

# Stigma and Dissatisfaction of Health Care Personnel in HIV Response in Iran: A Qualitative Study

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## Abstract

**Background and Aims:** With regard to the disease pandemics of HIV/AIDS, it is clear that there is need for prevention, treatment, care, and support of HIV positive patients in the health care system. In order to achieve these goals, job satisfaction should be a priority for health care staff. This study examined the problems of health care personnel and the behavior of patients undergoing HIV/AIDS counseling at Imam Khomeini Hospital in Tehran, Iran. **Methods:** Interviews were conducted individually with 5 health care personnel who participated in this study. Participants had 30 to 45 minutes each per session at the clinic, during which they were able to discuss the problems they faced in their careers. All conversations were officially recorded. **Results:** The most common problems mentioned by these health care workers included the lack of safety and standardization of work conditions, the lack of appropriate equipment, limited space, high numbers of patients, low staffing levels and financial and morale problems compounded by the lack of support by hospital authorities. **Conclusion:** The authorities need to allocate more funds to provide facilities and appropriate working conditions for health care staff in order to increase job satisfaction and enable staff to provide the best services and care to HIV positive patients.

## Keywords

HIV, staff and health care personnel, qualitative study

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### What Do We Already Know about This Topic?

There is need for awareness of the problems of health care personnel working with infectious diseases.

### How Does Your Research Contribute to the Field?

The research will help the health care workers in infectious diseases wards.

### What Are Your Research's Implications toward Theory, Practice, or Policy?

The authorities need to pay more attention, facilities and appropriate working conditions for health care staff and enable staff to provide the best services and care to HIV positive patients.

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## Introduction

AIDS is one of the biggest challenges for humanity and is considered to be one of the most significant health risk factors in the new millennium. It is recognized as the fourth leading cause of death from infectious diseases worldwide.<sup>1,2</sup> For a long time, those infected with the HIV virus have not been diagnosed and treated early enough. As a result, the world faces an epidemic for which there is neither an adequate definition of treatment nor a specific cure.<sup>3,4</sup> According to the latest report released by UNAIDS, in 2012 the total number of people living with HIV/AIDS was 35.3 million people around the world, with about 6 million of those people in Asia.<sup>5</sup> According to the Ministry of Health and Medical Education in Iran, at the beginning of 2013 the total number of people identified as living with HIV/AIDS in the country was 26 125, of whom 89.8% were men and 10.2% were women. Figures show an increase in the following 6 months to 27 041 people infected with HIV/AIDS, of whom 84.4% were men and 15.6% were women. The statistics indicate rapid growth in the disease, especially among women.<sup>6</sup> There have been many new cases of infection in the eastern Mediterranean region, which has the fastest growing HIV/AIDS epidemic in the world. This is also the case in Iran.<sup>7</sup> Subsequent rapid changes in the epidemiological characteristics of HIV/AIDS in Iran show an increase of 0.2%.

In order to control this disease, it is essential to solve all the problems related to treatment.<sup>8</sup> According to national guidelines, disease counseling centers in Iran are considered the core for provision of HIV/AIDS health care services for people living with HIV/AIDS. These centers offer various services to people living with HIV/AIDS, including consulting services, family planning counseling, and advice on methods to prevent transmission of the disease. Vaccines are provided for treatment of hepatitis B, tetanus, pneumococcal infections, and flu. Treatments for antiretroviral and tuberculosis prevention, in addition to laboratory services (including voluntary testing and follow-up tests) are provided. The use of condoms is also promoted.<sup>9,10</sup> Other programs and services offered in the area of HIV/AIDS include the treatment of sexually transmitted diseases and improvement in the infrastructure for support of lower socioeconomic patients, families of patients, and people at risk. This also includes the counseling of staff in the treatment of patients and their families to ensure that health care personnel have a good understanding of their patients.<sup>11,12</sup>

According to a report published in 2006, almost 3 million health care personnel are in contact with blood-borne viruses each year. Over 90% of infections contracted by the staff occur in low-income countries, and most of them are preventable.<sup>13</sup> Although the risk of HIV infection is very low through contact with the body's surface, there is still a risk of transmission from HIV positive patients to health care personnel, including doctors, dentists, nurses, and other health workers in hospitals.<sup>14</sup> Although carrying out their daily duties, doctors and medical personnel are often exposed to a variety of viral infections such as Hepatitis C Virus, Hepatitis B Virus, and HIV that can be transmitted from infected patients.<sup>15</sup> Given that HIV positive

patients are asymptomatic, there is a long-term potential risk of infection for health care personnel. If safety procedures are not observed, health care personnel can be exposed to blood and body fluids from patients and injections. This is the greatest risk for health personnel working in this area. Consequently, it is very important that all be aware of the transmission of diseases such as HIV through a patient's blood.<sup>16</sup> Because of the supposed risks of HIV infection, staff members experience a great deal of stress working with HIV positive patients.<sup>17</sup> HIV-infected people live under difficult and painful conditions and the heavy burden of disease. Therefore, health care personnel face many difficulties, including understanding and accepting patients, which are the most important factors influencing health care workers in their encounters with patients.

