

Coll. Antropol. 27 (2003) 1: 161–172
UDC 616.988AIDS:316.346-053.6
Original scientific paper

Youth and AIDS – A Study of Attitudes, Knowledge, Behavior and Risks in the Post-War Croatia

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ABSTRACT

According to the latest reports, the Eastern Europe currently exhibits the greatest relative increase in the number of newly registered HIV infections in the world. At the same time, Central Europe remains relatively spared from the epidemic, with reported rates significantly lower than those in both Eastern and Western Europe. Croatia geographically affiliates to Central Europe, but it has two specific potential risk factors in comparison to neighboring countries: recent War events and a summer season when immigration of large number of tourists from Central and Eastern Europe is expected. Therefore, it is critical to examine AIDS attitudes in young people, increase their knowledge, monitor their behavior and warn on risks in order to prevent larger spread of epidemics from Eastern Europe to Croatia. In this study, we report on a large related survey and education program among 17-year-old high school pupils that was conducted in years immediately following the War (1996–1999).

Key words: AIDS, youth, risks, attitudes, Croatia

Introduction

According to the latest reports, the Eastern Europe currently exhibits the greatest relative increase in the number of newly registered HIV infections in the world^{1–3}. At the same time, Central Europe remains relatively spared from the epidemic, with reported rates significantly lower than those in both Eastern and Western Europe^{4–6}. In the Eastern Europe, the number of newly diagnosed HIV infections increased from 233 cases in 1994 to nearly 100,000 reported in 2001, representing 348.8 cases per million population⁵. The corresponding figure in western Europe is much lower, 22.8 cases per million population. In Central Europe the situation is even better, with less than 6 cases per million per year⁵. The countries worst hit, with rates over 100 cases per million population, were Estonia, Latvia, the Russian Federation and Ukraine. The majority of these infections were diagnosed among intravenous drug users (89%), males (78%) and young people (82% under 30 years)^{5,7,8}.

Although situation is worsening for much of the region, there are very few quality epidemiological surveillance and risk reduction programs in the region that aim to control the epidemics^{9–12}. Thus, any information on the dynamics from the region during this period of spread of the epidemic is useful. In Croatia, the country that geographically affiliates to Central Europe, HIV/AIDS is still uncommon^{13,14}. In the period from 1986 to 2000, 171 patients with AIDS have been reported yielding the incidence of about 4 cases per million population¹³. However, our country has two specific potential risk factors in comparison to neighboring countries: recent war events and summer season when immigration of large number of tourists from Central and Eastern Europe is expected. Therefore, it is critical to examine AIDS attitudes in young people,

increase their knowledge, monitor their behaviour and warn on risks in order to prevent larger spread of epidemics from Eastern Europe to Croatia^{15–17}. In this study, we report on a large related survey and education program among 17 year-old high school pupils that was conducted in years immediately following the War (1996–1999) as a part of multinational investigation in six countries of Central and Eastern Europe¹⁸.

Examinees and Methods

Background

The research project »Youth and AIDS« began in 1996 as a multinational effort of six countries of Central and Eastern Europe and it was partly supported by the Open Society Institute. Its primary objective was to evaluate knowledge, attitudes and behaviors regarding AIDS among youth in this region. The investigation was designed as a simultaneous and coordinated survey among 17-year old high-school students in Bulgaria, Croatia, Czech Republic, Poland, Slovakia and Slovenia. In each country, a sample of 1,000 high-school students from several cities was taken (big cities being the good predictor of future social trends). A detailed questionnaire was standardized among 6 countries and passed on to students who filled it anonymously. The results in each country were summarized in National Report in 1999¹⁸.

Sample design

The sample size was agreed to be about 1,000 examinees in each country. They needed to be chosen from high school 3rd-grade students. According to the Ministry of Education and Culture of the Republic of Croatia, Zagreb and its surroundings harbor six types of high schools. Those are seventeen general gymnasiums, thirty-seven specialized high schools, four private gymnasiums, one high school

for handicapped children, four high schools for musicians and/or artists and three suburban high schools that are combination of general gymnasium and specialized high schools. To obtain standardized approach in all 6 countries, several high schools had to be excluded from the sampling procedure.

