REVIEW

IS THERE A "HIDDEN HIV/AIDS EPIDEMIC" IN TURKEY?: THE GAP BETWEEN THE NUMBERS AND THE FACTS

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ABSTRACT

Since the number of persons living with HIV/AIDS was relatively low compared to the hard-hit countries, HIV/AIDS was not considered as an emerging health problem in Turkey. However Turkey carries a number of factors which enable the spread of HIV/AIDS and the reported rates are accepted to be an underestimation due to the drawbacks of the present surveillance system. This paper discusses the epidemiology of HIV/AIDS in Turkey, factors influencing risk and prevention and the need concerning prevention and control activities in order to address future challenges to combat the epidemic.

Keywords: HIV/AIDS, Turkey, epidemiology, prevention, control

TÜRKİYE'DE GİZLİ SEYREDEN BİR HIV/AIDS SALGINI MI VAR?: SAYILAR VE GERÇEKLER ARASINDAKİ FARKLILIKLAR

ÖZET

Türkiye'de HIV/AIDS'in öncelikli sağlık sorunları arasında sayılmaması, olgu sayılarının bu hastalık tarafından vurulan diğer pek çok ülkeye kıyasla göreceli olarak düşük olmasından kaynaklanmaktadır. Ancak Türkiye'nin HIV/AIDS'in yayılımını kolaylaştıran pek çok risk faktörünü barındırdığı ve bildirilen olgu sayılarındaki düşüklüğün sürveyans sistemindeki yetersizliklere bağlı olduğu kabul edilmektedir. Bu makalede, HIV/AIDS epidemisi ile mücadele ederken yapılması gerekenleri ortaya koymak amacıyla Türkiye'deki hastalık epidemiyolojisi, riski etkileyen faktörler, önleme ve kontrol etkinlikleriyle ilgili gereksinimler tartışılmaktadır.

Anahtar Kelimeler: HIV/AIDS, Türkiye, epidemiyoloji, önleme, kontrol

INTRODUCTION

HIV/AIDS is considered as one of the most devastating disease of the recent decade due to its high morbidity, mortality and economic impact. As for December 2004, it is estimated that a total of 39.4 million people worldwide carry the HIV virus[1]. The epidemic has been growing and there is no region unaffected.

Today, HIV/AIDS should be considered as an emerging disease for Turkey, too. According to the statistics of the Turkish Ministry of Health, a total of 1922 persons living with HIV/AIDS (PLHA) were notified from 1985 to December 2004 in a population of more than 70 million. In the year 2004, 163 HIV and 47 AIDS cases were newly identified[2]. Figure 1 shows the reported number of PLHA in Turkey from 1985 through the end of 2004.

Since the reported prevalence was relatively low compared to the hard-hit countries, policy- makers as well as the community did not consider HIV/AIDS as an emerging health problem in Turkey. However, the figures mentioned above are accepted to be an underestimation due to the drawbacks of the present surveillance system. Moreover, Turkey has a number of risk factors that enable the spread of HIV/AIDS[3]. So the aim of this paper is to discuss the epidemiology of HIV/AIDS in Turkey, factors influencing risk and prevention and the need concerning prevention and control activities in order to address future challenges to combat the epidemic.

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In this paper, initially the present surveillance system for HIV/AIDS and its limitations will be discussed. Subsequently, the authors will present the epidemiological pattern of HIV/AIDS, the factors which influence the risk of the country and the prevention-control activities which are carried by both the governmental and the non governmental organizations. Lastly, taking into consideration the epidemiological pattern and the limitations of the present prevention- control programs, the authors will communicate the strategies to tackle the problem.

In this paper, primarily the statistics obtained from the Turkish Ministry of Health as well as the reports of UNAIDS are utilized. The authors retrieved all the articles cited in Pubmed through using the key words of "HIV/AIDS" and "Turkey". The authors also made an effort to cover the nationally published articles relevant to HIV/AIDS.

