

*Invited paper*

# Information needs assessment for HIV/AIDS and STIs in the Eastern Mediterranean Region

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تقييم الاحتياج للمعلومات حول الإيدز والعدوى بفيروسه وسائر الأمراض المنقولة جنسياً بإقليم شرق المتوسط  
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**الخلاصة:** قمنا بتقييم الاحتياج للمعلومات حول الإيدز والعدوى بفيروسه وسائر الأمراض المنقولة جنسياً في إقليم شرق المتوسط، وذلك بمسح عينة من النسل الذين يُعتقد أنهم واسعوا الإطلاع على هذا الموضوع. وقد شعرنا بشدة الحاجة إلى المعلومات حول مجالات معينة للإيدز والعدوى بفيروسه وسائر الأمراض المنقولة جنسياً. وكان واضحاً إدراك العاملين بالرعاية الصحية عموماً بالحاجة الماسة إلى المعلومات والخدمات. في حين كان قادة المجتمع وعلماء الدين أقل إدراكاً بالحاجة إلى بعض المعلومات والخدمات (مثل تشجيع استعمال العازل الذكري، والتعليم الجنسي للشباب). وأدركت جميع المجموعات الحاجة إلى التوعية والخدمات المقدمة للمعاشين للإيدز والمعاقرين للمخدرات. وتعتبر الإذاعة المسموعة والمرئية (التلفزيون) من أفضل قنوات التوعية الصحية، بينما يعتبر التدريب من أكثر الطرق فاعلية لتبادل المعلومات.

**ABSTRACT** We assessed information needs about HIV/AIDS and sexually transmitted infections (STI) in the Eastern Mediterranean Region by surveying a sample of people considered knowledgeable about the subject. Respondents felt that information on certain areas of HIV/AIDS/STIs was much needed. Health care workers were perceived to see a high need for information and services generally. Religious and community leaders were perceived to see less need for some information and services (such as condom promotion, sex education for young people). All groups were perceived to see a need for education and services for people living with AIDS and drug users. Television and radio were considered the best channels for health education while training was seen as the most effective method for information exchange.

## Evaluation des besoins en matière d'information sur le VIH/SIDA et les IST dans la Région de la Méditerranée orientale

**RESUME** Nous avons évalué les besoins en matière d'information sur le VIH/SIDA et les infections sexuellement transmissibles (IST) dans la Région de la Méditerranée orientale en interrogeant un échantillon de personnes considérées comme étant bien informées à ce sujet. Les personnes interrogées pensaient que l'information concernant certains domaines liés au VIH/SIDA était absolument nécessaire. Les agents de soins de santé étaient le groupe perçu comme estimant qu'il y avait un grand besoin d'informations et de services de manière générale. Les dirigeants religieux et les leaders communautaires étaient perçus comme ceux qui voyaient le moins un besoin d'informations et de services (comme la promotion du préservatif, l'éducation sexuelle pour les jeunes). Tous les groupes étaient perçus comme voyant un besoin d'éducation et de services pour les personnes vivant avec le SIDA et les toxicomanes. La télévision et la radio étaient considérées comme le meilleur moyen de faire passer l'éducation sanitaire, et la formation comme la méthode la plus efficace pour l'échange d'information.

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## Introduction

Since its emergence in 1981, HIV has posed one the greatest health threats the world has ever known [1] and virtually every country in the world has been affected by HIV/AIDS [2]. The recent estimates of UNAIDS and the World Health Organization (WHO) indicate that the number of people living with HIV or AIDS at the end of the year 2000 was 36.1 million, 5.3 million of whom were infected during the year 2000 [3]. For North Africa and the Middle East it was estimated there are 400 000 people living with HIV or AIDS, 80 000 of whom were infected during the year 2000 [3].

Because of the absence of a preventive vaccine or a cure for the disease, education and prevention offer the greatest hope for curtailing the HIV epidemic [4,5]. Thus dissemination of accurate information about HIV has always been an essential element of all AIDS prevention strategies [4].

Accordingly the AIDS Information Exchange Centre (AIEC) was established in August 1990, as part of the regional programme on AIDS of the WHO Regional Office for the Eastern Mediterranean in order to meet the needs of the general public for accurate and up-to-date information about the HIV/AIDS epidemic in the Region [6]. Over a period of more than a decade, the Centre has achieved a great deal and has been effective in filling the gaps in accurate information about HIV/AIDS health promotion [6,7]. The Centre is supported through a framework of collaboration with UNAIDS and the Regional Office in order to create better access to information and improve dissemination of WHO and UNAIDS material [8]. The present study was carried out as a component of the AIEC project within the context of provision and

dissemination of accurate information on HIV/AIDS.

