This study analyzed the viability of financing a voucher program for cocaine addicts in Spain through public and private donations. Of the 136 companies contacted, 52 (38%) provided donations. The difference between the benefits (15,670€/$20,371) and the costs (3,734€/$4,854) was 11,936€/$15,517. The type of reinforcer a company can offer, the size of the company, and the time elapsed before responding may be determining variables in a company’s decision whether to collaborate.

DESCRIPTORS: cocaine, community reinforcement approach plus vouchers, community-sponsored programs, fund-raising procedures

There is extensive clinical evidence that programs based on contingency management (CM) are effective in the treatment of addiction to different types of drugs and in diverse populations (Dallery & Glenn, 2005; Glenn & Dallery, 2007; Higgins & Silverman, 1999; Lussier, Heil, Mongeon, Badger, & Higgins, 2006; Roll, 2005). A type of CM program that has received a considerable amount of research attention is that in which patients earn vouchers that can be exchanged for goods or services. However, the use of vouchers has been criticized for its cost (Kirby, Benishek, Dugosh, & Kerwin, 2006; Petry, 2000; Silverman, 2004). One strategy for reducing costs associated with the use of rewards is to request donations of goods and services from the community and use them to reinforce behavior change (Higgins et al., 1991). Although this approach has been mentioned in several studies, in most cases no details regarding donation request methods or the success of the campaign were provided. Reports by Amass and her colleagues are exceptions to this pattern. In 1995, over a 2-month period, a positive response rate of 19% was obtained in Toronto, and the retail value of donations exceeded $8,000. The success of the donation request campaign was replicated in Los Angeles 5 years later, with 25% positive responses (Amass & Kamien, 2004; Rosen, Kamien, Ishisaka, & Amass, 2001).

Further research is needed to demonstrate that this model of treatment can be financially feasible in the context of more standard conditions (community settings). Moreover, it
is of great interest to investigate whether donation request methods and the success of the campaigns described in the international literature (mainly referring to North America) are comparable to those applied in a different sociocultural setting, such as that in Spain.

The main objective of the present study was to analyze the viability of financing a voucher program for cocaine addicts in Spain through public and private donations. We also describe the procedure involved in the search for resources, the efficiency (cost–benefit ratio) of this method, and the variables that may determine whether or not businesses collaborate.

METHOD

Setting

The community reinforcement approach (CRA) plus vouchers (Budney & Higgins, 1998) is being used for the first time in Spain as part of a research project aimed at assessing the effectiveness of such programs for the treatment of cocaine addiction in our country. This treatment is compared with a standard outpatient treatment (Garcia-Rodriguez et al., 2007; Secades-Villa, Garcia-Rodriguez, Higgins, Fernandez-Hermida, & Carballo, 2008). In the vouchers condition, patients can earn the equivalent of 1,500€ ($1,950) if they are continuously abstinent from cocaine for a period of 6 months. The study is being carried out in a clinic running the program known as Proyecto Hombre, the most important drug treatment program in Spain. This institution runs a range of treatment programs. In the treatment of cocaine, it uses an outpatient program that is based on coping skills training and relapse prevention, attending around 2,700 patients per year.

This project was approved by the institutional review board of the National Plan on Drugs of Spain.

Sample

The procedure for obtaining resource donors was applied with a total of 136 companies and public organizations located in the region in which the CRA plus vouchers treatment program is being implemented.

Materials

For selecting the specific organizations to be contacted, we used the telephone directory, Yellow Pages, and Internet. For making contact with the companies and institutions selected, the resources necessary were telephone, fax, e-mail, and postal materials.

Procedure

We developed a protocol for seeking resources after consulting the procedures reported by Amass and Kamien (2004) and various guidelines produced by European fund-raising organizations (European Foundation Centre, 2005; The Resource Alliance, 2005a, 2005b). We applied the resource-search protocol for a period of 6 months (September 1, 2004, to February 28, 2005). The steps of the protocol were as follows:

Selection of goods and services. The first step was to determine the types of goods and services we would request in our search. The main criterion was that they would serve as incentives in keeping with the therapeutic goals. We also wanted to ensure that the incentives would be reinforcing for the patients. To select the type of companies and institutions to contact, we used a Likert-type 22-item scale for the assessment of goods and services that were potentially reinforcing for patients addicted to cocaine. The questionnaire was applied to 63 patients addicted to cocaine who were asked to rate their interest in different goods and services on a scale of 1 (not very interesting) to 5 (very interesting). We selected these items on the basis of preferences described in previous research (Amass, Bickel, Crean, Higgins, & Badger, 1996; Petry et al., 2001; Rothfleisch, Elk, Rhoades, & Schmitz, 1999).

