

The Effect of Lebanese Sex Education Curriculum 2009 on Developing Students' Positive Sexual Attitude and Good Behavior

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Abstract

The aim of this study was to investigate the effect of implementing the Lebanese Sex Education Curriculum 2009 on grade 12 life science students' sexual attitude and behavior in public high schools – Mount Lebanon for three months. An intervention was conducted by using Sex Education Curriculum 2009 on a sample of 30 students as experimental group, while the control group consisted of 20 students selected from other public school in the same area. Using quasi-experimental non-equivalent groups design (pre- post test), evaluation of outcomes was measured by using a questionnaire from an Illustrative questionnaire for interview-surveys with young people done by John Cleland where questions were selected out according to the selected objectives of the new curriculum 2009 and student's social culture context and completed by 50 students. After analysing the data by using SPSS version 16.0, the findings implied that the government should activate the implementation of the Sex Education Curriculum 2009 as well as to improve it according to the students' needs.

ملخص

تهدف هذه الدراسة الى تحديد اثر منهاج التربية الجنسية للعام 2009 على التغيير الايجابي للمواقف والسلوكيات المتصلة بالجنس لتلامذة الثانوي الثاني-علوم الحياة. تم اعتماد منهاج 2009 للتربية الجنسية لمدة ثلاثة اشهر على عينة من 30 تلميذ في ثانوية رسمية في جبل لبنان في حين ان 20 تلميذ من ثانوية رسمية اخرى تابعوا منهج 1997. لقياس مستوى معرفة ومواقف وسلوكيات التلامذة الخمسون تم اعتماد استمارة *John Cleland* بعد تكييفها لتلائم مع محتوى منهج 2009 ومع خصوصية المجتمع اللبناني الثقافية والاجتماعية. بينت نتائج تحليل البيانات ان التلامذة الذين تم التدخل معهم وفق منهاج 2009 للتربية الجنسية اكتسبوا مواقف وسلوكيات متصلة بالجنس اكثر ايجابية من زملائهم الذين تابعوا منهاج 1997 وخلصت الدراسة الى ضرورة اعتماد منهاج 2009 الذي اعده المركز التربوي للبحوث و الانماء مع امكانية اجراء تعديلات عليه بحسب احتياجات التلاميذ.

World Health Organization (WHO) defined “Adolescents” and “young people” as the age group between 10 and 19 years and between 10 and 24 years, respectively.

According to the latest statistics that was done in 2009, the percentage of youth in Lebanon between 15-24 years and extended to 29 due to socioeconomic characteristics specific to Lebanon, such as age of marriage and social independence, represents 19.80% where 52.70 % are males and 47.30% are females and the percentage of school enrolment at secondary level is 82.14 % (UNFPA , 2011). Thus, neglecting this population has a major implication on sexual and reproductive behaviours as they develop into adults where the health threats for adolescents are predominantly behavioural rather than biomedical (WHO ,2000 – 2001).

Sexual Education (SE) was first officially introduced in 1995 in Lebanon, and was aimed at pupils in the eighth grade, ages 12 to 14. However, few years later it was withdrawn after facing fierce criticism from various religious factions in the country (Alabaster,2011). According to WHO (WHO.2010), youth in Lebanon are estimated at around 20 % of the total population and they face two fold discrimination: in society and in the Lebanese laws. Practically, youth are not expected to take initiative or influence society and most of the data available on youth health describe health problems related to behaviour, namely: violence, unprotected sex, unhealthy diet, inactivity and smoking (WHO,2010). As a result, they lack self-confidence and self esteem, and seldom express their thought comfortably and courageously. The Lebanese laws and policies are not youth-friendly as they do not allow youth’s meaningful engagement in decision-making processes in the public sphere (WHO,2010).

Throughout the years of teaching Biology for secondary level in Mount Lebanon , long line of students were asking sexual questions and they were lost , they didn’t know what to do. Students get the sexual behaviour and attitude from various unreliable sources such as the internet, television and pure hearsay and this was stated that the main sources of information on sexuality, conception, pregnancy, and contraception for young people are friends and the media (UNESCO/UNICEF/WHO /World Bank, 2000).

Background and Literature review

World Health Organization (WHO) defined Sexual health as : “...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. For sexual health to be attained and

maintained, the sexual rights of all persons must be respected, protected and fulfilled.” (WHO, 2006a, updated 2010).

