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Original Article

Quality of life and negative moods of females enrolled in compulsory detoxification in China

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Abstract: Female's psychiatric disorder can put one at risk for substance abuse. This study aims to assess the quality of life and negative mood states in the women under isolated compulsory detoxification and to identify their major concerns. In this study, short form-36 (SF-36) and designed scale (NMS) were developed to assess QOL and negative moods on addicts and general people. In-depth interviews were conducted for complements. The results indicated that statistically significant differences could be found in demographic characteristics between addict and general groups. The former showed lower education level, unstable employment and marital status. The QOL of addicts was significantly lower than the average QOL of the general population in domains of BP, GH, VT, SF, RE and MH ($P<0.01$). No significant difference was found in the domains of PF and RP. The scores of negative mood on drug group were significantly lower in eight of ten items compared with the score of general persons. The scores of addicts' negative moods were significantly correlated with eight domains of SF-36 ($P<0.01$). Female drug addicts' major concern was family responsibilities, followed by the hopelessness and social acceptation. In conclusion, QOLs of female addicts were poor. They had strong negative moods and concerns. Multiple psychiatric approaches, especially family supports should be adopted to lower the psychiatric diseases and relapse.

Keywords: Female, addiction, compulsory detoxification, quality of life, negative mood

Introduction

Evidences have demonstrated that the females can sometimes have more severe psychiatric symptoms than the males in relation to illicit drug dependence [1, 2]. One study in San Diego [3] has shown the higher prevalence of depressive symptoms in female methamphetamine users than in male methamphetamine users. Similarly, researchers in Taiwan have found that 43.4% of female methamphetamine users suffer from psychiatric problems, 11.0% were diagnosed with mood disorders, and 35.9% demonstrate suicidal behavior. In contrast, only about 31.1% men had psychiatric problems, and 8.9% and 5.6% of the man with mood disorders and suicidal behavior, respectively [4]. Thus, probably vulnerability on the female drug users suggests the necessity of attention.

As is known, drug addiction always brings psychosocial problems [5], such as job loss, legal problems, and relationship difficulties. The theoretical and empirical literature proved that, for substance abusers, mood distress is known to increase the craving for nicotine, alcohol and heroin in drug abstinence subjects [6-9]. Among the psychosocial varieties, the drug addicts' family plays an important role in the addictive behavior [10]. In Chinese, the family is considered as an extension of the self and plays an important role in most life decisions, especially for a Chinese woman. Therefore, for a Chinese female drug abuser, without a supportive family environment, these individuals often suffer from serious stress and depression. These stress and depression have contributed to the deterioration of patients' subjective well-being (quality of life, QOL), and can put one at risk for substance use [11].

QOL is the subjective perception of the impact of health status on physical, psychological, and social functioning and well-being [12, 13]. This method can assess not only individuals' body health but also their mental status in general.

Several studies involving quality of life in the field of drug dependence have been reported [14-17]. Research had shown that alcohol dependent persons generally have a lower QOL as compared to the general population [18]. Other authors have also demonstrated a negative effect of psychotropic drug use on QOL [19-21]. Drug users' scores for physical health are similar to other populations with chronic problems, but their mental health scores are usually much lower [22].

A person who uses drugs could be detained in a compulsory detoxification center for 1 to 3 years in China [23]. In the mandatory treatment center, medical detoxification treatment, physical excise, moral and legal education, drug/health education, and occupation skills training are commonly provided for the addicts to increase their mental status and decrease their possibility of relapse. Unfortunately, even with treatment, the relapse rate of drug abuse is still as high as 70% to 95% according to different sources [24, 25]. Considering the more crucial role for the family and for the children, drug problem in females causes a more serious outcome than the males in relation to illicit drug use.

The present study was conducted to demonstrate the psychiatric state about quality of life and negative moods in the women under isolated compulsory detoxification, with family-related varieties being especially paid attention. We hope our findings will be useful to provide appropriate psychosocial reports and to alleviate the mood vulnerability for women in detoxification, and eventually to protect against relapse.

Materials and methods

Study design and participants

This study was conducted in Henan province between July 2013 and December 2014. The data about drug abusers were collected in the compulsory detoxification center for females, and the data about the general women without drug problem for contrast were collected in rural and urban Henan province. Both quantitative and qualitative methods were adopted in this study. The substances being abused by participants included heroin, other opiates/analgesics, amphetamines, cocaine, or hallucinogens. All the participants had to meet the following criteria, including (1) aged 18 or above, (2) a history of drug use, (3) physical abstinence by urine tests, and (4) willingness to participate in the study.

