Article

"What Do Our Boys Know about Sex?" Preliminary Data of a New Questionnaire for the Evaluation of the Knowledge of Sexuality among Adolescents

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Abstract: Background: The sexual health of young people is an especially important issue for national health policies. Adolescents, in fact, are at elevated risk for adverse sexual and reproductive health outcomes relative to their habits, sexually transmitted infections (STIs), sexual behaviour and teenage pregnancy. The aim of this study was to assess the knowledge about sexuality of students under the age of 18. Moreover, we aimed to explore the influence of sex education on sexual knowledge and behaviour. Methods: The participants were enrolled during a cultural exchange project in September 2019. After completing the questionnaire, all students took part in a sex education course performed by an urologist with expertise in sociology and psychology. The adolescents repeated the same survey in a web form in September 2020, one year after the course. Results: Analyzing the data, sex education lessons helped to improve students' confidence in approaching all the issues of the questionnaire. Moreover, we observed a significant increase in the role of school as main source of information, while the role of the internet, media and family remained stable. Conclusions: This study encouraged the introduction of school-based sexual education policies, pointing to opportunities for structural early intervention programs.

Keywords: sexual dysfunction; sexual behaviour; sexually transmitted infections; men's health

1. Introduction

The sexual health of adolescents is an especially important issue for national health policies. Young people, in fact, are at elevated risk for adverse sexual and reproductive health outcomes relative to their habits, sexually transmitted infections (STIs), sexual behaviour and teenage pregnancy [1].

Moreover, several authors reported that abstinence-only education (AOE) programs are ineffective in reducing risky sexual behaviour (Society for Adolescent Health and Medicine [SAHM], 2017).

Sexuality education is defined as teaching about human sexuality, including intimate relationships, human sexual anatomy, sexual reproduction, sexually transmitted infections, sexual activity, sexual orientation, gender identity, abstinence, contraception and reproductive rights and responsibilities [2].

Several studies demonstrated that an adequate education about human sexuality and sexual health provided by parents, physicians, teachers and other professionals was important to help adolescents make aware, safe and positive choices about responsible sexual activity and their sexual health [3].

Furthermore, some authors reported an improvement in academic performance in adolescents who had attended sexual health courses [4]. Moreover, students and most parents believed that school-based programs play a role in sex education [5].

The World Health Organization (WHO) and The United Nations Educational, Scientific and Cultural Organization (UNESCO) considered comprehensive sex education (CSE) as a human right, with the objective to provide accurate, realistic information and life skills in a nonjudgmental way to help adolescents make informed decisions. Information should be free of stigma and reviewed regularly for inaccuracies (UNESCO, 2015; WHO, 2010).

Despite this, sexuality teaching is not widespread in all the schools. Furthermore, the effectiveness of these interventions remains unclear, especially regarding long term outcomes. Health surveys, introduced in Europe since the 1950s, guaranteed important data about the population's health for health research, welfare and monitoring. However, adolescents were underrepresented in sexual health research, resulting in a lack of information about the consciousness of young people concerning these issues. The aim of this study was to assess the knowledge about sexuality of adolescents under the age of 18. Moreover, we aimed to explore the influence of sex education on sexual knowledge and behaviour after one year.

2. Materials and Methods

The participants were enrolled during a cultural exchange project in September 2019. Adolescents were aged between 13 and 18 years. They came from four different countries: Italy, Portugal, Romania and Greece. The survey was anonymous, and all the participants signed an informed consent. The subjects were informed that they could withdraw from the study at any stage, and they were assured of confidentiality.

The survey was made available in English and took on average of only ten to fifteen minutes to complete. The survey included demographic characteristics, sexual behaviour and knowledge and was divided in three parts. The first part included demographic variables and a subjective evaluation of the personal knowledge of sexuality and sexual health. The second part aimed to measure the knowledge of sexual health issues related to the male and female genitourinary system, physiology of reproduction, pregnancy prevention and prevention of STIs, using a 26-item index, multiple choice. The third part evaluated sexual activity and behaviour of the participants.

After completing the questionnaire, all students took part in a sex education course performed by an urologist with expertise in sociology and psychology. The course was divided into two lessons of three hours each. The first dealt with the anatomy and physiology of the male and female genital system, and the second concerned infectious diseases and sexual habits.