Patients need to report their illness to health services as soon as possible. Due to socioeconomic and cultural barriers, there are negative attitudes toward people with HIV/AIDS and discriminatory behavior in the provision of health and treatment services. Infected patients having HIV/AIDS have difficulty communicating with health workers in order to receive necessary care.<sup>18</sup> In addition, people with HIV/AIDS often experience isolation, social exclusion, and job loss, which can bring about physical and psychological problems. These problems inevitably have an adverse effect on the quality of services provided to patients with HIV/AIDS.<sup>19</sup> Nevertheless, according to instructions provided by the health care system, doctors in health care centers must offer good services to patients living with HIV/AIDS.<sup>9,10</sup> Health care personnel, or any person or group that claims to provide services, are expected to design and participate in good programs for their patients. They are expected to learn to accept their patients on a personal level interact with them and give them sound advice based on their own experience in health care. Personnel should also have a good understanding of their patients.<sup>20,21</sup> They should advise patients and teach them unique methods to live with HIV/AIDS, including how to interact with others in the community, instead of concentrating only on preventing the spread of the disease and providing a treatment plan. In addition, regional and national strategies should include more awareness and understanding of patient's needs. It is necessary that such awareness and understanding must be rooted in real situations and experiences. Successful planning and intervention for people living with AIDS must include approaching them, carrying out in-depth interviews exploring their feelings and attitudes, understanding their outlooks on how to prevent further spread of the disease and how to have a positive, productive life while living with HIV/AIDS. Such a plan also requires regular motivational meetings and actions.<sup>22</sup>

With regard to the risk of the spread of infection and the increasing number of HIV positive patients in our country, it must be pointed out that there are currently no vaccines or effective treatments for this disease. It seems that the point at which the disease starts to be treated is only when a patient becomes unwell and is compelled to see doctor. However, early reporting and diagnosis is essential in order to provide more effective treatment decisions. Timely patient treatment should

be the priority in the health sector, in health education, and in advancing the knowledge and methods needed to prevent transmission of these diseases.

A report published in 2011 argued for making social changes in a specific arena by studying and understanding life experiences. Using this method, a qualitative researcher can help clarify the needs of those living with HIV/AIDS.<sup>23</sup> It is essential that health care workers introduce health education programs that can promote health and prevent the spread of disease in order to achieve the desired goal. Paying special attention to the problems of health care staff who work in this field and considering their difficulties can assist them in achieving this outcome. Therefore, our aim in this qualitative study is to provide better treatment for HIV positive patients by exploring the experiences of the health care staff and related obstacles.

## Methods

This research was a qualitative study that examined the problems of professional and occupational health staff in providing medical services to patients living with HIV/AIDS. The participants under study were selected following several consultations at Imam Khomeini Hospital complex in Tehran. Some staff members were invited to interview. This study was based on individual interviews with health staff lasting 30 to 45 minutes each, during which health personnel expressed their professional problems. No group sessions were arranged due to lack of opportunity and insufficient spare time for clinic personnel to attend. Individual interviews were conducted with each participant and each session was taped separately. A range of health personnel who work with HIV positive patients, including a pharmacist, psychologist, blood sampler, midwife, and receptionist at the clinic provided information. At the interview sessions, each interviewee was asked to give consent for the recording of the conversation. Once permission was obtained, the interviews were conducted, recorded, and transcribed. Interviews were performed in the spring of 2015.

## Analysis of Information

Texts of focus group discussions and individual interviews were analyzed using qualitative content analysis of the inductive category. Content analysis is often used in a study plan aiming to describe a phenomenon. Such a plan is appropriate when there are limited existing theories or research literature about the phenomenon under study. In this case, researchers avoided employing presumed categories and attempted to obtain categories from data instead. In this case, researchers analyze and interpret data to gain new knowledge. Thus, by deduction, various categories emerge from the data. Miring called this "inductive thematic analysis," in which data collected through interviews and idea association are analyzed with an open mind looking for innovative solutions. In this approach, each interview text is read through repeatedly to obtain a thorough understanding. Only after a thorough

understanding of all texts does the researcher begin to write the initial analysis and proceed to formulate the background information for codes of practice. A pattern of codes emerges from the texts and is categorized based on similarities and differences gleaned from each interview. At the next stage, definitions are provided for categories, subcategories, and codes.<sup>24</sup> The recurrent themes from the raw data are then analyzed, identified, and summarized. Then, according to major and minor participants, researchers are given insights into the feelings and experiences of health personnel in relation to their problems. At the end of the process, all recorded interviews are deleted in accordance with the wishes of the interviewees in order to protect their anonymity.

