

**Whether and What to Tell: A Qualitative Study of HIV Disclosure among Heterosexually
Married Men Who Have Sex with Men in China**

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Conflict of interest

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Ethic approval

This study was approved by the Institutional Review Board of the South China University of Technology, China.

Consent to participate

Oral informed consent was obtained from all individual respondents in the study.

Consent for publication

Not applicable

Availability of data and material (data transparency)

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ABSTRACT

In China, HIV transmission increasingly affected men who have sex with men (MSM) and those in heterosexual marriages. This study addressed a critical gap in understanding HIV and sexual orientation disclosure within conventional heterosexual marriages, framed within a family-oriented cultural context. Heterosexually married MSM living with HIV (HIV+ MMSM) faced complex identity dynamics and interactions between “gay circles” and marital life. Such disclosure was fraught with potential repercussions, including accusations of “marriage fraud”, HIV-related stigma, and divorce. This descriptive qualitative study, conducted in 2022, aimed to explore the common factors influencing HIV status disclosure to wives among Chinese HIV+ MMSM. Sixteen semi-structured interviews were conducted to analyze the factors related to the disclosure process model. Four key themes emerged: (a) concern for wives' well-being, (b) perceived marriage strength, (c) the degree of social support they had, and (d) a desire to maintain their status in a heterosexual society. The decision to (non)disclose was shaped by both approach-focused and avoidant-focused goals related to these four themes. The findings underscored the need for culturally sensitive strategies that balance family dynamics, stigma reduction, and HIV care management, emphasizing tailored approaches to effectively support this population.

Keywords: HIV disclosure, men who have sex with men, heterosexual marriage, stigma, China

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Introduction

In mainland China, an estimated 1.45 million people aged 15 years and above are living with HIV (PLWH; Cai et al., 2024). Despite significant advancements in biomedical science and public health, HIV/AIDS remains a critical social and public health issue, with notable shifts in transmission patterns, particularly among men who have sex with men (MSM; Chi et al., 2022; Huang et al., 2018; Wang et al., 2015). The proportions of penile–vaginal and penile–anal transmissions have markedly increased, from 48.3% (penile–vaginal) and 9.1% (penile–anal) in 2009 to 74.2% (penile–vaginal) and 23.3% (penile–anal) in 2020, respectively (He, 2021). A review of studies from 2001-2018 revealed that 22.3% of MSM were married to women (Dong et al., 2019), while a multicity study reported that 21.9% to 66.7% of MSM had been married or had a female partner (Ling et al., 2020). Additionally, 48.9% of single MSM planned to marry a woman, with 91% intending to continue having sex with men after marriage (Wu et al., 2019). Thus, heterosexually married MSM may remain at high risk for HIV transmission (Chi et al., 2022; Cai et al., 2024; Dong et al., 2019; Wu et al., 2019).

Previous studies highlight the unique challenges faced by heterosexually married men who have sex with men and are living with HIV (HIV+ MMSM) in China. These challenges include being condemned as committing “marriage fraud,” and serving as a “bridge” for HIV transmission between different communities (Li et al., 2016; Ling et al., 2020; Song et al., 2023; Wang et al., 2015). Acceptance of a sexual minority identity is often restricted by traditional family values centered on filial piety and procreation (Chi et al., 2022; Wu et al., 2019). This is further complicated by historical issues such as the sexual morality policing of the 1980s–90s”

and the repercussions of the one-child policy, which pressured individuals into heterosexual marriage without a comprehensive understanding of their sexual orientation/identity (Song et al., 2022; Worth et al., 2019; Wuhan LGBT Center, 2023). For instance, the one-child policy, while aimed at controlling exponential population growth, also heightened family expectation on the single child since as the sole hope for continuing the family linkage. Therefore, family and societal expectations, personal uncertainties, and the absence of a supportive environment for sexual identity exploration increase the likelihood that MSM while fail to disclose this information before getting married. The covert nature of these marriages exacerbates the challenges HIV+ MMSM face as they navigate dual identities and the disclosure of their HIV status. Addressing these issues requires a nuanced understanding and targeted interventions to support this marginalized group effectively.

Disclosing HIV status to wives poses significant challenges, including issues related to sexual identity disclosure, marital conflicts, and the risk of divorce (Chi et al., 2022; Huang et al., 2019; Song et al., 2023). These difficulties are exacerbated by societal stigma toward PLWH and sexual minority populations (Li et al., 2016; Song et al., 2023), making the decision to disclose a complex process that often requires mental readiness. Previous studies have showed the rates of HIV disclosure to heterosexual female partners in China are low (Chi et al., 2022; Yan et al., 2019). Factors influencing disclosure include education levels, perceived HIV-related stigma, the presence of HIV/AIDS symptoms, the partner's perceived HIV status, exposure to counseling that encourages disclosure, inconsistent condom use, and the partner's acknowledgment of MSM identity (Yan et al., 2019; Yin et al., 2019). However, the internal struggle that HIV+ MMSM undergo in deciding whether to disclose their HIV status remains largely unknown, as does the impact that having HIV has on their sexual life, marital quality,

mental health, and HIV prevention and care. Concerns about protecting spouses’ health, cultural emphasis on family responsibility and harmony, and access to support make understanding these dynamics crucial in Chinese context. This study fills this critical gap by providing a comprehensive understanding of their life experiences related to HIV disclosure, offering valuable insights for public health and counseling interventions in China.

