Psychosocial aspects of HIV infection: *I Love You* (2005)

Tomislav Meštrović

Polyclinic for Medical Microbiology and Parasitology, Gynecology, Internal Medicine, Urology and Occupational Medicine "Dr. Zora Profozić", Bosutska 19, 10000 Zagreb (Croatia).

Correspondence: Tomislav Meštrović, Andrije Hebranga 23, 10430 Samobor (Croatia).

e-mail: tomislav.mestrovic@gmail.com

Received 9 August 2012; accepted 1 September 2012.

Resumen

Desde el descubrimiento del VIH y el SIDA, los avances grandes se han hecho en el entendimiento de la biología del virus y la enfermedad, y también en el desarrollo de tratamientos eficaces. Sin embargo, esta infección sigue teniendo efectos muy profundos en el nivel psicológico, social y económico. Algunos ejemplos importantes de la estigmatización y los aspectos psicosociales de la enfermedad se muestra en esta película. Prejuicio común donde el VIH se asocia exclusivamente con la comunidad gay y la conducta desviada se acentúa, así como la deficiente educación básica sobre enfermedades de transmisión sexual en general. Aspectos psicosociales de la infección por el VIH, el estigma y la discriminación se discuten a fondo. A pesar de la prevalencia baja, Croacia tiene características particulares que podrían promover un crecimiento de la población infectada, por lo que informar al público sobre todos los aspectos de la enfermedad a través de películas y otras formas de acciones de salud pública es crucial.

Palabras clave: VIH, SIDA, estigma, discriminación, psicosociología, Volim te.

Summary

Since the discovery of HIV and AIDS, considerable progress has been made in understanding biology of the virus and disease, and also in developing effective treatments. Never the less, this infection still has very profound effects on psychological, social, and economic level. Some important examples of stigma and psychosocial aspects of the disease are depicted in this movie. Common bias where HIV is associated exclusively with the gay community and deviant behaviour is emphasised, as well as deficient basic education about sexually transmitted diseases in general. Psychosocial issues of HIV infection, stigma and discrimination are discussed thoroughly. Despite the low seroprevalence, Croatia possesses particular attributes that could foster a growth of the infected population, so informing the public about all aspects of the disease through movies and other forms of public health actions is crucial.

Keywords: HIV, AIDS, Stigma, Discrimination, Psychosociology, Volim te.

The author states that this article is original and that it has not been previously published.

About HIV infection

Human immunodeficiency virus (HIV) is a blood-borne, sexually transmittable virus, typically conducted via sexual intercourse, shared intravenous drug equipment, and from mother to child through the birth process or during breastfeeding¹. HIV disease is caused by infection with HIV-1 or HIV-2, both of which cause similar conditions - the difference is in transmission and progression risks. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS)², in 2008 approximately 33.4 million people worldwide (1% of the global adult population aged between 15 and 49 years of age) were infected with HIV, which represents a decline from 2006 (39.5 million reported infections). UNAIDS estimates that 2.7 million people had novel infections with HIV and that 2 million people passed away from AIDS in 2008, both showing a slight drop over time. HIV is responsible for a cellular immune deficiency characterized by the depletion of CD4+ cells (helper T lymphocytes). That loss of T lymphocytes results in the development of opportunistic infections and neoplastic processes, and clinical infection goes through three distinct phases: acute seroconversion, asymptomatic infection, and finally AIDS.

Since the discovery of HIV and its connection to AIDS, great progress has been made in understanding biology of the virus and disease, and also in developing effective treatments. The prognosis in affected individuals with untreated HIV infection is poor, with an overall mortality rate of more than 90%¹. The adequate use of combination antiretroviral therapies and prophylaxis for opportunistic infections significantly improves survival and dramatically decreases the risk of secondary opportunistic infections³⁻⁵. In addition, public education programs have raised awareness, resulting in increased testing and prevention of infection. A considerable amount of stigma has been attributed to HIV infection, mostly because of the virus's association with sexual acquisition and the implication of sexual promiscuity. Consequences of this stigma have included rejection, discrimination and reluctance to be tested for HIV infection, and are also associated with unjustified fear of acquiring a rapidly fatal infection from relatively casual contact, which will be discussed later in the article.

Movie outline

Technical details

Original title: Volim te. Other titles: I Love You (USA). Country: Croatia. Year: 2005. Director: Dalibor Matanić.

