

Does engaging in risky sexual behaviour depend on the level of knowledge about HIV? Study among Polish women

Czy angażowanie się w ryzykowne zachowania seksualne zależy od poziomu wiedzy na temat HIV? Badania wśród polskich kobiet

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Key words: sexual behaviour, HIV knowledge, women's sexuality.

Słowa kluczowe: zachowania seksualne, wiedza na temat HIV, kobieca seksualność.

Abstract

Introduction: The number of HIV infections in Central and Eastern Europe is increasing while patterns of risky sexual behaviour and HIV knowledge level within Polish women have not been extensively researched.

Aim of the research: The aim of the study was to measure the tendency for risky sexual behaviour and prevalence of condom use. The obtained data allow one to identify risk factors for contracting HIV/sexually transmitted infections and provide a comprehensive assessment of HIV knowledge level among adult Polish females.

Material and methods: Data were collected in May–July 2020 with the use of a cross-sectional sample ($n = 620$) of women aged 18 years and above. Predictors of socioeconomic factors, risky sexual behaviour and HIV knowledge level were the focal points of the article.

Results: Student's t -test revealed that the average level of knowledge about HIV within females who always use a condom (median [Mdn] = 13.92) did not differ from that of participants who have unprotected sexual intercourse (Mdn = 13.93) ($t(1,62) = 0.38; p > 0.05$).

Conclusions: The analysis of the data collected from this study revealed that HIV awareness is positively correlated with an increase in engaging in risky sexual behaviour. The results of this study can be used to enhance prophylactic programs and other preventative interventions that aim to reduce the transmission of the HIV infection.

Streszczenie

Wprowadzenie: Liczba zakażeń wirusem HIV w Europie Środkowo-Wschodniej wzrasta, a wzorce ryzykownych zachowań seksualnych i poziom wiedzy na temat HIV wśród Polek nie zostały dokładnie zbadane.

Cel pracy: Celem badania był pomiar skłonności do ryzykownych zachowań seksualnych oraz rozpowszechnienia używania prezerwatyw. Uzyskane dane pozwalają na identyfikację czynników ryzyka zarażenia się HIV/STI oraz dają kompleksową ocenę poziomu wiedzy na temat HIV wśród dorosłych Polek.

Materiał i metody: Dane zostały zebrane od maja do lipca 2020 roku na próbie przekrojowej ($n = 620$) kobiet w wieku 18 lat i więcej. Głównymi aspektami analizowanymi w badaniu były: czynniki społeczno-ekonomiczne, ryzykowne zachowania seksualne oraz poziom wiedzy na temat HIV. Badanie zostało przeprowadzone przy użyciu narzędzi w postaci kwestionariuszy oceniających poziom wiedzy na temat HIV oraz ryzykownych zachowań seksualnych.

Wyniki: Test t -Studenta wykazał, że przeciętny poziom wiedzy na temat HIV wśród kobiet zawsze stosujących prezerwatywę (Mdn = 13,92) nie różnił się od poziomu wiedzy kobiet, które odbyły stosunek płciowy bez zabezpieczenia (Mdn = 13,93) ($t(1,62) = 0,38; p > 0,05$).

Wnioski: Analiza danych zebranych z tego badania wykazała, że świadomość HIV jest dodatnio skorelowana ze wzrostem przejawiania ryzykownych zachowań seksualnych. Wyniki tego badania można wykorzystać do ulepszenia programów profilaktycznych i innych interwencji zapobiegawczych, których celem jest ograniczenie przenoszenia zakażenia wirusem HIV.

Introduction

Risky sexual behaviour, particularly unprotected vaginal and anal intercourse, significantly contributes to the heightened vulnerability of women to HIV

transmission. There are very limited data concerning risky sexual behaviour among Polish women who are not commercial sex workers (CSW) or those who have not yet been diagnosed with human immuno-

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deficiency virus (HIV) [1]. Firstly, there is a lack of research focusing on Polish women, arguably making them an underrepresented demographic, which supports the need for this study. Secondly, due to the nature of the topic, research regarding sexual behaviour is extremely sensitive. According to the literature, it is difficult to estimate the level of knowledge that Polish women possess about the HIV [1, 2]. Emerging from the literature is the prevailing notion that the general awareness of HIV within Polish society is fragmented and incomplete [3].

