


# Experiences, Emotions, and Adjustments of HIV-Infected Men in HIV-Concordant Marital Relationship in Cambodia

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## Abstract

Although it has been well documented that the HIV infection experience can be problematic for those affected, the experiences and perceptions of living with HIV among married males in Cambodia have not yet been examined until now. This study's purpose was to describe the revelations, emotions, reactions, and adjustments to HIV diagnosis among infected Cambodian males in seroconcordant heterosexual relationship. Fifteen qualitative in-depth interviews were conducted with 15 HIV-positive males using unstructured, open-ended questions and in the local Khmer language. Conventional content analysis method was employed for analyzing data. After analysis, four main categories were developed: knowledge of HIV-positive status; realization of self-deeds; discouraging news for both partners; and comparative improvement of life. Participants reported the appearance of physical symptoms as the only reason for pursuing HIV testing. Feelings ranged from sadness and guilt to acceptance of HIV infection in their lives. The participants' wives expressed anger and worry about being infected by their husbands. However, sufficient inspiration from medical personnel and peer groups, as well as a shared concern for their children, helped couples adjust to their dyadic relationship. The study results highlight the link between individual and couple experiences and emotions post-infection, with implications for designing and implementing coping interventions for this population. The findings of this study have public health implications in the design of couple-based intervention and counseling programs for HIV prevention and treatment with the input of the HIV-positive individuals' voices.

## Keywords

Cambodia, seroconcordant, HIV, revelation, experience

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The spread of HIV/AIDS is a severe health problem and a detriment to the development process in many countries worldwide (World Health Organization [WHO], 2008). The Joint United Nations Program on HIV/AIDS (UNAIDS) has reported that, as of December 2015, there were 36.7 million people living with HIV infection, 5.1 million (13.9%) in the Asia and Pacific Region (UNAIDS, 2016b). According to the UNAIDS prevention gap report of 2016, Asian and Pacific Region countries recorded 300,000 new HIV infections and 180,000 AIDS-related deaths in 2015 (UNAIDS, 2016a). Within these regions, Cambodia's situation reflects what appears to be evolving as a typical pattern for HIV infection in Asian countries. After the first Cambodian case of HIV was detected in 1991 (Wilkinson, Sovannarith, Navy, Sarith, & Bhatt, 2000), the prevalence of infection was increasing steadily to a high of 2% in 1998, decreasing first to 0.9% in 2006

to 0.7% in 2013 (National AIDS Authority, 2015). In 2015, the number of people living with HIV in Cambodia was estimated to be 74,000, with men equaling around 50% of that total (UNAIDS, 2015a). Cambodia has successfully reduced their national HIV incidence and is now attempting to be among the first countries worldwide to achieve "HIV elimination." Despite these commitments and achievements, preventing new HIV infections always

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remains a challenge. In Cambodia, most new HIV infections are acquired through unprotected sexual contact, with heterosexual transmission accounting for 48% of all new cases (National AIDS Authority, 2015). The influences of cultural and traditional thoughts and practices, social stigma, and discrimination surrounding HIV/AIDS create critical barriers to disclosure, treatment, care, and prevention in Cambodia (Chesney & Smith, 1999).

Around 50% of HIV testing among general population occurs as part of a diagnostic trial for another medical condition or illness (Dokuzoguz et al., 2014). Being diagnosed with the HIV brings drastic changes in one's physical, social, interpersonal and emotional relations with spouses, family members, and community (Sandelowski & Barroso, 2003); because of this, serodisclosure and the infection experience can be problematic for those affected (Lee, Li, Iamsirithaworn, & Khumtong, 2013). Possible risks of HIV serostatus disclosure include blame from one's family for being the carrier, separation from familial and social affairs (Pool, Nyanzi, & Whitworth, 2001), and shame and discrimination within one's community (Kilewo et al., 2001). Evidence from around the world illustrates that HIV infection is mainly transmitted to women (up to 90%) by their high-risk husbands, most commonly due to those husbands' extramarital sexual relationships (Newmann et al., 2000; UNAIDS, UNFPA, & UNIFEM, 2004; UNFPA, 2005). Infected wives report feelings of hopelessness, victimization and self-blame (Yang, Wojnar, & Lewis, 2016), depression and anxiety (Glémaud et al., 2014; Kamen et al., 2015), and fears of condemnation (Siegel, Schrimshaw, & Lekas, 2006) as their emotional responses towards the diagnosis. The acceptance or denial of HIV status by a couple makes a vast difference in their married life. In many instances, being married provides a level of contentment in the areas of interpersonal care and support, which can lead to a peaceful life for both partners (Akinboro et al., 2014).

