

# AIDS—the past, present and future in the Eastern Mediterranean Region

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الإيدز - ماضيه وحاضره ومستقبله في إقليم شرق المتوسط

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أصبح الاتصال الجنسي هو الآن الطريقة الغالبة لانتقال فيروس الإيدز في إقليم شرق المتوسط. وقد حدثت أغلب الحالات حتى الآن بين الذكور. ويتزايد انتشار الفيروس باطراد، لا سيما بين ذوي السلوك المحفوف بكثير من المخاطر. ويزيد العدد التراكمي للحالات المبلّغة في الإقليم منذ بداية الجائحة قليلاً على ٣٠٠٠ وهو يقل كثيراً عن العدد الفعلي. ويقل عدد حالات الإيجابيين للفيروس الذين تم التعرف عليهم عن ١٠٠٠٠٠. بينما يتراوح العدد التقديري لحالات الإصابة بسدري فيروس الإيدز في الإقليم بين ١٠٠٠٠٠ و١٥٠٠٠٠٠ حالة. ويمكن الحيلولة دون تفاقم الوباء في الإقليم على نحو ما حدث في مناطق أخرى، بترسيخ التمسك بالقيم الاجتماعية السائدة فيه، الداعية إلى الفضيلة والشرف، وتعزيز هذه القيم بالإضافة إلى طرق المقاومة والمكافحة الأخرى.

Sexual transmission is now the predominant mode of HIV transmission in the Eastern Mediterranean Region. It is mostly males who are affected. HIV prevalence is increasing steadily, particularly among persons practising high-risk behaviour. The cumulative number of reported cases in the Region since the start of the epidemic is just over 3 000, which is much less than the actual number; the number of identified HIV positives is less than 10 000 cases. The estimated cumulative number of cases of HIV infection in the Region is between 100 000 and 150 000. The course of the epidemic in the Region could be made less dramatic than it has been elsewhere by building on and promoting prevailing social values, which teach people morality and self-respect, in addition to other strategies for prevention and control.

## Le SIDA dans la Région de la Méditerranée orientale: passé, présent et avenir

La transmission par voie sexuelle est actuellement le mode prédominant de transmission du VIH dans la Région de la Méditerranée orientale. Ce sont principalement les hommes qui sont touchés par l'infection. La prévalence du VIH est en augmentation constante, en particulier chez les personnes ayant des comportements à risque. Le nombre cumulé de cas signalés dans la Région depuis le début de l'épidémie s'élève à un peu plus de 3 000, chiffre qui est toutefois bien en deça de la réalité; le nombre de séropositifs identifiés est inférieur à 10 000 cas. Le nombre cumulé estimatif de cas d'infection à VIH dans la Région se situe entre 100 000 et 150 000. L'évolution de l'épidémie dans la Région pourrait être amenée à être moins spectaculaire qu'elle ne l'a été ailleurs si l'on fait fond sur les valeurs sociales reconnues qui dictent aux gens moralité et dignité personnelle et si l'on s'attache à promouvoir ces valeurs.

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## The past

In the early 1980s—just over 10 years ago—the acronym AIDS, which stands for acquired immunodeficiency syndrome, was barely known. This condition, which represents a late stage of infection with the human immunodeficiency virus or HIV, is therefore a relatively new disease: the first cases began attracting attention in the late 1970s and early 1980s. It was first described as a syndrome in 1981 [1]. As we have come to know more recently, by the time these early cases appeared, infection must have already been spreading for some years. It is believed, then, that by the start of the 1980s, extensive spread of HIV infection had already occurred in the areas that saw these early cases, namely the Americas, Australia, western Europe, parts of the Caribbean and east and central Africa. The spread was primarily among homosexuals and injecting drug addicts in the Western world and among men and women with multiple sex partners in Africa and in the Caribbean.

