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Case study write up – Spain

Adolescent Smoking Cessation in
Spain (ASCEPIS)

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Introduction

The intervention consisted of two parts: smoking cessation for young people via a computer self-help programme and a school-based smoking cessation course of 7 sessions (of 1.5 hour each). The target age group was 16-18 year olds, but in practice most participants were aged 17 (26%), 18 (37%), and some older. The male to female ratio was 35-65, which corresponds with the higher numbers of smokers in the female population in Spain. All participants were daily smokers.

The intervention takes place in 5 different regions in Spain: Barcelona; Galicia; Vitoria; La Rioja; and Córdoba. In total 9 courses were offered throughout Spain: 2 in Barcelona; 2 in Córdoba; 1 in La Rioja; 2 in Galicia; and 2 in Vitoria. The case study visit focused on the intervention in Barcelona, both at the schools and with the self-help computer programme. Here, a total of 45 young people participated at the start of the programme: 24 in school-based smoking cessation sessions; and 21 via the self-help computer programme.

In total 1,154 young people were recruited across all 5 regions. These were all daily smokers who expressed an intention to quit. The total number of schools selected in this way was 39. Of the total number of recruited smokers, 267 (23.1%) asked for help with cessation. Finally, 206 of these young people (17.8% of the total) made it through the selection process. These 206 adolescents were then assigned to one intervention strategy (cessation groups or the computer programme). The average quit rate was 26.6% over all projects. Broken down over the two intervention strategies, the quit rate for the cessation groups is 26.8% and for the computer program 25%, with a higher number of young people involved in the cessation groups than the computer programme. Cordoba was the region with the highest quit rates with an average 50%.

Case study methodology

Most data are based on interviews undertaken with the project leader who co-ordinates the project on a national level within the Public Health Agency. First discussions took place over the phone (baseline interview in October 2004 and follow-up in December 2004) and then face-to-face during a country visit in June 2005, which focused on the Barcelona intervention. During this visit interviews were also conducted with 3 other team members and facilitators from the Public Health Agency. Researchers also attended the final celebration event attended by 4 young people involved in the computer self-help programme (3 girls) and the school-based smoking cessation course (1 boy). In addition, one girl was interviewed at the offices of the lead organisation. She had taken part in the smoking cessation course but was unable to attend the celebration event.

The working language during the fieldwork was English for conversations with the project leader, and Spanish and Catalan for communication with the rest of the intervention team and the young people, with help from the project leader for translation.

Lead organisation and main partners

The lead organisation is Agència de Salut Pública de Barcelona (Public Health Agency, Barcelona). The organisation is jointly controlled by the regional government (40%) and the local government (60%) – as part of the Barcelona Council.

In total, five organisations were involved in the intervention:

Name of organisation	Job title or position in organisation	Brief description of their role in the project.
Public Health Agency of Barcelona	Researcher	General coordination and one partner in the Project
Health and Consumption Department Vitoria Council	Head of the Department	Local coordination and one partner in the Project
Prevention and Disease Control Service Public Health Division Galicia Government	Head of the Service	Local coordination and one partner in the Project
Tobacco Plan Regional Drugdependence Commission La Rioja Government	Researcher	Local coordination and one partner in the Project
Program Section Health Province Delegation of Cordoba Andalusia Government	Researcher	Local coordination and one partner in the Project

The overall professional involvement in the national project is as follows: the project had 1 national manager, 5 local managers for the regions, 10 facilitators for the cessation groups and 2 facilitators for the self-help computer programme in Barcelona. The team in Barcelona consisted of 5 people: 4 facilitators (2 for the school-based cessation courses and 2 nurses on the computer programme) and the national project co-ordinator. The facilitators are generally either trained in smoking cessation or prevention for adults, or have experience with working with young people. The Barcelona team had two nurses involved in the computer self-help programme and two psychologists who delivered the school-based smoking cessation sessions.

Context

Smoking statistics from Globalink (2003)¹ present the following profile for Spain. Regular smoking rates amongst adolescents (14-18 year olds) in the year 2000 was 25.2% for males and 35.8% for females. The daily smoking rates for adults (16 years and older) was higher for males at 39.1%, but lower for females (24.6%).