Theoretical framework

This qualitative study used the disclosure processes model (DPM; Chaudoir & Fisher, 2010) to explore the factors influencing *whether* and *when* Chinese HIV+ MMSM disclosed their HIV status to their wives, whether they also disclosed *how* they contracted HIV. The DPM comprised four major components: (a) antecedent goals, (b) disclosure event, (c) mediating process, and (d) long-term outcomes. This framework was used to explore the nuanced decision-making process (see Figure 1).

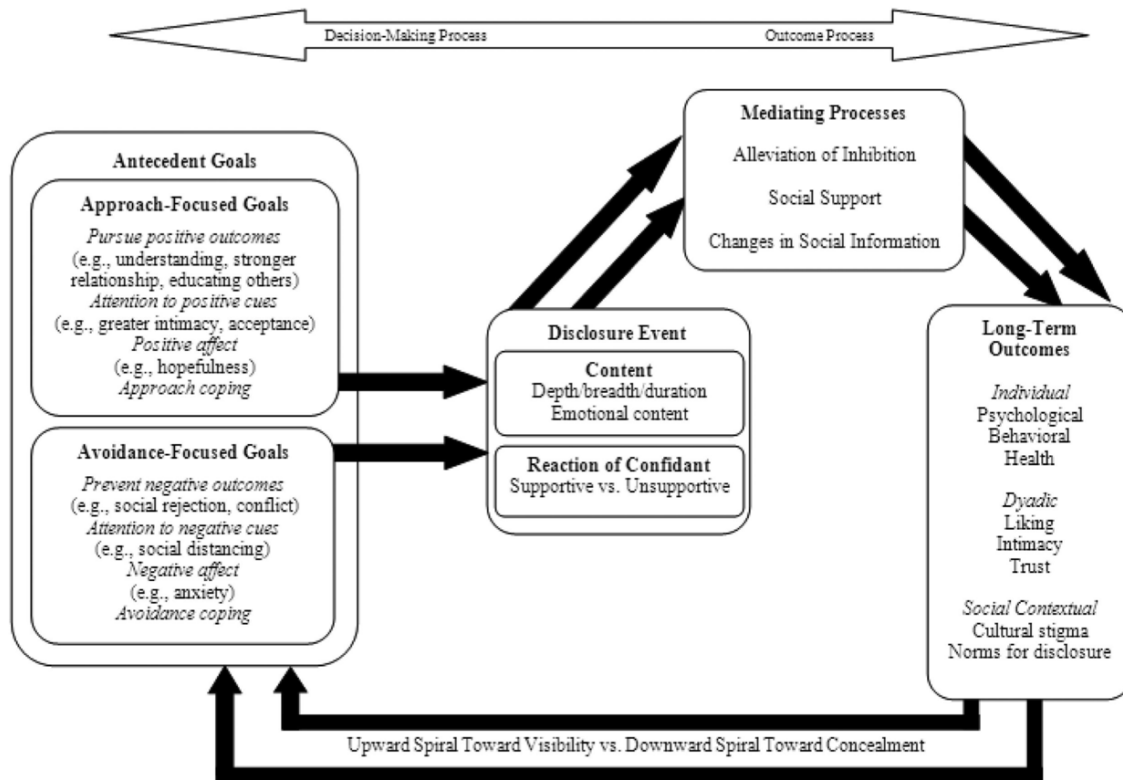


Figure 1 *DPM Adapted for HIV Discussion*

Note. Adapted from “The Disclosure Processes Model: Understanding Disclosure Decision Making and Postdisclosure Outcomes Among People Living with a Concealable Stigmatized Identity,” by S. R. Chaudoir and J. D. Fisher, 2010, *Psychological Bulletin*, 136(2), p. 255. (<https://doi.org/10.1037/a0018193>).

Antecedent goals, categorized as *approach* and *avoidance*, are critical in shaping disclosure decisions (Chaudoir & Fisher, 2010). Previous studies found that individuals who disclosed were more closely associated with either approach or avoidance goals (i.e., maintain in marriage, divorce, stigma) (Gabbidon et al., 2020). Individuals with *approach goals* are more likely to disclose when they perceive that there could be positive outcomes, thereby, minimizing the discrepancy between themselves and their goal. Conversely, those with *avoidance goals* concentrate on averting negative outcomes, amplifying the gap (e.g., avoiding the negative consequences) (Chaudoir & Fisher, 2010).

Approach and avoidance goals offer insights into the motivations behind whether and when Chinese MMSM choose to disclose their HIV status (and possible sexual identity disclosure). Individuals with approach-focused disclosure goals are more adept at communicating their health status/identity, potentially garnering positive reactions. This event includes *content* (i.e., what, when, and how to tell) and *reaction of the confidant*, influencing types of consequences (i.e., short- and/or long-term outcomes). Key mediating factors include the reduction of inhibition, the level of social support, and changes in social information (mediating process) (Chaudoir & Fisher, 2010; Chaudoir et al., 2011).

The analysis was informed by the principles of DPM. Due to the scope and depth of the study, we primarily explored the narratives of antecedent goals within the framework to gain a deeper understanding of the factors influencing disclosure among Chinese HIV+ MMSM. This exploration focused on how these factors interact to shape the decision to disclose and the disclosure process itself.