The second landmark in the history of AIDS was the discovery of the viral etiology of the disease in 1983 [1] and, later, the development of tests for laboratory diagnosis [2], which came into use in 1985. The disease then attracted priority attention from politicians, the media, the medical profession and, more important, from community groups and the public. It could be said that never before in recent history has a disease that has appeared so rapidly caused so much anxiety throughout the world.

The initial response to the threat posed by AIDS among most WHO Member States of this Region was strong denial. Individuals, groups, communities and national authorities did not want to believe that the AIDS crisis had anything to do with them. With the passage of time, the problem became more visible, denial gradually changed to reluctant acceptance, and national authorities became

more actively involved in the prevention and control of HIV infection/AIDS. The WHO Regional Committee (RC) for the Eastern Mediterranean Region, which comprises the ministers of health from all Member States, has included AIDS on its agenda almost every year since 1985. The developments in the epidemiological situation and important aspects in the prevention and control of AIDS have been discussed, and eight RC resolutions have been passed on AIDS [3].

Several other initiatives have been taken by many national organizations in the Region in support of national efforts to curb the spread of HIV and AIDS in the Region [4].

The history of AIDS cases in the Region began in the mid 1980s. Reporting started after the introduction of diagnostic techniques. Table 1 shows that by 1986, 12 of the 22 countries in the Region had reported cases of AIDS. The number of cases in each country was very few. Most of these cases were traced to transfusion of infected blood and blood products imported from countries known later to have a high prevalence of HIV infection. A few of these cases were related to individuals having sexual relations outside their country. The total number of identified cases up to the end of 1986 was 43. This number has increased year after year, and the number of countries reporting AIDS has also increased annually; by 1990 all countries of the Region, with the exception of Afghanistan, were reporting cases. The detailed distribution of cases by individual Member States and by year is contained in Table 1.

Why has the spread in the Region, at least in the 1980s, been rather slow compared with the spread in other parts of the world? There are several reasons:

1. The late introduction of infection in the Region. By the time infection was introduced in the Region, a lot was known about the modes of transmission and methods of prevention.

2. Early introductions were mostly through infected blood and blood products, which are not usually tied to subsequent rapid spread.
3. Introduction through sexual routes was limited, especially as southeast Asia, from which sexually transmitted diseases are usually introduced into countries of the Region, did not have widespread HIV infection in the early 1980s.
4. Homosexuality, prostitution and drug addiction, although present in the Region, are not generally tolerated by society. Also, the pattern of homosexuality is different from that observed in north America

and western Europe. In this part of the world, the persons involved usually do not have multiple sex partners; and, if grouped at all, homosexual groups are believed to be rather small in number.

Epidemiological investigations about the modes of transmission of HIV infection in the Region show that prostitution, homosexuality and drug addiction are involved in HIV transmission. It is vital to know more about these types of behaviour in the Region in order to address them and reach those involved with suitable messages. This is particularly true because broad public information programmes rarely produce behavioural

Table 1 Reported AIDS cases by year as of 15 March 1995

Member State	1979-86	1987	1988	1989	1990	1991	1992	1993	1994	Total
Afghanistan	0	0	0	0	0	0	-	-	-	0
Bahrain	0	1	0	2	1	3	4	4	5	20
Cyprus <sup>a</sup>	3	4	5	5	2	4	1	6	11	41
Djibouti	0	0	1	6	51	107	144	144	196	649
Egypt	2	3	6	9	7	12	23	29	22	113
Iran	0	1	3	5	10	25	16	32	19	111
Iraq	0	0	0	0	0	7	6	11	12	36
Jordan	1	3	1	5	1	6	7	7	7	38
Kuwait	1	0	0	1	1	3	2	2	1	15
Lebanon	4	4	4	4	8	7	6	32	14	83
Libya	0	0	0	1	4	2	3	2	3	15
Morocco	1	9	14	20	26	28	30	44	77	249
Oman	1	5	6	4	7	1	5	2	15	46
Pakistan	0	1	5	7	1	4	8	12	8	46
Qatar	9	22	13	12	12	15	7	10	12	112
Saudi Arabia	13	3	6	7	5	10	6	12	38	80
Somalia	0	1	4	3	5	-	-	-	-	13
Sudan	2	2	64	122	130	188	184	191	207	1 090
Syria	1	1	2	7	2	7	3	3	4	30
Tunisia	5	14	17	14	27	28	25	36	43	209
UAC	-	-	-	-	8	-	-	-	-	8
Yemen	0	0	0	0	1	0	3	4	3	11
UNRWA	0	0	0	2	2	1	2	-	1	8
<b>Total</b>	<b>43</b>	<b>74</b>	<b>151</b>	<b>236</b>	<b>311</b>	<b>458</b>	<b>485</b>	<b>583</b>	<b>702</b>	<b>3 043</b>