Puskorz's observations indicate that a substantial demographic of infected individuals in Poland – approximately 50% to 70% – remains oblivious to their HIV status [4]. Contrary to the escalating trajectory of newly diagnosed HIV cases documented in certain European regions [4–6], the recent trajectory in Poland diverges. The report published jointly by the European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office for Europe shows that just over half (53%) of those diagnosed with HIV in 2017 in the European Region were diagnosed at a late stage of infection (CD4 cell count < 350 cells/mm³ at diagnosis) (HIV/AIDS surveillance in Europe 2018–2017 data). The report also indicates that heterosexual contact was the second most common transmission mode among people newly diagnosed in 2017 (33%, equally divided between men and women).

While a number of countries within the European Union have reported a decrease in the incidence of new HIV cases, Poland experienced a notable increase in the frequency of newly detected HIV infections in 2019, with a rise of 28.2% compared to the preceding year. Furthermore, this increase was notably higher by 21.4% when compared to the median recorded during the years 2013–2017 [7]. Conversely, the latest data from the National Institute of Public Health – National Institute of Hygiene (PZH) suggest that Poland's upward trajectory of HIV infections has commenced a decline. This downward trend could potentially be attributed to reduced diagnoses during the COVID-19 pandemic; however, it is important to note that these data provide substantial evidence of a prevailing decrease [8].

The data surveillance furnished by the Joint United Nations Programme on HIV/AIDS (UNAIDS) yields encouraging insights. Specifically, it underscores that within the cohort of 2.1 million individuals living with HIV in Western and Central Europe, as well as the North American region, as of the end of 2016, a commendable 85% knew their HIV status. This commendable progress serves as a testament to the imminent realisation of the inaugural target encapsulated within the World Health Organization's (WHO) intricate 90-90-90 strategy, wherein the aspiration of attaining a 90% awareness level among individuals afflicted with HIV becomes tangibly proximate [7]. However, the landscape of Central and Eastern

Europe, including Poland, presents a divergent narrative, one characterised by an intricate challenge. It is a challenge underscored by the substantial fraction of HIV-infected individuals within this demographic, encompassing a range from 20% to 70%, who remain oblivious to their HIV status – a distressing reality that perpetuates the persistence of HIV transmission [8]. This regional context engenders an overarching scenario where the WHO European Region continues to grapple with an ascendant trajectory in newly reported HIV infections, with the Eastern Europe Region notably contributing to this unfortunate escalation. More specifically, Poland finds itself within this evolving narrative, with estimations pointing towards an alarming 30% to 40% of HIV-infected individuals who currently exist outside the realm of awareness concerning their infection, consequently precluding their engagement with vital care interventions [9]. This nuanced landscape underscores the pressing imperative of targeted awareness and intervention strategies to arrest the propagation of the virus and bolster the attainment of broader public health goals. The relentless sweep of the COVID-19 pandemic reverberated globally, yielding profound repercussions on healthcare infrastructures, Poland being no exception. This upheaval manifested in the realm of HIV infection detection as well. A retrospective analysis for the year 2020 reveals a stark contraction in the number of newly confirmed HIV cases within Poland, with a recorded count of 934 instances. This figure starkly contrasts the preceding year, 2019, which tallied 1763 cases – an imposing decrease of 53% [10]. It is imperative to consider that the extended duration of the pandemic, coupled with its ensuing restrictions, may have additionally catalysed a heightened prevalence of precarious sexual behaviours and escalated consumption of psychoactive substances [10].

Aim of the research

The authors of this study aimed to determine whether there exists a relationship between the level of knowledge about HIV and the tendency to engage in sexually risky behaviour. A group of Polish females constituted the research sample. The increase in the level of an individual's knowledge regarding HIV transmission and prevention is essential in reducing the risk and spread of infection. Support for these assumptions can be found in the AIDS Risk Reduction Model (ARRM) [11]. It assumes that in addition to being aware of the risks, i.e. knowing about the consequences of risky behaviour, in order to change someone's behaviour, there must be a decision-making process and an assessment of the potential gains and losses associated with implementing a proposed change.