Study aims

Applying the theoretical framework of the DPM (Chaudoir & Fisher, 2010), this qualitative study sought to explore the factors influencing Chinese MMSM's decision to disclose HIV status to their wives among HIV+ MMSM. Within the complex dynamics of maintaining family harmony, Chinese cultural factors, avoiding stigma related to HIV and/or sexual orientation, and achieving long-term psychological well-being, this research delved into nuanced considerations surrounding (non)disclosure. Sixteen in-depth, semi-structured interviews with HIV+ MMSM in China were conducted. The findings may contribute valuable insights for developing more effective health programs that lessen the transmission of HIV, disclosure strategies, and health care regulations to enhance support for HIV disclosure and to promote adherence to HIV care in this population.

Methods

This study adopted a descriptive qualitative approach to explore the phenomenon of disclosure, capturing and describing the “what” and “how” of this experience within a specific people (Sandelowski, 2020; Stanly, 2014). Thus, we aimed to gain a deeper understanding of (non)disclosure experiences, moving beyond surface-level descriptions to explore the more profound, often unspoken aspects of their lives, shaped by multi intersecting stigmas.

Sample and Procedures

A criterion sample, a type of purposive sample, was used to recruit participants with the following criteria:

1. Self-identification as a cisgender man;
2. Possession of Chinese citizenship;
3. Confirmation of an HIV-positive status after marriage;
4. Engagement in any form of sex interaction (oral, anal, and/or group sex) with men before and/or during the marriage; and
5. Previous/current marriage to a heterosexual cisgender woman who was unaware of the respondent's same-sex sexual attraction and/or behaviors prior to the marriage.

Given the limited information on this topic in China, the study focused on understanding the HIV disclosure process among cisgender men married to women. Respondents needed to be aware of their HIV status and have engaged in any form of sexual interaction with men before or during marriage. In China, sexual identity tends to conform to societal norms, with many individuals avoiding labels like gay or bisexual. Thus, in this study, we emphasized health behaviors from a preventative perspective rather than sexual identity labels.

Exclusion criteria were established if they were:

1. Unwilling to record the interview due to confidentiality concerns. Recording interviews was essential for the complexity of the topic, especially because publications were in both Chinese and English.
2. Involved in a sham or fake marriage or *xinghun* (i.e., contract marriage in English, specific for marriage that gay men and lesbians involve), focusing on individuals more concerned with hiding sexual attraction/interactions rather than genuinely being conflicted.

A sample of 16 respondents, ages 25–56 years, was included in this study (see Table 1). Initially, 18 participants were interviewed, but two were excluded because they did not disclose their HIV status, but rather their status was discovered. Among the participants, twelve identified as gay men (12/16, 75%), and approximately half (8/16) were still married at the time of the interviews. Regarding HIV diagnosis and care, nearly 56.3% (9/16) had been living with HIV for

1–5 years, and almost all reported undetectable viral loads in their most recent tests. Also, seven respondents had disclosed their HIV status to their wives (43.75%).

Table 1

Demographic Characteristics of HIV+ MMSM (N=16)

Variable	<i>n</i> (%)
Age	
< 30 years	3 (18.75)
31–40 years	8 (50.00)
41 and above	5 (31.25)
Sexual orientation	
Gay	12 (75.00)
Bisexual	4 (25.00)
Marital Status	
Married	8 (50.00)
Divorced	6 (37.50)
Widowed / separated	2 (12.50)
Education	
High school diploma or lower	8 (50.00)
College/technical school	8 (50.00)
Advanced degree	0
Disclosed HIV status to wife	
Yes	7 (43.75)
No	9 (56.25)
Duration since diagnosis	
≤1 year	1 (6.25)
1–5 years	9 (56.25)
5–10 years	6 (37.50)
More than 10 years	0

Data collection

Between March and May 2022, this study utilized in-depth interviews and field notes. The semi-structured interview guide was refined after three pilot interviews. Interviews, lasting approximately one hour, was voluntary, with ethical approval obtained from the Institutional Review Board of the South China University of Technology, China. Each respondent received CNY200 (equivalent to \$30.00 USD) for their participation, an amount consistent with similar studies at the study sites.

All interviews and conversations were conducted online, and no identifying information was requested from respondents. Respondents were also given the opportunity to ask questions about the research study and could withdraw from participation at any time. All recordings, interview transcripts, and field notes were securely stored on a password-protected online platform, accessible only to the research team.

Recruitment of respondents

Respondents were recruited from personal referrals using a snowball sampling or through online HIV support groups on WeChat, a Chinese multipurpose instant messaging social media platform, using purposive and snowball sampling. Eligible individuals engaged in audio-recorded WeChat interviews with CS (first author). We started the interview by obtaining informed consent. We encouraged respondents to be in a comfortable and safe space during the interview process (a sample questions listed in Table 2).

Data analysis

Sixteen de-identified interview records were transcribed verbatim in Chinese, with selected quotes translated into English. We conducted a thematic analysis to identify, organize, and thoroughly report themes within the data (Braun and Clarke, 2006). This approach is particularly

useful for exploring diverse perspectives among research respondents, highlighting both similarities and differences, and uncover unanticipated insights (Nowell et al., 2017). We followed Braun and Clarke's (2006) six-step process for thematic analysis, employing a hybrid process of inductive and deductive coding.