<sup>a</sup>Whole country

Source: WHO Global Programme on AIDS (EMRO)

changes among those at risk to an extent that would significantly reduce the spread of HIV infection. Experience has shown that the most effective educators of these groups are enlightened insiders—trusted members or peers within these communities. They are effective because they speak the language of their community and are aware of its cultural sensitivities.

5. The Eastern Mediterranean Region is fortunate in that its religious, cultural and social values teach people self-respect and morality. This means that people recognize good and evil actions and right and wrong behaviour, and they believe that everyone has a duty to act morally towards other people. As most HIV infection routes are considered immoral in the Region, there is less of this behaviour and so less infection. Mutual fidelity in sexual relations between husband and wife is highly valued in the Region and is one of the best safeguards against introduction of infection into the family.

So much for the past, which logically leads us to the situation now.

## The present situation

Globally, by end 1994, a total of 1 025 073 cases of AIDS had been reported to WHO from all over the world [5]. Allowing for underdiagnosis, underreporting and delays in reporting, and based on the available data on HIV infections around the world, WHO estimates that as of end 1994, there have been around four million cumulative cases of AIDS worldwide. Most of this underreporting is in Africa, Latin America and south and southeast Asia.

The proportionate distribution of cases by major geographic areas of the world is shown for reported and estimated cases in Fig. 1.

The difference between the reported and estimated numbers is very clear, particularly in the relative share of cases from Africa and Asia in the global estimate. The number of cases reported and estimated in the Eastern Mediterranean Region is only a fraction of 1% of the total global number of cases.

In the Eastern Mediterranean Region, the reporting of AIDS cases has been improving gradually, although there are still some delays,

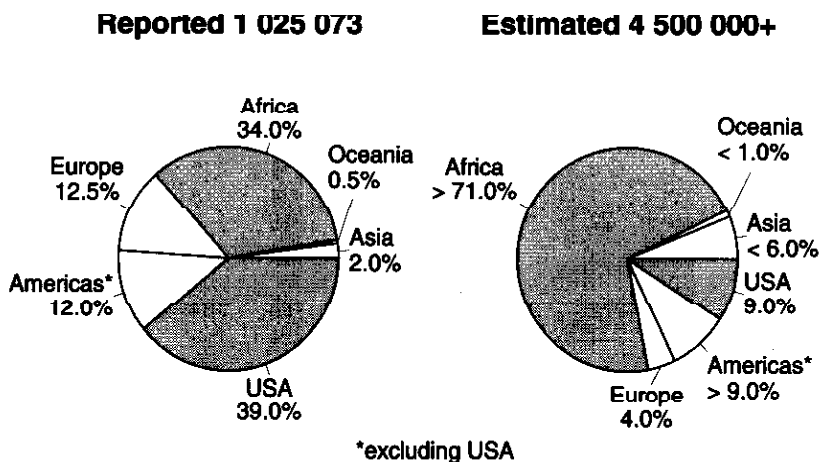


Figure 1 The proportionate reported and estimated distribution of AIDS cases by major geographic areas of the world by end 1994