Data collection

The questionnaires were intended to be self-administered for those participants who had completed junior high school, and support from well-trained interviewers was provided to avoid misinterpretation of the questions. Otherwise, the questionnaires were administered via face-to-face interviews. Each questionnaire took about 15 to 20 min to complete.

The participants were assured that the study was voluntary and their decision to enroll would not affect their access to services. Given the obvious vulnerability of these respondents, we took great care to ensure the process was unthreatening and sensitively conducted. The interviews were undertaken at a suitable private location (e.g., a conference room or an office), and the officers of the detoxification center were not allowed to stand by or listen to the interviews. Personal information collected from participants was kept confidential and anonymous, and the data were used only for this study. Written informed consents were obtained from participants before the data collection. The study procedures and materials were approved by the Institutional Review Boards of the Sichuan University.

Measures

A battery of questionnaires was designed and discussed by the researchers, which consisted of three parts, including demographic information, QOL, and negative moods. Demographic variables included gender, age, ethnicity, education level, occupation, marital status, and the duration of present detoxification in this study. In addition to demographic characteristics, the QOL and negative mood were measured by measurement scales, as detailed below.

Quality of life

In this study, Medical Outcomes Study Short-Form 36 (SF-36) was used to evaluate the QOL of all the participants with or without drug problem, which has been among the most widely

tested in cross-cultural contexts [26, 27]. The SF-36 measures the function and well-being from eight domains, including physical functioning (PF), role limitations due to physical problems (RP), bodily pain (BP), general health perceptions (GH), energy and vitality (VT), social functioning (SF), role limitations due to emotional problems (RE), and mental health (MH). These eight domains can be further summarized into a physical component summary (PCS) and a mental component summary (MCS). The raw score for each domain is usually transformed to a scale of 0~100, with higher scores indicating 'better' QOL.

Negative moods scale (NMS)

Negative mood status was tested using the questionnaire designed by the research group. To exclude any ambiguity that might occur in the investigation, researchers discussed the questionnaires item-by-item. At the beginning of the study, nine items were used to assess the negative moods according to its intensity. However, after consultation with two professionals, one of these items was deleted because the item, 'having the idea of suicide', might induce patients to think about suicide. Considering that the family plays an important role in the addict's recovery, especially for woman, or that "the family can consciously or unconsciously sabotage the addict's recovery process", as Daley's [28] viewpoint, participants' opinions about their families were specially paid attention. When we designed the items about the family, the 40-item "Family functional Scale" [29-31] was our reference. Additionally, the internalized shame was assessed by adapting the scale designed by Herek and Capitanio [32]. The subscale has been validated in Chinese population in the previous study [33]. Eventually, ten items were kept to ask about participants' negative feelings in the previous 4 weeks. Response categories ranged from 1 (strongly disagree) to 5 (strongly agree) [34]. The participants evaluated how true each statement was. The subscale was reverse coded so that the lower score indicated the higher level of negative mood.

In-depth interviews

Eight participants being detained were chosen from the pool of participants who had completed the questionnaire survey based on their willingness to be further interviewed. Meanwhile, four health workers were selected for the in-depth interviews from the officers of the detoxification center who had extensive experience with drug abusers. Information about the experiences and major concerns with drug addiction was collected. Some details of QOL may have been uncovered from the interviews that could not be reflected by SF-36.

The interview was semi-structured, lasted on average for 45 min, and was conducted in a private room by a same-sex interviewer. Interviewees were encouraged to talk freely about their concerns. A range of areas were explored, including reasons for starting to drug abusing, the 'culture', and suggestions for what types of help would help to prevent relapse on release.

Statistical analysis

The EpiData version 3.02 was adopted to set up the data. All analyses were performed using SPSS version 21.0. All of the statistical tests that we reported were two sided, and statistical significance was implied at $P \leq 0.05$.

