

# YOUTH VIEWS ON COMPREHENSIVE SEXUALITY EDUCATION AS A PART OF FORMAL EDUCATION

Research on youth knowledge and attitudes on reproductive health



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and attitudes on reproductive health



*Research on the views of youth about comprehensive sexuality education, and their knowledge of and attitudes towards reproductive health was conducted for the purpose of program activities planning of the United Nations Population Fund in Bosnia and Herzegovina (UNFPA BiH). The results of this research can also be used by other organizations working with youth as well as decision-makers for similar purposes.*

*Participants of the research were selected through a network of youth organizations and the results are not statistically representative for the entire BiH territory. Therefore, a comparison with the data of other, similar surveys is recommended for the use of results with greater reliability.*

*Views, opinions and conclusions of the author of this report do not necessarily represent the views of the United Nations Population Fund.*





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## 2. Introduction

In order for young people to get information, skills and motivation to make healthy decisions about sexual relationships and sexuality throughout life, they need education about sexuality. Every young person will one day make an important life decision about his/her sexuality and reproductive health. However, research shows that most adolescents lack the knowledge they need to make decisions responsibly, making them vulnerable to coercion, sexually transmitted diseases and unwanted pregnancies. Comprehensive education on sexuality enables young people to protect their health, well-being and dignity.

The United Nations Population Fund works with governments to implement comprehensive education on sexuality, both in schools and through training and community information. The United Nations Population Fund also promotes policies on and invests in sexuality education programs which meet internationally agreed standards. Since these programs are based on the principles of human rights, they promote gender equality, rights and empowerment of young people.

Comprehensive education about sexuality is a gender-based approach to education based on rights whether in or outside school. It is taught for several years, providing information that is appropriate to the age and development capacities of young people. It includes accurate scientific information on human development, anatomy and reproductive health, as well as information on contraception, childbearing and sexually transmitted diseases, including HIV. However, this approach goes a step further from informing by helping young people to explore and nurture positive values of their sexuality and reproductive health. This education includes discussions on family life, relationships, culture and sexual roles, addressing human rights, gender equality and raising awareness on hazards such as discrimination and sexual abuse.

Protecting sexual and reproductive health among youth has important social and economic implications: HIV infection, other sexually transmitted diseases, unwanted pregnancies and risky abortions are a major burden on families and communities, yet they can be prevented and reduced. Promoting sexual and reproductive health of young people, including the provision of sexuality education in schools, is in line with the Goals of Sustainable Development, in particular Goal 3 (Health and Well-being) and Objective 5 (Gender Equality). The Research was conducted by proMENTE organization.

## 3. Research goals:

1. Assess youth knowledge of sexuality, including knowledge of sexually transmitted diseases and protection against sexually transmitted diseases, the use of contraception and the most common sources of reproductive health knowledge;
2. Examine the perspective of young people about the need for formal, evidence-based and adapted education about sexuality;
3. Examine the views of youth about the most appropriate methods of transferring knowledge about sexuality.

# 4. Methodology

## 4.1 Respondents

The research on reproductive health involved 2,783 young users of the Facebook social network of which 1,909 (68.6%) were females and 874 (31.4%) were males aged 15 to 25.

## 4.2 Instruments

The questionnaire was designed to examine the views and knowledge of youth on reproductive health and the need to introduce this topic into the formal education system. The questions are organized in three blocks: demographic data, reproductive health knowledge and reproductive health education. The questionnaire has been adapted for the web environment, linguistically tailored to gender of the respondents, and optimized for use on computers, mobile devices and tablets, and was distributed online. The questionnaire also contained conditional questions<sup>1</sup>.

### 4.2.1 Demographic data

Demographic data block contained five questions: age, current area/region of residence, gender, current status in education and current/last completed level of education. Respondents who responded to their current education were redirected to the question “*Which school do you currently attend?*”, while the respondents who answered that they are not currently being educated were redirected to the question “*Which of the above schools did you complete the latest?*”.

### 4.2.2 Knowledge about reproductive health

The first question in this block contained 13 claims about the knowledge and views of youth on reproductive health that could have been assessed with responses “*true*”, “*false*” or “*I do not know/I am not sure*”. Three claims measure views (e.g. “*Contraception is only a girl’s concern and obligation*”), while other claims test the knowledge of youth (e.g. “*A woman can get pregnant if she has sexual intercourse during her menstrual period*”).

The second question was related to knowledge of sexually transmitted diseases. Respondents should recognize all sexually transmitted diseases among the 11 offered diseases. Seven sexually transmitted diseases have been offered: HIV/AIDS, chlamydia, gonorrhea, genital herpes, trichomoniasis, syphilis and HPV. The other four diseases had been: ulcerative colitis, celiac disease, hyperthyroidism and conjunctivitis and they do not fall within sexually transmitted diseases.

The third and fourth question concerned the contraceptive methods and sexually transmitted diseases. The methods offered can be categorized into three groups: modern methods, traditional methods and incorrect methods. The modern methods offered are: pills, intrauterine device, hormonal injections, hormonal implants, male condom, female

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<sup>1</sup> Some questions shown to the respondents were dependent on the responses to some of the previous questions..

condom, diaphragm, contraceptive foam/gel and the day after pill. The traditional methods offered were: monitoring of fertile and infertile days, interrupted intercourse and abstaining from sexual intercourse (abstinence). The offered incorrect methods were: showering and douching after intercourse, sexual intercourse in a standing position, drinking parsley tea and increased physical activity of the woman after sexual intercourse.

In the third question the respondents should have chosen all the ways in which pregnancy can be prevented.

In the fourth question the respondents should have chosen ways to protect against sexually transmitted diseases.

### 4.2.3 Education on reproductive health

The first question in this block was related to previous sources of knowledge on reproductive health. Respondents could have selected one or more responses among the 11 offered, with the possibility to write additional responses.

The second question in this block examined the views of young people on whether reproductive health should be a part of formal education. Respondents could have selected only one of the responses offered. If the selected response was that this topic should be taught in elementary school, secondary school or both elementary and secondary schools, respondents were redirected to the question of how to integrate reproductive health into formal education "*Reproductive health should be taught in school*". If the respondents selected the response that there is no place for this topic in school, they were redirected to the question of where else this topic should be taught "*Since you think that school is not a place to learn about reproductive health, can you tell us where do you believe it should be taught?*".

## 4.3 Procedure

The questionnaire was distributed through Facebook ads targeting youth who have an account on this social network with a residence in Bosnia and Herzegovina, within the age span of 15-25. The questionnaire was open for completion from 30 November 2017 to 12 December 2017. Upon opening the questionnaire, respondents were shown a filling instruction<sup>2</sup>. In order to ensure that only young people aged 15 to 25 participated in the research, the first question was "*How old are you?*" with offered responses. All respondents who indicated that they were under 15 and over 25 years of age were informed that the questionnaire is not intended for persons of that age. Respondents who indicated that they were 15, 16 and 17 years old were asked to notify their parents/guardians before completing the questionnaire and to confirm that they agree with the survey and that they have informed their parents/guardians about it, all in accordance with the Code of Ethics for Research Involving Children in BiH, and the Law on Protection of Personal Data. In the block "*Reproductive Health Knowledge*", the order of displaying offered responses was rotated randomly. The rotation of the offered responses minimizes errors in the results that can be attributed to the fatigue of the respondents, remembering the sequence of questions, or automatic filling in. All questions in the questionnaire were compulsory.<sup>3</sup>

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<sup>2</sup> Questionnaire with a filling instruction in the annex.

<sup>3</sup> Respondents could not move to the next block of questions if a question was left unanswered.

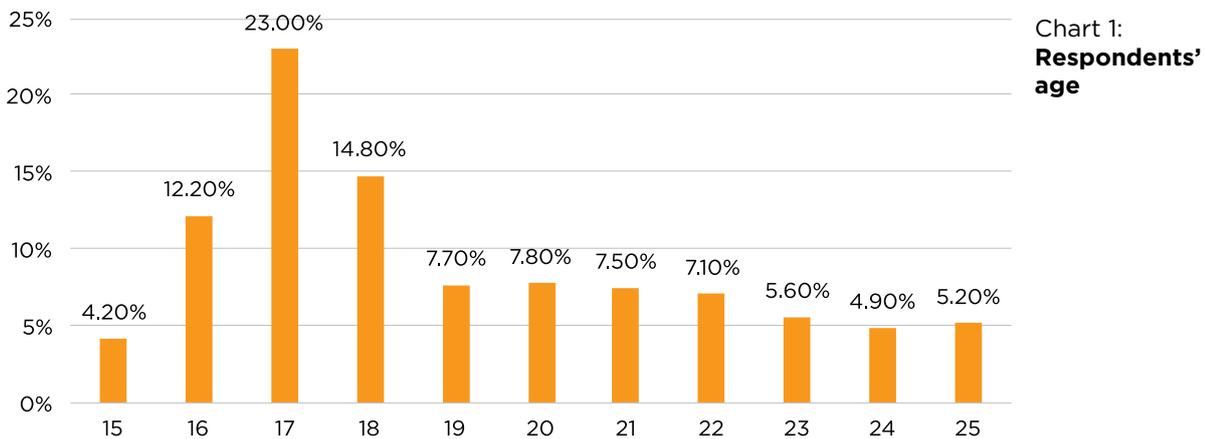
# 5. Results

## 5.1 Demographic indicators

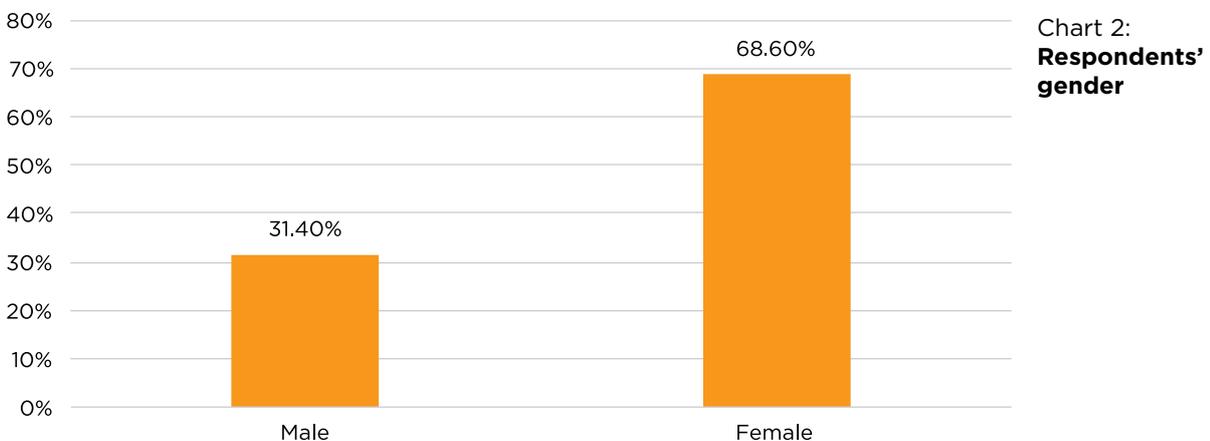
### Age and gender

The research involved 2,783 young people aged 15 to 25.

The average age of the respondents was 19. The largest number of questionnaires were filled by respondents aged 16 (12.2%), 17 (23%) and 18 (14.8%) and the smallest number of respondents were aged 15 (4.2%). Nearly 70% of the questionnaires were filled by respondents aged 15 to 20, while the percentage of questionnaires completed by persons aged 21 to 25 was lower.



The research included a larger number of female than male respondents. Out of 2,783 respondents, 1,909 (68.6%) were females and 874 (31.4%) were males <sup>4</sup>.



<sup>4</sup> Based on the size of the sample obtained, and with a confidence level of 99%, the confidence interval for females is 2.91 and for males 4.41.

## Ratio of sample and population by age and gender variables

Distribution of the sample for the research by age and gender variables was compared with the distribution of data on general population collected by the population, household and housing census in Bosnia and Herzegovina<sup>5</sup>, published by the Agency for Statistics of Bosnia and Herzegovina.

Based on the census, at the time of the census a total of 52,0931 persons aged 15-25 lived in BiH i.e. 14.75% of the total population. Distribution per age, within this age range (from 15 to 25 years), is mostly balanced and ranges between 9% and 10% with the exception of the age group of 15 years, which accounts for 8.7% of the total number of youth within the targeted group. Distribution of the specific age by gender group is also fairly uniform in the population.

The obtained sample for the research does not have a uniform distribution per age, as significant variations occur ranging from 4.2% (15 years) to 23% (17 years). In relation to the population, deviations range from 0.3% (20 years) to 13.1 % (17 years). Similar deviations of the distribution of the sample in relation to the population also range in the data differentiated by gender.

