

# Peer-delivered activity-based education as a preferred method to deliver healthy lifestyle, stress management, life skills and anti-addiction education to adolescents

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## Abstract

**Background:** Peer education is very effective to reach adolescents and can be used as a tool to provide adolescents with knowledge regarding Healthy lifestyle, Stress management, Life-skills, and Anti-addiction because peers influence the habits, opinions and behavior of adolescents. Activity based education provides a holistic approach to learning as it engages the adolescents with the topic, completely and meaningfully. **Aim:** To find out if adolescents preferred peer educators over professional educators and activity-based education verses didactic lectures to gain knowledge about healthy lifestyle, life-skills, Anti-addiction and Stress management. The preference for choice of topic was also analyzed. **Methods:** This was a questionnaire based cross-sectional study where 49 select adolescents (n=49) from private and public schools in an urban city, between the ages 13 and 15 years participated. The responses to the questions after a two day workshop were obtained and analyzed. **Results:** 64.3% of the participating adolescents chose peer education as the preferred method to seek information about healthy lifestyle, life-skills, Anti-addiction and Stress management ( $P$ -value < 0.05). 61.22% adolescents also chose activity-based education over didactic lectures ( $P$ -value < 0.05). Among topics, the adolescents preferred life-skills education over Healthy Lifestyle, Stress Management and Anti-addiction education. **Conclusion:** The result proved that peer-delivered activity-based education can be used as a preferred method to teach adolescents about Healthy lifestyle, Stress Management, Life-skills and Anti-addiction.

**Keywords:** Peer Education, Adolescent, Life Skills

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## INTRODUCTION

Peer education is an approach, a communication channel, a methodology, a philosophy, and a strategy. Peer education is used to change an individual by attempting to modify a person's knowledge, attitudes, beliefs, or behaviors.<sup>1</sup> Peer education is of immense value in facilitating the process of learning because peers have a strong influence on individual behavior<sup>2</sup>. Peer educators are assumed to have a level of trust and comfort with their peers that allows for open discussions of sensitive topics.<sup>3</sup> Similarly, peer educators are thought to have good access

to hidden populations that may have limited interaction with more traditional health programs.<sup>4</sup> In the existing system, didactic lectures occupy the top-most position and constitute the main method of learning. However, to effectively educate the adolescents, it is necessary to understand their learning style. For adolescents the most preferred learning style is kinesthetic followed by visual and auditory learning styles.<sup>5</sup> Also, didactic lectures might not be effective to teach adolescent who differ greatly in their cognitive skills and background knowledge.<sup>6</sup> This might be the case for topics like Anti-addiction and Healthy lifestyle where every adolescent may not possess the same level of background knowledge. It is also important to understand the preference of adolescents in the topics they want to learn. As a general guideline for topics to discuss with adolescent, Goldenring and Cohen made a mnemonic-HEADSS - Home, Education, Activities, Drugs, Sex, Suicidality.<sup>7</sup> This was later expanded to HEEADSSS with the addition of Eating and Safety.<sup>8</sup> Each adolescent is different and will have different preferences but it is important to identify the common preferred topics that the adolescents want to learn about.<sup>8</sup> This study focused on the choices and preferences of adolescents-whether they preferred peer educators or professional educators; the topic they wanted to learn in particular and what method of learning they chose while learning about the topics.

## METHODS

This was a cross-sectional questionnaire based study conducted after a two day workshop for training select adolescents of private and public schools of class 8 and 9 in an urban city. After the approval of the institutional ethics committee, 20 select students of 3 schools each were included in the study initially out of which 49 students attended both the days of a 2-day workshop(n=49). During a two day workshop, those 49 adolescent students between the ages of 13-15 years were taught about life skills ('coping with stress', 'How to say No', 'Communication skills', 'Self-awareness') healthy lifestyle ('Importance of Exercise', 'Reading Food Labels', healthy diet, importance of sleep) and Anti-addiction (towards Alcohol, Tobacco and social media). The participating adolescents were informed that they would be given pre-validated post-workshop questionnaires to assess their preferences and informed consent was taken for the same. The participation was completely voluntary, maintaining confidentiality and without any pressure of completion. The workshop consisted of both didactic lectures and interactive activities. The content of the lectures was delivered by both peer educators as well as professional educators. The activities, consisted of role-plays, poster presentations and small group discussions that were conducted by both sets

of educators. The participants were asked to fill a pre-validated questionnaire and the responses obtained were analyzed. The questionnaire was pre-validated by experts in the field of adolescent health. The questionnaire asked for the following information: Age, Sex.

