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Publication metadata:

Title: Association between sources of sexuality education, sexual beliefs and behaviours in Lebanese young adults: a university-based crosssectional study

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Journal: Sex Education: Sexuality, Society and Learning

DOI: <https://doi.org/10.1080/14681811.2020.1722624>

How to cite this post-print from LAUR:

Bouclaous, C.H., Alrazim A., Chababi J., Jamaledine W., Nassar E., Maalouf A., Aridy S. et alt (2020). "Association between sources of sexuality education, sexual beliefs and behaviours in Lebanese young adults: a university-based cross-sectional study." *Sex Education: Sexuality, Society and Learning* 1-12. Doi: <https://doi.org/10.1080/14681811.2020.1722624>

Handle: <http://hdl.handle.net/10725/11938>

C 2020

This is an Accepted Manuscript of an article published by Taylor & Francis Group in Sex Education: Sexuality, Society and Learning on 24/01/2020, available online

<https://www.tandfonline.com/doi/full/10.1080/14681811.2020.1722624>

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Association between sources of sexuality education, sexual beliefs and behaviours in Lebanese young adults: A university-based cross-sectional study

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Abstract

This study assessed the association between sources of sexuality education, sexual beliefs and behaviour among Lebanese youth. Following stratified sampling, 451 unmarried students at a private university, mean age 20.25 (± 1.41) years, participated in the study. Main sources of information were teachers, mothers, the internet and friends. Respondents wished for increased involvement of fathers and doctors in their sexuality education. There was a positive association between school classes on reproductive health and the adoption of protective behaviour at first sexual experience (OR=4.09, $p < 0.05$). A Sexual Beliefs Index (SBI) was calculated as a mean score on 18 items related to sexual permissiveness (Cronbach's $\alpha = 0.83$). Sex and classes on reproductive health predicted a rise in SBI. The timing of classes, namely an earlier introduction, and communication with family and religious figures predicted a decrease in SBI. The SBI was positively associated with sexual activity (OR=3.68, $p = 4.399e-07$), first sex at < 17 years (OR=5.262, $p = 0.0099$) and engagement in one-night stands (OR=4.195, $p = 0.0001$). Students who engaged in same-sex sexual experiences had higher odds of contracting STIs (OR=12.7, $p = 0.0001$). Findings reveal the need to include sexual health in school curricula; train parents, physicians and teachers as information providers and moderators of SBI; and improve access to youth-friendly services.

Keywords: Lebanon, youth, sexual behaviours, sexual beliefs, sources of information on sexuality

Introduction

Formal sexuality education was first addressed by the Lebanese Republic in 1995, five years after the end of the civil war. At that time, a national plan for educational development was formulated in the context of the Reconstruction and Development of Lebanon in partnership with United Nations agencies (Baydoun 2008). A sex education package, developed under the supervision of the Educational Center for Research and Development (ECRD), focused on information acquisition, development of practical skills and social attitudes aimed at preventing HIV and sexually transmitted infections among youth.

Despite an emphasis on abstinence and monogamy, the sex education package faced immediate opposition from religious and traditional factions who believed that its implementation would lead to moral decline and a more liberal attitude towards sex (WHO 2003). The values that guided the sex education package were considered foreign to Lebanese society and utilised a 'borrowed' framework for educating Lebanese youth. The traditional approach of formal religious authorities, whose influence was anchored in the Lebanese political sectarian system, was strongly opposed to a modern secular approach by specialists who felt that sex education would lead to responsible and low-risk sexual behaviour (Baydoun 2008). Under such pressure, a chapter on 'The Reproduction of Life in Humans' was eliminated from the Life and Earth Sciences curriculum in eighth grade through a Presidential Decree No. 2066 (Lebanese Official Gazette 2000). Only a few private schools adopted it in twelfth grade (the final pre-university grade). More recently, a reproductive health and gender curriculum, developed by the United Nations Population Fund (UNFPA), was approved through Ministerial Decree No. 6610 (11 of June 4, 2010). However, programme implementation in Lebanese schools is still far from universal (DeJong & Bashour 2016). This is happening at a time when young Lebanese people are experiencing a shift in social values due to globalization and influences from the media and the internet, and are engaging in premarital sex at a younger age (Barbour and Salameh 2009). The rise in singulate mean age at first marriage is another important societal trend in Lebanon; with 32.8 years for males and 28.8 years for females, it has become one of the highest in the world, hence increasing the biosocial gap and the likelihood of having multiple premarital sexual partners (Tutelian et al. 2006; El-Kak, 2013).