The number of students per class is approximately 30 in first two types of high schools, as suggested by law. Those schools were suitable for the study. Among specialized high schools, two Catholic high schools were excluded as a number of questions would be considered inappropriate. Among four new private gymnasia, two did not have the 3rd grade yet or the number of students was too small to be regarded as a »class«. Due to the latter reason, all four high schools for musicians and/or artists were also excluded from the study. From apparent reasons, we decided to also exclude high school for handicapped children. We were left with

52 high schools – 17 gymnasia and 35 specialized schools.

The 3rd grade population of general gymnasia in Zagreb in 1996 was 3,494 students (28.3%), while the 3rd grade population of specialized high schools was 8,853 students (71.7%). This yielded 283 students to be recruited from gymnasia, and 717 from specialized high schools. Those numbers, divided by 30 (average class size), equaled to 9 gymnasium classes and 24 specialized high school classes. Among gymnasia there were 100 classes (35 students per class on average), and we needed to select 9 of them (sampling fraction of 9/100 or approximately 1 in 11, see Table 1). Similarly, among specialized high schools there were 277 classes (32 students per class on average), and we needed to select 24 of them. Sampling fraction was therefore 24/277 or approximately 1 in 11.5 (see Table 2).

TABLE 1
GYMNASIUM CLASSES SELECTED FOR THE SAMPLE

| Gymnasium | Classes | | | | | | | | | | |
|---------------------------|---------|---|---|---|---|---|---|---|---|---|---|
| Gymnasium I | a | b | c | d | | | | | | | |
| Gymnasium II | a | b | c | d | e | f | g | h | | | |
| Gymnasium III | a | b | c | d | e | f | g | h | | | |
| Gymnasium IV | a | b | c | d | | | | | | | |
| Gymnasium V | a | b | c | d | e | f | | | | | |
| Old Town Gymnasium | a | b | c | d | e | f | g | | | | |
| Gymnasium VII | a | b | c | d | e | f | | | | | |
| Gymnasium »T. Brezovački« | a | b | c | d | e | | | | | | |
| Gymnasium IX | a | b | c | d | e | | | | | | |
| Gymnasium X | a | b | c | d | e | f | g | h | i | j | k |
| Gymnasium XI | a | b | c | d | | | | | | | |
| Gymnasium XII | a | b | c | d | | | | | | | |
| Gymnasium XIII | a | b | c | d | | | | | | | |
| Classic gymnasium | a | b | c | d | | | | | | | |
| Gymnasium XV | a | b | c | d | e | f | g | h | i | j | k |
| Gymnasium XVI | a | b | c | d | e | | | | | | |
| Gymnasium XVII | a | b | c | d | | | | | | | |