Did you prefer peer educators over professional educators?  
Did you prefer lecture-based education or activity-based education?

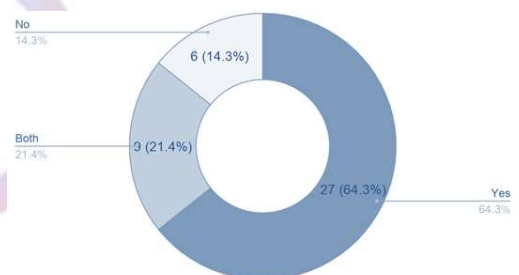
Which topic did you prefer learning about specifically?

Thus we conducted a single variable cross-sectional study. The options to the question were nominal categorical variables (Yes/No/ Both/Choice of topics) from which the participants had to choose a single best response. Statistical analysis was done by applying the one proportion Z-test to calculate *P*-value.

## RESULTS

The responses of 49 adolescents (both male and female), between the ages 13 and 15 were analyzed.

The responses to the question about preference for peer educators verses professional educators was as depicted in Fig. 1. 43 out of the 49 adolescents answered the question.



**Figure 1:** Answers to "Did you prefer peer education over senior faculty"

We saw that (From Fig.1):

64.3% (27 out of 43) participants replied in favour of peer-delivered education.

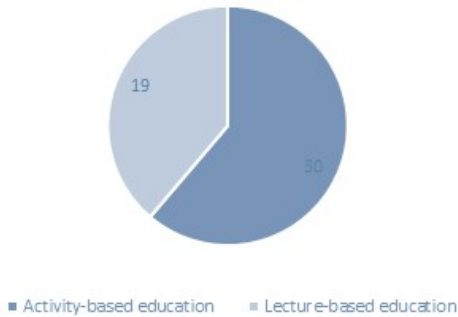
14.3% (6 out of 43) participants preferred professional-delivered education.

21.4% (9 out of 43) participants preferred both peer education as well as professional-delivered education.

The *P*-value was calculated as 0.043, i.e. *P*-value < 0.05.

Thus, the participants preferred peer education over professional-delivered education.

The second question: 'Did you prefer lecture-based education or activity-based education? What topic did you prefer learning about specifically?' was answered by all 49 participants.



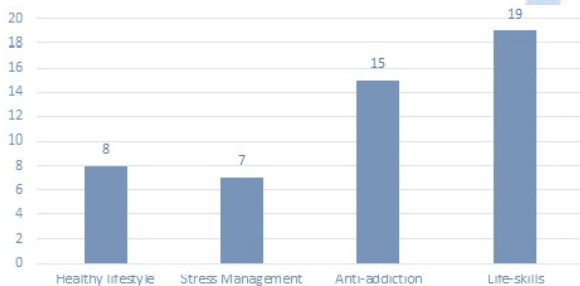
**Figure 2:** Answer to “Did you prefer lecture-based education or activity-based education?”

We observed that (From Fig.2):

30 out of the 49(61.22%) participants preferred activity-based education over lecture-based education.

19(38.78%) participants were in favour of lecture-based education.

The P-value was calculated as 0.031( $P$ -value < 0.05). Thus participants preferred activity-based education over didactic lectures and it was statistically significant.



**Figure 3:** Answer to “Which topic did you prefer learning about specific?”

19 out of the 49 adolescent participants chose Life-skills as the topic which they would like to learn about. 15 out of 49 adolescent participants preferred Anti-addiction education. 8 out of 49 adolescents preferred Healthy Lifestyle as the topic they preferred to learn. 7 out of 49 adolescent participants chose Stress Management-‘Coping with Stress’.