Source: WHO Global Programme on AIDS

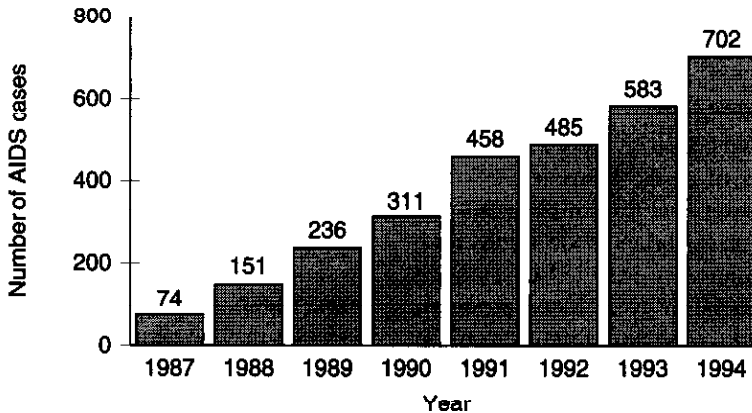


Figure 2 Reported AIDS cases in the Eastern Mediterranean Region by year  
Source: WHO Global Programme on AIDS (FMRO)

underrecognition of cases and also some underreporting in some countries. Based on available data, until the end of 1994 a cumulative total of 3 043 cases had been reported from countries of the Region since the beginning of AIDS reporting [6]. Thus the actual number of AIDS cases that may have already occurred in the Region is probably twice or three times the reported number. The number of these who are still alive is only a small proportion of these cases, as on average AIDS cases do not survive more than one year after they develop the manifestations of AIDS.

The reported number of cases and their epidemiological characteristics indicate several important facts:

1. There is an increasing trend from one year to the next in most countries of the Region, as shown in Fig. 2. The number of cases notified in 1994 shows the same pattern of increase.
2. Transmission is now mostly indigenous.
3. Most cases (three quarters) are among males, making the male to female ratio 3:1 (Fig. 3). There has been an observed difference in sex distribution between cases that appeared in the early years of epi-

demio spread in the Region and those in later years. The proportion of female cases is increasing, as it is in many other parts of the world.

4. The age group of 15–49 years accounts for 90% of all cases. The proportion of cases under 5 years is very small, which is again a reflection of the lower proportion of cases among females of childbearing age.

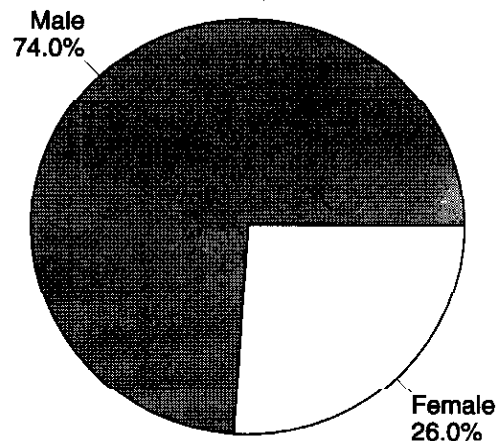


Figure 3 AIDS cases by sex in the Eastern Mediterranean Region  
Source: WHO Global Programme on AIDS (EMRO)

5. Sexual transmission is the predominant mode of transmission if we consider the Region as a whole. It is responsible for the vast majority of cases. This is particularly so in the two countries reporting the largest number of cases. However, in some countries parenteral transmission still appears to be an important mode of infection. These parenterally infected cases have been transfused or given blood products, mostly before screening tests were made available. Other modes of transmission are of much less importance. Only 4% of the cases were due to intravenous drug use, and perinatal transmission accounted for a very low percentage, namely 2%. The relative importance of the mode of infection is reflected in Fig. 4.

Analysing the data of cases by time of start of manifestation shows that the proportion due to sexual transmission, particularly heterosexual transmission, is more common among cases that occurred after 1990. On the other hand, the proportion due to parenteral transmission has decreased.

The hardest hit region so far remains sub-Saharan Africa, with a cumulative total of 11

million infections. Already close to 2 million of them have died because of AIDS. This situation has converted the health care systems in the heavily affected countries to AIDS care systems and, unfortunately, there is far worse to come as the millions of infected people become ill and die.