The aims of the study were to:

- Identify the specific aspects of HIV/AIDS/sexually transmitted infections (STI) where information needs to be provided in countries of the Eastern Mediterranean Region.
- Elucidate the perceived attitudes of certain influential groups about aspects of HIV/AIDS/STI.
- Reveal the perceived frequency of behaviours likely to spread HIV/STI among the population.
- Specify types of education materials considered best suited for the target populations in the countries of the Region.
- Identify the recommended themes and methods for information exchange both between AIEC and countries of the Region and between the countries themselves.

## Methodology

Data were collected through a questionnaire which was developed from literature review and previous experiences. The questionnaire included questions on the following topics.

- HIV/AIDS/STI knowledge, attitudes and practices
  - areas of HIV/AIDS/STI where information is needed by the general population
  - perceived attitudes of influential groups (i.e. important to the programme such as health care workers, religious leaders) regarding aspects of HIV/AIDS/STI

- perceived frequency of behaviours likely to spread the HIV/STI infection among the population.
- Support services and resources: information about the most appropriate educational materials for local use.
- The process of information exchange: the HIV/AIDS/STI topics most needed to exchange information about in the Eastern Mediterranean Region, and effective methods for such information exchange.

The questionnaire was pretested on 25 participants attending the regional consultation on reducing risk and vulnerability to HIV/AIDS in the Eastern Mediterranean Region which was held in Tunis from 29 May to the 1 June 2000. The pretesting indicated that a few questions were not clear and that others would not produce reliable answers. Accordingly, these questions were either modified or omitted.

The opinion poll pattern of study was applied, where a sample of key professionals knowledgeable about HIV/AIDS/STIs was obtained using a nomination method of recruitment which was applied in an earlier needs assessment process by UNAIDS [9]. In addition to the authors, nomination was carried out by national AIDS programme managers, WHO representatives and other professionals working in HIV/AIDS in the Region. Thus, individuals selected to answer the questionnaire came from the following areas:

- National AIDS Programmes
- HIV/AIDS-oriented nongovernmental organizations (NGOs)
- United Nations (UN) agencies
- sectors related to HIV/AIDS prevention and control activities, such as education, science and the media.

The final questionnaire forms were sent by mail to the selected participants accompanied by a short letter explaining the purpose of the study and asking them if they would like to participate and if agreeable to complete the questionnaire and return it to the Regional Office by mail, e-mail or fax. Reminders were sent to the respondents who did not reply in order to motivate them to send their replies.

Data were analysed with *Epi-Info*, version 6. Results were presented using descriptive statistics.

## Results

A total 53 people responded to the questionnaire. They were from 17 countries out of the 23 Eastern Mediterranean countries. No individuals responded from Bahrain, Cyprus, Libyan Arab Jamahiriya, Iraq, Kuwait, and the Republic of Yemen. Among the participants there were 15 national AIDS programme managers or their assistants, 7 NGO representatives, 26 participants from international agencies and 5 from related sectors.

Table 1 shows the respondents' views on the areas where information on HIV/AIDS/STIs is needed by the public. The majority of the respondents believed there was a great need for information on the definition, modes of transmission and access to care for HIV/AIDS and STIs. The majority also felt there was a great need for information on signs and symptoms of STIs and their relation to HIV infection, and information on HIV prevention and on the misconceptions of HIV transmission.

The attitudes of certain influential groups, as perceived by the respondents, about some HIV/AIDS/STI prevention ac-

**Table 1 Respondents' opinions about the areas where information on sexually transmitted infections and HIV/AIDS is needed**