Based on all of the foregoing, we can conclude that due to the significant deviation of sample distribution in relation to the population, **the sample used is not representative**, and accordingly the obtained data cannot represent the results of the research applicable to the population.

Age	Total %			M %			F %		
	Sample	Census	<i>Difference</i>	Sample	Census	<i>Difference</i>	Sample	Census	<i>Difference</i>
15	4.2	8.7	<i>-4.5</i>	4.5	8.8	<i>-4.3</i>	4.0	8.7	<i>-4.7</i>
16	12.2	10	<i>2.2</i>	12.9	10	<i>2.9</i>	11.9	9.9	<i>2.0</i>
17	23	9.9	<i>13.1</i>	22.1	9.9	<i>12.2</i>	23.5	9.9	<i>13.6</i>
18	14.8	9.7	<i>5.1</i>	15.7	9.6	<i>6.1</i>	14.5	9.7	<i>4.8</i>
19	7.7	8.3	<i>-0.6</i>	7.7	8.4	<i>-0.7</i>	7.7	8.3	<i>-0.6</i>
20	7.8	7.5	<i>0.3</i>	8.1	7.5	<i>0.6</i>	7.6	7.4	<i>0.2</i>
21	7.5	8.5	<i>-1</i>	7.4	8.4	<i>-1.0</i>	7.6	8.6	<i>-1.0</i>
22	7.1	9.3	<i>-2.2</i>	6.8	9.3	<i>-2.5</i>	7.3	9.3	<i>-2.0</i>
23	5.6	9.3	<i>-3.7</i>	6.2	9.3	<i>-3.1</i>	5.3	9.2	<i>-3.9</i>
24	4.9	9.3	<i>-4.4</i>	4.2	9.2	<i>-5.0</i>	5.1	9.4	<i>-4.3</i>
25	5.2	9.6	<i>-4.4</i>	4.5	9.6	<i>-5.1</i>	5.5	9.7	<i>-4.2</i>

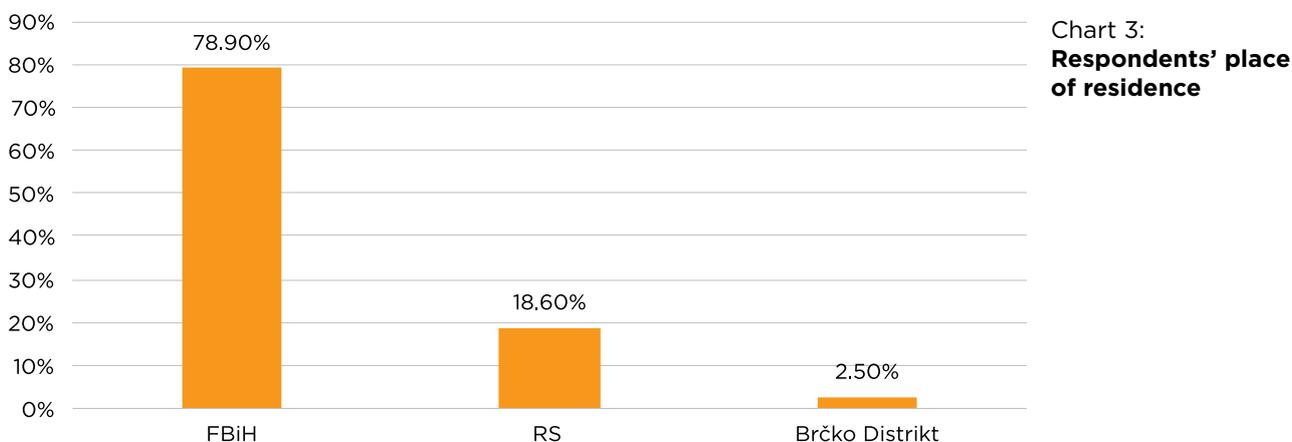
Table 1  
**Ratio of the sample and population by age and gender variables**

The total number of males within the population group aged 15-25 in BiH is 177,202 (51.26%), and the females 168,500 (48.74%). In the sample obtained, the percentage of male respondents was 31.4% and 68.8% of females. Accordingly, the difference in the percentage of respondents by gender in relation to the target population is 19.9%, and accordingly we conclude that the distribution of the sample according to the variable gender deviates significantly from the gender distribution in the target population.

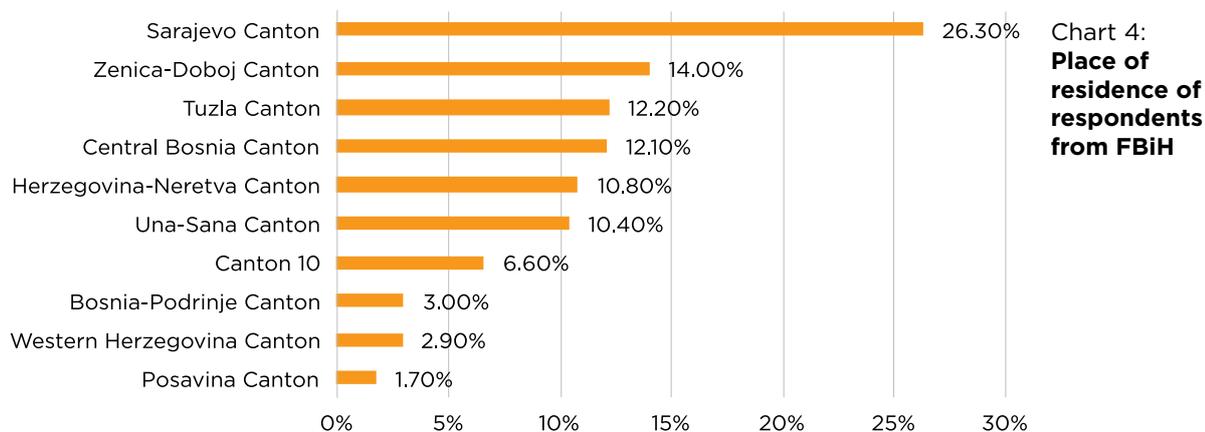
5 <http://www.popis.gov.ba/popis2013/knjige.php?id=0>

## Region/area of residence

78.9% of respondents living in the Federation of BiH, 18.6% of respondents from Republika Srpska and 2.5% of respondents from Brčko District participated in the research.



Out of 2,195 (78.9%) respondents living in the Federation of BiH, more than a quarter of the respondents live in Sarajevo Canton (26.3%). Then there are respondents from the Zenica-Doboj region (14.0%), Tuzla (12.2%) and the Central Bosnia Canton (12.1%). The smallest number of respondents live in the Posavina Canton (1.7%).



## Differences in the distribution of data by region/area variables between sample and target population

The difference in the distribution of data between the sample and the population of young people aged 15-25, in relation to the region/area, is also noticeable in the case of Republika Srpska, where the deviation is 12.8%, followed by Sarajevo Canton with a 9.6% deviation rate, Tuzla Canton (3.9%) and Canton 10 (2.9%). In other regions/ areas, the deviation is less than 2%, and the lowest recorded deviation is for the Posavina Canton with 0.1% difference.

Region/ Area	Total %			M %			F %		
	Sample	Census	<i>Difference</i>	Sample	Census	<i>Difference</i>	Sample	Census	<i>Difference</i>
Bosnian Podrinje Canton	2.4	0.7	<b>-1.7</b>	3.9	0.7	<b>-3.2</b>	1.7	0.7	<b>-1.0</b>
Herzegovina Neretva Canton	8.5	6.6	<b>-1.9</b>	6.5	6.6	<b>0.1</b>	9.4	6.5	<b>-2.9</b>
Canton 10	5.2	2.3	<b>-2.9</b>	5.8	2.3	<b>-3.5</b>	4.9	2.3	<b>-2.6</b>
Canton Sarajevo	20.8	11.1	<b>-9.6</b>	18.9	11.0	<b>-7.9</b>	21.6	11.3	<b>-10.3</b>
Posavina Canton	1.4	1.2	<b>-0.1</b>	1.4	1.3	<b>-0.1</b>	1.4	1.2	<b>-0.1</b>
Central Bosnia Canton	9.5	8.0	<b>-1.6</b>	9.3	8.0	<b>-1.3</b>	9.6	7.9	<b>-1.7</b>
Tuzla Canton	9.6	13.6	<b>3.9</b>	10.2	13.6	<b>3.4</b>	9.4	13.6	<b>4.2</b>
Una Sana Canton	8.2	8.6	<b>0.5</b>	8.9	8.7	<b>-0.3</b>	7.9	8.6	<b>0.8</b>
Western Herzegovina Canton	2.3	3.0	<b>0.7</b>	2.9	3.0	<b>0.1</b>	2.0	3.0	<b>1.0</b>
Zenica Doboј Canton	11.0	11.2	<b>0.2</b>	12.4	11.2	<b>-1.1</b>	10.4	11.2	<b>0.8</b>
Republika Srpska	18.6	31.5	<b>12.8</b>	16.8	31.6	<b>14.7</b>	19.4	31.3	<b>11.9</b>
Brčko District	2.5	2.2	<b>-0.3</b>	3.1	2.2	<b>-0.9</b>	2.3	2.2	<b>-0.1</b>

Table 2  
**Differences in the distribution of data by region/area variables between the sample and the target population**

## Education

Of the 2,783 respondents, 2,465 (88.6%) are currently in education. Of those currently in school, the largest number currently attends a four-year secondary school (60%), followed by respondents who attend the first level of higher education/ BA (31.6%). A lower number of respondents attends second level higher education/MA (6.3%), three-year secondary school (1.9%) or third level higher education/PhD (0.2%).

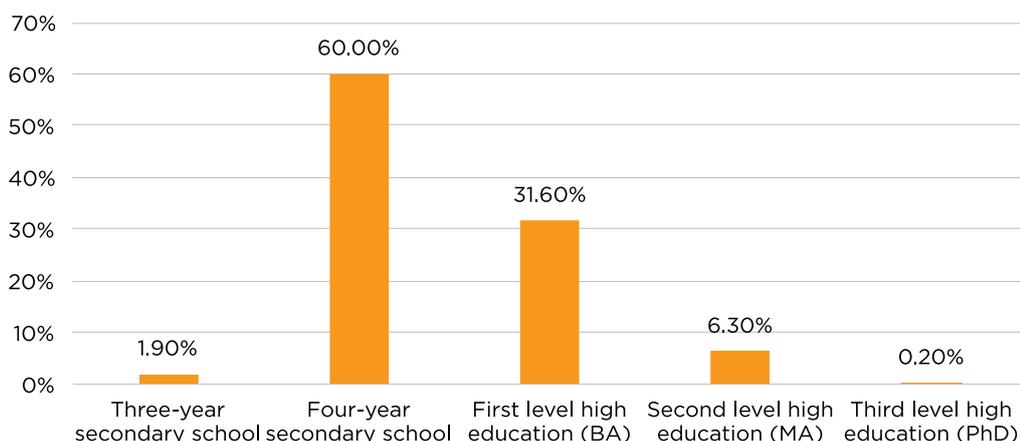
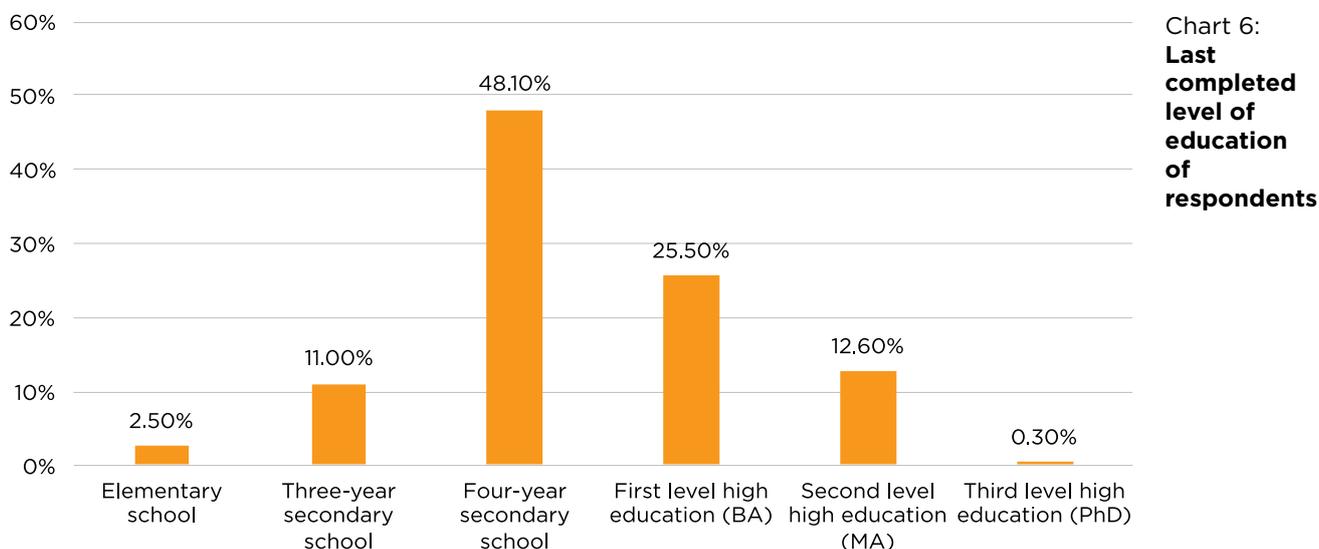


Chart 5:  
**Current level of education of respondents**

The remaining 318 (11.4%) respondents are currently not studying. 48.1% of these respondents have indicated as their last completed level of education a four-year secondary school, 25.5% first level higher education/BA, 12.6% second level higher education/MA, 11% three-year secondary school, 2.5% elementary school and 0.3% third level higher education/PhD.



