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Short-term effectiveness of the EU-Dap program
Background: (I)

School is an appropriate setting for illicit drugs use prevention programs

- **4 out of 5** drug users begin before adulthood
- A large number of **adolescents** can be reached
- Schools can adopt and enforce a broad spectrum of **educational policies**
In European countries virtually all schools carry out interventions to prevent the onset of substance use

- most are theory-based
- some have been evaluated as regards intermediate variables (knowledge, intentions…)
- the evaluation of effectiveness in reducing use of drugs is very rare

There is a solid suspicion that some programmes can make harm
(Dukes 1997; Hawthorne 1996)
Background: (III)

Why is that important to apply effective programs

• **Primary prevention intervention:**
  
  the target population is **healthy**, our aim is to prevent a risk behaviour (use of drugs) in a population where most people are **non-users**

• **We are responsible for adolescents who start using drugs because of the intervention**

• **Adolescents are involved**

• **The target population did not ask for an intervention**
Background: (IV)

- Considering the risk of harm, on the ethical point of view the **evaluation of effectiveness** of prevention programs is essential.

Focuses of this presentation

- Cochrane Review on *School-based prevention for illicit drugs' use* (Faggiano, 2005)
- short-term results of the EU-Dap trial
Systematic reviews

- **Systematic reviews** are a tool developed to summarize the results of scientific literature.

- They are the base of the **Evidence Based Medicine**.

- The **Cochrane Collaboration** is an international no-profit network aimed at developing systematic reviews on the effectiveness of health technologies (medicines, interventions) using standardized methods.

- Cochrane Library (www.cochrane.org)
Rationale for the review

Because of the huge variability in the effectiveness of school-based programs for the prevention of drugs use

A systematic review has been considered a priority by the Cochrane Drug and Alcohol Review Group (CDAG)
This review was published in the Cochrane Library (Issue 2 – 2005):

"School-based prevention for illicit drugs' use"

Authors:
Methods

All RCTs and CPS (Controlled Prospective Studies) evaluating any intervention program versus a control condition were considered.

The following databases were searched (from beginning to Feb 2004):

- Medline & Embase
- ERIC, Sociological Abstracts, Psychinfo
- Cochrane databases

To discover unpublished researches/results, research teams, and 18 authors of included and excluded studies were contacted.
Flow chart of the review

9657 reports identified → 7441 reports excluded

2216 abstracts evaluated → 1538 reports excluded

678 full texts obtained

- 65 reports prov. incl. (40 RCTs)
- 41 reports included (29 RCTs)
- 15 RCTs with useful data

613 reports excluded
- 374: methodological reasons
- 128: reviews
- 76: community programs
- 35: alcohol focused programs

24 reports excluded (21 RCTs)
14 RCTs no useful data
The interventions and control arms of the studies were classified as:

- **skills focused**, aimed to enhance students' abilities in generic, refusal, and safety skills
- **affective focused**, aimed to modify inner qualities (personality traits such as self-esteem and self-efficacy, and motivational aspects such as the intention to use drugs)
- **knowledge focused** programs, aimed to enhance knowledge of the effects, and consequences of drug use
- **usual curricula**
Included studies

- 29 studies (41 reports) were included
- 14 did not present data useful for the inclusion in the meta-analyses
- 18 studies were of 6th and 7th grade students
- in 18 studies the evaluation was based on post-test assessment; 13 provided data at 1 year follow-up
- all but one were conducted in the USA. Only 1 RCT was conducted in the UK
Results: (I)

Skills versus usual curricula drugs use: RR = 0.81; CI95%: 0.64, 1.02

Reduction: 19%

Review: School-based prevention for illicit drugs' use.
Comparison: 02 skills vs usual curricula
Outcome: 07 drug use