The present surveillance system and the drawbacks of the morbidity data

Since 1987, serologic tests had been compulsory for blood and organ donors, registered sex workers and Turkish men who reside in foreign countries, but come to Turkey for their military services. From the year 2002 onwards, HIV testing was also required for couples before getting married. Public as well as the private sector, both of which are within the HIV surveillance system, perform HIV tests and report to the Ministry of Health. However sentinel sites do not exist within the present system.

The major problem concerning the morbidity data is that testing is limited and is not systematic among the persons under high-risk[4]. There is no surveillance system targeting unregistered sex workers, men who have sex with men (MSM) or intravenous drug users (IUD). Although tests are performed in the public hospitals during antenatal examinations, this practice is also not implemented systematically.

Also the number of reported cases can not be accepted as a sufficient indicator by itself. Particularly in regions with low prevalence, surveillance programs that evaluate behavioral change among vulnerable groups are needed[5]. The rate of condom use in commercial or casual sex or needle exchange should be evaluated. Yet in Turkey, this information is currently lacking.

Turkish Ministry of Health reported that in the year 2003 nearly 2.5 million HIV tests were performed. Interestingly, only %0.5 of the tests was performed on sex workers. Commercial sex work is considered as the major driver of the epidemic in Turkey[6]. But sex workers who were tested for HIV are the registered ones and do not represent the parent population. In Turkey, there are approximately 2000 registered sex workers, but the estimated number for unregistered sex workers is 15 000 only for Istanbul[7]. Moreover after the fall of the Eastern Block, some women from the former Soviet Union and the East Europe, who come by tourist visas, work as commercial sex workers in Turkey. Yet the data about the unregistered sex workers, who might be at an increased risk and have decreased access to health services, is limited to those arrested by the police and to some small-scaled studies.

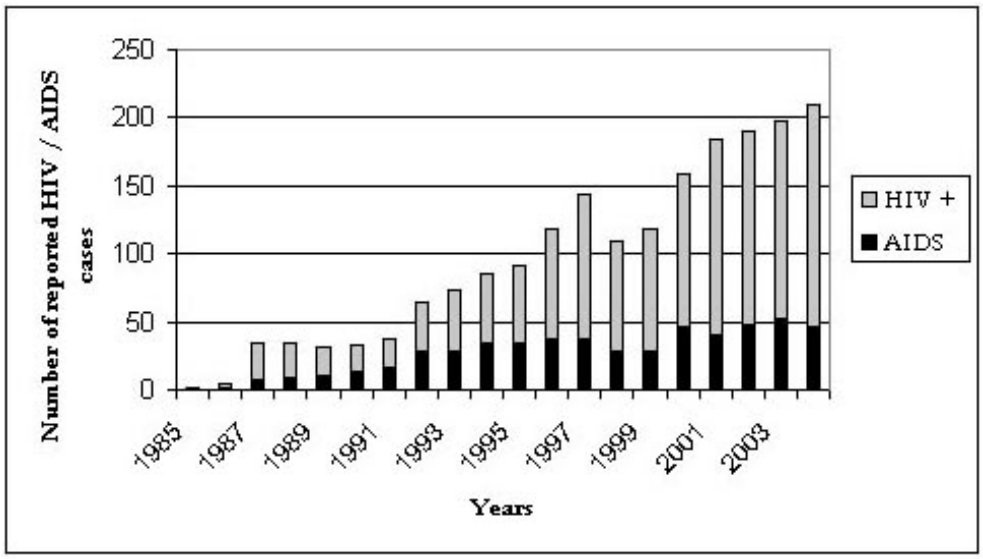

Figure 1: Reported HIV Positive and AIDS Cases in Turkey (1985-2004)[2]

Private sector, which has been flourishing for the last two decades, is becoming an important health service provider in Turkey. Persons suffering from sexually transmitted infections (STIs) prefer the private sector since they do not want to disclose their diseases in a conservative community[8]. Another important problem with the morbidity data is that notification from the private sector is under the actual figures.