## 5.2 Knowledge and views of youth on reproductive health

### 5.2.1 Assessment of reproductive health claims

Respondents were offered a number of claims for measuring knowledge and views about reproductive health. The following data represents the selection of one of the three offered responses for each individual claim i.e. whether the respondents selected each claim as true, false, or did not know/were not sure about their response. The following interpretations **do not represent the valorisation of knowledge on these claims but the frequency and percentage of respondents' choice of responses**. The accuracy of the response or the level of knowledge will be shown in the continuation of the report.

#### **Claim: One can get pregnant during first sexual intercourse.**

Most respondents, 86.1% of them, selected this claim as true, while 4.5% selected it as false and 9.4% did not know or were not sure about the response.

#### **Claim: Girls can get pregnant before the first menstrual period.**

There were differences in opinion on the accuracy of this claim. The response 'true' was selected by 15.7% of respondents, the response 'false' was selected by 59.2%, while 25.1% responded that they did not know or were not sure of their response.

#### **Claim: Douching, showering or bathing after sexual intercourse can prevent pregnancy.**

Most of the respondents i.e. 80.1% of the respondents selected this claim as true. The claim that douching, showering or bathing after sexual intercourse can prevent pregnan-

cy was considered false by 4.1% of respondents, while 15.8% did not know or was not sure of the response.

**Claim: A woman can get pregnant if she has sexual intercourse during her menstrual period.**

There were differences in opinion on the accuracy of this claim. 45.6% of respondents responded that it is true that a woman can get pregnant if she has sexual intercourse during her period. This claim was believed to be false by 25.8%, and the response I do not know or I am not sure was selected by 28.6% of the respondents.

**Claim: If a partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated.**

More than two-thirds of the respondents, or 72.6%, found this claim to be false. The claim was believed to be true by 9.2%, and the response I do not know or I am not sure was given by 18.3% of the respondents.

**Claim: Only people with many partners get sexually transmitted diseases.**

As with the previous claim, most of the respondents rated this claim as false (80.7%). That the claim is true was believed by 11.1%, and the response I do not know or I am not sure was given by 8.1% of the respondents.

**Claim: Contraceptive pills are effective for the prevention of sexually transmitted diseases.**

70.2% of respondents considers it incorrect that birth control pills represent effective protection against sexually transmitted diseases. Nevertheless, 19.7% of respondents state that they are not sure or that they do not know the response to this claim, and 10.2% that it is true.

**Claim: Sexually transmitted diseases are transmitted only through sexual intercourse.**

There were differences in opinion on the accuracy of this claim. More than half of the respondents consider this claim to be false (52.2%), while the other respondents consider that it is true (38.5%) and (9.3%) either does not know or is not sure about the response.

**Claim: Only one unprotected sexual intercourse may be sufficient to transmit a sexually transmitted disease.**

Most respondents, or 91% of young people, believe that this statement is true. That the claim is false is believed by 3%, and the response I do not know or I am not sure was given by 6% of the respondents.

**Claim: HPV infection often occurs without symptoms, so that the person is not aware that he/she is infected.**

A similar number of respondents chose this claim to be correct or that they did not know/were not sure about their response. 46.5% of the respondents deemed the claim true and 46.1% said that they did not know or were not sure about the response. The remaining 7.4% of respondents consider this claim to be false.

The following three statements examine youth views on reproductive health: *“Girls should agree to a sexual intercourse even if they are not ready, if it’s a way to keep a partner.”* *“Contraception is only a girl’s concern and obligation.”* and *“Contraception is used by partners who do not trust each other.”*

**Claim: Girls should agree to a sexual intercourse even if they are not ready, if it's a way to keep a partner.**

The majority of the respondents disagree with this claim - 96% of the respondents estimated that this claim was false, 2.5% that it was true, and 1.5% did not know / were not sure about the response.

**Claim: Contraception is only a girl's concern and obligation.**

86.5% of the respondents believe that it is incorrect that the contraception is only a girl's concern and obligation. This claim was estimated as true by 6.6%, and the response I do not know or I am not sure was given by 6.8% of young people.

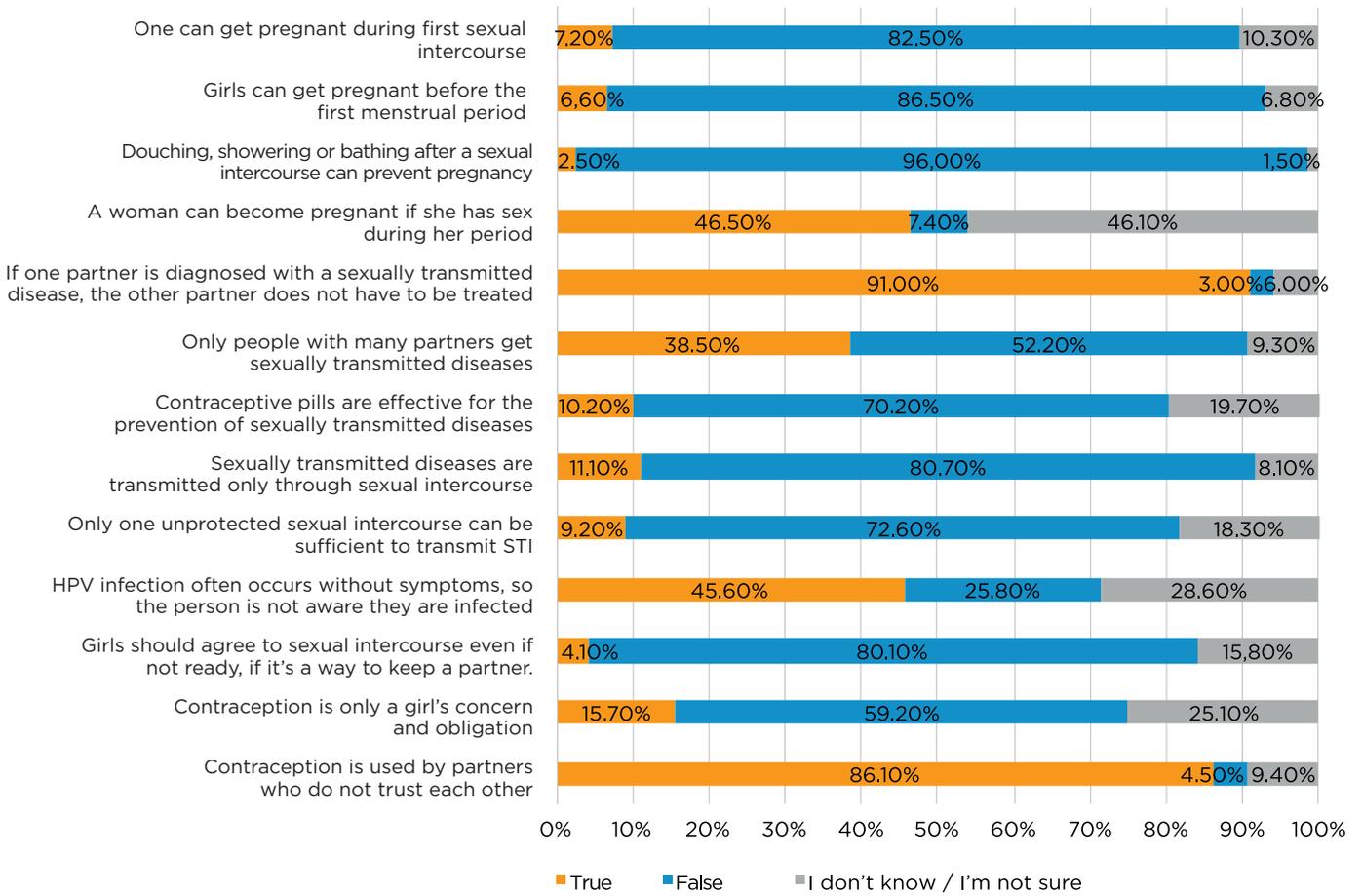
**Claim: Contraception is used by partners who do not trust each other.**

82.5% of young people believe that it is incorrect to claim that only partners who do not trust each other use contraception. The claim was deemed as true by 7.2% of respondents, and 10.3% did not know or were not sure of the response.

	True		False		I don't know / I'm not sure	
	f	%	f	%	f	%
One can get pregnant during first sexual intercourse.	2,396	86.1%	125	4.5%	262	9.4%
Girls can get pregnant before the first menstrual period.	436	15.7%	1,648	59.2%	699	25.1%
Douching, showering or bathing after a sexual intercourse can prevent pregnancy	114	4.1%	2,228	80.1%	441	15.8%
A woman can become pregnant if she has sex during her period	1,268	45.6%	719	25.8%	796	28.6%
If one partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated	255	9.2%	2,020	72.6%	508	18.3%
Only people with many partners get sexually transmitted diseases.	310	11.1%	2,247	80.7%	226	8.1%
Contraceptive pills are effective for the prevention of sexually transmitted diseases	283	10.2%	1,953	70.2%	547	19.7%
Sexually transmitted diseases are transmitted only through sexual intercourse	1,071	38.5%	1,452	52.2%	260	9.3%
Only one unprotected sexual intercourse can be sufficient to transmit a sexually transmitted disease	2,532	91.0%	83	3.0%	168	6.0%
HPV infection often occurs without symptoms, so that the person is not aware that he/she is infected	1,294	46.5%	206	7.4%	1,283	46.1%
Girls should agree to a sexual intercourse even if they are not ready, if it's a way to keep a partner.	69	2.5%	2,673	96.0%	41	1.5%
Contraception is only a girl's concern and obligation	185	6.6%	2,408	86.5%	190	6.8%
Contraception is used by partners who do not trust each other	200	7.2%	2,297	82.5%	286	10.3%

Table 3  
**Knowledge and views of respondents on reproductive health by selecting the options offered (true, false, I do not know / I am not sure)**

Chart 7:  
**Knowledge and attitudes of youth on reproductive health according to offered options (true, false, I don't know/I am not sure)**



The table below shows the percentage of male and female responses for each of the claims.

	Gender					
	Male			Female		
	True	False	I don't know / I'm not sure	True	False	I don't know / I'm not sure
	%	%	%	%	%	%
One can get pregnant during first sexual intercourse	85.8%	5.4%	8.8%	86.2%	4.1%	9.7%
Girls should agree to a sexual intercourse even if they are not ready, if it's a way to keep a partner	6.2%	90.2%	3.7%	0.8%	98.7%	0.5%
Girls can get pregnant before the first menstrual period	18.2%	48.6%	33.2%	14.5%	64.1%	21.4%
Douching, showering or bathing after a sexual intercourse can prevent pregnancy	5.5%	78.9%	15.6%	3.5%	80.6%	16.0%
A woman can become pregnant if she has sex during her period	35.2%	31.1%	33.6%	50.3%	23.4%	26.3%
If one partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated	13.6%	67.8%	18.5%	7.1%	74.8%	18.1%
Only people with many partners get sexually transmitted diseases	11.9%	80.4%	7.7%	10.8%	80.9%	8.3%
Contraception is only a girl's concern and obligation	8.9%	81.0%	10.1%	5.6%	89.1%	5.3%
Contraceptive pills are effective for the prevention of sexually transmitted diseases	12.7%	68.4%	18.9%	9.0%	71.0%	20.0%
Sexually transmitted diseases are transmitted only through sexual intercourse	38.0%	54.6%	7.4%	38.7%	51.1%	10.2%
Only one unprotected sexual intercourse can be sufficient to transmit a sexually transmitted disease	91.2%	4.0%	4.8%	90.9%	2.5%	6.6%
Contraception is used by partners who do not trust each other	12.7%	74.8%	12.5%	4.7%	86.1%	9.3%
HPV infection often occurs without symptoms, so that the person is not aware that he/she is infected	45.0%	9.3%	45.8%	47.2%	6.5%	46.3%

Table 4  
**Knowledge and views of respondents on reproductive health with respect to gender according to selection of offered options (true, false, I do not know / I am not sure)**

## 5.2.2 Assessment of reproductive health knowledge

The following table shows the frequencies and the percentages of **correct and incorrect** responses for 10 claims that measure the knowledge of the respondents. The incorrect responses are combined to indicate the responses that are incorrect and the responses “*I do not know / I’m not sure.*” Three claims that measure views cannot be assessed as correct or incorrect and therefore are not shown in the following section.