<table>
<thead>
<tr>
<th>Study or sub-category</th>
<th>Treatment n/N</th>
<th>Control n/N</th>
<th>RR (random) 95% CI</th>
<th>Weight %</th>
<th>RR (random) 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ringwall 1991</td>
<td>65/685</td>
<td>77/585</td>
<td></td>
<td>52.56</td>
<td>0.72 [0.53, 0.98]</td>
</tr>
<tr>
<td>Snow 1992</td>
<td>63/575</td>
<td>63/526</td>
<td></td>
<td>47.44</td>
<td>0.91 [0.66, 1.27]</td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>1260</td>
<td>1111</td>
<td></td>
<td>100.00</td>
<td>0.81 [0.64, 1.02]</td>
</tr>
</tbody>
</table>

Total events: 128 (Treatment), 140 (Control)

Test for heterogeneity: Chi² = 1.06, df = 1 (P = 0.30), I² = 6.0%
Test for overall effect: Z = 1.80 (P = 0.07)
## Results: (II)

### Skills versus usual curricula

**marijuana use:** RR = 0.82 CI95%: 0.73, 0.92

**Reduction:** 18%

<table>
<thead>
<tr>
<th>Study or sub-category</th>
<th>Treatment n/N</th>
<th>Control n/N</th>
<th>RR (random) 95% CI</th>
<th>Weight %</th>
<th>RR (random) 95% CI</th>
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</thead>
<tbody>
<tr>
<td>Sussman 2002</td>
<td>46/199</td>
<td>44/172</td>
<td></td>
<td>10.09</td>
<td>0.90 [0.63, 1.29]</td>
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<tr>
<td>Botvin 1990</td>
<td>147/1128</td>
<td>160/1142</td>
<td></td>
<td>28.69</td>
<td>0.93 [0.76, 1.15]</td>
</tr>
<tr>
<td>Ellickson 2003</td>
<td>332/2353</td>
<td>293/1723</td>
<td></td>
<td>55.38</td>
<td>0.76 [0.66, 0.88]</td>
</tr>
<tr>
<td>Furr-Holden 2004</td>
<td>25/192</td>
<td>34/178</td>
<td></td>
<td>5.85</td>
<td>0.68 [0.42, 1.10]</td>
</tr>
<tr>
<td><strong>Total (95% CI)</strong></td>
<td><strong>4072</strong></td>
<td><strong>3215</strong></td>
<td></td>
<td><strong>100.00</strong></td>
<td><strong>0.82 [0.73, 0.92]</strong></td>
</tr>
<tr>
<td><strong>Total events:</strong></td>
<td><strong>550 (Treatment), 531 (Control)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test for heterogeneity: Chi² = 3.15, df = 3 (P = 0.37), I² = 4.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test for overall effect: Z = 3.43 (P = 0.0006)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results: (III)

Skills versus usual curricula

hard drugs use: RR = 0.45; CI95%: 0.24, 0.85

Reduction: 55%
Results: (IV)

Skills versus usual curricula

Improvement of:

- drug knowledge: WMD=2.60 (1.17-4.03)
- decision making skills: SMD=0.78 (0.46-1.09)
- peer pressure resistance: RR=2.05 (1.24-3.42)
- self-esteem: SMD= 0.22 (0.03-0.40)
Summary of results: (I)

- **Skills focused programs** have a positive effect on both mediating variables and final outcomes, compared to usual curricula.

- The meta-analysis on drug and marijuana use showed a **20% lower use** in the intervention groups at the post test, and a 55% lower use of hard drugs.

- Most of the RCTs included have a satisfactory methodological quality (mainly quality score=B).
Summary of results: (II)

- **knowledge focused programs** improve mediating variables (especially **drug knowledge**) compared with usual curricula, but are not more effective than skills based programs.

- When final outcomes are considered (drug use), their effects are **comparable to the usual curricula** and the other two types of programs.

