

School project focused on the prevention of alcohol consumption among students aged 15-17



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AIMS AND BACKGROUND

This poster presents the study design and the main outcomes of a randomized controlled trial designed to conduct a preliminary examination of the efficacy of a two-fold health-promotion school program for students aged 15-17 years. The delivered interventions were both characterized by four shared components, though focusing on one specific targeted health-behavior each: Intervention **A**–“*Prevention of Alcohol Misuse*”; Intervention **B**–“*Promotion of Healthy Diet and Physical Activity*”. They were aimed to provide accurate information important for health, and to promote, through brief life skills trainings, healthier youths’ beliefs, attitudes, and behaviors related to alcohol or diet and physical activity, respectively. Moreover, a gradual adaptations of the school environment was proposed to facilitate the adoption of healthier behaviors in young students, in furtherance of the progressive endorsement of revised school health policies.

The study design involved 8 schools located in the Campobasso, Ascoli Piceno, and Benevento provinces (Italy). It was conducted by the Campobasso Provincial Section of the nonprofit organization “Lega Italiana Lotta contro i Tumori – LILT” as project coordinator, and by two other LILT Provincial Sections (Ascoli Piceno and Benevento) as project partners from June 2016 to June 2017. In the province of Campobasso, training activities and workshops were conducted at the Health-Promoting Center “Luoghi di Prevenzione Molise”, funded by the Campobasso Provincial Section of LILT.

METHODS AND STUDY DESIGN

STUDY POPULATION

N= 8 secondary schools in Campobasso, Ascoli Piceno and Benevento provinces.

In each province, schools were paired according to their type (vocational secondary schools or *licei*), then the schools of each pair were randomly assigned to the intervention or control arm. In each school, two 1st grade classes and two 2nd grade classes were randomly selected to compose required groups

INTERVENTION ARM

4 schools allocated
N= 401 students (Mean age: 15y)

CONTROL ARM

4 schools allocated
N= 388 students (Mean age: 15y)

BASELINE DATA COLLECTION

I.G.A: 205 students filled the pre-intervention survey (Alcohol Form)

I.G.B: 196 students filled the pre-intervention survey (Diet and Physical Activity Form)

C.G.A: 195 students filled the baseline survey (Alcohol Form)

C.G.B: 193 students filled the baseline survey (Diet and Physical Activity Form)

IMPLEMENTATION AND MONITORING

Shared components of the interventions
A: “*Prevention of Alcohol Misuse*” delivered to I.G.A; **B:** “*Promotion of Healthy Diet and Physical Activity*” delivered to I.G.B:

- a) **Extracurricular Activities** – 4-hour workshop, conducted by trained LILT educators in out-of-school health-promotion centers, aimed to provide accurate information and to enhance life skills (1);
- b) **Peer Education** – 2-hour peer-led intervention using interactive classroom activities (e.g. brainstorming, role-playing games, creative writing)*;
- c) **Teachers’ Thematic Session** – 4-hour teacher-led lessons on the targeted health-behavior*;
- d) **School Policies And Adaptations** – Establishment of a working group aimed to enforce the health-promotion program through the revision and the endorsement of school health-policies and to propose adaptations in educational environments to facilitate healthy habits.

* Peer educators and teachers had previously been trained by LILT educators (2)

To students allocated in **C.G.1** and **C.G.2**, it was administered the **usual school curriculum**

FOLLOW-UP

I.G.A: 197 students participated in the follow-up survey (Alcohol Form)

I.G.B: 199 students participated in the follow-up survey (Diet and Physical Activity Form)

C.G.A: 180 students participated in the follow-up survey (Alcohol Form)

C.G.B: 201 students participated in the follow-up survey (Diet and Physical Activity Form)

CONCLUSIONS

The results of this trial, though affected by substantial methodological limitations, offer encouraging preliminary data on the efficacy of the intervention named “*Prevention of Alcohol Misuse*” in promoting the awareness of alcohol-related habits in students and in reducing alcohol misuse (i.e. consumption of liquors, daily consumption of alcohol, frequency of incidents of drunkenness).

The health-promotion school program presented above combined the efforts of health promotion services and school staff. In fact, the interventions have been delivered not only by LILT professionals, but also by committed teachers and students.

All the components of the interventions were aimed to strengthen the empowerment of both school staff and students. Moreover, the establishment of a working group composed by educational professionals, healthcare professionals, students and volunteers, responsible for the endorsement of a revised health-policy at school and for proposing adaptations of the educational environment to facilitate healthy habits at school, will contribute to sustained and lasting positive impacts.

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REFERENCES

- Allara E., Angelini P., Gorini G., Bosi S., Carreras G., Gozzi C., Martini A., Tamelli M., Storani S., Faggiano F., (2015). A prevention program for multiple health-compromising behaviors in adolescence: baseline results from a cluster randomized controlled trial. *Prev Med*; 71: 20–26.
- Training includes the use of instruments and methods (i.e. interactive classroom activities) intended to promote decision making, problem solving, and other personal and interpersonal skills, as well as to effectively provide accurate information important for health (Manuals and materials available on www.luoghidi prevenzione.it).

RESULTS

This paragraph presents a descriptive analysis of the main outcomes of the “*Prevention of Alcohol Misuse*” intervention. Data were obtained through the analysis of the students’ answers to a self-report multiple-choice questionnaire. The items covered youths’ beliefs, attitudes and behaviors related to alcohol. Students allocated in the intervention arm (I.G.A) participated in all the four components of the project’s intervention **A:** “*Prevention of Alcohol Misuse*”. Meanwhile, the usual school curriculum was administered to students in the control group (C.G.A), who participated as well in the baseline and follow-up surveys. Overall, a total of 777 questionnaires were completed.

Comparative evaluations between the results of pre- and post-intervention surveys carried out on both the intervention and control groups, are reported below.

Follow-up surveys suggested an overall efficacy of the intervention in providing accurate information to students about the risks related to alcohol consumption (e.g. addiction and other alcohol-related disorders).

The prevalence of students who considered their consumption of alcohol to be excessive, increased by 75% in I.G.A, and even decreased by 37% in C.G.A. However, the improvement of students’ knowledge about the concepts of alcohol unit, blood alcohol level, and the regulations concerning the sale of alcohol and its consumption, was not statistically significant.

At the baseline measurement, alarming data about students’ alcohol consumption emerged: the prevalence of youths who reported alcohol consumption at least one time in the previous month was 69% in I.G.A, and 67% in C.G.A. In both groups, beer was found to be the most frequently consumed drink, during the weekends (30% beer; 12% cocktails; 10% wine; 9% liquors).

After the intervention, the prevalence of students who did not drink in the last month increased by 25% in I.G.A, versus a 14% increase observed in C.G.A. Moreover, the consumption of liquors decreased by 45% and the prevalence of students admitting to drink alcohol daily decreased by 72% within I.G.A, while it didn’t vary within C.G.A (5%).

Regarding the number of incidents of drunkenness experienced in the previous year, at the baseline evaluation 38% of youths in I.G.A and 40,6% of youths in C.G.A reported having experienced at least one episode. At the follow-up, these prevalence decreased in both groups: specifically, by 34% in I.G.A versus 20% in C.G.A. Furthermore, within I.G.A, the percentage of youths who experienced 3 or more incidents of drunkenness during the previous year, decreased by 50% at follow-up.