TABLE 2
SPECIALIZED HIGH SCHOOL CLASSES SELECTED FOR THE SAMPLE

| Specialized high school for: | Classes | | | | | | | | | | | |
|-----------------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|
| Technics I | a | b | c | d | e | f | g | h | i | j | k | |
| Technics »Ruđer Bošković« | a | b | c | d | e | f | g | h | i | j | k | l |
| Technics – construction | a | b | c | d | e | f | g | | | | | |
| Technics – geodesy | a | b | | | | | | | | | | |
| Technics – engineering I | a | b | c | d | | | | | | | | |
| Technics – engineering II | a | b | c | | | | | | | | | |
| Technics – electronics | a | b | c | d | e | f | g | | | | | |
| Technics – electric engineering | a | b | c | d | e | | | | | | | |
| Industrial engineering | a | b | c | d | e | f | g | h | i | | | |
| Handicraft – personal services | a | b | c | d | e | f | g | h | i | j | k | l |
| | m | n | | | | | | | | | | |
| Handicraft – electric engineering | a | b | c | d | e | f | g | h | i | j | k | l |
| | m | n | o | p | r | s | t | | | | | |
| Handicraft – industry | a | b | c | d | e | f | | | | | | |
| Installations | a | b | c | d | e | | | | | | | |
| Carpenters | a | b | c | d | e | f | g | h | | | | |
| Agriculture | a | b | c | d | e | f | g | | | | | |
| Communications | a | b | c | d | e | f | | | | | | |
| Road traffic | a | b | c | d | e | f | g | h | i | | | |
| Railroad traffic | a | b | c | d | e | f | g | h | | | | |
| Chemistry and geology | a | b | c | d | e | f | g | h | | | | |
| Food technology | a | b | c | d | e | f | g | | | | | |
| Graphic design | a | b | c | d | e | f | g | h | i | | | |
| Sports | a | b | | | | | | | | | | |
| Economy I | a | b | c | d | e | f | g | h | | | | |
| Economy II | a | b | c | d | e | f | | | | | | |
| Economy III | a | b | c | d | e | f | g | h | i | j | | |
| Trade | a | b | c | d | e | f | g | h | i | j | k | l |
| | m | n | o | p | r | s | t | u | v | z | | |
| Textile design | a | b | c | d | e | f | g | h | i | j | k | l |
| | m | | | | | | | | | | | |
| Fine arts and design | a | b | c | d | e | | | | | | | |
| Tourism | a | b | c | d | e | f | g | h | i | j | k | l |
| | m | n | o | p | r | s | | | | | | |
| Administration and bureau | a | b | c | d | e | f | g | h | | | | |
| Veterinary science | a | b | c | | | | | | | | | |
| Nurses I | a | b | c | d | | | | | | | | |
| Nurses II | a | b | c | d | | | | | | | | |
| Nurses III | a | b | | | | | | | | | | |
| Health care | a | b | c | d | e | f | | | | | | |

The survey, undertaken by a number of surveyors from the Institute for Anthropological research, the School of Public Health and the staff from several general hospitals and public health institutes in Croatia, took place between 1996 and 1998.

Methods of data analysis

After the completion of questionnaires, the data were entered into specifically designed computer database file. After transcription, the database was transferred into SPSS statistical software package, where results were evaluated. The evaluation consisted mainly of descriptive statistics (frequencies, mean values, maximums and minimums (range) and standard deviations) for certain analyzed variables. When the impact of certain variable on other variables was of special interest, cross-tabulations of variables were performed. In all cases, the significance of difference between the distribution of variables was estimated using Fisher's chi-square test or Student's t-test for independent samples.

Results

Basic information

Due to missed attendance of some students at the day of the survey in their class, the final Croatian sample consisted of 955 examinees aged 16–18 (the large majority being 17 years of age). Male stu-

dents formed 42.4% of the total sample, and females the remaining 57.6%. Father's and mother's education degree included some college education in 58% and 48%, respectively. Elementary school or lower was recorded in 12% and 14%, respectively. A total of 62% of examinees attended church on regular basis, while nearly 70% felt religious. The large majority of pupils lived with parents (88%). About 70% attended 4-year vocational schools and 30% 4-year gymnasiums.

Attitudes

Males were significantly more frequently allowed to have a partner stay overnight, especially in 4-year vocational school (Table 3). Significantly more males in both types of school would have liked to have a partner stay. Females were more likely to have to ask parents to go out. They also had to tell parents who are they going with or return home at fixed hours more frequently than their male counterparts (Table 4). Expectedly, their parents seemed to be more liberal in towns than in suburbs or villages.