Smoking is prohibited in schools, except for a dedicated and separate place where people can still smoke. Currently changes are being prepared in Spanish law to forbid smoking in the workplace altogether, including at schools. This is still part of a discussion in Parliament, but there is agreement on the need for a complete smoking ban in schools and the workplace, which is likely to be introduced in January 2006.

Offering smoking cessation via the school setting is perceived as difficult, as there is no culture of smoking cessation for adolescents. This pilot project should demonstrate the effectiveness of the intervention and provide evidence, so that schools can integrate it into their curriculum – which is not the case at this moment. Most schools see it as a ‘one off’ and not a permanent or structural part of health intervention in schools. Smoking cessation for adults is broadly accepted in the country but not available as a public service, including pharmacological support (NRT). This might change with a public ban on smoking.

The adolescent smoking cessation initiative is part of a broader aim of the organisation in tackling public health issues amongst adolescents. The lead organisation focuses on nutrition (mainly in age group 12-13 years, including school breakfasts); sexuality (14-16 and 16-18 year olds); and drugs and dependency, including cannabis use, smoking and alcohol abuse (16 years and up). Several smoking prevention programmes are being implemented, such as the Smokefree Class Competition. On average, about 50-60% of the schools in Spain have smoking prevention programmes. Health education is not compulsory in the country.

Previous experience with adolescent smoking cessation

The project leader has a background in smoking prevention, and was project manager for a smoking prevention project in schools between 1997 and 2002. Offering smoking cessation services to young people is a new phenomenon for the organisation however, and no previous experience exists with this particular intervention for adolescents.

Project aims and objectives

The main aim of the project was to show that smoking cessation is feasible and effective in 16-18 years old adolescents and to include smoking cessation alongside preventive strategies in the adolescent age group. Specific objectives were as follows:

A) Behaviour objectives (related to effect)

1. To obtain regular attendance and participation in cessation groups by 16-18 years old smoker adolescents.
2. To get a cessation groups and computer programme quitting rate upper than spontaneous cessation in this ages (3-7%).
3. To achieve reduction in smoked cigarettes in that students without quitting success.

B) Learning objectives (related to process)

4. To increase knowledge about smoking health effects and also about the own profile and addiction as smoker.
5. To promote contrary attitudes to smoke and favourable attitudes towards the own health and self-concept.
6. To increase the motivation to stop smoking and try an attempt to do it.

Characteristics of target group

The target group included young people at school between 16-18 years old, who smoke on a daily basis. In Spain most (daily) smokers in the adolescent population are female, which is reflected in the participant gender ratio of the smoking cessation intervention; approximately two thirds of the participants were female (34.6% male and 65.4% female).

The target age group is 16-18 year olds, but in practice most participants were aged 17 (26.3%) and 18 (37%), and some older. The percentages per age group are:

15 years	0	16 years	7 (3.4%)
17 years	54 (26.3%)	18 years	76 (37.0%)
19 years	35 (17.1%)	20 years	17 (8.3%)
Over 20 years	10 (4.9%)	Not known	6 (3.0 %)

Most smokers participating in the project smoked between 6 and 20 cigarettes a day, and all of them had been smoking for over a year on a weekly if not daily basis:

Number of cigarettes per day	Number and percentage of participants
1-5	31 (15.1%)
6-10	66 (32.2%)
11-20	65 (31.7%)

21-30	6 (3.0%)
More than 30	1 (0.5%)
Not known/missing data	36 (17.6%)

Motivational levels of the participants were measured via the Richmond motivation test. Most pupils scored 'good motivation' on this (42.9% or 172 students with a score of 7 or higher), followed by 39.5% (81 students) that qualified as 'moderately motivated' (with a score between 4 and 7). Only 3 students (1.5%) scored lower on the motivation ladder.

Selection is based on the outcomes of the test. Adolescents need to display a motivation to quit together with low levels of self-efficacy: *'The pupils must be willing to quit but not able to'*.

