
Techniques for Recruiting Special Types of Persons for Research: Pitfalls and Successes in Enlisting Recovered Alcoholic Women

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OBTAINING SUBJECTS for research in the health sciences is not always easy. A particular type of person, with singular qualifications, may be needed. Some investigations may never be attempted because finding a suitable sample seems impossible. The difficulties are compounded if the desired subjects are not patients or otherwise identifiable through medical records, but instead are living in the general community.

In the past, alcoholics who were seen in treatment settings were used as subjects in alcoholism research. These patients are a readily accessible and captive population, but they present serious problems to an investigator. First, the patients may be toxic if they are in the

early stages of treatment, and they can be difficult to follow after treatment, especially if they relapse. More important, the alcohol abuser who recovers without formal treatment is excluded from their ranks. Investigators wishing a more representative sample of recovered problem drinkers may therefore wish to recruit subjects from the general population rather than from treatment programs. We describe the methods used in recruiting recovered alcoholic women for a study of heavy drinking during pregnancy and its effect on the fetus, and we outline the pitfalls and successes of these methods.

The Study

The possible consequences of heavy alcohol use were first documented in this country in 1973 by Jones and co-workers (1) with their description of the fetal alcohol syndrome. The syndrome is characterized by pre- and post-natal growth deficiency, mental retardation, and a characteristic pattern of malformation (2). Partial effects suggestive of the syndrome may also occur (3). Fetal alcohol syndrome has never been

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found in a child whose mother was not drinking heavily during pregnancy. A natural question is whether the alcohol ingested, or the history of alcohol abuse or both, were responsible for the effects on the fetus. The study described here was designed to address this question. Preliminary reports of the study findings have been published (4,5).

Two kinds of alcoholic women were needed for the study: (a) those who had had a serious alcohol problem before and during the target pregnancy and (b) those who had had a serious alcohol problem before the target pregnancy but had stopped drinking before conception and remained totally abstinent throughout the 9 months of gestation. For simplicity, these are termed the "drinking" and the "abstinent" alcoholic mothers.

A further requirement was that all women in the study be sufficiently recovered from their alcoholism so that a valid interview could be obtained (in the judgment of an experienced interviewer). The 1- to 2-hour interview covered past drinking, diagnosis of alcoholism, and a detailed description of pregnancy

habits, including alcohol consumption, smoking, use of caffeine, medications, and ingestion of other drugs. After the interview, the target child was given a neuropsychological examination that took from 1 to 5 hours, depending on the age of the child. No remuneration was given, but subjects recovered all their expenses. Results of the child's evaluation were shared with the mother.

Recruiting method. The study design called for 75 abstinent alcoholic mothers and 75 drinking alcoholic mothers who could be matched according to their children's ages and other relevant variables. The investigators (A.P.S. and R.E.L.) were aware that abstinent alcoholic mothers were rare and that extraordinary efforts would be required to find the quota of such women; therefore, these women were recruited first. The most promising source seemed to be Alcoholics Anonymous. The investigators knew that AA does not sponsor any outside projects, but they thought that an announcement of the research and a request for volunteers in the local AA bulletin would be an

appropriate first step. However, the local Alcoholics Anonymous office denied this request. Next, the study personnel contacted all heads of professional alcoholism services in a four-county area to solicit their cooperation. The University of Washington media services were contacted, and requests for volunteers were placed in all local newspapers as well as university publications. The net result of all these efforts was seven subjects. Clearly, a more effective strategy was needed, and the following plan was devised.

The goal of the recruitment plan was to develop a communications network so far reaching that potential subjects would call in and volunteer for the research. Three primary sources of direct communication were used: (a) an expanding network of personal contacts; (b) letters, posters, and brochures giving information on the research and requesting volunteers; and (c) media recruitment, including radio, television, and newspaper articles.

The nucleus of the personal contact network was a steering committee of active AA members who supported the research. The purpose of the committee was to provide assistance and guidance in recruiting AA members on a one-to-one basis. Committee members first drew on their contacts and asked persons within their circle of AA friends to do the same. The steering committee members distributed a brochure describing the study to friends and other interested persons. Members also served as a source of information and reassurance for women who were considering participation but were initially unwilling to make a formal commitment.

Letters as well as brochures and posters displayed in public places were used to alert the community to the need for volunteers. Two directors of alcoholism treatment centers who were contacted earlier in the study sent letters to more than 1,000 women who were former patients in 2 States. The letters described the research and urged them to volunteer, if eligible. Informative posters were also designed and displayed in public places throughout the community, including parks, schools, and churches. Most alcoholism service agencies also displayed the posters. Staff members distributed brochures whenever they made a presentation concerning drinking and pregnancy. The brochures were also posted on community bulletin boards.

To facilitate effective media coverage, we hired a public relations consultant (E.L.P.) with extensive experience in media communication in the field of alcoholism. The investigators had attempted to obtain television interviews themselves, but their knowledge in this field was not great enough to warrant success. The public relations consultant arranged a series of television appearances. These ranged from brief reports during the news to extended appearances on "talk"

shows. The general format was to provide some public information on drinking and pregnancy, a description of the research currently in progress, and a statement regarding the need for volunteers. The investigators were carefully trained to project a warm and caring image designed to allay fears and encourage subjects to contact them. A telephone number was given during the performance, and study staff stood by to accept the many incoming calls. A 30-second public service spot, with a telephone number, was also used on all local television stations. Also, some radio broadcasts were made, newspaper interviews were given, and classified advertisements were run in local newspapers.