Music: Jura Ferina and Pavle Miholjević.

Photography: Branko Linta.

Film editor: Tomislav Kraljević, Tomislav Pavlić and Roman Wagner.

Screenwriter: Dalibor Matanić.

Cast: Krešimir Mikić, Ivana Roščić, Ivana Krizmanić, Zrinka Cvitešić, Nataša Janjić, Bojan Navojec, Leon Lučev, Angelo Jurkas, Ana Stunić, Božidar Orešković, Biserka Ipsa, Stefanija Acimac, Miljenko Car, Alen Grozaj, Zdenko Jelčić, Marko Jurković, Matija Kezele, Ana Kretmeyer, Packe, Linda Šeferović, Željko Tomac.

Color: Color.

Runtime: 83 minutes.

Genre: Drama.

Production Companies: Hrvatska radiotelevizija (HRT).

Synopsis: Young successful guy gets infected with AIDS by accident. He becomes a problem for society.

Awards: Golden Arena (2006) for Best Cinematography and Best Editing.

Links:

http://www.imdb.com/title/tt0470167



This movie is directed and written by one of the most influential modern Croatian directors, Dalibor Matanić, who is famous for tackling subjects controversial in Croatian society. It starts with a voice of protagonist Krešo (Krešimir Mikić), reminiscing about childhood and growing up, first loves and trips to the seaside, but also about his introduction to the world of recreational drug usage, which he views as a departure from innocence. We find out that he accidentally killed a woman on a crossover while driving, but his father – famous lawyer with connections – made sure he did not go to jail. Krešo has a pessimistic view of the future.

In the next scene we find him in the doctor's office. He is in a hurry to leave because he is late for work and does not understand why doctor insists on him staying when he feels perfectly fine and healthy. Then the doctor finally tells him that he is HIV-positive. Apparently the blood he received by transfusion after the accident contained the virus, despite passing the initial check. Krešo is in state of shock and disbelief, not knowing what will happen to him. After leaving the doctor's office, he wanders through the city aimlessly, stumbling on people. Upon coming home he calls his girlfriend Ana on a cell phone, imploring her to get off work, only to find out that she can't be home before evening.

He enters the nearby bar where he is a regular guest, and orders four shots of tequila and a beer. He gets drunk and starts provoking the waitress, which results in owner needing to kick him out of the bar on the street. He shouts uncontrollably.

Krešo returns home, regurgitates in the toilet and crashes into bed. His girlfriend returns home and immediately starts working on her laptop. Krešo wakes up in the evening, comes to the living room, and starts a conversation with Ana (Ivana Krizmanić). She asks him why did he call her on her work, complains about their relationship and stresses her dissatisfaction with her life. She has a feeling that he is bored with her and that the love between them is gone. She also accuses him that he is selfish and egocentric. Krešo interrupts her and tells her that he has AIDS. At first she does not believe him, but he gives her test results from the doctor. She asks how, and he explains to her that the blood he received was not checked properly.

In the morning Krešo wakes up only to see Ana packed all her stuff and standing in the hallway, ready to leave. Their eyes meet, but Ana leaves their apartment without saying a word.

In the next scene Krešo is at work, in an office packed with people. His boss and former partner Mario (Leon Lucev) approaches him and expresses his anger because he did not show up for work yesterday. At the break female colleague from the office named Nataša (Nataša Janjić) hits on him, and when he tells her that he has AIDS, she laughs and does not believe him. She tells him that not only is he good in bed, but apparently very funny guy as well.

After work Krešo meets with his two friends (Žac and Robi) at the squash centre; they talk about what drugs they will use during the weekend and the upcoming bachelor party. Žac advises him against marriage and envies him because of his solitude life. All three of them have lunch at the Chinese restaurant, get drunk in the bar and attend a club with folk music. A nice looking lady starts dancing with Krešo, but leaves when he tells her that he has AIDS.

At 3 a.m. he returns to his apartment, when suddenly visibly drunk Nataša appears at his doorstep. She is jealous of the relationship between him and Ana, not knowing they broke up. She tells him that she wants to be with him and initiates sex, but he stops her telling her that he is really sick. She leaves with disappointment and fear in her eyes.