- **affective-focused programs** improve **decision making skills and drug knowledge** compared to usual curricula and knowledge-focused interventions, but no evidence of effectiveness is shown for use of drugs.
**Summary of results: (III)**

- **The number needed to treat** (NNT=1/ARR) is 33 for marijuana use

Since the prevalence of marijuana use in the post-test of the control arm of the RCTs included in this comparison was **16.5%**

**5 out of 33 students** (16.5% of 33) will use this drug.

Of these, **1 would be prevented** by the intervention, which corresponds to the **20% of the new initiators**.
Limitations

- none of the RCTs satisfied all the quality criteria
- most results were outcomes at post test and few data were from long-term follow-ups
- many studies did not present effect measures but only statistical indicators so it was impossible to combine them in the meta-analysis
- measure of effects were very heterogeneous
- all but one of the 29 RCTs included were conducted in the USA
EU-Dap study

European Drug Addiction Prevention trial
Characteristics

- Experimental study:
  - Cluster randomized controlled trial
- Funded by the European Community
  - Public Health Program
- Involving 9 centers in 7 European Countries
- Conceived by an international expert group
- Supported by EMCDDA

Main aims:
- to build a School-based European Prevention Program ("Unplugged")
- to evaluate the efficacy of the program
“Unplugged”

- the program is based on a comprehensive social influence approach

- It includes the following components
  - Social skills
  - Personal skills
  - Knowledge
  - Normative education
  - (No resistance education)

- It is administered by teachers trained in a 3-days course

- It is made by 12 units, 1 hour each
The 12 units

- **Unit 1**: Opening “Un-plugged”
- **Unit 2**: Choices: risk and protection
- **Unit 3**: Drugs – get informed
- **Unit 4**: Smoking the cigarette – get informed
- **Unit 5**: Your beliefs, norms and information: are they correct?
- **Unit 6**: To be or not to be in a group
- **Unit 7**: Express your self
- **Unit 8**: Party tiger (contacts and non-verbal and verbal ways to present oneself)
- **Unit 9**: Get up stand up (respect for the rights and opinions of the other people)
- **Unit 10**: Coping competence
- **Unit 11**: Problem solving/ decision making
- **Unit 12**: Goal setting and closure
Individual code

AUTO-GENERAZIONE DEL CODICE ANONIMO

Nome

Cognome

Data di nascita (gg/mm/aaaa)

Nome della madre

Nome del padre

Nome della nonna paterna

Colore dei tuoi occhi

Verdi Marroni Neri Blu Grigi
QUESTIONARIO su abitudini, usi e altre informazioni sulle sostanze non alimentari
Methods

• EU-Dap is designed as a Cluster randomised controlled trial

• The schools to be included were selected by chance among all schools of the center area

• A stratified randomization has been carried out to ensure a balanced sample according to social class variables
Enrollment

- **7079** students participated in the *baseline survey* (November 2004)
- The program ("Unplugged") was administered between November 2004 and February 2005 in the intervention arms
- **6604 students** participated in the *follow-up survey* (May 2005), at least **3 months** after the end of the program
- The percentage of successful linkage between the baseline and first follow-up questionnaire was **91.5%**
## Enrolled population

<table>
<thead>
<tr>
<th>Centres</th>
<th>Controls (N=3297)</th>
<th>All interventions (N=3307)</th>
<th>Total population (N=6604)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Italy - Turin</td>
<td>859</td>
<td>27.1</td>
<td>634</td>
</tr>
<tr>
<td>Spain - Bilbao</td>
<td>212</td>
<td>6.7</td>
<td>159</td>
</tr>
<tr>
<td>Germany - Kiel</td>
<td>203</td>
<td>6.4</td>
<td>358</td>
</tr>
<tr>
<td>Belgium - Gent</td>
<td>288</td>
<td>9.1</td>
<td>347</td>
</tr>
<tr>
<td>Sweden - Stockholm</td>
<td>426</td>
<td>13.4</td>
<td>501</td>
</tr>
<tr>
<td>Greece - Thessaloniki</td>
<td>322</td>
<td>10.1</td>
<td>368</td>
</tr>
<tr>
<td>Austria - Wien</td>
<td>433</td>
<td>13.6</td>
<td>283</td>
</tr>
<tr>
<td>Italy - Novara</td>
<td>209</td>
<td>6.6</td>
<td>270</td>
</tr>
<tr>
<td>Italy - Aquila</td>
<td>222</td>
<td>7.0</td>
<td>276</td>
</tr>
</tbody>
</table>
### Differences of use among centers