Although a systematic and a comprehensive surveillance system for HIV/AIDS is not present in Turkey yet, there are constructive efforts in this direction. Recently, a project was started within the context of the Reproductive Health Program of the European Union, which aims to implement a sentinel surveillance system designed for STIs and HIV/AIDS[9]. Also in 2005, the Turkish Ministry of Health received a grant from the "Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria" for the HIV/AIDS Prevention and Support Project. Within this project, a behavioral study targeting the vulnerable groups will be carried out which consequently will provide an important database for planning the prevention activities.

The epidemiological pattern of HIV/AIDS in Turkey

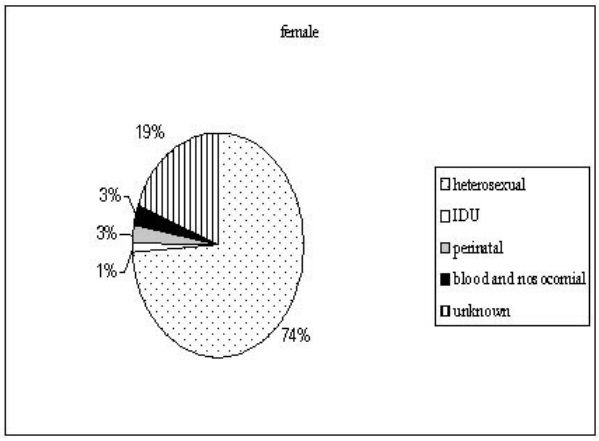

Figure 2: Reported modes of transmission among women[10]

In Turkey, HIV positive cases show male dominance. Among all reported cases, the male-female ratio is approximately 2.2[10]

This ratio showed a decreasing trend and women showed an increasing proportion throughout the years. Nearly 70% of the reported HIV/AIDS cases belong to the 15-39 year age group. The major mode of transmission is the heterosexual relationship for both sexes[10]

Figure 2 and 3 summarizes the possible routes of transmission for both genders.

The epidemiological pattern of HIV/AIDS in Turkey is similar to the African pattern, where heterosexual transmission is the main route of spread[8]. Homo-bisexual route is the second most common route among male. But since homosexuality is still a taboo in Turkey, MSM are probably underreported. Although Turkey's geographic location is close to the countries of Eastern Europe, it still shows a different pattern from them[8] because IDU is not as prevalent as the Eastern European countries. The dominant heterosexual route and the increasing prevalence among women can be expected to increase the vertical transmission throughout the years in Turkey, where antenatal HIV testing is limited and not systematic.

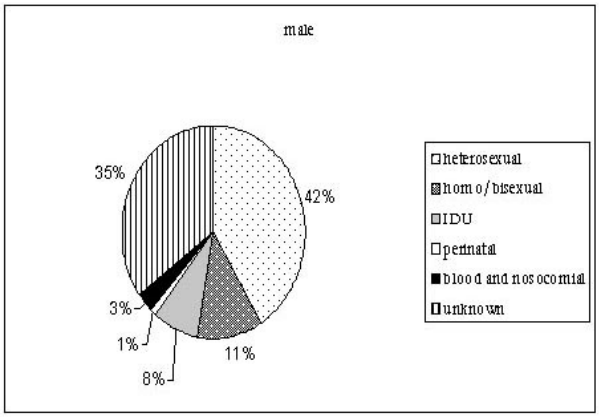

Figure 3: Reported modes of transmission among men[10]

The factors influencing risk and prevention

Turkey deserves special attention since it carries several risk factors for the spread of HIV/AIDS. Geographic location of the country and high mobility, low social and economic status as well as the wide gaps, gender inequalities and demographic structure are evaluated as important risk factors for HIV/AIDS[3,4,7]. Moreover, there are other risk factors which are mentioned by UNAIDS, that are important in countries of low prevalence[5]. Both the public and the governments do not view HIV/AIDS as a priority due to the underreporting which leads to low number of cases. Therefore insufficient funds are allocated to this issue among the limited public health resources. Opinions such as "HIV can not infect me" or "HIV is others' disease" are very common. These attitudes prevent the discussion on risky behavior and thus preclude the prevention measures building an environment enabling the spread of HIV.