HIV in married couples must be understood within a sociocultural context in Cambodia. The patriarchal culture in Cambodia holds that wives are subordinate to and the physical property of their husbands (Nakagawa, 2006). Risky sexual behavior like visiting sex workers, participating in extra marital affairs, and infrequently using condoms are easily accepted by society as a need and right of Cambodian males while wives are forbidden to negotiate for condom use with husbands (Yang, Lewis, & Kraushaar, 2013). These rules fortify a cultural norm that increases the number of HIV-concordant couples in the country. On the other hand, HIV/AIDS is still an offensive in the country. The social environment does not engender acceptance of HIV/AIDS as a typical chronic disease, leading to the stigmatization of those infected (Yi et al., 2015). When designing suitable dyadic interventions and counseling programs to better the lives of HIV-concordant married couples, it's

essential that the lived experiences of both genders be studied (Edwards, Irving, & Hawkins, 2011; Mwale, 2006). Previous research considered the lived experiences of Cambodian women infected with HIV (Yang, Wojnar, & Lewis, 2016). However, the perspectives and experiences of Cambodian men, who may be the sources of infection within many couples, have yet not been studied.

There is now a considerable body of research that discusses the social and gender aspects of HIV infection, especially focusing on the serodiscordant relation. Very little research seems to conceptualize the experiences and emotions of infected people in seroconcordant relationships. This study explores how Cambodian men learn of their HIV positive status, highlights the link between their individual emotions and experiences post-infection with those occurring in the couple relationship, and documents how they deal with their post-diagnosis life within marriage. The results could provide a guideline for interventions aimed at long-term care of married HIV-positive men. The efforts to improve the psychological health of both partners within a marriage impacted by HIV/AIDS could also benefit greatly from an understanding of the individuals' and couples' ongoing psychological status from the initial time of HIV diagnosis.

## Methods

### *Design, Setting, and Sample*

The qualitative descriptive research method guiding this study was designed to describe the experiences during the process among married Cambodian men of being diagnosed with HIV and adjusting to living with the infection (Morse & Field, 1995). Study participant recruitment occurred at an HIV/AIDS hospital in Phnom Penh, Cambodia. The eligibility criteria included (a) being a married Cambodian man, (b) being diagnosed as HIV positive, (c) having an HIV-positive wife, and (d) being willing to provide written informed consent. To collaborate closely with the hospital staff members (doctors, nurses, counselors, social workers, and peer-group leaders), a meeting was conducted before the start of the study where its aims, method of participation, and process were introduced. A social worker approached small groups of men ( $n = 75$ ) in the hospital's HIV unit waiting area and briefly introduced the study aims, explained how to participate, and discussed human rights and the ethical standards that would be maintained. If a man showed an interest in participating, details were provided in a separate area. Thirty-one men expressed interest in the study, out of which 15 men enrolled, signed the consent form, and participated in the interviews. The National Ethics Committee for Health Research of the Cambodia Ministry of Health (151NECHR) and

Chonbuk National University Institutional Human Subjects Review Committee approved the study.

### Data Collection

Data were collected through in-depth interviews using unstructured, open-ended questions to elicit information about the men's experiences, emotions, challenges, and perspectives. The first interview questions were, "How did you find out that you were HIV-positive?" and "What was it like for you being diagnosed as HIV-positive?" The interview went deeper with follow-up questions, like, "What was the response of your wife when she found out your HIV status?" "How have you been handling your life since diagnosis?" If needed, further inquiry occurred by asking, "Can you tell me about that in more detail?"

The senior author had an intermediate fluency level of the local language (Khmer) at the time of the interviews; because of this, a bilingual Khmer/English male interpreter assisted so the interviews could be held in Khmer. To maintain participant confidentiality, all interviews were held in a separate, soundproofed room in the hospital with only the participant, senior author, and interpreter in attendance. Interviews lasted between 35 and 67 min and averaged 60 min in length. All interviews were digitally audio-recorded after obtaining permission from each participant. For privacy, pseudonyms and code numbers were given for all information obtained from every participant. Sociodemographic information (age, years of marriage, education level, and job type) and HIV-related information (years HIV diagnosis was known) were collected through a questionnaire delivered by the interviewer. After receiving permission from the hospital director, one of the hospital staff members who had access to the patient database provided the records for CD4 cell counts and years of antiretroviral (ARV) therapy. When an interview was completed, the senior investigator gave the participant \$5 USD (in a sealed envelope; without any prior notice of remuneration) to express gratitude for participating. Data were collected during July and August 2015.