<table>
<thead>
<tr>
<th></th>
<th>ALO smoking</th>
<th>Regular smoking</th>
<th>Daily smoking</th>
<th>ALO drunk</th>
<th>Regular drunk</th>
<th>ALO cannabis</th>
<th>Regular cannabis</th>
<th>ALO drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turin</td>
<td>26.7</td>
<td>17.6</td>
<td>12.0</td>
<td>8.6</td>
<td>2.8</td>
<td>6.9</td>
<td>3.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Bilbao</td>
<td>25.0</td>
<td>15.8</td>
<td>9.7</td>
<td>17.3</td>
<td>4.4</td>
<td>13.1</td>
<td>10.4</td>
<td>13.3</td>
</tr>
<tr>
<td>Kiel</td>
<td>13.4</td>
<td>7.6</td>
<td>5.0</td>
<td>6.0</td>
<td>2.5</td>
<td>1.4</td>
<td>0.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Gent</td>
<td>9.1</td>
<td>4.9</td>
<td>3.1</td>
<td>4.8</td>
<td>1.8</td>
<td>1.9</td>
<td>1.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Stockholm</td>
<td>2.9</td>
<td>1.1</td>
<td>0.4</td>
<td>1.9</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Thessaloniki</td>
<td>1.3</td>
<td>0.6</td>
<td>0.4</td>
<td>2.5</td>
<td>1.2</td>
<td>0.7</td>
<td>0.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Wien</td>
<td>8.5</td>
<td>4.5</td>
<td>2.4</td>
<td>3.5</td>
<td>0.7</td>
<td>1.3</td>
<td>0.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Novara</td>
<td>27.0</td>
<td>14.7</td>
<td>9.1</td>
<td>9.2</td>
<td>1.5</td>
<td>4.2</td>
<td>2.3</td>
<td>5.0</td>
</tr>
<tr>
<td>L’Aquila</td>
<td>11.2</td>
<td>4.7</td>
<td>2.5</td>
<td>4.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.2</td>
<td>1.4</td>
</tr>
</tbody>
</table>
I smoked at least one cigarette in the last 30 days

Torino/Italia: 27.3% (Ragazzi n=841, Ragazze n=807)
Bilbao/Spagna: 22.7% (Ragazzi n=205, Ragazze n=195)
Novara/Italia: 24.4% (Ragazzi n=275, Ragazze n=238)
Have been drunk

I've been drunk at least ONCE in the last 30 days

<table>
<thead>
<tr>
<th>Location</th>
<th>Boys (Ragazzi)</th>
<th>Girls (Ragazze)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torino/Italy</td>
<td>11.9%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Bilbao/Spain</td>
<td>17.3%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Novara/Italy</td>
<td>10.5%</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

Ragazzi n= 841, Ragazze n= 807
Ragazzi n= 205, Ragazze n= 195
Ragazzi n= 275, Ragazze n= 238
Smoking cannabis

I smoked cannabis at least ONCE in the last 30 days

<table>
<thead>
<tr>
<th>Location</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torino/Italy</td>
<td>10.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Bilbao/Spain</td>
<td>17.7</td>
<td>10.6</td>
</tr>
<tr>
<td>Novara/Italy</td>
<td>5.1</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Ragazzi n= 841, Ragazze n= 807
Ragazzi n= 205, Ragazze n= 195
Ragazzi n= 275, Ragazze n= 238
Measures of effect (last 30 days)

- **ALO smoking**: At least once
- **Regular Smoking**: At least 6 times
- **Daily smoking**: At least 20 times
- **ALO drunkenness**: At least once
- **Regular drunkenness**: At least 3 times
- **ALO cannabis**: At least once
- **Regular cannabis**: At least 3 times
- **ALO drugs**: At least once (all drugs except cigarettes and alcohol)
ALO smoking

% Yes BAS % Yes FU1

[0] CONTROL
[1] BASIC
[2] PARENT
[3] PEER
[1+2+3] INTERV
Regular smoking

![Graph showing the percentage of regular smoking across different groups]

