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Title: Impact of a Peer-Led Educational program on Knowledge and attitudes about Prevention of Substance Abuse among Lebanese/Armenian Adolescents

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Acknowledgements: Peer educators, participants, families and school principles
Background

- Substance abuse and addiction affect all ages, sexes, races, and segments of society.

- Alcohol, tobacco, and other drugs (ATOD) abuse and addiction are serious problems in Lebanon.

- Peer education on ATOD abuse in several settings has been found to be an effective way of prevention.
Primary prevention efforts directed in schools, colleges and media through peer education has resulted improvement in academic achievement, self concept, and reduction in violence and drug use.
Purpose

- To evaluate the extent to which participation in a peer-led educational program about substance abuse produces changes in knowledge and attitudes among Lebanese/Armenian adolescents.
Hypotheses

Students who enroll in a peer-led educational program, after the program, will experience, a significant:

1. increase in their knowledge about substance abuse,
2. decline in attitudes related to substance abuse,
3. improvement in their drug refusal skills.
Methods

- Design: Quasi experimental pre–post test design.
- Setting: Two Armenian high schools conveniently selected.
- Sample: A convenient sample of 134 students from 10, 11, and 12 grades.
Educational Program

- was designed following the Harm Reduction Model.

- This approach accepts the reality that psychoactive drug use is endemic, and it focuses on pragmatic interventions, especially education.
The purpose of the program was to provide the adolescents with knowledge and skills to effectively resist social influences to engage in substance use and to reduce potential motivations to use substances by increasing general and social competence.
Objectives:
1. List major substances that are abused,
2. Describe their effects on body, mind and behavior,
3. List a variety of ways on how to cope and deal with stress.
4. Describe personal attitudes toward major substances that are abused,
5. List a variety of drug refusal skills.
Educational Program (cont.)

- Program was composed of:
  1. A power point presentation covering major substances and their effects on body, mind and behavior.
  2. A short DVD showing healthy and happy high school students playing basketball followed by an interactive discussion among students and a peer educator about substance abuse prevention and how to refuse drugs.
3. Three brochures;
   one for the parents offering guidelines on how to relate to their children and strengthen their personalities,

Two for the students; one offering 20 ways of drug refusal skills and the second a summary of major drugs and their effect on body and mind.
The educational program was offered by two of the trainees, peers, who had participated in the training the “trainees” project and at present are employed by an office, “Horizon: Drug free Zone”.

Program was offered over two class periods, one week interval.

Students completed the questionnaire before and one week after the educational program.
The Life Skills Training Questionnaire (LSTQ) middle school version was used after securing permission by Dr. Griffin.

LSTQ is divided into 3 sections:

1. Demographic info, 7 items: age, gender, living situation, class, grades, absenteeism and membership to sport or other organizations.
Instrument (cont.)

- Section 2. Knowledge test, 32 true and false items that assess knowledge of various content areas.
- Section 3. 33 items, 16 items about drug attitudes, 10 items on drug refusal skills and 7 items on life skills assessment, on a scale of 1–5 students indicate to what extent they agree or disagree with each statement.
Scoring and Analysis of data

- SPSS version 16 was used for data analysis.
- Descriptive statistics to analyze demographic characteristics.
- Overall knowledge score, as well as knowledge sub-scores for: drug knowledge and life skills knowledge were created.
- Overall drugs’ attitudes scores as well as attitude scales for pro-smoking, pro-drinking, pro-marijuana and pro-hard drugs were created.
Two drug refusal skills scales: one to assess whether the student is likely to say “NO” to drug offers, and the second whether the student is likely to use a variety of refusal skills were created.