The next day on work Mario calls him because Nataša told him that he got AIDS. He is stunned and extremely angry because he also had repeated sexual intercourses with her, but Krešo explains to him that they slept together before his car accident. Mario fires him, regardless of the fact they started the company together. He thinks Krešo is gay because only gay people can get AIDS. Heavily disappointed, Krešo makes up that he slept with Nataša after the accident as well. They argue vigorously, and furious Mario throws him out of the office.

Krešo is having lunch with his parents in the next scene. They talk about Ana, and he does not reveal them that she actually left him. His father tells a story about his friend's 13-year old daughter with a stash of Ecstasy drugs, which encourages his mother to warn him about the dangers of illegal drug abuse. Few moments later his father reads out loud an article in the newspaper about a sailor who was spreading HIV on purpose and calls him as a monster who needs to be killed immediately. Anxious Krešo leaves the family lunch instantly.

In the squash centre, Krešo destroys his racquet and bangs against the wall with his bare hands. Upon calming down, he starts flirting with a nice looking girl in the dressing room. She accepts his invitation to have some drinks. They attend the same bar near his house and get completely drunk. Ana is entering with his new boyfriend and one other couple, approaches Krešo to warn him about his behaviour. She tells him that he will kill that poor girl; they start fighting, and he is kicked out one more time. Heavily drunk Krešo tells the girl from the squash centre to go home, but she doesn't want to leave.

Krešo awakes in his apartment, only to find the naked squash girl on top of him, without protection. He throws her off him and forces her out of the apartment. She screams how all men are the same and jerks, not knowing that he is HIV-positive. She starts crying in front of his door, and he cries inside the apartment.

Next morning Krešo is walking around the main Zagreb square and stumbles upon Robi (Angelo Jurkas), his friend from the squash centre. He admits that Ana told him about his disease and advises him not to come to the bachelor party because of the other people who will attend. He also says that Vedrana (squash centre manager) thinks that he should stop coming to the centre because of the showers. They start arguing and physically fighting, falling on the surrounding tables. Robi says that it's his own fault that he has the disease.

Again at home, Krešo calls an escort lady (Ana Stunić) and finds out that she wants 200 Euros for an intercourse. When she comes to his apartment, first she takes some cocaine. He asks her how and why she started selling her body, and she tells him that she also studies chemistry. He wants to know if she is afraid of diseases, and she responds that she always uses condoms because one of her lady friends acquired HPV from unprotected sex, although she knows that there are not any serious diseases in this country. She also says that there are all kinds of clients, some of them really dirty with foul odour. Krešo asks her if someone clean and reliable suggested unprotected sex, how much would she charge. She answers 600 Euros and they end up having sexual intercourse without a condom.

From that moment he starts actively pursuing unprotected sex. In the city Krešo finds underage prostitute and he pays her 300 Euros for sex without protection. Few moments later he comes to his bar, drinks tequilas and starts searching for escorts in the ads. He starts a conversation with the waitress, molests her with his drunken questions and starts a fight. He is kicked out yet once more, this time violently.

His pattern of destructive behaviour continues. Krešo starts molesting girls in the club and is kicked out; then he assaults an old lady on the street. He finds gay couple in the park and sits next to them, slowly unzipping his pants. It is not long before a group of skinheads spots them and starts bashing the gay couple. Krešo escapes on time. He calls a girl from the ads and comes to her apartment. When she opens the door, he sees that it is a waitress from his favourite bar. They start undressing, but then her daughter's voice is heard, calling her from the other room. Krešo is in shock and starts crying. She takes his hand and puts his hand into her lap.

Later she complains to him that she does everything wrong, and that she is even incapable to be a good prostitute. Krešo asks her why she does that when she has a steady job as a waitress. She replies that having a daughter is very expensive, especially when her ex-husband does not pay alimony. He advises her to seek justice in court, but she says that he has better lawyers. When she tells him her life story, he says that the balance is restored in his case because he killed somebody and got infected with AIDS. She goes crazy because he wanted to have unprotected sex, starts beating him and cries herself to sleep in his lap.

Evening in Zagreb. Krešo leaves waitresses apartment and gives hear an envelope with money. He says it is a gift. Waitress looks through her window, smiling. Krešo is driving in a tram, also looking through a window and smiling. His dad visits him in his apartment, tells him a joke and leaves without a word. He meets with his friend Žac who hugs him, and a few moments later he reconciles with Ana. He meets with a waitress in his bar; she is eager to meet him with her daughter.

