. Harsh physical and verbal punishment from family members have been associated with the severity of symptoms in individuals with schizophrenia. Addressing these family problems using comprehensive bio-psycho-social interventions can reduce the severity of patients’ symptoms, help the patient maintain a stable mood, and prevent relapse.

One of the 10 subscales assessed by the FES-CV, the conflict subscale, generated different results in the univariate and multivariate analysis — family conflict was less important in the self-reports of homeless patients than in the self-reports of non-homeless patients, but this difference disappeared after adjustment for the sociodemographic factors. The remaining 9 subscales were consistent in the univariate and multivariate analyses, indicating that demographic factors did not strongly influence the results. As reported by the patients themselves, families in which patients with schizophrenia become homeless have a stronger a) intellectual-cultural orientation, b) achievement orientation, c) organization, and d) control; one possible interpretation for this is that patients with serious mental illnesses are less able to meet the high expectations of such families and, thus, are more likely to be extruded from the families or to leave on their own. Patients with schizophrenia who become homeless also report that their families have weaker a) cohesion, b) moral-religious emphasis, c) independence, and d) active-recreational orientation; one possible interpretation for this is that such families are generally less supportive of individual family members with problems. However, some of the constructs considered by the FES-CV subscales are not fully consistent with Chinese cultural norms (e.g., the importance of ‘independence’ and a ‘moral-religious emphasis’) so one must be cautious in interpreting these subscale results. Efforts are needed to identify more culture-sensitive measures of family functioning in China.

4.2 Limitations
There are several limitations that need to be considered when interpreting these results. This was a large inpatient sample from one location in China; we are unable to determine how representative this sample is of all homeless individuals with schizophrenia in China. The 7-day duration of homelessness used as the operational definition of homelessness in this study was chosen arbitrarily; it may be too short to identify the chronically homeless subgroup of patients who are most in need of social services. The assessment of family function was based on a self-completion instrument completed by individuals who had been hospitalized for two to three months at the time they completed the instrument and, in the case of the homeless group, may have been separated from their family for some time prior to hospitalization; this could introduce substantial recall bias. Moreover, all respondents had schizophrenia so their interpretation of family functioning may have been affected by their illness. Other factors that may affect homelessness among mentally ill individuals such
as the personality and coping skills of the patients, and
the number, age, and socio-economic status of the
patients’ close relatives were not considered. The very
large sample resulted in many small but statistically
significant differences between the groups; one needs
to be cautious to avoid over-interpreting these small
differences. Finally, the evaluation of family functioning
was based on a scale for which some of the subscales
have weak internal consistency: previous studies with
the FES-CV[6] have shown that the Cronbach alpha values
for the expressiveness, independence, achievement
orientation, active-recreational orientation, moral-
religious emphasis, and control subscales are all below
0.60, indicating that the items in these subscales are not
assessing a distinct construct. Future research about
this important topic will need to address these complex
issues.

4.3 Implications
This study identifies both demographic characteristics of
patients and characteristics of patients’ families that are
independently associated with homelessness among
individuals with schizophrenia. These results need to
be confirmed by simultaneously obtaining information
on family function from patients’ family members and
by using other measures of family functioning. The next
step will be to see if these retrospectively identified
risk factors for homelessness can prospectively predict
which patients will become homeless. If they can, then
clinicians must develop and test interventions aimed at
reducing this very negative outcome (i.e., homelessness)
for persons with serious mental disorders.

Conflict of interest
The authors declare that they have no conflict of interest.

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Ethics review
The study was approved by the Ethics Committee of The
Fifth Ren Min Hospital of Xiangtan.

Informed consent
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流浪与非流浪精神分裂症患者的家庭环境比较

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背景：流浪行为逐渐成为中国严重精神疾病患者的一
个重要问题。

目的：发现在精神分裂症患者中与流浪行为相关的家
庭特征因素。

方法：本研究被试人员都来自湖南省湘潭市，包括
1856 例具有流浪行为的精神分裂症患者（其定义为连
续 7 天没有地方居住或无照顾者）和 1728 例无流浪行
为的精神分裂症患者。所有被试人员在急性精神病性
症状得到缓解后，自行填写中文版家庭环境量表（Family
Environment Scale-Chinese Version，FES-CV）。

结果：与无流浪行为的患者相比，有流浪行为的患者
更为年长，并且更可能不是本地人（即从湘潭以外的
地方来的），更可能是农村居民（相对于城市），更
可能是临时工（相对于固定职业），多为已婚，以及
教育程度偏低。本研究采用逻辑回归模型并控制人口
学差异，发现流浪行为分别与 FES-CV 知识性、组织性、
成功性和控制性分量表的较高评分独立相关，并分别
与 FES-CV 凝聚力、道德宗教观、独立性、和娱乐性分
量表的较低评分独立相关。

结论：即使控制了社会人口学因素后，家庭环境的某
些方面与精神分裂症患者的流浪行为相关，并需要进一
步研究以确定可以减少高风险人群的流浪
行为风险的干预措施。

关键词：流浪行为；精神分裂症；家庭环境；中国

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There are two errors in the print version of the article:
Xie MM, Jiang WH, Yang HB. Efficacy and safety of the Chinese herbal medicine shuganjieyu with and without adjunctive repetitive transcranial magnetic stimulation (rTMS) for geriatric depression: a randomized controlled trial. Shanghai Archives of Psychiatry. 2015; 27(2): 103-110. doi: http://dx.doi.org/10.11919/j.issn.1002-0829.214151

In the second sentence of the first paragraph of section ‘2.1 Sample’ (last line of left column on page 104), the listed sample size was incorrect: ‘Study participants were 79 patients with geriatric depression...’ should read ‘Study participants were 65 patients with geriatric depression...’.

In the second sentence of the first paragraph of section ‘4.1 Main findings’ (third line of the left column on page 108), the numbers in parentheses representing subjects who completed the trial were incorrect: ‘Ninety-four percent (65/69) of the enrolled subjects completed the 6-week trial.’ Should read ‘Ninety-four percent (61/65) of the enrolled subjects completed the 6-week trial.’

The online version of the article is correct.