ORIGINAL ARTICLE

A survey of STI policies and programmes in Europe: preliminary results

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Objectives: A survey was conducted to assess the adequacy of sexually transmitted infections (STI) prevention and control policies and programmes in the European region (including the central Asian republics).

Methods: An adapted World Health Organization (WHO) model questionnaire was sent to ministry of health officials in all 45 countries of Europe and central Asia. The questionnaire included questions on STI programme structure; STI case management; the different types and levels of services, including public and private service providers; partner notification and screening policies; services for vulnerable populations; monitoring and supervision; surveillance and research.

Results: Western European countries largely leave STI prevention and care to individual practitioners. Licensed providers exist at all levels of care, and access to consultations and treatment is usually free of charge. In the newly independent states (NIS), by contrast, programme efforts emphasise state guidance and supervision of local providers rather than individual practitioners. Access to services is limited in that in several NIS, only public sector specialists are licensed to treat STI. Formerly free of charge policies have been severely eroded. While in western Europe access to condoms appears to be good, in the NIS there are many fewer condom outlets. Regionwide, in 40% of countries the distribution of condoms is part of STI consultations.

Conclusions: Non-availability of affordable high quality STI services, including STI treatment and condoms, may be one of the causes for the much higher STI prevalence in parts of eastern Europe and NIS than in western Europe.

According to the World Health Organization (WHO) document, "Sexually transmitted diseases: policies and principles of prevention and care"¹ the main components of national STI programmes may include an STI programme structure; different types and levels of services including public and private service providers; specific services for vulnerable populations; partner notification and screening policies; as well as guidelines related to primary prevention of STI and STI case management, monitoring, and supervision; and surveillance and research. For certain components, WHO has made specific recommendations to its member countries. For instance, syndromic STI case management has been promoted² and patient referral is usually preferred over provider referral.³ There are also guidelines concerning STI surveillance.⁴

However, knowledge about the actual state of STI policies and programmes and the implementation of WHO recommendations in the various countries and regions is incomplete. In a worldwide effort, therefore, WHO and UNAIDS have aimed to collect relevant information on STI prevention and care policies and programmes. The survey reported upon in this paper refers to Europe. Similar surveys in Latin America⁵ and east Asia and the western Pacific⁶ have already been reported, while those in Africa, South Asia, and the Arab world are under way.

The assessment of STI policies and programmes in Europe has particular relevance, as this region comprises both countries (in western Europe) where STI are well controlled, and the newly independent states (NIS) and some south eastern European countries which have experienced an epidemic rise in syphilis, gonorrhoea, and other STI in recent years.^{7,8} While in western Europe the number of registered syphilis cases was 1.5/100 000 in 2000, the respective figure in the Russian Federation was 157.3, with even higher figures from rural and remote areas.⁹ The control of these STI epidemics has

been recognised as a public health priority.¹⁰ The results of the survey were expected to shed light on the association between the status of STI policies and programmes and the epidemiological situation in European subregions.

METHODS

The survey was conducted in 1998–9. A generic questionnaire covering all aspects of STI programme elements developed by WHO and UNAIDS was adapted to suit the needs of the region. Specific issues like the definition of primary health care (PHC) clinics, which in Europe and central Asian countries include family or general practitioners, polyclinics, and so called "feldschers" or services that are neither public nor private (because they have yet not been officially licensed) were included as specific categories. The English version was pretested in one western and one central European country, and the Russian version in one newly independent state.

The survey involved two rounds of communications with European WHO member countries, the first to inquire about and establish an updated list of people currently responsible for STI prevention and care programmes in the various countries, and the second to actually conduct the survey.

Data were analysed using ACCESS database software. Proportions were calculated for the whole sample of countries, as well as stratified by subregion (western Europe, central Europe, and NIS).

RESULTS

Questionnaires were received from 45 out of 46 countries. Respondents in western and central Europe were mostly directors of or affiliated with public health institutes of ministry of health departments of infectious diseases or community health. In NIS, virtually all were directors of national dermatovenerological (DV) centres or institutes.