- **CONTROL**: 6.2, 7.2, 7.3, 8.4, 9.5, 10.2, 10.7, 13.3
- **BASIC**: 5.5, 6.5, 7.5, 8.5, 9.5, 10.5, 11.5, 13.5
- **PARENT**: 6.5, 7.5, 8.5, 9.5, 10.7, 11.5, 12.5, 13.5
- **PEER**: 5.5, 6.5, 7.5, 8.5, 9.5, 10.5, 11.5, 12.5
- **[1+2+3 INTERV]**

Legend:
- [0] CONTROL
- [1] BASIC
- [2] PARENT
- [3] PEER
- [1+2+3 INTERV]
Daily smoking

% Yes BAS
% Yes FU1

CONTROL [0]
BASIC [1]
PARENT [2]
PEER [3]
INTERV [1+2+3]

% 10,0
9,0
8,0
7,0
6,0
5,0
4,0
3,0

4,8
4,6
3,3
6,1
6,5
6,0
7,2
9,6

t
Regular drunkenness
Regular cannabis
Adjusted statistical analysis

- A Multi-Level model was used to:
  - Adjust for the *cluster effect*
  - Take into account the *differences in the prevalence of use among centers*
  - Take into account the *differences in the prevalence of use among arms* (the controls show higher prevalences of use at the baseline)
## Results of the model

<table>
<thead>
<tr>
<th></th>
<th>% reduction</th>
<th>CI 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALO smoking</td>
<td>-12%</td>
<td>-29%;+8%</td>
</tr>
<tr>
<td>Regular smoking</td>
<td>-14%</td>
<td>-33%;+10%</td>
</tr>
<tr>
<td>Daily smoking</td>
<td>-30%</td>
<td>-48%;-6%</td>
</tr>
<tr>
<td>ALO drunkenness</td>
<td>-28%</td>
<td>-42%;-10%</td>
</tr>
<tr>
<td>Regular drunkenness</td>
<td>-31%</td>
<td>-52%;-1%</td>
</tr>
<tr>
<td>ALO cannabis</td>
<td>-23%</td>
<td>-40%;0%</td>
</tr>
<tr>
<td>Regular cannabis</td>
<td>-24%</td>
<td>-47%;+9%</td>
</tr>
<tr>
<td>ALO drugs</td>
<td>-11%</td>
<td>-31%;+15%</td>
</tr>
</tbody>
</table>

Model 3: model 2 + adjustment for the baseline status of the outcome
Considerations: age

<table>
<thead>
<tr>
<th></th>
<th>12 anni</th>
<th></th>
<th>13 anni</th>
<th></th>
<th>14 anni</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/N*</td>
<td>%</td>
<td>n/N*</td>
<td>%</td>
<td>n/N*</td>
<td>%</td>
</tr>
<tr>
<td>ALO smoking</td>
<td>153/2202</td>
<td>6.9</td>
<td>156/2082</td>
<td>8.5</td>
<td>719/2497</td>
<td>28.8</td>
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<tr>
<td>Regular smoking</td>
<td>85/2202</td>
<td>3.9</td>
<td>85/2082</td>
<td>4.1</td>
<td>477/2497</td>
<td>19.1</td>
</tr>
<tr>
<td>Daily smoking</td>
<td>48/2202</td>
<td>2.2</td>
<td>53/2082</td>
<td>2.5</td>
<td>331/2497</td>
<td>13.3</td>
</tr>
<tr>
<td>ALO drunkenness</td>
<td>88/2254</td>
<td>3.9</td>
<td>81/2132</td>
<td>3.8</td>
<td>295/2536</td>
<td>11.6</td>
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<tr>
<td>Regular drunkenness</td>
<td>30/2254</td>
<td>1.3</td>
<td>24/2132</td>
<td>1.1</td>
<td>93/2536</td>
<td>3.7</td>
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<tr>
<td>ALO cannabis</td>
<td>30/2273</td>
<td>1.3</td>
<td>21/2154</td>
<td>1.0</td>
<td>217/2576</td>
<td>8.4</td>
</tr>
<tr>
<td>Regular cannabis</td>
<td>16/2273</td>
<td>0.7</td>
<td>9/2154</td>
<td>0.4</td>
<td>136/2576</td>
<td>5.3</td>
</tr>
<tr>
<td>ALO drugs</td>
<td>76/2289</td>
<td>3.3</td>
<td>39/2170</td>
<td>1.8</td>
<td>267/2594</td>
<td>10.3</td>
</tr>
</tbody>
</table>