### Data Management and Analysis

Interviews conducted in Khmer were transcribed verbatim by two Cambodian college students, then translated into English by a professional translator and a nursing faculty member for analysis. Each translator listened to the original audio records to verify the transcript's accuracy. The interpreter, translators, and transcriptionists all signed agreements assuring the confidentiality of the participants' information.

Conventional content analysis was conducted to produce categories, subcategories, and codes from the data rather than imposing those from existing theoretical

perspectives or literature (Hsieh & Shannon, 2005). This analysis technique was chosen to capture the participants' unique experiences and perspectives as grounded in the actual data. The senior researcher read the data twice to obtain a sense of the themes, then performed a detail reading to derive codes that captured key concepts. Notes based on impressions, thoughts, and labels were used to create reflective codes. Codes containing similar meaning were classified to family groups and then again sorted into subcategories based on how they linked together by the two researchers. In the end, 12 subcategories emerged and were used to organize and develop four main categories: knowledge of HIV-positive status; realization of self-deeds; discouraging news for both partners; and a comparative improvement of life. Next, a codebook that included definitions and descriptions for each category and subcategory was developed. Representative exemplars for each subcategory were identified from the data. Ongoing reviews and discussions between the two researchers were held via email and in person until consensus was reached on the final findings. The ATLAS.Ti 6.1.1 qualitative analysis program (ATLAS.ti Americas, Corvallis, OR) was used for data management.

### Results

Table 1 illustrates the demographic characteristics of the participants. The median age for the 15 participants was 44, ranging from 29 to 63 years, and years married ranged from 5 to 36 years, with a median of 17 years. All but one of the participants came from rural Cambodian villages; the average amount of schooling was 9 years and ranged from 4 to 12 years. Time since HIV diagnosis average 7 years for participants (range of 0.5 to 12 years), and they had been in ARV therapy for an average of 6 years (range of 0.5 to 11 years). All except one were diagnosed as HIV-positive after getting married. The hospital records reported a median value of 392 cells/mm<sup>3</sup> for the CD4+ T count, ranging from the lowest value of 44 to the highest value of 800. The average monthly household income was \$228 USD, with a range of \$75 USD to \$500 USD.

Table 2 outlines the definitions of each theme and its subcategories. Data analysis classified results into four major themes: knowledge of HIV-positive status; realization of self-deeds; discouraging news for both partners; and comparative improvement of life. Subcategories were prepared for the categories based on the respondents' answers.

#### Knowledge of HIV-Positive Status

Fourteen participants learned of their HIV status only after getting married. However, it is unclear whether they were infected before or after marriage. The choice to get

**Table 1.** Sociodemographic Characteristics of the Population.

Participant	Age	Years of marriage	Grade completed in school	Hometown/residence <sup>a</sup>	Years known HIV diagnosis	Job	Monthly income (USD)	Years of taking ARV	CD4+ T cell count
1	36	20	4	Rural/urban	5	Construction labor	300	5	363
2	45	14	7	Urban/urban	9	Soldier	200	8	800
3	40	16	5	Rural/urban	7	Construction labor	75	5	596
4	47	23	8	Rural/urban	5	Motor	100	5	800
5	36	8	10	Rural/urban	7	Camera man	400	7	215
6	32	11	10	Rural/rural	0.5	Garment worker	500	0.5	44
7	39	18	7	Rural/urban	12	Seller	350	11	250
8	43	16	12	Rural/urban	6	Police	350	3	85
9	63	36	12	Rural/rural	7	Officer	300	7	600
10	48	21	8	Rural/rural	2	Farmer	75	2	270
11	51	15	12	Rural/urban	11	Motor	100	10	385
12	45	11	9	Rural/rural	6	Motor	75	6	650
13	44	10	7	Rural/urban	17	Land Broker	200	7	300
14	58	34	12	Rural/rural	11	Seller	250	8	400
15	29	5	8	Rural/rural	1	Farmer	150	0.7	120

Note. <sup>a</sup>Urban here refers to Phnom Penh, the capital city of Cambodia. USD = U.S. dollar; ARV = antiretroviral.

**Table 2.** Definitions of Themes and Subcategories.

Theme/Definition	Subcategory
<b>Knowledge of HIV positive status</b> Pushing factors for the step towards the blood test	<ul style="list-style-type: none"> <li>• Illness in self or other family members</li> <li>• Delayed acknowledgment: repeated false results</li> <li>• No blood tests before marriage</li> </ul>
<b>Realization of self-deeds</b> Retort for the unexpected and unsolicited result	<ul style="list-style-type: none"> <li>• Feelings of sadness</li> <li>• Feelings of guilt</li> <li>• Acceptance</li> </ul>
<b>Discouraging news for both partners</b> Inter reaction and sharing of interpretations between the couple regarding the condition	<ul style="list-style-type: none"> <li>• Unexpected</li> <li>• Apologies to wives and words of comfort</li> <li>• Wife's response: angry then adjustment</li> </ul>
<b>Comparative improvement of life</b> Subsidiary dynamics acting as the pillars for their remaining life	<ul style="list-style-type: none"> <li>• Hospital services lead to a better life</li> <li>• Trust in destiny and the development of a positive attitude made life easier</li> <li>• Thinking about the children</li> </ul>

tested for all participants occurred only after the appearance of physical symptoms on their own or family members' bodies or because their wives suggested testing. The virus was confirmed after hospital tests.