## Ethical Considerations

This study was approved by the Ethics Committee of Tehran University of Medical Sciences. Written consent for interviews and recording of the interviews was obtained from all the health personnel who took part. Researchers acted in accordance with all ethical principles in relation to the gathering of information and data protection of audiotapes that were made by the interviewers. The right of all volunteers to participate in or withdraw from the study at any time during the project was ensured and respected. Participants were told that data collection was solely for the purposes of the study.

## Results

The most significant problems highlighted in individual interviews with health care staff were as follows:

### *Lack of Standards and Workplace Safety*

*Laboratory personnel say in association with unsuitable workspace and lack of safety.*

That is one of my major problems. I do not really have any standard or safety in my workplace and everyone knows that HIV is a disease that can be transmitted through blood and sexual contact. I have close contact with the blood of patients. Except for the women, most HIV patients that come here are intravenous drug users whose veins cannot often be found.

Now please look at my workspace. Which laboratory workplace is like mine? When representatives were sent by the ministry, I told them that this work environment is completely unsuitable. For example, when I am taking blood samples from patients, my chair suddenly sinks. There is a risk of being infected or the spattering of a patient's blood into my eyes. There is no standard or safety at the workplace. There is no set place for gathering blood samples.

### *Problems relating to blood sampling of children.*

The laboratory personnel in most hospitals tell parents to go out until they are done taking blood from children, but here I don't even have a room that closes. I have to force my door before it can be closed. I always have to put babies on my working table or chair

because I do not have any bed to lay the children down on when taking their blood sample. Parents have every right to be upset of course. These kids are very dear to their parents who have been trying to have a baby for years. The baby's potential disease cannot be determined until they are 18 months of age. Parents have to hold down the hands of their kids before I can insert a needle to take a blood sample, and it is very difficult for them.

### ***Lack of Cooperation from Ministry of Health to Solve Patient Problems***

*Midwife of clinic says in relation to her problems with officials of the Ministry of Health.*

In this regard, I do not fear contamination during sampling. I have all the necessary protective equipment, like glasses and gloves. However, my main problem is the quality of the work, about which I have a lot of problems with the Ministry. Nowadays, the best method for Pap smear samples is liquid-based. They give me glass slides, but I'm not provided with liquid-based. Slides are glass and the spray we use scatters. When I contact the administration to talk about my problems, like discussing the high cost of gloves, they don't put in any effort to solve them. I have to solve them myself . . . .

*Psychologist says in relation to elimination of some services to patients.*

At first, we were offering free services to HIV positive patients but then the free services were eliminated. This began the problems. Doctor's visits were free but now the patients have to pay the cost of the visit. These issues have caused problems in the therapeutic relationship.

### ***In Relation to Severe Stress in the Workplace***

*Laboratory comments in relation to severe stress during blood sampling of patients.*

This is an important issue. Before I insert a needle into my patients, I need to take a medication for stress but I can't due to the side effects . . . Every day when I go to work, I ask God to help me not have any stress or difficulties until I get back home. When putting the needle into the patient, sometimes I feel numb due to the stress. Blood samples must not be taken from a patient more than once a day. It is unlawful.

### ***In Relation to Multiple Stresses in the Workplace***

*A psychologist at the clinic center in reference to consultation with addicted patients influenced by psychotropic substances who were referred to the clinic.*

Most of the personnel working here have been assigned here without their agreement because working here requires much patience. There are many troubled cases in this ward. For example, there was one difficult patient who caused me not to be able to come to the counseling center for about 5 or 6 months. He had used crystal

meth. [Because of him,] I was trapped in a room and could not get out. After I finally got out, I cried a lot. I asked my coworkers why none of them opened the door for me. I had been in the room for half an hour and none of them thought to check on me to see why I had not come out. The patient would not allow me to leave the room. He threatened me and said he needed sex and that I should tell his mother to find a wife for him. He said, "If I have sex, I will get better." I said to him, "Sit down. Let me go out and talk with your mother." I wanted to do anything to get out of the room. No matter what I did to get out, he would block me with his hands and say, "Don't you know how a small amount of my blood could contaminate many people?" When I finally got out, I cried a lot and was extremely upset . . . .

### ***Spousal Reluctance and Lack of Approval That Their Wives Work in HIV/AIDS Treatment Centers***

*Laboratory blood sampler admits that her spouse was unaware of where she actually worked.*

. . . during blood sampling of children sometimes they scream. If they are crying and shaking, the needle might go into the hand of personnel. My husband only knows that I work at a hospital as a nurse, but he does not know that I do work as a blood sampler at this center. No man wants his wife to work in such a place even as a clinic doctor . . . .