In the past few years evidence has been accumulating from WHO statistics to suggest that a stabilization in the prevalence of HIV infection may be taking place in certain areas such as north America, western Europe and Australasia, as well as in the high-prevalence areas of east and central Africa [5]. By stabilization, we mean that the number of deaths due to AIDS over the most recent year is about the same as the number of new infections. Although it is an observation worth noting, it is not necessarily an indication of positive developments from a preventive perspective. It may also actually mask important epidemiological changes, such as changes in the modes of transmission, or in the age of those newly infected.

The most alarming trends are those in south and southeast Asia, where in some places the pandemic is spreading as fast as it was a decade ago in sub-Saharan Africa.

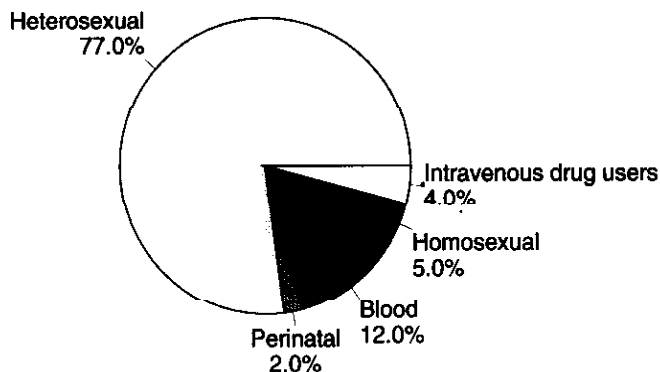


Figure 4 Mode of transmission of AIDS cases in the Eastern Mediterranean Region

Source: WHO Global Programme on AIDS (EMRO)

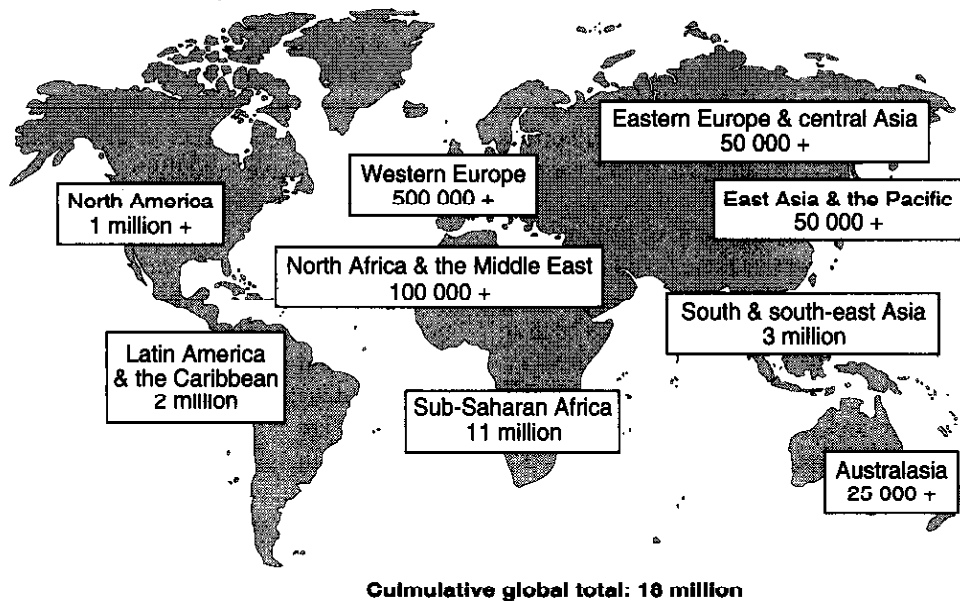


Figure 5 Estimated distribution of total adult HIV infections until end 1994

Source: WHO Global Programme on AIDS

WHO believes that if effective measures are not taken in Asia, the annual number of newly infected people will soon be more than that in Africa.