Finally, both investigators spoke publicly at every opportunity, providing information about drinking and pregnancy in general and about the current research in particular. These appearances were an additional method of "personal contact" recruitment, because face-to-face contact with the investigators was necessary to engender enthusiasm and allay fears among potential subjects. We addressed such groups as Alanon, Alcoholics Anonymous, community college classes, nursing personnel, alcoholism professional groups, and childbirth educators. Often subjects would be found in the most unlikely places; therefore, we did not refuse to appear before any group of interested persons. A significant fringe benefit of this policy was the provision of extensive public health education to the community about alcohol use during pregnancy.

The greatest recruitment effort was focused on the Seattle metropolitan area. It became necessary, however, to extend recruitment to other parts of Washington State and Oregon to obtain a sufficient number of abstinent alcoholic mothers. Television was our principal tool in these areas because of the large audience that could be reached within a short time. We enlisted a key person in each city to be a liaison between the local community and the study office. This person provided a local telephone number that potential subjects could call and provided information on the research for those who did.

After the recruitment of the abstinent alcoholic mothers was well underway, efforts were directed toward finding the alcoholic mothers who drank throughout pregnancy. We anticipated that this task would be much easier than finding the abstinent alcoholic mothers, but unexpected problems arose. There was no shortage of women whose children were of school age, but not enough women with preschool children or adult offspring volunteered for the study. Since a wide range of the children's ages was necessary, a television campaign was launched to recruit such subjects in the last days of the research. In general, however, most of the drinking alcoholic mothers were re-

cruited as a result of the personal contact network and response to posters and brochures.

Recruitment results. After 18 months of recruitment, we had located and interviewed 57 abstinent alcoholic mothers in the 2 States. During 12 of these 18 months, recruitment efforts had been intensive. Time and funding constraints did not permit further searching for eligible subjects, so recruitment was terminated. The results of each type of recruitment technique are shown in the table.

Number of subjects obtained from each type of contact			
Mothers	Personal contact	Letter, brochure or poster ¹	Media
Abstinent alcoholic (N = 57)			
Seattle area	20	1	17
Outside Seattle	8	8	3
All subjects	28	9	20
Drinking alcoholic (N = 74)			
Seattle area	29	5	25
Outside Seattle	6	2	7
All subjects	35	7	32

¹ Includes only subjects who responded to brochures displayed in public places without personal contact.

Recruitment costs. Estimating the cost per subject of each recruitment technique is complicated by the difficulty of prorating staff time spent on each type of effort. Salaries were included only if a total of at least 2 weeks of staff time was required for the specific recruitment effort. The following are rough estimates:

Method	Cost
Personal contact	\$90
Media	58
Letters, posters, and brochures	42

Personal contact was the most expensive recruitment method, as well as the most effective. The high cost reflects an estimated 3 months of high-level staff time. Media efforts were next; cost per subject was 64 percent of personal contact expense. About 2 weeks of staff time and the media consultant's fee were the chief expenses. Recruitment of a subject by letter, posters, or brochure was only a little less expensive than media cost, but it was far less effective in locating rare subjects.

Discussion

Our recruitment methods were effective in locating unusual subjects for research—alcoholic mothers. The

subject recruitment process was complicated by mothers' feelings of guilt and shame associated with alcoholism. Perhaps some eligible women did not volunteer because they were hesitant to share intimate information about their past problem. Others may not have volunteered because they were reluctant to reveal that they had a handicapped child. Nevertheless, with sufficient financial backing and a dedicated staff, subjects volunteered in sufficient numbers to complete the research.

The most effective method in reaching these women was personal contact by staff and volunteers, but it was also the most expensive. Recruitment through the media—television, radio, and newspapers—was nearly as effective and cost about one-third less than personal contact. Effective media coverage required a public relations expert since the investigator's attempts were unproductive. Letters and publicly displayed brochures and posters were the cheapest method, but they did not bring in many volunteers.

If special kinds of subjects are needed for research, personal contact and personal appearances in the media by the investigators appear to be the most effective; however, the cost is high, and these methods are not economical for a study where subject availability is not a problem. Unless volunteers are extremely difficult to obtain, more traditional recruitment methods should suffice.

The techniques outlined here could be used to obtain any special kind of subject who must be recruited from the general community. A sample obtained in this way will not be random, of course, but there may be no alternative. If research cannot proceed because of a shortage of eligible volunteers, we suggest that these methods be tried and the degree of success reported, so that future investigators can benefit from the experience of others.

References

1. Jones, K. L., Smith, D. W., Ulleland, N., and Streissguth, A. P.: Pattern of malformation in offspring of chronic alcoholic women. *Lancet* 1: 1267-1271 (1973).
2. Clarren, S. K., and Smith, D. W.: The fetal alcohol syndrome: a review of the world literature. *N Engl J Med* 298: 1063-1067 (1978).
3. Streissguth, A. P.: Fetal alcohol syndrome: an epidemiologic perspective. *Am J Epidemiol* 107: 467-478 (1978).
4. Little, R. E., Streissguth, A. P., Woodell, S., and Nordin, R.: Birthweight of infants born to recovered alcoholic women [abstract]. *Alcoholism: Clin Exp Res* 3: 184, April 1979.
5. Streissguth, A. P., Little, R. E., Herman, C., and Woodell, S.: IQ in children of alcoholic mothers compared to matched controls [abstract]. *Alcoholism: Clin Exp Res* 3: 197, April 1979.