*Illness in self or other family members.* Nine participants reported developing physical symptoms that led them to seek out a diagnosis. They sought out treatment when the symptoms were first noticed, then proceeding to get blood tests when the treatment did not seem to help. As one participant said:

At that time, I was a construction worker. I used to work hard and drink alcohol a lot after work. One day, I started feeling uncomfortable, high temperature and sweating at night. I thought I was having that problem because of the

continuous physical works and heavy drinking. I denied the fact that I should have blood test. At the same time, I got red spot in my eyes and went to eye specialist who advised me to do blood test. After the test, I knew myself [as] HIV-positive. (Samik, aged 36)

Six participants explained that they chose to proceed with a blood test when a family member became ill. A wife or child would be sick and tested for HIV, which would lead to the husband getting tested as well. For example, one man shared how he knew he was HIV-positive:

For my life, I was not sure about myself that I was infected or not. Well, my kid was ill and did blood test, the result was HIV-positive. Then we (me and my wife) did blood test, we found to be HIV-positive all together. (Semkol, aged 45)

In another situation, a man went for a blood test after his wife became ill and presented symptoms such as weight loss and marks on her hands. At that time, he wondered about the cause of his wife's illness; however, he felt her weight loss was due to the stress caused by their daughter's upcoming wedding. After going in for a basic health checkup, his wife was prescribed some medicine. The medicine did not seem to alleviate her symptoms; concerned, they both went to a private clinic for blood tests and discovered they were HIV-positive.

Two of the participants learned of their diagnosis after following their wives' suggestions to get tested. One respondent shared his wife's advice:

Before I got symptoms, I was very strong, and I never felt tired or powerless. When I became weak, my wife suspected me and she went to test her blood before me. Then she suggested me to get blood test. This was how we knew that we both are infected. (Linn, aged 29)

In contrast, one man continued to avoid getting tested even though his wife and child were diagnosed as HIV-positive; his reasoning was that he continued to present as healthy. He explained:

I just saw my wife and my child sick, I still don't know until the doctor told me, and I still don't believe that I am infected, because I was never sick. At that time when the doctor told me, I was just very shocked, but I tried to be strong and thought that I was ok! That time only my wife and my daughter were sick, my daughter often used to get diarrhea, and I took her to the hospital and even they didn't know that she was infected. (Sothom, aged 40)

**Delayed acknowledgment: Repeated false results.** False or negative diagnoses often caused a delay in participants' acknowledgment of the illness. Aches and other symptoms would occur due to opportunistic infections. Doctors ran blood tests, but the results would be negative. After continuing to take the prescribed symptomatic medication without any health improvement, participants reported changing hospitals and having their blood tested again. Only then did they face the reality of their diagnoses. One participant shared:

I did not know how, where and from whom I got infected. I only knew that I had various symptoms and I was sick for long time. I spent lots of money and time for treatment. I did blood test three or four times with different doctors. But they lied [to] me about the result of blood test. I was always told HIV-negative. After visiting last doctor, I was suggested to visit XXX hospital where I was confirmed having HIV-positive. (Kiseth, aged 39)

One participant was not diagnosed as HIV-positive until he had developed severe symptoms and had a CD4 cell count of 19. He explained:

First of all, I got herpes infection. I got hurt, high fever, and chill, and then I took the medication that I bought from pharmacy. I reduced hurt, fever, and chill...but only one or two days, and then it reappeared again. After that, they recommended me to take blood test, because it is clearly for doing diagnostic and cure. I was also better, but only 2 or 3 days after it reappeared again. Finally, my neighbor, he was also doctor...he suggested me to go to XXX Hospital. When I arrived there, they took to do blood test, and then the result I was HIV-positive...at that time, CD4 was only 19...I could not have much walk. (Potan, aged 51)

**No blood tests before marriage.** A total of 14 interviewees reported they did not get their blood tested before marriage and getting one was not a routine for them. As one explained, "I did blood test only after 29 years of marriage. They did not ask to test, nor did I test...no...no test before marriage." (Fifi, aged 63)

### *Realization of Self-Deeds*

Respondents reported a mix of emotions when they were told of their HIV status. Twelve explained that they had no interest in living, felt guilty about their actions that had led to this disease entering their lives, and wanted to give up everything, feeling their lives were over once they heard they were HIV-positive. On the other hand, three participants said that it was not bothersome for them to be diagnosed and live as HIV-positive.