The estimated number of cases in eastern Europe and central Asia; and east Asia and the Pacific is relatively small (50 000 each). As for the Eastern Mediterranean Region, it is estimated that approximately 150 000 infections may have already occurred.

For a chronic disease such as AIDS, with an average period from infection to illness of 10 years, the cumulative incidence estimates will be close to the prevalence estimates in the early years of spread. As the years from the start of the epidemic increase, people infected early in the epidemic convert to cases and die, and the gap between the cumulative incidence and the prevalence increases. The map in Fig. 5 shows the estimated present distribution of cases of HIV infection. It is clear that the gaps in the figures are mostly in areas

where the epidemic started early—in the late 1970s and early 1980s—namely Africa and north America, and to some extent in Latin America and western Europe. The global total of HIV infected living persons ranges between 13 and 15 million [5].

For the Eastern Mediterranean Region, obtaining a picture of HIV infection has so far not been easy. Reports of asymptomatic HIV infections refer mostly to HIV positives found among groups tested for one reason or another. In this Region, these groups include:

- blood donors
- people seeking work permits
- groups involved in high-risk behaviour who may come to the attention of the authorities, such as patients with sexually transmitted diseases who attend public clinics.

The total number detected through these methods does not exceed a few thousand every year. Apart from expatriate workers and

blood donors, the picture of HIV infection among the general population or among those practising high-risk behaviour is far from complete.

At present, almost all national authorities of the Region have adopted sound national policies for the control of AIDS. They have well-formulated comprehensive national programmes. The fact that there is still no drug or vaccine available for the prevention of HIV infection or for treatment of AIDS has been an important factor in provoking national authorities and organizations to address social, economic and cultural issues related to the spread of HIV infection.

In addition, it is now widely acknowledged in the Region that AIDS is not just a medical problem, but also a social, economic and developmental one. Effective preventive measures, as well as care and support of HIV infected persons and their families cannot depend solely on technical know-how or on the involvement of health professionals. Many other sectors must be involved in this process; and have major roles to play. These include planning, finance, education, information, social services and religious affairs, as well as industry, agriculture and other sectors that depend on human resources and that can be adversely affected by the spread of HIV infection and AIDS. The role of national health authorities should be more one of coordination of the needed multidisciplinary, multisectoral response.

We, in this Region, have some good examples of such involvement and collaboration between different sectors. Not only the ministries of health, but also the ministries of education, the universities, industry, the media and religious sectors are pooling their resources in many countries in the fight against the spread of HIV infection and AIDS.

In addition to the involvement of national authorities, significant efforts are carried out

by nongovernmental organizations (NGOs) in some aspects of the control of HIV infection/AIDS. In the Eastern Mediterranean Region, there are more than 100 NGOs now involved in the fight against AIDS in their countries. These NGOs have credibility and access to their communities since they are deeply rooted in their local communities and are in close touch with their specific needs and cultural sensitivities. They are thus uniquely positioned to help change high-risk behaviour and offer care and compassion to AIDS affected people and their families.

NGOs are able to undertake activities which are generally not given priority or are difficult to acknowledge in public health programmes, especially work with groups practising high-risk behaviour, such as drug addicts, homosexuals and prostitutes. A better understanding of the mutually beneficial relationship between national authorities, NGOs and communities, together with effective partnership, can play an instrumental role in addressing the AIDS crisis. We conclude this section by stating cautiously that people in most countries have come to terms with the AIDS crisis, and the initial severe reactions of fear, blame and rejection are gradually fading away.

## The future

The long-term dimensions of the HIV/AIDS pandemic cannot yet be forecast with confidence. Several factors determine the future of HIV/AIDS in any community. These include:

- the present status of HIV infection/AIDS, not only in the general population, but also among population groups engaged in high-risk behaviour
- the pattern of spread of HIV in recent years



- population size and structure and the magnitude of the groups practising high-risk behaviour

- predominant modes of transmission

- the natural history of HIV and, in particular, the period when significant spread occurred in the community

- the prevailing incubation period

- the shape of the epidemic curve and the year in which HIV incidence is expected to peak

- the current position along the theoretical epidemic curve.