Table 1 Key STI programme elements by country and subregion

Country	National STI programme	Integration in PHC	Dedicated STI clinics	STI case management guidelines	Supervision and support	Surveillance system
Western Europe:						
Austria		X	X			X
Belgium						X
Denmark	X	X	X	X		X
Finland		X	X			X
France		X	X	X		X
Germany						X
Greece			X	X		
Iceland		X	X			X
Ireland		X	X			X
Italy		X	X			X
Luxembourg						X
Netherlands		X	X	X	Unknown	X
Norway		X	X			X
Portugal		X	X			X
Spain		X	X			X
Sweden	X	X	X	X		X
Switzerland		X	X			X
United Kingdom			X			X
Central and south eastern Europe:						
Albania			X			X
Bosnia/Herzegovina			X			X
Bulgaria	X	X	X	X	X	X
Croatia		X	X			X
Czech Republic	X		X	X	X	X
Hungary	Unknown	X	X	X		X
Macedonia		X	X			X
Poland	X		X	X	X	X
Serbia and Montenegro			X			X
Slovakia	X		X	X	X	X
Slovenia	X	X	X	X		X
Turkey	Unknown	Unknown	X	X	X	X
Newly independent states:						
Armenia	X	X	X		X	X
Azerbaijan	X		X	X	X	X
Belarus			X	X	X	X
Estonia		X	X	X		X
Georgia	X		X	X		X
Kazakhstan	X	X	X	X	X	X
Kyrgyzstan			X	X	X	X
Latvia		X	X	X	X	X
Lithuania	X		X	X		X
Moldova	X	X	X	X	X	X
Russian Federation			X	X	X	X
Tajikistan		X	X	X		X
Turkmenistan			X	X	X	X
Ukraine	X		X	X	X	X
Uzbekistan			X	X	X	X

Overview of STI programmes (table 1)

The existence of national STI control programmes and/or national STI plans was reported from 33% of countries, including two of 18 western, five of 10 central European countries, and seven of 15 NIS. However, elements of STI control programmes were reported from all countries. Almost all countries reported having an STI surveillance system, 93% have dedicated STI clinics, 82% a partner notification policy, and 58% had issued national STI case management guidelines. STI services were reportedly integrated with primary care services in 56% of countries and in 36% there was supervision and monitoring of practitioners' performance.

Most western European officials thus reported the absence of national STI programmes/plans and of standard case management guidelines. They also reported no supervision of practitioners by national programme staff. By contrast, half the NIS reported the existence of national STI programmes, written case management guidelines exist, and national authorities seem to directly supervise lower level dedicated clinic staff. Central European countries' reports varied.

Public and/or private STI providers

In western Europe, the private sector has an important role. In virtually all countries, a range of public and private sector STI specialists, other specialists such as gynaecologists, as well as GPs provide STI services. By contrast, in the NIS, most STI treatment is provided by specialists working in the public sector or, in a few countries, by public sector general practitioners or multipurpose polyclinic staff. Belarus, Georgia, Moldova, Tajikistan, Turkmenistan, and Uzbekistan reported no private STI service provision by either specialists or generalist at all. From 10 NIS, significant self medication, and from four countries STI treatment with drugs obtained from vendors, was reported.

STI case management

STI syndromic management as recommended by the WHO is accepted by one third of the programme managers surveyed. Syndromic STI management is reportedly performed at dedicated (public) STI clinics in 12 countries, public polyclinic or primary care facility staff in nine, private GPs in eight, antenatal clinic staff in eight, and family planning staff in six

Figure 1 STI partner notification policy by European subregions.

Figure 2 Proportion of European countries providing free STI services in any setting (public, private, specialist, general), by service element.

countries. All other providers presumably treat on the basis of laboratory or individual clinical diagnoses.

Public STI care providers in all but four countries provide client information and education, while STI clinics in nearly all countries promote condom use. However, providers in less than half of the countries give away condoms to their clients. Partner notification is part of STI case management in all countries except for France, Italy, and Spain.