The participants repeated the same survey in a web form in September 2020, one year after the course. An email was sent to all students who participated in the first part of the study.

All data were collected in a prospectively maintained database and were retrospectively analysed. Frequencies and proportions were reported for categorical variables, while mean and standard deviation ($\pm$SD) were calculated for continuous variables.

Yates's chi-squared test (χ^2) was used to compare the statistical significance of differences in proportions. Statistical analyses were performed using SPSS version 23.0 (IBM Corp., Armonk, NY, USA), considering statistical significance as a *p*-value < 0.05.

3. Results

Of the 80 participants (mean age 15.46 $\pm$ 1.484 years) who completed the survey, 40 (50%) were female, and 40 (50%) were male. We did not report cases of drop-outs. In fact, all the adolescents who participated to the survey in 2019 completed the questionnaire in 2020 and were enrolled in the study. Additional sample characteristics are presented in Table 1. Table 2 shows the comparison between all questions of the survey before and one year after the sex education course. Particularly, we noticed a significantly increase

in the percentage of right answer in the following questions (e.g.: "The scrotum contains . . . "; "It is legally possible to change sex?"; The fertile days of the cycle are those . . . "; "Indicate among the following the behaviour that increases the risk of contracting a sexually transmitted disease"; "Fertilization is . . . "; "The urethra in the male is . . . "; "Sexually transmitted diseases are . . . "; "Heterosexuality means . . . "; "Menstruation is . . . " and "Orgasm means . . . "). Table 3 summarises the data about sexual behaviour of the adolescents. Particularly, we noticed a significant increase in participants reporting a high knowledge of the topic (30% vs. 15%). Furthermore, after one year, we observed an increase in the importance of school as the main source of sex education (20% vs. 5%), while the importance of the internet and the family showed no significant changes. In 2020, also, the percentage of adolescents who talked about sex increased significantly. Finally, we found an improvement in the use of contraceptive methods.

Table 1. Demographics characteristics of the 80 subjects.

Variable	Value
Mean $\pm$ SD	
Age (years)	15.46 $\pm$ 1.484
Paternal age (years)	48.77 $\pm$ 4.88
Mother's age (years)	45.85 $\pm$ 4.74
Brother and sister (number)	1.45 $\pm$ 0.78
Age of the first sexual intercourse (years)	16.74 $\pm$ 1.482
N$\pm$ (%)	
Sex	
Male	40 (50%)
Female	40 (50%)
Country	
Italy	20.(25%)
Portugal	20.(25%)
Romania	20.(25%)
Greece	20.(25%)
School class	
Middle school	68 (85%)
High school	12 (15%)
Religion	
Catholics	36 (45%)
Ordodoxa	38 (47.5%)
Atheist	1 (1.3%)
Agnostic	5 (6.3%)
Father's job	
Unemployed	8 (10%)
Employee	30 (37.5%)
Graduate executive	27 (33.8%)
Armed forces	13 (16.3%)
Mother's job	
Housewife	27 (33.8%)
Employee	29 (36.3%)
Graduate executive	21 (26.3%)
Armed forces	2 (2.5%)
Brother and sister	
Yes	56 (70%)
No	24 (30%)

Table 2. Comparison between surveys one year later: questions.

