

# Awareness of the threats of sexually transmitted diseases among youth – review of studies

Irena Puszkarz

College of Medicine and Health Science, Jan Kochanowski University in Kielce

## Abstract:

**Background:** Increasing problem of sexually transmitted diseases needs a well-organized effort allowing preserving and strengthening sexual health. Proper knowledge about sexually transmitted diseases (STD) allows not only to protect oneself against contagion but also others. Incorrect information in that field may give false sense of security and in consequence increase in STD rates. Appropriate sources of knowledge are inherent in awareness-raising and taking mature actions. Seeking effective methods of transferring knowledge and awareness-raising about STD is the subject of actions of many professionals.

**Objective:** Analysis of chosen scientific work concerning the level of knowledge and the awareness of the threats of sexually transmitted diseases among Polish youth.

**Material & methods:** The basis for this paper was the review of articles and scientific work in Polish magazines that were the results of studies of the awareness of the threats of STD among youth. Papers of high quality of presented studies and with interesting results were selected for analysis.

**Results:** Analyzed studies were using questionnaires created by authors and containing questions dealing with knowledge about etiological factors, symptoms and risky behaviour leading to STD infection. The results of the studies confirmed significant yet in some aspects

selective and limited knowledge of the subjects about threats and prevention of STD. The youth knew few diseases, did not realize STD were asymptomatic, and often did not notice the risk of infection caused by early sexual initiation and having many sexual partners. Women and residents of urban areas knew more about STD than men and residents of rural areas.

**Conclusion:** Selective and not well-organized knowledge limits possibility of eliminating hazardous behaviour contributing to transferring STD. The lack of understanding of the threat and asymptomatic course of STD leads to unaware carriage of STD and, in consequence to spreading the diseases and their complications. Observed decrease of the age of sexual initiation requires to introduce effective prevention based on coordination of the actions of young man or woman, their surroundings and educational units. It is necessary to complement school educational programmes by regularly repeated information about aetiology, clinical picture of reproductive system diseases, paying particular attention to early detection of cancer and STD prevention.

**Key words:** sexually transmitted diseases (STD), level of knowledge, awareness of the threats, bibliography, analysis

## **Background**

Sexually transmitted diseases (STD) are a serious worldwide medical problem. It is observed that the rate of the diseases from this group is still increasing. In Poland for the last decades it was observed that the rate of HIV infections, syphilis, gonorrhoea, trichomoniasis, genital herpes, chlamydiosis, HPV was increasing.

Young people entering adulthood take decisions concerning their sexual behaviour. During puberty sexual tension grows, to relieve it young people get involved into different forms of sexual activity, not realizing their possible consequences. Without proper background young people often take risky behaviour, impulsively, being fascinated with another person, under peer pressure, under influence of alcohol and drugs or simply out of curiosity. Most often in the opinion of young people unplanned pregnancy is the only negative consequence of sexual initiation, the possibility of contracting STD is rarely considered [1].

These diseases are associated with people of specific population, e.g. prostitutes, drug addicts, homosexuals. It is important for young people to understand the consequences of early and risky sexual encounters. Sex education is one of the methods of preventing of sexually

transmitted contractions. It should be taken at home, by parents who are responsible for showing the right path in life and creating the right attitude and behaviour of their children. Unfortunately in many Polish homes parents are not talking openly about sexuality, explaining it with the lack of time or feeling ashamed [2].

Sex education in Poland has been for many years the topic of lively disputes and the subject of political duels. Many people think that promoting sex education will encourage young people to sexual initiation and make them rush to it. The supporters of sex education however are of opinion that parental teaching should be completed in schools and media and it should be easily accessible. Transferred knowledge should be related to human biology, psychology, psychiatry, sexology and law, it should be in accessible form, adapted to age, mental and physical progress and sex and the educator should be the source of reliable information [3].

Sex education is the prevention of risks towards sexual health and life. Sexual knowledge acquired in the right moment will help young people to forecast the consequences of the decisions made about their own sexual life, and thanks to it, to make them in more responsible way. Proper education should stay one step ahead of events –challenges of sexuality that await young people, and not follow them [4].

### **Objective**

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### **Material & methods**

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### **Results**

In recent years in Polish literature there was much space devoted to publications connected with the threats resulting from sexual behaviour. The increasing rate of STD, permissive attitude towards sex and fast rate of life of youth are the factors that force taking preventive action. In the opinion of Prof. Izdebski, the author of the newest report “Sexuality of Poles 2017” bigger and bigger generation gap in approach to sex is clearly visible, which indicates social changes of young Poles. The report says that only 42% of Poles are satisfied with their sexual life and

they more and more often allow themselves to have extramarital affairs at work, at a leave from work spent just by themselves or under the influence of alcohol [5].