**Feelings of sadness.** For eight participants, it was shocking news to discover that they had contracted the HIV. They felt the world fell apart the day they were diagnosed. They reported being particularly concerned about their social positions and were upset because there is no recovery from HIV infection. One participant explained:

Right after I know, I just want to die. I need nothing. I am shocked. I know that this is such a bad disease, especially the discrimination. Once they know that we are infected, they don't even see our face, they just hate us, and they don't even want to share a table with us for meals, so it is very depressing. I feel like I have no soul or spirit in my body, better to die. I don't want to live anymore. (Veasni, aged 36)

**Feelings of guilt.** Four participants expressed guilt over those past actions (having multiple sex partners, both before and after marriage) that were responsible for the disease's entry into their marriages. These participants focused on the time they felt was lost, that could never be brought back. They regretted that they would have to live with this for the rest of their lives due to their past transgressions and ignorance. One stated,

This is caused by my carelessness. My father used to advise me, "Too much fun may hurt too much," but since I used to

feel happy to do those things, I just enjoyed it. I used to follow my friends and enjoyed my life to the fullest. When I had time, I knew nothing other than enjoyment, and now when I know, everything is over. I don't have time. I woke up just right after I got informed about HIV status. (Sothom, aged 40)

**Acceptance.** In contrast to the pessimistic reactions of 12 respondents, three were cautiously optimistic; as one man said, "I am on medication. I am not going to die soon." Another had a similar view, stating:

I just feel relax, just free, it's not only me with the infection. Many people are infected. I just think that I am very ok, I am sure I am ok. Frankly speaking, I felt nothing. Doctor gives me the medication and I just take the pill according to their prescription. They told me to take it at 7 o'clock, I just take it. I just follow. Usually I just catch cold a day and then it's gone, nothing serious. Others usually say that once I have this, I will die soon, but I don't care, just pretend like nothing, and I always say that I am OK! (Sothom, aged 40)

One participant explained that he received counseling from his workplace that helped him feel he could face the disease. He said:

Because I worked at XXX, every meeting we mostly talked about this infection, and I was also close with the leader of HIV researching. He told me the virus hardly threatens our health if everyone around us always encourages us...never blame us, and also if we are not depressed. (Shivan, aged 63)

### **Discouraging News for Both Partners**

Within this participant group, the men were infected first, then transmitted the disease to their wives (although data on this are not presented). A medical checkup for the wives confirmed their HIV-positive diagnoses. Some study participants felt guilty for making their wives also suffer. The husbands reported that their behavior and attitudes towards their partners changed after knowing that they were responsible for their wives' condition. They also said they became more responsible, caring, and loving husbands and life partners after diagnosis.

**Unexpected.** The disease was unexpected for all study participants, who reported their wives having the same reaction. The men claimed to be ignorant of the risk of infection prior to diagnosis. One recalled, "She was angry with me but still I talked with her...everything was because of my mistake and I also knew nothing about my HIV status" (Samath, aged 58). Another participant added, "I just told her that I also didn't want this, I didn't know. I also don't want to be infected but who knows... She just keeps on blaming me" (Sothom, aged 30).

**Apologies to wives and words of comfort.** Six participants felt apologetic and remorseful for infecting their wives. They agreed that the news of their wives' HIV-positive diagnosis hurt more than their own since because they were the source of the infection. As one said,

I really regret about this. If it was just me who got infected, then it would be OK but I transmitted to my wife too. I really feel sorry for her. I feel sad, stressed and sometimes I cry loud by myself. (Exhong, aged 36)

Similarly, another participant explained, "I want to make her understand that it's not purposeful. I didn't know that I had virus otherwise I would have never make her contaminated too" (Potan, aged 51).

The men explained how self-realization led them to become loving, caring, and supportive towards their wives. As one said,

Actually, right after I told her about this, she cried and I said nothing at that moment. I thought that if she couldn't accept this, I will just follow her, whatever she wishes for. I told her to have blood test since I already got it. For 1-2 days she kept crying continuously. I tried to encourage her not to fear about the result of the test because nowadays medicines are available. Death is regular so don't worry; instead try to make our remaining days more wonderful. Nothing can be changed now because we are already infected. (Seang, aged 45)

Moreover, one of them stated, "Whenever she cannot walk, it's only me to carry her, wash her, and look after her" (Borek, aged 43).

