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## Stigma, Subsistence, Intimacy, Face, Filial Piety, and Mental Health Problems Among Newly HIV-Diagnosed Men Who Have Sex With Men in China

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### Abstract

High rates of mental health problems among people living with HIV (PLWH) have been widely reported in the literature; however, an understanding of the socioecological contexts of these presentations remains limited, particularly in China. In order to explore potential socioecological factors associated with mental health problems among newly diagnosed HIV-infected migrant men who have sex with men (MSM), we employed a life profile approach conducting semi-structured in-depth interviews with 31 newly diagnosed HIV-infected MSM residing in a city in Southern China. Participants' life profile accounts outlined their concerns, including internalized stigma, subsistence living, difficulties finding a lover or a stable partner, loss of face, and deviation from filial piety. We contend that targeted interventions should address socioecological issues such as migrant adversities, social suffering, and cultural trauma when providing culturally based mental health services for this marginalized population within the context of Chinese society.

### Keywords

China; HIV; mental health; men who have sex with men; newly diagnosed HIV infection

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In the Western-based literature, gay, lesbian, and bisexual populations are reported to have a higher prevalence of mental health problems such as depression, anxiety, substance use, and suicidal ideation, when compared with heterosexual populations (Chae & Ayala, 2010;

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### Disclosures

The authors report no real or perceived vested interests that relate to this article that could be construed as a conflict of interest.

Hirshfield et al., 2008). Amongst HIV-infected men who have sex with men (MSM), a high prevalence of depression (58.1%) and anxiety (38.2%) has been reported (Berg, Mimiaga, & Safren, 2004). In a study of people who had been newly diagnosed with HIV infection in the United States, 67% had screened positive for depression (Bhatia, Hartman, Kallen, Graham, & Giordano, 2011).

In China, internal migration provides an important lens through which to examine contemporary mental health issues. In 2012, China's internal migrant population was 236 million (National Health and Family Planning Commission of P.R. China, 2013). Furthermore, 23.7% of internal migrant workers had experienced depressive symptoms, which were further associated with self-rated economic status, city adaptation status (e.g., length of residence in the city, satisfaction with one's job, and social support that one could obtain while living within the city), and self-rated health (Qiu et al., 2011). It has been identified that rural-to-urban migrants suffer from poorer mental health status than their rural and urban counterparts (Li et al., 2009).

The public health sector in China has primarily tended to focus on migrant status associated with infectious diseases, maternal health, and occupational diseases and injuries; furthermore, because of household-bounded and locality-based health schemes, migrants have been largely excluded from urban health services (Hu, Cook, & Salazar, 2008). It has been further noted that until recently, less than 1% of internal migrants had received any professional help for depression or anxiety (Li et al., 2007). Clearly, for China's migrant populations, mental health issues deserve considerable attention, due to associated stressors such as low social status, separation from family, unfamiliar social surroundings, and associated health risks.

With respect to Chinese MSM, it has been found that anxiety and depression rates among men who visited gay bars were 45.5% and 57.5%, respectively, and showed a significant association with high-risk behaviors (Zheng, Xu, & Zhang, 2005). A study of 950 MSM in Mainland China found that 63.3% were depressed, 34.5% had suicidal ideation, and 10.6% had attempted suicide (Zhang et al., 2003). In China, it has been recently reported that depression and the experience of trauma were strongly related to HIV infection among MSM, supporting the existence of associated syndemic problems such as drug use, binge drinking, depression, intimate partner violence, and childhood sexual abuse (Jie, Ciyong, Xueqing, Hui, & Lingyao, 2012).

Also in China, studies of people living with HIV (PLWH), in keeping with MSM population studies, have reported the existence of depression and suicidal ideation (Lau et al., 2010). The associated risk factors for depression in these populations included inaccessibility to antiretroviral treatment (ART), poor physical functioning, perceived discrimination from relatives and friends, low level of resilience (Yu et al., 2009), low self-acceptance, poor social support, negative life events (Chen et al., 2004), and stress related to HIV diagnosis (Wang, Lin, Wu, & Qu, 2005). A recent systematic review found that HIV prevalence in Chinese MSM had increased from 1.77% (1.26%-2.57%) in 2000 to 5.98% (4.43%-8.18%) in 2010, with a national incidence of 0.98 (0.70-1.25) per 100 person-years in 2010 (Zhang et al., 2013). However, these epidemiological and behavioral studies provide limited

knowledge of socioecological antecedents and the context in which these mental health problems are experienced.

