# Effectiveness of life skill education in managing adolescent health in schools of Phuentsholing, Bhutan

#### Leela M. Rizal\* and Yanki Dem

Phuentsholing Higher Secondary School, Ministry of Education, Chukha, Bhutan imrixzal777@gmail.com

#### Available online at: www.isca.in, www.isca.me

Received 18<sup>th</sup> November 2017, revised 22<sup>nd</sup> March 2018, accepted 31<sup>st</sup> March 2018

# Abstract

Globally half of the new HIV/AIDS cases are among the age group of 15 to 24 years. Within this group, adolescents are also vulnerable to teenage pregnancies, STIs and HIV infections. This article describes the usefulness of life skill in handling the adolescents health in schools in collaboration with stakeholders. A survey was undertaken to examine the adolescent health knowledge in schools of Phuentsholing. Further to address the result of the initial data, interventions were addresses: peerhelper program and a joint sensitization program using promotional songs and a movie. Majority of early adolescent (10-14yrs) were unaware about adolescent issues, however the other (15-19 yrs) had very little knowledge. Peers were the main supply of information on sexual-health related issues. There is an urgent need to include comprehensive sex-education in school curriculum along with improved adolescent health facilities in the nearest health centre. The evaluation of the program provides valuable knowledge regarding the processes and outcomes that may have application and assessment in future school based sexual health initiatives.

Keywords: Adolescent health centre, behavioral change, community participation, sexual health, school based initiatives.

#### Introduction

Studies revealed 56% of Bhutan's populations constitute adolescents<sup>1</sup>. Sexually transmitted infections (STIs) including HIV, early age marriage, pregnancies and anemia are on the rise<sup>2</sup>. However the reproductive health needs of adolescents are often neglected<sup>3</sup>. Multi-partner sex practices, rising evidence of drug use, low contraceptives use, prevalence of STIs, rise in extra-marital affairs and divorce cases are identified in the reproductive age group of 20-49 years<sup>2</sup>. Twenty-three new HIV cases have been detected since June to December 2016, out of which 96% were through heterosexual<sup>4</sup>. These results shows a school based adolescents health programs for the last 10 years have limited impact on adolescents. The large numbers of uninformed youth are the consequences of limited formal adolescent education. Moreover the benefits of motherdaughter, teacher-student or constructive peer discussion through which adolescents are likely to get information on safe sex, relationships, reproductive health are insufficiently studied in Bhutan. Evidences show the effectiveness of curriculum based interventions in improving sexual knowledge among adolescents in developed and developing countries<sup>5</sup>. Bhutan, which focuses on ten years of free and compulsory schooling, is well placed to benefit from such an approach greater than any other south Asian countries. The paper suggests that students in Phuentsholing are ill equipped to make informed decisions about adolescents' health issues and protect themselves from the unwanted consequences<sup>6</sup>. Pedlow and carey<sup>7</sup> identified that culturally appropriate, increasing awareness and ageappropriate intervention can be effective for adolescents. This

action research is therefore aimed to answer the following research questions. i. How Knowledgeable are the adolescents at Phuentsholing schools on sexual and reproductive health? ii. What interventions strategies and life skills approach are effective to inform adolescents to make informed decisions and protect them from unwanted consequences? iii. What additional facilities or information in the adolescent health centre could be effective to avoid early pregnancy, HIV/AIDS and sexually transmitted infections (STIs)? iv. What are the evidences that show adolescents change in attitude, behavior, and awareness about sexual health?

# Methods

**Action Research Phases:** This study uses three phases: the baseline information gathering, interventions and evaluation (Figure-1).

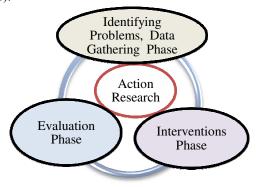


Figure-1: Model for study.

**Recruitment of study Participants:** The study was undertaken in July, 2016 at three schools of Phuentsholing. It comprised 300 volunteer adolescents aged 10-19 years who were studying in grade 7 to 12.

Date Collection: Preliminary data were collected by using self completion questionnaire which were focused on the knowledge of adolescent sexual, psychological and social health. To use in an educational setting, questionnaire was developed in collaboration with adolescents, medical officers, parents, teachers, peer-helpers and counselor. Reproductive, psychological and nutritional health knowledge of the respondents was examined through twenty eight items. Second question focused on exploring the prime source of information they get to learn and preferred choice to share issues related with adolescent health (Appendix-1). Some closed questions were replaced by open questions to incorporate their views.

Addressing Ethical Issues and Data Analysis: Confidentialiality was ensured to the participants before the implementation of preliminary questionnaire as well as interventions. The study was approved by the ethics committee of Ministry of Education. Checks for errors were carried out before data entry. Data underwent consistent checks prior analysis. Survey responses were recorded. Descriptive statistics were performed on all questions.

#### **Evaluation Phase**

**Demographic Information:** The total respondents were 300 out of which 105 (35%) were boys and 195 (65%) were girls. They ranged in age from 10 to 19 years (mean=14, 15).