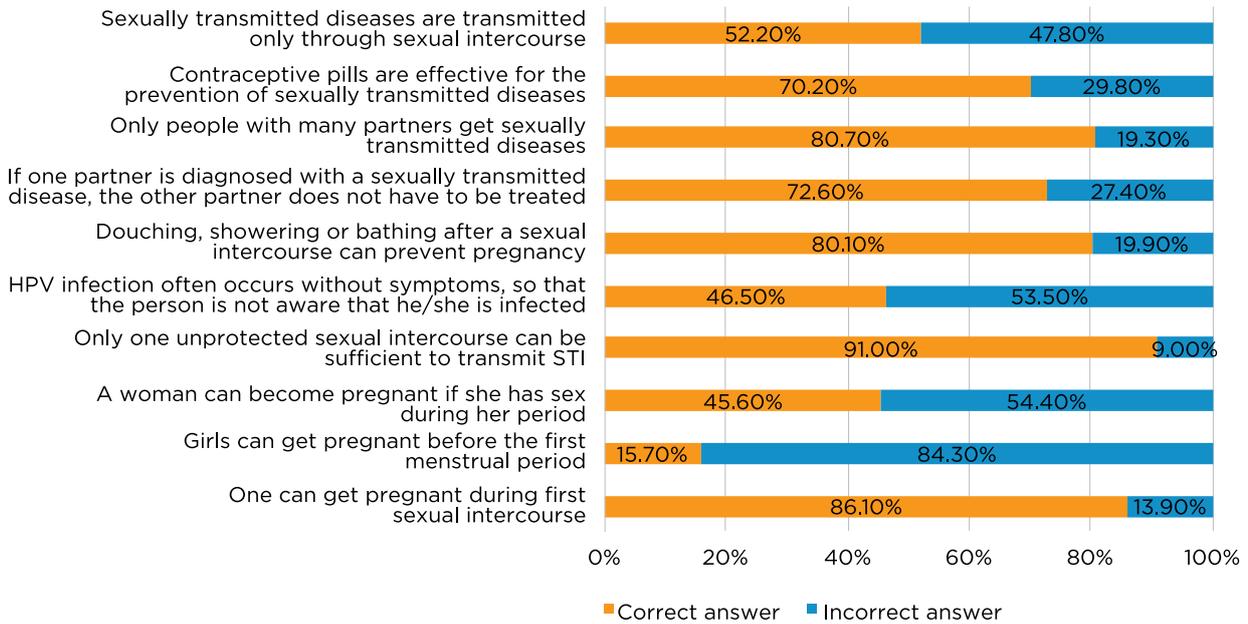
- 86.1% of respondents responded accurately to the claim “One can get pregnant from first sexual intercourse”.
- Only 15.7% of respondents responded correctly to the claim “Girls can get pregnant before the first period.”
- The claim that “Woman can get pregnant if she has sexual intercourse during her period” was responded to correctly by 45.6% of respondents.
- 91% of respondents responded correctly to the claim: “Only one unprotected sexual intercourse can be sufficient for the transmission of a sexually transmitted disease”.
- 46.5% of respondents offered the correct response to the claim: “HPV infection often occurs without symptoms, which is why the person is not aware that he/she is infected”.
- The claim “Douching, showering or bathing after a sexual intercourse can prevent pregnancy” was responded to correctly by 80.1% of the respondents.
- The correct response to the claim “If one partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated” was provided by 72.6% of the respondents.
- 80.7% of the respondents gave the correct response to the claim “Only people with many partners get sexually transmitted diseases”.
- 70.2% of respondents responded correctly to the claim that “Contraceptive pills are effective to protect sexually transmitted diseases”.
- To the claim “Sexually transmitted diseases are transmitted only through sexual intercourse”, 52.2% of respondents responded correctly.

	Correct response		Incorrect response <sup>6</sup>	
	f	%	f	%
One can get pregnant during first sexual intercourse	2,396	86.1%	387	13.9%
Girls can get pregnant before the first menstrual period.	436	15.7%	2,347	84.3%
A woman can become pregnant if she has sex during her period	1,268	45.6%	1,515	54.4%
Only one unprotected sexual intercourse can be sufficient to transmit a sexually transmitted disease	2,532	91.0%	251	9.0%
HPV infection often occurs without symptoms, so that the person is not aware that he/she is infected	1,294	46.5%	1,489	53.5%
Douching, showering or bathing after a sexual intercourse can prevent pregnancy	2,228	80.1%	555	19.9%
If one partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated	2,020	72.6%	763	27.4%
Only people with many partners get sexually transmitted diseases	2,247	80.7%	536	19.3%
Contraceptive pills are effective for the prevention of sexually transmitted diseases	1,953	70.2%	830	29.8%
Sexually transmitted diseases are transmitted only through sexual intercourse	1,452	52.2%	1,331	47.8%

Table 5  
**Correct and incorrect responses to claims measuring the knowledge of the respondents**

<sup>6</sup> Incorrect responses as indicated include both the incorrect and the responses “*I do not know / I am not sure*”

Chart 8:  
**Correct and incorrect answers to claims measuring respondents' knowledge**



The percentage of accurate responses with respect to gender is shown below. The biggest differences between the percentage of correct responses of males and females were on the claims “*Woman can get pregnant if she has sexual intercourse during her period*” and “*If a partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated*”. For the first of these claims a higher percentage of females offered the correct response (50.3%) compared to male responses (35.2%). The same is repeated with the other claim where again more females offered the correct response (74.8%).

	Gender	
	Correct responses	
	Male	Female
	%	%
One can get pregnant during first sexual intercourse	85.8%	86.2%
Girls can get pregnant before the first period.	18.2%	14.5%
A woman can become pregnant if she has sex during her period	35.2%	50.3%
Only one unprotected sexual intercourse can be sufficient to transmit a sexually transmitted disease	91.2%	90.9%
HPV infection often occurs without symptoms, so that the person is not aware that he/she is infected	45.0%	47.2%
Douching, showering or bathing after a sexual intercourse can prevent pregnancy	78.9%	80.6%
If one partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated	67.8%	74.8%
Only people with many partners contract sexually transmitted diseases.	80.4%	80.9%
Contraceptive pills are effective for the prevention of sexually transmitted diseases	68.4%	71.0%
Sexually transmitted diseases are transmitted only through sexual intercourse	54.6%	51.1%

Table 6  
**Correct responses to claims that measure the knowledge of the respondents with respect to gender**

### 5.2.3 Sexually transmitted diseases

Respondents were supposed to select, among a range of listed diseases, the diseases that are sexually transmitted. Sexually transmitted diseases that were listed were **HIV/AIDS, chlamydia, gonorrhea, genital herpes, trichomoniasis, syphilis** and **HPV**. Other diseases that do not fall within sexually transmitted diseases and were listed are: **ulcerative colitis, celiac disease, hyperthyroidism** and **conjunctivitis**.

**HIV/AIDS is a disease for which 96.6% of youth knows it is sexually transmitted.** It is then followed by syphilis (85.3%), genital herpes (68.8%), HPV (65.8%), gonorrhea (55.1%) and chlamydia (50.8%). Among the sexually transmitted diseases, trichomoniasis is the least recognized disease (21.0%).

Among the remaining diseases that are not sexually transmitted, 9.2% of the respondents selected ulcerative colitis, 10% celiac disease, 10% hyperthyroidism, and some 37.6% conjunctivitis as sexually transmitted disease.

	Not selected		Selected	
	f	%	f	%
HIV/AIDS	94	3.4%	2,689	96.6%
Chlamydia	1,368	49.2%	1,415	50.8%
Gonorrhea	1,250	44.9%	1,533	55.1%
Genital herpes	867	31.2%	1,916	68.8%
Trichomoniasis	2,198	79.0%	585	21.0%
Syphilis	408	14.7%	2,375	85.3%
HPV	951	34.2%	1,832	65.8%
Ulcerative Colitis	2,528	90.8%	255	9.2%
Celiac disease	2,504	90.0%	279	10.0%
Hyperthyroidism	2,506	90.0%	277	10.0%
Conjunctivitis	1,737	62.4%	1,046	37.6%

Table 7  
**Knowledge of sexually transmitted diseases**

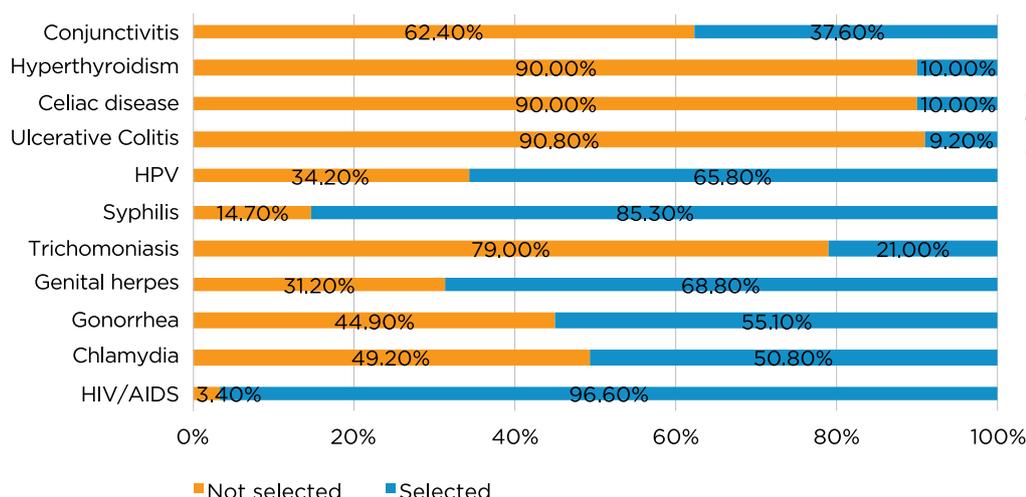


Chart 9:  
**Knowledge of sexually transmitted diseases**

The differences in the knowledge of sexually transmitted diseases between males and females are shown in the table below. The biggest difference was in the recognition of genital herpes and syphilis as sexually transmitted diseases. A higher percentage of females (71.2%) recognized genital herpes as sexually transmitted disease when compared to males (63.7%). On the other hand, a higher percentage of males (91.2%) selected syphilis as a sexually transmitted disease when compared to females (82,7%).

	Gender	
	Male	Female
	Selected	Selected
	%	%
HIV / AIDS	97.3%	96.3%
Chlamydia	48.2%	52.1%
Gonorrhoea	53.7%	55.7%
Genital herpes	63.7%	71.2%
Trichomoniasis	19.7%	21.6%
Syphilis	91.2%	82.7%
HPV	63.4%	66.9%
Ulcerative colitis	10.5%	8.5%
Celiac disease	11.1%	9.5%
Hyperthyroidism	11.1%	9.4%
Conjunctivitis	40.8%	36.1%

Table 8  
**Knowledge of sexually transmitted diseases with respect to gender**

## 5.2.4 Methods of preventing pregnancy and sexually transmitted diseases

In order to examine the knowledge of young people on methods of protection against sexually transmitted diseases and prevention of pregnancy, two questions were asked about all possible ways to prevent pregnancy and methods that could be used for protection against sexually transmitted diseases. The methods offered can be categorized into three groups: modern methods, traditional methods and false methods.

The modern methods offered are: pills, intrauterine device, hormonal injections, hormonal implants, male condom, female condom, diaphragm, contraceptive foam/gel and the day after pill.

The traditional methods offered are: monitoring of fertile and infertile days, interrupted intercourse and abstaining from sexual intercourse (abstinence).

The offered false methods are: showering and douching after intercourse, sexual intercourse in a standing position, drinking parsley tea and increased physical activity of a woman after the sexual intercourse.

### 5.2.4.1 Preventing Pregnancy

**Male condom is a contraceptive that most young people recognize as a method of preventing pregnancy (93.5%).** In addition to this, among the modern methods of contraception, the respondents were more likely to select pill (73.8%), female condom (64.7%), intrauterine device (56.3%) and the day after pill (53.5%). In this group of methods, the responses less selected were diaphragm (32.9%), contraceptive foam/gel (23.9%), hormonal injections (13.3%) and hormonal implants (9.3%).