Research in several countries confirmed that Sex educated women stay healthier and raise better nourished, healthier and better educated children (Cooper, 1999) and the promotion of SE does not encourage young people to have early sexual intercourse (Blum & Mmari, 2006, Kirby & Lepore, 2007) but rather put in evidence a positive effect on the maturity in the sexual behavior of students (Singh et al. , 2005) and risk taking (Coyle et al. 2004, 2006 ; Kirby et al. , 1997, 2005, 2006, 2007). Moreover, Sex Education programmes don't increase the adolescents and young peoples' sexual activity (Kirby, 2011) and to be effective it needs to be comprehensive, provide unbiased and scientifically based information, value the risks of unprotected sex; clarify the different practices and methods that can decrease the risks of pregnancy and sexually transmitted diseases during the intercourse and address the importance of using contraceptive methods such as condoms and others. (Kirby, 2011)

According to UNESCO (2012), Lebanon has a low level HIV epidemic. Prevalence is estimated at 0.1% in the general population males and females and the primary mode of HIV transmission is sexual. There are no specific data available on prevalence among young people or on their knowledge of both correctly identifying ways of preventing the sexual transmission of HIV and rejecting major misconceptions about HIV transmission. It is not known how many schools in the country provide life skills-based HIV education. However, there is growing evidence from Knowledge, Attitude, Behaviour and Practices (KABP) studies that Lebanese youth are increasingly displaying risky behaviours, suggesting that the education sector has a key role to play in regard to prevention. (EDUCAIDS/UNESCO, 2010).

Meanwhile due to the recommendations of international organisms such as WHO, the educational centre of research and development in Lebanon (ECD) has attempted to introduce SE in renovation of curricula 1998. This attempt has faced many objections from several socio- political and religious authorities in Lebanon, which resulted in its total suppression from the curriculum of the EB8 class (students aged 12-13) and partial containment of the biology curriculum for the 2nd year of secondary school (15-16 years), Literature and Humanities and the 3rd year of secondary school (16-17 years) (Yammine et al. 2007, Yammine ,2008). In 2009, the sex education curriculum was acknowledged by the minister of education under the title “Life skills applied to education in reproductive health from a gender perspective”.

On other hand , a study done by the help of UNFPA and ECRD about why reproductive health is needed in Lebanese schools revealed that 15% of boys between 15 and 24 years old , they did various short sexual relationship while 5% they were sexually harassed to do a sexual relationship and 1 out of four had used a condom during the sexual relationship .And on the same study, 40% of the students stated that their parents don't understand or guide them ,while 66.8% of the students don't ask their parents about sexual and reproductive health issues, 79.6% don't ask their teacher about sexual issues and among them 88.3% of females (UNFPA / ECRD,2012).

If students know more about sexual health, they are more likely to postpone initiation or use contraceptives and to be protected (Frost & Darroch Forrest, 1995; Grunseit & Kippax, 1993 , p.10; Grunseit et al., 1997; Kirby, 2000) and in some cases, sex education delayed the initiation of sexual intercourse, decreased sexual activity, and increased the adoption of safer sexual practices among sexually active young people. These findings have been confirmed again by a study in the United States (Kirby, 2001).

In 1997, UNAIDS conducted a comprehensive literature review of more than 60 articles that confirmed Education on sexual health and/or HIV does not encourage increased sexual activity, good-quality interventions can help delay first intercourse and/or reduce the frequency of sexual activity, pregnancy, abortion, or birth-rates, good programmes can increase the condom use of sexually active youth and thus protect them from STD, including HIV, and pregnancy and responsible and safe behaviour can be learned (UNAIDS, 1997).

Sex Education have had some success in many countries all over the world , this study attempted to focus on the effect of Sex Education Curriculum 2009 on developing positive sexual attitude and promoting a good behaviour for year 12 Life Sciences' Students in public high Schools – Mount Lebanon .

Research Question

Due to the sexual health problems and questions that were faced every year, a question was raised: does applying the Lebanese Sex Education Curriculum 2009 on Year 12 Life Sciences' Students develop a positive sexual attitude and promote good behaviour?

Hypothesis

H0 : Applying the Sex Education Curriculum 2009 doesn't have an effect on developing positive sexual attitude and promoting good behaviour for year 12 Life Sciences' Students in Public High School – Mount Lebanon .

H1 : Applying the Sex Education Curriculum 2009 significantly has an effect on developing positive sexual attitude and promoting good behaviour for year12 Life Sciences' Students in Public High Schools – Mount Lebanon.

Methodology

Participants

A Sample of 50 students was participated in this study from two Public High Schools having common Socio- cultural and traditional believes and between 17 – 20 years old , who are originally Lebanese .Also, constant variables were maintained where the students are not in contact with each other, because each school is present in different area but still having same constant factors in terms of traditions and believes , demographic characteristics such as gender, age, ethnic identity, also, students are not relatives or friends to each other.