**Knowledge on sexual and reproductive health:** The analysis of the preliminary data confirmed a very high percentage of adolescents (88%) of (10-14) male know little about the mentioned topics. This finding was comparatively higher than

female (74%) (Figure-2 and 3). Adolescents 10-14 yrs old make up significant percent of the world's population. Recognizing their need to know their bodies and sexual rights is critical for a safe passage through adolescence into adulthood<sup>8</sup>. However most programs related with adolescents health are referred to young adults (15-19 or 19-24 yrs). Policy and programs related to adolescents 10-14 years are vital<sup>9</sup>. Our results are similar to that of Reimer et al.<sup>10</sup> who argued that adolescent male are less knowledge on adolescents health compared to female who were interested in receiving the knowledge from health officials and elders.

The item 2-13 on the source of knowledge and preference personnel to share adolescents' problems provided interesting view. 82 % of (10-14 years) male have generated knowledge on adolescent sexual health only from Science and Biology text books, which are inadequate to update individual to tackle the adolescents' challenges.

# Intervention

Preliminary: Peer helper Program: Based on the preliminary data, three intervention strategies were developed and from August- November 2016 in Phuentsholing Higher Secondary School. The first peer helper program was used for three months soon after the findings of initial data. It included identification of 45 peer helpers for each level (a male and a female) from class 7-12. Selections of peer helpers were based on academic performance, high level of social interest and communication skills<sup>11</sup>. Adolescents are usually reluctant to communicate to parents, counselors, and teachers, peer counseling programs have been developed to train adolescents<sup>12</sup>. Life skill education was used for training peer helpers to identify the critical problems in target group adolescents<sup>13</sup>. Visits to the local health centre was encourages to see the facilities and services they have for adolescents.

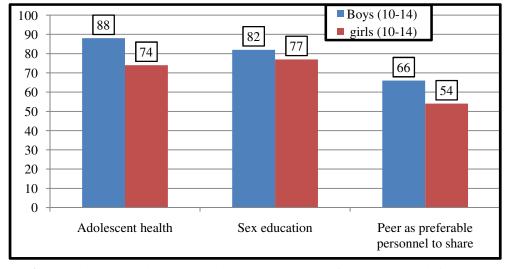
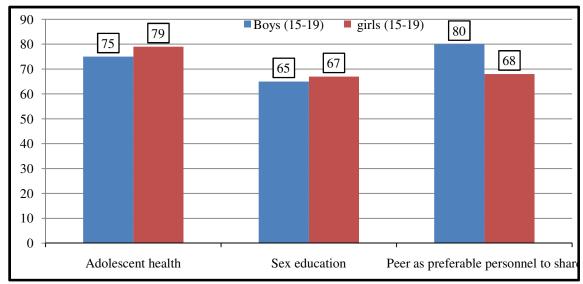


Figure-2: Knowledge on adolescent's health (10-14 yrs) and preference to share their problems.



**Figure-3:** Knowledge on adolescent's health (15-19 yrs) and preference to share their problems.

A survey questionnaire (Appendix-2) was prepared after consultation with fourteen volunteer adolescents, three teachers, a health worker and a school counselor. It was handed to peer helpers and was informed to record the issues of each mentee in the diary provided. Peer helpers and research team met once a week to discuss their findings and the degree of the life skills enhancement on both mentor and mentee. The problems in target groups were segregated into minor, major and urgent and accordingly given treatments after consulting with school counselor and health professionals. Adolescents with problems were advised to visit adolescents centre. Further they were advised to provide feedback on the improvement of facilities.

**Intermediate:** Sensitizing Program: The initial preliminary date and the data collected by the peer helpers were used to identify topics for sensitizing. Experts were invited to advocate the information i.e. counselor for psychological problems and a Clinical Nurse on adolescent' health related problems. Stakeholders, teachers, parents, 120 adolescents comprising of target and focused group were invited as participants. Sensitized participants were encourages to inform three more adolescents using the handouts and the pamphlets provided after the program and encouraged to visit adolescent services centre.

Post Intervention: Feedback from Participants: The post intervention strategy was to get the feedback of the overall program. To ensure confidentiality interviews for target group were carried out in private location after the program. Other participants were invited to provide feedback on evaluation form right after the program on their views of the effectiveness and impact of the programs (Appendix-3), with particular reference to: i. How did the program enhanced awareness on adolescents' health? ii. How did life skill based approach upgrade the skills among adolescents to tackle health issues? iii. To what extent do you think the program/ training/ activities have changed your attitudes or belief towards adolescent sexual health?

# **Evaluation of Preliminary Intervention**

**Peer-helper Program:** Menstrual problems (menorrhagia, dysmenorrhoea, menstrual symptoms), urinary tract infections, STI were identified in 30% female (13-19 yrs). However 2% of adolescents required urgent attention and were referred to gynecologist (Figure-4). The prevalence of menstrual problems in our finding is high and causes considerable interruption to their school and daily activities. However, only a minority seek medical advice. Menstrual abnormality was reported in 62% of adolescents during the first year of menstruation<sup>14</sup>. In some cases it persists for 3 to 5 years and the girls (10-13yrs) had inadequate knowledge on health-seeking behavior in regard to menstrual problems.

