• Summer caravans toured Morocco distributing 15 000 condoms and providing voluntary and confidential HIV testing and counselling to 7000 young people[21]

The way forward

Sensitivity surrounding young people's sexual and reproductive health has limited the knowledge base, particularly on young people's perspectives and needs, that could inform legislation, policy, and programmes. Appropriate sex education could be strengthened through working with teachers and parents. Special attention is needed in designing programmes that reach the most vulnerable young people. Above all, government commitment is required to translate the small scale models in the region to national programmes that improve the welfare of all young people.

The statements in this article are the views of the authors and do not necessarily reflect the policies or the views of Unicef.

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HIV in the Middle East

Carla Makhlouf Obermeyer

Prevalence of HIV in the Middle East is low but there is no room for complacency

The problem of HIV in the Middle East has elicited contradictory expectations and responses. Denial ("Not in our region") characterised the early phases of the epidemic. HIV was presented as a disease brought from countries where sexual morals were decadent, and obedience to Islam was thought to offer the best protection.[1] Perhaps as a reaction to this, allegations have been exaggerated that the problem represents a public health crisis concealed "behind the veil."[2] As in earlier debates on Islam and fertility, preconceived notions seem to stand in the way of assessing the situation in light of evidence.

This review summarises what is known about the HIV epidemic in the Middle East and north Africa region and examines the extent to which lower prevalence can be attributed to cultural factors, particularly those related to the practice of Islam and to gender.

The Middle East and north Africa region is defined here as including Arab countries and Iran.

What is the state of the evidence?

All countries of the Middle East and north Africa compile statistics on reported cases of HIV and AIDS, but case definitions are inconsistent and local capacity for diagnosis and reporting is uneven. Nearly all countries screen blood donors, but epidemiological surveillance is lacking and monitoring of special risk groups is infrequent and at times hampered by local sensitivities. Only a few countries test pregnant women to estimate HIV prevalence in the population. Knowledge,

P+ *The search strategy and promising initiatives are on bmj.com*

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Information resources

Global Report on HIV (www.who.int/hiv/mediacentre/news60/en/index.html)—contains the most recent statistics on HIV

World Health Organization Global Health Atlas (www.who.int/globalatlas/default.asp)—provides country by country updates and fact sheets on epidemiology of HIV

Information on the Middle East region

League of Arab States (www.arab.de/arabinfo/league.htm)—has a list of the Arab countries included in this review

World Health Organization's Regional Office for the Eastern Mediterranean (www.emro.who.int/asd/)—includes reports, activities, and links to country websites

Joint United Nations Programme on HIV AIDS (UNAIDS) (www.unaids.org/en/Coordination/Regions/MiddleEastAndNorthAfrica.asp)—provides links to statistics and graphics for the Middle East

Websites from countries of the region

National program of Lebanon (www.emro.who.int/lebanon/NationalProg-aids.htm)—provides information on the epidemiology and legal context of HIV, along with basic information on the disease, tests, care and support, and ongoing and planned activities

Ministry of Public Health, Lebanon (www.public-health.gov.lb/aidsngos.shtml)—contains brochures, publications, TV spots, songs about AIDS prevention and a list of non-governmental organisations working on HIV in Lebanon; (www.public-health.gov.lb/aidspublications.shtml)

Programme d'appui pour la lutte contre le SIDA (www.programmesida.org.ma/)—the national programme in Morocco, which took the lead in openly promoting condom use

Information on the triangular clinic for harm reduction in Kermanshah, Iran (www.emro.who.int/asd/Publications-Regional.htm)

Eastern Mediterranean Health Journal (www.emro.who.int/Publications/EMHJ/0401/28.htm)—analysis of *Family House*, an Egyptian soap opera from the 1990s that referred to HIV

Positive Muslims (www.positivemuslims.org.za/)—website on HIV positive Muslims in South Africa

attitude, belief, and practice surveys have been carried out in several countries,[3–5] but they rarely include behaviours because of strong reluctance to discuss sexuality. Thus information about HIV prevalence and trends in the region is insufficient, under-reporting is likely, and it is not possible to obtain exact statistics or to ascertain the specific determinants of levels and trends of HIV.