Previous work exploring the relationship between school-based sex education interventions and young people's sexual health has shown that school-based sex-education is effective in reducing HIV-related risk by significantly raising knowledge of HIV, improving efficacy in refusing sex, increasing condom use and reducing the number of sexual partners and first sex initiation (Fonner et al. 2014). While sex education may delay first sex in girls and boys when compared to having no sexual education (Lindberg and Maddow-Zimet 2012), it does not increase youth sexual activity, risky sexual behaviour or sexually transmitted infection (STI) rates (UNESCO 2018). Beyond classroom education, there is good evidence that whole-school health interventions that include the promotion of sexual health alongside prevention of substance abuse with involvement of parents and school clinics is also effective (Shackleton et al. 2016).

Since sex education in Lebanese schools remains a controversial topic, this study sought to identify the main sources from which Lebanese young adults report receiving information on sexuality during adolescence, and to assess the association of these sources of sexuality education with sexual beliefs and sexual behaviours. It also aimed to examine factors that predict scores on a Sexual Beliefs Index and consequently students' level of sexual permissiveness. The following working definition of sexual health informed the work:

'a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence' (WHO 2006).

Materials and Methods

A cross-sectional study was conducted in a private university campus that hosts 3,800 students in Byblos. Following stratified sampling by major area of study, 451 students were selected to take part in the study. Inclusion criteria were being university student, 18-25 years old, not married and enrolled on a major course. The sampling frame consisted of students enrolled in major courses (i.e. courses attended exclusively by students of a given major) to avoid double counting. Formal approval by the Lebanese American University's institutional review board and the dean of students were secured. A list of major courses was obtained from the institutional research and assessment office. From this list, courses were randomly selected. Students, present on survey day, were invited to participate. The questionnaires were administered by the research team at the beginning or at the end of class. Data collection was completed between October and December 2018. After giving their informed consent, participants completed the questionnaire and returned it in a sealed envelope. A response rate of 70% was noted. The reasons indicated for not participating were lack of time or having another class to attend.

The 'Illustrative questionnaire for interview-surveys with young people' (Cleland 2001) was used. The research team adapted the questionnaire to ensure cultural appropriateness. Questions on abortion were removed because the Lebanese law only permits induced abortion as a last resort in emergency medical situations. Questions with explicit vocabulary such as 'Did you ever reach climax inside her vagina?' and 'Did you ever stroke their vagina/penis so that she/he climaxed?' were found inappropriate for the local context and were removed. The revised questionnaire was shared with subject experts at the Lebanese American University to confirm its face validity. The variables gathered data on: 1. sources of information on sexual and reproductive health (including actual and preferred sources as well as the school year in which a reproductive health class was first taken), 2. sexual conduct (including heterosexual contact, same sex sexual experiences, and protective behaviours), 3. sexuality, gender and norms, 4. use of health services, 5. sexual health outcomes, and 6. background characteristics (including age, sex, educational level, religiosity, lifestyle mainly smoking and alcohol consumption).

Statistical analyses

Descriptive and inferential statistical analysis was carried out using SPSS version 25 for Windows. A multiple linear regression was performed to predict responses to a Sexual Beliefs Index (SBI) (dependent variable) based on sources of sexuality education (independent variables), religiosity, sex, same sex sexual experiences, and school year in which a reproductive health class was first received. The SBI was calculated as a mean score on 18 items related to sexual permissiveness (such as the belief that it is all right to hug/touch, the belief in female/male pre-marital virginity, the belief that sex is all right if contraceptive method is used, the belief that female/male will regret having intercourse prior to marriage, the belief that a boy will not respect a girl who agrees to sex out of wedlock). Responses to items within the SPI were coded: 0 (disagree), 1 (not sure) and 2 (agree). Some of the items were reverse coded to fit the theme of openness to sexuality. A high reliability coefficient was reported (Cronbach's alpha= 0.83). A higher SBI score indicated a higher degree of sexual permissiveness. Sources of information included parents, siblings, other relatives, friends, religious figures, classes on reproductive health, doctors, the Internet and non-governmental organisations. In this regression model, religiosity was coded as a categorical data taking 0 for not important, 1 for important and 2 for very important; school year during which reproductive health classes were first introduced was coded as a categorical variable taking integer values from 1 (grade 6 or before) to 4 (never or not applicable). All other variables were dichotomous and were coded as 1 for yes and 0 for no. Preliminary analyses were performed to ensure there was no violations of assumptions of normality, linearity and multicollinearity.