Variable	2019	2020	*p*
		N± (%)	
Question 1 "The scrotum contains … "			
Right	65/80 (81.3%)	75/80 (93.75%)	0.0314
Wrong	11/80 (13.8%)	2/80 (3.8%)	0.0206
Unknown	4/80 (5%)	3/80 (3.8%)	1
Question 2 "The HIV virus is also transmitted through … "			
Right	78/80 (97.5%)	77/80 (98.75%)	1
Wrong	2/80 (2.5%)	1 (1.25%)	1
Unknown	0	2 (2.5%)	0.4767
Question 3 "The fallopian tubes are … "			
Right	71/80 (88.75%)	75/80 (93.75%)	0.4013
Wrong	6/80 (7.5%)	2/80 (2.5%)	0.2765
Unknown	3 (3.75%)	3 (3.75%)	0.6773
Question 4 "It is legally possible to change sex?"			
Right	68/80 (85%)	77/80 (96.3%)	0.0300
Wrong	11/80 (13.75%)	2/80 (2.5%)	0.0206
Unknown	1/80	1/80	
Question 5 "Gender identity is … "			
Right	69/80 (86.25%)	71/80 (88.75%)	0.8111
Wrong	10/80 (12.5%)	6/80 (7.5%)	0.4292
Unknown	1/80 (1.25%)	1/80 (1.25%)	0.4767
Question 6 "The fertile days of the cycle are those … "			
Right	66/80 (82.%)	74/80 (92.5%)	0.0943
Wrong	12/80 (15%)	3/80 (3.75%)	0.0300
Unknown	2/80 (2.5%)	3/80 (3.75%)	1
Question 7 "Get pregnant during the first sexual intercourse … "			
Right	75/80 (93.75%)	77/80 (96.25%)	0.7168
Wrong	4/80 (5%)	2/80 (2.5%)	0.6773
Unknown	1/80 (1.25%)	1/80 (1.25%)	0.4767
Question 8 "For homosexuality it is understood … "			
Right	76/80 (95%)	74/80 (92.5%)	0.7440
Wrong	3/80 (3.75%)	3/80 (3.75%)	0.6773
Unknown	1/80 (1.25%)	3/80 (3.75%)	0.6126
Question 9 "Indicate among the following the behaviour that increases the risk of contracting a sexually transmitted disease"			
Right	68/80 (85%)	77/80 (96.25%)	0.0300
Wrong	10/80 (12.5%)	1/80 (1.25%)	0.0124
Unknown	2/80 (2.5%)	2/80 (2.5%)	0.6126
Question 10 "The hymen is … "			
Right	65/80 (81.25%)	72/80 (90%)	0.1764
Wrong	13/80 (16.25%)	6/80 (7.5%)	0.1426
Unknown	2/80 (2.5%)	2/80 (2.5%)	0.6126
Question 11 "Fertilization is … "			
Right	59/80 (73.75%)	70/80 (87.5%)	0.0455
Wrong	14/80 (17.5%)	5/80 (6.25%)	0.0506
Unknown	7/80 (8.75%)	5/80 (6.25%)	0.7641
Question 12 "The urethra in the male is … "			
Right	68/80 (85%)	78/80 (97.5%)	0.0118
Wrong	10/80 (12.5%)	2/80 (2.5%)	0.0356
Unknown	2/80 (2.5%)	0/80 (0%)	0.4767