Initially, we familiarized ourselves with the data by reviewing each transcript to grasp its richness and depth. The second step involved generating initial codes and themes through an inductive coding strategy of active reading, guided by the DPM (Chaudoir and Fisher, 2010). In the third step, we identified overarching themes based on the interview categories: 1) sexuality exploration across the lifespan, 2) marital relationships, and 3) HIV status disclosure with their wives or others. Additional themes also emerged during this phase. The first four coded transcripts were reviewed by JB, CS, and HX, and coding consensus was researched through discussion. In step four, we reviewed and vetted these themes across the research team. Step five involved defining, refining, and finalizing the themes, with some being combined or renamed for clarity. Finally, in the sixth step, we synthesized the themes to address the research question, and the selected themes were translated in English.

Reliability criteria

This study adhered to the Consolidated Criteria for Reporting Qualitative Studies (COREQ) checklist (Tong et al., 2007). The validity of coherence (Morse et al., 2002) was ensured through the alignment between research objective and the methodological steps, which were rigorously and explicitly followed. During and after each interview, CS took field note to capture non-verbal details such as sighs, communication on WeChat platform. Triangulation was achieved through collaboration among three researchers (CS, DR, and HX), who had extensive experiences working with LGBT communities, as well as input from some respondents and field

experts. Follow-up discussions with some respondents were conducted to clarify any ambiguous information. No further interviews were performed once data saturation was reached. To enhance rigor, dependability, and credibility, independent data collection and analysis occurred, with periodic reviews and peer debriefing sessions among researchers, strengthening overall quality and trustworthiness.

Results

The study sought to unravel the nuanced themes influencing Chinese HIV+ MMSM in their decisions to disclose their HIV status to their wives. Four key themes emerged as pivotal in shaping the decision-making process: (a) care for their wife's overall well-being, (b) perceived strength of the marriage, (c) the degree of social support they had, and (d) a desire to maintain their status in a heterosexual society.

Theme 1: Caring for Their Wife's Overall Well-Being

Eleven respondents (69%) expressed profound concerns for their wives' well-being. Notably, 5 of 7 respondents who disclosed their HIV status (71%) did so primarily due to the importance they assigned to their wives' health. For instance, Jie (bi-identified, married with two kids, disclosed HIV not sexual orientation [SO]) shared his struggle: "I had (unprotected sex) with her before ...I am scared, I don't want her to be infected, you know, I can't do it ... The anticipated outcome was as long as she didn't get infected, everything would be fine." This commitment was

manifested through anxieties about disease transmission and the potential impact on their children's health.

Similarly, Hang (bi-identified, married with one kid, disclosed both HIV and SO) candidly shared his internal struggle upon learning about his HIV status:

I told her and got her tested immediately [after my confirmatory result], and then I did it again 3 months later because I was afraid there might be a window period or something like that. Fortunately, everything turned out fine. The silver lining in this unfortunate situation is that she is still healthy.

During the initial 6 months, Hang expressed a sense of hopelessness for himself and his marriage upon receiving the HIV confirmatory result. Anticipating potential negative consequences, he prepared for the worst, fearing his wife might leave him. Contrary to his expectations, his wife chose to stay and supported him in adhering to HIV care and treatment after receiving information about his HIV status and sexual orientation. During this challenging period, they welcomed a child, demonstrating their commitment to building a family together despite the diagnosis.

Despite significant psychological distress, the five men who disclosed their HIV status did so primarily to protect their wives and families. This finding underscores the complex interplay of emotions and moral considerations influencing disclosure decisions among respondents. Among those who chose not to disclose, most ($n = 6$, 66.7%) undertook discreet yet meticulous efforts to safeguard their wives' health. This covert initiative involved orchestrating medical check-ups and diagnostic procedures to confirm the absence of disease transmission. Peng (gay-identified, married with no kids, nondisclosure of HIV and SO) vividly described his approach:

I also had concerns about the risk of my wife getting infected, so I was very afraid at that time. I made up some excuses to get her to undergo a full-body checkup, including

examinations like gastroscopy. Later, the results came back negative, and at that moment, the anxious feeling I had been carrying was finally lifted.

Peng's decision not to disclose was grounded in a commitment to family harmony and safeguarding his reputation. Peng expressed an intention to disclose only when planning to have a child. Similarly, Jian (gay-identified, divorced with one kid, nondisclosure of HIV and SO) employed self-evaluation to ensure his wife was not infected, stating, "I didn't let her know or encourage her to undergo HIV testing. In fact, after I got infected, I asked her if she had a recent cold, and she said no. So, I felt relieved." Although this evaluation might not be scientifically accurate, it shows possible strategies some respondents employed to manage HIV transmission without disclosing their HIV status.

Overall, this theme reveals that the well-being of their wives was a central concern for some participants in decisions about whether to disclose their HIV status. This finding underscores the ethical and emotional complexities inherent in disclosure decisions. Respondents' strategies often tried balancing family harmony, protecting their wives' health, and managing personal reputations.

Theme 2: Perceived Strength of Their Marriage

Eleven respondents expressed varying degrees of strength in their marital status, a crucial factor in determining whether to disclose their HIV status. Many who chose to disclose their HIV status to their wives often had more positive pre-existing marital relationships. Four of seven respondents (57%) who opted for disclosure highlighted the positive qualities of their marriages, emphasizing the presence of intimacy, trust, and strong psychological connections with their wives and in-laws.