The evidence has, however, been improving, and recently there has been greater attention to the epidemiology and behavioural dimension of the epidemic. Examples of this expansion include analyses of the epidemiology of HIV in Iran, Lebanon, Morocco, and Saudi Arabia; surveys in Iran among sex workers, prisoners, children, Gypsies, and injecting drug users; and studies on hospital patients and clinic users in Saudi Arabia and on children in Sudan.[6–11] The growing body of evidence in countries of the Middle East and north Africa indicates that the problem of HIV is being increasingly recognised, and it makes it possible to assess the situation of HIV in the region.

HIV rates may increase

Estimates by the World Health Organization and the joint United Nations programme on HIV/AIDS[12] show that HIV prevalence is low in the Middle East and north Africa region (0.2%). This is confirmed by studies of blood donors in Egypt, Jordan, Palestine, Iraq, and Syria, and by screening of patients admitted to hospital in Saudi Arabia.[13–16] Concentrated epidemics (prevalence of 5% or more in some subpopulations), are reported among intravenous drug users in Iran and Libya, whereas generalised epidemics (prevalence among pregnant women of over 1%) have been documented in Djibuti, Sudan, and some areas of Somalia.

The most recent estimate of the number of people living with HIV/AIDS in the Middle East and north Africa region is about half a million[12]; the reliability of the estimate is low because of the paucity of accurate statistics, and depending on which countries are included in the definition of the region it may be higher or lower. Overall, however, it suggests that the region comprises about 5% of the global population, but it accounts for a much lower percentage of people living with HIV/AIDS, about 1%.

Several factors may increase the risk of the epidemic. Firstly, the prevalence of sexually transmitted infections is relatively high and indicative of unprotected extramarital sex.[17] Secondly, war, displacement, and migration, which often bring about risky behaviours, may increase vulnerability to HIV in the region. Thirdly, in some countries, subgroups of intravenous drug users may constitute a "bridge" for transmission of HIV to the general population. The spread of HIV depends on the size of the risk groups and the interaction of these with the general population, neither of which is well understood. Thus there is no reason for complacency. A World Bank review subtitled "Why waiting to intervene can be costly" summarises the need to take action without delay.[18]

Links between Islam and HIV prevalence

It has been hypothesised that the low prevalence of HIV in the Middle East and north Africa region is somehow linked to Islam and its influence on the behaviours that affect transmission of HIV. A comparative analysis of data from African countries showed that the prevalence of HIV was negatively associated with the percentage of the population that is Muslim, but that the link between being Muslim and sexual risk factors is ambiguous and variable.[19]

It is possible that some practices among Muslim populations contribute to decreasing the risk of HIV transmission. One is low alcohol use, which reduces disinhibition and hence risky behaviour. Another is male circumcision, which was shown to reduce

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HIV testing in a government department, Amman, Jordan

infection in a recent trial, and whose protective effect may be shown if other ongoing trials find similar results.

At the same time other population trends, beliefs, and practices in the region may have adverse effects. Most countries have young populations with a rapidly increasing age at marriage, but young people may be ill equipped to protect themselves against sexually transmitted infections.[20] Traditional Muslim approaches have tended to be conservative, and it is difficult to break the silence around issues of sexual behaviour, especially those that deviate from religious norms. An analysis of religious magazines and doctrinal pronouncements (fatwas) of the past decade found that strong moralising views prevailed; HIV was seen as divine punishment for deviance, whereas religion was a protection.[21] Hence in many settings fears of stigma and discrimination are great against people living with HIV/AIDS. But more flexible approaches can also be found. A theology of compassion and approaches advocating harm reduction seem to be emerging in several Muslim countries, and greater acceptance of HIV positive people is justified with reference to religion.[22]

The gender factor

The Middle East and north Africa region is generally thought to be characterised by gender inequality, and indeed many indicators of women's position are unfavourable. Yet when it comes to HIV some of the practices that stem from sex inequality in the region, in particular the strong prohibitions against extramarital sex, applied more strictly to women, are associated with lower prevalence. Statistical evidence indicates that the percentage of women among people living with HIV/AIDS is lower in the Middle East and north Africa (most under 25%) than in other regions (for example, 57% in sub-Saharan Africa).[12]

The more favourable sex ratio is shifting, suggesting that the disease is spreading and that many women are getting HIV just because they are married to a man who engages in risky behaviours. The age-sex distribution of HIV in the region confirms that women are infected at a much younger age than men, reflecting a pattern whereby younger women are married to older men who are more likely to have been exposed to infection.[8 10 17]

Several practices increase women's vulnerability: marriage patterns and age differences between spouses; cultural expectations of women's innocence, making it difficult for them to access information on risks; and the resurgence of early forms of temporary marriages, which may be religously sanctioned in circumstances such as poverty, travel, or tourism.[20] There have been calls to recognise that sex norms have changed and cautionary statements that religion is no excuse for inaction regarding women's vulnerability to HIV.[23] Thus, the social construction of gender represents a double edged sword, which may serve to protect or to increase risks.