Table 2. *Cont.*

Variable	2019	2020	*p*
		N± (%)	
Question 13 "After ejaculation in the vagina, the spermatozoa may remain viable within the female genital organs . . . "			
Right	70/80 (87.5%)	75/80 (93.75%)	0.2780
Wrong	9/80 (11.25%)	3/80 (3.75%)	0.1334
Unknown	1/80 (1.25%)	2/80 (2.5%)	1
Question 14 "The interrupted coitus is . . . "			
Right	53/80 (66.25%)	64/80 (80%)	0.0745
Wrong	19/80 (23.75%)	11/80 (13.75%)	0.1562
Unknown	8/80 (10%)	5/80 (6.25%)	0.5628
Question 15 "Indicate the following sexually transmitted diseases . . . "			
Right	62/80 (77.5%)	71/80 (88.75%)	0.0913
Wrong	12/80 (15%)	6/80 (7.5%)	0.2109
Unknown	6/80 (7.5%)	3/80 (3.75%)	0.4926
Question 16 "The clitoris is . . . "			
Right	75/80 (93.75%)	72/80 (90%)	0.5628
Wrong	5/80 (6.25%)	5/80 (6.25%)	0.7440
Unknown	0/80 (0%)	3/80 (3.75%)	0.2437
Question 17 "The foreskin is . . . "			
Right	67/80 (83.75%)	74/80 (92.5%)	0.1426
Wrong	10/80 (12.5%)	3/80 (3.75%)	0.0825
Unknown	3/80 (3.75%)	3/80 (3.75%)	0.6773
Question 18 "Indicate the method that you think is most effective as a contraceptive . . . "			
Right	71/80 (88.75%)	75/80 (93.75%)	0.4013
Wrong	7/80 (8.75%)	4/80 (5%)	0.5320
Unknown	2/80 (2.5%)	1/80 (1.25%)	1
Question 19 "The menarche is . . . "			
Right	68/80 (85%)	72/80 (90%)	0.4733
Wrong	8/80 (10%)	6/80 (7.5%)	0.7796
Unknown	4/80 (5%)	2/80 (2.5%)	0.6773
Question 20 "Indicate the method that you feel is the safest way to prevent sexual transmitted diseases . . . "			
Right	75/80 (93.75%)	72/80 (90%)	0.5628
Wrong	3/80 (3.75%)	5/80 (6.25%)	0.7168
Unknown	2/80 (2.5%)	3/80 (3.75%)	1
Question 21 "Sexually transmitted diseases are . . . "			
Right	70/80 (87.5%)	78/80 (97.5%)	0.0356
Wrong	9/80 (11.25%)	2/80 (2.5%)	0.0608
Unknown	1/80 (1.25%)	0/80 (0%)	1
Question 22 "Transsexualism means . . . "			
Right	72/80 (90%)	73/80 (91.25%)	0.7862
Wrong	6/80 (7.5%)	4/80 (5%)	0.7440
Unknown	2/80 (2.5%)	3/80 (3.75%)	1
Question 23 "Heterosexuality means . . . "			
Right	55/80 (68.75%)	74/80 (92.5%)	0.0003
Wrong	13/80 (16.25%)	4/80 (5%)	0.0401
Unknown	12/80 (15%)	2/80 (2.5%)	0.0118
Question 24 "Masturbation could cause . . . "			
Right	70/80 (87.5%)	73/80 (91.25%)	0.6079
Wrong	8/80 (10%)	5/80 (6.25%)	0.5628
Unknown	2/80 (2.5%)	2/80 (2.5%)	06126
Question 25 "Menstruation is . . . "			
Right	64/80 (80%)	74/80 (92.5%)	0.0388
Wrong	14/80 (17.5%)	6/80 (7.5%)	0.0943
Unknown	2/80 (2.5%)	0/80 (0%)	0.4767
Question 26 "Orgasm means . . . "			
Right	65/80 (81.25%)	75/80 (93.75%)	0.0314
Wrong	13/80 (16.25%)	5/75 (6.25%)	0.0799
Unknown	1/80 (1.2%)	0/80 (0%)	1

Table 3. Comparison between surveys one year later: behaviour.

Variable	2019	2020	*p*
		N± (%)	
Sexual knowdlege			
Inadequate	3/80 (3.75%)	1/80 (1.25%)	0.2437
Poor	16/80 (20%)	2/78 (2.5%)	0.0011
Adequate	49/80 (61.25%)	53/80 (66.25%)	0.6218
High	12/80 (15%)	24/80 (30%)	0.0373
Main sources			
Friends	4 (5%)	1 (1.25%)	0.3635
Internet	42/80 (52.50%)	37/80 (46.25%)	0.5271
Family	9/80 (10.11%)	9/80 (10.11%)	0.8037
School	4/80 (5%)	16/80 (20%)	0.0086
Mass-media	15/80 (18.75%)	11/80 (13.75%)	0.5203
Doctors	5/80 (6.25%)	6/80 (7.50%)	1
Books	0	0	NA
Magazines/Newspapers	1	0	1
Other	0	0	NA
Regular partner			
Yes	5/80 (6.25%)	20/80 (25%)	0.0023
No	75/80 (93.75%)	60/80 (75%)	
Sexual petting			
Yes	12/80 (15%)	44/80 (55%)	<000.1
No	68/80 (85%)	36/80 (45%)	<000.1
Awareness of sexual intercourse meaning			
Yes	72/80 (90%)	73/80 (91.25%)	1
No	6/80 (7.5%)	5/80 (6.25%)	1
Unknown	2/80 (2.5%)	2/80 (2.5%)	0.6126
Practicing			
Yes	10/80 (12.5%)	46/80 (57.5%)	<000.1
No	70/80 (87.5%)	34/80 (42.5%)	<000.1
How often			
Seldom	7/10 (70%)	20/46 (43.48%)	0.2412
Sometimes	2/10 (20%)	22/46 (47.83%)	0.2080
Very often	1/10 (10%)	4/46 (8.7%)	0.6307
Masturbate			
Yes	30/80 (37.5%)	54/80 (67.5%)	0.0003
No	50/80 (62.5%)	26/80 (32.5%)	0.0003
Masturbation rate			
1–2 per month	8/30 (26.67%)	4/54 (7.41%)	0.0365
1–2 per week	7/30 (23.33%)	26/54 (48.15%)	0.0457
3–4 per week	5/30 (16.67%)	15/54 (27.78%)	0.3798
>4 per week	10/30 (33.33%)	9/54 (16.67%)	0.1396
Does he/she talk about sex?			
Yes	31/80 (38.75%)	55/80 (68.75%)	0.0003
No	49/80 (61.25%)	25/80 (31.25%)	0.0003
With whom?			