Material and methods

Participants were selected for this study based on a standardised anonymous questionnaire sent via an

online social media platform targeting Polish women. Qualification criteria were: age over 18, female, ability to complete the questionnaire in Polish, having had one or more sexual partners in the last 6 or 12 months and giving consent to participate in the study. The exclusion criteria included no history of sexual partners and providing incomplete responses to risky sexual behaviour scale questions. A link to the anonymous questionnaire (created in Google Forms) was published on social media and female forums. Outlined were the study purpose and participation terms including anonymity, privacy and confidentiality. The respondents were required to read an informed consent statement and to agree to participate by clicking 'yes' in the online questionnaire before being enrolled in the study. In total, there were 659 completed surveys, of which 39 were excluded due to participants declaring not sexually active and/or under 18. The final sample consisted of 620 females who completed the survey and met the eligibility criteria.

Participants were asked to complete a structured questionnaire in Polish language. The development of the questionnaire was guided by a review of the literature. The survey was composed of 38 questions divided into three main sections, these being socio-demographics, sexual behaviour, and HIV knowledge level. The subset of questions related to socio-demographics included: gender, age, place of residence size (population), current household situation, level of education (according to the Polish educational system), employment, sexual orientation (heterosexual, bisexual, homosexual, asexual, other [please specify]). The subset of questions related to sexual behaviour included: marital status (single, married, homosexual cohabitation, heterosexual cohabitation, open relationship [I have casual sexual partners outside relationship]), number of sexual partners in last 6 and 12 months, whether or not the participant uses condoms during vaginal and/or anal or oral sexual intercourse (VI/AI or OI) (with three possible answers: 'always' – considered as consistent condom use; 'sometimes', 'never'), sexual intercourse with casual partner ('one night stand'), sexual intercourse with a friend who is not a partner ('friend with benefits'), using dating apps, sexual intercourse with casual partner met on dating apps, sexual intercourse with casual partner without condom used, chemsex (recreational drug use for sexual purpose), sexual intercourse under influence of alcohol with a casual partner, paid for sexual intercourse, participation in sexual group intercourse and sexual intercourse with someone who used injectable drugs (IVDU). The questions assessing the level of HIV knowledge were based on the HIV Knowledge Questionnaire (HIV-K-Q) [12]. Aspects studied include: (A) transmission–non-transmission, (B) effective and ineffective prevention methods, (C) consequences of infection, (D) general knowledge.

Moreover, additional questions explore the aspect of knowledge concerning pre-exposure prophylactic (PrEP), post-exposure prophylactic (PEP), adequate time for HIV testing and HIV transmission on anti-retroviral therapy. The questionnaire consisted of 16 questions to which the respondents answered true or false. The maximum number of points possible to obtain in terms of knowledge about HIV was 16, which means that the test result was positively correlated with knowledge about HIV (Attachment 1).

Statistical analysis

All statistical analyses were performed using IBM SPSS Statistic 25 (IBM Corp., Armonk, NY, USA). Quantitative variables were compared using Student's *t*-test, given that they fit the normal distribution, and the analysis of variation (ANOVA) test. The Spearman correlation test was used to verify the relationship of variables. All tests were two tailed and a *p*-value < 0.05 was considered significant.

Results

At the completion of the study, 620 valid completed surveys were obtained (Table 1).

Age ranged from 18 to 64 years, average 27 ± 8.5 . More than half of the respondents had upper secondary education, and 194 people had an academic degree. The majority of respondents identified themselves as heterosexual, followed by homosexual, bisexual and asexual. Almost half of the surveyed women were in a heterosexual relationship, one fifth were married, one third were single, and a few women were in an open relationship or homosexual cohabitation (Table 2).

Among the respondents, 22.42% reported having had from two to fifty sexual partners in the last year. Nearly a third of the women surveyed had had sexual intercourse with a casual partner ("one-night stand"), and most of them confirmed that they did not use a condom during intercourse. What is more, more than a third of those surveyed had had sex with a friend who was not a partner ("friend with benefits"), and almost a quarter had had sex with someone they met on dating apps such as Tinder. Only 22 women had engaged in chemsex (recreational use of drugs for sexual purposes), and 105 had had sexual intercourse under the influence of alcohol with a casual partner. Some respondents had had sexual intercourse with an injecting drug user (IVDU).

The assessment of condom use shows that only some respondents consistently use a condom (always) during vaginal/anal intercourse, while a significantly small group does it during oral intercourse. Importantly, the data also show that only 35.97% of all study participants have ever been tested for HIV; therefore 64% of respondents have never been tested for the virus.

The analysis of the level of knowledge about the HIV virus showed that the majority of Polish women surveyed do not know the date by which they should undergo HIV testing after possible exposure. Moreover, most respondents do not know what pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) are (Table 2).