The objective of the paper by Nowosielski et al. was the assessment of sexual behaviour and contraceptive methods used in population of young adults living in Silesian province in the context of age, sex, education and religious belief. The study group included 720 people aged 18-26. The questionnaire "Sexual life of young adults" was the study tool. In the group 76.1% have initiated their sexual life, but 3.3% of them did not use any contraceptive methods. Using condoms (96.9%) was the most often used contraceptive method and intrauterine device (3.3%) was the least often used. Additionally in the study the influence of the type of school on the type of contraceptive method was evaluated. It was noted that vocational schools students used coitus interruptus more often than others. People aged 21-26 paid more attention to quality and comfort of sexual intercourse compared to their younger peers. Young adults in Silesian province indicated media (72.6%) as the main source of contraception knowledge and parents (29.2%) and doctors (23%) as the least popular. The authors assessed that the average age of sexual initiation was gradually lowering and earlier age of first sexual experiences and worse education promoted contacts with many sexual partners. The higher the intellectual level of the subjects the more often they use various contraceptive methods [6].

The analysis of the results of the study by Szelağ which included students of the highest grade in high schools showed great knowledge of the students about infection and prevention of HIV/AIDS. The multiple choice test containing closed-end questions and constructed according to methodology of biology teaching was the study tool. The questions were gathered in themes concerning the knowledge of concepts, the knowledge about infection and clinical aspects as well as informed choices and attitudes of the students towards patients with AIDS and people living with AIDS. It was found that there were differences in the level of knowledge between girls and boys in favour of the girls. Students living in urban area had greater knowledge about concepts used in HIV/AIDS issues. The level of knowledge of the youth about HIV/AIDS depended on the number of biology classes taken. Students of pre-med classes (greater number of biology and chemistry classes) knew the correct answers to most of the questions. These results and experiences connected to author's work as a biology and "upbringing to live in a family" classes teacher allowed to draw a conclusion that "upbringing to live in a family" classes should stay in the school educational programme as a separate classes with properly prepared teacher instead of educational path realized by all teachers in all classes. Moreover, according to the author, additional teachers' activities as organizing knowledge competitions, art competitions, encouraging students to prepare pastoral scenes increase the efficiency of

education. Such activities, organized on a regular basis, should find their place in the calendar of school events. In the implementation of the activities connected with HIV/AIDS issues cooperation of all teachers, especially the help of heads of classes and school counsellor as well as appreciation of school authorities are very important [7].

Dyk studied the level of knowledge of 15-18-year-old students of Poznań schools about HIV/AIDS using the method of diagnostic survey with self-constructed questionnaire. The study included 70 students attending middle and high schools. Questions, results and their interpretation were divided into 3 thematic groups: knowledge about HIV/AIDS, ways of spreading the virus and methods of prevention of HIV infections. The subjects had great about the topic, in their opinion avoiding casual sexual encounters and using condoms (75%) were the most important actions protecting against the diseases. In case of risky behaviour it was taking the test for anti-HIV antibodies (98%). Giving the correct answers on the length of the period from the moment of HIV infection to developing symptoms (30% Don't know answers), risk of infection in a public toilet (35.7% Don't know answers) or existence of HIV vaccine (47.1% Don't know answers) was very problematic. 37.1% answered incorrectly to the question whether HIV can be carried by mosquitoes. Television (91%) was the most often chosen source of information about HIV/AIDS, 75% pointed to youth magazines and school classes. Meeting the specialist (27%) was the least popular source of information. The study confirmed the high level of knowledge of adolescents about HIV/AIDS and possibilities of preventing the infection. Awareness of the threats of HIV/AIDS was assessed on the average level, but in the author's opinion young people are prepared to use the knowledge in real-life situations, they are also able to express their opinion regarding the threats of HIV/AIDS [2].