## DISCUSSION

Peer education can be used for topics such as but not limited to those mentioned in the paper where adolescents are more receptive towards advice from their friend circles or seniors than from traditional sources like professional educators, family and media campaigns. Also, if the peer-delivered education is in the form of activity-based education, it is even more effective. Mellanby *et al.* suggested that peer leaders appear to be more effective in establishing conservative norms and attitudes related to sexual behavior than the adults<sup>11</sup>. Peer leaders were less

effective than adults in imparting factual information. Thus both adult-led and peer-led methods may have their own place in effective sex education. Previous research of use of peer education in Drug Use and Prevention suggests that although peer education is successful in achieving increased levels of knowledge of drugs, it remains unclear how effective the intervention was in influencing the drug-using behaviour of young people currently involved in drug use. Thus there is no clear evidence that peer education is a superior method for imparting drug education and prevention in comparison to other approaches {Ward *et al.*}<sup>12</sup>.

The observations have differed from these findings as the topics discussed were different and the participants (adolescents) preferred peer education for knowledge about Stress Management(Coping with Stress),life skills (‘How to say No’, ‘Communication skills’, ‘Self-awareness’) healthy lifestyle (‘Importance of Exercise’, ‘Reading Food Labels’) and Anti-addiction (towards Alcohol, Tobacco and Social media). This observation is due to the fact that peer learners and peer tutors seem of the same social standing. As a result of this social congruence, peer teachers seem to express more of an understanding of their learner’s needs and concerns, by way of an increased understanding of their social and academic lives<sup>13</sup>. This social congruence along with the fact that adolescents are highly influenced by peers makes it unsurprising that adolescents prefer peer delivered education. Peer education was preferred because of the effective communication skills of peer educators as they presented the matter in a manner that was understandable and relatable to the fellow participants. The participants also seem to have found the content delivered by peer educators was relevant and insightful. Although the content quality of both peer educators as well as professional educators was the same, the quality of presentations made by peer educators was enhanced with colorful pictures, with animations, pictures and references that could easily connect with the adolescents. The similar age groups of adolescents and peer educators also had an impact and peer educators could empathize with the issues of adolescents due to a sense of unity in the kind of problems they faced. Thus even though the professionals spoke from great experience and had quality content to present, the adolescents preferred peer educators for the aforementioned reasons. Thus our observations differed from the two aforementioned research papers. This may be due to the difference in the topics of our researches. Thus, we can conclude that peer education is highly effective for topics related to Healthy Lifestyle, Anti-addiction (towards tobacco, alcohol and Social Media) and Life-skills. Our analysis of the preference of adolescents related to the topic about which they would like to learn revealed that

adolescents preferred topics related to Life-skills education ('Communication skills', 'Self Awareness' and 'How to say No!') This has deviated from an earlier research which says that stress management was the topic adolescence wanted to discuss. The research also mentioned that young girls would like to discuss about topics like sex and body image<sup>8</sup>. Previous research done by Djalalinia *et al.* had similar observation, stating that adolescents stressed on Mental Health and Life-skills among other topics as the main training topics<sup>14</sup>. They were extremely interested in the comprehensive educational material among their participatory role in peer programs<sup>14</sup>. This also reinforced our observation that interaction and participation through activities was preferred by adolescents. An earlier research done by Viero *et al.*, that analyzed the acquisition of knowledge of adolescents on three themes: Oral Health, Drug use Prevention and Sexuality showed positive results in increasing the knowledge of adolescents on drug prevention and sexuality, that did not happen on the theme of oral health.<sup>15</sup> The results are related to factors that aroused the interest of adolescents, for example, methods which promote dialogue, exchange of experiences, reflect on their own practices and relationships with groups of friends/family.<sup>15</sup>

Thus adolescents preferred methods wherein there is dialogue, interaction and exchange of views and therefore activity-based education was much more preferred than didactic lectures in our research.

## CONCLUSION

Peers represent a major source of information regarding many health related behaviours and contribute to setting the group norms. Conformity to the peer group is greatest during adolescence<sup>16</sup>. Thus peer education as a method is very effective to reach adolescents and can be used as a tool to provide adolescents with knowledge regarding healthy lifestyle, life-skills, Anti-addiction and Stress management. We must develop a team of competent and knowledgeable peer educators should be created and harness this resource in providing knowledge to adolescents.