*Psychologist says due to the behavioral health clinic her husband does not support her work.*

I like working here but my husband does not like it. I never, never talk about my problems with my husband for about the last 2 years now. One of the patients stabbed 2 of my colleagues and now my husband is not happy with me working here because there is no protection, no camera, no guard . . . .

### ***Hard Work and Lack of Sufficient Support by Authorities to Health Care Personnel in HIV/AIDS Health Centers***

*Laboratory blood sampler talked about her problems.*

. . . It is difficult for me to take a leave of absence. When I do take leave, I get stressed out coming to work the next day because of the reactions of the others. People ask me why I do not take leave from work. Work here is not like other wards. They get extra pay due to the difficult conditions, but I get even less than my previous position.

There was a hospitalized patient. On the chart, it said that there should be no skin contact with the patient. The patient got into an argument. Finally, the result was that I had to take the blood sample. The patient said that I had to take the sample while they were standing. [In this case] the patient might shake. The patient didn't consider that if I take a blood sample while they are standing, what might happen if their hand shook and their blood splattered on me.

I have even told these problems to the authorities of the Ministry of Health that have come here on official visits and they knew well all of our problems . . . The head of the center screams at me that there is no support by the authorities that can be offered to me . . . Most of the patients have bad blood vessels because they inject

drugs and have damaged their veins. As a result, we are forced to do arterial blood sampling which is not legal for us to do and must be done by a doctor. What doctors are doing in emergency centers and ICUs, unfortunately, we have to do here for our patients. Almost 50% of cases...are blood sampling through the neck. They ask for us to do it through the neck. If we don't, they start yelling. It's hard to get the needle into the neck and there is risk of cardiac arrest, bleeding, stroke... I mostly have to perform arterial blood sampling without any liability insurance. When such a patient comes, I tell them to go see the doctor first. They refuse to do so and say they do not want to have to come back later for a doctor's visit. I do the blood sampling and then they go to see the doctor the same day... The doctor asks them to do more tests. I take blood from the same patient 2 times. I have requested many times that the clinic make rules for sick patients... I work here alone and some days I take 60 blood samples. If we estimate the average needle injections, I might have taken blood samples from each patient 100 times... Blood samples for children are different from adults but here we do them... there are no beds or space in the room. I think pediatrics should take blood samples from children. We do not have good conditions at our workplace. We don't get special wages for the difficult working conditions... and work here is very difficult... There is no staff other than me. If I have stress, I might unconsciously transfer my anger to the patient. The support and behavior of authorities is more important than everything else to us. Rules are not followed and we are demeaned by those in charge... It is not right... When I do blood sampling, other patients stand around me. If a patient has a seizure, there is no possibility for us to transfer him or her to emergency...

#### *Psychologist speaks about working conditions in the clinic.*

... I have a lot of job stress, but it is not related to the patients. Here (in the center) we are not supported sufficiently compared with other medical centers. Because here there are large numbers of sick patients, there is a problem getting leave, even hourly leave... Working in an infectious disease ward with HIV patients has its own unique problems. For example, once my twins were sick and, when the people who take care of them... realized that I work in the infectious disease ward, it scared them that I could become the cause of transmission of the virus to their home... Generally, this department is full of stressful conditions...

#### *Clinic pharmaceutical personnel in conjunction with work problems in the clinic.*

... Health authorities and ministries have cooperation but, unfortunately, they do not cooperate with this center. We do not have enough health care personnel. Everyone who comes here and sees the working conditions leaves. Even 1 or 2 of my colleagues have asked why I am still working here...

#### *Shortage of and Inappropriate Space at the Clinic*

##### *The receptionist of the clinic says about her problems.*

... I think we should have a good and a comfortable space to work in. The document files are all around the room. When 2 people

come in here and stand around to get records, the space is not enough. It is very difficult because there is not enough physical space... it makes us very tired... There are no doors here that can be closed. Researchers take the files sometimes and we don't know who has the files at any given time. We are facing problems like that...

#### *Psychologist discusses the limitations and problems of her workspace.*

... Here, we try our best to visit HIV positive patients in the first month to create awareness among our patients with 4 sessions. However, recently, due to overcrowding at the center we do not have the proper space and can no longer have 4 sessions but maybe just 2 or 3 sessions, just enough so that the patient can accept his or her illness before the step of seeing of a specialist. There are many problems here with space and the presence of one psychologist is inadequate. I have told the clinic authorities and it is the responsibility of the clinic to do something about this. Most patients come for counseling regarding the ways they might transmit HIV, but we are unable to instruct them completely. Consulting is not satisfactorily completed... Because of overcrowding and heavy workloads, we may not be able to explain everything fully to patients. Unfortunately, it is too crowded here and space is inadequate and sometimes we cannot attend to or take care of all our patients and though this is the largest counseling center, unfortunately, it does not have the appropriate facilities. The room, table, and space for counseling are deficient. The room is not a consultation room and is too small and even the chairs are inappropriate. When a patient comes for consulting, it is necessary that we speak about the patient's most private matters; however, when the patient leaves, he or she realizes that the people outside have heard everything. The space (consulting rooms) is too small and not good at all... When I spoke with the authorities, they accepted that, unfortunately, we do not have space, but they could not do anything about it...