After her work, they meet in a park. He goes to buy some ice-cream for the girl, but while he was crossing the streets, a speeding car hits him. Young driver is in shock, but his father assures him that his connections will make everything right. Waitress lies next to him on the road and sobs.

In the epilogue, Krešo thinks about all the nice moments in his childhood and young life. He asks himself why we need to hurt so many people during our short lives.

Stigma and HIV

HIV and consequent AIDS not only affect physiological processes, but have very profound effects on psychological, social, and economic level. Since the beginning of the epidemic more than 30 years ago, fear and stigma had a big influence on those who live with and die from this disease, as well as those who love and care for them. The extent of these psychosocial aspects makes them central to HIV prevention efforts, care for HIV positive individuals, and the reaction of the communities to the loss of people in their most productive years of life.

Perhaps the key factor in producing and extending the negative psychosocial impact of HIV and AIDS is aforementioned stigma. Thus actions to reduce or

protect against stigma present are essential in order to improve the psychosocial wellbeing of people with HIV infection. We can define stigma as "an act of identifying, labelling or attributing undesirable qualities targeted towards those who are perceived as being shamefully different and deviant from the social ideal" and as "an attribute that is significantly discrediting (and is) used to set the affected persons or groups apart from the normalized social order"⁶. Definition of discrimination can be formulated as "an action or treatment based on the stigma and directed toward the stigmatized" and as "sanction, harassment, scapegoating, and violence based on infection or association with HIV/AIDS"⁶. Simply put – stigma is an attitude, and discrimination is an act.

Affected individuals are stigmatized and discriminated for many reasons. The main one is a view of HIV as a slow, incurable disease that eventually results in suffering and death, and many people regard HIV as a death sentence7. The public often poorly understands how HIV is actually transmitted and is unjustifiably afraid of acquiring HIV from people infected with it. Furthermore, HIV transmission is frequently associated with abuses of social norms regarding proper sexual relationships, so people with HIV are associated with having done something "bad" (in some cultures, for example, people believe that a woman develops HIV-infection because she has violated the mourning period after the death of her husband). If one family member exhibits signs and symptoms of HIV, the entire family may experience rejection and possible violence from the community.

Transmission of HIV is not exclusively related with so-called immoral behaviour. But such type of behaviour is often attributed to infected individuals, resulting in a double stigmatization – both through infection and through ascription⁸. Prevention measures can be stigmatized through their association with HIV as well; the false reasoning is that those who try to protect themselves must be infected. Stigma is, therefore, associated not only with psychosocial consequences, but also with a decline in prevention and safe-sex practices. Minimizing the effects of stigmatization in order to improve treatment and prevention efforts cannot be overstated. Likewise, health care professionals must be cognisant of the stigma encountered by their HIV-positive patients and must be scrupulous in protecting their confidentiality. As this kind of stigma is a cultural and social phenomenon of the community as a whole, and not merely the result of individual actions, efforts to reduce stigma must address the community rather than focusing on individuals.

Psychosocial issues of HIV

Even if stigma can be minimized, HIV is a disease that requires enormous psychosocial adjustments.

People diagnosed with HIV go through numerous emotional responses characteristic to people facing a terminal illness⁹. They commonly experience an initial stage of denial, not acknowledging the disease or denying its eventual consequences. HIV poses a threat to a person's goals, expectations and important relationships. People who subject themselves to high-risk behaviours often deny that they are at risk of acquiring infection. They usually avoid testing or, even when tested, avoid following up on results, hoping to prevent the disease that way. In order to fight HIV efficaciously, people are required to have a certain level of acceptance of the illness so that they can seek counselling, social support, and medical care.

The stages when facing HIV are similar to the Kübler-Ross stages of response to dying¹⁰.

The first stage is presented with shock, denial, and anger; infected individuals often feel guilty or angry at those they think are responsible for infected them. The second stage is a stage of withdrawal; they are aware of the stigma associated with the disease and are worried about how others will react. Third is a "bargaining" stage where they decide to tell cautiously selected individuals or friends about their status. Fourth stage is a stage of seeking support, looking for others in the same situation and discussing problems. In some instances, a fifth stage appears where the affected individuals see themselves as different or special, followed by altruistic behaviour and acceptance of their disease. Yet the more stigmatized HIV and AIDS are, the less likely the patient will evolve beyond confessing to carefully selected individuals. On the other hand, new psychological issues arise when disease symptoms start to emerge.