• *Geographic location and mobility:*

Turkey is closely located to the countries that have an increased prevalence of HIV/AIDS. The

high prevalence and the accelerated epidemic in Eastern Europe will have a significant impact on Turkey, too. The movement of commercial sex workers from these countries to Turkey is an important mode in transmission. From 1996 to 2002, 23 500 foreigners were deported from being involved in illegal sex work[6]. Also trading activities with the neighboring countries, the travel of businessmen and tourism increases the risk[3].

From 1985 to 2003, 22.6% of the HIV positive cases that were reported had a foreign nationality. When we look at the countries of the origin, nearly 30% of the cases were from the former Soviet Union, about 20% are from the East European, 20% percent are from the African and more than 10% percent are from the West European countries[10]. Sometimes this fact is falsely interpreted by the community and HIV is perceived as if it is a disease of foreigners.

• *Social and economic inequalities:*

Socio-economic deprivation and wide inequalities also increase the risk of HIV/AIDS in Turkey. Turkey has a GNP per capita of approximately 3300 US Dollars. But more importantly, there are deep inequalities within the country. Almost all health and educational indices vary highly from west to east. The knowledge and attitudes towards HIV/AIDS is consistent with this fact. Turkish Demographic and Health Survey (TDHS) which was conducted in 2003, determined that the percentage of married women who had heard of AIDS in the west and east region of the country was 92.3% and 69.1%, respectively. In the west region 71.2% of the women believed that HIV/AIDS was preventable. However in the east only 43.3% considered this disease as preventable. When education status was taken into account, the married women who were illiterate was the most susceptible group[11]. Again according to TDHS 2003, overall 21.9% of the married women stated condom as one of the preventive measures. However among illiterate women only 5.5% pronounced condom as a measure[11].

•*Gender power inequalities:*

Research has shown that gender power inequalities and violence against women is associated with inconsistent condom use and unplanned pregnancies[12,13]. Domestic violence is not rare in Turkey. In a survey, which is carried out among pregnant women in a province in the east of Turkey, the prevalence of physical or psychological abuse during pregnancy was determined as 33.3%. More than half of the women who were exposed to abuse had physical violence. Abused women had a lower level of education and were more likely to have unplanned pregnancies[14]. Also nearly 40% of women considered the violence used by their husband as a legitimatized act[11]. This finding is important in showing the internalization of the socially subordinate role of women.

•*Cultural context - beliefs and attitudes:*

Turkey was considered a traditional and mostly a patriarchal society. But within the recent decades, industrialization, urbanization, advances in education have caused variations within the social and the cultural context. Social norms started to change, thus the number of sex partners are expected to increase[3]. This change was quite rapid and yet uneven through the society. Although still mostly traditional, now Turkey represents a complex cultural structure with diverse social norms. In some parts of the community discussing sexuality is a taboo while in others it is discussed indirectly or sometimes openly. The approach to sexuality influences the knowledge concerning HIV/AIDS. In a study conducted among high school students in Turkey, one of the most important factors influencing the level of knowledge was the attitude of the family about sexuality. The students who discussed sexuality comfortably within the family had the highest knowledge scores. The scores were less among the ones who discussed sexuality indirectly and the least who among the ones whose families considered sexuality as a taboo[15].

A qualitative study, which was published in 1995, evaluated the beliefs and attitudes of Turkish women and men[4]. This study points out that women consider "cleanness" as the important factor in HIV prevention. The main belief is that by keeping clean i.e. vaginal douche women can prevent HIV infections. This belief is not unexpected since the association of personal hygiene was promoted for the prevention of many infectious diseases during the previous years. Differently from women, men considered themselves as "strong" and thus having a "biological resistance" for the disease. These two important concepts and the belief models should be further evaluated in order to plan effective intervention strategies, which aim behavior change.

Although it is the second most common route of transmission, the presence of MSM has been denied. The stigmatization and discrimination prevent these men to accept their behavior leading

to the internalization of homophobia. These people show high-risk behavior and can not access the already limited preventive services. Due to social pressure most MSM also have heterosexual relations and so do not consider themselves as homosexual[16].