Instrument

A questionnaire was designed based on an Illustrative questionnaire for interview-surveys with young people done by John Cleland (WHO,nd) . Ten questions were selected out according to the objective of the new curriculum and student's social culture context in order to test the students' sexual attitude and behaviour. The first and second sections of the questionnaire contained questions on the socio-demographic data of the respondents, and contained questions about the source of information received by students concerning puberty, reproductive system and relationship, and from where they prefer to receive these information respectively, while the third section contained questions which test their sexual behaviour and attitude. On other hand, the used tool in the study was the curriculum of 2009 for Sex Education and the following objectives were selected :

1- Students will be responsible on their sexual relationship , the goal is that students will know what is abortion, the reasons beyond abortion, its disadvantages on female and family , name the contraceptive methods and its consequences . 2- Students build attitude and behaviour as a result of sex education , where the goals : students will name the types STD and the way they are transmitted , obey the medical and prescriptions about protection against STD. 3- Students make decisions related to family in a conscious way , and knowing the importance of participation and be responsible one. where the goals are : Students plan with their partner about the family in terms of kids numbers , know his rights and duties, respect his partner, children and parents rights, and know the importance of pre- marriage blood test to protect the family from genetic diseases or STD .

Procedures

During three months parallel to what is mentioned in the curriculum of 1998 about reproduction and health education with the help of the Sex Education Curriculum (2009) for year 12 in biology course , Sex Education was integrated and applied only in one high School.

A quasi-experimental non-equivalent groups (quantitative) design of pre-post test was used in this study. Pre-treatment phase (pre-test) was applied for both students before starting the explanation of reproductive part in the life sciences book, where students were given 30 minutes to fill the questionnaire. After three months, a post test was applied for both schools, which was same as the pre-test. Results were analysed by comparing the effect of treatment before and after and compared to the High school students that wasn't subjected to the treatment.

Ethical Issues

The questionnaire was reviewed and approved by the school ethics. School principals, parents and students acceptance were taken at the beginning of the study by completing the consent form for participation in the study.

The students' privacy were respected where a random number was posted to the questionnaire as well as they had the ability to refuse to do the pre or post test or even to withdraw.

Data analysis

Data was entered into and analysed using SPSS version 16. Pair sample t-test was used to assess whether the means of two groups are *statistically* different from each other after applying the intervention and to compare the means of post-test for the behaviour and attitude of grade 12 life sciences students with sex education curriculum 2009 and with curriculum 1997 respectively.

Study Limitations

The study had many methodological limitations that may have affected the results. Because, the participants were recruited from higher secondary education level, hence, it is difficult to generalise the findings on common grade 12 students in the local context. The quantitative nature of the questionnaire might have prevented students from sharing their views that might have been different from the options available in the questionnaire, besides it would be better if time was available to introduce also interview as a tool of measurement in order to clear the doubt about the honesty of the students' responses.

Results

a- Demographic characteristics

The total sample was 50 students among both Public High Schools who participated in this study. The mean age of the respondent was 17.6 years in the experimental group and 18.6 years in control group with a range of 17 and 20 years. The respondent pool was composed of 46% males and 54% females where the number of males in Control group was 65% and in experimental one was 30% while the number of females in control group was 35% and in experimental one was 70 %.

Table: 1 Descriptive analysis of demographical indicators.

	Mean Age	Males		Females	
		n	%	n	%
Experimental Group	17.6	10	30	20	70
Control Group	18.6	13	65	7	35
Total of students	-----	23	46	27	54

On the other hand, it was noticed that in control group most of the students live in big family of 4 (37.5%) to 5 (37.5%) members same as the in intervention group , the students live in big family made up of 4 (46.8%) members. Thus, 42.8% of the students live in a family of 4 members. Also, t in both schools 0% of the students mentioned that they feel comfortable of talking about sex with their parents or adults they live with. while 66.7 % of the respondent pool said they feel a little bit comfortable talking with sex , these percentages was 75% in control group students' and 61.6% in intervention group students', however, 23.8 % of the respondent they don't feel comfortable where 12.5% for control group and 30.8 % for intervention one . However just 9.5% never did talk about sex with their parents or adults they live with them, where 12.5% in control group and 7.6% in intervention one.

b- Source of information regarding the puberty, sexual reproductive system and relationship

It was noticed that 35.3% of their first source of information about puberty is from the school teacher, 16.5% from friends, 30.5% from mother, 15 % from films / videos and 2.7% from sisters , in the absence of any information from the father or brother whether a first or second source of information, on other hand the first source of information about sexual and reproductive systems of men and women is 54.3% from the teacher , 14% from the mother, 21.3% from friends, 5% from the father, 2.7% from films/videos and 2.7% from sisters. On contrary, their first source of information on relationships is 48.7% from the friends 29.4%

from mother, 9% from films/videos, 7.7% from personal experience and 5% from the father.

c- Students' sexual attitude in the third section of the questionnaire during pre- post tests.