The assessment of the level of knowledge about STD was done by Wdowiak et al. The study included students of Medical University (UM), John Paul II Catholic Lublin University (KUL) and Marie Curie-Skłodowska University (UMCS) in Lublin. The questionnaire constructed by the authors was used in the study. The results of the study showed the low level of knowledge of male students (52%) about STD, the level of knowledge of female students (43.5%) was average. Other relevant factors included age, student aged 24-26 (52.8%) had the highest level of knowledge. There were also significant differences with respect to the universities: medical students had the highest and KUL students had the lowest level of knowledge. Internet (67.3%) was the main source of information of students about STD, other sources included the university (60%) and media (53.3%). Vast majority of the subjects considered using condoms, avoiding casual sexual encounters and having one sexual partner as the elements of prevention. In authors' opinion it is necessary to intensify the activities aimed at increasing the level of

knowledge of students about STD, particularly male students, aged 21-23 and studying outside medical universities. Moreover, the authors postulated that medical staff should be the main source of information about STD (in particular chlamydia and monilial vaginitis) [8].

An interesting research concerning the level of knowledge about STD and rules for condom use in the context of STD including HIV/AIDS was made by Tritt. He examined 2255 subjects including students of different types of universities, teachers, professional soldiers and Military Academy cadets. An anonymous questionnaire consisting of 24 questions was the study tool. The results of the study showed that many respondents did not know the difference between HIV and AIDS, and a large number of respondents know very little about basic sexually transmitted diseases (only 63% knew gonorrhoea and 58% knew syphilis). More than 90% of the respondents did not know anogenital venereal wart, chancroid, chlamydiosis, pubic lice, trichomoniasis, hepatitis, genital herpes, 85% of fungal diseases. Vast majority of the subjects knew how to use a condom (though ca. 30% did not, including over 5% who would put a condom onto both scrotum and penis). In author's opinion the lack of knowledge about STD is in part caused by insufficient level of sexual and health education. This fact can lead to taking hazardous sexual behaviour which in consequences give new cases of STD and cause serious problems of public health in broad sense [9].

Olejniczak et al. studied high school graduates from Warsaw and Ciechanów high schools. The objective of the study was to assess the level of the knowledge of the students about STD concurrently taking into account sex education of the young people. The study included 200 students. The questionnaire constructed by the authors was the study tool, it consisted of questions dealing with knowledge of symptoms and complications, sources of information as well as prevention and risk factors of syphilis, HIV/AIDS and cervical cancer. The respondents declared the medium level of knowledge of the topic, and it was confirmed in the results of the study. The graduates learnt about STD mostly from internet (130 respondents), the school (118 respondents), parents (41 respondents) and peers (32 respondents). 27 respondents were not interested in the topic. Women knew more about STD than men. According to the graduates (mostly females) avoiding casual sexual encounters (87%), using condoms (83%), proper hygiene (66.5%), regular check-ups (64.5%) are the best methods of preventing sexually transmitted diseases. Twelve per cent of the respondents (from which 87.5% were men) indicated prophylactic medication as prevention of STD, coitus interruptus was indicated by 4% of the respondents (mostly males). Don't know answer was checked by 4.5% of the respondents (only males). According to the authors the level of education of the graduates about STD is insufficient. This fact creates a risk of increasing the rates of STD infections and general

worsening of the health status in this group, additionally creating the threats of unwanted consequences for partners and families of the subjects. In authors' opinion there should be more attention paid to STD issues, not only at school, but also in the environment of the upbringing, highlighting the importance of parents and guardians. Moreover the authors called for focusing the youth on skilful information retrieval as well as extracting it from reliable sources [10].

Mężyk et al. undertook studies about the awareness of risk factors and prevention methods of STD infections. The study based on the questionnaire constructed by the authors included 100 students from Silesian agglomeration. The questions regarded the knowledge about symptoms and complications of STD, the sources of information and sexual behaviour of the youth. In the study group only 52 people use reliable medical scientific literature to extract information about STD and only 16 people got the information from the physician. None of the respondents use free phone line. Other sources of information included school classes (33 people) and parents (45 people). Most of the subjects named HIV/AIDS, syphilis, gonorrhoea as sexually transmitted diseases, just 2 respondents indicated chlamydia. The low level of the knowledge was also confirmed by the fact that 98% of the respondents had no knowledge about human papillomavirus, 65 students did not know any complications of STD and as many as 88 people thought that all sexually transmitted diseases were curable. It is also disturbing that 11 people see no harm in casual sex. Majority of the respondents (70 people) would call in a doctor in case of STD infection, no one would turn to their teacher in that case. It is positive that sexually active people made the decision about sexual relations because of falling in love, but it is distressing that 9 people started sexual activity out of curiosity and 4 students were under the influence of alcohol. In the opinion of the authors young people have the basic knowledge about STD however it is incomplete. The subjects confirmed that there is not enough media programmes about safe sex as well as not enough debates about the topic at school [11].