In China, newly diagnosed HIV-infected migrant MSM constitute a vulnerable and important population as they face new and preexisting stressors while adapting to their HIV status, which may affect the course of the disease. Studies have shown that depression leads to HIV-related mortality (Anastos et al., 2005; Cook et al., 2004), while highly subjective well-being results in better health and longevity (Diener & Chan, 2011). To date, few qualitative studies have investigated the potential socioecological factors associated with mental health problems in PLWH, especially in newly diagnosed HIV-infected MSM in China. The underestimation of subjective experience limits contextual explanations of mental health problems in PLWH.

## Methods

### Settings and Research Design

Our study was conducted in Shenzhen, China. In 2010, Shenzhen had a population of 13.1 million, and more than 80% of this population was internal migrants (Shenzhen City Government General Office, 2011). It was further estimated that 100,000-200,000 MSM were living in Shenzhen in 2009 (Xie et al., 2010). Repeated in-depth interviews (an initial interview and a follow-up interview) were conducted from January to September 2010, in collaboration with a local non-governmental organization (NGO). The nominated NGO worked closely with the Shenzhen Centre for Disease Prevention and Control (CDC) to provide HIV prevention services (e.g., free condoms, lubricant, HIV testing, and hotline) to MSM and was well connected to specific grassroots groups for PLWH support services. A life profile approach was employed, undertaking background research, lengthy interviews, and close collaborations with participants to ensure that testimonies accurately reflected the degree of depth related to the life-world or social themes. The life profile enabled a focus on individual life narratives that provided background and context to an individual's contemporary community life (McCance, McKenna, & Boore, 2001). A semi-structured interview guide was developed based on an initial literature review to include such questions as: After the HIV diagnosis, how do you feel and what do you think? What do you do to respond to it or adjust yourself? How do others react to you? And how do you handle their reactions? In order to be mindful of the cultural context of discussing sensitive information, the first author concurrently analyzed themes and reflected on which probing questions could be asked sensitively in the interviews.

A socioecological model (McLeroy, Bibeau, Steckler, & Glanz, 1988), which examines individual and social environmental factors influencing behavior in multiple levels and multiple dimensions, was adapted in our study to guide data collection and analysis. Before the main study, the first author conducted a pilot study using a draft semi-structured interview guide in Chinese with five HIV-infected MSM separate from the main study, and modifications were made accordingly. The new interview guide was further modified based on interviews with five health care workers and volunteers involved in providing services to MSM. The first author also took part in outreach health education in MSM venues with local CDC staff and volunteers to further refine the interview guide. The socioecological model,

as supported by the pilot, enabled an exploration of a broad range of factors in multiple levels in the context of Shenzhen: individual (e.g., limited information and knowledge, perceived constraints, frightening images, ART and its side effects, internalized homophobia, internalized HIV stigma, comorbidity, substance use), interpersonal (e.g., difficult to look for partners; reduced social support, intimacy, and sex), community and family (e.g., face, taboos, filial piety, stigma, and discrimination), and institutional and structural factors (e.g., conflict with CDC, financial burden, employment, and working conditions). This facilitated probing questions in in-depth interviews in the main study. The research team undertook investigator triangulation to reach levels of agreement on emergent themes.

### Participants

We used purposive sampling (Babbie, 2001) to recruit participants with diverse social and health demographic characteristics (Table 1), including ages, duration since diagnosis, occupation, education, income, sexual identity, marital status, and ART status, in order to reflect the diversity and breadth of the sample population of newly diagnosed HIV-infected MSM. Eligibility criteria included participants who were 18 years of age or older, diagnosed with HIV infection in the previous 6 months (newly diagnosed), identified as a man who has sex with men, and willing and able to provide written informed consent. In order to capture detailed information on adaptation to the new HIV diagnosis, a total of 31 eligible participants completed repeated in-depth interviews over the course of fieldwork; all participants were internal migrants.