Partner notification (fig 1)

Partner notification policies exist in all but seven western and three central European countries, patient referral is the norm in 15, patient and provider referral in 12, in six countries providers actively trace partners and refer them for treatment.

Payment for STI services (fig 2)

In most countries (including all western, central and south Eastern countries) it is policy to provide free STI consultations. In central and south eastern Europe, STI consultations are free of charge for patients attending public clinics. In nine NIS, consultations are free at public clinics only, while in the other six NIS, only certain categories of patients are reported to benefit from free public services.

STI consultations are therefore, at least in principle, free of charge in most European countries, but this is not the case with regard to treatment. Most western, central, and south eastern European countries either provide STI treatment in

the public sector free of charge (18 countries) or at reduced costs (seven countries). Treatment is also reported to be free for STI patients attending public clinics in four NIS, but the others report that patients either must pay for the treatment or drugs must be purchased.

In the same way as treatment, tests such as Gram stain or syphilis serology are free of charge for clients attending public clinics in almost all countries. More expensive tests, however, such as chlamydia tests seem not to be routinely available in several central European countries and in the majority of the NIS. Condoms are freely distributed by STI clinics only in 18 (40%) of the 45 countries.

Screening policies

Syphilis screening of donated blood is policy in 40 of 44 European countries, the exceptions being Denmark, Greece, Iceland, and Ireland. By contrast, only 33 of 44 respondents (75%) confirmed a policy of routinely screening pregnant women for syphilis. Furthermore, there are a substantial number of countries where antenatal clinic clients/pregnant women are routinely tested for HIV and/or hepatitis, and all countries have policies for blood donor screening for HIV.

In western Europe, most Nordic and Mediterranean countries, Ireland, the United Kingdom, Germany, and Austria have policies for syphilis (and some for HIV) testing of pregnant women, while France reportedly tests for HIV, chlamydia, and gonorrhoea, but not for syphilis. In central and south eastern Europe, nine of 12 countries screen pregnant women for syphilis. In the NIS, except for Ukraine, it is policy to screen pregnant women for syphilis. Most NIS also have policies to test pregnant women for HIV, gonorrhoea, and chlamydia, but it is not clear whether the resources are available to do so systematically.

STI screening of population groups other than blood donors and pregnant women in western Europe involves sex workers in Austria, France, Germany, Greece, and Ireland. France is screening prisoners while Iceland screens alcohol and drug misusers. Females below the age of 25 are screened for chlamydia in Norway and the United Kingdom, while couples before marriage are tested for syphilis and gonorrhoea in Luxembourg. In Bulgaria, it is policy to test drivers, employment applicants, and immigrants for syphilis. Hungary and Turkey screen registered sex workers for various STI including HIV. Turkey screens also military recruits for HIV. Policies to screen food handlers for syphilis and gonorrhoea persist in Armenia, Kazakhstan, Kyrgyzstan, Latvia, Moldova, Russia, and Ukraine. Preschool and other education staff are screened in the same countries as well as in Belarus, and health workers (doctors, nurses and/or midwives) in Latvia, Kazakhstan and Russia. Estonia, Moldova, and Russia report the screening of injecting drug users for syphilis, Estonia and Tajikistan that of prisoners. Armenia, Belarus, Estonia, Latvia, Moldova, Uzbekistan, and Russia screen sex workers.

STI services designed for specific vulnerable groups

The existence of projects or special public STI services for vulnerable populations, such as sex workers, adolescents, and migrants, was reported from eight of 18 western European countries, five of 12 central and south eastern European countries and nine of 15 NIS. In western Europe, Austria, Finland, Germany, Greece, Ireland, and Portugal report providing STI services specifically for sex workers, France offers services for adolescents and people without medical and social coverage, Portugal also provides services for migrant workers.

In central Europe, the Czech Republic provides special services for sex workers, migrant workers, adolescents, displaced people, and truck drivers; Poland for sex workers and migrant workers; Hungary for sex workers and adolescents; Turkey for sex workers; and Croatia for adolescents and travellers to high prevalence areas.