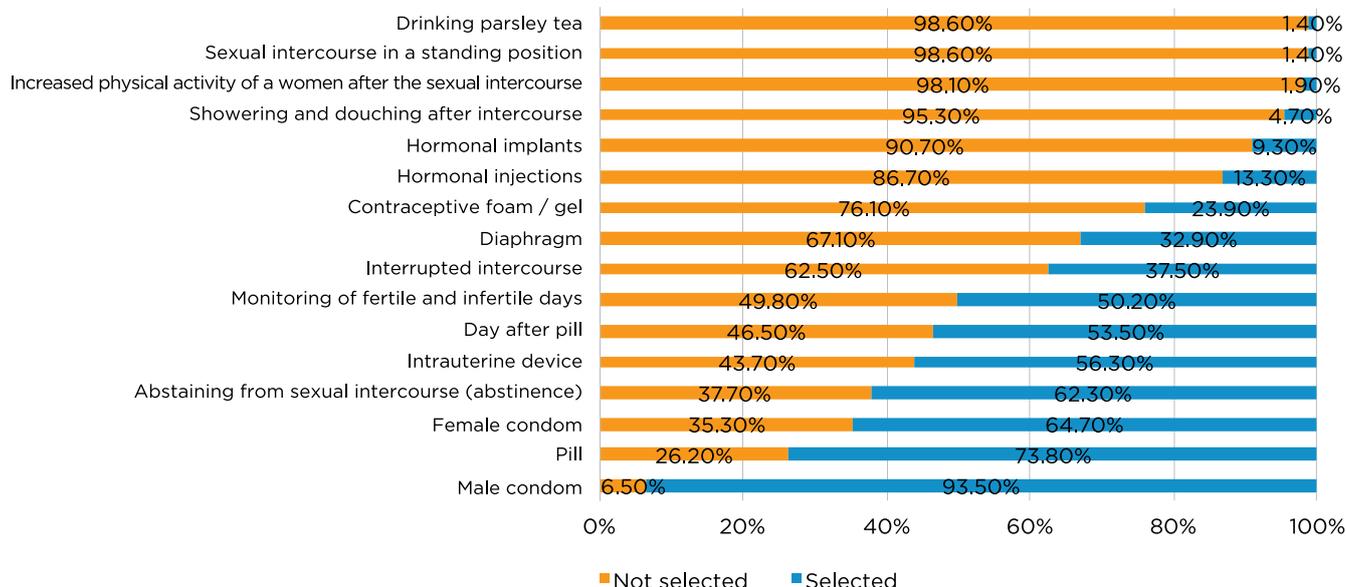
With traditional methods of contraception, the most frequently selected response was abstaining from sexual intercourse (abstinence), a response selected by 62.3% of respondents. The monitoring of fertile and infertile days was selected by 50.2%, and 37.5% of respondents selected interrupted intercourse.

A small percentage of respondents selected one of the false methods of contraception. In this group of responses, showering and douching after the intercourse were selected by 4.7%, increased physical activity of a woman after the sexual intercourse by 1.9%, drinking parsley tea by 1.4% and sexual intercourse in a standing position by 1.4% of respondents.

	Not selected		Selected	
	f	%	f	%
Male condom	180	6.5%	2,603	93.5%
Pill	7,28	26.2%	2,055	73.8%
Female condom	983	35.3%	1,800	64.7%
Abstaining from sexual intercourse (abstinence)	1,050	37.7%	1,733	62.3%
Intrauterine device	1,217	43.7%	1,566	56.3%
Day after pill	1,293	46.5%	1,490	53.5%
Monitoring of fertile and infertile days	1,386	49.8%	1,397	50.2%
Interrupted intercourse	1,739	62.5%	1,044	37.5%
Diaphragm	1,867	67.1%	916	32.9%
Contraceptive foam / gel	2,117	76.1%	666	23.9%
Hormonal injections	2,413	86.7%	370	13.3%
Hormonal implants	2,524	90.7%	259	9.3%
Showering and douching after intercourse	2,652	95.3%	131	4.7%
Increased physical activity of a women after the sexual intercourse	2,731	98.1%	52	1.9%
Sexual intercourse in a standing position	2,743	98.6%	40	1.4%
Drinking parsley tea	2,744	98.6%	39	1.4%

Table 9  
**Knowledge of contraceptive methods**

Chart 10:  
**Respondents' knowledge of contraceptive methods**



Regarding the differences between males and females on knowing how to prevent pregnancy, the biggest differences existed in recognizing the intrauterine device, the day after pill, and monitoring fertile and infertile days as methods of preventing pregnancy. Intrauterine device was selected by 61.2% of females compared to 45.5% of males, the day after pill by 56.1% of females compared to 47.9% of males, and monitoring fertile and infertile days by 52.2% of females compared to 45.9% of males.

	Gender	
	Male	Female
	Selected	Selected
	%	%
Pill	70.7%	75.3%
Intrauterine device	45.5%	61.2%
Hormonal injections	13.3%	13.3%
Hormonal implants	9.5%	9.2%
Male condom	94.5%	93.1%
Female condom	68.2%	63.1%
Diaphragm	31.2%	33.7%
Contraceptive foam / gel	27.0%	22.5%
Day after pill	47.9%	56.1%
Monitoring of fertile and infertile days	45.9%	52.2%
Interrupted intercourse	39.0%	36.8%
Abstaining from sexual intercourse (abstinence)	59.8%	63.4%
Showering and douching after intercourse	6.4%	3.9%
Sexual intercourse in a standing position	2.1%	1.2%
Drinking parsley tea	2.1%	1.1%
Increased physical activity of a women after the sexual intercourse	2.7%	1.5%

Table 10  
**Differences in knowledge of contraceptive methods with respect to gender**

### 5.2.4.2 Protection against sexually transmitted diseases

Among the methods offered, male condoms, female condoms and abstaining from sexual intercourse (abstinence) represent three correct responses to the question about the methods of protecting against sexually transmitted diseases. **The results show that a large proportion of the respondents are familiar with at least one method of protecting against sexually transmitted diseases**, since the aforementioned three responses were the most frequently selected as accurate. Male condom was selected by the majority of respondents (84.8%), followed by abstaining from sexual intercourse/abstinence (54%) and female condom (53%).

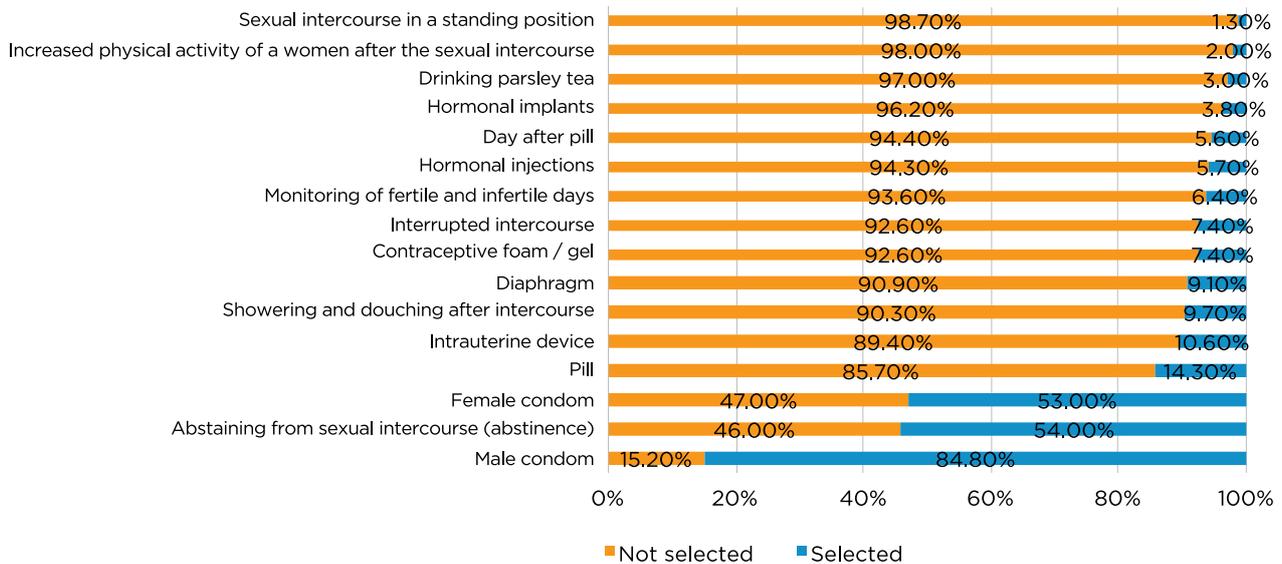
The most frequently selected incorrect answer was the pill (14.3%). Bearing in mind that with regards to the claim “*Contraceptive pills are effective for protection against sexually transmitted diseases*”, 19.7% of the respondents stated that they were not sure or did not know the response to this claim, and 10.2% that it was true, it is obvious that a certain number of young people is not sufficiently familiar with the advantages and disadvantages of using contraceptive pills.

In addition to the contraceptive pill, the incorrect responses that were frequently selected are: intrauterine device (10.6%) and douching and showering after the intercourse (9.7%). Other responses were selected less frequently.

	Not selected		Selected	
	f	%	f	%
Male condom	423	15.2%	2,360	84.8%
Abstaining from sexual intercourse (abstinence)	1,281	46.0%	1,502	54.0%
Female condom	1,309	47.0%	1,474	53.0%
Pill	2,386	85.7%	397	14.3%
Intrauterine device	2,489	89.4%	294	10.6%
Showering and douching after intercourse	2,514	90.3%	269	9.7%
Diaphragm	2,529	90.9%	254	9.1%
Contraceptive foam / gel	2,577	92.6%	206	7.4%
Interrupted intercourse	2,577	92.6%	206	7.4%
Monitoring of fertile and infertile days	2,605	93.6%	178	6.4%
Hormonal injections	2,623	94.3%	160	5.7%
Day after pill	2,627	94.4%	156	5.6%
Hormonal implants	2,678	96.2%	105	3.8%
Drinking parsley tea	2,700	97.0%	83	3.0%
Increased physical activity of a women after the sexual intercourse	2,728	98.0%	55	2.0%
Sexual intercourse in a standing position	2,747	98.7%	36	1.3%

Table 11  
**Respondents' opinion of STD protection methods**

Chart 11:  
**Respondents' opinion of STD protection methods**



When it comes to the differences between males and females in knowing about protection against sexually transmitted disease, there was a somewhat greater difference in the percentage of selecting a female condom as a method of protection. Female condom was more frequently selected by males (58.7%) compared to females (50,3%).

	Gender	
	Male	Female
	Selected	Selected
	%	%
Pill	15.2%	13.8%
Intrauterine device	10.0%	10.8%
Hormonal injections	5.9%	5.7%
Hormonal implants	4.2%	3.6%
Male condom	89.6%	82.6%
Female condom	58.7%	50.3%
Diaphragm	10.5%	8.5%
Contraceptive foam / gel	7.9%	7.2%
Day after pill	7.0%	5.0%
Monitoring of fertile and infertile days	8.5%	5.4%
Interrupted intercourse	10.1%	6.2%
Abstaining from sexual intercourse (abstinence)	50.7%	55.5%
Showering and douching after intercourse	11.4%	8.9%
Sexual intercourse in a standing position	2.3%	0.8%
Drinking parsley tea	3.5%	2.7%
Increased physical activity of a women after the sexual intercourse	3.0%	1.5%

Table 12  
**Differences in knowledge of sexually transmitted disease prevention methods with respect to gender**

### 5.2.5 Scale of knowledge

One of the goals of the conducted research was an assessment of youth’s knowledge of sexuality, especially in the field of sexually transmitted diseases and methods of protection against them, as well as methods of preventing unwanted pregnancy. Consequently, a scale of knowledge, which consists of four separate questions from the questionnaire, was created.

The first question relates to the general knowledge of youth on reproductive health from the block *“Knowledge and views on reproductive health”*. Three claims that do not relate to the assessment of knowledge but rather measure the views have been taken out of this block of questions. Claims that were excluded are: *“Girls should agree to sexual intercourse even if they are not ready, if it’s a way to keep a partner”*, *“Contraception is only a girl’s concern and obligation”* and *“Contraception is used by partners who do not trust each other”*. The other ten questions were scored in such a way that for each true (accurate) response 1 point was awarded or 0 points for each false (inaccurate) response.

