ACTIVE VS. PASSIVE METHODS OF RECRUITING ETHNIC MINORITY WOMEN TO A HEALTH PROMOTION PROGRAM

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ABSTRACT

Ethnic minority women have been underrepresented in health promotion research. There is a need to develop effective methods of recruiting ethnic minority women to health promotion programs and research studies. This article evaluates several methods for recruiting ethnic minority women to a study of a telephone and mail intervention encouraging participation in a home-based walking program. One hundred twenty-six sedentary ethnic minority women between the ages of 25 and 55 were recruited using two types of approaches. Number of participants screened, number enrolled, and recruitment efficiency (ratio of number recruited/number screened) were assessed. “Active” recruitment, contacting targeted individuals in person, by phone, or by mail, yielded 236 screened and 29 recruited with a recruitment efficiency of 11%. “Passive” recruitment, informing the community through public notices and waiting for volunteers to call, yielded 151 screened and 97 recruited with a recruitment efficiency of 64%. Those recruited by active or passive methods did not differ by demographic characteristics, baseline psychosocial variables, or dropout rates. Passive recruits walked significantly more at five-month follow-up than active recruits. Passive recruitment may be more economical at the cost of potentially biased samples.


The effectiveness of health promotion programs relies, in part, on involving the largest number of participants possible. Recruitment of participants is a critical step in all health promotion programs and research studies. Though there is a relatively large literature relating to recruitment of research participants (1), there are few studies comparing methods of recruiting to health promotion studies. The process of effective recruitment to health promotion studies may differ from recruitment to clinical trials because of differences in current health status and expected benefits of participation. In addition, different methods of recruitment may be needed for specific population subgroups, such as ethnic minorities. Recruitment of ethnic minorities and women to research studies has received more interest recently, as reflected by funding agency requirements (2).

In developing an empirical basis for subject recruitment, it is useful to examine the differences between two distinct strategies of recruitment. We propose that recruitment approaches may be described as “active” or “passive.” Active recruitment is characterized by researchers targeting specific individuals, groups, or residents of defined areas and recruiting from this known subject pool. In this method, persons from the pool, such as a mailing list or a clinic roster, are approached and researchers attempt recruitment. This method is expected to yield a relatively generalizable sample of participants that accurately reflects the population. Precise response rates can be calculated, because the size of the pool is known. Because participants are recruited from a preexisting pool, the research may be less susceptible to self-selection bias. However, with this method, low recruitment rates may reintroduce self-selection bias. Because the researcher reaches out to the participant, level of commitment to the study may be low and attrition rates may be substantial.

Passive recruitment approaches involve the researcher making the target population aware of the study and allowing prospective volunteers to approach the researcher. This may include techniques of social networking and communication through electronic or print mass media. In passive approaches, the subject pool is defined much more broadly, and it may not be possible to estimate the size or characteristics of the population that is exposed to recruitment information. Self-selection bias is expected to be operating more with this method. Level of commitment to the study may be high, and attrition may be relatively low, because subjects are seeking out the researchers. Because recruitment efforts occur in a wider population, the number of subjects recruited may be high, even if the estimated response rate is low.

Most health promotion programs and studies recruit subjects using passive methods, because of the desire to recruit as many subjects as possible (1). However, there is concern that passive recruitment precludes contact with people who could benefit from the intervention but are not presently ready to join a study or program; this reduces the generalizability of the sample. In stages of change terminology (3), precontemplators are under-sampled. Active recruitment, on the other hand, could include efforts to recruit people in a variety of stages, and several health promotion studies have reported intensive recruitment efforts in defined populations (4–6).

Studies using active recruitment have reported varying degrees of success. Several studies have reported the effectiveness of an aggressive letter and telephone campaign for recruiting participants. In the Hypertension Prevention Trial, Borhani, Fonascia,
and Schlundt (7) reported that 85% of their population was recruited through direct mailing. In an attempt to recruit the rural elderly to a health promotion study, Ives, Kuller, Schultz, Traven, and Lave (8) found that direct mailings yielded limited participation (13.5% response rate), but improved dramatically when coupled with aggressive telephone contact (37% response rate).

Although active recruitment procedures may yield more participants, some research indicates that it may be actually very costly and time-consuming. Baines, Christen, and Simard (9) ranked direct mailings as least effective for recruiting female participants to a breast cancer screening survey when compared to mass media efforts. Edleson, Witkin, and Rose (10) recruited 55 participants out of 4,000 mailings, a response rate of 1%. Compared with six other recruitment methods, direct mailings yielded the most participants, but at the highest cost in terms of clerical time, printing costs, and postal fees: about $4.00 per recruit (10). King et al. (6) used a random-digit dialing procedure to recruit participants to an exercise study. Only 11% of those contacted were eventually randomized, and participants appeared to be more health-conscious than non-participants. Thus, active recruitment by phone and mail appears to be very inefficient.