Normal distribution analysis enabled the use of parametric tests. The assumption of normal distribution was met. Student's *t* test, ANOVA test and Pearson correlation were used for analyses.

The Student's *t*-test analysis showed that among women who stated consistent use of condoms during intercourse, the average level of knowledge about HIV ($M = 13.92$) did not differ from that of the participants who have unprotected sexual intercourse ($p > 0.05$). Interestingly, the obtained data showed significant differences between the two groups in the tendency for displaying risky sexual behaviour. Women who reported always having protected sex engaged in significantly less risky behaviours ($M = 2.23$; $p < 0.001$) than those who have intercourse without a condom ($M = 4.38$; $p < 0.001$). These results show that despite a similar level of knowledge about HIV, women who do not protect themselves at each sexual encounter are considerably more likely to be involved in risky sexual behaviour, especially if we assume that sexual intercourse without a condom is itself a risky sexual behaviour (Table 3).

As stated previously, when comparing the results of women who always have protected sex and those who do not, there was no significant difference in terms of HIV knowledge level. Therefore, it was decided to examine whether a positive or negative relationship existed between these variables, if at all. We were also eager to establish whether there are differences in the level of knowledge about HIV and the level of willingness to participate in risky sexual behaviour among women of different sexual orientations. For further comparisons of means, one-factor ANOVA for independent samples was used. It was found that significant differences ($p < 0.001$) in the level of knowledge about HIV occurred only between bisexual ($M = 15.12$) and heterosexual ($M = 13.64$) women. Therefore, no significant differences in the level of knowledge about HIV were observed between homosexual women ($M = 14.87$) and other sexual orientations. Thus, bisexual women showed the highest level of knowledge about HIV, followed by homosexual women, and heterosexual women showed the lowest level. Interestingly, as regards the tendency for risky sexual behaviour, the same statistical test showed no significant differences between the groups of women as the results were almost equal (bisexual – $M = 16.68$; heterosexual – $M = 16.34$; homosexual – $M = 16.93$) (Table 4). We also decided to examine whether the relationship status of the surveyed women would differentiate them in terms of the ana-

Table 1. Socio-demographic characteristics of the sample of female respondents ($n = 620$)

Variable	Number	%
Place of residence size (population):		
Village	110	17.74
Small town up to 50 000 residents	110	17.74
Large town from 50 000 to 100 000 residents	59	9.52
City with more than 100 000 to 500 000 residents	129	20.81
City with over 500 000 residents	212	34.19
Current household situation:		
Own flat/house/studio	138	22.26
Rented flat/house/studio	229	36.94
Living with parents	214	34.52
Flat/house shared with others (family/unrelated)	30	4.84
Student dormitory	9	1.45
Education:		
Junior high school	37	5.97
Medical school (nurse, doctor)	9	1.45
Primary school	2	0.32
Postgraduate school	16	2.58
Upper secondary	333	53.71
Academic degree	194	31.29
A-Level	29	4.68
Employment:		
Employed	280	45.16
Unemployed	54	8.71
Retired	2	0.32
Student	284	45.81
Sexual orientation:		
Heterosexual	504	81.29
Homosexual	15	2.42
Bisexual	82	13.23
Asexual	7	1.13
Other	12	1.94

lysed variables. The results showed that, considering the relationship status of the respondents, the level of knowledge about HIV and risky sexual behaviour display between women in a cohabitation relationship, married and single did not differ. Married women showed the highest level of knowledge about HIV ($M = 13.94$), followed by cohabiting women

Table 2. Sexual behaviour characteristics of the sample of female respondents ($n = 620$)

Variable	Number	%
Marital status:		
Single	184	29.68
Married	129	20.81
Homosexual cohabitation	12	1.94
Heterosexual cohabitation	286	46.13
Open relationship	9	1.45
Number of sexual partners in the last 1 year:		
None	71	11.45
One	410	66.13
Two and more	139	22.42
Had sexual intercourse with a casual partner:		
Yes	168	27.1
No	452	72.9
Had sexual intercourse without a condom with a casual partner:		
Yes	142	22.9
No	478	77.1
Had sexual intercourse with a friend who is not a partner:		
Yes	193	31.13
No	427	68.87
Using a condom during vaginal/anal intercourse:		
Always	202	32.58
Sometimes	203	32.74
Never	215	34.68
Using a condom during oral intercourse:		
Always	23	3.71
Sometimes	47	7.58
Never	405	65.32
Never had oral intercourse:	145	23.39
Using dating app:		
Yes	69	11.13
No	401	64.68
In the past: yes	150	24.19
Had sexual intercourse with someone met on dating app:		
Yes	144	23.23
No	474	76.45
I don't know	2	0.32
Chemsex:		
Yes	22	3.55
No	598	96.45

Table 2. Cont.