Additionally, students answered the third section of the questionnaire about their sexual attitude and behaviour during pre and post test. Concerning their sexual attitude , three likert scale questions were asked and the results were 46.6% of control group answered disagree in pre-test regarding the question " A boy will not respect a girl who agrees to have sex with him." while 55.5 % for intervention group , however, when the post-test was applied after 3 months , the percentage of control group who gave the correct answer decreased to 20% while that of the intervention group it increased rapidly to 80% . Also , concerning the question " It is mainly the woman's responsibility to ensure that contraception is used regularly." 0% of control group students answered disagree in both pre-test and post-test , while for the intervention group , the percentage of students's correct answer increased from 11.1 % during the pre-test to 40.3% during the post-test. Where as for the question " I think that you should be in love with someone before having sex with them." was asked 26.6% of control group students and 58.4 % for intervention group answered agree during the pretest , but the percentage increased during the post-test in both groups but more positively significant for intervention group, where in control group it increased to 40 % while 100% in intervention group (table 2).

Table 2: The percentage of students' correct answers about their sexual Attitude.

Students' Sexual Attitude % of the correct answers	For control group		For Intervention group	
	Pre-test	Post-test	Pre-test	Post-test
Question Number				
2- A boy will not respect a girl who agrees to have sex with him	46.6	20	55.5	80
6- It is mainly the woman's responsibility to ensure that contraception is used regularly.	0	0	11.1	40.3
7- I think that you should be in love with someone before having sex with them.	26.6	40	58.4	100

d- Students' sexual behaviour in the third section of the questionnaire during pre- post tests.

Concerning the sexual behaviour of the students , the questionnaire included 7 questions and the results were as following during the pre-test and post-test for

both groups. The first question was about " I think that sometimes a boy has to force a girl to have sex if he loves her. " 90% of control group students during pre-test and post-test gave the correct answer disagree greater than 87.5 % of the intervention group students during both tests. However , in the second question : " It is sometimes justifiable for a boy to hit his girlfriend. " during pre-test 83.4% of control group gave the corect answer diagree approximately equal to 87.5% of the intervention group , while during pos-test, this percnatage of correct answer increased rapidly to 100% for intervention group but it decreased to 73.4 % for control group.

On other hand for the question " I am confident that I can insist on condom use every time I have sex." The percnatage of correct answer agree during pre and post-test for control group remained constant 40 % while for the intervention group durig pretest was 18.1 % and increased to 41.6 % in post-test.

For question number 5 " I would never contemplate having an abortion my self or for my partner." In pre- test 20 % of control group gave the correct answer agree less than in intervention group 69.5 % , but during the post-test , both group percentages increased but for control group 53.4 % less than for intervention group 100%. Also , for question 8 " I feel that I know how to use a condom properly." in pre-test , 66.6 % of control group agreed greater than intervention group 30.5% , but during the post-test the percnatage of students who agreed decreased to 50 % , while for intervention group it increased to 52.8 % . Question number 9 : " Is it ok for a boy /girl to pressure a girl / boy for a kiss? " In pre-test , 46.6 % of control group agreed less than in intervention group 57 % , while in post-test , the percnatage of correct answer decreased to 30% in control group ,while in intervention group it increased to 100% . Same as in question 10 , " Could you stop a boy/ girl if he/she wanted to kiss you?" in pre-test , 43.4 % of control group answered yes greater than in the intervention group 38.9 % , however , in post-test , the percentage in control group decreased to 36.7 % while it increased rapidly in the intervention group to 94.4 % (table 3).

Table 3 The percentage of students' answers about their sexual behaviour .