Pearson's chi-square test of independence was applied to examine differences by sex, sexual activity, religiosity and lifestyle. A p-value less than 0.05 indicated significance. Fisher's exact test was performed to assess the association between sexual behaviour and the sexual beliefs index. These dichotomous variables referred to sexual behaviour: sexual activity (0 for abstinence, 1 for no abstinence), age at first sexual experience (0 for ≥ 17 years, 1 for < 17 years), engagement in one-night stand (0 for no one-night stand, 1 for engagement in one-night stand), acquisition of STIs (0 for no STI, 1 for acquisition of STI) and adoption of protective behaviour at first sexual experience or on one-night stand (0 for no action, 1 for action taken to reduce risk of STI). The SBI was treated as a dichotomous variable and coded (0 for ≤ 1 , 1 for > 1).

Results

A total of 451 students (including 220 young women), mean age 20.25 (± 1.41) participated in the study. Table 1 presents a summary of sample characteristics.

[insert - **Table 1: General characteristics of sample of 451 unmarried university students aged 18 to 25 years** - here]

Nearly two thirds (278; 61.6%) of students reported never having had sexual intercourse. The main reasons for abstinence (not mutually exclusive) were lack of readiness (161; 36.0%), fear of sexually transmitted infections (127; 28.1%), perceived immorality of the act (125; 27.7%) and lack of opportunity (76; 16.8%). In some cases, students perceived pressure from others to have intercourse (78; 17.3%). The relation between sex and source of pressure was significant,

($\chi^2=18.046$; $df=4$; $p= 0.001$). Young men were pressured by friends whereas young women felt pressure from partners.

Table 2 presents the characteristics of sexually active students. On their first experience, 117 students reported using a condom for protection (70.5%). For the majority (100, 60.2%), first sexual experience was at 17-19 years of age. Male respondents were close to 34 times more likely to experience a first sexual relation at less than 17 years of age (OR= 33.795, $p= 7.133e-09$, 95% CI: 5.523, 1380.539).

[insert - **Table 2: Specific characteristics of the 166 unmarried university students, 18 to 25 years old, who reported a sexual activity - here]**

There was a significant association between lifestyle and sexual activity. Smokers were more likely than others to be sexually active ($\chi^2=46.909$; $df=1$; $p=0.000$). Similarly, students who had ever consumed alcohol (daily, weekly or occasionally) were more likely than others to be sexually active ($\chi^2=26.158$; $df=1$; $p=0.000$). Thirty-two percent of smokers and drinkers had two or more sexual partners.

Sources of sexuality education

Although 65.6% of respondents had taken classes on reproductive health in school, an equal proportion (295; 65.4%) thought that the number of classes was insufficient. For most, reproductive health education was introduced in grades 7-9 (157; 34.8%) which corresponds to ages 12 to 15 years. While half (218; 48.3%) felt that the topic was offered at the right time, some wished it had been introduced earlier (51; 11.3%). There was no association between the availability of classes on reproductive health and age at first sexual experience. However, sexually active students were more likely to request additional classes on sexuality, ($\chi^2=6.625$; $df=2$; $p=0.036$). A positive association was found between classes on reproductive health and the adoption of protective behaviour at first sexual experience (OR=4.09, $p<0.05$, 95% CI: 0.832, 21.827). Those who had taken such classes had higher odds of using a method of contraception on their first sexual experience.