Variable	Number	%
Had sexual intercourse under influence of alcohol with a casual partner:		
Yes	105	16.94
No	515	83.06
Paid for sexual intercourse:		
Yes	6	0.97
No	602	97.1
I don't know	12	1.94
Group sexual intercourse:		
Yes	30	4.84
No	590	95.16
Sexual intercourse with someone who used injectable drugs:		
Yes	124	20
No	496	80

Table 3. Student's *t*-tests – differences between groups

Variable	Women who stated consistent use of condoms during intercourse		Women who have unprotected sexual intercourse	
	M	SD	M	SD
Level of knowledge about HIV	13.92	3.05	13.93	2.3
Risky sexual behaviour	2.23***	2.06	4.38***	2.64

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4. ANOVA test – differences between groups

Parameter	Homosexual		Heterosexual		Bisexual	
	M	SD	M	SD	M	SD
Level of knowledge about HIV	13.92	3.05	13.93***	2.3	15.12***	3.04
Risky sexual behaviour	2.23	2.06	4.38	2.64	3.68	2.75

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.05$.

($M = 13.91$), and single women ($M = 13.7$), who presented the lowest level. It should be noted that these differences are minimal. In respect of risky sexual behaviour, they were most often manifested by single women (16.71), then by women in a cohabitation relationship ($M = 16, 42$), and least often by those in a marital relationship ($M = 15.79$) (Table 5).

Correlation analyses were conducted and revealed a significant relationship between the level of knowledge about HIV and engaging in risky sexual behaviour in most of the studied groups of sexual orientations. The strongest and most significant relationship between the variables was observed among women who defined their sexual orientation as 'other'. The analysis of the correlation showed that in this study group, together with the level of knowledge

about HIV, the tendency for risky behaviour not only does not decrease, but in fact it increases, demonstrating a positive, strong correlation ($r = 0.6$; $p < 0.01$). Similarly, in relation to those who described their sexual orientation as 'other', those who stated their sexuality to be 'bisexual' also demonstrated a significant positive weak relationship between HIV knowledge level and engaging in risky sexual behaviour ($r = 0.24$; $p < 0.05$). Finally, in the group that identified as 'heterosexual', a weak but significant positive correlation was observed between the HIV knowledge level and risky sexual behaviour variables ($r = 0.1$; $p = 0.05$). There was, however, no significant relationship between the above-mentioned variables in the group of homosexual respondents. The results presented here indicate the need for further discus-

Table 5. ANOVA test – differences between groups

Parameter	Marriage		Single		Partner	
	M	SD	M	SD	M	SD
Level of knowledge about HIV	13.94	3.05	13.7***	2.3	13.91***	3.04
Risky sexual behaviour	15.79	2.06	16.71	2.64	16.42	2.75

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.05$.

sion concerning risky sexual behaviour changes, as possessing knowledge about the risk does not suffice to encourage individuals to implement pro-health measures, as has been demonstrated with the obtained data.

Discussion

Previous research in the field of HIV and risky behaviour has predominantly focused on specific groups, notably men who have sex with men (MSM), and studies involving women have often centred on high-risk populations, such as sex workers [12, 13]. However, this study aims to address a critical scientific and clinical concern within the broader demographic of women, regardless of their professional status. The findings obtained in this study have the potential to yield valuable insights for the development of prevention programs and contribute to an enhanced understanding of risk behaviours and strategies for mitigating HIV transmission among women. This issue carries significant importance given the mounting evidence suggesting an increasing number of young women engaging in casual and often risky sexual encounters as well [14].

The results of the authors' research have yielded several noteworthy conclusions.

Counter to initial presumptions, the study has unearthed no substantial disparities in knowledge levels and proclivity for risky behaviour among women engaged in partnerships, marriages, and those in single status. This implies that involvement in an intimate romantic relationship does not inherently act as a protective bulwark against the engagement in risky sexual conduct.