One poignant example is the case of Guo (gay-identified, married with three kids, disclosed HIV not SO). His wife gave birth right after he received the confirmatory result,

intensifying his concerns for the well-being of both his wife and newborn. Despite the challenges, he chose honesty:

Regardless of the result [the HIV test of wife], since the incident has occurred [my HIV status], you can't [keep it secret], as a couple, keep it from her, can you? You can't hide this. You might be able to hide it for a while, but you can't hide it for long. When I came back, the first thing I did was to tell her, I was honest with her.

Following the negative HIV result for his wife, Guo experienced a mix of emotions, crying and laughing in front of the HIV testing center. The traumatic journey left an enduring impact, casting a shadow on the intimacy within his marriage. Despite their commitment to maintaining their marital relationship and raising three daughters, it became apparent their intimacy had waned.

In contrast, Jie (bi-identified, married with two kids, disclosed HIV not SO) expressed a notable increase in romantic feelings following the disclosure.

I always felt that she (my wife) should have been very loving towards me at the beginning (before the HIV infection). She constantly sought my response, questioning whether my love for her was genuine. ... Now, I seem to be more passionate about the relationship between men and women than being involved with a boyfriend. In this relationship between men and women... we become more equal (in romantic relationship). Additionally, she believes that only a complete marital status can provide a good growth environment for children, and I share this viewpoint.

Before revealing his HIV status, Jie admitted love may not have been the priority or that his wife put more effort into the marriage. As this was her second marriage, she might have felt relatively disadvantaged, perceiving herself as "flawed" or inadequate and believing "he deserves better." However, upon the HIV disclosure, they may have perceived certain "flaws" from both sides, leading to a more balanced relationship dynamic. The contraction of HIV had shifted the existing power dynamics, especially for Jie's wife. In addition, disclosing the HIV status signified more open and honest communication, contributing to the establishment of a more equalitarian and empathetic marital relationship. After disclosure, Jie noted a reversal in his

sentiments, finding himself more enthusiastic about romantic relationships with his wife. He attributed this shift to the evolving dynamics of their relationship and the perceived newfound equality following the disclosure.

Meanwhile, Ze (gay-identified, married with one kid, disclosed HIV and SO) opted to disclose his HIV status due to the financial dependence of his wife, believing it would act as a deterrent against divorce. He explained:

My wife doesn't have a job, and she relies on me financially. Additionally, my wife values her reputation and is afraid of others knowing. She wouldn't consider (divorce), she's more of the traditional type, not someone who would divorce. In this aspect, I am quite fortunate. ...As things stand now, it's not possible; my family is unlikely to divorce.

Significant factors influencing Ze's decision to disclose included his wife's financial dependency and social reputation. He viewed these factors as crucial safeguards against the risk of divorce.

On the other hand, 7 of 9 men (78%) who chose not to disclose expressed primarily apprehension about the anticipated negative consequences following HIV disclosure, which they deemed insurmountable. These concerns ranged from fears of marital conflicts to the revelation of their sexual orientation and the prospect of divorce. For instance, Hao (gay-identified, married with one kid, nondisclosure of neither HIV nor SO) articulated his reasons for nondisclosure:

There are two reasons for this. One is that I'm afraid she won't be able to accept it, especially when it becomes public knowledge; it might lead to a divorce. The other reason is that she has always been quite reserved when it comes to matters of intimacy, and, well, I'm just afraid she won't be able to handle it. Our relationship is not very stable right now, so if I were to reveal this, I'm afraid it might lead to a divorce, and that wouldn't be good for the children either.

Similarly, Shang (gay-identified, separated with one kid, nondisclosure neither HIV nor SO) voiced:

Because the infection occurred during a period when my relationship with my wife was already very strained. If she were to find out about this, she would make a big issue out of it, and it would create further turmoil at home. So, I don't want her to know.

Both respondents believed revealing their HIV status would further worsen their already fragile marital situations. Additionally, 5 of 9 respondents (56%) who chose not to disclose expressed fears about exposing their extramarital affairs, which had the potential to unveil their sexual orientation. In all, this theme highlights that the decision to disclose HIV status among heterosexually married MSM in China is deeply influenced by the nature of their marital relationships. Respondents who disclosed often had strong, trusting marriages and saw disclosure as essential for maintaining honesty and connection. Conversely, those who did not disclose typically feared exacerbating fragile marital situations and facing social ostracism, driven by concerns about revealing their sexual orientation and exposing extramarital affairs.

Theme 3: The Degree of Social Support They Had

Three out of seven respondents (43%) disclosed their HIV status and identified wives as their primary source of support, particularly in managing the overwhelming psychological burden of their diagnosis and care. Ze (bisexual-identified, married with one child) expressed experiencing suicidal thoughts and distress, stating, "At that time, I couldn't bear it within myself, and I had no one to confide in. She's my best friend and a family member [of mine]." Ze emphasized that he could not have managed without his wife's support, indicating the importance of psychological and social support during the process.

Similarly, Hang (gay-identified, married with two kids, disclosed HIV but not SO) described how his wife's response evolved over time:

During that half-year period, she slowly adjusted, and indeed, she didn't leave me afterward. Our relationship was quite delicate during that time. ...Eventually, she accepted it, mainly because she felt that there was a child to raise, and the child was still

young, as in 2016, the child was still very young. Additionally, later, she also learned about this matter (HIV). ...Slowly, she began to see this as a normal state of affairs.