Characteristics of settings

The intervention took place in 5 different regions in Spain: Barcelona, Galicia, Vitoria, La Rioja and Cordoba. Originally a sixth region was selected, Aragon, which agreed orally to be involved in the project, but during the early phases of the project they decided not to participate due to lack of resources and staff. Because the programmes had already started running no alternative location could be selected anymore.

The schools where the intervention took place are all situated in towns or major cities, with the exception of Cordoba, which has a more rural population. Cordoba was also the only location which offered the smoking cessation sessions within school time, as opposed to the other locations where the sessions took place outside class hours, such as after lunch. The education staff in this location was very involved in the project from the early beginning, whereas it was health professionals who promoted the programmes in the other locations. Thus Cordoba is an interesting example where health professionals and education staff worked closely together in setting up and delivering the project, which seems to have positive effects on sustainability.

In Barcelona two schools took part in the intervention, one in a town district with an overall middle-class population, and one in a sub-urban district with a working class population.

The types of school participating in the intervention were predominantly pre-university (higher education level) and some vocational schools. Implementing this particular programme in vocational schools has been hindered by the fact that these schools do not allow for a lot of extra time outside class hours in which the sessions can be organised. In general it proves difficult to organise health related activities in vocational schools, even though it has been recognised that these particular students could benefit from the intervention given the higher smoking levels. Recently the age for compulsory attendance at school has been raised from 14 to 16 years of age in Spain, which means there are additional opportunities to reach adolescents via the school system.

The intervention

The intervention consisted of two interrelated parts: a self-help computer program and a school-based series of 7 smoking awareness sessions over a period of six months during the school year.

The first activity was a general awareness activity organised in the school, where young people learnt about the effects of smoking. This activity was run during lunchtime by the teachers in the school, who received training and information leaflets from the lead organisation. Activities during this meeting included the calculation of the costs of smoking (over a life time), and posters and information were provided on issues such as the role of the tobacco industry and the manipulation of young people in smoking promotion. This activity was highly valued by most participants; they generally enjoyed it. The teachers' involvement ended after this introduction activity.

During this meeting the possibility of help to quit smoking is offered to young people who are interested and highly motivated. They have to decide when to quit smoking and conduct a nicotine dependency test (Fagerstrom), which forms part of the selection. After this introductory activity the selection takes place for either cessation groups or the computer programme.

In Barcelona, the team was assisted by school nurses who already had a working relationship with the schools. Once a school agreed to participate, the Director received a letter to pass on to parents to inform them of the project running in the school. Confidentiality is important. Parents were aware of the project being implemented in the school but were not told which individuals participated. No parental consent is needed as long as pharmacological support is not offered to the young people. The confidentiality of the teacher who was involved in the introduction activity is more problematic, as they knew the names of the young people who expressed an interest to quit smoking. However, it was the lead organisation that made direct contact with the young people.

Most teachers were happy to participate in the first activity, with the exception of a few teachers in one region (Galicia) who did not prioritise it in their schedule. This particular school did not have a history in school health. In most participating schools the intervention was part of a broader framework, which also includes the Smokefree Class Competition. In addition, in Barcelona smoking cessation services are being offered to teachers, and so far seven teachers have entered the programme, which started in July 2005.

The project plan aimed to set up 2 cessation groups of 12-15 participants each, in all 5 different regions in Spain. Recruitment for the self-help computer programme would include 25 young people for each region (so N=250). In the end a total of 1,154 young people were recruited in all 5 regions. These were all daily smokers who expressed an intention to quit. The total number of schools selected in this way was 39. Of the total number of recruited smokers, 267 (23.1%) asked for immediate cessation. Not all of these adolescents could attend the sessions or self-help computer program though, and some of them dropped out as they were having doubts about their ability/desire to quit. The general message from the facilitators was to stress the need for high motivation levels: *'If you're not sure, don't enter!'* There was no option to enter later on during the intervention. Thus finally 206 of these young people (17.8% of the total) made it through the selection process. These 206 adolescents were then assigned to one intervention strategy (cessation groups or computer programme).