Evaluation of construct 3, 4 and 5 found 49% female and 45% male were confirmed to have psychological and social problems (studies, relationship with teachers, peers and opposite sex). Among these four adolescents required major attention and were given counseling. Ayodele<sup>15</sup> stated that the broken homes, single parenting and socio-economic status of the parents determines adolescent's academic achievement and these findings are similar to our results.

Items 11 and 12 were set to identify substance abuse and addiction problem. 5% of female and 20% male have had substance abuse and addiction problem. Two among them were identified to have major addiction, counseling was given and advised to visit adolescent services centre for detoxification. Ogunsola and Fatusi<sup>16</sup> suggest that most male adolescents try cigarettes, alcohol, and marijuana in between (10-19) age and stop substance abuse by age 20. In contrast, those adolescents who have not experimented with any of these substances by that age are unlikely to abuse thereafter. Moreover except for prescribed substances, male are likely to use these drugs at higher rates than female and these results correspond with our findings.

Res. J. Recent Sci.

Nine items were set to identify social and family problems. 35% female and 25% male in (14-19 years) revealed that they could not perform well in academic because of family problems (Figure-4). The studies by Petersen et al. 17 identified that compared to boys, girls by 10th grade are vulnerable to develop depression because they experienced more challenges in early adolescence than boys. However after 12th grade the sex related depression effects is reduced once early adolescent challenges are mitigated.

**Knowledge Gained through Peer-helpers Program:** 90% of peer-helper and 88% of mentee strongly agreed that the peer helper program has helped them grow mentally, emotionally and socially 18. Particularly, our peer helpers reported improvement in (a) self-awareness, (b) emotional awareness of others (empathy), and (d) counseling (communication skills). 93% of them indicate that they would recommend the program to their friends (Figure-5).

**Positive Changes Observed in Mentees after the Program:** Most mentee felt this program has helped them to solve their problems. Adolescent who was referred to hospitals after counseling, shared his contentment.

"Earlier I feared sharing my problems with people around me because I thought they would look down, but now I feel relieved as I know what to do when we have problems."

Adolescent boys in particular acknowledged peer helper program because it helped them to tackle peer pressure and depression. Most adolescents suggested that such programs might become an important mechanism in producing positive character in adolescents<sup>19</sup>.

Suggestions to Improve Adolescent Services Centre: The adolescent service centre at Phuentsholing General Hospital is a relatively new concept and was inaugurated on May 2016. 14% percentage of adolescent visited to avail treatments and counseling and claimed that they were well assisted among this 10% were male because the services males need are easy to get compared to those required by females. The primary reason female stated for not visiting an adolescent services centre was due to poor accessibility and time. Most females also viewed adolescent services centre visit as a last option and visit only if they had severe health concern. A small number (2%) reported regular visit, however they were sometime denied the permission by their parents and teachers. This clearly denotes that despite the facilities to adolescents, they were not able to visit and avail the help.

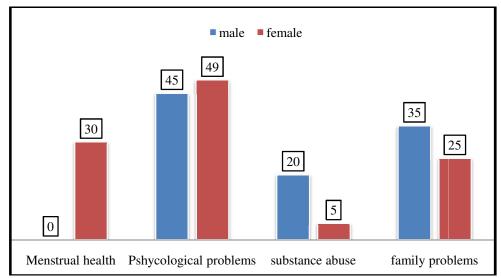
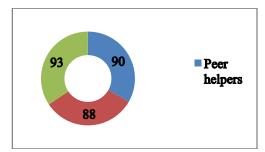


Figure-4: Problems in target group identified by peer helpers.



**Figure-5:** Knowledge gained through peer-helpers program.

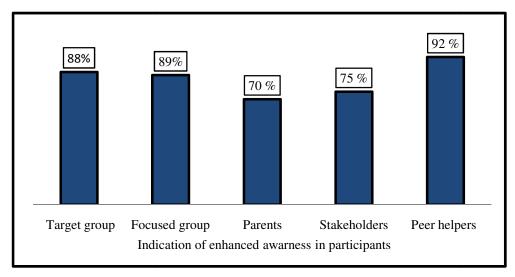
# **Evaluation of Post Intervention** (the participants feedback)

Indications of enhanced awareness on adolescent health among the adolescents and the community: 88% of target group (mentee), 89% focused group, 70% parents 75% stakeholders and 92% peer helper group rated excellent which indicated of enhanced awareness among adolescents and community (Figure-6). They especially emphasized the usefulness, culturally appropriate and age-relevancy of the movie. The comparison of preliminary data with the post intervention data suggested another startling finding: the participants made with regard to having adequate knowledge on STIs (95%) and (80%) on STIs. Participants acknowledged the issues on sexual (teenage pregnancy), psychological and social health (peer pressure) shared by the research team.

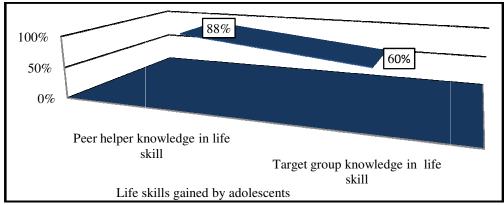
**Life skills up gradation among adolescents:** Evaluation of Construct five and item 1-4 indicated that the program was based on life skill education. 88 % of peer participant peer helper stated that they have used life skill (self awareness, empathy, critical thinking, creative thinking, decision making,

problem solving, effective communication, interpersonal relationship, coping with stress, coping with emotion, intrapersonal relationship) to persuade their mentee, this result also coincides with the result of peer helper program. Further mentee (60%) stated that they now know to identify the cause of problem and to deal with it creatively (Figure-7). This shows life skill education is not only enhanced in mentor but also in mentee.