Students' Sexual Behaviour % of the correct answers	For control group		For intervention group	
	Pre-test	Post-test	Pre-test	Post-test
Question Number				
1- I think that sometimes a boy has to force a girl to have sex if he loves her.	90	90	87.5	87.5
3- It is sometimes justifiable for a boy to hit his girlfriend.	83.4	73.4	87.5	100

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4- I am confident that I can insist on condom use every time I have sex.	40	40	18.1	41.6
5- I would never contemplate having an abortion my self or for my partner.	20	53.4	69.5	100
8- I feel that I know how to use a condom properly.	66.6	50	30.5	52.8
9- Is it ok for a boy /girl to pressure a girl / boy for a kiss?	46.6	30	57	100
10- Could you stop a boy/ girl if he/she wanted to kiss you?	43.4	36.7	38.9	94.4

e- Comparing the students sexual attitude and behaviour post-tests by using pair sample t-test for both groups .

“A paired-samples t-test was conducted to compare the means of post-test for the behaviour and attitude of grade 12 life sciences students with sex education curriculum 2009 and with curriculum 1997 . It showed that there was a significant difference in the scores when using sex education curriculum 2009 on developing positive attitude (M = 73.4333, SD = 30.38689) and with curriculum 1997 (M = 20.0, SD = 20.0) conditions ; t(2) = -8.137. P = 0.015 (Table 4) .

In addition, there was a significant difference in the scores when using sex education curriculum 2009 on promoting good behaviour (M = 82.3286, SD = 24.63079) and with curriculum 1997 (M = 53.3571, SD = 21.43641) conditions; t(6) = 2.591. p = 0.041.

These results suggested that sex education curriculum really does have a significant effect on developing positive sexual attitude and good behaviour. Specifically, our results suggested that when sex education curriculum 2009 was applied , the students' positive attitude and good behaviour were increased positively.

Table: 4 Comparison of post-tests in both control and intervention about the student's attitude and behaviour .

	Post- test For contrctervention group	Post-test for intervention group	Mean paired difference [SD]	t-value	Df	P value
Attitude	20 [20]	73[30.3]	.34333E1 [11.	-8.137	2	0.015
Mean [SD]						
Behaviour				2.591		
Mean [SD]	53.3[21.4]	82.3 [24.6]	2.89714 E1 [29.5]		6	0.041

Discussion and Conclusion

The aim of this study was to investigate the effect of applying Sex Education Curriculum 2009 on year 12 students on developing positive attitude and promoting good behaviour. Hence, when the treatment (intervention) group was

compared with the control group, there were significant differences on developing positive sexual attitude and promoting good behaviour by using Sex Education Curriculum 2009. Those in the intervention group reported less at-risk of sexual behaviours and developed a positive attitude and promoted good behaviour than their counterparts in the control group.

The results indicated that students feel shy and little bit comfortable to discuss sexual topics with their parents or adults they live with and as well as their source of information is mostly from their friends , teachers and films / videos and with parents at last position , and the reason beyond it because sexual topics are considered to be taboo for social and cultural reasons. Also, this study showed that one-third of the young people feared discussing their sexual health problems with parents or adults as well as there is absence of father role on topics of puberty, reproductive systems ad relationships. This indicates that they have less trust and more fear of breaking confidentiality about their sexual health. It is well discussed that if the confidentiality is compromised, young people will be less likely to use the services or will be less than honest about their sexual health conditions (Thomas et al. ,2006) .

The findings indicated an increase in sexual behaviour that showed a statistically significant difference between pre-test and post-test for intervention groups. When a pair sample t-test was applied to compare the post-tests of both groups , it showed that the selected objectives from sex education curriculum 2009 developed positive sexual attitude and promoted good behaviour . The obtained values $p = 0.041$ for behaviour , and $p = 0.015$ for attitude are less than 0.05. Because of this, it was concluded that participants in the Sex Education curriculum 2009 condition were able to have positive attitude and good behaviour significantly more than participants in the curriculum1997 condition.

In addition, the findings of this study implied that the government should activate the implementation of sex education curriculum2009. This study suggested that sex education program 2009 promotes a positive sexual attitude and good behaviour where several studies and reviews have concluded that school-based sex education for young people improves their understanding on sexually transmitted infections, including HIV/AIDS, reduces risky behaviour like unsafe and unprotected sexual intercourse, and develops skills to communicate effectively and make healthy relationships (Kirby et al,2007).

However, sex education curriculum needs more improvement concerning the nowadays needs for our students as well as it is a much wider concept than this and future research would be beneficial exploring different aspects of sexual health education such as puberty and family welfare and the long-term effects of sex education on dimensions such as quality of sexual adjustment and

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consistency of contraceptive usage. In addition, Sex Education programs need to be implemented by trained educators who are knowledgeable about human sexuality and are comfortable in interacting with adolescents and young people on sensitive topics (Kirby,2011).

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