In this case, the disclosure increases emotional, informational, and tangible support from his wife, significantly improving their marital relationship. The openness and support in their relationship contrasted with the past, where he had to conceal his sexual orientation. Expressing his sentiments, Hang stated, "After this journey, I found that it's not as good as being with my family. It's better to return home, where there are parents, children, relatives, and loved ones."

On the contrary, four of nine (44%) respondents who chose not to disclose their HIV status harbored a fear that the social support they received from their wives would be taken away. This fear, combined with HIV stigma, intensified their psychological distress and contributed to a heightened sense of a "stigmatized" identity related to both HIV and sexual orientation. This added strain to their already troubled relationships.

Hao (gay-identified, married with a kid, nondisclosure, neither HIV nor SO) struggled with the decision to inform his wife, anticipating she might not accept the situation and could even contemplate self-harm. This fear compelled him to withhold disclosure, as he explained:

I told her that I have an illness, but she doesn't know it's this kind of illness. She knows I'm taking medication, but she doesn't know the details, so I dare not say. I mentioned that this illness can be transmitted, and she wouldn't want to have this kind of illness herself. I wanted to tell her, but I didn't know what excuse to find, what to say. If I directly say it, my wife would be devastated, and she might even consider harming herself. Because I understand the kind of person my wife is, once she encounters such a thing, she won't take it well.

Similarly, Peng (gay-identified, married with no kids, nondisclosure neither HIV nor SO) expressed:

I feel that because I had an affair [that led to HIV infection], and it has always been kept a secret, I try my best to fulfill everything for my wife. I accommodate her more, avoid arguing with her too much, all for the purpose of telling her these things later and preserving some dignity.

Instead, Peng opted to accommodate her more, avoid arguments, and fulfill his marital responsibilities to uphold his dignity and maintain stability in their marriage. It is crucial to acknowledge that not all experiences were positive. Respondents who chose not to disclose their HIV status expressed deep-seated fears of exposure. This theme underscores the significant impact of HIV disclosure on the level of social support received from wives. Respondents who disclosed their HIV status frequently reported increased support and improved relationships, with their wives offering both emotional and practical assistance during challenging times. Conversely, those who chose not to disclose faced heightened psychological distress due to the stigma associated with HIV and their sexual orientation, compounding existing relationship difficulties and intensifying their fear of losing their wives' support.

Theme 4: A Desire to Maintain Their Status in a Heterosexual Society

The fourth factor influencing respondents' decision to disclose their HIV status to their wives is the desire to uphold their social status. Ren (bi-identified, widowed with an adult child, nondisclosure of HIV and SO) expressed deep affection for his wife. Despite their profound connection for 30 years, as he shared, "We were a couple with me focusing on external matters, while she managed the household chores, and she loves me very much," Ren was concerned about the potential impact of HIV disclosure on his public image and relationships with others.

He said:

I mainly have one thing that I can't let my family know about (HIV status). ...If my family were to find out, I would certainly not survive. Sometimes, Chinese people value "face" (social reputation) more than life itself. For example, if you were to make my recording public, I would definitely commit suicide! I've always thought this way; saving face is truly more important than anything else.

Throughout the interview, Ren consistently underscored the significance of maintaining social reputation by adhering to the identities of "being heterosexual" and "noninfected,"

drawing attention to the negative attitudes toward both identities. The stigma linked to these identities was perceived as more formidable than a tiger; if exposed, he might contemplate suicide. Meanwhile, he also talked about his extramarital affairs with young men during the period when his wife was sick and needed care, adding complexity to the dynamics of life interactions and feelings. This reveals a delicate dance between preserving social status and navigating the complexities of intimate relationships amidst societal expectations and stigma.

Among the seven HIV status disclosers, five respondents opted not to disclose their sexual orientation (71.4%), with only two disclosing both HIV status and sexual orientation to their wives. When questioned by their wives about potential extramarital affairs with women, these respondents did not explicitly deny it. Some even speculated whether their wives might be aware of their sexual orientation without direct acknowledgment. For instance, Guo (gay-identified, stayed married with three kids, disclosed HIV, not SO) stated:

I haven't told her about my sexual orientation. I suspect she understands, and I suspect she can feel it too. Since that year until now, she has never asked me how I got infected. Up to now (5 years after), she still hasn't asked me.

It is noteworthy that nearly all respondents chose not to disclose their HIV status to their same-sex sexual partners. This decision was influenced by the principle of Undetectable = Untransmittable (U=U) and the pervasive stigma surrounding HIV within gay communities. This theme highlights the complex balance respondents sought to maintain between their personal realities and societal expectations. It explores how the desire to preserve social status and conform to societal norms impacts HIV disclosure decisions among this group. Many respondents avoided disclosing their HIV status to safeguard their public image and protect their social reputation, with societal stigma being a significant concern. They employed strategies to

manage perceptions, such as concealing their sexual orientation and HIV status, while navigating the intricate dynamics of their intimate relationships amidst societal pressures and stigma.