Schönnesson and Ross found that HIV poses a threat not only to individual's physical survival, but to their psychological survival as well¹¹. People often see themselves as being "persecuted" by the virus early in the disease, and at later stages, physical and psychological worries and anxieties about death are not unusual. With the progression of the disease patients also face control issues due to increased loss of physical control; thus active participation in their health can have an impact on people's sense of being in control, as well as reduce their risk of feeling helpless. Patients' view on the meaning of life is often crushed, so there is a need to rebuild new meanings that integrate HIV. This may include personal and spiritual growth for some of them, with HIV as an incentive to do something with their life, but abandonment and loss of support could lead to depression. The existential issues include spirituality for many patients, often a rekindling of religion if the person has a history of religiosity. For such people religious belief systems can represent a main source of psychosocial support and consolation.

Psychosocial support is a crucial part of health care services offered to HIV-positive individuals. Social and health care workers, counsellors, volunteers, ministers of religion, as well as family and friends represent key figures in providing psychosocial support. Perceived social support is generally associated with less depressive symptomatology, less stigma and improved quality of life¹². It is important to make sure the helper is completely aware of and at ease with the facts about HIV transmission. If any of the helpers feel personally at risk from HIV-positive patients, that kind of feelings can be conveyed to patients and even greater sense of isolation can occur. The bottom line is that counsellors must educate themselves properly about the disease in order to provide satisfactory counselling¹³. Individual and supportive counselling is essential in helping patients to embrace their diagnosis and to show them how it will affect all aspects of their lives. Basic information about how HIV is transmitted should be provided to patients, which will give them an idea what are common emotional and physical responses to HIV like, and help them in anticipate and plan for these experiences.

Group counselling can allow individuals with HIV to mutually share experiences, although the important prerequisite is the patients' acceptance of the diagnosis which then results in an honest communication¹⁴. Group support help affected individuals to cope with their emotional responses based on precise information, similar experiences, sympathetic listening, as well as assistance with solving issues and problems. Family also plays a pivotal role, especially in the initial stages of the disease. Strong family structure is particularly important due to the tremendous stress that HIV is laying on families. The undiagnosed partner can express anger and (in some cases) violence toward the individual who has been diagnosed with the virus.

Public and private-industry policies concerning HIV and its prevention should be assessed on an ongoing basis in order to evaluate their effects on the lives and health of the population. Supporting policies ensuring confidentiality of HIV status, protection from discrimination and access to medical care are likely to help more people with HIV meet their needs. Support and education within cultural and religious groups aid patients and families to cope with the disease. Governments and nongovernment organizations must devote resources to promote increased necessity for HIV prevention and the need for adequate medications, medical care, as well as cultural and psychosocial support for patients, families and communities living with this virus.

Movie analysis

The inspiration for the movie was a case of the first HIV contraction through a regular blood donor in

Croatia in 2004, whose contaminated blood apparently passed through screening tests undetected. The particular donor has given blood more than 40 times and apparently contracted HIV within three weeks of his donation during the virus' incubation period, when HIV is virtually undetectable through the technology in use in Croatian hospitals. Albeit rare, the same way of contracting the disease was shown in this film.

Some examples of stigma and psychosocial aspects of the disease are shown throughout the movie, although in depth analysis is lacking due to relative quick death of the protagonist in the car accident. Common bias where HIV is associated exclusively with the gay community and deviant behaviour is clearly shown. Also, mixing the terms HIV and AIDS is evident throughout the movie, and unfamiliarity of the characters with the routes of transmission demonstrates how the basic education about sexually transmitted diseases is lacking significantly. Croatia falls under the group of countries with low HIV prevalence (1-1.5 per 10,000 inhabitants), and HIV infection is mainly related to risk behaviour of gay and migrant workers working in HIV infection endemic areas¹⁵; it is the reason why people still think this disease happens somewhere else and to somebody else. Conversation scene with a prostitute emphasizes this perspective. Reasonable critique can be directed towards experiencing all the Kübler-Ross stages in relative short period of time, which is seldom the case in real life.