• *Attitudes of health care workers*

Since HIV/AIDS is integrated into the medical curriculum recently and the prevalence is relatively low, many health practitioners lack experience on diagnosis, treatment and counselling skills[8]. So among the health care workers, the bulk of the knowledge about HIV/AIDS is gained from the media just like the other members of the society, which resulted in the formation of stigmatization and discrimination towards PLHA. A research carried out among surgeons in one of the leading teaching hospitals in the capital of Turkey revealed that doctors overestimated the risk for acquiring the HIV. Moreover they had negative attitudes as anger and worry towards PLHA. Doctors were less willing to interact with AIDS patients and they did not want to work with professionals who had AIDS in the same environment[17].

• *Demographic structure*

15-24 year old persons account for nearly the half of all new HIV cases worldwide[18]. Turkey has a young population and nearly 27% of the population is between the ages of 15-29[11]. In a study carried out in a university in Turkey, it was determined that more than one third of the students had had sexual experience, most of them at the ages of 15-19[19]. Research evaluating the knowledge of young people about HIV/AIDS indicated that their knowledge concerning STIs was inadequate[15,19,20]. The study carried out by Ungan determined that there was also relatively low level of condom use among both genders[20].

•*Male circumcision:*

Today the role of male circumcision, which is a very frequent practice among the Turkish population, is being discussed for the prevention of HIV/AIDS in the medical literature. Although male circumcision does not prevent HIV transmission entirely, some studies indicate that it reduces the risk. Yet these observational studies are criticized since their results could be confounded by behavioral practices[21]. However, recently an observational study took into account ethnic, religious differences and controlled for the sexual behavior of men. This study determined that uncircumcised men had more than a two fold increased risk per sex act compared to circumcised men[22]. In Turkey, the risk of transmission could be less than the expected since the main mode of transmission is the heterosexual relationship and most men are circumcised before they become sexually active in Turkey.

Traditional family life, the migration of workers together with their families and the prohibition of sexual relationships before marriage in the rural areas might also serve as preventive factors.

Current prevention and control activities

In Turkey, although there were important steps taken in the first years of the epidemic by the Ministry of Health, national policy was not in action as recommended by the UN's Declaration of Commitment. In 1985, when the first case was notified HIV/AIDS was included in the list of infectious diseases that should be notified. In 1987, compulsory serologic test was applied for some of the vulnerable groups. But since the reported number of cases was relatively small, HIV/AIDS was not considered as one of the priorities of the country. On the other hand, despite the efforts of NGOs, the business community was not involved and did not provide the support, which it did for other health projects, due to the stigma attached to HIV/AIDS.

In 1996 National AIDS Commission was established which was the principal decision authority at the national level. National AIDS Commission consists of representatives from different ministries, NGOs and occupational organizations, which work related to HIV/AIDS. The main aim of the Commission was to develop and recommend strategies for the prevention of HIV/AIDS by intersectoral collaboration. But the Commission was not able to function as required due to the rapid turnover of the ministers[23]. In 2002 national objectives and strategies were formulated and an Action Plan was developed. But since it lacked the leadership and the financial support, the plan was not implemented[24].

In Turkey, the funds released from the international NGOs, particularly from the United Nations System, was inadequate to carry out the required activities. Recently, United Nations Global Fund provided funds in order to support the National Action Plan[25]. Lately 55 million EURO was donated by the European Union for the Reproductive Health Program to Turkey. Hence with this fund, the aim of improving the sexual and reproductive health status of the Turkish population especially women and youth

will be achievable through the projects implemented by NGOs in collaboration with the Ministry of Health[9]

Also, the Ministry of Health adopts a strategy, which aims to combine the reproductive health services to the routine services in order to encompass the persons who do not have accessibility to the services and who do not get comprehensive care. Until 2015 this strategy will be implemented in all health care institutions and predominantly in primary health care centers. One of the main subjects of this program is to increase the demand and supply of services[26].