### Procedures

The ethics committee in the Chinese University of Hong Kong granted ethics approval. The collaborating NGO approached potential participants through contacts and networks according to our purposive sampling scheme. Informed consent outlined that individual refusal to participate would not affect the rights to use services, that there were to be repeated interviews, and that all interviews were to be audio-recorded. Written informed consent was obtained. Each participant was assured of data confidentiality, use of pseudonyms, safe storage of the data, and the right to withdraw at any time without being questioned. In the initial interview, participants were encouraged to talk about their life stories. The follow-up interview was conducted 3 months after the initial interview. In the follow-up interview, participants were directed to focus on their experiences in the previous 3 months and to further explore prior emerging themes from the initial interview. Before commencing each follow-up interview, the transcript of the initial interview was read and reread to capture emerging themes, unsaturated themes from the interviews, or incomplete information, which were subsequently explored in depth. All interviews lasted from 1.5 to 2 hours and were conducted in a private room in the NGO's office. All participants received RMB 500 (about USD 80) in cash after completion of the repeated interviews to compensate for the time spent and transportation costs. Research results were subsequently shared with some participants through presentations in order to provide rigor.

## Data Analysis

At the completion of each tape-recorded interview, two assistants transcribed them verbatim (in Mandarin). We then employed thematic content analysis (Green & Thorogood, 2009) concurrently between each interview to capture emerging themes, which were reflected in subsequent interviews. Bi-weekly research team meetings were held to discuss emerging themes, any saturation, and agreement on a set of preliminary codes. The later in-depth analysis first involved preliminary reading of all the transcripts, noting initial reactions and assigning preliminary thematic codes. The first author undertook all coding, which was duly discussed with coauthors. Testimonies of major depression and anxiety disorders were identified and further coded with the assistance of a senior psychiatrist with a specialist background in HIV and MSM issues. Furthermore, related psychosocial and cultural factors emerging from participants' reflections on their mental health problems were also coded, using the aforementioned socioecological model as a guiding framework. These included internalized stigma and subsistence living at the individual level, partners and intimacy at the interpersonal level, and the cultural concept of face and filial piety at the community and family level. We grouped informative quotes relevant to the themes together prior to synthesis and then refined thematic structures based on collective discussion. The first author translated the transcripts into English, and the co-authors crosschecked the accuracy and completeness of the translations.

## Results

Most of the newly diagnosed HIV-infected MSM in our study (21/31) reported depressive symptoms (e.g., fatigue, hopelessness and despair, loneliness, isolation and withdrawal, guilt and worthlessness, sadness, and suicidal ideation); the men also commonly reported experiencing anxiety (e.g., feeling afraid or anxious, catastrophizing, multiple worries, rejection sensitivity, fear of losing control, anxiety and avoidance, and easily startled), whilst close to half of the men experienced both types of symptoms. Our study confirmed the presence of mental health problems in newly diagnosed HIV-infected MSM and provided testimonies to the risk factors of inaccessibility of ART, poor physical functioning, low self-acceptance, poor social support and negative life events, and stress related to HIV. The second level of our analysis then focused on emerging stressors related to individual (e.g., shame, evil, and subsistence living), interpersonal (e.g., difficulties searching for love and intimacy), and sociocultural (e.g., face and filial piety) conditions in support of the aforementioned socioecological model.

### Sense of Shame and Evil

Some participants reported feeling strong self-stigmatization and believing that, as HIV-infected people, they should be treated in a discriminatory manner or be a target of stigmatizing beliefs, which has been defined by Steward and colleagues (2008) as internalized stigma. The men interviewed regarded themselves as “being toxic,” “inferior,” “evil,” “shameful,” “a virus bringing bad luck,” or “a monster.” Internalized HIV stigma stimulated negative emotions and further exacerbated self-reported anxiety and depression. The following account provides such testimonies:

It's a kind of punishment. The Heaven (God) is really punishing me. I remember when my father passed away, I did not go back home to *shou si* (death-watch, which is the role of a son at his father's funeral) ... I am now HIV positive and I am very toxic. I feel I am inferior to others and I feel I am evil. Only those dubious characters would get this rubbish disease.

Another man said, "Sometimes others regard you as a monster. The feeling of being discriminated against is very hard ... Sometimes, because I have got this disease, I feel inferior to others."

Some participants developed negative perceptions about themselves and their MSM associates and reported "feeling dirty," "promiscuous," "being punished," and "untrustworthy." These testimonies evoked the concept of establishing a spoiled identity (Goffman, 1968), of being a *tongzhi* (gay or bisexual man) and having HIV. Participants expressed their views as follows:

I haven't been back to my hometown for 9 years. Honestly speaking, I feel I am very dirty [because of his HIV infection and his homosexual activities with many boys and men in his hometown] ... If there are too many *tongzhi*, it will be awfully serious and this society will be ruined ... I don't like this circle from the bottom of my heart ... This circle is really very "dirty." Actually, I bear very big stress in these years. The stress of being a *tongzhi* is already very big. After being diagnosed with HIV positive, I feel the stress is much bigger than that of being a *tongzhi* ... I now have lost confidence with everyone in Shenzhen, and people are untrustworthy indeed.