In Armenia, Belarus, Estonia, Kyrgyzstan, Latvia, and Uzbekistan special STI projects providing services for sex workers exist; Armenia, Belarus, and Latvia have services for both sex workers and adolescents. In Armenia and Uzbekistan, there are specific services provided for displaced people and refugees, and in Estonia for injecting drug users. A clinic in Latvia provides services specifically for men who have sex with men. Moldova offers services for adolescents, displaced people, and truck drivers.

Condom availability

The vast majority of countries of all subregions report that condoms are available from pharmacies, from stores and kiosks (except Azerbaijan), as well as in bars and restaurants (except Albania, Armenia, Azerbaijan, Greece, Italy, Latvia, Kyrgyzstan, and Turkmenistan). At work places condoms are available in 10 western countries and Poland. At universities, condoms can be bought in 11 western and three central European countries. Condoms are sold at schools in three Benelux countries and Portugal, as well as in Czech, Slovak Republic, and Poland. Vending machines exist in all of western and central Europe, but not in south eastern Europe and in only five of 15 NIS.

Free distribution of condoms by public services is rare except at STI clinics. From Armenia and Estonia the provision of free condoms at (some) universities, schools, and work places is reported, while Austria and Bulgaria report free distribution in universities and schools, Albania in the local university, and Sweden in schools. Condoms are sold at reduced prices in pharmacies in Albania, Poland, Belarus, Tajikistan, Turkmenistan, and Ukraine. In Albania and Poland, subsidised condoms are available at kiosks and stores, universities, and schools respectively.

Surveillance

All European countries except Greece have an STI surveillance system. In western Europe, 14 of 18 countries report STI case reporting based on both clinical and/or laboratory diagnosis. In Albania, Croatia, Czech Republic, Slovakia, Slovenia, and Turkey STI cases are reported from both public and private sector clinics, while elsewhere only cases attended by public clinics are reported.

In the NIS, except Georgia, STI reporting by licensed practitioners is universal. In altogether 11 countries, either laboratory diagnoses or "laboratory diagnoses following clinical diagnoses" are reported. Only in three countries, clinical diagnoses are accepted as cases. Armenia and Azerbaijan accept and report syndromes as clinical diagnoses.

Monitoring drug sensitivity is conducted in the majority of countries. In western Europe, 12 of 18 countries report performing gonococcal antibiotic sensitivity testing. In the others, laboratories perform it for individual diagnostic rather than for surveillance purposes. In central and south eastern Europe, gonococcal antibiotic sensitivity testing is reportedly carried out in Czech Republic, Macedonia, and Slovenia, as well as in Poland, Serbia, and Montenegro and Slovakia with the latter four performing it at "regional centres."

DISCUSSION

The survey was the first ever attempt to review STI policies and the presence and manifestations of various STI programme elements in the European region. While it would appear to have been successful in shedding new light on a number of issues, evidently many of the policies reported by the people responsible for STI programmes in the various countries will need confirmation by other experts, or some policies may have changed in the meantime. Furthermore, actual STI service provision cannot be assessed through such policy and programme surveys among ministry of health officials and/or directors or other staff of public health institutes alone, and the validation of our findings by practitioners would seem crucial.

Key messages

- This is the first ever attempt to systematically survey STI policies and programmes in Europe
- Because of restrictions in licensing of practitioners, the erosion of state funding, and the limited number of condom outlets, STI services are less accessible and affordable in the newly independent states than in western Europe
- Several STI policies promoted by the WHO, such as the syndromic approach to STI case management, patient rather than provider partner referral, and WHO's principles of STI surveillance are only adhered to by a small and varying numbers of countries
- The high rates of STI in the NIS are a major public health problem in their own right and a potentially important co-factor for sexual transmission of HIV