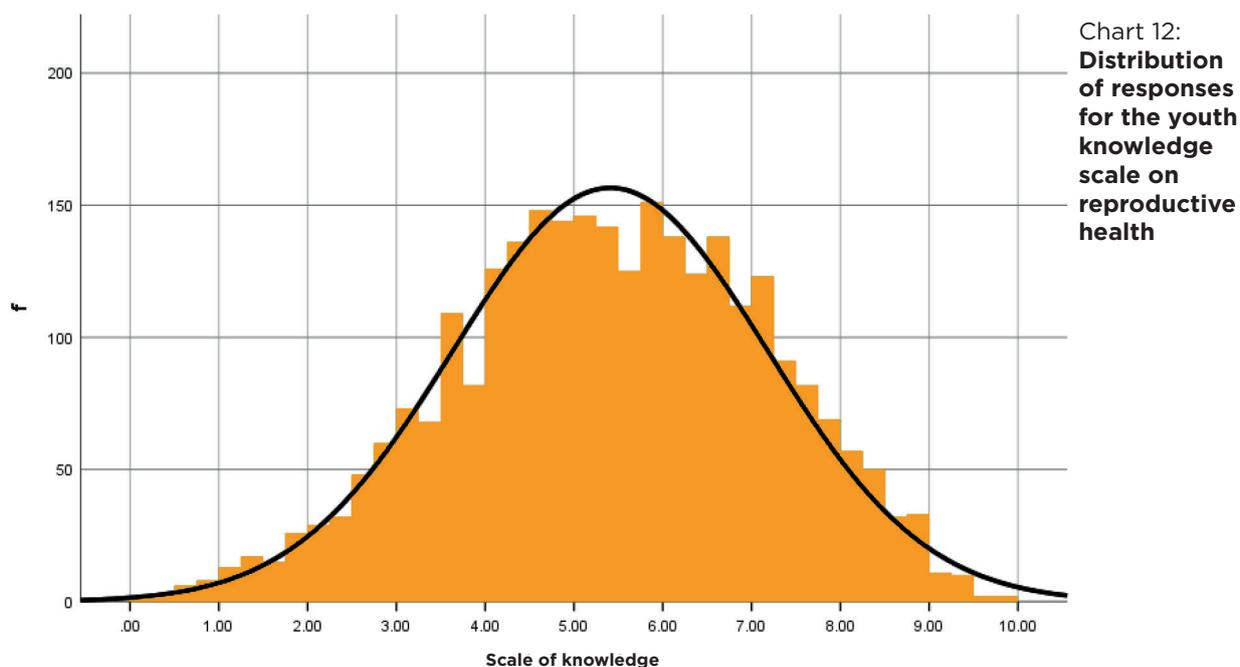
The second question, which together with the remaining three questions forms a scale of knowledge, was related to recognition of sexually transmitted diseases among the 11 listed diseases, of which 7 are sexually transmitted while the other 4 (ulcerative colitis, celiac disease, hyperthyroidism and conjunctivitis) do not fall within sexually transmitted diseases. Correct responses (selected sexually transmitted diseases) were scored by way of summing up all the correct responses on these 10 questions. The selection of incorrect responses was scored negatively in such a way that the sum of all incorrect responses is -10, that is, the sum of all correct and incorrect responses is 0, as the lower limit of points on this question cannot be less than 0.

The third question relates to ways of preventing pregnancy, and the fourth question to protection against sexually transmitted diseases, where 16 possible responses were offered to each question, but with 12 possible responses to the third question awarded positive points, and three possible accurate responses to the fourth question. The maximum number of points that could be awarded for each of these two questions was 10, though

in this case the selection of the incorrect response would be awarded negative points. The sum of all the correct and incorrect responses (selections) was 0.

These four questions make a scale of knowledge. Knowledge scale represents the average number of points awarded on the four questions that form the given scale. Accordingly, the theoretical range of the scale ranges between 0 and 10 points, where 10 represents the maximum number of points that respondents could win in the entire scale.

The average score of 2,783 subjects on the scale of knowledge is 5.41 with a standard deviation of 1.77.



When looking at the individual results (score points) on questions that make up the scale of knowledge, we note that the highest results were scored by the respondents on the first (M = 6.53) and the fourth question (M = 5.81), and the lowest on the second (M = 4.74) and the third question (M = 4.55). These results indicate that young people achieve lower scores on scales of knowledge about sexually transmitted diseases and methods of preventing pregnancy, and better scores on the scale of general knowledge on reproductive health and methods of protection against sexually transmitted diseases.

	N	Minimum	Maximum	M	SD
General knowledge of reproductive health	2,783	00.00	10.00	6.53	1,952
Sexually transmitted diseases	2,783	00.00	10.00	4.74	2,779
Methods for preventing pregnancy	2,783	00.00	10.00	4.55	2,176
Methods of protection against sexually transmitted diseases	2,783	00.00	10.00	5.81	2,926

Table 13  
Results for youth knowledge scale on reproductive health (ranging from 0 to 10)

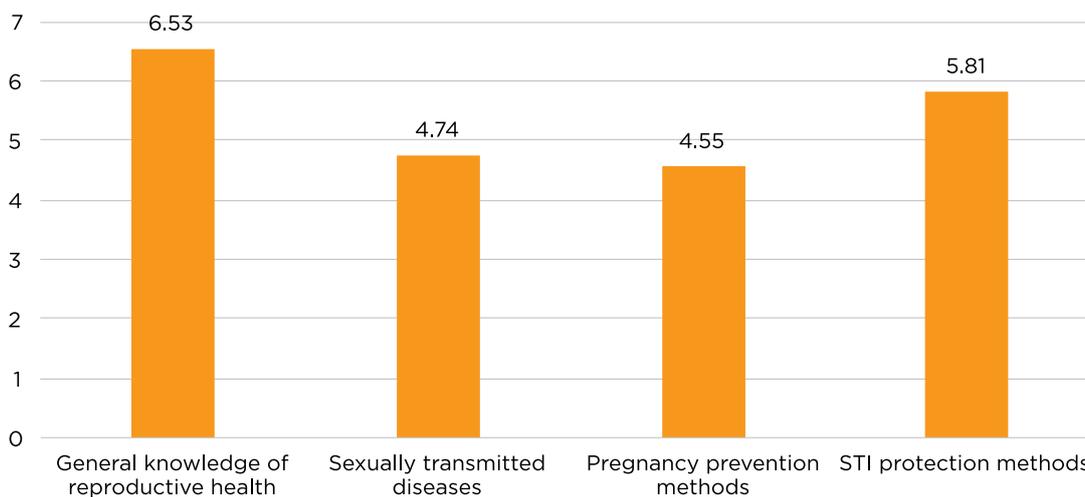


Chart 13: Results for youth knowledge scale on reproductive health (ranging from 0 to 10)

When looking at the more detailed distribution of awarded points on the scale of knowledge, it is noted that 20% of young people have a score below 3.91 on the knowledge scale while on the other hand 20% of the “best” achieved scores on the scale of knowledge were above 7.02.

More detailed distribution of scores on questions that form the scale of knowledge, as well as the scores of the scale of knowledge itself, are shown in the table below:

		General knowledge of reproductive health	Sexually transmitted diseases	Methods for preventing pregnancy	Methods of protection against sexually transmitted diseases	Scale of knowledge
M		6.5289	4.7453	4.5535	5.8060	5.4084
Percentage	20	5.0000	1.7857	2.5000	3.3333	3.9048
	40	6.0000	4.2857	4.1667	5.1267	4.9345
	60	7.0000	5.7143	5.0000	6.6667	5.9286
	80	8.0000	7.1428	6.6666	9.2300	7.0178

Table 14 Results for youth knowledge scale on reproductive health, by gender (ranging from 0 to 10)

### 5.2.5.1 Gender and knowledge

When it comes to knowledge differences with respect to gender, there is a statistically significant difference where females achieve higher results ( $M_F=5.47$ ) compared to males ( $M_M=5.27$ ).

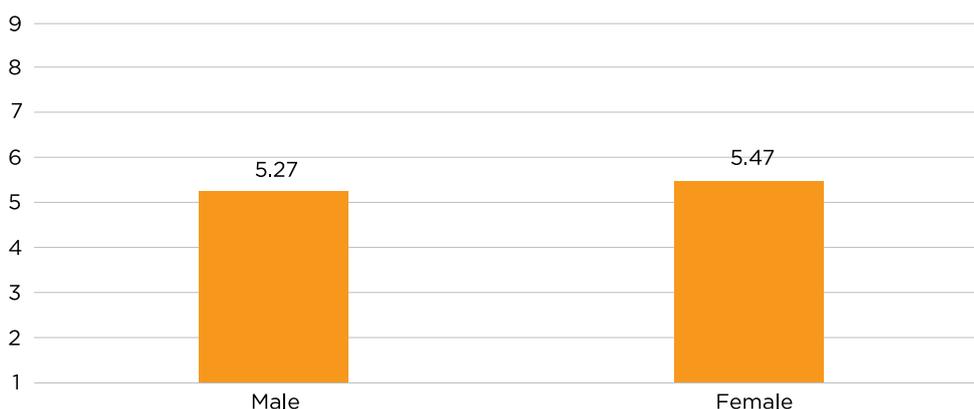


Chart 14: Scale of knowledge on reproductive health, by gender (score range 1-10)

A more detailed analysis of differences on individual questions shows that females achieve higher results than males in general knowledge on reproductive health ( $M_F=7.12$ ;  $M_M=6.68$ ), knowledge on sexually transmitted diseases ( $M_F=5.64$ ;  $M_M=4.74$ ) and methods of preventing pregnancy ( $M_F=5.13$ ;  $M_M=4.65$ ). Though when it comes to methods of protection against sexually transmitted diseases males achieve higher results ( $M_M=6.04$ ) compared to females ( $M_F=5.78$ ), but this difference did not prove itself statistically significant.

According to all of the above, it can be concluded that females have higher scores on reproductive health knowledge than males, especially when it comes to general knowledge, sexually transmitted diseases and pregnancy prevention methods. When it comes to knowing about methods of protection against sexually transmitted diseases, there is no significant difference in the scale of knowledge between males and females<sup>7</sup>.

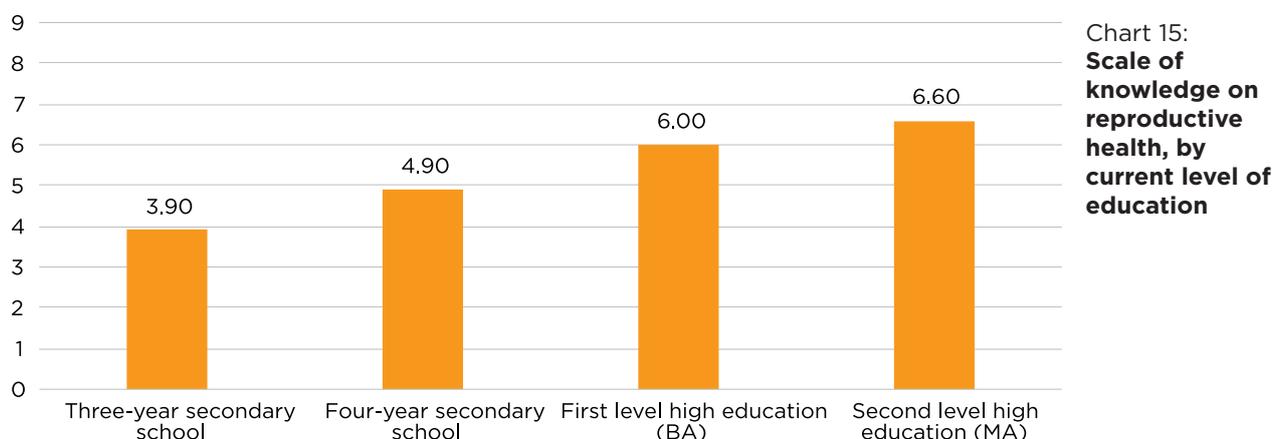
### 5.2.5.2 Age and knowledge

In addition to gender differences, a linkage between the age of the respondent and the score on the scale of knowledge was also noted.

There is a low but significant positive correlation of the age and results on the scale of knowledge ( $r=+0.352$ ,  $p<0.01$ ). With the increase in age respondents also grow their knowledge of reproductive health, which is the expected result. On the other hand, the younger the respondents are the lesser is their knowledge of sexuality.

