

Berlin Evaluates School Tobacco Prevention (BEST Prevention Study)

Summary:

Smoking prevalences in Germany are among the highest in Europe. Especially the data in Berlin are alarming: The HBSC-study (Health Behaviour in School aged Children) showed in 2006 a prevalence of regular smoking among 9th graders (15 years old) in Berlin of 24%. The national mean was at 13%.

It is undoubted that smoking is one of the most important modifiable risk factors for certain cancer entities as well as for cardiovascular diseases. To prevent smoking in school-aged children, a variety of school-based prevention programs have been designed and evaluated. Results have shown that education and other single interventions alone do not lead to sustainable success in reducing smoking rates. Multi-component approaches are propagated in the literature, and international research has shown that interventions targeting both the students and their parents appear to be the most promising strategy in reducing smoking rates.

The present study aims to evaluate the effectiveness and acceptability of a student-parent combined smoking prevention program comparing the student-parent program with a student only intervention and a control group in a sample of schools in Berlin.

This cluster-randomized trial will enroll about 3000 7th grade students from 47 schools in Berlin. They will be randomized into three groups: student intervention, combined student-parent intervention, control group. Data assessments will be conducted at baseline as well as following the intervention after 12 months (1. follow-up) and 24 months (2. follow-up). The primary outcome is the percent of regular smokers among students after two years. Baseline assessment:

Questionnaires are distributed in all participating 7th grade classes. Socioeconomic status, smoking behaviour and other health behaviours (e.g. alcohol and drug use, nutrition and physical activity) are assessed.

Interventions:

1. Student intervention: visit in an interactive parcours targeting smoking prevention
2. Combined student-parent interventions: student intervention see above, parent intervention takes place during a regular parental evening and includes information about parental behaviour towards smoking in their children as well as a follow-up newsletter.
3. Active control group: visit in an interactive parcours regarding nutrition and physical activity.

1. Follow-up:

Re-assessment with questionnaire in 8th graders.

2. Follow-up:

Re-assessment with questionnaire in 9th graders.

Additionally objective measurements of the smoking behaviour will be conducted in 15 randomly assigned schools: cotinine concentration will be measured in saliva specimen (6 schools), carbon monoxid will be measured in the exhaled air (6 schools), in 3 schools both objective measurements will be conducted.

Parental questionnaire:

Between 1. and 2. student Follow-up a questionnaire will be mailed to the parents investigating parents' and childrens' smoking habits, rules and consequences regarding smoking as well as questions about the intervention.

Current status:

Schools were recruited in two waves (time span of one year). Currently, the 1. wave (32 schools) undergoes the 2. follow-up phase, the 2. wave (15 schools) undergoes the 1. follow-up phase. First baseline analyses are being prepared.

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