Finally, life skills including assertiveness, anxiety reduction, and self-control skills were assessed.
Results

Demographics: No significant variation
Total # 134;
Sex: 56.7% females;
Ages: raged 15–20 years;
Majority 84.1% living with both parents:
Grades: mostly average (C=70–79); 10% failing.
Majority 69% Members to sports and/or other organizations.
### Mean and SD knowledge and attitude scores (N=97)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Pre–test scores</th>
<th>Post–test scores</th>
<th>p–value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean(SD)</td>
<td>Mean(SD)</td>
<td></td>
</tr>
<tr>
<td>Overall know.</td>
<td>0.62 (0.10)</td>
<td>0.65 (0.13)</td>
<td>0.112</td>
</tr>
<tr>
<td>Drug know.</td>
<td>0.51 (0.11)</td>
<td>0.55 (0.14)</td>
<td>0.005</td>
</tr>
<tr>
<td>Life skill know.</td>
<td>0.70 (0.13)</td>
<td>0.71 (0.17)</td>
<td>0.745</td>
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<tr>
<td>Overall attitude</td>
<td>1.90 (0.63)</td>
<td>1.74 (0.72)</td>
<td>0.010</td>
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<tr>
<td>Pro–smoking</td>
<td>1.93 (0.71)</td>
<td>1.71 (0.70)</td>
<td>0.004</td>
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<tr>
<td>Pro–alcohol</td>
<td>2.12 (0.71)</td>
<td>1.93 (0.82)</td>
<td>0.036</td>
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<tr>
<td>Pro–marijuana</td>
<td>1.84 (0.70)</td>
<td>1.72 (0.82)</td>
<td>0.630</td>
</tr>
<tr>
<td>Pro–hard drug</td>
<td>1.73 (0.71)</td>
<td>1.60 (0.79)</td>
<td>0.039</td>
</tr>
</tbody>
</table>
Mean and SD of drug refusal scores and life skills assessments: pre–test (n=125) and post–test (n=97).

<table>
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<th>Post–test scores</th>
<th>p–values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td></td>
</tr>
<tr>
<td>Drug refusal sum.</td>
<td>4.01 (0.69)</td>
<td>4.19 (0.61)</td>
<td>0.028</td>
</tr>
<tr>
<td>Drug refusal I</td>
<td>4.11 (1.02)</td>
<td>4.46 (0.73)</td>
<td>0.002</td>
</tr>
<tr>
<td>Drug refusal II</td>
<td>3.80 (0.67)</td>
<td>3.93 (0.76)</td>
<td>0.630</td>
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<tr>
<td>Life skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertiveness</td>
<td>3.33 (0.72)</td>
<td>3.45 (0.78)</td>
<td>0.092</td>
</tr>
<tr>
<td>Anxiety reduction</td>
<td>2.47 (0.90)</td>
<td>2.66 (0.84)</td>
<td>0.224</td>
</tr>
<tr>
<td>Self control</td>
<td>4.22 (0.82)</td>
<td>4.11 (0.80)</td>
<td>0.808</td>
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</table>
Discussion

Results of this study partially supported the 1st hypothesis: overall drug and life skills knowledge did not improve significantly whereas drug knowledge alone did. May be too much emphasis on knowledge about drugs, or students grasped mostly the drug knowledge. In addition life skills: decision making, interpersonal communication, emotional wellbeing, may need much longer period of training.
The findings supported the 2\textsuperscript{nd} hypothesis in terms of mean positive attitudes.

The 3\textsuperscript{rd} hypothesis related to drug refusal skills I improved significantly, which relates to “likely to say no when asked to smoke, drink or use drugs” but refusal skills II, “is likely to use a variety of techniques in refusing cigarettes, drugs or alcohol” did not change. Similarly, no significant improvement in all components of life skills: assertiveness, anxiety reduction and self control.
Limitations

1. Small number, adequate for a pilot study.
2. Convenient sample, generalization limited.
3. Self-reported data.
4. Use of English language, pilot test showed no language barrier.
Conclusion and Implications

- This study indicates that peer-led educational may be effective, resulting in positive changes in health behaviors.
- The lesson learned from this experience is that use of peer-led educational program is possible to deliver cost efficient preventive campaigns in communities like Lebanon where health man-power resources are scarce.
Conclusion and Implications

- It is highly recommended to:
- Continue peer–led interactive substance abuse prevention programs. Programs need to focus on short–and–long term consequences of drugs; drug refusal skills taught under realistic conditions to build confidence, strengthen personal competence and interpersonal functioning, self–esteem building, decision making, coping and public commitment activities.
- Follow up study on drug use behavior.
Thank YOU All have a Nice Day!