Questionnaire items were coded and scored. The QOL of participants was compared with that of the general population. The continuous data, expressed as the means and standard deviations, were analyzed using a t-test, and the frequencies or proportions of the categorical data were analyzed using Chi-square test or Fisher's exact test to compare the baseline characteristics and medical outcomes between the treatment projects. Internal consistency (Cronbach's α) and test-retestreliability (intraclass correlation) were tested. Factor analysis and item-subscale correlation (Peason's r) analysis were undertaken to test the construct validity. The correlation between QOL and negative moods was also examined. Qualitative data were analyzed manually. Themes regarding experiences and major concerns of patients were extracted and categorized.

Results

Demographic information of participants

A total of 181 and 1393 valid questionnaires were obtained from the compulsory detoxification center and outside, respectively. The over-

Table 1. Basic demographic characteristics of the female participants

	Drug Addicts (%) (N=181)	General Inhabitants (%) (N=1363)	X^2	*P*
Age				
Mean (SD)	47.31 (14.649)	44.21 (17.152)	2.624*	0.009
≤30	73 (40.3)	733 (53.8)	20.886	0.000
31-40	88 (48.6)	430 (31.5)		
≥41	20 (11.)	200 (14.7)		
Ethnicity				
Han	169 (93.4)	1268 (93.0)	0.137	0.712
Minority	12 (6.6)	95 (7.0)		
Marital status				
Never married	7 (3.9)	249 (18.3)	25.308	0.000
Married/living with partner	161 (89.6)	1013 (74.3)		
Separation	11 (7.2)	101 (7.4)		
Education level				
Illiterate	83 (45.9)	293 (21.5)	87.056	0.000
Primary school	68 (37.6)	378 (27.7)		
Junior high school	22 (12.2)	334 (24.5)		
Senior high school	4 (2.2)	204 (15.0)		
College degree or above	4 (2.2)	154 (11.3)		
Occupation (in the last 3 years)				
Unemployed	113 (62.4)	634 (46.5)	16.288	0.000
Part-time job	63 (34.8)	667 (48.9)		
Full-time job	5 (2.8)	62 (4.5)		
Duration of detoxification (months)				
1-6	49 (27.1)	-	-	-
7-12	114 (63.0)	-		
>12	18 (9.9)	-		

*: *t* value.

all statistical tests (t-test or Chi-square test) about demographic information of participants from two groups were summarized in **Table 1**. The mean age of the participants in and out of the compulsory detoxification center was 47.31 (14.649) and 44.21 (17.152) years, respectively. The table showed statistically significant differences in terms of education level, employment status (in the last three years), and marital status. Only 30 (16.6%) addicted participants had completed junior high school education, and on the contrary, 692 (50.8%) had completed junior high school education in general group. There were 113 (62.4%) and 63 (34.8%) females with drug problems had no job or part-time job in the last 3 years. In the general group, 634 (46.5%) women were unemployed and 667 (48.9%) were undergoing part-time jobs. For 63.0% (N=114) of the drug group, the time of duration in the detoxification center were 7-12 months.

Reliability and validity of SF-36 and NMS

Reliability of SF-36 in this study was acceptable. The Cronbach's α coefficient of the eight domains of SF-36 ranged from 0.65 to 0.90. Test-retest reliability was moderate, with intraclass correlation coefficients of the eight domains ranging from 0.64 to 0.80. All items had higher correlation coefficients with their underlying domains than with others. Factor analysis extracted five factors that could explain 73.05% of the total variance. The hypothesized structure of SF-36 was confirmed by the factor analysis. SF-36 discriminated successfully between drug addicts and the general population. The correlation coefficients of eight domains of SF-36 with negative moods were

Table 2. Scores of SF-36 and NMS for all the participants

	Drug addicts (N=181)	General residents (N=1363)	t	*P*
	Mean (SD)	Mean (SD)		
SF-36				
PF	71.892 (16.843)	70.456 (16.678)	1.087	0.277
RP	79.779 (13.853)	80.844 (12.600)	1.055	0.291
BP	83.980 (21.462)	87.959 (18.847)	2.625	0.009
GH	61.222 (18.638)	65.885 (18.375)	3.194	0.001
VT	86.464 (18.293)	91.390 (15.747)	3.876	0.000
SF	84.583 (17.384)	87.867 (16.069)	2.551	0.011
RE	83.159 (19.335)	88.793 (18.397)	3.823	0.000
MH	81.733 (21.433)	87.729 (10.315)	3.637	0.000
NMS				
1. My life is meaningless	86.464 (18.293)	91.390 (15.747)	3.876	0.000
2. My family hates me	81.733 (24.433)	87.829 (20.315)	3.637	0.000
3. Other people (without drug problem) avoid to contact me	83.978 (21.462)	87.95 (18.847)	2.625	0.009
4. I am abandoned by society	61.222 (18.638)	65.885 (18.375)	3.194	0.001
5. I am satisfied with my social relationship	71.892 (16.843)	70.456 (16.678)	1.087	0.277
6 I am abandoned by my family	84.583 (17.384)	87.867 (16.069)	2.551	0.011
7. I am satisfied with my family relationship	83.195 (19.334)	88.793 (18.397)	3.823	0.000
8. I feel guilty for not fulfilling my family duty	79.779 (13.853)	80.844 (12.600)	1.055	0.291
9. I am a disgrace to my family	78.283 (16.262)	83.237 (14.176)	4.327	0.000
10. My future life will get better	79.907 (13.266)	81.990 (11.968)	2.166	0.030