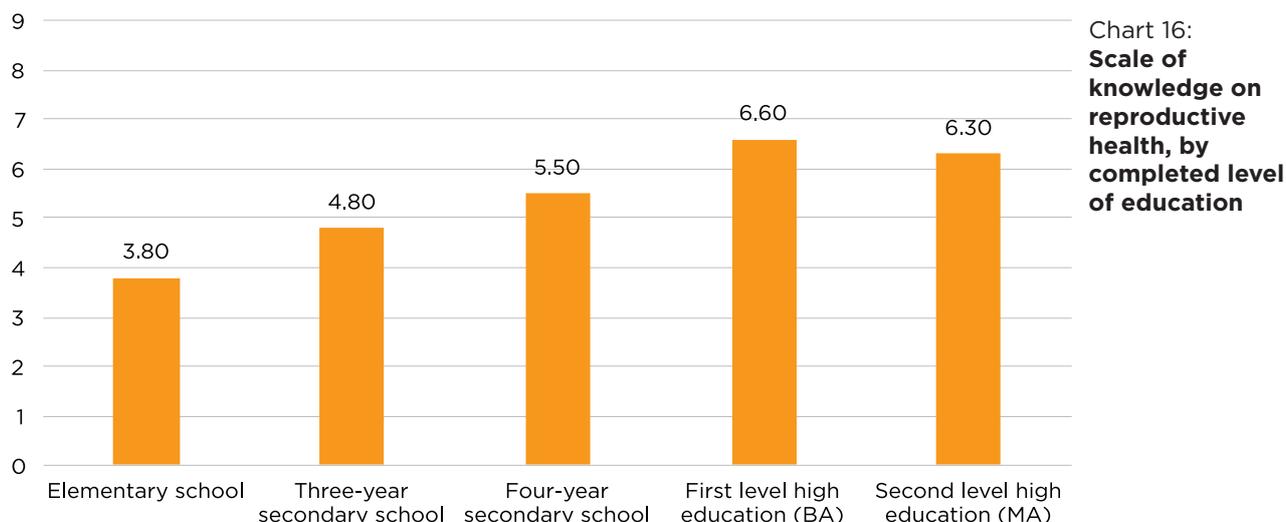
### 5.2.5.3 Level of education and knowledge

Differences on the scale of knowledge are also observed in relation to the education level of young people i.e. in relation to the last completed level of education, or in relation to the current school (education level) that the young person attends in case that he/she is still in education. It was noted that the highest scores on the scale of knowledge were achieved by young people attending the second level of higher education (MA), with an average score on the knowledge scale of 6.6. Students of the first cycle of university studies achieve somewhat lower scores with an average score of 6, followed by students of four-year secondary schools with an average score of 4.9, while the lowest score of 3.9 is achieved by students of three-year secondary schools.



<sup>7</sup> Although males score higher in this area, the difference obtained is not statistically significant.

A similar trend of growth of scores on the scale of knowledge in relation to the education level of youth was also recorded in last completed school situation, in the case of respondents who were no longer being educated at the moment of data collection.



## 5.3 Education on reproductive health

### 5.3.1 Sources of knowledge on reproductive health

Respondents were able to select one or more sources from which they have so far learned about reproductive health. Their answers were ranked as per frequency of choice.

**The Internet is the most common source of youth knowledge on reproductive health.**

As many as 79.6% of respondents reported the Internet as one of the sources of knowledge. Second place goes to friends/peers that were selected by 42.4%, and the third to books/brochures selected by 41.6% of the respondents.

When it comes to schools, 39.3% of respondents have been learning about reproductive health from school teachers, which is the fourth most frequently selected response. 7.9% of respondents received information from their pedagogues, social workers and psychologists in the schools, and this response came ninth by frequency out of the eleven questions offered.

TV / films on this subject were sources of information for 34.7% of respondents, 34.6% learned from representatives of institutions/organizations that held lectures/workshops at school, 28.5% from newspapers/magazines and 22.1% respondents from parents/guardians.

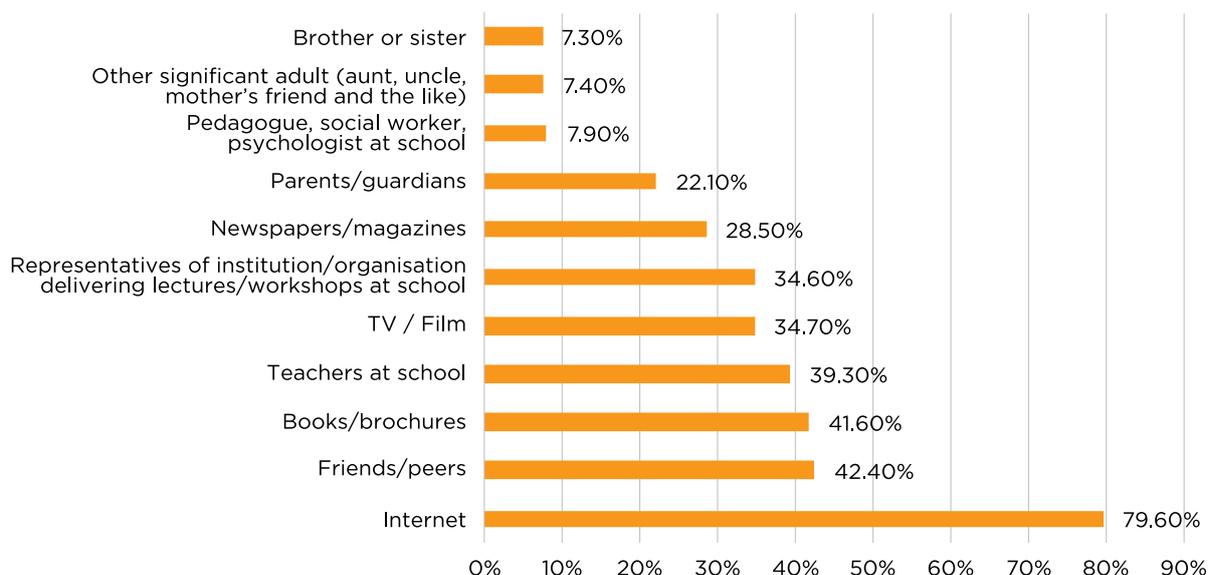
As a source of information, the smallest percentage of young people mentioned other important adults (aunt, uncle, mother's friend and the like) selected by 7.4% of respondents, and a brother or sister selected by 7.3% of respondents.

Under the option 'Other', respondents offered additional 117 responses. These answers are mainly related to reproductive health learning from their own experience, from health workers, in college, through various workshops/seminars and from organizations such as the Red Cross and the XY Association.

	Selected	
	f	%
Internet	2,166	79.6%
Friends/peers	1,154	42.4%
Books/brochures	1,131	41.6%
Teachers at school	1,068	39.3%
TV / Film	945	34.7%
Representatives of institution/organisation delivering lectures/workshops at school	942	34.6%
Newspapers/magazines	775	28.5%
Parents/guardians	601	22.1%
Pedagogue, social worker, psychologist at school	216	7.9%
Other significant adult (aunt, uncle, mother's friend and the like)	200	7.4%
Brother or sister	199	7.3%

Table 15  
**Sources of knowledge on reproductive health**

Chart 17:  
**Sources of knowledge on reproductive health**



### 5.3.2 Reproductive health in formal education

Nearly all respondents believe that **reproductive health should be taught at school**, and only 2.4% of respondents stated that school is not the place to learn about this topic. Among respondents who stated that reproductive health should be taught at school, 68.5% of respondents believe that it should be taught in elementary and high school, 28% only in high school and 1.1% only in elementary school.

	f	%
Yes, but only in elementary school	29	1.1
No, school is not the place to learn about this	66	2.4
Yes, both in elementary and secondary school	1,862	68.5
Yes, but only in high school	7,60	28.0
Total	2,717	100.0
Blank values	66	
Total	2,783	

Table 16  
**Attitudes of youth on teaching reproductive health in schools**

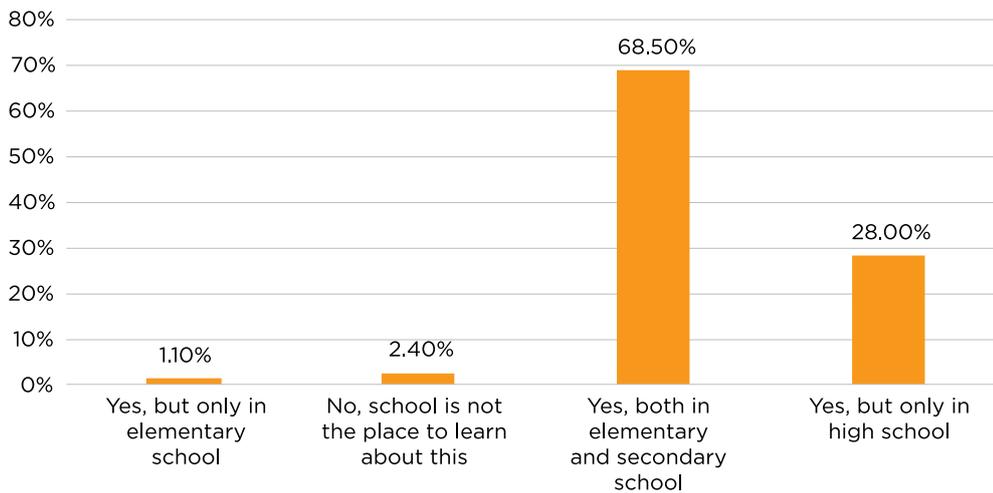


Chart 18:  
**Youth attitudes on learning reproductive health in school**

Respondents who stated that reproductive health should be taught at school could indicate how this topic should be integrated into formal education. For 40.2% of respondents, reproductive health should be taught as a separate subject, 28% of respondents think this should be done through peer education programs, 26.7% of respondents through regular teaching (through various existing subjects), and 5.1% through school clubs and extracurricular activities.

	f	%
Through regular teaching (different existing subjects)	504	26.7
Through separate subject	761	40.2
Through school clubs and extracurricular activities	97	5.1
Through peer education programmes	529	28.0
Total	1,891	100.0

Table 17  
**Attitudes of youth on ways of integrating reproductive health in formal education**

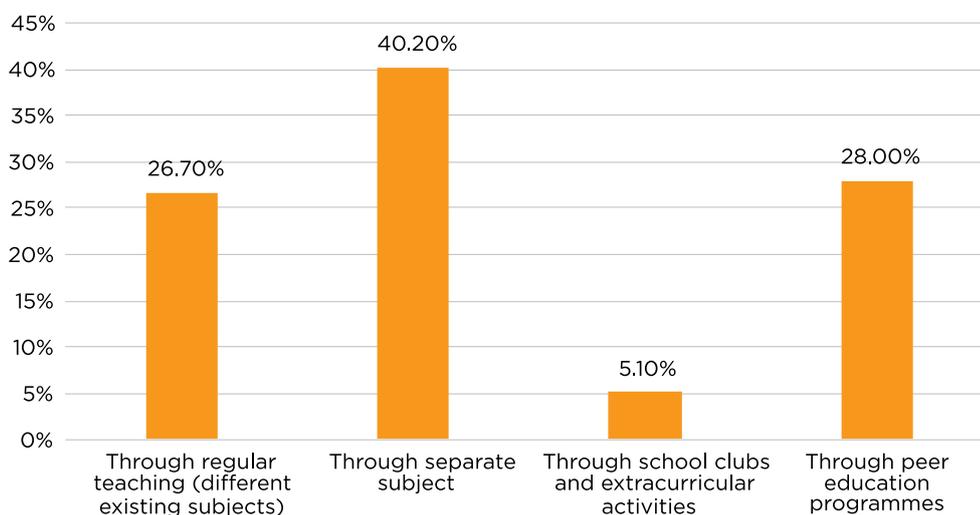


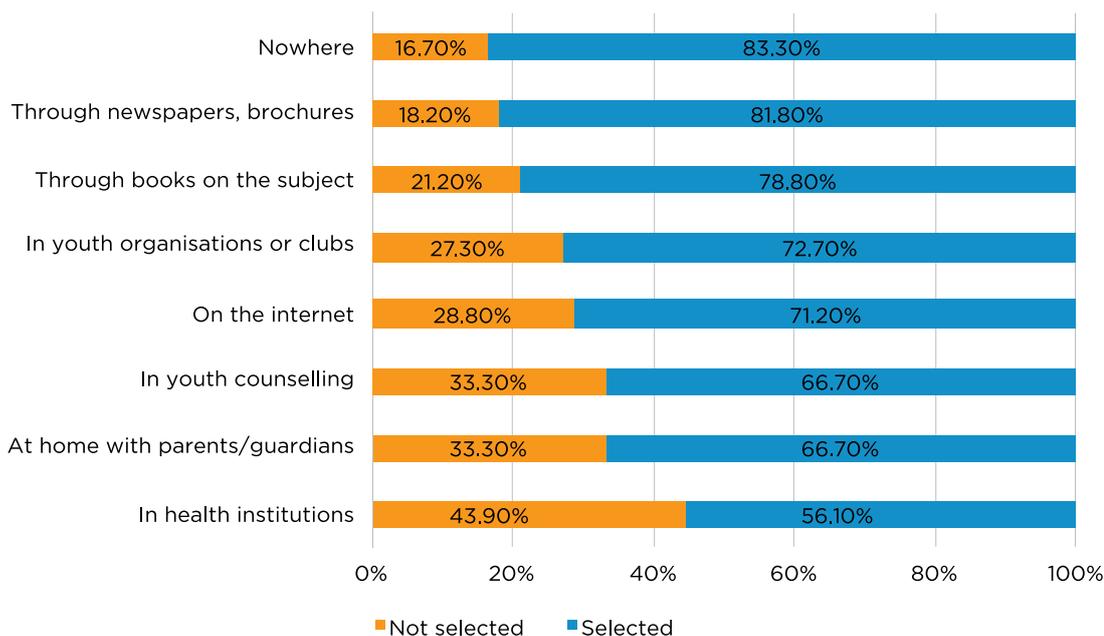
Chart 19:  
**Youth attitudes on ways to integrate reproductive health in formal education**

66 respondents (2,4%) think that school is not a place for learning about reproductive health. These respondents could select one or several other means or places for teaching students about this topic. The most frequently selected answer was health institutions – 29 respondents answered in this way. 11 respondents thought this topic should not be taught anywhere.