Discussion

This study diverges from many HIV studies that predominantly focused on quantifying the effects of demographic backgrounds and psychological pathways in disclosure. Instead, we center on the inner journey of HIV+ MMSM as they navigate various stigmatized identities in the decision to disclose HIV status in China. The narratives reveal four themes highlighting the intricate nature of the disclosure process (whether and what) among HIV+ MMSM in China. These themes illuminate a complex interplay between subjective experiences with their wives, involvement in “gay circles,” and social expectations, helping to bridge the gap in understanding the mechanisms of the decision-making process of HIV disclosure.

First, our study revealed a lower HIV disclosure rate among MMSM (43.75%), aligning with prior research findings (Chi et al., 2022; Wu et al., 2019). Grounded in the DPM (Chaudoir & Fisher, 2010), the decision to (non)disclose goes beyond a mere instrumental health-related activity, emphasizing a profound engagement with the meaningfulness of their identities, health, and life (Flowers & Davis, 2012; Li et al., 2023). Most HIV+ MMSM in the study approached (non)disclosure as a deliberate activity, significantly influencing the trajectory of their relationship with their wives (Yan et al., 2019; Li et al., 2016) and their own mental health (Li et al., 2023). This process is influenced by the compounding impacts of these four themes in our study, which were not systematically captured in previous studies (Chi et al., 2022; Lin et al., 2016).

Concerning the approach-based goal, HIV+ MMSM who chose to disclose exhibited a consistent commitment to strengthen the familial bond between “us.” They emphasized concerns

for their wives' well-being, the perceived strength of their marriage, and a desire for spousal support to alleviate feelings of guilt. Primarily, these men disclosed out of concern for their wives' health and well-being, driven by confidence in the strength of their marriages and the belief that their wives would stand by them (e.g., good relationship with their wives before the disclosure or financial dependency of their wives).

Meanwhile, positive expectations and goals associated with disclosure functioned as active coping strategies (Fu et al., 2023), empowering individuals to navigate the challenges posed by their altered life circumstances. Wives were integral to the familial unit, making the decision to disclose their HIV status outweigh potential negative consequences, such as identity exposure or stigmatization (Chi et al., 2022; Li et al., 2016; Song et al., 2023). This finding underscores a discernible pattern among those who chose disclosure—a shared foundation of robust marital relationships. Respondents frequently expressed the depth of their intimacy with their wives, reflecting on the significant role their wives played in their lives. This pattern further reinforces the notion that the decision to disclose is rooted in a foundation of trust, understanding, and strong relational bonds established before the diagnosis. In the face of difficulties and challenges, these positive expectations serve as driving forces, affirming disclosure is a deliberate choice made within the context of a supportive and resilient marital relationship.

In contrast, avoidance-focused goals are linked to adverse outcomes, manifesting in nondisclosure, heightened stress, and strained marital relationships. Men opting not to disclose their HIV status often harbor fears of lacking social support, experiencing stigmatization for HIV and internalized homophobia, and apprehensions about potential damage to their social status/identities (Li et al., 2016). Despite having concern for their wives' health and well-being,

some may fabricate reasons for their wives to undergo testing (e.g., check-ups) or closely observe their wives' apparent well-being, interpreting it as a sign that they have not contracted HIV. Notably, some used various alternatives to reduce sexual intimacy with their wives as a protective method (Chao et al., 2020). Urgent investigation and promotion of HIV testing among their wives are imperative to address these issues (Wang et al., 2015).

Conversely, those who chose to conceal their HIV status, their focus was on specific aspects related to poor marital life (e.g., divorce and trouble) and concerns about disclosing their sexual orientation. These aspects resonate more with the notion of “me” as the central point of potential stigmatization. This contrasting decision-making process highlights the complexity of individual choices within the context of HIV disclosure and underscores the diverse factors influencing these decisions, especially when sexual orientation and identity are jeopardized (Lin et al., 2016; Perlson et al., 2021). Their nondisclosure behaviors were also a part of coping and were perceived to make their lives more manageable (Fu et al., 2023).

The diverse factors influencing these decisions highlight the multifaceted nature of HIV disclosure choices. HIV stigmas and homophobia emerge as primary concerns within the identified themes, significantly impacting individuals' decisions to withhold information (Li et al., 2016). A striking trend in our study revealed that only two respondents chose to disclose their sexual orientation, even among those who revealed their HIV status to their wives. This pattern, once again, underscores the pervasive influence of internalized homophobia and societal discrimination toward homosexuality, deeply rooted in the context of China (Song et al., 2022; Worth et al., 2019; Wuhan LGBT Center, 2023).

Disclosing one's sexual orientation may pose risks to marital stability (e.g., being condemned as “marriage fraud”), leading to isolation and rejection from family, the “gay circle,”

and boarder society, as well as jeopardize financial stability (Liu & Ren, 2023; Xie & Duan, 2024). Respondents consistently emphasized the significance of “social reputation” as a force shaping their values, behaviors, and interactions within the collective society (Li et al., 2022; Song et al., 2022). According to our field notes, many respondents reinforced traditional gender roles and heterosexual status in their daily lives, such as wife being expected to cook and take care of the children. Thus, a comprehensive understanding of the complex dynamics of identities and behaviors is essential when considering disclosure decisions within the context of multiple stigmatized identities.