Many of the findings reflect the political reality of a still divided European region. Not just the STI epidemiological situation, but also approaches to prevention and control continue to differ remarkably between western Europe and NIS. In western countries reporting a lack of supervision of practitioners and an absence of official case management guidelines, the development of STI prevention and care policies and guidelines and adherence to standards may well be left to professional venereological associations that do not directly report to the ministries of health and state institutions. In 2001, European STI case management guidelines were developed, in a collaboration between the WHO and the International Union against Sexually Transmitted Infections, although it is unclear to what extent the various countries have officially embraced them. Western countries may also allow for a relatively larger degree of responsibility for service quality to be assumed by individual practitioners. Licensed providers exist at different levels of services, and access to free of charge consultations and treatment would appear to be quasiuniversal.

By contrast, in the post-communist NIS, programmatic efforts emphasise guidance and supervision of local STI care providers by the state. Services are mainly provided by dedicated public STI clinics (and specialists), which tend to be ministry of health institutions. Some form part of policlinics, but in rural areas, where there are no dedicated clinics, easily accessible licensed first level providers would appear to be entirely missing. At the same time, the provision of once free of charge services has been severely eroded. In 11 of 15 NIS, either all clients or all but syphilis patients reportedly have to pay for STI treatment. Preliminary results of care seeking studies confirm that a large number of clients in these countries do indeed no longer attend licensed public services, either because they perceive them as generally not user friendly or lacking confidentiality. Instead, many potential STI clients in the NIS attend unlicensed (semi-) private providers or self medicate. Such services may be either ineffective (self medication) or prohibitively expensive for most (private providers). Anecdotal reports—for example, from Moscow, show that such treatment can cost up to \$US150–200 (£100–133). Central and south eastern European countries have dedicated public clinics, but in most, STI care is also provided by general health services and/or private services, reflecting ongoing health reforms.¹¹ Access and affordability of services must therefore be assumed to vary.

A West-East difference is also apparent with regard to condom availability. While in western Europe access to condoms is generally through a variety of outlets such as bars and restaurants, vending machines, universities, or schools, in the NIS there are fewer condom outlets. Questions on condom prices were not included in the questionnaire, but subsidised marketing schemes in this subregion are only known to exist in Albania, Caucasus, Kosovo, Romania, and parts of Russia.¹²

The availability and coverage of services for vulnerable populations such as young people, sex workers, and prisoners will need further investigation. Similarly, the adequacy of screening policies in the various countries will need confirmation. Routine syphilis screening in pregnancy is a cheap and cost effective intervention recommended by the WHO,¹³ and it will, therefore, be important to find out why these countries reported not to have such policies.

Other programme elements, too, will need to be reassessed in the light of WHO policy recommendations. Only a minority of countries subscribes to the syndromic approach to STI care recommended by the WHO, and several countries in the NIS continue to emphasise provider referral, although this is usually discouraged as too expensive and often counterproductive.³ Furthermore, in only 40% of the countries are condoms provided as an integral part of STI case management, as recommended. The WHO, in collaboration with national policy makers, should further analyse these findings and, for instance, investigate the reasons why so many policy makers and practitioners reject the syndromic approach to STI case management.

STI surveillance appears to be weak in all three subregions, relying exclusively on case reporting. The WHO generally considers trends resulting from case reporting, especially if based on aetiological diagnoses only a rough reflection of real trends or even unreliable. Perhaps reflecting this recognition, at least one country, Germany, has since decided to abandon STI case reporting. A wealth of data should be available from screening programmes, but these data are so far not being used for surveillance purposes, and behavioural surveillance is also lacking.

Despite this lack of quality data, there is little doubt that most of the NIS and parts of south eastern Europe have been facing major STI epidemics⁷ since the beginning of the 1990s, while prevalence in western Europe has remained low. Changes in sexual norms and behaviours are likely to have contributed to the epidemics in the NIS, as are underlying socioeconomic and political changes.^{14, 15} However, the limitations of STI policies and services identified in this survey, including lack of access to and shrinking affordability of quality STI care, and a lack of easy access to condoms, may also have played an important part. Some of these service related constraints that tend to result in inadequate healthcare seeking behaviour have also been identified in other regions.^{5, 6} Other elements, such as partner notification and provider licensing policies, seem to be region specific.