Selection and contact with companies and institutions. We selected the organizations or companies that could provide the services
and resources that patients had selected as the most interesting. We made telephone contact with those responsible (e.g., managers) to provide a brief explanation of the project. Each company was asked for the specific goods or services that had been selected. We then sent a formal request (by letter, fax, or e-mail) describing the project in more detail, specified the kind of help we thought they could offer, and provided a telephone number for any questions they might have. After 2 weeks, we telephoned again to request a response about collaboration. If the response was favorable, we arranged a personal appointment. If the company or institution accepted all the conditions, a collaboration agreement was signed. In the majority of cases the companies provided us with vouchers or gift certificates that patients could exchange directly for goods or services. If the company did not have their own vouchers or gift certificates, we produced them ourselves, and the company stamped them to avoid falsification. Several companies agreed to donate more vouchers when the first batch ran out, so that contact was maintained with them over the following months in order to replenish the stocks of vouchers.

Letters of thanks. In exchange for collaborating with the project we promised the companies that their support would be publicized in various media. Several notes of thanks were published in the local newspapers with highest circulation. Copies of all of these announcements and reports were sent to the companies with a letter of thanks and a brief explanation of how the treatment program was progressing.

RESULTS AND DISCUSSION

Efficiency of the Program

To calculate the value of the goods and services obtained, we asked the companies for the market value of their donations. The corresponding value of the total goods obtained was 15,670€ (or $20,371). To calculate the costs of implementing the project, we used the cost categories included in the DATCAP (French, 2002a, 2002b), a structured program widely used to estimate the economic cost of substance abuse interventions (Roebuck, French, & McLellan, 2003). We have taken into account the economic cost (the cost based on the value of the resources in their next best use), not the accounting cost (the actual expenditures and depreciation of all resources used). The costs were as follows. Personnel: a master’s level psychologist working half-days for 6 months and a supervisor working 1 hr per week (3,300€/$4,290). Contracted services: repairs and maintenance, security services, housekeeping services, pest control services (30€/$39). Buildings and facilities: office (4 m²) (100€/$130). Equipment: computer and printer, which were also used for other purposes (125€/$163). Supplies and materials: paper, stamps, and envelopes (40€/$52). Miscellaneous resources and costs: electricity, water and sewer, garbage, insurance, taxes, telephone, transport, printing, and copying (139€/$180). Total: 3,734€/$4,854. The net benefit was therefore 11,936€/$15,517, and the cost per collected euro of goods and services was 0.23€. It should not be forgotten that several companies provided more vouchers every time they ran out, so that the benefits obtained were continually on the increase.

The incentives were used initially with a group of 15 patients. Mean expense per patient was 698€/$907. It cost about 160€/$208 to collect enough donated incentives per patient. The remaining incentives, as well as those that replenished the ones already used, were employed later with a further group of 16 patients.

Response Rate

Of the 136 potential donors contacted, 52 (38%) provided donations. Moreover, 18 companies (13%) did not provide a donation but expressed interest in collaborating in the future. Finally, 66 potential donors decided not to collaborate on the project (49%). Table 1
shows the different types of reinforcers obtained as a result of the campaign.

Mean value of the total donations obtained was 321€ ($417). The minimum donation received was 40€ ($52), and the maximum was 2,000€ ($2,600).

The majority of the companies (87%) donated goods and services totally free of charge (14,670€/$19,071 of the total obtained), and the remaining 13% collaborated with some kind of discount for the goods or services provided (1,000€/$1,300 of the total). The maximum discount was 50%, the minimum was 15%, and the mean was 40%. To claim their discount, patients presented a voucher stamped by the company at the time of purchase. Nevertheless, the level of use of discounts was low.