Table 5 reveals the respondents' opinion on who should cover the expenses for treatment of certain groups of HIV-infected persons by gender, which is a proxy for assigned guilt. For homosexual men, most of the students believe that they and their families should cover expenses. However, promiscuous men and women fare even worse on that question. Female

TABLE 3
EXPERIENCE AND ATTITUDE TOWARDS HAVING A PARTNER STAY OVERNIGHT BY TYPE OF SCHOOL AND GENDER

| | 4-year vocational school | | 4-year gymnasiums | |
|--------------------------------|--------------------------|---------|-------------------|---------|
| | Males | Females | Males | Females |
| Allowed to have a partner stay | 63.5% | 10.1% | 44.7% | 12.6% |
| Have had a partner stay | 27.0% | 18.2% | 24.1% | 13.7% |
| Wish to have a partner stay | 70.0% | 53.3% | 84.7% | 67.8% |

TABLE 4
FREEDOM TO GO OUT BY PLACE OF RESIDENCE AND GENDER

| | Towns | | Suburbs | | Villages | |
|---|-------|---------|---------|---------|----------|---------|
| | Males | Females | Males | Females | Males | Females |
| Must ask parents to go out | 53.8% | 69.6% | 67.6% | 81.2% | 63.3% | 78.9% |
| Must tell parents who are they going with | 35.9% | 66.0% | 45.2% | 76.1% | 44.8% | 74.2% |
| Must return home at fixed hours | | | | | | |
| – on week days | 57.4% | 72.7% | 69.2% | 85.3% | 64.3% | 79.2% |
| – on weekends | 37.2% | 69.1% | 39.1% | 67.3% | 38.1% | 67.8% |

TABLE 5
RESPONDENTS' OPINION ON WHO SHOULD COVER EXPENSES ON TREATMENT OF CERTAIN GROUPS OF HIV-INFECTED PERSONS BY GENDER

| | They and their families | | The government | | Charity organisations | |
|------------------------------|-------------------------|---------|----------------|---------|-----------------------|---------|
| | Males | Females | Males | Females | Males | Females |
| Drug users | 46.7% | 50.1% | 34.3% | 30.6% | 19.0% | 19.3% |
| Homosexual men | 62.0% | 60.3% | 29.5% | 24.2% | 8.5% | 15.5% |
| Hemophiliacs | 16.1% | 12.0% | 72.0% | 70.6% | 11.9% | 17.4% |
| Promiscuous men | 72.3% | 77.1% | 26.3% | 14.8% | 1.4% | 8.1% |
| Female prostitutes | 56.4% | 58.2% | 29.4% | 25.1% | 14.2% | 16.7% |
| Promiscuous females | 70.1% | 76.1% | 22.4% | 18.6% | 7.5% | 5.3% |
| Children of infected mothers | 8.4% | 13.5% | 79.0% | 76.4% | 12.6% | 10.1% |
| Female prostitutes' clients | 74.1% | 79.6% | 18.3% | 15.2% | 7.6% | 5.2% |
| Partners of infected persons | 43.4% | 54.1% | 38.9% | 33.3% | 17.7% | 12.6% |

prostitutes are considered »better« than the homosexual men. The students showed most compassion for children whose mothers were infected and for hemophiliacs. It appears that the general determination of students' compassion and understanding towards is related to age and place in society – someone who could be of their own age, such as drug users, fares better than someone adult. Very low percentage of students chose charity organizations as the source of payment, possibly due to their own disillusionment in the efficacy of such organizations during the War period in Croatia.

Knowledge

Table 6 shows the recognition of correct answers for a number of proposed AIDS-related statements among the examinees. The overwhelming majority of the students recognize that *one can be infected by HIV without looking ill* and that *one can be infected with HIV for years before becoming ill*.