The World Health Organization uses a model [7] based upon the natural history of HIV, and a theoretical epidemic curve into which some of the above-mentioned parameters are fed; the model then determines the total number of infections since the epidemic began. The projected future number of HIV infections is extrapolated along the epidemic curve, as well as the future number of AIDS cases and deaths.

It is clear that many assumptions are made, and there is a dependence on data which are not that solid. In addition, all these factors and assumptions do not consider other important determining factors that can influence the epidemic situation, such as successful interventions, which can convert risk taking behaviour into risk prevention and which we sincerely hope we shall apply in this Region.

The future is not bright regarding AIDS cases or HIV infection if the present trend continues. If the spread of HIV infection is not halted we can expect considerable consequences.

1. Adult mortality, particularly of men and women in the prime of their lives, will be devastating to families and communities. With AIDS, many children are certain to lose one or both parents, with orphanhood and its consequences as a result.

2. The interaction of AIDS with other infectious diseases is of great concern. One of the most significant interactions is between HIV infection and tuberculosis. When HIV infection spreads, tuberculosis cases increase as the suppressed immunity from HIV infection allows the tubercle bacilli in dormant foci to become active. We have very clear examples of this association in our Region. It would therefore not be an exaggeration to say that an epidemic of tuberculosis will accompany the HIV/AIDS epidemic.

The other example of association is between HIV infection and infection with other sexually transmitted diseases (STDs). It is now a well-known fact that persons with STDs, especially those with genital lesions, are more likely to transmit and be infected with HIV. This probability is nearly five times greater than among those without STDs. This fact indicates the value of monitoring HIV infection among STD patients and, what is more important, the need to strengthen efforts to control STDs in tandem with those of HIV.

3. The costs involved just in treating opportunistic infections among cases of AIDS can have a significant detrimental effect on health care services in general. Data available from the World Bank and other development agencies show that AIDS in the Americas and in Africa would claim up to half the health expenditure if the needs of AIDS patients were fully met. Some countries of the Eastern Mediterranean Region that are unable to fully finance health services will suffer considerably if the number of AIDS cases increases and they attempt to address their needs.

These direct costs, though substantial, are dwarfed by the indirect costs associated with loss of income and decreased productivity of the work force as a result of HIV infection and AIDS.

4. The 1994 theme of World AIDS Day was "AIDS and the family", and 1994 was also the International Year of the Family.

Families are affected by AIDS and they can be effective in AIDS prevention and care.

Families and family ties are based on love, trust and nurturing. Families are therefore best placed to protect their members from infection and, more important, to protect them from exposure to circumstances or practices that will expose them to infection. Families are where the young learn to practise good patterns of behaviour and reject dangerous ones.

Apart from the huge emotional loss of a member of the family, the affected families also face a loss of income, as the breadwinner is usually the most affected. There is also a loss of care and stability in the family, with children paying the price not only through loss of their parents, but also by becoming infected themselves.

Although it is clear that the AIDS pandemic, with its potentially devastating effects, will persist throughout the Region, there is still every reason to believe that the future

course of the epidemic in this Region can be significantly altered if we make joint and co-ordinated efforts involving the individual, the family, the community, nongovernmental organizations and national authorities. What is needed is to arm ourselves with knowledge and, what is more important, with appropriate behaviour.

Knowledge means effective health education that makes people aware of the methods of HIV transmission and the ways of protecting themselves.

Appropriate behaviour remains the most effective means for complete protection. It is well known that AIDS has limited modes of transmission, the most common of which is sexual intercourse. This means, in effect, that maintaining a proper moral code, based on chastity and refraining from promiscuity, keeping sexual activity within faithful marriage, will ensure protection of the individual and the family.

The AIDS situation in the Eastern Mediterranean Region is still much better than that in other regions, but we still must work towards preserving this favourable position.

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