With respect to information on sexual and reproductive systems, respondents listed the following main sources: teachers (203; 45.0%), the Internet (95; 21.0%), friends (43; 9.5%) and doctors (21; 4.7%). There was a significant association between sexual experience and source of information ($p=0.001$). Students who received information from the Internet were more likely to have had sexual experience whereas virgins were more likely to have acquired information from the teachers. When students were asked from whom they would have preferred to learn, they answered teachers (114; 25.3%), doctors (100; 22.2%), mothers (46; 10.2%) and the Internet (38; 8.4%). A chi square goodness of fit test showed that students did not have an equal preference for the sources of information. In other words, preference was not equally distributed in this sample, ($\chi^2=609.26$, $df=14$, $p<0.05$). Post hoc tests showed that teachers and doctors alone had the same proportion of preference as all the other categories taken together, ($\chi^2=0.473$, $df=1$, $p=0.4914$).

For information on emotional relationships, respondents depended on friends (170; 37.7%), mothers (83; 18.4%) and the Internet (50; 11.1%). However, they would have preferred to receive advice from mothers (106; 23.6%), friends (94; 20.8%) and fathers (42; 9.3%). Respondents expressed the need for increased involvement by the father in this aspect of their education.

The majority (409; 90.7%) had learned something about sexuality from the Internet. Sources consulted included educational articles/videos (151; 33.5%), pornography (114; 25.3%) and entertainment articles/videos (108; 23.9%). Students who had had sexual experience were more likely than others to have learned about sexuality from pornography ($\chi^2=45.530$; $df=4$; $p=0.000$).

Sources of sexuality education and sexual beliefs index

A significant regression equation was found ($F(11, 418) = 16.82$, $p < 0.000$), with an R^2 of 0.3068. The participants' predicted SBI was equal to $1.72410 - 0.19984$ (religiosity) + 0.11754 (homosexual experiences) + 0.07653 (sex) – 0.15868 (parents) – 0.50704 (other relatives) – 0.88424 (religious figures) – 0.22772 (siblings) + 0.10514 (friends) + 0.14867 (Internet) + 0.06009 (classes on reproductive health) – 0.06218 (year of classes on reproductive health). The variance in the SBI explained by the model was approximately 30%. Significant predictors of scores on the SBI were religiosity, sex, classes on reproductive health, school year in which such classes were first received, and information from religious figures, parents and other relatives. More specifically, sex and classes on reproductive health had a positive relationship with the SBI, meaning that a unit increase in these variables led to an increase in the index. Religiosity, parents, other relatives, religious figures and year of classes had an inverse relationship with the SBI, meaning that is a unit increase in these variables induced a decrease in the sexual beliefs index.

Sexual beliefs index (SBI) and sexual behaviours

There was a significant association between sexual activity (no abstinence) and the SBI. Sexually active students were more likely to have a SBI greater than one ($OR=3.68$, $p=4.399e-07$, 95% CI: 2.112, 6.686) indicating higher sexual permissiveness. There was also a significant association between age at first sexual experience and the SBI. Specifically, students who had had early sexual experience (<17 years of age) were more likely to have a SBI greater than one ($OR= 5.262$, $p= 0.0099$, 95% CI: 1.298, 46.178). Moreover, there was a significant association between the SBI and one-night stands. Respondents with a higher SBI were more likely to have engaged in one-night stands ($OR= 4.195$, $p=0.0001$, 95% CI: 1.854, 11.149).

SBI was not associated with acquisition of STI or adoption of protective behaviours against pregnancy and STIs at first sexual experience. There was also no association between the SBI and the adoption of protective behaviour on one-night stands.

Among the students who had had sex with same sex partners, 11 (68.8%) reported more than three sexual partners and 12 (75%) had engaged in one-night stands. Students who engaged in

same sex sexual experiences had a higher odds of contracting STIs (OR= 12.7, $p=10e-4$, 95% CI: 3.368, 45.796).

Use of sexual and reproductive health services

Sixty-five participants (14.4% of sample) had visited a health care facility for sexual concerns. While the majority had sought services from a private health facility (54; 83.1%), the remainder had used the public sector (Table 3).