#### *Pharmaceutical services personnel says about the workspace.*

... We do not have space here at all. Eleven years ago, this center was handed over to the personnel in the present state without any changes until now. Though the space is the same, the patients have increased from 300 or 400 to nearly 3000; however, the center is the same center and nothing has changed at all, including the number of personnel who are not at all enough...

#### *Inappropriate Behavior of Patients with Health Care Personnel*

##### *Laboratory blood sampling personnel discuss the behavior of some patients.*

... I have had no specific problem with a patient but in some cases they force me or bully me. Sometimes they try to get their work done through [disagreeable] means. Women can wait at the hairdresser for 5 hours, but cannot tolerate taking tests even for 2 minutes. They get angry quickly. I just want to finish their treatment quickly so they can leave immediately...

*The receptionist of the clinic also says in this regard.*

... When entering the clinic, patients do not even wait a moment. They are intolerant. They sometimes come up and stand in front of the desk 4 at a time. One will tell me to give them their record and another will say the same, and both of them will repeat it continuously. When I tell them to wait a minute, they say they are in a hurry. Of course, I do not argue with them because I do want to do their work quickly so that they can go because most of them are aggressive. They are waiting for an excuse to get angry ... because they become aggressive quickly ...

*Clinic receptionist states that most significant problems are caused by severe discomfort and resentment of patients by health care personnel.*

... About gloves, patients are very sensitive to this issue. Why do we wear gloves? The reason is that some clients come with files that have nasal mucus on them and that make them dirty. Once a patient went to the toilet and cleaned his hand with his file. Some of them have infectious skin disease. We have many patients here with this problem, and the disease is contagious. Because of these things, I feel wearing gloves is best, but it makes the patients upset ... Of course, sometimes I don't wear gloves in the mornings because the files are still clean ...

*Psychologist of center also says about the behavior of some patients.*

Those who are innocent victims of HIV usually get more depressed and have higher expectations from medical staff. They want special attention because it is different for them, but not for us. They are sensitive and do not have good behavior with the health care staff ...

*A pharmaceutical staff member says about patients.*

... I have many problems with the patients. Unfortunately, some patients still have not given up drugs and use amphetamines and hallucinogens like "glass" [Crystal methamphetamine]. This causes problems for my colleagues. Sometimes patients behave arrogantly and when they come (to the clinic) they want their work done quickly at the door of clinic so they can go. Before, the center offered many services for them that were free, like CT scans and MRIs, but now because of lack of funds these things (MRIs and CT scans) are not done free ... all of the free services have been removed ... only chest x-rays are free. Specialists were previously free, but now they have to pay for visits ... These issues have caused some patients to become aggressive and create work difficulties for my colleagues and me. If employees have an interest in working with these patients, they wouldn't have professional problems with them. The work is hard but, if we were to have an interest in our jobs, we could bear the difficulty ...

*Inattention to and Ignoring Recommendations of Health Care Professionals and Experts*

*Clinic midwife discusses problems with some patients.*

... We don't really have bad patients. Even sex workers are not bad patients. Sometimes they don't act upon my recommendations.

I know they have financial difficulties. It's not that they don't trust me. For example, when I request ultrasound ... when they do not follow my request I know they don't have the financial ability ... - Most of the time I don't really have problems with patients ... only with a few. Many of them have unwanted pregnancies. Why? Because husbands are negative or they have temporary marriages or the lady wants to keep the man for herself by use of any method. These women do not care about contaminating others ... They say they have problems and do not have any support. When they come, I forcedly put condoms in their bags and tell them to have the condoms with them. Of course, I never imply they are having sex with anyone ...

*Clinic midwife discusses family planning.*

... One of my problems is in family planning. I give oral contraceptives, but they say the LD makes them fat ... I tell them that at most LD makes them fat at a rate of 1-2 kilos a year ... and if they have a good diet, they can control their weight ... They don't listen. Why? Because most of them are HIV positive. A majority of them have mental problems. Most of them do not have anyone to support them. They have no family or their families have rejected them and many of them are sex workers or have temporary marriages ... The main problem is that most of them have no families or have lost their husbands, and even their mothers and sisters do not support them so they have temporary marriages or become sex partners to men ... men who are HIV negative. I try a lot but I cannot convince them to use condoms. I know that they do not use them. Because of the stigma and phobias associated with the disease in the society, they hide their disease ... they come to me secretly and tell me that they are pregnant and ask me what they should do ... Until last year, we would give them birth permits, but since the beginning of this year, they should undergo CD4 testing before getting the permit.