Activity based education completely and meaningfully engages the students with the topic of discussion. It promotes creativity and critical thinking and is a method that is more preferred than lecture-based education (a more common method).As the learners are fully involved in the activity, it has a lasting impact on the adolescents. Adolescents today, prefer life-skills learning over other topics like Healthy lifestyle, Coping with Stress and Anti-addiction. This life-skills knowledge can be delivered more effectively via peer education and activity-based education.

## Implication:

Every school, college and educational institution can have its own set of such peer educators. In this way we can improve the overall adolescent health and positively channel the young, burning energies of adolescents towards the betterment of adolescent health. It will work both ways- the right knowledge will be passed on to adolescents and the peer educators will also benefit from this as they themselves will possess the right knowledge and will develop leadership qualities<sup>6</sup>. Further work is needed in this regard for promoting Peer Educators.

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## REFERENCES

1. [https://www.unodc.org/pdf/youthnet/action/message/esc\\_ap\\_peers\\_01.pdf](https://www.unodc.org/pdf/youthnet/action/message/esc_ap_peers_01.pdf)
2. Population Council. Peer Education and HIV/AIDS: Past Experience, Future Directions. [Accessed on: April 2, 2008]; 2000 Available at: [http://www.popcouncil.org/pdfs/peer\\_ed.pdf](http://www.popcouncil.org/pdfs/peer_ed.pdf).
3. Campbell C, Mzaidume Z. Grassroots participation, peer education, and HIV prevention by sex workers in South Africa. *Am J Public Health*. 2001; 91(12):1978–1986.
4. Sergeyev B, Oparina T, Romyantseva T, Volkanevskii V, Broadhead R, Heckathorn D, Madray H. HIV Prevention in Yaroslavl, Russia: A Peer-Driven Intervention and Needle Exchange. *Journal of Drug Issues*. 1999; 29(4):777–803.
5. Kinjari, K. and Gopal, C. N. Ram. (2020). Learning style preference among adolescent school students. 10.25215/0801.118.
6. Aburahma M. H. (2015). Do not lose Your Students in Large Lectures: A Five-Step Paper-Based Model to Foster Students' Participation. *Pharmacy (Basel, Switzerland)*, 3(3), 89–100.
7. Goldenring, J.M. and Cohen, E. (1988) Getting into adolescent heads. *Contemporary Pediatrics*, 5, 75-90.
8. Lee EC. Adolescent Preferences for Topics Addressed During Well Visits. *WMJ*. 2017 Nov; 116(4):210-214. PMID: 29323808.
9. Fatemeh, Masoumeh Simbar. The peer education approach in Adolescents: A narrative review article. *Iranian journal of public health*. 1972. 42(11):1200-1206
10. N, GOPALAKRISHNA and Pai, Preethi and MRSM, PAI and Shastry, Rajeshwari and Shenoy, Ashok. (2010). Didactic Lectures and Interactive Sessions in Small Groups: A Comparative Study among Undergraduate Students of Pharmacology in India. *Journal of Clinical and Diagnostic Research*. 4.
11. AR Mellanby, Robert G Newcombe, J Rees, John Howard Tripp. A comparative study of peer-led and adult-led school sex education. *Health education research*. PubMed. 2001. 16(4):481-92
12. Jennifer Ward, Gillian Hunter, Robert Power. Peer education as a means of drug prevention and education



- among young people: an evaluation. *Health Education Journal*. 1997. 56(3): 251-263
13. Saskiyanto Mahggabarani, Irfan Said, Anto J Hadi, Rapida Saragih, Muhammad Cristandy, Neni Ecovati Januariana. The effectivity of peer education module on knowledge, attitude, and fast-food consumption in adolescents. *Journal of Health Promotion and Behaviour*. 2020. 5(1): 35-43.
  14. Shirin DJALALINIA, Fahimeh RAMEZANI TEHRANI, and Niloofar PEYKARI. Peer Education: Participatory Qualitative Educational Needs Assessment. *Iranian Journal of Public Health*. 2013 Dec; 42(12): 1422–1429.
  15. Vanise dos Santos Ferreira Viero *Et al.* Health education with adolescents: analysis of knowledge acquisition on health topics. *Esc Anna Nery* 2015; 19(3):484-490
  16. World Health Organization (2005). Adolescent peer education in formal and non-formal setting. P: 1–37.

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