[insert - **Table 3: Experience of 65 university students who visited a health facility or doctor to receive services or information on contraception, pregnancy, abortion or sexually-transmitted diseases- here]**

Discussion and Conclusion

Close to two-thirds of the students in this study had never engaged in sexual intercourse. The reasons for virginity concurred with earlier literature on the postponement of sexual debut in Lebanese youth for whom social rejection, religion, parental disapproval and fear of contradicting one's beliefs were major concerns (Yasmine et al. 2015). The proportion of sexual activity (38.4%) was comparable to previous work (Salameh et al. 2016) that revealed a rate of 35% divided into 15% who had engaged in sexual activity and 20% who were regularly sexually active. This may be explained by the specificities of the Lebanese socio-cultural context, which assigns great importance to virginity and hymen and, largely, reinforces gender inequalities. Awwad et al. (2013) have observed that Lebanese women are more tolerant of marrying a non-virgin male partner while men are more likely to refuse marriage with a non-virgin woman in certain religious denominations. They have reported discrepancies in attitudes towards virginity and premarital coital sex stemming from differences in religious and cultural backgrounds. Nevertheless, an intact hymen has been linked to chastity, marriageability and family honor (El-Kak 2013). With such cultural ideals connected to hymen preservation, and the ensuing control over women's sexuality and autonomy, El-Kak et al. (2017) have reported that, among Lebanese female university students who had ever had anal or oral sex, 39.2% did so specifically to avoid premarital vaginal sex and hymen-breaking. Bteich et al. (2017) has also described a contradiction between Lebanese university students' beliefs and practices — whereby emotional conflict exists between the desire to engage in sex and the lack of actual sexual activity possibly due to the social and religious norms that reject premarital sex and the fear of social sanctions. Current findings are compatible with those from a study from Turkey (Sümer 2015), which showed that religiosity resulted in more conservative views on masturbation, same sex relationships, abortion, pornography and sexual coercion. Recent initiatives in Lebanon are attempting to create a safe environment for open discussion on youth sexual health although cultural taboos and stigma remain an obstacle to informed discussion and the expression of needs (IWSAW 2017). The sexuality hotline, launched by The A Project allows callers to safely discuss their concerns and views on sexual orientation, pleasure, sexual violence, contraception, STIs and abortion (Soweid 2017). UNFPA has also been developing and training a youth network of around 300 peer educators (<https://lebanon.unfpa.org/en>). Non-governmental organizations like Marsa, the

Lebanese Medical Association for Sexual Health (LebMash), the Lebanese Medical Students' International Committee (LeMSIC) have been providing respectively voluntary counseling services and STI testing, workshops on sexual health to students in the health sciences, and information sessions in schools and scout groups (Soweid 2017). Such initiatives remain few and fragmented, however, and lack a strategy for scale up.

Two-thirds of respondents reported wanting more sexuality education in school, with 11.3% supporting the earlier introduction of classes. This was also the case in a previous study (Mouhanna et al. 2017) where reproductive health education received support from 58.1% of 11-17 year-olds, particularly those at higher-grade levels and those who have ever drunk alcohol, with the desire for classes to begin before or at puberty. As in previous research (Salameh et al. 2016), we found that students who smoked or drank alcohol were more likely to be sexually active and to have two or more partners. This was also in accordance with Ghandour et al. (2014) who reported an association between alcohol and/or drug use at sexual debut and an increased likelihood between alcohol use and having sex with an unfamiliar partner, reporting several sexual partners, or engaging in uncomfortable sexual activity.

Thirty percent of the variance in respondents' sexual beliefs index was explained by sources of sexuality education, with a significant inverse relationship resulting from communication with parents, relatives, religious figures and an earlier introduction of reproductive health education in school. Significant predictors with a positive effect on the SBI scores were sex (male/female) and classes on reproductive health in school. Although not statistically significant, friends and the Internet tended to predict an increase in the sexual beliefs index. In turn, the SBI was positively associated with sexual activity, engagement in one-night stand and younger age at first sexual experience. However, the SBI was not associated with acquisition of STIs or the adoption of protective behaviours.