**Wife's response: Anger then adjustment.** According to the participants, their wives were at first shocked, dazed, and discouraged after they found out about the diagnoses for both them and their husbands. In two cases, these responses developed into anger towards their husbands; however, in other cases ( $n = 5$ ), the husbands reported their wives gradually accepting the situation, becoming motivated, and encouraging their husbands to not give up hope.

Two participants summarized their wives' bitter responses. The wives held their husbands responsible for this disease entering their homes; it was not easy for them to accept the HIV-positive diagnosis. One participant said, "She was angry and blamed me too much. Even though she was angry, everything was over" (Samath, aged 58).

Four of the men reported that their spouses ultimately adjusted to the disease. The wives seemed to be conscious about their and their spouses' health. The wives' overriding concern for everyone's health helped get rid of the anger, as evidenced by one participant commenting, "At that time she was angry, but not that much, she loves me. Even now she is not so much angry; else she is concerned

about my health since I am getting severe infections” (Kiseth, aged 39).

### *Comparative Improvement of Life*

One question asked how the men attempted to negotiate their lives after diagnosis. The participants reported being thankful for the medical services offered to upgrade their health status, faithful to the concept of self-destiny, dedicated to developing positive attitudes in order to make life easier for themselves and for their children.

*Hospital services lead to a better life.* Six respondents said that their lives changed after they began to receive medical care services and take medication. Their health status improved because of the variety of medical support received. They overcame depression and developed an optimistic attitude towards life. One explained:

Before infection, we had a sweet family, but right after knowing ourselves HIV-positive we were feeling difficult, sad, and depressed. However, now we are getting better. Centre has given us more hope that we can still live even with being HIV-positive. I get good medications that can cure the disease here. I get warm care and hospital services like medications; those make my family life better. We have just turned to normal life; can live happier and work normally like non-infected people. (Veasni, aged 36)

Participants also mentioned the awareness they gained from hospital and care center staff. One stated,

I got a lot of advice from health center staff. They told me that I am not the only person who is living with HIV positive and can still live as normal person. They educated me on the procedures for taking care of my health and about medications. I learned how to live with HIV. (Makala, aged 32)

Drugs were prescribed by hospital doctors to reduce symptoms. Regular intake of medicine helped the participants maintain their health. One said, “Medicines diminished the virus’s numbers and [we] had good health like other people who were not infected. We have to take medicines and care ourselves for whole life but happy that we can have same good health” (Potan, aged 51)

During visits to care centers and hospitals, those couples infected with HIV reported themselves becoming closer and more emotionally connected. Meeting others with the same disease and sharing feelings and ideas also motivated and encouraged respondents to overcome difficulties. One respondent explained, “Normally, we came to hospital, talked and asked about the side effects and effects of medicines to each other day by day. I am not scared anymore” (Potan, aged 51).

*Trust in destiny and the development of a positive attitude made life easier.* Five respondents believed that whatever happened was a result of destiny (kismet, a power that is believed to control what happens in the future) and their own doings (karma). They felt that only they could save themselves and they should always be prepared to face whatever challenges life presented to them.

At first, I was too shocked but many years after, I considered it was the human life.... how can we escape if we already got it, so it is up to our kismet. We tried to find the medicines to delay our lives and to survive same as what other people do. Then I was not depressed any more... (Semkol, aged 45)

Another explained:

I have no challenges. Since we have known we got this virus...I have never had intercourse with her anymore. I just looked after her and gave medications to her regular time. I also took medications [at a] regular time. Everything is up to our kismet. (Samath, aged 54).

*Thinking about the children.* Two study participants answered they needed to live for their children. Their love for their children gave them the courage to live as long as possible. As one explained, “That time I was really very sad. My children were too young. I thought if I die who will take care of them. Then I just tried to think about them and live for them” (Seang, aged 45).

Another stated,

I have to take care of my children very well because they may get infected at any time. I do care [about my] children a lot. I feed with formula milk by myself. Doctor asked me if I can have effort to bear those children. I had [my] most happiness moment to answer him.... (Veasni, aged 36)