Information area	Don't know		Low need		Moderate need		High need	
	No.	%	No.	%	No.	%	No.	%
<i>Sexually transmitted infections</i>								
Definition	1	1.9	4	7.5	17	32.1	31	58.5
Modes of transmission	0	0.0	2	3.8	12	22.6	39	73.6
Signs and symptoms	0	0.0	6	11.3	10	18.9	37	69.8
Access to care	0	0.0	2	3.8	11	20.8	40	75.5
<i>HIV/AIDS</i>								
Definition	1	1.9	7	13.2	16	30.2	29	54.7
Modes of transmission	0	0.0	4	7.5	15	28.3	34	64.2
Misconceptions about modes of transmission	1	1.9	3	5.7	11	20.8	38	71.7
Prevention	0	0.0	3	5.7	7	13.2	43	81.1
Access to care	2	3.8	2	3.8	12	22.6	37	69.8

tivities are shown in Table 2. Most respondents (73.6%) believed that religious leaders would not generally approve condom promotion activities, followed by community leaders (30.2% of respondents). On

the other hand, health care workers were perceived as the category most likely to be in favour of condom promotion followed by young people (69.8% and 49.1% of the respondents respectively).

**Table 2 Attitudes of specified groups about condom promotion and sex education for young people as perceived by the respondents**

Group	Don't know		Low need		Moderate need		High need	
	No.	%	No.	%	No.	%	No.	%
<i>Condom promotion</i>								
Young people	10	18.9	3	5.3	14	26.4	26	49.1
Health care personnel	5	9.4	0	0.0	11	20.8	37	69.8
Religious leaders	8	15.1	39	73.6	5	9.4	1	1.9
Community leaders	12	12.6	16	30.2	23	43.4	15	28.3
Media	6	11.3	7	13.2	25	47.2	15	28.3
Policy-makers	10	18.9	7	13.2	20	37.7	16	30.2
<i>Sex education for young people</i>								
Young people	5	9.4	3	5.7	2	3.8	43	81.1
Health care personnel	4	7.5	4	7.5	7	13.2	38	71.7
Religious leaders	4	7.5	28	52.8	10	18.9	11	20.8
Community leaders	4	7.5	14	26.4	18	34.0	22	41.5
Media	3	5.7	10	18.9	18	34.0	22	41.5
Policy-makers	9	17.0	8	15.1	20	37.7	16	30.2

Similar to condom promotion, religious leaders were perceived to be the category most against sex education for young people (52.8% of the respondents held this view), while young people were thought to be the category mostly in favour of sex education (81.1% of the respondents).

Respondents believed that both religious and community leaders would have negative attitudes towards provision of education and services to both sex workers and men who have sex with men (50.9% and

32.1% of the respondents respectively believed this to be the case for sex workers, and 58.5% and 41.5% for men who have sex with men) (Table 3). Health care personnel were indicated to be the group mostly in favour of helping these two groups (56.6% for sex workers and 30.2% for men who have sex with men).

All the five groups were perceived to be more in favour of providing people living with HIV/AIDS with education and services. Health care personnel were considered

**Table 3 Attitudes of specified groups about provision of education and services for sex workers, men who have sex with men, people living with HIV/AIDS and drug users as perceived by the respondents**

Provision of education and services for:	Don't know		Low need		Moderate need		High need	
	No.	%	No.	%	No.	%	No.	%
<i>Sex workers</i>								
Health care workers	13	24.5	3	5.7	7	13.2	30	56.6
Religious leaders	16	30.2	27	50.9	4	7.5	6	11.3
Community leaders	16	30.2	17	32.1	15	28.3	5	9.4
Media	16	30.2	8	15.1	16	30.2	13	24.5
Policy-makers	15	28.3	8	15.1	18	34.0	12	22.6
<i>Men who have sex with men</i>								
Health care workers	16	30.2	10	18.9	11	20.8	16	30.2
Religious leaders	18	34.0	31	58.5	3	5.7	1	1.9
Community leaders	21	39.6	22	41.5	9	17.0	1	1.9
Media	17	32.1	12	22.6	15	28.3	9	17.0
Policy-makers	18	34.0	15	28.3	13	24.5	7	13.2
<i>People living with HIV/AIDS</i>								
Health care workers	4	7.5	0	0.0	7	13.2	42	79.2
Religious leaders	17	32.1	7	13.2	9	17.0	20	37.7
Community leaders	13	24.5	5	9.4	14	26.4	21	39.6
Media	10	18.9	2	3.8	18	34.0	23	43.4
Policy-makers	8	15.1	1	1.9	15	28.3	29	54.7
<i>Drug users</i>								
Health care workers	9	17.0	3	5.7	8	15.1	33	62.3
Religious leaders	12	22.6	18	34.0	10	18.9	13	24.5
Community leaders	14	26.4	11	20.8	11	20.8	17	32.1
Media	11	20.8	4	7.5	13	24.5	25	47.2
Policy-makers	13	24.5	6	11.3	11	20.8	23	43.4

as the leading group (79.2% of respondents) followed by policy-makers (54.7%) and the media (43%) (Table 3). The perceived attitudes towards drug users were similar to people living with HIV/AIDS, although less positive (Table 3).