PF, physical functioning; RP, role limitations due to physical health problems; BP, bodily pain; GH, general health perceptions; VT, vitality; SF, social functioning; RE, role limitations due to emotional problems; MH, mental health. SD, standard deviation.

moderate. Two-week test-retest reliability was acceptable, and the intra-class correlation coefficient was 0.78 (n=40).

QOL and NMS scores for participants of drug addicts and general residents

Table 2 shows the SF-36 and NMS scores of all the participants. Statistical differences were seen in the domains associated with mental function than in the domains indicating physical health. Patients who were receiving rehabilitation experienced worse QOL conditions in the domains of BP, GH, VT , SF, RE and MH than patients who were not receiving ($P<0.01$ or $P<0.05$, t-test). No significant differences were found in the domains of PF and RP. For the physical aspect, the domain of body pain (BP) appeared difference between the two groups ($P<0.05$). Researchers thought that even though the participants in the detoxification center had been away from drugs for several months, but the damage of drugs still existed, and the physical health of them had not been improved much.

Scores about negative mood of participants with drug problems were significantly lower in eight domains compared with the mood score of general residents in Henan province. Addicted females showed very strong negative mood trends. They had much lower life satisfaction, feeling that life was meaningless (Item 1). They also felt helpless and abandoned by society their families (Item 4 and Item 6). Furthermore, the females felt the society and their family hate them and they thought themselves were the disgrace for the family (Item 2 and Item 9). The drug group participants appeared to have no hope for the future (Item 10). Possibly, the repeat relapse of drug dependence could diminish their wish for their abstinence and for the future life (All *P* values were beneath 0.05). Item 5 (I am satisfied with my social relationship, $P>0.05$) and item 8 (I feel guilty for not fulfilling my family duty, $P>0.05$) did not showed statistical difference between the two groups. For these two items, researchers explained that they are both the questions to ask the feeling of modern social stress. A person who has no drug problem could also not

Table 3. Correlation of family-related negative mood items and domains of SF-36

Item	PF	RP	BP	GH	VT	SF	RE	MH
1. My life is meaningless	.269	.345	.358	.271	.541	.097	**.784**	.432
2. My family hates me	.442	.513	.319	.207	**.991**	.180	**.783**	.529
3. Other people (without drug problem) avoid to contact me	.395	.450	.297	.222	.526	.206	**.704**	**.968**
4. I am abandoned by society	.302	.444	.640	.322	.420	.275	.649	.400
5. I am satisfied with my social relationship	.341	**.708**	.356	**.722**	.317	.439	.409	.330
6. I am abandoned by my family	**.873**	.721	.234	.169	.507	.356	.500	.531
7. I am satisfied with my family relationship	.429	.688	.174	.132	.510	.318	.417	.356
8. I feel guilty for not fulfilling my family duty	.363	.658	.237	.307	.234	**.834**	.266	.281
9. I am a disgrace to my family	.461	.571	.516	.325	**.816**	.248	**.939**	**.758**
10. My future life will get better	.669	**.921**	.331	.437	.536	.611	.538	.502

The bold number represents P<0.01.

totally fulfill their duties nor could they get satisfaction about the social relationship.