Behavior

Table 7 shows dating and sexual experience by gender. Over 90% of the examinees have already kissed and about 90% have been in love. Sex-related differ-

TABLE 6
RESPONDENTS WHO AGREED WITH CERTAIN HIV AND AIDS-RELATED STATEMENTS

| | Males | Females |
|--|-------|---------|
| One can be infected by HIV and do not look ill | 96.0% | 96.7% |
| One can be infected with HIV for years before becoming ill | 97.4% | 97.6% |
| AIDS cannot be cured | 70.1% | 82.3% |
| One can have a positive HIV test and not have AIDS | 84.1% | 82.5% |
| Infection with HIV can be ascertained immediately | 33.5% | 29.6% |

TABLE 7
DATING AND SEXUAL EXPERIENCE AND GENDER

| Sexual experience | Males | | Females | |
|--|-------|------------------|---------|------------------|
| | % | Mean age (years) | % | Mean age (years) |
| I have already kissed | 91.3% | 12.8 | 90.5% | 13.7 |
| I have been in love | 89.6% | 13.2 | 93.0% | 13.9 |
| I have had a date | 92.6% | 13.0 | 94.4% | 14.2 |
| I have had a steady partner | 66.3% | 13.4 | 74.7% | 14.8 |
| I have petted with a partner of opposite sex | 52.6% | 14.3 | 56.3% | 15.5 |
| I have petted with a partner of same sex | 4.8% | 14.5 | 22.3% | 14.6 |
| I have had sexual intercourse | 27.1% | 15.1 | 25.3% | 15.9 |
| I have already menstruated | --- | --- | 99.4% | 12.75 |

ences were noted in slightly more females having had a steady partner, and as many as 22.3% females petting with a partner of same sex in comparison to 4.8% males.

Table 8 shows that 40% of males and almost as many females with a steady partner have also kissed with someone

else. About 7% of males and 4% of females had sex with someone else, and it was usually an isolated event.

Table 9 shows the locations of first sexual intercourse among experienced responders by gender. Among males, the most frequent location was own home

TABLE 8
PROPORTION OF RESPONDENTS WHO WERE UNFAITHFUL TO THEIR STEADY PARTNER BY KISSING, PETTING OR HAVING SEXUAL INTERCOURSE WITH ONE OR MORE OTHER PARTNERS

| | Males (yes answer) | | | | Females (yes answer) | | | |
|-------------|-------------------------|-----|-----|------|-------------------------|-----|-----|------|
| | With how many partners? | | | | With how many partners? | | | |
| | % | One | Two | More | % | One | Two | More |
| Kissing | 40.2% | 33% | 36% | 31% | 37.6% | 66% | 17% | 17% |
| Petting | 12.3% | 52% | 21% | 27% | 15.1% | 67% | 14% | 19% |
| Intercourse | 6.5% | 61% | 19% | 20% | 3.8% | 63% | 19% | 18% |

TABLE 9
LOCATION OF FIRST SEXUAL INTERCOURSE
BY GENDER

| | Males | Females |
|-------------------|-------|---------|
| At my home | 35.1% | 17.5% |
| At partner's home | 29.1% | 45.3% |
| At friend's place | 18.6% | 14.8% |
| Outside | 31.2% | 17.6% |
| In a car | 3.2% | 8.3% |
| Elsewhere | 13.2% | 13.6% |

(35.1%), followed by *outside* (31.2%) and partner's home (29.1%). Among females, the most common location was partner's home (45.3%).

Table 10 reveals the circumstances of first sexual intercourse by sexual experience and gender. In comparison to their female counterparts, experienced males claimed more frequently that they were very excited and that it was nice for both of partners; they less frequently planned

the intercourse ahead and less frequently feared pregnancy. Sexually inexperienced responders were much more likely to expect planning the first intercourse ahead, taking time and being very excited, and less likely to expect smoking cigarettes, being drunk or taking tablets in comparison to the actual experiences of their peers.

Table 11 shows similar results as the previous table. Among the reasons for having first sexual intercourse, the element of mutual love is less pronounced among experienced responders, while the element of *wanting to get over with it* was more pronounced.