Some responses to the epidemic are encouraging

In recent years better information systems to track HIV have been put in place in the region.[6–8 10] About half of the countries have formulated national plans to tackle HIV and have sought support from the Global Fund to Fight AIDS, Tuberculosis, and Malaria for their treatment and prevention activities.

Medicines for HIV are now provided in several countries, with some governments providing antiretrovirals free of charge or at subsidised prices. But global statistics show that the availability of antiretrovirals in the Middle East and north Africa is largely insufficient (about 5% of those needing treatment),[12] underscoring the need for greater mobilisation to scale-up access to treatment.

Although knowledge is still inadequate and stigma and discrimination prevail in many settings, there is greater visibility and more public discussion of HIV/AIDS in the region.[24] Throughout the region, governments and non-governmental organisations have initiated promising projects to break the silence around HIV, spread information, promote prevention, and provide care and treatment.(see bmj.com). The challenge now is how to capitalise on the strengths represented by cultural tradition while fostering effective responses to the epidemic.

Summary points

Current evidence suggests the prevalence of HIV in the Middle East and Africa is low

Low alcohol intake and male circumcision may account for this low prevalence but there is no room for complacency

Women are infected with HIV at a younger age than men due to gender inequality and their increased vulnerability

Stigma and discrimination need to be overcome, public discussion of HIV/AIDS promoted, and safe behaviours encouraged

Contributors and sources: CMO had for more than a decade carried out research on population and health in the Middle East; she has published classic analyses of the demography of the region, the influence of sex on reproductive health, and the links between Islam and population policies. This article is based on a presentation given at the American University of Beirut, April 2004, and another given at the Wilson Institute, Washington DC, September 2005. It has benefited from the comments of colleagues at WHO headquarters in Geneva and WHO office of the Eastern Mediterranean.

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Tackling social determinants of health through community based initiatives

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Women are often the key to improving a population's health, and this is especially true in the Eastern Mediterranean region. Projects that empower women and provide basic needs are transforming poor communities

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Many of the inequalities in health, both within and between countries, are due to inequalities in the social conditions in which people live and work.[1] These social determinants have a important effect on health status and general wellbeing. Tackling these underlying causes of poor health can contribute to improving health and health equity.[2] The World Health Organization has given this approach added impetus by the creation of the Commission on Social Determinants of Health. Over the past two decades the basic development needs programme, a component of the community based initiatives programme in the WHO Eastern Mediterranean region, has developed and implemented community based initiatives to improve health in poor populations through actions on social determinants. The basic needs development programmes, which enhance the status of women and their role in the health of families, are an important part of this work.

Gender and health

The low status of women in the Eastern Mediterranean region is one of the key underlying social determinants of health. Sex differences in access to health care and poor health indicators for women and girls in several countries have resulted in differences in mortality and morbidity between male and female infants,[3] differences in the quality of care for male and female children,[4] high maternal mortality (estimated at 1600 deaths per 100 000 live births in Afghanistan and Somalia),[5] limited prenatal and postnatal care and lack of skilled attendants at birth,[6] higher prevalence of mental illness among women than men,[7 8] and high rates of suicide and attempted suicide among women of reproductive age.[9]

Gender determinants that have an adverse effect on the health of girls and women include low valuation of girls compared with boys and of women compared with men; social structure and beliefs that tolerate violence against women and children[10–12]; limited autonomy for women in making choices about treatment for their children or themselves[13]; and considerations of family honour that are associated with early marriage for girls and female genital mutilation.[14 15]

Basic development needs programmes

The basic development needs programmes help to enable women by giving them the opportunity to earn money through loans and training. The programmes also include measures to improve health and wellbeing such as health services, nutrition, safe water, sanitation, and shelter. The first programme was initiated in Somalia in 1988, and the model has been extended to support community development in 12 countries in the WHO Eastern Mediterranean region: Afghanistan, Djibouti, Egypt, Iran, Iraq, Lebanon, Morocco, Oman, Pakistan, Somalia, Sudan, and Yemen. Programmes now cover a population of almost three million in over 250 sites.

P+ *Further information on basic development needs programme is on bmj.com*