There was a maximum number of participants of 12 for the school based cessation sessions and 20 to 25 for the self-help computer programme. The computer programme also served as a back-up for people who could not attend the school-based sessions.

1) School based adolescent smoking cessation sessions

This part of the intervention included 7 sessions in schools, taking place outside class hours. The first two sessions prepared the participants to quit smoking, while sessions 3 and 4 were dedicated to 'D-day', the quit date. The remaining sessions focused on cessation and staying smoke-free. In each phase of the cessation programme the participants were taught specific skills and abilities, such as assertiveness and refusal and resistance skills.

The sessions in Barcelona took place after lunch, from 15.30 till 17.00 (so 1.5 hours each), in the library room of one of the two participating schools. The first session took place on December 1st 2004, and included a general presentation of the programme and aims. The second session was dedicated to 'D day', the quit day, and took place on January 12th 2005. This was followed by the third session in the same week, on January 19th 2005, and this focused on withdrawal and support after 3 days of not smoking. The fourth session was

dedicated to a week without smoking (26 January 2005) and the fifth session to a month living smoke-free (16 February 2005). The last two sessions were organised three months after the quit date (in April 2005) and six months after this date (end of June 2005). The final session included a celebration of smoke-free status, with music and drinks, organised in a community centre near the intervention school. Also incentives were given to the participants, depending on their individual success in giving up or reducing smoking. This included a bag with goodies such as CD cases, key rings, a t-shirt, a radio, or mobile phone cards (in Cordoba). All participants received something, and even if they failed to quit smoking they got a small reward. Participants from both the school-based cessation sessions and the computer help programme were invited to this final session.

The face to face contact and discussion with the facilitator is the main element of the programme: *'talking is the main tool'*. Each session had an ice breaking activity at the beginning including as relaxation techniques. Also leaflets were developed for support and use during the sessions. One example of such a leaflet is an overview of risky situations for people who just quit smoking.

Between sessions, facilitators offered support, both for the school-based intervention and the self-help computer programme. This took the form of telephone calls, some email communication (although it was acknowledged that this did not work well as adolescents did not check emails regularly) and to a lesser extent SMS messaging via mobile phones. It was acknowledged that SMS and mobile calls would be the most effective communication strategy for future programmes, as most young people use mobile phones extensively (especially for short-term messages, and compared to email is not accessible for all young people).

One girl (28, vocational school) who participated in the school based programme, found it difficult to quit, but succeeded and had been smoke-free for six months. Her main motivation for wanting to quit smoking was for the health of her baby. She was also trying to encourage her husband to quit. She had a history of heavy smoking, started at the age 10, quit at age 17 or 18 and then started again. She particularly valued the face-to-face support of the facilitator, discussion of problems with giving up smoking, and the self-register activity of how many cigarettes smoked per day. She found it useful to reduce smoking before D-day. When the rest of the group decided to quit, they succeeded for just 1 week. She commented that the school setting was important for support, and having friends in the group helped.

The last smoking cessation session in Barcelona was attended by 3 girls involved in the computer programme, and 1 boy from the school-based face-to-face sessions. Also the full research team (project coordinator and facilitators) attended. In general the participants said that if they had been presented with the choice between face-to-face cessation in the school or the computer programme, they would have opted for the face-to-face sessions. The computer programme was useful as support, but the direct contact with the facilitator was valued most. Getting along with the facilitator and a personal relationship with this person seemed to be a key factor in success and retention, and it was important that the facilitator kept in touch with the participants between sessions, especially towards the end where the sessions are held less frequently.

Two of the girls in the self-help computer programme managed to cut down smoking (one from about 20 to 4 or 5 a day; the other from 20 to 8 or 9 a day). Both set a future quit date for September. The girls were friends and felt they could provide each other with mutual support in their next quit attempt.

The third girl had been a heavy smoker (about 30 cigarettes a day), and managed to cut down to 4 or 5 a day. She used nicotine gum as support, and had quit previously for over a year but found it more difficult this time around.