## **Discussion**

This study explored the steps married Cambodian men took to discover their HIV-positive status, their reactions to an HIV-positive diagnosis, and their adjustments to living with HIV. Those infected with HIV who are unaware of their status carry a risk of transmission rate 3.5 times higher than those who know their serological status (Marks, Crepaz, & Janssen, 2006). Nearly all study participants ( $n = 14$ ) had a blood test for HIV after getting married (premarital HIV infection could not be confirmed for any of these participants), and none of the couples practiced safe sex within marriage. All were seroconcordant cases in this study. Even though all participants were familiar with the modes of HIV transmission, they brought the infection into their home regardless of the availability of preventive measures. They seemed to be less conscious about their own risk of getting the virus

and of putting their wives at risk; as a result, HIV testing often occurred late in the disease's progression. In addition, the pathways to HIV testing were often prolonged and complicated. Participants did not recognize their risk behaviors leading to HIV infection because they felt healthy. The participants recognized probable symptoms of HIV (weight loss, physical weakness, restlessness) in themselves or family members before they chose to get blood tests to determine their status, which was too late to protect their wives from the disease. Similarly, other studies have reported that people often delay HIV testing until they experience undeniable physical symptoms (Dokuzoguz et al., 2014; Mayston et al., 2016). Realizing the importance of early diagnosis in preventing HIV transmission, Cambodia has committed itself to reaching the global 90-90-90 targets, where 90% of all those living with HIV will know their HIV status by 2020 (UNAIDS, 2015b). A total of 924 health facilities are providing HIV testing and counseling services in the country, out of which Voluntary Confidential Counseling and Testing (VCCT) centers number 253. Among the clients who visited VCCT centers in 2013, only 30% were self-referred, while 55.4% were referred by antenatal care services (National Center for HIV/AIDS, Dermatology and STD [NCHADS], 2014). From these statistics, it can be predicted that HIV testing rates for males are very low in the country. Even though the risk is high, only 9.3% of the total population has undergone HIV testing (National Institute of Statistics, Directorate General for Health, & ICF International, 2015). This suggests the need to develop additional strategies to encourage the use of available HIV testing services among those in key risk populations, such as men using sex services (sex shops, Karaoke, massage shops, beer bars). Informative and awareness-raising programs related to the access and usability of such services are to be raised in order to increase HIV testing before and after marriage which will aid to decrease the HIV transmission risks among the general population as well as in serodiscordant couples.

An HIV-positive diagnosis is a stressful and life-changing moment for those infected (Stevens & Hildebrandt, 2006). Feelings at diagnosis may include shock, anger, hopelessness and fear of discrimination, and the consideration of the disease as an unwelcomed guest in one's home (Yang, Wojnar, & Lewis, 2016). The majority (54%) of this study's participants felt sad and worthless, reporting the loss of the desire to live after finding out they were HIV-positive. However, Cambodian society is comfortable for men, and mistakes committed by men are acceptable (Nakagawa, 2006). This can be a reason that 46% of the participants were not worried about being HIV-positive. They seemed to be unaffected by the entrance of HIV into their lives and were certain that nothing would change post-infection. This finding is

quite different when compared with the feelings of HIV-positive Cambodian women. A study of 15 Cambodian women with a median of 8 years post-diagnosis who were infected by their husbands reported that almost all the participants felt fear, shock and hopelessness when they received the news (Yang, Lewis, & Wojnar, 2015). This can be due to the still-existing cultural, social, and economic status differences between males and females in Cambodian society, where men are considered superior to women in every aspect.

Many behavioral changes were seen in couples after the serodisclosure of their health conditions. The husbands changed their thinking and attitudes towards their wives and demonstrated more loving, caring, and responsible attitude towards their partners. Few of them even expressed feelings of guilt and apologized to their wives. This is similar to an earlier study's finding where Cambodian wives shared that their husbands began to treat their opinions and thoughts as being important after being diagnosed as HIV-positive (Yang et al., 2015). Also, the participants in this study recalled their wives' immediate responses as shock, anger and distress followed by the gradual relief from those feelings as time passed and this finding is consistent with reactions of rural South African wives (Tabana et al., 2013). The men in the present study felt that their wives chose to move on from their negative reactions in order to support a content life within their marriage rather than risk ruining their futures. The mutual lifelong commitment that marriage signifies in Cambodia was a source of power for the infected wives to forgive and accept their husbands; the traditional concept of "live together, die together" carries a great deal of influence in Cambodian women's thought processes (Yang, Lewis, & Wojnar, 2016). This study reveals that the infected married couples experience various emotional downs in the process of adjusting to the disease. They find ways to continue through necessary mutual support, and a feeling of "we-ness" grows within the relation which makes the dyadic life easier (Tabana et al., 2013). Unlike serodiscordant couples focused on preventing the spread of the HIV to the negative partners, seroconcordant couples are concerned mainly with encouraging each other and developing positive attitudes to live a content life together beyond the infection (Chinomso, Adaeze, & Chidebe, 2017). This finding indicates the need of psychosocial intervention programs to treat a married couple as a single unit in order to provide better HIV care to both partners. Livelihood programs have been implemented in Cambodia in order to improve the daily lives and mental health of people living with HIV (KHANA [Khmer HIV/AIDS Non-Governmental Organization Alliance], 2015). The beneficiaries of these programs are reported to have comparatively sound mental well-being than non-beneficiaries (Tuot et al., 2016). Couples who are seropositive could be



actively involved in such programs to mitigate their psychological problems.