Attitudinal and behavioral changes: Increased awareness and understanding about sexual health was understood to have influenced attitude change in the adolescents (80%). Similarly, the stakeholder participants (55%) also indicated that attitudinal and behavioral changes had occurred amongst participants (Figure-8). Positive changes in adolescents (80%) were more easily observed, such as enthusiasm while viewing movie, listening songs, discussions on sexual health topics. Parents (67%) felt that the circulation of pamphlet to participants would certainly increase in the disseminations of related information to promote sexual health and would increase in the number of visits to adolescent service centre for the earliest treatment and counseling.



**Figure-6:** Positive awareness in the participants.



**Figure-7:** Life skills education enhanced in peer helpers and target group.

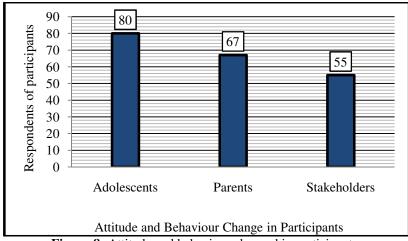


Figure-8: Attitude and behaviour changed in participants.

# Limitations and suggestions for future programs

Despite the positive comments from the participants, there were shortcomings of the programs and the research team presented their suggestions to improve educational programs in future. Leading concerns were:

Inadequate time and limited promotional activities: The use of students who were also dedicated on other learning activities resulted into discarding the scheduled program. It is vital that the future programs should look for vulnerable adolescents and implement strategies that provide an opportunity to engage them. To help future programs reach out to susceptible adolescents, we suggest better targeted promotional or advertising channels appropriate to the target group via posters, social media, local papers, television channels and involving celebrity to inform adolescents through promotional songs and movies.

**Evaluation of the adolescent services centre and sex education at school:** Though the level of adolescent's reproductive health program has improved greatly over the decade, there is a need to evaluate the impact of programs in order to set up best practices. In addition there is the need for greater involvement of young people in all phases of policy planning.

Limited promotion on existing adolescents health centre: Some adolescents are not even aware of the existence of reproductive health services. Further studies should develop strategies to improve adolescents' awareness of services that are available to them.

#### Conclusion

There is an urgent need to include comprehensive sex-education in school curriculum along with improved adolescent health facilities in nearest adolescent health center. It is essential that the findings are translated into action at policy and practice levels.

#### References

- United Nations Development Programme (2013). Millennium development goals (MDG) framework: youth employment in Bhutan. Retrieved from http://www.bt.undp.org/content/dam/bhutan/docs/MDGs/M AF, 28/12/2017
- 2. Ministry of Health (2014). The National STIs and HIV/AIDS Prevention and Control Programme (NACP) of the Department of Health (2014). Bhutan Progress Report, Global AIDS response progress report. Retrieved from http://www.unaids.org/sites/default/files/country/documents //BTN\_narrative\_report\_2014.pdf. 28/12/2017.
- 3. National Statistics Bureau (2010). Bhutan Multiple Indicator Survey, Study Documentation. Royal Government of Bhutan. http://www.ncwc.gov.bt/en/files/ publication/ Bhutan. 28/12/2017.
- **4.** National AIDS Control Programme (2016). New 32 HIV positive cases so far this year. Kuenselonline. http://www.kuenselonline.com/32-hiv-positive-cases-so-far-this-year/. 20/12/2016.
- **5.** Lundgren R. and Amin A. (2015). Addressing intimate partner violence and sexual violence among adolescents: emerging evidence of effectiveness. *Journal of Adolescent Health*, 56(1), S42-S50.
- **6.** S. Choden personal communication (2016), August 28, (2016). 28/8/2016.
- 7. Pedlow C.T. and Carey M.P. (2004). Developmentally appropriate sexual risk reduction interventions for adolescents: Rationale, review of interventions, and recommendations for research and practice. *Annals of Behavioral Medicine*, 27(3), 172-184.
- **8.** Bruce J. and Chong E. (2006). The diverse universe of adolescents, and the girls and boys left behind: A note on research, program and policy priorities. *Background paper to Public Choices, Private Decisions: Sexual and*

Reproductive Health and the Millennium Development Goals, New York: UN Millennium Project.