NGOs

After attending the International Population and Development Conference in 1994 in Cairo, both the Ministry of Health and the NGOs changed their services taking into consideration a comprehensive reproductive health approach. New NGOs focusing on STIs and HIV/AIDS were founded. Through the last 20-30 years, NGOs implemented programs and adopted strategies focusing on new service models, training and communication, needs assessment, services to disadvantaged groups, which increased the demand and the accessibility for the services[27].

There are various NGOs which function in the field of HIV/AIDS in Turkey. Differently from the official organizations, the decision making process is faster and not as bureaucratic. Since NGOs function more flexible and rapid, and are aware of the needs of the community they operate as an efficient resources[27] NGOs both participate in the prevention-control activities and also together with the international organizations in motivating the government to take action[8]. Their activities mostly focus on training, communication, advocacy, some of which target groups under high risk as sex workers, IDUs, MSM and the street children[8].

Care and treatment of the people living with HIV/AIDS

WHO estimates the percentage of adults covered among those in need of antiretroviral treatment as 60% for Turkey[28]. In Turkey nearly 65% of the population is covered with health insurance[29]. Although there are some problems in the implementation, HIV/AIDS treatment expenses are covered by these insurance systems. In 1994 a new procedure was utilized for persons most deprived and not covered by the insurance. Persons who do not have any insurance and are below a certain economic level could get "green card" which enables them to get the services and treatment free of charge.

Recently, it was demonstrated that treatment programs that are not combined with effective prevention activities will have only a small impact on the incidence of HIV over the next 15 years. The research underlines that only if effective prevention is practices treatment will be affordable in the long run. This result focuses on the need of an integrated approach consisting of prevention and tratment as the most cost effective way[30].

Future challenges

•Economic development, larger investment in health and education sectors, maintaining equity is important not just for the prevention and control of HIV/AIDS, but for the well being of our society.

•Political commitment by the Turkish Government is a prerequisite for developing and maintaining effective prevention-control activities as well as raising and allocating funds to this issue. Political determination will improve the decision making process, the implementation, monitoring and evaluation of activities carried out by the National AIDS Commission. Also political support will accelerate the activities of various NGOs that have been working in this area with limited resources.

•A comprehensive and a reliable surveillance system which also includes the indicators concerning high-risk behavior should be adopted for STIs and HIV/AIDS[3].

•Adopting and evaluating programs that target behavior change are necessary for young people and the vulnerable populations. The believes, values, attitudes ,behaviors and risk perceptions of the Turkish society regarding STIs and HIV/AIDS should be studied and better understood in order to develop effective prevention programs. Gender power inequalities, the low rate of condom use should be dealt with.

•Sexual health education including STIs and HIV/AIDS should be covered within the curriculum and awareness should be raised during the early school years. The trainers providing sexual health education should be trained and empowered[31].

•Counseling and voluntary testing (VCT) services for STI and HIV/AIDS should be provided widely, particularly to the vulnerable groups. Each health care organization should by law encompass

a trained health care worker for the counseling services.

•In order to maintain prevention, early diagnosis and treatment of STI, the services should be integrated to the primary care level. The personnel working in the primary care should be adequate and qualified to provide these services effectively.

•NGOs can strengthen their capacity by providing technical assistance and financial support from United Nations, European Union or other international organizations. It is important to use the scarce sources in a most effective way without duplicating the activities. The National AIDS commission should provide the synergistic function of NGOs and maintain intersectoral cooperation.

CONCLUSION

The present studies, although small-scaled, indicate that high risk behavior particularly not using condoms in commercial sex is prevalent[32-34]. The low number of cases can be explained by the inadequacy of VCT services and so the low number of cases getting HIV tests. Yet, the highly accelerating epidemic in the former Eastern Block countries and the high mobility in the region suggest a potential HIV/AIDS epidemic. Although there are important deficiencies in the prevention program, important steps are taken in order to put into action some of the above-mentioned recommendations. Hopefuly, the Turkish Reproductive Health Program and the HIV/AIDS Prevention and Support Project will be important in achieving the goals by both the Ministry of Health and the NGOs working in this field.

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