The frequency of behaviours likely to spread HIV/STI among the population as perceived by the respondents is presented in Table 4. Most respondents (64.1%) thought that there was a moderate to high frequency of males engaging in sex before marriage and 56.6% thought that men engaging in extramarital sex happened with moderate to high frequency. For premarital and extramarital sex, only 39.6% and 20.8% of the respondents respectively believed that women were involved in such practices with moderate to high frequency. Less than half the respondents (47.2%) indicated that the frequency of sex work was moderate or high. For men who have sex with men, most of the respondents (56.6%) stated it was rare, although 18.9% considered this practice moderately prevalent. Responses regarding injecting drug use had the same pattern (60.4% of responses indicated low or rare prevalence

and 22.6% indicated a moderate prevalence).

About half of the respondents (47.1%) believed that there was a moderate to high frequency of cultural practices involving skin piercing or cutting. These practices included female genital mutilation, ear or nose piercing and male circumcision.

The respondents' opinions of the appropriate health education materials or channels for local use are shown in Table 5. The largest proportions of respondents considered television, radio and face-to-face interaction as 'highly appropriate' channels for local use (77.4%, 77.4% and 71.7% respectively). On the other hand, electronic media were considered the least appropriate by 41.5% of the respondents.

The perceived need for information exchange in the Region in specific areas is given in Table 6. Most of the respondents considered information on the four specified areas (preventive measures, social and behavioural research, epidemiological data, and care and support of HIV/AIDS patients) as highly needed.

As regards methods of information exchange, training was considered highly ef-

Table 4 Frequency of behaviours likely to spread HIV/STIs as perceived by the respondents

Behaviour	Don't know		Low frequency		Moderate frequency		High frequency	
	No.	%	No.	%	No.	%	No.	%
Male premarital sex	8	15.1	11	20.8	14	26.4	20	37.7
Female premarital sex	8	15.1	24	45.3	17	32.1	4	7.5
Male extramarital sex	6	11.3	17	32.1	18	34.0	12	22.6
Female extramarital sex	6	11.3	36	67.9	9	17.0	2	3.8
Sex work	7	13.2	21	39.6	17	32.1	8	15.1
Injection drug use	7	13.2	32	60.4	12	22.6	2	3.8
Men having sex with men	11	20.8	30	56.6	10	18.9	2	3.8
Cultural practices	4	7.5	24	45.3	12	22.6	13	24.5

Table 5 Opinions about appropriate health education materials or channels

Method or channel	Not appropriate		Least appropriate		Moderately appropriate		Highly appropriate	
	No.	%	No.	%	No.	%	No.	%
Posters	0	0.0	3	5.7	32	60.4	18	34.0
Printed materials	0	0.0	5	9.4	24	45.3	24	45.3
Television	4	7.5	2	3.8	6	11.3	41	77.4
Radio	1	1.9	4	7.5	7	13.2	41	77.4
Newspapers	1	1.9	7	13.2	20	37.7	25	47.2
Electronic media	8	15.1	22	41.5	15	28.3	8	15.1
Video tapes	3	5.7	10	18.9	19	35.8	21	39.6
Telephone hotlines	6	11.3	13	24.5	15	28.3	19	35.8
Lectures	1	1.9	8	15.1	21	39.6	23	43.4
Face-to-face interaction	1	1.9	5	9.4	9	17.0	38	71.7
Others	41	77.4	1	1.9	0	0.0	11	20.8

Table 6 HIV/AIDS/STI topics for which there is a need for regional information exchange as perceived by the respondents

Topic	No need		Low need		Moderate need		High need	
	No.	%	No.	%	No.	%	No.	%
Epidemiological data	1	1.9	0	0.0	12	22.6	40	75.5
Care and support of HIV/AIDS patients	1	1.9	4	7.5	9	17.0	39	73.6
Preventive measures	1	1.9	1	1.9	7.5		47	88.7
Social and behavioural research	1	1.9	2	3.8	9	17.0	41	77.4
Others	39	73.6	0	0.0	3	5.7	11	20.8

fective by a large percentage of the respondents (73.6%) (Table 7), followed by exchange of health education materials between countries (66.0%). Again only 26.4% of the respondents considered electronic media as a highly effective method for information exchange.