Next, four respondents carefully selected a specific time to disclose their HIV status. Those with stronger relationships with their wives prepared for this moment with the intention of sustaining the marriage and seeking social support, drawn on their existing marital conditions, such as intimacy and daily positive interactions. As posited by the DPM (Chaudoir & Fisher, 2010), disclosure goals shape both the content of the disclosure event and the reactions of the recipients. While the disclosure event significantly influenced the reactions of the wives in our study, none of the respondents divorced solely due to their HIV status/HIV status disclosure. Instead, divorces were primarily driven by preexisting issues within the conjugal relationships. This finding underscores the nuanced interplay of factors that influence the long-term outcomes of HIV disclosure within the context of existing marital dynamics.

Respondents in our sample reflected some, but not all, the potential benefits of voluntary HIV disclosure. These advantages encompass increased support, enhanced psychological well-being, and improved HIV adherence, aligning with findings from previous studies (Chaudoir et al., 2011; Li et al., 2007; Perlson et al., 2021; Qiao et al., 2016). Although some relationships strengthened over time as their wives came to understand, accept, and adjust to the reality of

HIV, others did not experience the same positive outcomes. These mixed findings suggest the need for additional considerations to comprehend how negative outcomes of disclosure may structure psychological health. Overall, the narratives in our studies parallel the outcome process outlined in the DPM (Chaudoir & Fisher, 2010). Various mediators, such as rejections from wives or experiences of HIV discrimination in healthcare or workplace settings, increased the respondents' struggles with HIV disclosure and adherence, internalized stigma, and adverse psychological well-being (Qian et al., 2016).

Limitations

The present study has several limitations that warrant consideration. First, it involved a small convenience sample online, comprised solely of highly active respondents who reported suppressed viral loads. This awareness and engagement may have influenced the decision-making process, potentially explaining why none of the respondents disclosed their HIV status to same-sex partners. Thus, the findings may lack generalizability to individuals with limited access, diminished social support, or diverse demographic characteristics. Secondly, the online nature of the sample introduced a potential selection bias, as those not actively participating in online forums or communities may be underrepresented. The sensitive nature of the study's topics may introduce self-report bias, and relying on self-disclosure might not fully capture the nuances of the respondents' experiences.

Notably, the study lacked interviews with the wives of respondents, who could provide distinct perspectives on the relationship and the decision-making process regarding disclosure. Lastly, the recruitment strategy heavily relied on existing networks, which may limit diversity and representation of this group, particularly among individuals with higher levels of internalized

homophobia or those who do not have access to online social groups. These individuals may be in greater need of HIV care education.

Future research could address these limitations by employing a more diverse sample and incorporating quantitative approaches to explore variables, such as family dynamics, internalized homophobia, and HIV stigma in relation to disclosure. Investigating these factors could provide a more comprehensive understanding of disclosure pathways among PLWH by their sex.

Implications

Several critical implications arise from our study, emphasizing the need for a more holistic approach to HIV care. Traditionally, HIV care has focused predominantly on physical health, with less attention given to the mental health and social well-being of individuals living with HIV (PLWH). However, our findings underscore the importance of integrating these dimensions into HIV care education. This broader approach should encompass not only medical management but also the psychological and relational challenges faced by PLWH, particularly those in serodiscordant relationships. Education programs should address key topics such as protective sex practices, effective communication within relationships, and strategies for managing the complexities of living with HIV in a serodiscordant partnership. By equipping individuals and couples with these tools, health professionals can help mitigate the emotional and social challenges that often accompany an HIV diagnosis.

Guided by the Disclosure Processes Model (DPM) (Chaudoir & Fisher, 2010), it is essential for health professionals, including social workers and counselors, to recognize the significant difficulties associated with HIV disclosure. Disclosure is not a one-size-fits-all process; it is deeply influenced by the individual's goals, fears, and the dynamics of their relationships. As such, professionals should assist PLWH in developing personalized HIV care

plans that align with their disclosure goals, whether these are approach-oriented (seeking social support) or avoidance-oriented (minimizing harm and potential rejection).

Comprehensive interventions should be designed to address these intersecting stigmas, empowering HIV+ MMSM with strategies for disclosure that are sensitive to their specific circumstances. Additionally, these interventions should offer ongoing support for long-term HIV treatment planning, helping individuals maintain their health while managing the social and emotional complexities of their situation.

The success of these efforts depends on fostering and maintaining a positive social climate for PLWH and sexual minorities. Public health campaigns are pivotal in this process. These campaigns should focus on reducing both societal and self-stigma associated with HIV, strengthening social support networks, and addressing both enacted discrimination and perceived stress related to stigmatized identities. By promoting greater acceptance and understanding, these initiatives can help create a more supportive environment where PLWH feel safer and more empowered to disclose their status and seek the care they need.

Conclusion

In summary, this qualitative study, guided by the DPM (Chaudoir & Fisher, 2010), has offered valuable insights into the intricate factors influencing the decision of HIV+ MMSM in China to disclose their HIV status to their wives. The narratives identified four prominent themes: (a) concern for their wife's overall well-being, (b) perceived strength of the marriage, (c) changes in social support, and (d) maintaining their status in a heterosexual society. These themes encompass two types of goals: approach-focused and avoidant-focused goals. By exploring these themes, the study not only advances understanding of specific challenges HIV+ MMSM face in China but also marks a crucial step toward developing informed and targeted interventions.

Tailoring strategies to address the identified factors can enhance support systems for HIV disclosure and facilitate better adherence to HIV care within this unique population.

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