- **9.** Salvy S.J., De La Haye K., Bowker J.C. and Hermans R.C. (2012). Influence of peers and friends on children's and adolescents' eating and activity behaviors. *Physiology & Behavior*, 106(3), 369-378.
- 10. Reimer R.A., Schommer J.A., Houlihan A.E. and Gerrard M. (2014). Ethnic and gender differences in HPV knowledge, awareness and vaccine acceptability among White and Hispanic men and women. *Journal of Community Health*, 39(2), 274-284.
- **11.** Topping K.J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631-645.
- **12.** Magnani R., MacIntyre K., Karim A.M., Brown L., Hutchinson P., Kaufman C. and Dallimore A. (2005). The impact of life skills education on adolescent sexual risk behaviors in KwaZulu-Natal, South Africa. *Journal of Adolescent Health*, 36(4), 289-304.
- **13.** Azeez A.E. (2015). Positive Mental Health through Life Skill Education: Empowering Adolescents having Psychosocial Problems. *Journal of Psychosocial Research*, 10(1), 21-31.
- **14.** Chan S.S., Yiu K.W., Yuen P.M., Sahota D.S. and Chung T.K. (2009). Menstrual problems and health-seeking

- behaviour in Hong Kong Chinese girls. *Hong Kong Medical Journal*, 15(1), 18-23.
- **15.** Ayodele K.O. (2011). Fostering adolescents' interpersonal behaviour: An empirical assessment of enhanced thinking skills and social skills training. *Edo Journal of Counselling*, 4(1-2), 62-74.
- **16.** Ogunsola O.O. and Fatusi A.O. (2016). Risk and protective factors for adolescent substance use: a comparative study of secondary school students in rural and urban areas of Osun State, Nigeria. *International Journal of Adolescent Medicine and Health*.
- **17.** Petersen A.C., Sarigiani P.A. and Kennedy R.E. (1991). Adolescent depression: Why more girls? *Journal of Youth and Adolescence*, 20(2), 247-271.
- **18.** Switzer G.E., Simmons R.G., Dew M.A., Regalski J.M. and Wang C.H. (1995). The effect of a school-based helper program on adolescent self-image, attitudes, and behavior. *The Journal of Early Adolescence*, 15(4), 429-455.
- **19.** Naylor P. and Cowie H. (1999). The effectiveness of peer support systems in challenging school bullying: the perspectives and experiences of teachers and pupils. *Journal of Adolescence*, 22(4), 467-479.

# Appendix-1

Date 25<sup>th</sup> July 2016

Baseline Survey Questionnaire on Adolescents' Knowledge on Sexual Health
Survey Questionnaire for baseline data

The Impact of Life Skills Education on Adolescent Sexual Health in Three Schools of Phuentsholing Thromdee

#### Dear Respondents,

Life skill education for addressing adolescent reproduction sexual health (teenage pregnancy, sexual activities, STIs, HIV/AIDS is an important imitative of the Ministry of Education.

This is an anonymous survey to collect data to identify adolescent health related issues, create awareness and improving the facilities in the adolescent health services centre. Please give your genuine responses.

# 1. Demographic Information.

*Please tick* ( $\sqrt{}$ ) *the most appropriate response* 

- 1. Your age
- a) 10 b) 11 c) 12 d) 13 e) 14 f) 15 g) 16 h) 17 i) 18 j) 19
- 2. Sex
- a) Male b) Female
- 3. Studying in
- a) 5 b) 6 c) 7 d) 8 e) 9 f) 10 g) 11 h) 12
- 4. School
- a) Phuentsholing Higher Secondary School
- b) Phuentsholing Middle Secondary School
- c) Sonamgang Middle Secondary School

Res. J. Recent Sci.

# 5. How knowledgeable do you think you are on adolescent's health?

Please tick  $(\sqrt{})$  the boxes which correspond to your level of agreement or disagreement on the statement given below.

Sl.	tick (N) the boxes which correspond to your level of agre Statement	Strongly		t on the statement gi Neither Disagree		Strongly
No	Statement	agree	Agree	nor Agree	Disagree	Disagree
1	Stages of adolescents development	1	2	3	4	5
2	Pubertal delay	1	2	3	4	5
3	Early puberty	1	2	3	4	5
4	Weight and height issues	1	2	3	4	5
5	breast sore	1	2	3	4	5
6	Causes of early menstruation (menarche)	1	2	3	4	5
7	Optimal quantity of menstrual discharge and abnormal discharge	1	2	3	4	5
8	Causes of menstrual cramps	1	2	3	4	5
9	Cure for menstrual cramps	1	2	3	4	5
10	Premenstrual symptoms	1	2	3	4	5
11	Causes of delay menstruation	1	2	3	4	5
12	I know about condoms	1	2	3	4	5
13	I know the benefits of using condoms	1	2	3	4	5
14	I know the benefits of abstain when it comes to sexual activities	1	2	3	4	5
15	I know about copper T, and at least one another contraceptive	1	2	3	4	5
16	I have adequate knowledge on STIs	1	2	3	4	5
17	I have adequate knowledge on HIV transmission and consequences	1	2	3	4	5
18	I know about reproductive counseling	1	2	3	4	5
19	I have adequate knowledge on the benefits of annual health check up, dental check up, hemoglobin counts, ENT care, HIV screening	1	2	3	4	5
20	I know how to have good relationship with friends, parents and teachers	1	2	3	4	5
21	I know about peer pressure and its effects	1	2	3	4	5
22	I know about the benefits of balance diet and nutrition	1	2	3	4	5
23	I know the consequences of poor nutrition and obesity	1	2	3	4	5
24	I have adequate knowledge on eating disorders (Anorexia nervosa)	1	2	3	4	5
25	I know about Depression	1	2	3	4	5
26	I know about Anxiety	1	2	3	4	5
27	I know about personality disorder	1	2	3	4	5
28	I know about the consequences of substance abuse	1	2	3	4	5