By investigating both formal and informal sources of information on sexuality, we developed an understanding of the information-seeking behaviour of Lebanese youth. A finding worth mentioning was the positive association between the receipt of classes on reproductive health in school and the adoption of protective behaviour on first sexual experience. Another important result was the lack of association between receipt of classes on reproductive health and age at first sexual experience. As part of their preferred sources of information, students expressed the need for involvement of physicians and fathers in their sexuality education. Their actual sources of information had been the teacher, friends, mother and the Internet. It should be pointed out that many of these individuals convey their own conceptions about sexuality including notions of sexual pleasure, eroticism, same sex relationships and gender roles. A study comparing schoolteachers from Tunisian, Morocco, Lebanon and France (Khzami et al. 2008) reported that Lebanese schoolteachers were less supportive of early sexual education, or discussion of the intimate and social aspects of sexuality, or even 'safer sex' compared to other teachers. They did support gender equality and sexual activity within a stable relationship similarly to others. The more religious among them were opposed to sexuality education, abortion, equal rights for men and women, and rights of same sex practicing women and men. Interestingly, teachers who were older, had higher degrees, or had more teaching experience were more in favour of these issues

Having had sex with same sex partners increased the odds of having acquired an STI. This finding calls for attention to this at-risk group through the implementation of awareness campaigns and testing services. This was particularly important in a context where 75% of those who have had same sex sexual experiences have engaged in one-night stands. Efforts need to include the training of physicians and other health professionals in the provision of youth-friendly services characterised by appropriate time for treatment of current concern, in a confidential manner, and with counselling on contraception, STIs, pregnancy and risky behaviours as well as testing for STIs. Of note, the study participants who had visited a health facility for a sexual concern were not always given educational material on sexual health. In some instances, the health professional did not discuss contraception and did not make them feel comfortable and secure enough to ask questions. This may be due to persistent inadequate training in patient education and counselling. In the past, Lebanese obstetricians and gynaecologists have expressed a need for training and curricular change to encompass more sexual health topics (El-Kak et al. 2004).

Taken independently, reproductive health education in school did not predict early sexual activity. A combination of factors determined individuals' sexual beliefs index and their degree of sexual permissiveness, namely their sex, religiosity, lifestyle, sexual orientation and exposure to different formal and informal sources of information. Thus, sexual health may be included in school curricula without the fear of inducing early sexual activity and in the comfort of knowing that first sexual experience would likely involve the adoption of protective behaviours. Creating an environment in which young people rely less on the Internet and friends, and depend more on informed and trained parents, teachers and health professionals may moderate their engagement in early sexual activity and risky behaviours.

Limitations

Several limitations are worth noting. This study would have provided a wider understanding of the needs of Lebanese youth, had the questionnaire been applied in conjunction with a qualitative method of investigation such as focus groups. Another limitation was the lack of a question on household composition, namely whether students lived with a mother, father, brothers and sisters. Some may have skipped reference to a 'sister' or 'brother' as a source of information because they had no sibling. The questionnaire focused mainly on penetrative sexual behaviour; the inclusion of questions on non-penetrative sexual behaviour would have yielded greater precision concerning sexual practice. Since students' responses indicated strong parent-child closeness, it would also have been interesting to inquire about the views of parents on sexuality. Moreover, study participants came largely (422; 93.5%) from private schools; outcome measures may have been different for students from public or technical schools. Due to limited resources, data was collected from a single university, which may affect the generalisability of the results. Finally, asking university students to remember when and how they learned about sexuality and the circumstances of their first sexual intercourse may involve recall bias.

Conclusion

A sexual education programme should empower young people with the skills needed to make informed and responsible decisions, and promote gender equality along with sexual and reproductive rights (Starrs et al. 2018). In addition, the programme should be adapted to the socio-cultural norms of the 18 legally recognised religious groups in Lebanon. This requires the involvement of teachers, parents, peers and health professionals as important sources of information and support, and as predictors of youth sexual beliefs index and sexual permissiveness.. Young people in Lebanon are engaged in sexual activity involving one-night stands, multiple partners and STIs. These realities cannot be ignored. We need to develop the willingness to discuss and address issues of adolescent and young adults' sexuality openly. Only then, will we be able to develop programmes and policies that attend to young people's needs and their overall wellbeing.

We conclude with the following recommendations for the future implementation of sexuality education in Lebanon.