The problem is that even when I give them condoms forcibly, again they come and say they are pregnant ... They say they do not know how they have become pregnant ... I tell them that they may be innocent and helpless in this matter, but the kids that they bring into the world will be infected ... You have been infected without doing anything wrong, but now you know and are aware so do not contaminate anyone else intentionally ... About 50% or more of HIV positive patients have no husbands and do not work anywhere. When they go to find work, the employers ask for Hygiene & Health cards from them. They justify their behavior for being sex workers ... They ask why it is that others had the right to infect them and insist that they have the right to infect others too. I tell them that they may have been innocent in the matter ... but now they are intentionally infecting others.

The government should recognize these people's needs and gather and support them. Here, we give them condoms and other facilities, saying to ourselves that they will use them, but I know about 40% to 50% of them do not use the condoms. I ask them if they have a partner. They say yes. "Negative?" "Yes, he is negative." "Does he know that you are sick?" "No, because if he finds out, he will leave me." I tell them this is prohibited by the law and I bring other reasons. They say, "What about the one who infected me? I could not do anything." Our problem is a fundamental one. When problems occur, we are blamed ... problems

such as pregnancy. Despite a lot of advice given to avoid pregnancy, they repeatedly come to blame the hospital staff. I tell them a thousand times and even ask them to repeat what I told them, but they come the next time and say, "Well, it happened anyway." It does not matter to them because they feel they are victims. They no longer have a sense of morality.

## Discussion

The purpose of this study was to investigate the problems of personnel and medical staff in HIV/AIDS health care centers. This study highlighted the main problems that health care personnel face at clinics, including the lack of acceptable standards in the working environment, poor workspace safety for staff taking and testing samples from HIV positive patients, and the failure by the authorities to provide suitable equipment and facilities.

Staff complained about poor working terms and conditions. These included lack of adequate income, inadequate subsidies for expenses, lack of annual vacation time and special leave for domestic emergencies, bonuses and other job benefits.

There were also grievances regarding inadequate workspace for counseling, high numbers of patients, and overcrowding due to the limited space at the clinic. These problems were exacerbated by inadequate staffing levels, a lack of replacement staff to give support during busy periods or to replace staff on leave or off sick, and insufficiency of specialist staff in reserve. Severe stress in the workplace is also a problem, particularly in relation to some patients affected by psychoactive substances. There was also pressure on employees from dissatisfied husbands who were unhappy about their wives working at HIV/AIDS clinics. The problem reported by most health care personnel, such as blood samplers who were in contact with blood, secretions and body fluids of patients, was the risk of developing the HIV/AIDS infection.

One of the results of the present study is that the risk of occupational infection with HIV in the health care center environment is related to the exposure of percutaneous tissue to blood or bloodied fluid of patients, which occurs in more than 85% of cases.<sup>25</sup> Another study also showed that there was a risk of medical personnel being infected with HIV through percutaneous exposure and accidental needle syringe contact. The injuries were estimated at about 6% to 30% for HIV, 0.3% for HBV, and HCV to about 1.8%.<sup>26-28</sup> It has also been estimated that each year, medical personnel deal with 500 000 accidents involving contact with blood through the skin and mucous. These accidental exposures happen more frequently due to poor job conditions that increase the risk of infection with blood-borne pathogens.<sup>29</sup> A study in India showed that the rate of incidents of accidental needle contact among medical staff with better work conditions and health and safety education was reduced from 38.5% of cases in 1995 to 12% of cases in 1998.<sup>30</sup> Considering that HIV positive patients are asymptomatic for a long time, nurses are at a potential risk of infection due to regular contact with blood and body fluids of patients

and those who give injections without observing safety advice are at highest risk of being infected with HIV.

Nurses are always at risk of contracting disease; however, there are no detailed statistics about transmission of HIV through job and professional activities. The Center for Disease Control and Prevention reported 57 confirmed cases and 134 suspected cases of HIV contracted through job and occupational activities.<sup>6,7</sup>