### Subsistence Living

Some participants reported that they were fired or demoted in their workplaces after their HIV-infected status was disclosed to others. Some participants felt that their HIV diagnosis prohibited them from working and therefore made them feel disabled and worthless. The diagnosis of HIV was reported to limit their job-seeking capabilities. The deterioration of their economic status as migrant workers was seen to exacerbate poverty and potentially increase the propensity for poor mental health. These adversities made some participants feel "unfairly treated," "angry," "upset," "gloomy," "depressed," and "stressed." Participants spoke out as follows:

My boss introduced me to a physician-in-chief in XX Hospital to check up and tested it out as HIV positive ... Later he asked me to go home for a rest. That meant I was fired. Bosses are all like this. Whoever hears about HIV will not accept it at all.

My workload was too heavy in June, and my body could not bear it. I was extremely gloomy, depressed and lost interest. I worked 12 hours per day, and stayed up late at night, but my salary was low, less than RMB 2,000 (about USD 310).

"Loss of job," "being paid very low," and "high spending on health care and medication" (e.g., general medical costs or specific spending on HIV) made participants feel stressed. A

participant said, “I am now very afraid, very afraid. When I am in a serious condition and need to take medications, what should I do since the spending (for medication and health care) is so high?” Another participant, whose monthly income was only about RMB 1,000 complained, “The CDC staff said it may cost RMB 2,000 to 3,000 (about USD 310 to 460) per month (for ART). I said I would rather die because how can I pay this every month?”

### Difficulty Searching for Love and Intimacy

Some participants reported that it was difficult enough to look for a lover or stable partner in MSM circles, and having HIV made it even more difficult to look for partners. Some participants became worried about being refused, hurt again, or transmitting HIV to a partner. Participants provided their views as follows:

I feel it is really difficult to look for a partner ... Even in the circle of HIV-positive people, the people like me who are lowly educated, lack of training in working skills or technologies, and in low income are difficult to look for someone.

In this circle, people are neither frank nor honest to each other, and they are wary of each other. There is a kind of estrangement among them. On the one hand they want to look for real love, but on the other hand they worry about being hurt if they devote their love ... I feel I even have lost the opportunity to look for partners now.

Participants further outlined their needs for intimacy and sex. When they met partners with unknown HIV status, however, having sex and developing intimacy frightened them. Nondisclosure or fear of disclosure created anxiety. A participant said, “Since I did not disclose it (HIV infection) to him (boyfriend), I felt it was not good and I was always in fear.” The dilemma between casual and regular relationships resulted in mental conflicts as the participants did not know whether they should maintain casual sex or build up regular relationships with others. Another participant described as follows:

I have some hesitations in my love affairs. I got to know a man, not an HIV-positive person, who liked me so much and was actively approaching me. When we had sex, we definitely used condoms since we just started to have sex and we distrusted each other. This made me relieved. But after we stay together for a long time and set up a stable relationship, we don't hang out with others. If he insists on not using condoms, how can I explain it to him? It makes me scared. Should I tell him I am HIV positive or break up with him? I am really afraid to face this encounter. This is the biggest problem I have faced in these months.

### Problems of *Lian* (Face) and Filial Piety

Loss of face was reported to evoke feeling worried or anxious; as one participant said, “I generally care about face. I don't want them to look at me with colored glasses. I especially don't like others to look at me with cold eyes.” The Chinese cultural concept of *lian* is related to property (embedding the cultural stigmatization of avoiding poverty), marriage (embedding a stigma against single adults who do not fulfill family obligations), and moral judgments against PLWH (embedding a stigma against people who got infected through culturally immoral ways, such as multiple sex partners, homosexual activities, commercial sex, and taking drugs). Another participant said:

I miss my hometown so much, but I dare not go back home (no face to go back) ... Economic stress is the first reason and my job is not good now. Secondly, some of my relatives know about my problems (being MSM and HIV infection) and they feel terrible, and are disdainful and hesitant.

Having HIV was reported by some participants to make them feel sorry for their parents. To die before one's parents denotes extreme impiety in Chinese culture. Furthermore, not being married nor having children to maintain the family bloodline poses another serious deviation from filial piety, as illustrated by a Chinese saying: "Bu xiao you san, wu hou wei da (不孝有三, 无后为大)," meaning, "Without male offspring is the worst form of impiety."