Table 12 shows the use of contraception among the examinees according to gender and sexual experience. Although 22% inexperienced males and 42% inexperienced females plan to use hormonal contraception during their first intercourse, less than 5% of experienced students did so at the time of their first in-

TABLE 10
CIRCUMSTANCES OF FIRST SEXUAL INTERCOURSE BY SEXUAL EXPERIENCE AND GENDER

| Circumstances of first sexual intercourse | Sexually experienced responders | | Sexually inexperienced responders | |
|---|---------------------------------|---------|-----------------------------------|---------|
| | Males | Females | Males | Females |
| We planned it ahead | 32.4% | 41.0% | 59.6% | 54.2% |
| It happened unexpectedly | 64.3% | 54.7% | 50.3% | 46.2% |
| We were afraid of doing wrong | 30.6% | 36.0% | 30.3% | 48.6% |
| We smoked cigarettes | 46.2% | 36.6% | 10.1% | 7.6% |
| We drank alcohol | 36.5% | 18.3% | 23.1% | 16.4% |
| We were drunk | 13.2% | 11.6% | 3.2% | 0.6% |
| We smoked hashish | 8.0% | 8.2% | 3.4% | 3.0% |
| We took some tablets | 3.0% | 3.2% | 0.3% | 2.4% |
| We took our time | 58.2% | 54.3% | 93.2% | 96.5% |
| We were very excited | 80.6% | 63.1% | 98.6% | 94.3% |
| It was nice for both of us | 89.1% | 71.6% | 97.5% | 99.2% |
| We were in love | 75.3% | 65.9% | 96.3% | 100.0% |
| We were not very close | 3.6% | 2.4% | 4.3% | 0.6% |
| We were afraid of interruptions | 20.8% | 29.0% | 20.3% | 21.6% |
| We feared pregnancy | 30.3% | 48.3% | 40.2% | 47.3% |

TABLE 11
REASONS FOR HAVING FIRST SEXUAL INTERCOURSE BY SEXUAL EXPERIENCE AND GENDER

| Reasons for having first sexual intercourse | Sexually experienced responders | | Sexually inexperienced responders | |
|---|---------------------------------|---------|-----------------------------------|---------|
| | Males | Females | Males | Females |
| I loved my partner | 39.6% | 49.3% | 57.3% | 71.5% |
| I wished for it very much | 72.3% | 62.8% | 80.6% | 85.2% |
| It just happened | 23.1% | 21.7% | 18.5% | 19.5% |
| I was curious | 23.6% | 35.0% | 16.3% | 11.7% |
| My partner wanted it very much | 38.2% | 30.1% | 34.2% | 44.3% |
| I wanted to get over with it | 24.2% | 20.9% | 9.4% | 5.8% |
| I was just the right age for it | 9.1% | 5.2% | 8.5% | 11.3% |
| My friends have done it too | 6.3% | 1.8% | 3.8% | 3.2% |
| I wanted to become a real man/women | 7.3% | 5.1% | 4.6% | 3.6% |
| I was under influence of drugs/alcohol | 6.2% | 3.0% | 2.8% | 1.8% |
| My partner would have left me | 0.0% | 0.0% | 0.5% | 0.9% |
| Partner forced me | 0.0% | 0.0% | 1.0% | 1.0% |

TABLE 12
CONTRACEPTIVE USE BY GENDER AND SEXUAL EXPERIENCE

| Contraceptives used | Sexually experienced responders | | | | | | Sexually inexperienced responders | |
|-------------------------|---------------------------------|---------|------------------|---------|---------------|---------|-----------------------------------|---------|
| | First intercourse | | Last intercourse | | At least once | | Hypothetical first intercourse | |
| | Males | Females | Males | Females | Males | Females | Males | Females |
| Hormonal pills | 4.8% | 4.2% | 4.0% | 10.5% | 8.6% | 14.4% | 22.3% | 42.1% |
| Condom | 70.8% | 70.4% | 73.2% | 62.0% | 87.9% | 81.8% | 86.5% | 92.3% |
| Foam, gel, cream | 3.9% | 3.5% | 1.5% | 2.3% | 3.1% | 2.7% | 7.0% | 5.1% |
| Washing sponge, rinsing | 0.6% | 0.2% | 22.1% | 21.5% | 0.0% | 0.0% | 1.4% | 0.9% |
| Diaphragm | 7.5% | 11.3% | 8.1% | 12.4% | 9.3% | 15.6% | 28.6% | 16.4% |
| Coil | 3.2% | 3.2% | 8.9% | 17.1% | 16.3% | 26.6% | 8.5% | 6.8% |
| Calendar method | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 1.8% | 0.5% | 0.1% |
| Coitus interruptus | 5.0% | 9.0% | 9.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Other devices | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |

tercourse. However, there is a very optimistic result regarding the use of condoms: about 90% of inexperienced males and females plan to use it, while as many as 71% males and 65% females have used it at the time of first intercourse.

Risks

Table 13 shows the examinees' assessment of the level of HIV transmission risk involved in several proposed situations. Almost all of them are certain about high risk of sharing a needle with a

TABLE 13
ASSESSMENT OF THE LEVEL OF HIV TRANSMISSION RISK INVOLVED IN THE FOLLOWING SITUATIONS

| | High risk | | Low risk | | Practically no risk | |
|---|-----------|---------|----------|---------|---------------------|---------|
| | Males | Females | Males | Females | Males | Females |
| Sharing needles with a HIV-positive drug user | 96.0% | 97.8% | 2.3% | 1.3% | 1.7% | 0.9% |
| Intercourse with infected person without using a condom | 96.0% | 97.0% | 2.1% | 2.1% | 1.9% | 0.9% |
| Bandaging bleeding wounds of a HIV-infected person | 32.3% | 37.4% | 46.3% | 42.8% | 21.4% | 19.8% |
| Petting with an infected partner | 21.2% | 26.8% | 44.0% | 45.3% | 34.8% | 27.9% |
| Looking after a person with AIDS | 8.9% | 12.1% | 48.9% | 48.1% | 42.2% | 39.8% |
| Seeing a dentist who has seen an infected patient before | 24.3% | 28.1% | 46.0% | 50.2% | 29.7% | 21.7% |
| Sexual intercourse with an infected partner using a condom | 24.0% | 24.6% | 65.1% | 65.9% | 10.9% | 9.5% |
| Living with an infected family member for a longer period of time | 15.0% | 15.8% | 46.3% | 42.0% | 38.7% | 42.2% |
| Passionate French kiss with infected partner | 10.0% | 10.4% | 48.7% | 51.2% | 41.3% | 38.4% |
| Sharing a glass with HIV-infected person | 6.5% | 6.3% | 37.9% | 33.8% | 55.6% | 59.9% |
| Swimming in the same pool with HIV-infected person | 10.0% | 11.1% | 46.0% | 44.1% | 44.0% | 44.8% |

HIV-positive user and having a sexual intercourse with infected person without using a condom. However, the congruence of the answers is lost regarding the situation of bandaging bleeding wounds, petting with or looking after an infected person. The answers to the remaining questions also imply that there are still many controversies in opinions on risk situations regarding AIDS transmission.

Discussion

The Croatian national study »Youth and AIDS« gathered valuable insights into knowledge, attitudes, behaviors and risk exposure among post-war Zagreb high-school students with respect to

AIDS. The investigated cohort of 955 students represents a group who were only 8–15 years of age at the time of the fiercest clashes during the war in Croatia (1991–1995). This group was, therefore, exposed to highly unusual environment during a delicate period of their psychosexual and social development. As the war period occurred during the years of increasing social activities of theirs, it is presumed that opportunities for their social interaction during that time were limited. We presume that they were more likely to be forced to stay at home during the war times in comparison to their peers in other countries of Central and Eastern Europe. Also, they were less likely to go to summer holidays where many of the

first-time romances take place. This is not necessarily unfavorable in terms of health education and prevention^{19,20}. Some of those conditions should logically lead to delayed first sexual intercourse, while increased attention to the media during the war led to better exposure to public health information.