Table 3. *Cont.*

Variable	2019	2020	*p*
	N± (%)		
Friends	19/31 (61.29%)	30/55 (54.55%)	0.7041
Parents/Uncles	5/31 (16.13%)	9/55 (16.36%)	0.7826
Sibilings	4/31 (12.90%)	3/55 (5.45%)	0.4224
Teachers	1/31 (3.23%)	12/55 (21.82%)	0.0458
Doctors	2/31 (6.45%)	1/55 (1.82%)	0.6084
Priest	0	0	N.A.
Contraceptive Use			
Yes	5/10 (50%)	44/46 (95.65%)	0.0006
No	5/10 (50%)	2/46 (4.35%)	0.0006
Type			
Condom	3/5 (60%)	40/44 (90.91%)	0.2012
Contraceptive	1/5 (20%)	2/44 (4.55%)	0.7027
Other	1/5 (20%)	2/44 (4.55%)	0.7027

4. Discussion

The survey presented in this paper provides new and interesting data about the knowledge of sexuality of European adolescents, underlining the importance of national health policies.

Nowadays, sexuality remains a highly stigmatized and underrated health problem, perpetuating the silence and false myths surrounding this topic.

Adolescents are at elevated risk for adverse sexual and reproductive health outcomes relative to their habits, including HIV, sexually transmitted infections (STIs) and unplanned pregnancy [1].

However, the importance of sexual education is often ignored in schools [2].

Children and adolescents receive sexual health information several times throughout the day from the media, particularly the internet [6], but also from friends, parents and partners, although the quality of the messages is variable.

Despite recent progress in sexual educational programs, young people continue to be excessively burdened by threats to their sexual and reproductive health [7].

Analyzing our data, we noticed that, at the baseline, 23.75% of adolescents believed they had poor (20%) or inadequate (3.75%) knowledge of sexuality. After one year, this percentage fell to 2.5% and 1.25%, respectively. On the other hand, the percentage of participants who reported high knowledge of sexuality increased significantly. This data could indicate that sex education lessons helped to improve student confidence in approaching these issues.

Moreover, the main source for information about sexuality changed after one year. Particularly, we observed a significantly increase in the importance of school, while the role of the internet, media and family remained stable.

We hypothesize that the course encouraged students to discuss these issues with teachers and not only with friends and family.

Regarding students' sexual habits, after one year we noticed an increase in the number of sexually active subjects and adolescents with a stable partner.

We assumed that these results were related to the growth of the participants. In fact, several studies showed that, today, the median age of first intercourse for both sexes is 16 years [8].

Furthermore, subjects who used contraceptives increased. The small sample did not allow a definitive assessment of the role of the course in promoting healthy sexual behaviors. However, it is conceivable that increasing the number of the sample may determine a statistically significant correlation.

Moreover, the increase in the percentage of right answers for the questions "Indicate among the following the behaviour that increases the risk of contracting a sexually transmitted disease", and "Sexually transmitted diseases are ... ", could corroborate the role of the course in promoting healthy lifestyles and behaviours [3–5].

Analyzing the data of the questionnaire, we noticed that, in 2020, there was an increase in the number of correct answers in 24 questions out of 26, with a statistically significant difference in nine out of 24.