Participants provided their views as follows:

The most difficult thing for me is how to face my parents. I feel really sorry for them. Marrying a wife is not the priority and would be only to satisfy my parents. I am 30 years old already. My parents want me to get married soon. It is good to comfort them. (But he cannot get married now.)

I am the only child of my family ... If I die ... If there is no hope, no continuity of life, my family and parents will collapse. I don't know how they can accept this reality. It is really too cruel for them.

Concerns over losing face and cultural impiety restricted open and in-depth discussions about being homosexual and having HIV, which further prohibited possible psychological adjustments to the diagnosis. The men said that they could not openly and fully talk about sex, love, and HIV. A participant disclosed his condition to his mother, but he and she didn't have an in-depth conversation and he said, "I really got annoyed and didn't want to talk to others." Another participant also described:

I told my elder brother that I had an incurable disease and sent him a Web site link. He is a teacher and I think he should understand ... I told him to see a show (about AIDS) on CCTV (China Central Television), but he said he didn't have time. Later when I talked to him, he avoided talking with me.

## Discussion

Our study explored the specific socioecological factors of stigma, subsistence, intimacy, face, and filial piety and how these were seen to be associated with mental health problems suffered by newly diagnosed HIV-infected MSM in China. Participants' experiences graphically portrayed their migrant adversities, social sufferings, and cultural traumas.

### Migrant Adversities: Shame, Evil, and Subsistence Living

All participants were internal migrants, making it hard for them to access social security, health care insurance, and free ART in Shenzhen. Social adversities in migrants' lives have been widely reported (Li et al., 2007; Wong, He, Leung, Lau, & Chang, 2008). In China, the Hukou system (the household registration system) contributes to the experience of marginalization of rural migrant workers in urban cities because it determines social welfare and medical benefits (Wong, Li, & Song, 2007). Most of our participants had migrated to Shenzhen from poorer areas of China and had shouldered the cultural obligation to support

their families back in their hometowns. Failure to meet this cultural obligation would have placed them in stigmatized and shameful situations. Some participants encountered considerable financial difficulties as well as housing and health service insecurities. Their HIV status aggravated the situation in multiple dimensions (e.g., poorer health, heavier financial burden, job instability, narrower social networks, less social support, lower self-esteem) and appeared to further exacerbate the potential for downward social mobility and associated life stressors.

### **Social Sufferings: Lack of Love and Intimacy**

The MSM we interviewed could only express their social and sexual needs occasionally in some MSM venues or circles, hiding their sexual identities from mainstream heterosexual society. In Shenzhen, 52.6% of MSM have not been reported to be in steady or spousal relationships (Behringer, 2008). In our study, many of the MSM expressed unmet needs for love, stable partnerships, and significant personal relationships because this involved the complexities of disclosure, self-confidence, fear of rejection, and conflict between needs for intimacy and the imperative of safe sex. The men testified to having to hide not only their sexual orientation but also their seropositivity from both mainstream heterosexual society and their MSM communities, diminishing their social spaces. Therefore, the HIV-infected MSM held negative attitudes toward themselves and MSM communities, manifesting internalized stigma and homophobia. This could, in turn, be argued to create a vicious cycle involving feelings of inferiority, guilt, mistrust, and even hatred, informing a spoiled identity, which would further lead to deterioration of their self-esteem. Given these scenarios, it is imperative in the Chinese context to build vital communities for HIV-infected MSM and connect them to diverse support groups. The rise of social media provides an opportunity to build virtual communities to provide potential sources of social support.

### **Cultural Traumas: Loss of Face and Impiety**

Many participants had planned to get married to a woman before being diagnosed with HIV infection. In China, MSM (18.25% to 33.5%) are commonly in married heterosexual relationships (Lau et al., 2008), with the majority of MSM (64%) older than 39 years of age having been married (Choi et al., 2003). The diagnosis of HIV had confronted our participants' cultural life trajectories of competency and success, such as marrying a woman and having children to maintain family bloodlines, which are deeply and culturally internalized (Li, Holroyd, & Lau, 2010). Moreover, HIV-infected MSM could not fulfill their family obligations of maintaining *lian* and exercising filial piety, putting them at risk of cultural trauma (Alexander, 2004). In the Chinese context, *lian* (face, moral position) and *mianzi* (face as self-affirming social status) are key moral resources (Kleinman & Kleinman, 1997). The destruction of this moral capital would enhance the negative impact of the cultural trauma, contributing to poor mental health in HIV-infected MSM. Such stressors are mostly related to the family. Currently in China, no support services are provided to family members of HIV-infected MSM.