Correlations for mood items and domains of SF-36

Correlation coefficients for the mood items and domains of SF-36 are presented in **Table 3**. Scores of negative moods were significantly correlated with the eight domains of SF-36 ($P<0.01$). Pearson's correlation coefficients of PF with item 6 (I am abandoned by my family), RP with item 5 (I am satisfied with my social relationship), BP with item 5 (I am satisfied with my social relationship), VT with item 2 (My family hates me) and item 9 (I am a disgrace to my family), SF with item 8 (I feel guilty for not fulfilling my family duty), RE with item 1 (My life is meaningless), item 2 (My family hates me), item 3 (Other people (without drug problem) avoid to contact me), and item 9 (I am a disgrace to my family), and MH with item 3 (Other people (without drug problem) avoid to contact me) and item 9 (I am a disgrace to my family), all the Pearson's correlation coefficients above were greater than 0.70. For other correlations, Pearson's correlation coefficients ranged from 0.097 (SF with item 1) to 0.688 (RP with item 7 (I am satisfied with my family relationship)).

Results of in-depth interviews

From the in-depth interviews, we got some information that could be ignored by the structure questionnaires.

In general, unstable living condition and being alone have made the drug addicts lack the feeling of safety. When were asked how often has there been someone knowing well or making them feel unsafe, some of them said "Nobody". In addition, what they worried about was variable. Ambiguous outcome of detoxification, financial pressure, social environment outside, and the future of their children and parents were on top their concerning lists. The importance of family was emphasized by addicts. When we asked them "What do you think is helpful in your healing and recovery?" Most of them answered that support of family members and friends (other than recovering peers) appears to be crucial. They hope their family should be extensively involved in the compulsory detoxification program. Additionally, they pointed out that, participation in meaningful and responsible social roles, like fulfilling the intimate duty as a mother, daughter, *and ect,* helping others may play a role in recovery from substance abuse.

Discussion

The drug dependence is a known serious problem in recent years. This concern causes long-term and recurrent suffering for individuals, families, and communities and a cure has not yet been found [35]. Considering the more crucial role for the family and for the children, drug problem in females causes a more serious outcome than the males in relation to illicit drug use. Therefore, probably vulnerability for relapse on the female drug users suggests the necessity of attention.

Building upon prior research, the present study explores the quality of life characteristics and

their family-related negative moods of Chinese female drug addicts who were detained in police mandatory treatment centers. The exploration is based on a comparison of two groups: the drug group who were being detained in the compulsory detoxification center, and the general group who were sampled from urban and rural China. The exploration concentrates on three types of factors, including demographic characteristics, quality of life (QOL), and negative moods (NMS). The data collected from a survey of 181 drug users who were detained in police mandatory treatment centers and 1363 general inhabitants in Henan, a central province in China.

This study has demonstrated that SF-36 is a reliable instrument for the assessment of QOL among drug addicts as it had been valued in general groups by prior studies in China [36-39]. A satisfactory internal consistency of SF-36 was showed in this study, with Cronbach's α exceeding 0.75. The hypothesized structure of SF-36 was proven by the factor analysis and item-subscale correlations. SF-36 discriminated successfully between drug addicts and the general population. The correlation coefficients of eight domains of SF-36 with negative moods were moderate. For the NMS, this study suggests that the negative mood items were reliable for the assessment of negative mood status in individuals with drug problem in mainland China. The test-retest reliability coefficient was 0.78. Correlation analysis of SF-36 and the NMS indicated that seven domains had Pearson r greater than 0.70.

The "drug" group differed significantly from the "general" group in several important demographic variables. Especially, the "drug" respondents were likely to have a lower level of education, have no stable job, no stable marriage. These findings may imply that drug users in China are likely to have different demographic characteristics which were proved by prior researches connecting with drug problem. For women, the instability of living place or finance is always associated with not having family support or responsibilities. And a chaotic personal life for s drug addict is always associated with the risk of relapse [49].

The questionnaire of SF-36 and NMS and the in-depth interview in this study measured the despairing mentality of drug addicts towards the outside world. These participants had very low life satisfaction and felt helpless and abandoned. Female drug addicts in compulsory detoxification centers experienced lower QOL in six domains of SF-36 compared with the general population (BP, GH, VT, SF, RE and MH). It was demonstrated that their mental and social functioning were particularly affected. For domains of PF and RP, scores of female drug addicts were comparatively close to those of the general population, which may be due to the fact that participants in this study had been in the detoxification for some months and their physical functioning had recovered during the program.