14 years old students have very high level of use
### Considerations: peers and parents

<table>
<thead>
<tr>
<th></th>
<th>Study arm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ctrl</td>
</tr>
<tr>
<td>POR</td>
<td>POR (95%CI)</td>
</tr>
<tr>
<td>ALO smoking</td>
<td>1</td>
</tr>
<tr>
<td>Regular smoking</td>
<td>1</td>
</tr>
<tr>
<td>Daily smoking</td>
<td>1</td>
</tr>
<tr>
<td>ALO drunk..</td>
<td>1</td>
</tr>
<tr>
<td>Regular drunk..</td>
<td>1</td>
</tr>
<tr>
<td>ALO cannabis</td>
<td>1</td>
</tr>
<tr>
<td>Regular cannabis</td>
<td>1</td>
</tr>
<tr>
<td>ALO drugs</td>
<td>1</td>
</tr>
</tbody>
</table>

The involvement of parents and peers do no change the results

the basic intervention works better
Considerations: parents smoking

% of students who smoked cigarettes at least once according to the smoking status of parents and siblings

<table>
<thead>
<tr>
<th>Parents</th>
<th>One Parent</th>
<th>Both Parents</th>
<th>Siblings Not Smoking</th>
<th>Siblings Smoking</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Smoking</td>
<td>(N=3042)</td>
<td>(N=2396)</td>
<td>(N=1554)</td>
<td>(N=4847)</td>
<td>(N=1276)</td>
</tr>
<tr>
<td>%</td>
<td>28.3</td>
<td>38.2</td>
<td>43.1</td>
<td>28.0</td>
<td>59.1</td>
</tr>
<tr>
<td>N</td>
<td>857</td>
<td>910</td>
<td>663</td>
<td>1348</td>
<td>744</td>
</tr>
</tbody>
</table>
Considerations: parents permission

% of students who smoked cigarettes or have been drunk at least once according to the parents’ permission

<table>
<thead>
<tr>
<th></th>
<th>Would allow (N=1091)</th>
<th>Wouldn't allow (N=5169)</th>
<th>Don’t know (N=690)</th>
<th>Total (N=7079)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALO smoked cigarettes</td>
<td>% 61.0</td>
<td>29.3</td>
<td>36.8</td>
<td>35.1</td>
</tr>
<tr>
<td></td>
<td>N 663</td>
<td>1506</td>
<td>251</td>
<td>2420</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Would allow (N=1463)</th>
<th>Wouldn't allow (N=4108)</th>
<th>Don’t know (N=1334)</th>
<th>Total (N=7079)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALO drunkenness</td>
<td>% 43.8</td>
<td>16.6</td>
<td>26.0</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>N 640</td>
<td>680</td>
<td>345</td>
<td>1665</td>
</tr>
</tbody>
</table>
Conclusions: (I)

• The statistical analysis shows that Unplugged is effective in reducing use of drugs, alcohol and cigarettes at the first follow-up

• it seems to work better:
  • for high frequent users than for sporadic ones
  • for boys than for girls

• there are large differences between centers (data not shown) that are explained by differences in the implementation of the program

• the lack of effect of any extra intervention (parents, peers) have to be explained, yet
Conclusions: (II)

- It is the first European program evaluated through a multicentric, randomized controlled trial design.
- The follow-up at 1 year will give data to test the stability over time of the results.

Thank you for the attention and..
Keep in touch with EU-Dap!!!
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