# 2. Knowledge on Sex education.

*Please tick* ( $\sqrt{}$ ) *the appropriate response.* 

- 1. Did you learn any of these topics mentioned above before, where?
  - a) School
- b) Biology/Science lessons
- c) Newspapers/television d) Parents
- e) Friends
- 2. Is the current education and programs on adolescent health sensitization enough?
  - a) Yes
- b) No

3.	Who do	you think is	the better per	rsonnel to	create av	wareness	on sexual	health?	Tick the	best answ	er.	
	a)	Teacher	b)	Health	workers	c)	Peers		d)	Parents		
4.	Where w	ould be sen	sitization pro	gram be	the most e	effective.						
		Hospital	b) <sup>1</sup>	Schoo		c)	Adolesc	ent heal	th service	es centre	d)	Home
	e)	Social med	ia (face book,	twitter r	iews pape	rs, televis	ion)					
2.	Do you a	ınd your pai	ents discuss a	adolescer	nt health is	ssues?						
	a)	Yes		b)	No							
6.	Are you	aware of the	e law related	with ado	escent cri	mes (stati	itory rape	e, child i	nolestatio	on, child s	exual	abuse)
	-	Yes		b)	No		• •					
7.	Have any	of the law	makers or the	e police p	ersonnel	informed	your rega	arding th	e laws re	lated with	adolesc	ent crimes.
		Yes		b)	No		, .	C				
8.	Are you	aware of A	dolescent frie	ndly heal	th service	s provide	d in your	city/tow	'n?			
	a)	Yes		b)	No	•	•	•				
9.	If you ha	ve a proble	m related with	any of	the topic a	bove whe	ere do you	u think y	ou can sh	are it bett	ter?	
	a) Parent	s b)	Friends	c) Sibl	ings	d) Class	teacher	e) Heal	lth coordi	nator	f) Healt	h staff
10.	Do you f	eel adolesco	ents are stigm		_						cent prol	olems openly
	a)	Yes	C	b)	No		•	•			•	1 .
11.	What cou	ald be done	to make peop	ole open	ıp in sex ı	elated pro	oblems					
	a) Semin		Sensitizing P	-	-	-		d) Sex	education	in curric	ulum	
	e) Advoc		adolescent he	-								ce book)
12.	•	•	ner adolescent	health to	opic away	from me	ntioned to	opics tha	t can be b	eneficial	for the	adolescent?
	Dleace m	ention?										

# Appendix-2

Date: 24<sup>th</sup> September 2016

# First Intervention Data Collection Tool

Demographic Information

Sex; a) Male b) Female

Age; a)10, b)11, c)12, d) 13, e) 14, f) 15, g) 16, h)17, i)18, j)19, k) 20, l) 21

Studying in; 7 b) 8 c) 9 d) 10 e) 11 f) 12

Please tick the boxes which correspond to your level of agreement or disagreement on the statements given below. Ticking should be done after helping each mentee.

1. Knowledge gained by peer-helpers

Sl. No	Statement	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Peer helper develops communication skills	5	4	3	2	1
2	Develop identification skill looking at body language and behaviours	5	4	3	2	1
3	Develop convincing skill to get help from health professionals or visit adolescent services centre for counseling	5	4	3	2	1
4	Can enable to identify positive changes or no changes in mentee after discussion of problems	5	4	3	2	1
5	Enable to think and use different approach when the first approach didn't work, to bring positive changes in mentee		4	3	2	1
6	Peer helper could provide effective suggestions to mentee	5	4	3	2	1
7	Peer helper develops problem solving skills	5	4	3	2	1
8	Peer helper develops critical thinking skills					
9	Peer helper develops creative thinking skills		4	3	2	1
10	Peer helper develops interpersonal relationship skills		4	3	2	1
11	Peer helper develops empathy	5	4	3	2	1

Any comments;....

2.	Adolescent Sexual and health problems in mentee					
Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	mentee has delay menstruaration compared to her friends and is concerned	5	4	3	2	1
2	mentee has early menstruations compared to her friends and she is concerned	5	4	3	2	1
3	mentee has excessive discharge of foul white fluids and excessive period during menstruation cycles.	5	4	3	2	1
4	mentee does not know much on menstrual hygiene	5	4	3	2	1
5	mentee has had teenage pregnancy issue		4	3	2	1
	mentee has abortion related problems					
5	mentee has sleep disorder and couldn't concentrate in studies	5	4	3	2	1
7	mentee does not know where screening of STIS and HIV/AIDS is carried out	5	4	3	2	1
8	mentee has suffered from one or other form of sevually		4	3	2	1
9	mentee had screened HIV/AIDS recently	5	4	3	2	1
10	mentee fears testing HIV and STIs in health services centre		4	3	2	1
11	Mentee has abused substance frequently	5	4	3	2	1
12	Mentee has addiction problems	5	4	3	2	1

Any comments:....