- Raise awareness on the importance of protective behaviours at first sexual experience and in subsequent sexual conducts
- Include sexual health and notions of sexual and gender diversity in school curricula
- Consult with young people to understand how best to address their sexual health needs in a non-judgemental and non-discriminatory way
- Train parents, physicians and teachers for their future role of sexual information providers
- Improve access to youth-friendly services that offer sexual information, testing and treatment to adolescents and young adults

Funding

No funding was received for this work.

Ethics

Formal approval of the LAU Institutional Review Board was secured.

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Table 1: General characteristics of the study population of unmarried university students aged 18 to 25 years

Variables (N= 451)		Male n (%)	Female n (%)	Total N (%)
Educational level	Undergraduate	190 (42.1)	186 (41.2)	376 (83.4)
	Graduate	40 (8.9)	32 (7.1)	72 (16.0)
Importance of religion	Very important	69 (15.3)	93 (20.6)	162 (35.9)
	Important	111 (24.6)	97 (21.5)	208 (46.1)
	Not important	50 (11.1)	30 (6.7)	80 (17.7)
Ever smoked	Yes	108 (23.9)	66 (14.6)	174 (38.6)
Ever consumed alcohol	Yes	191 (42.4)	155 (34.4)	346 (76.7)
Ever had sex	Yes	134 (29.7)	32 (7.1)	166 (36.8)
	No	90 (20.0)	188 (41.7)	278 (61.6)
Ever watched pornography	Yes	206 (45.7)	83 (18.4)	289 (64.1)
	No	11 (2.4)	122 (27.1)	133 (29.5)
	Don't know	7 (1.6)	4 (0.9)	11 (2.4)
Ever visited a health facility for sexual concerns	Yes	41 (9.1)	24 (5.3)	65 (14.4)
Ever had classes on reproductive health in school	Yes	152 (33.7)	141 (31.3)	293 (65.0)
	No	79 (17.5)	76 (16.9)	155 (34.4)

Table 2: Specific characteristics of unmarried university students, aged 18 to 25 years, who reported a sexual activity

Variables (N=166)		Male n (%)	Female n (%)	Total N (%)
Sexual activity	Yes	134 (80.7)	32 (19.3)	166 (100.0)
Number of partners	1-2	55 (33.1)	23 (13.9)	78 (47.0)
	≥3	79 (47.6)	9 (5.4)	88 (53.0)
Age at first sexual experience	<13	4 (2.4)	1 (0.6)	5 (3.0)
	14-16	27 (16.3)	0 (0.0)	27 (16.3)
	17-19	80 (48.2)	20 (12.0)	100 (60.2)
	> 20	18 (10.8)	7 (4.2)	25 (15.1)
Homosexual experiences	Yes	13 (7.8)	3 (1.8)	16 (9.6)
Protective behaviour	Yes	108 (65.1)	20 (12.0)	128 (77.1)
	No	22 (13.3)	7 (4.2)	29 (17.5)
Ever had a one-night stand	Yes	74 (44.6)	8 (4.8)	82 (49.4)
Ever had STIs	Yes	11 (6.6)	3 (1.8)	14 (8.4)
Ever paid for sex	Yes	22 (13.3)	0 (0.0)	22 (13.3)
Ever received money for sex	Yes	10 (6.0)	3 (1.8)	13 (7.8)

Table 3: Experience of single university students who visited a health facility or doctor to receive services or information on contraception, pregnancy, abortion or sexually transmitted diseases

Variables (N=65)	Male n (%)	Female n (%)	Total N (%)
Seen posters on sexual health	33 (50.8)	14 (21.5)	47 (72.3)
Given a brochure on sexual health	20 (30.8)	9 (13.8)	29 (44.6)
Doctor/nurse talked about contraception	21 (32.3)	15 (23.1)	36 (55.4)
Doctor/nurse talked about sexually transmitted diseases	29 (44.6)	17 (26.2)	46 (70.8)
Doctor/nurse talked about pregnancy	23 (35.4)	15 (23.1)	38 (58.5)
Felt comfortable enough to ask questions	32 (49.2)	12 (18.5)	44 (67.7)
Questions asked were answered adequately	35 (53.8)	21 (32.3)	56 (86.2)
Enough confidentiality	32 (49.2)	20 (30.8)	52 (80.0)