The ingredients of negative moods, including depression, anxiety, bewilderment, and fatigue, showed an statistical magnificent difference comparing with the general population from urban and rural mainland China. Marlatt's [40] finding indicated that 76% of relapses occur in three basic contexts: coping with intrapersonal negative emotional states, coping with interpersonal conflict, and coping with social pressure. For substance abusers, the drug dependence brings various physical disorders and psychosocial difficulties, like detoxification symptom, or disease like HIV/AIDS. Participants with drug problems were less likely to have a stable job and an uncertain financial income, and they were also facing legal problem like punishment from the police agents or other social relationship difficulties. Women being detained in the compulsory centers by police tend to lose their hope with their future life and the society. The interviews revealed that stigmatization and discrimination were common [41]. Drug abusers may experience feelings of rejection from the community, which may stem from community attitudes, beliefs or discrimination, as well as the possibility of "losing face", especially given the stigma of drug use in Chinese society [42]. The negative experiences cause tensions like worry, anger, guilt, shame, financial strain, physical effects of stress, and hopefulness. These experiences are extremely stressful and may contribute to the deterioration of patients' QOL and mental states [43]. Some individuals cope with these stressors by indulging substances, or even suicidal ideation [44].

Among all the demographic and social factors, familial influence affects the start of drug use,

continuing drug use, and return to drug use after time away from drugs [45]. In Ukraine, Mimiaga [46] and colleagues identified that emotional support and reminders from family facilitated medication adherence among HIV-positive drug abusers. Family issues were quoted as a barrier to implementing alcohol and other drug use treatment programs in the United States [47]. Studies demonstrated that family relationships arise when families provided care for a family member with a substance use problem, mental disorder, or both [48]. Participation in meaningful and responsible family roles, like fulfilling the duty as a mother or a daughter, may play a role in recovery from substance abuse. It has been demonstrated [25] that removing women with histories of substance abuse from the parenting role was considered significant barriers to recovery. In Chinese culture, the family presents the principal source of financial support and care, which prevents drug abusers from suffering serious social deprivation and ill health [49]. For a female drug abuser, it is hard to discard her personal responsibility to the family or her family member(s). But, bad family relations always lead the unstable housing and finance, the lack of family support, and mainstream social roles. It is considered that, drug using is not individual behavior; it also impacts other members of a family [42, 50, 51]. Drug abusers and their family members may experience feelings of rejection from the community, given the stigma of drug use in Chinese culture. These feelings of being rejected may strengthen family connections that make the drug abusers get more family support, or the rejection and discrimination could make the family lose hope for their drug addicts and abandon them.

The findings suggest that women who lack access to support from others are more likely to relapse than women who have access to these elements [50]. It has been appealed that the addict's family should be extensively involved in the compulsory detoxification program [25], from the detoxification period through the rehabilitation program. Therapy and support should be provided to the addict and the family in order to help the addict to cope with psychological and social aspects of the addiction, as well as to deal with family relationships and enhance family functioning. Such highly motivated family support could start while the family member is still in the detoxification center and this could be harnessed very positively to support at the vulnerable time of release [52-54]. Furthermore, to diminish the vulnerability for relapse, other resources of support could be complemented. Studies found that substance-dependent people who were engaged in helping others were significantly less likely to relapse during the year following treatment [25]. They further suggested that the opportunity to assume normal roles such as student, employee, and parent contributed positively to their potential for recovery.

Although the present study provided some of the significant results, there are also a few limitations. Firstly, the participants of this study were not selected at random and the baseline characteristics of subjects were not perfectly balanced. And, all interviews were took place while individuals were detained, and they might answer according to social or institutional norms, even though we were very conscious. Furthermore, the findings might not be generalizable to drug addicts who did not receive routine detoxification within the compulsory centers. Secondly, this is a cross-sectional study. Therefore, the data generated from subjects with different duration of compulsory detoxification program may not necessarily represent the time course of QOL and mood changes in the program. Thirdly, although SF-36 has been proved a reliable instrument for the assessment of QOL, it may not be able to capture some unique aspects associated with discrimination, stigmatization, and side effects of detoxification, fear of death and lack of a normal life.

In conclusion, the ultimate goal of compulsory detoxification is to prevent relapse among drug users. Quality of life and negative mood among Chinese drug users may have multiple factors. Consequently, preventing drug relapse may need multiple approaches and efforts to lower the degree of craving and exacerbation of psychiatric disorders [55].

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Disclosure of conflict of interest

None.

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