The boy involved in the school based programme used to smoke 8 to 10 cigarettes a day at the beginning of the project, then quit for a week, but by the end of the project he only smoked during the weekends. He indicated he wanted to keep smoking on a social basis, against the advice of one of the facilitators. Asked about the practicalities and time investment in the project, he replied that most of the other participants found it hard to stick to the schedule and keep coming to the sessions, although he himself attended all sessions. The timing of the sessions (just after lunch) was not ideal, as many people have sports or work activities. He wanted to stay in touch with the group, and several of his friends were involved which helped a lot. The group setting was important, and knowing people in the group acted as a motivator to continue attending.

2) Computer self-help programme for smoking cessation in young people

The second major part of the intervention was the self-help computer programme, translated as 'I quit right now'. This programme was based on a cognitive behavioural model to quit smoking. Originally it had been developed for people over the age of 25, but it was adapted to the needs of adolescents. Although the outer appearance of the programme is the same, the content has been altered. One of the main changes relates to the use of Nicotine Replacement Therapy (NRT) which is not included in the adolescent version of the programme. Also the potential 'risk situations' were altered and tailored to young people and the situations they are likely to be faced with (less focus on pregnancy and work related situations; more about youth life-styles). Furthermore, peer support and pressure is seen as more important to adolescents than to adults, and young people value the confidentiality of the intervention (private from parents and teachers).

Before participants enter the programme an interactive chat is organised (using windows messenger) which takes about an hour, and where young people get advice about the process of quitting smoking. The programme focuses on the short term quit process but also includes a follow-up phase of up to six months of non-smoking, comparable to the timeframe of the smoking cessation sessions in schools. To enter the computer programme a password and username are needed, which is provided by the facilitator after the first phone contact with the young people.

The computer programme consists of several menus. One menu is called 'my situation now' and includes a questionnaire with 26 items about the current smoking situation of the participant, including: the number of cigarettes smoked on a daily basis; amount of years of smoking; the current attitude towards quitting; and possible health related issues related to smoking. Methods of support are also discussed here (acupuncture, chewing gum, group therapy etc), and a whole range of dependency related questions comparable to the Fagerstrom test.

Another menu comes up with the test results of this questionnaire, and moves onto habits and motivation; costs of smoking (and the amount of money saved when giving up); the degree of nicotine dependence; need for NRT or other specialised support advice; and where to get the different support means.

A third menu focuses on difficulties in quitting smoking, plus a motivational ranking for the candidate, to remind him or her of the individual reasons to quit. Also risk situations related to relapse are discussed, and the candidates decide upon a D-day to quit smoking. Initially the computer programme generates a quit date, but this can be altered by the candidate. Finally, names and details of friends that can help the candidate quit smoking and stay smoke-free are entered onto the programme.

Another menu is called 'my plan' and gives an overview of personal reasons and motivation to quit, risks, how to prepare for quitting smoking etc. Pop-ups remind the candidates of their

D-day. Another menu looks at the quit process, with 'action moments' to prepare for quitting and listing strategies for dealing with difficult or risky situations. Finally, the D-day menu deals with how to deal with D-day with a reminder of all the things that might help. Following the structure of the smoking cessation sessions in schools, the menu for smoking cessation focuses on the time frame of 3 days after quitting smoking, 1 week, 1 month, 3 months and finally 6 months after the quit date.

The young people participating in the self-help programme are in regular contact with a health professional, usually at least once every two weeks. In Barcelona, two nurses were employed for this role. These facilitators are also connected to the web, but use other means of communication as well, mainly phone and some text messaging and email. All young people participating in this computer programme connect from home, not the school. Also the facilitator has access to the candidate's smoking profile on the computer, which can be used during telephone support sessions, for example by reminding the participant of the specific reasons to quit.

The initial phases of setting up the computer programme were problematic, as many participants could not access the programme. In general 1 out of 12 of all participants go through the full process online, while the other 11 have mainly phone contact with the facilitator. As the number of people connected to the computer programme was limited, especially in the Cordoba and Galicia areas, only valid data for the evaluation are available for Barcelona.