We hypothesized that, despite its short duration, the course contributed to increase the knowledge of sexual health themes and positively influenced the sexual habits and behaviours of the participants.

In terms of clinical implications, our data highlighted important topics related to sexuality that needed to be addressed and discussed with adolescents seeking help to overcome sexual difficulties.

This study represents preliminary experience which, if implemented on a larger scale, could be useful to assess the knowledge of sexual health among European adolescents.

Moreover, it showed that sexuality education course offered to adolescent determine positive sexual and reproductive health outcomes, including an improvement in the knowledge of the topic and an increase in condom use.

Our study had some limitations, the first being the sample size. Moreover, various sample characteristics, such as school class, religion and/or age, might have impaired the generalizability of our results.

Furthermore, we did not evaluate how the outbreak of the Sars-Cov-2 pandemic influenced the results of our analysis. Li et al. [9], in a series of 967 young Chinese individuals, reported that the COVID-19 pandemic was associated with a decrease in sexual intercourse frequency and an increase in the frequency of masturbation. The main survey was elaborated specifically for this study and dis not rely on validated or standardized instruments, and the participants repeated the same survey in a web form. Finally, this was a self-reported questionnaire, so the adolescents may have under-reported or over-reported their actual behaviour due to social pressures.

5. Conclusions

We believed that sexual health education in schools could play a major role in the sexual health development of adolescents, and may reduce future adverse sexual and reproductive problems, such as sexually transmitted infections or unplanned pregnancies. This study encouraged the introduction of school-based sexual education policies, pointing to opportunities for structural and early intervention programs.

References

1. William, G.; Axinn, L.; Pearce, D. *Mixed Method Data Collection Strategies*; Cambridge University Press: New York, NY, USA, 2006.
2. Breuner, C.C.; Mattson, G. Committee on Adolescence; Committee on Psychosocial Aspects of Child and Family Health. Sexuality Education for Children and Adolescents. *Pediatrics* **2016**, *138*, e20161348. [CrossRef] [PubMed]

3. Chin, H.B.; Sipe, T.A.; Elder, R.; Mercer, S.L.; Chattopadhyay, S.K.; Jacob, V.; Wethington, H.R.; Kirby, D.; Elliston, D.B.; Griffith, M.; et al. Community Preventive Services Task Force. The effectiveness of group-based comprehensive risk reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus, and sexually transmitted infections: Two systematic reviews for the Guide to Community Preventive Services. *Am. J. Prev. Med.* **2012**, *42*, 272–294. [PubMed]

4. Advocates for Youth. Programs that Work to Prevent Teen Pregnancy, HIV and STIs in the US. In *Science and Success*, 3rd ed.; Advocates for Youth: Washington, DC, USA, 2012.

5. Cavazos-Rehg, P.A.; Krauss, M.J.; Spitznagel, E.L.; Iguchi, M.; Schootman, M.; Cottler, L.; Grucza, R.A.; Bierut, L.J. Associations between sexuality education in schools and adolescent birthrates: A state level longitudinal model. *Arch. Pediatr. Adolesc. Med.* **2012**, *166*, 134–140. [CrossRef] [PubMed]

6. Daneback, K.; Månsson, S.-A.; Ross, M.W.; Markham, C.M. The Internet as a source of information about sexuality. *Sex Educ.* **2012**, *12*, 583–598. [CrossRef]

7. Bearinger, L.H.; Sieving, R.E.; Ferguson, J.; Sharma, V. Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *Lancet* **2007**, *369*, 1220–1231. [CrossRef]

8. Stryhn, J.G.; Graugaard, C. The age at first intercourse has been stable since the 1960s, and early coital debut is linked to sexual risk situations. *Ugeskr. Laeger.* **2014**, *176*, V01140063. [PubMed]

9. Li, G.; Tang, D.; Song, B.; Wang, C.; Qunshan, S.; Xu, C.; Geng, H.; Wu, H.; He, X.; Cao, Y. Impact of the COVID-19 Pandemic on Partner Relationships and Sexual and Reproductive Health: Cross-Sectional, Online Survey Study. *J. Med. Internet Res.* **2020**, *22*, e20961. [CrossRef]