Pikala et al. made an interesting research concerning the knowledge of high school students about HIV infections. The study indicated the regions especially important during educational and prophylactic activities. The authors examined 248 high school students aged over 18 using the questionnaire made by them consisting of 46 questions. The questions dealt with knowledge about AIDS development, sources of infection, knowledge of risk factors, methods of avoiding infection, knowledge about treatment and screening. The results showed that there were many misconceptions concerning HIV infection risk reduction among the youth. Only 37.5% of the respondents were aware that the risk of HIV infection increases after using intoxicating substances. The fact that using tattoo parlour, beauty salon or hairdresser's can increase the risk of HIV infection was known to 82.6% of the respondents, but 38.7% thought that it is possible

to become infected with HIV during blood donation. Only 57.3% of the students knew that HIV tests administered in consultative and diagnostic centres are anonymous and free of charge. In authors' opinion in preventive actions there should be more attention paid to denying the misconceptions and stereotypes concerning the ways of spreading and reducing the risk of HIV infections. The preventive actions should include teaching young people that blood donation is not hazardous and that HIV diagnostic tests are anonymous and free of charge [12].

Podolska et al. undertook the problem of cervical cancer. The objective of the study was to evaluate the attitude of female students ready to be health educators in the field of cervical cancer prevention. The study included 284 students of pedagogy and sociology from two Szczecin universities. The anonymous questionnaire consisting of 16 questions concerning attitude towards prevention of cervical cancer was the study tool. In the respondents' opinion the availability of the information about prophylactic programmes is limited and personal invitation to cervical cytology is the basic information. A major proportion of the subjects were afraid of gynaecological examination, which is one of the main reasons for avoiding free screening. Majority of the subjects shared an opinion that free screening should be mandatory and be one of periodic examinations of the employed workers. The study concludes that future educators have problems with adaptation to regular gynaecological examination, even though as students of pedagogy and sociology should set an example for women and play an important role in health education [13].

## **Summary**

The analyzed content allowed to get partial yet very important picture of stock of knowledge of Polish youth about sexuality and STD. The content presented in the reviewed papers is a specific source of information and it is an important element partially filling the gap caused by the lack of properly conducted sex education at schools, health facilities and homes. According to the recommendation of Polish Gynaecological Society both prevention and therapy of STD should be based on education and counselling. It is also advised to perform activities focused on promoting safe sexual behaviour, identification of people infected with or without symptoms who do not seek possibilities of correct diagnosis and therapy. Effective diagnostics, treating infected people, treating sexual partners of people infected with STD and vaccinations preceding exposition of people at risk of STD [14].

In Poland the sex education topic is still raising ideological and political controversies. Despite the results of studies stating that Polish schools do not teach sex education and do not implement recommended programmes sufficiently, the problem is still marginalised. According to



Wejbert-Wąsiewicz et al. widespread cultural taboo imposed on the domain of human sexuality, “politicisation” of this domain and the lack of educators well prepared to teaching sex education at schools uphold the unfavourable situation [15].

The current school programme “upbringing to live in the family”, according to UN recommendations should popularize modern knowledge about sexuality, that could reduce the threats which are the results of HIV infections and other STD [16]. However the studies show that the youth perceive sex education conducted at school as boring and unnecessary. The main reasons for that are the lack of professional educators and sex education conducted by priests, RE or biology teachers, which is evaluated especially negatively. In the opinion of young people they do not allow asking difficult questions by avoiding the subject matter and limiting teaching to vague information about human anatomy and promoting several chosen contraceptive methods like calendar method or using condoms. The classes where teachers cannot attract students are often a subject of mockery and sarcastic comments.

Young people do not look for support from near relatives or medical specialists. They indicate internet, magazines and peers as the sources of sexual knowledge. Embarrassment and fear are reasons why young people do not talk to their parents about their sex life. Some think that sex is too intimate matter to talk to anybody, and in opinion of many young people a sense of adulthood is an excuse for not telling parents about everything. It is worth pointing out that the internet plays an important role in all fields of life of modern Polish youth [15].

In the evolving Polish realities sexual awareness is a complicated process for many young people. Due to the lacks in sex education at home, school and medical institutions and without prior proper preparation to own sexuality the youth is exposed to losing sexual and reproductive health. Providing sound knowledge, which would pay off in terms of physical, mental and emotional health is one of the most important tasks of sex education.

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