A study from the United States illustrates that the patient–health-care provider relationship often positively influences HIV patients and their ability to maintain their health (Beach, Keruly, & Moore, 2006; Sullivan, Stein, Savetsky, & Samet, 2000). Similarly, this study’s participants remarked specifically on the availability of medicines, emotional support, and advice from medical services, stating that they felt these were major reasons they were experiencing a healthier life. Developing positive relationships with health-care professionals has been proven to be effective in reducing stress and developing confidence. HIV-related counseling programs that involve both partners can create a supportive space where partners can come to a consensual agreement on how to deal with the infection in their daily married life and develop ways to support each other consistently. Moreover, peer groups are a valued platform where one can learn and share one’s knowledge and experience about being HIV-positive (Funk-Brentano et al., 2005; Peterson, Rintamaki, Brasher, Goldsmith, & Neidig, 2012). This study’s findings identify that participants engaging in peer groups valued such groups as a source of motivation for their survival. For them, getting together with similar sufferers and sharing feelings, emotions and problems was a relief. Hence, people living with HIV are encouraged to be involved in psychological support programs where they can share feelings and issues. In addition, a study from China highlights the positive co-relation between HIV sufferers and their families where family members played a vital role in improving psychological health of the HIV positive people (Li et al., 2006). In a study from the UK, 81% of the male participants agreed that their children gave meaning to their lives (Sherr & Barry, 2004). Almost 50% of Cambodian women interviewed in a previous study commented that their children were strong motivators for their wish to continue to live (Yang et al., 2015). Attachment between mother and child is strong in Cambodian culture; however, only two of this study’s male participant cited their children and families a source of hope and a reason to live. This study did not specifically ask participants about their feelings towards their children; any comments about this link were offered by the participants on their own. Studies about fatherhood and HIV-positive males within Cambodian culture are lacking; further studies are recommended to go in-depth about how HIV-positive fathers may perceive their lives in relation to their children’s needs.

This study has some limitations. Since participants had been living with HIV from 0.5 years to 17 years, there was a possibility that participants’ thoughts changed and evolved during this time. The actual time of infection among the participants and their wives as well could not

be determined so only years since diagnosis could be assessed. Moreover, the senior author’s first language is not Khmer; this could limit the author’s social and cultural sense of Cambodia and could also lead to misinterpretation of explanations given by the participants. Nevertheless, interpretation, transcription, and translation were carefully and regularly monitored and scrutinized throughout the period of data collection to maximize the quality of accuracy.

This study highlights the critical role of health practitioners, peer groups, and family members in helping to alleviate or prevent the extent to which people living with HIV experience emotional disparities and psychological distress about their own and family members’ present and future. Its findings have public health implications in the design of couple-based intervention and counseling programs for HIV prevention and treatment. Medical personnel who serve or plan to serve this population or those culturally and geographically similar to it could succeed if they are able to recognize and address its specific psychological needs. This study has also important implications for testing and screening, communicating results, and including non-spouses in testing and counseling for optimal treatment and survival. Further in-depth studies should examine the gap between the care those who are seropositive are receiving and their psychological needs. The number and quality of existing Cambodian mental health programs working for the improvement of the psychological health of HIV positive people need to be refined (Shimizu et al., 2016) and the appropriate mental health intervention development programs need to be increased in the country. This study also contributes to the growing awareness about dyadic interdependence in HIV-concordant couples. The possible influences in those dyadic relationships affected by HIV require further investigation. Future studies also could consider the use of a qualitative approach to understand more about the dynamics within the husband–wife dyad and the effects of illness-related conceptualization on their own and their partner’s quality of life and well-being outcomes. The perception of treatment for HIV-positive individuals by health-care providers might also be an area of interest for further research.

## Conclusions

This was the first study addressing the experiences, emotions, and perspectives of heterosexual men in HIV-concordant couples in Cambodia. The results suggest that delayed acknowledgment of infection increases the risk of transmission between sexual partners, making timely diagnosis is a must within marriage. The emotional status of the male participants post-diagnosis was identified by various emotional reactions and responses as well as a

hesitation to face personal, familial, and social consequences. If social and emotional aspects of HIV patient's lives are prioritized, it can make a positive difference in how they deal with the disease. Psychological care is recommended to be given in tandem with medical care post-diagnosis. The potential transformation of the lived personal and social identities of HIV-positive individuals and seroconcordant couples needs to be targeted in any treatment programs.

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