3. Psychological problems

Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Mentee has adjustment problem with friends	5	4	3	2	1
2	Mentee fear excessively, failing in exams	5	4	3	2	1
3	Mentee is conscious about the body image and diet without knowing the consequences on health	5	4	3	2	1
4	Mentee is undergoing depression	5	4	3	2	1
5	Mentee has anxiety related problems due to over load in subjects	5	4	3	2	1
6	Mentee is lonely since she had lost her closed one	5	4	3	2	1
7	Mentee has low self-esteem because of her/his physical structure of body	5	4	3	2	1
8	Mentee has deformed feet, arms and face and occasionally criticized/discriminated by friends		4	3	2	1
9	Mentee is mentally exhausted due to un-motivational nature of teachers		4	3	2	1
10	Mentee is frustrated at teachers	5	4	3	2	1
11	Mentee is stressed due to work load at school	5	4	3	2	1
12	Mentee has peer relation problems	5	4	3	2	1
13	Mentee say that they involved in opposite sex fantasy	5	4	3	2	1
14	Mentee say that he/she was/is inclined to pornographic images		4	3	2	1
15	Some mentee said that they were attracted to same sex (homosexuality)		4	3	2	1
16	Mentee has had faced attitude and ego problem	5	4	3	2	1
17	Mentee is not able accept pubertal changes	5	4	3	2	1
18	Mentee has had faced peer-pressure	5	4	3	2	1

Any comments;....

# 4. Social and family issues

Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Mentee has family problems	5	4	3	2	1
2	Mentee parents were found unsupportive while discussing their problems	5	4	3	2	1
2	Mentee did not inform mothers when she had periods	5	4	3	2	1
3	Mentee feels his/her parents don't have adequate knowledge on pubertal issues	5	4	3	2	1
4	Mentee does not share her/his problems with parents	5	4	3	2	1
5	Mentee is facing domestic violence at home.	5	4	3	2	1
6	Mentee feels she/he will be stigmatized if she/he shares their adolescent problems.	5	4	3	2	1
7	Mentee step-parent is abusive and reluctant to support her/him	5	4	3	2	1
8	Mentee is mentally disturb because parents drink excessive alcohol and fight most of the time	5	4	3	2	1
9	Mentee parents are divorce and not getting much love and support at home	5	4	3	2	1

Any comments:....

# 5. Studies related problems

Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Mentee I encountered is academically low achiever	5	4	3	2	1
2	Mentee I encountered is academically high achiever	5	4	3	2	1
3	Mentee has studies related problems	5	4	3	2	1
4	Mentee has time management problem	5	4	3	2	1
5	Mentees is unable to make decision on which subject he/she require more attention		4	3	2	1
6	Mentee feels she/he was/is not assessed fairly by teachers	5	4	3	2	1
7	Mentee was/is not able to approach teachers confidently	5	4	3	2	1
8	Mentee is scared of raising doubts in their subjects	5	4	3	2	1
9	Mentees hides their weakness or problems in subject to avoid punishment/low grade	5	4	3	2	1

Any comments:....

# 6. Child right and ethics

Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Mentee is harassed by guardian	5	4	3	2	1
2	Mentees is overburden with daily domestic chores	5	4	3	2	1
3	Mentee was/is sexually harassed by relatives and step parents	5	4	3	2	1
4	Mentee has sexual affair with married adults	5	4	3	2	1
5	Mentee have sex with married man/married woman often because he/she does not married man will inform public about their affairs		4	3	2	1
6	Mentee is bullied and harassed by friends and elders	5	4	3	2	1
7	Mentee feel that he/she was wrongly punished at school	5	4	3	2	1
8	Mentee feel that he/she is wrongly punished at home	5	4	3	2	1
9	Mentee was/is verbally abused and mentally stressed	5	4	3	2	1
10	Mentee was/is eve-teased by friends and is mentally disturbed	5	4	3	2	1
11	Mentee is discriminated in class by the teachers	5	4	3	2	1
12	People stigmatized homosexual and had unfavorable opinion	5	4	3	2	1

Any comments:

7. Adolescent services Centers (if mentee has visited adolescent service centre's please tick which is the most appropriate)

Sl. No	Statements	Strongly agree	Agree	Neither disagree nor agree	Disagree	Strongly disagree
1	Visited adolescent service centres atleast once	5	4	3	2	1
2	Services in adolescent service centres are adolescent friendly		4	3	2	1
3	Health personnel in adolescent service centres are open, kind, trust worthy and approachable		4	3	2	1
4	The location and the visiting time are convenient	5	4	3	2	1
5	When I first visited adolescent service centre i was informed about all the services relevant to my needs	5	4	3	2	1
6	Communication was carried out respectfully and age appropriately.	5	4	3	2	1

Any o	comments t	to change the	e facilities in	ı adolescent s	ervice centres
1					
2					