Certain psychosocial and cultural factors not directly related to HIV appeared to exercise strong influences over these men's mental health, corroborating the results of other studies (Mao et al., 2009; Rogers et al., 2003). In line with the argument that HIV risk in MSM is

embedded in multiple cooccurring public health problems (a syndemic; Safren et al., 2010), our study postulates that HIV is a trigger that amplifies preexisting adversities and sufferings that are embedded at different socioecological levels in MSM.

### Limitations

The limitations of our study include the use of a digital recorder that may have prohibited some participants from openly talking about their negative views. Secondly, the sample size was small and sampling was not representative and, therefore, the results may not be generalizable to all HIV-infected MSM in Shenzhen or in other parts of China. In addition, we only recruited participants who had contacted health care workers or volunteers, which limited access to the hardest-to-reach populations and, possibly, the most in need of services. Third, our study focused on exploring the potentially associated factors of depression and anxiety. Although the use of repeated in-depth interviews provided insights into socioecological contexts of mental health problems, the lack of standardized scales of depression and anxiety limited our analysis of the changes of symptoms and resilience. Finally, it could be that participant concerns related to HIV status might be not differentiated from those related to MSM status.

### Conclusion

Our study confirms the existence of mental health problems (e.g., depression and anxiety) in newly diagnosed HIV-infected MSM in China and explores underlying socioecological stressors at the individual, interpersonal, and sociocultural levels. The study suggested that China's HIV health care services needed to address such socioecological issues as adverse conditions of migrants, social suffering of HIV-infected MSM, and cultural trauma. Given the well-documented association of migrant status to poor mental health (Wong et al., 2008), we recommend policy changes to remove household-based boundaries of access to social welfare and health care. It is important to integrate HIV prevention, treatment, care, and mental health services and to include interprofessional health team members such as psychologists, medical anthropologists, and social workers. It is also necessary to build virtual communities to provide social support and support services to family members of HIV-infected MSM. More research is warranted to examine the complexity of conditions faced by HIV-infected MSM in China. As more people learn that they have HIV infection and as PLWH live longer, it is increasingly important to develop mental health interventions to improve the quality of life for PLWH, which may lead to better longevity in this population.

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### Key Considerations

- In contemporary China, registered nurses can extend their HIV clinical services by undertaking a role of health navigator to link HIV medical treatments and clinical care to mental health services and other social welfare services.
- Nurses can support people living with HIV (PLWH), including HIV-infected men who have sex with men (MSM), to build diverse support groups, such as peer groups or family support groups, from which PLWH can obtain different types of social support. A feasible way is to work closely with nonprofit organizations that serve PLWH or HIV-infected MSM.
- Nurses can provide support to Chinese PLWH/HIV-infected MSM and their families to address the cultural traumas their clients may be suffering.
- Practically, nurses can provide ongoing counseling and related health education information (e.g., how to have healthy children or how to manage side effects) to these families.

**Table 1**

Summary of the Characteristics of Participants (Newly Diagnosed HIV-Infected Men Who Have Sex With Men [ $N = 31$ ])

Characteristics	<i>N</i> (%)
Age, years	
18-25	8 (25.81)
26-35	19 (61.29)
36-40	4 (12.90)
Duration since diagnosis	
1-2 months	15 (48.39)
3-4 months	11 (35.49)
5-6 months	5 (16.13)
Occupation	
Office	10 (32.26)
Service/seller	5 (16.13)
Technician	9 (29.03)
Laborer	4 (12.90)
Sex worker	1 (3.23)
Jobless	2 (6.45)
Education	
College	8 (25.81)
High/technological school	17 (54.84)
Secondary school	6 (19.35)
Monthly income (RMB)	
More than 6,000	3 (9.68)
3,000-6,000	12 (38.71)
Less than 3,000	14 (45.16)
No income	2 (6.45)
Sexual identity	
Homosexual	28 (90.32)
Bisexual	3 (9.68)
Married	5 (16.13)
On ART	8 (25.81)

*Note.* RMB = Renminbi yuan; \$1 U.S. = 6.80 RMB in 2010; ART = antiretroviral therapy.