This is the only Croatian movie tackling this subject, and it did a fairly decent job portraying some of the stereotypes and psychosocial aspects of this disease. Dalibor Matanić is an important figure of Croatian film industry and famous for dealing with controversial and difficult topics. In his first feature film, he depicted a vivid example of mobbing through the eyes of a small shop worker with a sick daughter, suffering due to the callous attitude of her boss [Blagajnica hoće ići na more (2001) http://www.imdb.com/title/tt0277607]. After that he tackled the topic of homosexuality for the first time in mrtve our country [Fine djevojke (2002)http://www.imdb.com/title/tt0329083]. Following the movie I love you he directed a realistic drama set in a godforsaken Croatian mountain village with highly controversial scene of animal sex [Kino Lika (2009) http://www.imdb.com/title/tt1185253], and last year he finished a thriller about family violence [Ćaća (2011) http://www.imdb.com/title/tt1980053].

To conclude, while the seroprevalence of HIV in Croatia stays low, the country possesses particular attributes that could foster a growth of the infected population¹⁵. Thus only comprehensive preventative and educational efforts can give Croatia opportunity to remain a low-level epidemic country, and inform people

about all aspects of the disease. Making movies like this is one step towards achieving that goal.

References

1. Reitz Jr MS, Gallo RC. Human Inmunodeficiency viruses. In: Mandell GL, Bennett JE, Dolin R,editors. Mandell, Douglas, and Bennett's principles and practice of infectious diseases. 7th ed. New York: Churchill Livingstone Elsevier; 2010. p. 2323-33.

2. Joint United Nations Programme on HIV/AIDS. AIDS Epidemic Update: December 2009. [cited 2012 Jul 20]. Available from: http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report /2009/jc1700 epi update 2009 en.pdf.

3. Nesheim SR, Kapogiannis BG, Soe MM, Sullivan KM, Abrams E, Farley J, Palumbo P, Koenig LJ, Bulterys M. Trends in opportunistic infections in the preand post-highly active antiretroviral therapy eras among HIV-infected children in the Perinatal AIDS Collaborative Transmission Study, 1986-2004. Pediatrics. 2007;120(1):100-9.

4. Sackoff JE, Hanna DB, Pfeiffer MR, Torian LV. Causes of death among persons with AIDS in the era of highly active antiretroviral therapy: New York City. Ann Intern Med. 2006;145(6):397-406.

5. Palella FJ Jr, Baker RK, Moorman AC, Chmiel JS, Wood KC, Brooks JT, Holmberg SD; HIV Outpatient Study Investigators. Mortality in the highly active antiretroviral therapy era: changing causes of death and disease in the HIV outpatient study. J Acquir Immune Defic Syndr. 2006;43(1):27-34.

6. Stigma and AIDS in Africa: Setting an Operational Research Agenda. UNAIDS Intercountry Team for East and Southern Africa. Dar es Salaam, Tanzania: Joint United Nations Programme on HIV/AIDS; 2001. Avalaible from: http://pdf.usaid.gov/pdf_docs/Pnadc158.pdf

7. Herek GM. AIDS and stigma. Am Behav Sci 1999;42(7):1106-16

8. Thomas F. Indigenous narratives of HIV/AIDS: morality and blame in a time of change. Med Anthropol. 2008;27(3):227-56.

9. Ross MW, Tebble WEM, Viliunas D. Staging of reactions to AIDS virus infection in asymptomatic homosexual men. J Psychol Human Sex. 1989;2(1):93-104.

10. Kübler-Ross E. On death and dying. New York (NY): MacMillan Publishing Co., 1969.

11. Nilsson Schönnesson L, Ross MW. Coping with HIV infection: psychological and existential responses in gay men. New York (NY): Plenum Press; 1999.

12. Rao D, Chen WT, Pearson CR, Simoni JM, Fredriksen-Goldsen K, Nelson K, Zhao H, Zhang F. Social support mediates the relationship between HIV stigma and depression/quality of life among people living with HIV in Beijing, China. Int J STD AIDS. 2012;23(7):481-4.

13. Baggaley R, Sulwe J, Kelly M, Ndovi MacMillan M, Godfrey-Faussett P. HIV counsellors' knowledge, attitudes, and vulnerabilities to HIV in Lusaka, Zambia, 1994. AIDS Care. 1996;8(2):155-66.

14. Chippindale S, French L. HIV counselling and the psychosocial management of patients with HIV or AIDS. BMJ. 2001;322(7301):1533-5.

15. Gjenero-Margan I, Kolarić B. Epidemiology of HIV infection and AIDS in Croatia – an overview. Coll Antropol. 2006;30 Suppl 2:11-6.