The high rates of STI in the NIS are a major public health problem in their own right and a potentially important co-factor of sexual transmission of HIV.¹⁶ The acceleration of ongoing policy reforms that aim to make services more widely accessible and affordable, including through the integration of STI services into primary care services and basic insurance packages, the licensing of professionals other than

specialists,³ the development of rational (for example, syndromic) case management protocols, and the promotion of safe sex including large scale marketing of affordable condoms, will be crucial for both the control of classic STIs and the prevention of sexually transmitted HIV.

CONTRIBUTORS

FN designed the study; KD had overall responsibility, interpreted the results, and reviewed drafts; GR designed the questionnaires and was responsible for the implementation of the survey; OM assisted in data collection; CN was responsible for data input and analysis; ULJ reviewed drafts and put together the final paper.

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REFERENCES

- 1 **UNAIDS/WHO**. *Sexually transmitted diseases: policies and principles for prevention and care*. UNAIDS/97.6. Geneva: UNAIDS/WHO, 1999.
- 2 **WHO**. *Guidelines for the management of sexually transmitted infections*. WHO/HIV_AIDS/2001.01. Geneva: WHO, 2001.
- 3 **UNAIDS**. The public health approach to STD control. *UNAIDS best practice collection*. Geneva: UNAIDS, 1998.
- 4 **WHO/UNAIDS**. *Guidelines for sexually transmitted infections surveillance*. WHO/CHS/CSR/EDC/99.3. Geneva: WHO, 1999.
- 5 **PAHO**. Status of STD prevention and care programmes in Latin America and the Caribbean. Unpublished report, UN/221E, WP Doc UN-221. Washington: PAHO, 1998.
- 6 **Sarda R**, Dehne K. Preliminary survey of sexually transmitted disease services in the Western Pacific Region. *Venerology* 1997;**10**:94–9.
- 7 **Dehne KL**, Prokrovskiy V, Kobysheva Y, et al. Update on the epidemics of HIV and other sexually transmitted infections in the newly independent states of the former Soviet Union. *AIDS* 2000;**14**(Suppl 3):S75–84.
- 8 **Riedner G**, Dehne KL, Gromyko A. Recent declines in reported syphilis rates in the former Soviet Union: are the epidemics over? *Sex Transm Infect* 2000;**76**:263–5.
- 9 **WHO/EURO**. HFA database, <http://www.euro.who.int/hfad>. Copenhagen: WHO/EURO, 2002.
- 10 **WHO/EURO**. Task Force for the urgent response to the epidemics of sexually transmitted infections in Eastern Europe and Central Asia. *Report on the Fourth Meeting, Copenhagen, 10–11 Feb 2000*. EUR/00/5015853. <http://www.sti-taskforce.org/>. Copenhagen: WHO/EURO, 2000.
- 11 **WHO/EURO**. Health care systems in transition, HiT country profiles. <http://www.euro.who.int/observatory/TopPage>. Copenhagen: WHO/EURO, 2001.
- 12 **PSI**. What we do, where we work—our programs. <http://www.psiwash.org/where/where.htm>. Washington: PSI, 2001.
- 13 **WHO**. *Global prevalence and incidence of selected curable sexually transmitted infections: overview and estimates*. WHO/HIV_AIDS/2001.02. Geneva: WHO, 2001.
- 14 **Kon S**. *The sexual revolution in Russia*. (Translated by James Riordan.) New York: Free Press, 1995.
- 15 **Dehne KL**, Khodakevich L, Hamers FF, et al. The HIV/AIDS epidemic in Eastern Europe: recent patterns and trends and their implications for policy-making. *AIDS* 1999;**13**:741–9.
- 16 **Dehne KL**. The emerging AIDS crisis in Russia: review of enabling factors and prevention needs. *Int J STD AIDS* 2001;**12**:277–8.