Secondly, considering the sexual orientation of the surveyed sample, only bisexual and heterosexual women differed significantly regarding the tendency for risky behaviour [15].

What is more, the analysis of authors' research showed that the level of knowledge about HIV was positively correlated with an increase in displaying risky sexual behaviour. This suggests that risk awareness is not sufficient to encourage individuals to engage in health protective behaviour such as using a condom in order to ensure one's safety from an infection.

The perception of health risks is often considered a condition for changing a hazardous behaviour; if

one has no awareness of danger, there is no motivation to change [16]. However, numerous studies show that the mere induction of fear in an individual does not stimulate them to change their behaviour or avoid danger [17].

Supported by several studies [18–21], the authors verified that the relationship between the level of knowledge about HIV and tendency for risky sexual behaviour is ambiguous. Interventions limited to raising awareness about HIV provide a basis for reducing one's willingness to engage in risky sexual behaviour but are not sufficient.

The authors suggest that when conducting future interventions for those at risk of contracting HIV through unsafe health behaviours, further information should be provided regarding prophylaxis and elements of the presented models should be integrated. Only through combining these methods would the efficacy of preventing HIV transmission and encouraging positive health behaviour changes increase.

Conclusions

While this study has shed light on crucial aspects of HIV-related risk behaviour among women, it is essential to acknowledge and address the study's limitations. These limitations not only inform the scope of this research but also offer valuable insights into avenues for future investigations in this field.

Firstly, the issue of sample size warrants careful consideration. As with many research endeavours, a larger study group would have undoubtedly bolstered the reliability and generalisability of the findings. However, the challenge of recruiting a more extensive pool of respondents cannot be underestimated, particularly given the intimate nature of the questions posed. Future research should thus explore innovative strategies for data collection that respect the privacy and sensibilities of participants while enabling a more expansive and diverse sample.

Secondly, the need to standardise sample sizes within different sexual orientation groups is a salient point. As observed, discernible differences in risky behaviour were identified among bisexual and heterosexual women. This prompts further inquiry into the intricate dynamics at play within various sexual orientation categories. Future studies may consider stratified sampling techniques to ensure robust representation within each subgroup, thereby facilitating more

nuanced analyses and yielding practical implications that cater to the unique needs of these populations.

Furthermore, it is imperative to recognise that this study, albeit pioneering, is exploratory in nature. Its primary aim was to delineate the scale of the problem and advocate for heightened public awareness concerning women's sexuality and sexual health. As such, this research should serve as a catalyst for more comprehensive and in-depth investigations in this domain. Subsequent research efforts may delve deeper into the factors that underlie the observed correlations between knowledge and risky behaviour, exploring the multifaceted interplay between cognitive awareness, emotional factors, and sociocultural influences.

In conclusion, this study offers a foundational framework for understanding HIV-related risky behaviour among women. It also underscores the critical need for further research that addresses the noted limitations, expands upon the current findings, and strives for a more comprehensive understanding of the multifaceted issues surrounding women's sexual health. These future endeavours will not only contribute to the field of health protection but also enhance our ability to develop tailored interventions that effectively mitigate HIV transmission and promote positive health behaviours among women.

Conflict of interest

The authors declare no conflict of interest.

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Attachment 1

1. HIV knowledge questionnaire – true or false.
2. A person can become infected with HIV by using public toilets.
3. HIV is NOT transmitted through droplets, e.g. if someone sneezes close to us.
4. HIV can be transmitted by mosquitoes or similar insects.
5. You can become infected with HIV by sharing a glass of water or eating meals with someone who has HIV.
6. A pregnant woman who has HIV can pass the virus to her unborn child.
7. A woman with HIV can pass the virus on to her baby through breastfeeding.
8. Using condoms reduces the risk of HIV infection.
9. Washing your private parts/genitals after sexual intercourse protects against HIV infection.
10. A person living with HIV can look and feel healthy.
11. People infected with HIV quickly develop serious symptoms indicating infection.
12. Women always have an HIV test during Pap smear.
13. You cannot become infected with HIV through oral sex (mouth-to-penis) with a man who has HIV.
14. A woman cannot become infected with HIV if she has sexual intercourse during her period.
15. Athletes who share needles while using steroids can become infected with HIV from the needles.
16. Healthy eating and taking vitamins protects against infection.
17. Having more than one sexual partner increases the risk of HIV infection.