Positive changes observed in mentees after the program

0.	Positive changes observed in mentees after the program						
S1.	Statements	Strongly	Agree	Neither disagree	Disagree	Strongly disagree	
1	Mentee opened up more confidently to share problems	agree	4	nor agree	2	uisagice	
1		J		3	2	1	
2	Mentee's self esteem has boosted now	5	4	3	2	l	
3	Mentee looks cheerful and friendly	5	4	3	2	1	
4	Mentee has started to take things positively	5	4	3	2	1	
5	Mentee is able to focus in studies	5	4	3	2	1	
6	Developed skills to share problems to doctors	5	4	3	2	1	
7	Developed skills to share problems to parents	5	4	3	2	1	
8	Developed skills to share problems to teachers	5	4	3	2	1	
9	Developed communication skills	5	4	3	2	1	
10	Developed interpersonal relationship,		4	3	2	1	
11	Developed exposer						
12	Mentee has begin to realize they are supported by their peers,	5	4	3	2	1	
13	Mentee has begin to realize they are supported by their		4	3	2	1	
14	Mentee has begin to realize they are supported by their teachers		4	3	2	1	
15	Mentee has begin to realize they are supported by their health workers	5	4	3	2	1	

Any comments.....

# Appendix-3

Date 30<sup>th</sup> November 2016

The post intervention: Employed to evaluate the overall research and sensitization program

Please tick the boxes which correspond to your level of agreement or disagreement on the statements given below. Ticking should be done after the program

Which group do you fall in?

Target group (mentee) b) Focused group c) Teachers d) **Parents** a) Stakeholders (School management board, health official, counselor) f) Peer helper e)

# Questions for interview participants

1. What is your general impression about these programs, activities?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

2. Were the services/programs/activities better or worse than your expectation?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

3. What is your view about the content of the activities of today's program? To what extent do you think the services/programs /activities can improve your knowledge/awareness regarding sexuality and sexual health?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

4. To what extent do you think the services/programs /activities can change your attitudes or beliefs towards sexuality and sexual health?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

5. What is your view about the activities?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

6. What do you think about the communication (pamphlets, advice, service, information) of the services/programs/activities as a method to sensitize adolescents?

Excellent	Very good	Good	Satisfactory	Poor
5	4	3	2	1

<sup>7.</sup> Are there any other comments you wish to make about the services/programs/activities conducted today?

8. To what extend do you believe that life skill education should be taught and infuse in sex education?

Strongly agree	Agree Neither agree nor disagree		Disagree	Strongly disagree
5	4	3	2	1

#### Reasons:

9. Does life skill education help in changing the attitude of the adolescents?

Strongly agree	ngly agree Agree Neither agree nor disagree		Disagree	Strongly disagree
5	4	3	2	1

#### How did the program enhanced awareness on adolescent health?

1. Effectiveness of program

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The program was age appropriate	5	4	3	2	1
Program was culturally appropriate	5	4	3	2	1
Time was appropriately managed	5	4	3	2	1
Games were effective in addressing adolescents issues	5	4	3	2	1
Awareness through song was effective	5	4	3	2	1
Movie was effective in creating awareness	5	4	3	2	1
Information on adolescents health were beneficial	5	4	3	2	1

# 2. Adolescent health

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Program shared consequences on teenage pregnancy	5	4	3	2	1
Program shared interesting facts on menstruation	5	4	3	2	1
Program informed on urinary tract information	5	4	3	2	1
Program informed adolescents about the most common diseases	5	4	3	2	1
Program informed adolescents on consequences of substance use	5	4	3	2	1
Program informed adolescents about STDS and HIV and consequences	5	4	3	2	1
Program informed adolescents on consequences of substance use	5	4	3	2	1

3. Awareness on psychological of adolescents

Statement Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Program emphasized the rights of adolescents to health and well being	5	4	3	2	1
psychological information shared are relevant	5	4	3	2	1
Time management technique are appropriate as per the need of the adolescents	5	4	3	2	1
Program emphasized on problem management	5	4	3	2	1
Program informed adolescents on abstinence	5	4	3	2	1
Program tells adolescents to be responsible for their future	5	4	3	2	1

4. Family and relationship awareness

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Program emphasized the role of parents in helping adolescents	5	4	3	2	1
Program informed the consequences of alcoholic parents and students learning and self esteem of the child	5	4	3	2	1
Program informed adolescents differences between love and infatuation	5	4	3	2	1
Program informed adolescents about the importance of assertiveness	5	4	3	2	1
How to build interpersonal relationship to improve relation with teacher and friends	5	4	3	2	1
Informed the consequences on adolescents if the home is no conducive	5	4	3	2	1
Emphasized on positive thinking	5	4	3	2	1

5. Life skills up gradation among adolescents

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Peer helper program is based on life skill approach	5	4	3	2	1
Use of life skill education in tackling adolescent program	5	4	3	2	1
All the program carried out were based on life skill education	5	4	3	2	1
Peer helper program can bring positive changes in adolescent	5	4	3	2	1

6. Attitude and behavioral changes

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am aware of common adolescent problems	5	4	3	2	1
I can tackle some of the adolescents problem now	5	4	3	2	1
I can also advise my friends if they have any of these problems	5	4	3	2	1
Positive attitude towards sexual health can solve many problems	5	4	3	2	1
After the program I feel life skill education is really important	5	4	3	2	1
I can use life skill approach to solve most challenges that come my way	5	4	3	2	1
I wish to inform my friends about the program	5	4	3	2	1
Will advise friends and siblings to visit adolescent service centres for treatment	5	4	3	2	1