Overall the facilitators prefer the combination of both computer programme and school based cessation sessions, while the young people involved in the computer programme seem to have preferred the face-to-face opportunities of the school based programme. A general recommendation concerns the use of modern technology for recruitment and retention of young people, with extended use of chat, email and SMS. For example Windows Messenger and hotmail are popular tools with the adolescent population, so currently the idea of an online notice board is being explored. The creation of a virtual community the group feeling (and pressure) between participants could be increased, which would benefit their motivation to take part and stay in the programme. Peer pressure is seen as more important for adolescents than adults.

Given the young age group (16-18 years) pharmacological support is reserved for a very limited number of participants, and only under specific medical prescription. Nicotine Replacement Therapy (NRT) was offered to young people in two cases, where both received medication provided by the project (usually prescribed by medical doctors). The health specialist stance towards the use of NRT in young people was to not promote any of this kind of therapy as part of the course, but in the case of special request the preference was given to medication rather than the use of nicotine chewing gum or tablets.

Recruitment and retention

The recruitment strategy incorporated an educational activity for the whole class. This introductory activity is used for recruitment of young people, and then smokers are selected for either cessation groups or the computer self-help programme. To compare results randomisation was used where the young people were randomly allocated to one of the interventions.

The randomisation took place at an individual level, although in one cessation group a lot of people from the same school participated (but overall the cessation sessions are attended by adolescents from different schools). During the intervention it was learned that the school-based smoking cessation sessions work better in homogenous groups, with participants from one school rather than from different locations.

As part of the selection process, the young people filled in a smoker profile questionnaire which provided an insight into their smoking behaviour. To be admitted into the smoking cessation phase the young people had to satisfy five selection criteria: voluntary attendance; the possibility of extra time to quit; feeling the need to give up smoking; positive dependence; and a good score on the motivation test. Young people who said they would have difficulty attending the sessions because of other activities or work commitments were assigned to the computer programme. Overall the main criterion was smoking status, where only daily smokers that are motivated to quit were included in the programme.

Overall there were some problems came with recruitment which affected the structure and scale of the intervention. Originally 6 regions were selected to take part, but one (Aragon) decided not to participate. Also the number of cessation courses offered was reduced. Out of the original 12 planned (two per location), 3 cessation groups could not be run, while 1 location did not participate in the self-help computer programme. This was mainly due to recruitment problems (in La Rioja), and retention problems (Vitoria). Reasons for this included poor weather conditions on the day of the session and the fact that in this particular region there are many heavy smokers (including cannabis users). In this region none of the participants quit smoking.

During the last two sessions of the cessation course the participants received small gifts, depending on their progress within the programme. There was some debate about the use of incentives and their role in recruitment and retention. Some project leaders did not agree with the principle, so the incentives varied between regions. Other facilitators felt the need for introducing incentives earlier on during the intervention, as means of retention and motivation rather than as a reward towards the end of the programme. Also a complicating factor is the lack of resources, so it depends on the regional budget if incentives could be offered as part of the intervention.

One girl participating in the school-based intervention saw the incentives as *'not a motivation, but more a recognition'* for the fact that she gave up smoking. She was not aware of the fact these incentives were part of the programme so was pleasantly surprised.

The use of a control group was considered, but this was problematic in terms of finding a large enough group of young people with similar characteristics in terms of motivation levels, school, and background. Also, due to recruitment problems, it did not seem feasible to recruit a high enough number of participants for both the intervention and the control group, which is the reason this idea was abandoned.

Outputs and outcomes to date

In total 10 cessation groups started running over 5 regions, of which 8 ran the full course according to aims and objectives: 2 in Barcelona; 2 in Córdoba (1 urban and 1 rural area, but the computer programme ended early); 1 in La Rioja (where no computer programme was run); 3 in Galicia (no computer programme); and 2 in Vitoria (no computer programme). This last location changed focus during the process away from cessation.