To prevent transmission of HIV in the workplace, standard precautions should be introduced for all patients.<sup>17,18</sup> In one case report, 2 nurses who were infected with HIV through a syringe needle were diagnosed by a psychiatrist as having post-traumatic stress disorder. Their psychological symptoms included depression, anxiety, insomnia, and nightmares. They received antiviral treatment for one year. After 2 years with repeated experience of panic attacks, they returned to work. Most people exposed to such stress who follow the appropriate psychological treatment return to normal and resume work once more. However, some health care personnel affected in this way are unable to return to normal. The role of mental health professionals is very important in these cases. Statistics show that 35% of employees of such clinics have continuous stress. An additional 30% of them, due to the risk of HIV-infected needles, have left their jobs.<sup>31</sup> Staff who have more contact with secretions and body fluids of patients but less contact with needles, have less stress. However, there is more stigma for the medical staff.<sup>31,32</sup> According to the results of our investigation done in coordination with other studies, health staff (especially blood sampling personnel) who have more contact with secretions, bodily fluids, and blood of patients endure stigma and more stress. Therefore, there is a requirement to create better work facilities and conditions of employment, and for authorities to provide better standard equipment with safety features to enable personnel to be able to do well in their assigned duties, with peace of mind. These developments can bring about effective improvements in relationships between patients and health care personnel and provide job satisfaction to health care staff. In organizations that are active in the service sector, including hospitals, in which most of the work depends on the goodwill and dedicated work of staff, it is important to give attention to personnel and the management of human resources because of the motivational and environmental factors that affect the people who work in and use the center.<sup>33</sup> In fact, the characteristics of any job and the duties of employees are influenced by satisfaction or dissatisfaction at work.<sup>34</sup> Each year many hospital staff members leave their jobs due to job dissatisfaction. In addition to the waste in expensive training costs is the loss of skills, expertise, and human resources.<sup>35,36</sup> Furthermore, the importance of health care and therapeutic care workers is such that they ought to be managed with maximum efficiency and effectiveness. In addition to expertise, health care personnel should perform their work with love and interest.<sup>37</sup> Therefore, it is important to notice and evaluate factors that increase the rate of job satisfaction for all employees at the center including medical staff.

Many studies have been conducted in this area. The results of various studies have shown that the most important factors that can affect the level of personnel satisfaction include proper and efficient management by the authorities, access to authorities when necessary, and proper encouragement and appreciation, including material and morale-boosting incentives for employees. Administrators must ensure that personnel feel valued in their work and provide more flexibility for staff to use their leave at times of necessity or during domestic problems. Reviews with the aim of increasing salaries and benefits are needed.<sup>38-43</sup> Occupational problems have been pointed out such as high workloads, failure to implement terms and conditions of law affecting workplaces, demands to meet tight deadlines and targets, increased working hours, lack of or inadequate facilities, overcrowding in the workplace, poor physical arrangement of medical centers, and stress.<sup>44</sup> With regard to the treatment of staff, the greatest dissatisfaction was exhibited in the rate of job stress. In a meta-analysis performed by Zangaro and Soeken, results have shown that job stress has the strongest negative relationship to job satisfaction.<sup>45</sup> Stress in the hospital environment has long been mentioned as a key factor influencing job satisfaction and retention.<sup>46</sup>

Job satisfaction of nurses and employed staff in wards providing services to HIV positive patients has also been studied extensively. A qualitative study carried out in Vietnam has investigated job satisfaction of health care workers in the HIV/AIDS sector. The results showed that factors leading to job satisfaction among personnel in HIV treatment centers included training opportunities, social recognition, and performing meaningful tasks. Job dissatisfaction factors that were not good for the careers of such personnel included unsatisfactory compensation, lack of positive feedback, absence of support by supervisors, work-related stress from a heavy workload, fear of infection, HIV-related stigma from family, colleagues and society due to contact with patients, living with HIV, low self-esteem, and low incomes.<sup>47</sup> Murphy and colleagues (2000) in Canada reported that social support and use of proper defense mechanisms can have an effect on job satisfaction and burnout among nurses caring for HIV positive patients. Bellani et al carried out a study about the relationship between demographic factors, satisfaction, and burnout among health care providers who are working with HIV positive patients and showed that 2 independent variables, fatigue and personal accomplishment, affected job satisfaction as well as a range of personal factors such as ego strength and depression.<sup>48</sup> Benevides-Pereira and Das Neves Alves (2007) reported that one-fourth of personnel at health service centers received high scores on emotional exhaustion this even affected staff who worked less than 5 years in the centers. Employees were also prone to exhibit inappropriate or destructive attitudes and defense mechanisms. Li and colleagues (2007) reported that of 478 health care workers in China experienced stigma and discrimination caused by working with HIV positive patients which had a positive correlation with internalized shame ( $R = 0.32$ ). In addition, health care providers experienced low institutional or organizational support ( $B = -0.10$ ) and high levels

of internalized shame because of working with HIV positive patients.<sup>49</sup> The results of a study by Holzemer and colleagues in 2009 in 5 African countries showed that 83.7% of nurses had experienced at least one or several stigmas.<sup>50</sup> There is a relationship between stigma and lack of job satisfaction and desire for nurses and people with HIV who have experienced stigma to move to other jobs.<sup>49</sup> In a center caring for women, a study was performed in Kenya in relation to stigma suffered by medical personnel. The results showed that, despite all the precautions and facilities in these centers, it was still the case that women were afraid of staff and nurses due to perceived risk of HIV infection. Although local authorities want to provide more health services to care for these women, health care personnel, especially in women's wards, have intense fear of HIV infection in the workplace through infected needles due to the stigma and discrimination associated with working with this group of patients. They were worried that, should they become infected with HIV at the workplace, people would regard them as morally corrupt people or suspect that they were in contact with HIV positive patients.