Several studies have used active strategies to recruit families from defined populations to health promotion studies. Hollis et al. (5) recruited door-to-door in neighborhoods, and Atkiness et al. (4) recruited from elementary schools. In both studies, recruitment rates were around 20%. Baranowski and colleagues (11) recruited 94 African-American families out of an initial pool of over 700 using in-home outreach visits. At a recruitment rate of 13%, the researchers concluded that active recruitment yielded less-interested participants with a high drop-out rate. By week ten of the intervention, participants were attending fewer than 20% of the sessions.

The two main methods of passive recruitment are social networking and announcements through posters and mass media. Hooks and colleagues (12) described social networking as a pattern of early participants recommending and helping to recruit other family members and friends. This may be a useful technique for recruiting ethnic minority populations with well-developed social networks who do not use mass media as much as other subgroups (4). It has been suggested (12) that social networking may reduce potential anxiety and distrust toward research that sometimes exists among ethnic minority populations. Hooks, Tsong, Henske, Baranowski, and Levin (12) used social networking to recruit 88% of their available pool of Mexican-Americans to a community health study. This technique may not be optimal for research, however, because of the strong potential for contamination between intervention and research conditions if participants in the same network are randomly assigned to different treatment groups.

Using media as a means to publicize research efforts is a passive recruitment method that has demonstrated mixed effectiveness (7). Some investigators have found that newspaper advertisements successfully reach the maximum number of people at minimal cost (10). Baines, Christen, and Simard (9) reported newspaper, radio, and television advertisements generated particular interest among female recruits. Others found that newspaper, radio, and television were not effective methods of publicizing a research study (13).

Recruitment becomes a special challenge when working with ethnic minority populations. Minority groups have been underrepresented in health promotion interventions (14), but have a high burden of preventable diseases (15). Little information is available on how to access members of ethnic communities. Researchers have commented that recruiting ethnic minorities is difficult and infrequent, possibly because members of these groups have daily survival concerns that reduce their interest in health promotion (16). Ethnic minorities are more likely to experience the effects of low socioeconomic status (SES). The African-American community experiences a rate of poverty over twice as high as the general population, and Hispanics appear to have the lowest SES of all racial and ethnic groups in the United States (17). Women in this population are more likely to be the head of the family (17), and, thus, be solely responsible for all family decisions and needs. These women may have special needs, such as child care and transportation (18) that may impede interest in participation. Other authors have identified culture-specific beliefs about health and appropriate health care (17) that may influence attitudes toward the relevance of health-related research. There may be distrust toward researchers and lack of confidence in the value of Western notions of appropriate health behavior that may also prohibit participation.

Active methods of recruiting participants, while potentially more representative, may be costly and time-consuming. Passive methods are less costly for researchers but may under-sample some segments of the target population. These issues may be particularly thorny with ethnic minority populations because of economic and social barriers to health-related research. Before health promotion research may be conducted, there is a need to develop cost- and time-effective methods of recruiting members of minority groups (7); thus, identifying effective recruitment strategies is worthy of study in its own right. The purpose of the present study was to document the results of multiple "active" and "passive" recruitment methods that were implemented in a health promotion study for ethnic minority women. Project WALK was a behaviorally-based intervention designed to encourage sedentary ethnic minority women to become more physically active by adopting a regular walking program. This study focused on minority women because of their higher risks for health-related disorders that are reduced by physical activity, such as cardiovascular disease (19), diabetes mellitus (20), and obesity (21).

METHODS

Participants

One hundred twenty-six sedentary, ethnic minority women, who were free from disease were recruited to a home-based physical activity intervention. Represented ethnicities included: Latino (45%), African-American (40%), Asian (7%), and other (8%, including Native American). All participants were between 25 and 55 years of age, (mean = 37, SD = 8.4). Sixty-three percent worked outside the home full- or part-time. Fifty-eight percent were married or lived with her partner. Sixty-three percent reported two children under the age of 18. All were required to speak and read English at a minimum sixth-grade level. Most participants (80%) had completed a high school diploma, and 60% reported some college or post-secondary degrees.

Recruitment Methods

Characteristics of Recruiters: Female graduate students and advanced undergraduates from a large Southern California university were trained as recruiters during weekly meetings throughout the recruitment process. Weekly meetings addressed each strategy of recruitment and allowed recruiters an opportunity to role-play potential interactions. Students were selected to represent a variety of ethnicities and cultural backgrounds including African-American, Asian-American, Latina, and European American to enhance sensitivity to the targeted populations.