## Discussion

Assessment of needs is generally accepted by theorists and concerned organizations as the first step in adult education programming. The best sources of information about the perceived needs of the learners

**Table 7 Opinions of the respondents about the effectiveness of methods for information exchange**

Method	Not effective		Less effective		Moderately effective		Highly effective	
	No.	%	No.	%	No.	%	No.	%
Printed materials	1	1.9	2	3.8	26	49.1	24	45.3
Meetings	1	1.9	6	11.3	18	34.0	28	52.8
Training	2	3.8	0	0.0	12	22.6	39	73.6
Electronic communication	3	5.7	13	24.5	23	43.4	14	26.4
Visits	1	1.9	4	7.5	16	30.2	32	60.4
Exchange of educational materials	1	1.9	1	1.9	16	30.2	35	66.0

are the learners themselves [10,11]. However, because of resources, time and administrative constraints, this was not feasible in the present study which included 17 countries with a total population of over 400 million [6]. Therefore the opinion poll pattern of studies was applied.

Most of the respondents indicated that there is a moderate to high need for information about HIV/AIDS and STIs. This agrees with findings of studies which showed gaps in the AIDS-related knowledge of the general public, whether in industrialized or developing countries [12–15]. It also indicates the importance of maintaining information dissemination efforts.

The perceived negative attitudes of religious and community leaders groups against condom promotion, sex education, and provision of education and services for sex workers and men who have sex with men is understandable. It is known that religions play an important role in shaping attitudes. For the majority of developing countries, religious beliefs are the foundation stones of the society, and its laws and morals. Traditions are often based on, or

strongly reflect, religious beliefs. Both Islam, which is the religion followed by most of the people of the Region, and Christianity explicitly condemn sex between men [16,17].

The indicated positive attitude towards providing people living with HIV/AIDS and drug users with services indicates that people within these two groups are considered sick individuals who need help and care.

Relatively high proportions of respondents believed that moderate to high frequencies of risky practices for transmission of HIV infection existed in the Region. This expectation is probably realistic as it has been estimated that around 10 million STI cases occur in the Region every year [8]. Also studies about male homosexuals carried out by NGOs in some countries of the Region have revealed the existence of such practices in higher rates than was thought before [18]. At the same time drug addicts in the Region, including a high proportion of injecting drug users, are estimated to be in the millions [8,19].

Television and radio were regarded as the most appropriate health education channels for local use. This coincides with



WHO data on 126 countries that indicated that 93% broadcast HIV/AIDS messages on television and 85% conduct radio broadcasts [20]. Television was found the main source of health information for the public in different settings and countries [21,22]. Despite the fact that the internet has great potential for use in the campaign against HIV/AIDS for information exchange, communication and interaction [1], most respondents felt it was an inappropriate method for health education, probably because of its inaccessibility in many areas and the high cost of provision. Telephone hotlines were also not considered an appropriate channel for health education. This channel, however, was very successful in Egypt where the number of calls received surpassed all expectations. Calls averaged around 1000 per month, and some of these calls were from outside Egypt [18].

Although the four suggested topics for information exchange were considered highly needed, preventive measures were considered the most needed and care and support the least. This perhaps reflects the stage of the epidemic in Eastern Mediterranean countries; in most of them it is at a low level [19] and at this stage care and

support of HIV/AIDS patients is not perceived as such a priority as prevention.

## Recommendations

- HIV/AIDS/STI information, education and communication efforts should continue in order to meet the high need indicated in this study, and the perceived prevalent risky behaviours.
- Cooperation and discussions should be encouraged between different sectors related to HIV/AIDS in order to bridge the gaps in opinions and attitudes.
- The mass media should be used effectively for wide-scale dissemination of HIV/AIDS/STI information messages. The internet should also be introduced into the spectrum of channels used in HIV/AIDS/STI information dissemination to be up-to-date with global communication trends.
- There should be a strategy for HIV/AIDS/STI information exchange between the Eastern Mediterranean countries. One possible method may be a regional HIV/AIDS media network.

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