For the school based cessation sessions:

Region	Programme set up	Number of participants at start	Quit rate
Barcelona	2 groups in 2 different schools	Group 1: 13 Group 2: 11	Group 1: 23 % (4/13) After 6 months 3 yp quit, 1 reduced Group 2: didn't run full course
Cordoba	2 different groups in 2 different schools	Group 1: 12 Group 2: 12	Group 1: 50% (6/12) Group 2: 25% (3/12) after 3 months

La Rioja	1 group in school	Group 1: 7	Group 1: 28,6% Of the 3 yp left at end of programme, 2 quit and 1 reduced
Galicia	3 groups in school	Group 1: 10 Group 2: 10 Group 3: 5	No quit rates available
Vitoria	2 groups in school	Group 1: 18 Group 2: 4	0 - No quit attempts made, different programme offered

For the internet based self-help programme:

Region	Number of participants at start	remarks
Cordoba	7	Programme not continued due to drop-out – see below
Barcelona	21	25% quit, 20% reduction – see below
La Rioja	-	Not run
Galicia	-	Not run
Vitoria	-	Not run

It was anticipated that 150 participants would be involved in the self-help computer programme, but actual participation rates were much lower.

The evaluation of the self-help computer programme only focuses on Barcelona, as data are only available for this location. Of the 21 young people who started the intervention, 8 did not connect to the internet after signing up, 16 participants set a D-day to quit (80%), and of this group 7 actually completed D-day (35%) and followed the programme. Only one person read and responded to emails. In the 13th week after the programme started (in January), 12 young people were still participating in the programme (60%). Of these 12 young people, 3 were in abstinence (25%) and 4 in reduction (30%). Another 3 people could not connect or be contacted anymore, so their smoking status is not known.

In Cordoba, the rural area, 7 people initially joined the computer programme, but 5 left soon after it started. Of the two people who set a quit date only one stayed, but after the 13th week this last person dropped out too, so the programme was brought to a halt.

In Vitoria initially two school-based groups started with a total of 22 young people involved, who completed the first four sessions. Given the relatively high number of cannabis smokers in this group the focus of the programme shifted and due to different objectives set during the second half of the course no quit attempts were made.

A total of 1,154 young people were recruited in all 5 regions. These were all daily smokers who expressed an intention to quit. The total number of schools selected in this way was 39. Of the total number of recruited smokers, 267 (23.1%) asked for immediate cessation. Finally 206 of these young people (17.8% of the total) made it through the selection process. These 206 adolescents were then assigned to one intervention strategy (cessation groups or computer programme).

On average the smoking cessation rate was 26.6%, with some variations between regions. In Vitoria quit rates are 0% while in Cordoba 50%. In Barcelona there is variation between the two groups: quit rates were lower in the less homogenous group which was attended by students from a number of different schools. Attendance was lower amongst those students who were not from the host school.

The final quit rates of 26.6% for all projects can be broken down to 26.8% for the cessation groups and 25% for the computer programme, where it should be noted that more young people were involved in the cessation groups than in the computer programme. Highest quit

rate was in Cordoba. Included in this rate are young people who completed 3 or more sessions (because the majority of the people only came along to the first session but not the rest, so these are not included in final numbers) or still connected and involved in the computer programme after the 13th week. A total of 18 young people were included in the Barcelona project: 3 in the computer programme and 15 in the cessation groups.

Materials developed for the course included: the baseline and follow-up questionnaires for young people; a smokers profile register for facilitators that covers two phases; an intervention guide for facilitators; the self-help computer programme; several leaflets and posters used during the cessation sessions and a range of promotion and support materials used as incentives for the participants. Other outputs included an abstract, article and paper for a national tobacco prevention journal, plus an evaluation of the cessation project for an international journal.

Sustaining the outcomes with young people

The intervention provides a cessation course over 6 months, which includes support between sessions. Communications with adolescents over this timeframe proved difficult but future plans include using SMS text messaging as a more effective means of communicating with this age group.