This study confirmed a number of those hypotheses. As many as 96% of high school students live with their parents or a single mother and 69% feel religious. The war setting might have added to their accelerated psychological development, sense of seriousness and responsibility. Those hypotheses were partly confirmed in the section of the study investigating their attitudes. One third of them believed that people of their age, seventeen, should not have sex yet. Almost 80% opposed that there is basically nothing wrong with cheating on the partner. Almost 90% believed that they should insist on a condom when having sex. Rejecting sex was not difficult to 80% of examinees, and 72% opposed that alcohol and drugs make sex better. As many as 97% knew where to buy condoms, and 90% knew how to properly use them. We found these results encouraging.

Health education authorities did fairly well on improving knowledge by education efforts on the national radio, TV and newspaper and at the local (high-school) level. As many as 98% of the examinees recognized that person can be infected years before the onset of the disease, while 97% recognized the high risk of having sex or sharing a needle with infected partner – two main routes of AIDS transmission in younger age population in the region. The results of this study showed that the investigated students possessed a broad knowledge on the topics related to AIDS. Most of them take this problem very seriously when having a relationship with colleagues of opposite sex. The majority of the students are

aware of risky behavior that may lead to infection and of the main hazards. Most of the students share very liberal attitudes regarding dating, having sex, going out, tolerance and cooperation with their colleagues in general, but there is a notable discrepancy in comparison to their parents, especially mothers. The majority of the students would be willing to help and stand for an infected colleague, but their parents are far more conservative regarding that topic.

Since the collapse of the iron curtain, the Eastern Europe has been faced with an explosive HIV epidemic while Central Europe was spared to date. The main driving force of the epidemic was the increase in intravenous drug users in the situation of socio-economic deterioration. Currently, risk reduction programs barely cover 10% of the intravenous drug user population in these countries. Thus, to contain this epidemic, it is vital to increase the coverage of these programs and also to improve measures to prevent further HIV spread in Central European countries^{5,6,16,17}. This study made one of first steps in that direction, as large-scale heterosexual transmission in young people represents a major risk in this region. The outcome of the programs will depend on the nature and extent of contacts between high risk populations and the general population of Croatia, which is critical during summer tourist season. Comparing all available epidemiological data on HIV/AIDS at the wider European level is therefore essential for a better understanding of the trends of the epidemic. It should also help evaluating the impact of prevention activities^{5,14}.

Acknowledgements

This work was supported by the Open Society Institute grant to P.R. and I.R. and by the Croatian Ministry of Science and Technology grant to I.R. (0108330).

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MLADEŽ I AIDS: ISPITIVANJE STAVOVA, ZNANJA, PONAŠANJA I RIZIKA U POSLIJERATNOJ HRVATSKOJ

S A Ž E T A K

Prema najnovijim izvješćima, istočna Europa je područje koje trenutno bilježi najveći relativan porast broja novoregistriranih HIV infekcija u svijetu. U isto vrijeme, središnja Europa ostaje relativno pošteđena od epidemije, a stope incidencije su značajno niže od onih u istočnoj i zapadnoj Europi. Hrvatska zemljopisnim položajem gravitira središnjoj Europi, no ima dva specifična potencijalna čimbenika rizika u usporedbi sa susjednim zemljama: nedavna ratna zbivanja, te ljetnu sezonu u kojoj se očekuje dolazak većeg broja turista iz područja srednje i istočne Europe. Stoga je od iznimne važnosti ispitati stavove o AIDS-u u mladih ljudi, povećati njihova znanja, promatrati njihova ponašanja i upozoriti ih na rizike kako bi se spriječilo širenje epidemije većih razmjera iz istočne Europe u Hrvatsku. U ovom radu izvješćujemo o rezultatima velike ankete i edukacijskog programa među 17-godišnjim učenicima srednjih škola koja je provedena u godinama neposredno nakon rata (1996.–1999.).