	Selected	
	f	%
In health institutions	29	43.9%
At home with parents/guardians	22	33.3%
In youth counselling	22	33.3%
On the internet	19	28.8%
In youth organisations or clubs	18	27.3%
Through books on the subject	14	21.2%
Through newspapers, brochures	12	18.2%
Nowhere	11	16.7%

Table 18  
**Attitudes of youth on learning about reproductive health outside of school**

Chart 20:  
**Youth attitudes on learning reproductive health outside of school**



# 6. Conclusions

A research on the knowledge and attitudes of young people about reproductive health was carried out at the end of 2017 with a specially created questionnaire in online form and distributed through the Facebook network in the period 30.11-12.12.2017. Research target population included young people living in BiH, between 15 and 25 years of age. During the data collection, 2,783 responses were collected and processed. The research sought to evaluate the knowledge of young people about sexuality, sexually transmitted diseases and protection from STIs, the use of contraception and the most common sources of knowledge about reproductive health. In addition, the young people's views on the need for formal education on sexuality and on the methods of transferring knowledge on sexuality were also examined.

Comparative analyses of the demographic data of young people who participated in the survey and the demographic data of young people in BiH collected in the 2013 Census, show significant differences between sample and population in age, gender and place/region variables. *Consequently, the sample used is not considered representative of young people in BiH aged between 15 and 25, and the findings are only relevant to sample respondents, and not to the target population of young people.*

However, the findings may also indicate the status of young people in the population, but because of the lack of representativeness of the sample, such conclusions in this research have not been made. For safer indicators that can be generalized to the target population, it is necessary to carry out more detailed and deeper research, selecting a representative sample, and using multiple different research approaches and methods that will contribute not only to the description and quantification of the measured phenomenon but also to its understanding.

Generally, the conducted research has shown the following findings, referring to young people from the sample.

## Knowledge and attitudes of young people on reproductive health

The most correct answers were offered by the respondents to the claims "Only one unprotected sexual relationship may be sufficient for the transmission of sexually transmitted diseases" (91%) and "It is possible to become pregnant after the first sexual intercourse" (86.1%). On the other hand, the least accurate answers were provided by young people responding to claims "HPV infection often occurs without symptoms so the persons are not aware they are infected" (46.5%), "Women may become pregnant if they have sexual intercourse during menstruation period" (45.6%) and "Girls can stay pregnant before their first menstrual period" (15.7%). The biggest difference between the percentage of correct answers of male and female respondents was related to claims "a woman may become pregnant if she has a sexual relationship during menstruation" and "If a partner is diagnosed with a sexually transmitted disease, the other partner does not have to be treated." For both claims, a higher percentage of women offered the correct answer compared to men.

When it comes to attitudes of young people towards reproductive health, 96% of respondents think it is not true that girls should agree to sexual intercourse, even if they are

not ready for it, if it is a way to keep a partner. Also, 86.5% of respondents believe that contraception is not a concern and obligation of only a girl, and 82.5% do not think that contraception is used by people who do not trust each other.

## Sexually Transmitted Diseases and Protection from Sexually Transmitted Diseases

HIV/AIDS is a disease for which 96.6% of young people know that it is sexually transmitted, while this percentage is lower for other sexually transmitted diseases. One finding shows that a greater number of young people chose conjunctivitis as a sexually transmitted disease (37.6%) than trichomonas (21%), indicating young people who lack adequate knowledge of sexually transmitted infections.

A large number of the respondents was familiar with at least one method of protection against sexually transmitted diseases: male condoms were selected by 84.8%, abstinence from sexual intercourse was chosen by 54% and female condom by 53% of respondents. The most commonly chosen incorrect answer is the pill (14.3%), which, combined with other results, suggests that a certain number of young people are not sufficiently familiar with the benefits and disadvantages of using the contraceptive pill. The biggest differences with regard to gender existed in the selection of female condoms as a method of protection against sexually transmitted diseases. This response was more often chosen by men than by women.

## Contraceptive Methods

The male condom is a contraceptive device recognized by the majority of young men as a method of prevention of pregnancy (93.5%) followed by pills (73.8%), female condom (64.7%) and abstinence (62.3%). When it comes to differences between men and women in knowing how to prevent pregnancy, the biggest differences existed in the recognition of the intrauterine device, the day after pill, and the monitoring of fertile and non-fertile days as a method of preventing pregnancy. All of the above methods of contraception were chosen more by women than by men.

## Assessment of the knowledge of young people

Claims measuring the level of knowledge and questions about awareness of sexually transmitted diseases, pregnancy prevention methods, and sexually transmitted diseases were the basis for creation of a knowledge scale ranging from 0 to 10. The average score of 2,783 subjects on the knowledge scale is 5.41 with a standard deviation of 1.77. Young people scored lower on sexually transmitted diseases and pregnancy prevention methods, while the results are higher on general reproductive health knowledge and the methods of protection against sexually transmitted diseases. Women have higher scores on the reproductive health knowledge than men, especially when it comes to general knowledge, sexually transmitted diseases, and pregnancy prevention methods. When it comes to knowledge of the methods of protection against sexually transmitted diseases, there is no significant difference in the knowledge between men and women. Reproductive health knowledge increases with the age and level of education of respondents.

## Education on reproductive health

When it comes to youth education on reproductive health, the internet is the most common source of knowledge in this area (79.6%). This is followed by friends/peers (42.4%), books/brochures (41.6%), while teachers ranked fourth (39.3%).

Almost all respondents believe that reproductive health should be taught at school, with more than two-thirds of respondents in favour of learning in both elementary and high school. Opinions are divided on how this topic should be integrated through formal education. A number of respondents think that reproductive health should be taught as a special subject (40.2%), followed by peer education (28%) or through various existing subjects (26.7%). The lowest number of respondents selected school clubs and extra-curricular activities as a way of integrating the topic of reproductive health into formal education (5.1%).

2.4% of respondents think that school is not the place to be taught about reproductive health, and most of these respondents believe that reproductive health is to be learned in health care institutions.

# 7. Annex

## 7.1 Questionnaire on reproductive health

### Instructions:

Hello!

With this questionnaire, we want to find out the attitudes, opinions and basic knowledge of youth in BiH about reproductive health. Completing this questionnaire is anonymous and confidential, meaning that the answers you provide will not be associated with your identity, nor will your individual responses be used for anything other than for the purposes of this research. Your answers will not be processed individually, but only in group (with a further 2500 responses of your peers).

This research is intended for young people aged between 15 and 25. If you are under 15 or over 25 years of age, then please do not fill out this questionnaire.

The time needed to fill in this questionnaire is about five minutes.

1. How old are you? (drop-down menu: under 15, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, over 25) ?

### Text for persons under 15:

Sorry, this questionnaire is not intended for persons under 15 years of age.

### Text for persons over 25:

Sorry, this questionnaire is not intended for persons over 25 years of age.

### Text for 15, 16, and 17 years old persons:

Although this questionnaire is also intended for people of your age, we would ask you to notify your parents / guardians about this research before you complete this questionnaire and consult with them. If your parents agree that you may participate in the research, then you can return to this questionnaire and fill it out.

If you have already spoken to your parents and received their approval, please click on the “box” below to confirm that you have done this.

I agree with the research and have notified my parents/guardians.

## DEMOGRAPHICS

2. Please select from the list the area/region of your current residence:
  - Una-Sana Canton
  - Posavina Canton
  - Tuzla Canton
  - Zenica-Doboj Canton
  - Bosnia-Podrinje Canton
  - Central Bosnia Canton
  - Herzegovina-Neretva Canton
  - Western Herzegovina Canton
  - Sarajevo Canton
  - Canton 10
  - Republika Srpska
  - Brčko District
  
3. Gender: M    F
  
4. Are you currently in education (going to school or university)? YES    NO
  
5. (if answer to question 4 is YES) → Which school do you go to?
  - a. Three-year secondary school
  - b. Four-year secondary school
  - c. First level high education (BA)
  - d. Second level high education (MA)
  - e. Third level high education (PhD)
  
6. (if answer to question 4 is NO) → Which of the listed was the last school you completed?
  - a. Elementary school
  - b. Three-year secondary school
  - c. Four-year secondary school
  - d. First level high education (BA)
  - e. Second level high education (MA)
  - f. Third level high education (PhD)

## KNOWLEDGE OF REPRODUCTIVE HEALTH

7. Which of the below statements do you consider true or false? If you're not sure or don't know if the statement is true, you can select "I don't know/I'm not sure".

	True	False	Don't know/ not sure
One can become pregnant after first sexual intercourse			
Girls should consent to sexual intercourse even when not ready, if this is the way to keep their partner			
Girls may get pregnant before their first menstrual period			
Douching, showering or bathing after sexual intercourse may prevent pregnancy			
Woman can get pregnant if she engages in sexual intercourse during menstrual period			
If one partner is diagnosed with sexually transmitted disease, the other partner does not need to receive treatment			
Only persons with multiple partners contract sexually transmitted diseases			
Contraception is a concern and duty only for girls			
Contraceptive pills are efficient protection from sexually transmitted diseases			
Sexually transmitted diseases are only transmitted through sexual intercourse			
Only one unprotected intercourse may be sufficient for transmission of a sexual disease			
Contraception is used by partners who do not trust each other			
HPV infection often comes without symptoms, so the person is not aware of being infected			

8. Please select all sexually transmitted diseases that you've heard of:

- HIV / AIDS
- Chlamydia
- Gonorrhoea
- Genital herpes
- Trichomonas
- Syphilis
- HPV
- Ulcerative colitis
- Celiac disease
- Hyperthyroidism
- Conjunctivitis

9. Which of the below listed methods may prevent pregnancy, in your opinion?

- Pill
- Intrauterine device
- Hormonal injections
- Hormonal implants
- Male condom
- Female condom
- Diaphragm
- Contraceptive foam/gel
- Day after pill
- Monitoring fertile and non-fertile days
- Interrupted intercourse
- Abstinence from intercourse
- Showering and douching after intercourse
- Sexual intercourse in standing position
- Drinking parsley tea
- Increased physical activity by woman after intercourse

10. Which of the below listed methods may protect you from sexually transmitted diseases, in your opinion?

- Pill
- Intrauterine device
- Hormonal injections
- Hormonal implants
- Male condom
- Female condom
- Diaphragm
- Contraceptive foam/gel
- Day after pill
- Monitoring fertile and non-fertile days
- Interrupted intercourse
- Abstinence from intercourse
- Showering and douching after intercourse
- Sexual intercourse in standing position
- Drinking parsley tea
- Increased physical activity by woman after intercourse

## REPRODUCTIVE HEALTH EDUCATION

In this section we ask you where you have obtained your existing knowledge of reproductive health (including knowledge of sexually transmitted diseases, protection from STIs, and preventing unwanted pregnancy).

11. Please select from who or where you have learned the most about reproductive health until now:

- Friends/peers
- Teachers at school
- Pedagogue, social pedagogue, psychologist at school
- Representatives of an institution/organisation that held lectures/workshops at school
- Parents or guardians
- Brother or sister
- Other significant adult (aunt, uncle, mother's friend etc.)
- TV /Film
- Internet
- Books/brochures
- Newspapers/magazines
- Other (please list): \_\_\_\_\_

12. Do you think that reproductive health should be learned in school?

- a. Yes, but only in elementary school
- b. Yes, but only in secondary school
- c. Yes, both in elementary and secondary school
- d. No, school is not the place to learn about this

13. (if your answer to question 12 was a, b, or c) → Reproductive health in school should be taught:

- a. Through regular classes (various existing subjects)
- b. As separate subject
- c. Through school clubs and extracurricular activities
- d. Through peer education programmes

14. (if your answer to question 12 was d) → Since you think that school is not the place to learn about reproductive health, please tell us where you think this topic should be learned?

- a. At home with parents/guardians
- b. In youth counselling
- c. In youth organisations or clubs
- d. In health institutions
- e. Online
- f. In newspapers, brochures
- g. From books on the topic
- h. Nowhere
- i. Some place else: \_\_\_\_\_

**Thank you for your answers.**