Sometimes there is even a very negative attitude to specialists. For example, personnel who work in the women's center receive very negative comments regarding how they are willing to be in contact with patients' blood and placental tissue, which is the most common method of transmission of the infection. These kinds of attitudes certainly have a negative effect on the work of medical staff. With regard to the private and family life of medical personnel, it has been reported that husbands who are not health workers have requested that their wives wash their hands when they come home before taking care of children or doing housework.<sup>51</sup> The results of the present study are in line with similar studies in terms of problems of employment at HIV/AIDS centers. All the results were synchronized and aligned perfectly with the other studies discussed herein. A stressful workplace may lead to negative results and poor treatment. These conditions can weaken the quality of patient care and result in extra costs for the entire health system. Therefore, problems that lead to job dissatisfaction and job stress in the workplace for health care workers must be identified, especially in centers dealing with HIV/AIDS. With regard to results obtained from the present study, personnel experienced stress in the performance of their work duties because of assumed risk of HIV infection in care or sampling of patients. In order for infection control to be carried out, the necessary precautions must be provided and supplies must be available to centers, including accessories and supplies for infection control such as gloves, bleach, autoclaves, and other hygiene products. The policies for HIV positive patients must be reconsidered. In addition to these policies, programs to meet health care needs must be considered. Structural and infrastructural interventions such as provision of appropriate space (private consulting rooms) and accessories (gloves, bleach, REP, etc) are needed to provide services confidentially to HIV positive patients and to protect staff against infection.<sup>51</sup>



In addition to the items mentioned above measures, such as salary increases, supportive monitoring, stress management, ability to take advantage of leaves of absence when necessary, reduction of stigma, increased safety, and provision of more equipment in the workplace, must be implemented to improve job satisfaction of employees. Immediate measures should be taken to provide more information, instruction, and communication in the mass media to improve the public image of services for HIV and enhance safety in the workplace. If all the above proposals are implemented, they can have a positive effect on feelings of worthiness and safety for staff in their work environment.

The World Health Organization recommends that countries should improve their staff recruitment process, with the best way being the use of the available workforce and management of the migration of health care workers to other countries. This requires proper financial and nonrewards, incentives, constant improvement of knowledge and awareness, empowerment, and creation of an appropriate work environment.<sup>47</sup> Evidence suggests that whenever the degree of satisfaction of personnel increases due to improvement of working conditions, the possibility of them giving up or leaving their work decreases, and whenever there is greater dissatisfaction, there is an increase in absenteeism and resignations from work. On this basis, job satisfaction encourages retention of personnel, their efficiency and quality of work. When staff members are under stress, it affects work performance. Creating comfortable facilities that encourage staff to make more of their minds and imaginations, as well as the reorganization of staff, can be considered by the authorities.<sup>52</sup>

If authorities, health practitioners and national health services have concerns over the control of HIV/AIDS, they must consider the important role of employees and providers of health care services to HIV positive patients in all areas and cases. They must put into practice policies and programs for employee retention and job satisfaction so that health care personnel are enabled to provide the best services to people living with HIV/AIDS.

## Conclusion

According to the results of the present research, the most significant problems that health care staff faced were related to behavioral disease counseling at the clinic. Another crucial problem was lack of safety and standardization of work, in terms of lack of facilities, space, and appropriate equipment for self-care of personnel while working in a restrictive space. The existence of too many patients for the limited number of health care staff to cope with was also cited as a difficulty, along with inappropriateness of psychological counseling rooms in light of the need for patient confidentiality. The absence of replacement staff for employees on leave was also a concern. There were problems related to leave, inadequate income, and lack of other spiritual and material rewards. Wages compared with other sectors, especially starting salaries, were low. There was lack of support to staff by hospital

authorities. It appears that authorities need to allocate more funding to create facilities and good working conditions for health care staff, so they can provide the best services and care to people living with HIV/AIDS. The main limitation of this study was that only individual interviews were conducted with health personnel due to the crowded clinic and the impossibility of giving personnel time off for group interviews even after working hours. Had group interviews taken place, they could have helped in explaining many more of the problems experienced by health care workers. In addition, interviews with doctors and specialists as well as with authorities are highly effective in studying the problems and strategies for reducing and solving the problems of health care workers. We hope that researchers will have the opportunity to carry out further studies in the continuation and completion of this study in order to resolve the problems of health care workers.

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