Monitoring and evaluation

The main evaluation instruments included: the baseline questionnaire with smokers profile; the cessation group register for the facilitator; the self-register for reduction for young people to fill out; and a process evaluation questionnaire for facilitators and for participating adolescents at the end of the intervention. After completion of all sessions in all 5 zones in Spain, data will be compared.

During a network meeting with all partners in April 2005 future plans and evaluation were discussed. The aim is for an evaluation of the whole project, incorporating all people who participated in the intervention, both young people and facilitators.

The plan is to write a paper based on data from the baseline questionnaire to be published in a national smoking prevention magazine (read by practitioners and people working in the field), followed by a paper on the outcomes, effectiveness and results, including comparison, based on the follow-up questionnaire.

Next steps

There is a plan to integrate the school based cessation sessions with the self-help computer programme, and make more use of the different elements of the computer programme during the school-based cessation course.

Cordoba is the only location in Spain which will continue to offer the school-based smoking cessation sessions, as part of their curriculum and within dedicated class hours. The other projects will use the year 2005-06 to further evaluate the pilot and improve the programme, especially to update the self-help computer programme and to find additional ways of communicating with the young people (over chat and email rather than with telephone follow-up which took up a lot of time and the young people were not always reached). This would lead to more flexible means of communication and provide opportunities to offer the programme over different settings in the year 2006-07. Funding is currently being sought to further improve the programme and to collect additional information for evaluation to gather evidence for the effectiveness of the intervention.

The lead organisation was also involved in a proposal for an EC project on digital smoking cessation, coordinated by Denmark, to evaluate and improve the current adolescent smoking cessation intervention, but the Commission did not allocate any funding to the adolescent

cessation services and not for the ENYPAT network anymore (but funded a smoking prevention health campaign for young people instead). Now the lead organisation will apply for local funds in Spain. This should not be too problematic, as a lot of interest has been expressed already, but this implies that the project is not run again on national level until 2007.

Key learning points

Testing out alternative approaches for adolescents smoking cessation highlighted what works with this age group. The face-to-face approach of the school-based sessions was valued as a key support mechanism for adolescents and the self-help computer programme could provide a complimentary form of support and advice. The self-help computer programme was unlikely to achieve successful outcomes as a standalone mechanism but could prove useful when supplemented with telephone contact with facilitators.

Communication with participants over the six month period was difficult but a number of promising approaches have emerged from this pilot. SMS text messages and emails would have the most potential with this age group. Interactive, on-line forums such as Windows Messenger also appear to work well.

In terms of group dynamics, homogenous groups in school-based cessation work better than heterogeneous groups. Asking students to attend sessions in schools other than their own led to poor attendance. Knowing other people in the group was an important factor in encouraging attendance and motivating quitting.

A main learning point and potential change for the future is the use of more communication means to stay in touch with the participants, especially chat and email, which would be more effective for the facilitators. When combining the programme with cessation groups, also other alternative settings can be considered. The meeting of groups in schools poses problems with timetables, and last year many young people couldn't participate due to other activities (like sports) after school time. Alternative venues for meeting would include youth or job centres. On the other hand this pilot learned that homogenous groups are more effective than heterogeneous groups. So probably the best alternative would be a combination of school setting with the use of the computer programme which the young people can access from home.

A result of 26% of cessation is considered satisfactory for this project, although the possibility of reduction of smoking shouldn't be excluded as it complements cessation.

The facilitators played a key role in all aspects of the intervention. In Barcelona, the combination of disciplinary backgrounds in nursing and psychology created a strong team with complementary skills. Project incentives were appreciated by young people, although more as sign of recognition of their success rather than as a tool for recruitment and retention.

Only one location, Cordoba, offered the smoking cessation sessions within school time during a dedicated class hour. Also the education staff in this location was very involved in the project from the early beginning, working closely with health professionals in setting up and delivering the project. This seems to have positive effects on sustainability, as Cordoba is the only location where the adolescent smoking cessation courses are continued to be offered in the next school year (2005-06).

References

¹ Global Tobacco Control Country Profiles 2003: Spain. Online: <http://www.globalink.org/tccp/Spain.pdf> Last accessed in June 2005