The positive response rate (38% of the total contacted) is slightly higher than that found in similar studies, in which the figure was between 19% and 26% (Amass & Kamien, 2004). This may be due to slight differences in the fundraising procedures, to the sociocultural characteristics of the region where the study was carried out, and to the setting in which it was applied. Asturias (the region where we implemented the project) is a small region and is unaccustomed to campaigns requesting donations for community programs. Although at first glance this may appear to be a disadvantage, it may be just the opposite, because many small businesses are considering this option for the first time and study it with interest. As regards the setting in which the program is being applied (Proyecto Hombre), this project is widely known in Spain, given that it represents the country’s principal service for helping those addicted to substances. We believe that in the case of many companies and institutions, this helped in obtaining a positive response.

Variables Related to the Decision to Collaborate

Type of reinforcers or business sector. Table 1 shows the number of companies that collaborated according to the type of reinforcers they could provide, that is, the business sector to which they belonged. The companies or institutions that offered newspapers or magazines, public transportation, and leisure services were those with the highest percentage of collaboration, and beauty services and restaurants accounted for the lowest percentage. This makes sense if we consider that the principal reason given to potential donors for requesting their help (and indeed, one of the main criteria of voucher-based reinforcement therapy) is that patients need to change their lifestyle and more specifically their use of leisure time (Higgins, 1997; Petry, 2000), so that these three sectors fit in perfectly with the therapeutic objectives.

<table>
<thead>
<tr>
<th>Companies contacted</th>
<th>Companies that collaborated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (free subscriptions)</td>
<td>2</td>
</tr>
<tr>
<td>Public transportation (train, city or local buses)</td>
<td>4</td>
</tr>
<tr>
<td>Leisure (cinema, theater, museums, sport events, gyms, adventure sports, travel)</td>
<td>44</td>
</tr>
<tr>
<td>Training (language courses, computer courses, hairdressing or beauty courses)</td>
<td>19</td>
</tr>
<tr>
<td>Shops (vouchers or gift certificates for department stores, bookshops, clothes shops, art shops)</td>
<td>26</td>
</tr>
<tr>
<td>Restaurants (fast food and culinary institute)</td>
<td>7</td>
</tr>
<tr>
<td>Beauty services (hairdressing and beauty)</td>
<td>8</td>
</tr>
<tr>
<td>Others (gasoline discounts)</td>
<td>8</td>
</tr>
</tbody>
</table>
Size of company. We contacted a total of 33 large organizations (multinationals, franchises, or official institutions with more than 50 employees). Of those contacted, the proportion of large companies or institutions that collaborated was 30%. Regarding small and medium-sized companies (family or local businesses), we contacted 85 companies. The proportion of small companies that collaborated was 50%.

Time elapsed before responding. Of those that took less than 1 month to provide a definitive response, 82% agreed to collaborate, and only 19% of those that took 2 to 3 months to decide finally joined the project. A mean of four telephone calls was made to the organizations, and no differences were found between those that eventually collaborated and those that did not. Number of calls per organization ranged from 2 to 12.

In accordance with our findings, we might consider it more useful to contact small businesses than large ones. Likewise, disregarding those companies that take more than 1 month to return a definitive response can optimize use of time.

This work extends Amass and Kamien’s (2004) findings to a new country (Spain) and to another population (cocaine users). Amass and Kamien noted as a limitation the special characteristics of the population with which they worked (pregnant smokers). In our case we at all times made reference to the fact that the donations requested would be used by people addicted to cocaine, and the results obtained were equally good, so that this fund-raising approach could be considered a viable alternative for obtaining resources to be used in voucher-based programs for cocaine addicts.

Moreover, this method may have certain advantages over traditional methods of providing incentives to patients. The fact of using vouchers or gift certificates that the patient can exchange directly with the collaborating company or institution can reduce even further the costs involved in this type of program. Furthermore, with the voucher system we propose, the temporal contiguity between the target behavior and the selected reinforcer is improved. Temporal contiguity is a highly important parameter in reinforcement programs for drug abuse treatment (Kirby, Petry, & Bickel, 1999; Roll, Reilly, & Johanson, 2000).

We believe that the use of fund-raising campaigns for reducing costs in voucher-based reinforcement therapy programs may be a good option for those projects with a certain minimum number of personnel. In smaller programs it may not be possible to implement this procedure. For such projects it may be possible to recruit the help of capable volunteers (e.g., retired persons) to conduct the fund raising.

REFERENCES
incentivos sobre la retención en un tratamiento ambulatorio para adictos a la cocaína [Effect of incentives on retention in an outpatient treatment for cocaine addicts]. Psicothema, 19, 134–139.


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