

Active vs. Passive Recruitment Methods for Young Latino Women in a Diet/Breast Health Intervention.

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Abstract

There is little information available on successful recruitment methods for Latinos into research studies. Thus, we compared the success of active vs. passive methods using data from *Mujeres Felices por ser Saludables* -a dietary breast health intervention project. Methods: Healthy Latino women, aged 20-40 years were recruited by active methods (i.e., recruiter-initiated telephone calls to health clinic clients and mass mailings followed by telephone calls), or passive methods (i.e., attendance at a Women's, Infant's and Children's Program, or community events, referrals from participants or health-care providers, and mass media advertisements). Results: Active methods yielded a higher number of contacts compared to passive methods (n=2,131 and 258, respectively), however, the percentage of women randomized using active methods was lower (8.8% vs. 26%, respectively (p<0.001)). Discussion: Although active methods result in a lower recruitment yield, passive methods could lead to fewer contacts. The choice of using active vs. passive methods could depend on the availability of an appropriate list or target sample size.

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INTRODUCTION

The importance of including Latinos -the fastest growing ethnic group in the U.S. -in cancer prevention and control research is a growing priority (1). This is partly due to the 1993 National Institutes of Health (NIH) Revitalization Act, directing NIH to establish guidelines for inclusion of women and minorities in NIH-supported research involving human subjects (2). To fulfill these guidelines, effective methods targeting underserved populations are necessary. However, to date, there are little data available on successful strategies for reaching and recruiting minority populations (3).

As described by Lee et al (4), various recruitment methods can be classified as either active or passive. Active methods require that the research staff initiate the first contact, whereas passive methods require that a potential participant initiate the first contact. Using data from *Mujeres Felices por ser Saludables* -a dietary breast health intervention project targeting young Latino women -we compared the success of active to passive methods of recruitment.

METHODOLOGY

Mujeres Felices por ser Saludables Study Design

Mujeres Felices was a randomized intervention project designed to assess the efficacy of an 8-month dietary breast health education program for Latino women aged 20-40 years. This project was conducted in collaboration with health-care providers at the Erie Family Health Center, a community-based center that serves a large Latino population in Chicago, IL. Details regarding the *Mujeres Felices* study design and data collection are published elsewhere (5). Briefly, women were first screened for pre-eligibility and willingness to participate, and baseline data were collected at a Health Center Visit (HCV). Eligible women were randomized to either a classroom (intervention) or mail (control) group. All recruitment, data collection, and intervention personnel were bi-lingual (Spanish~English), and most were ethnically Latina. The questionnaires (except the Quick Check for Fat and Coronary Risk Questionnaire (6) which is available in Spanish) were translated using a back translation approach. Institutional Review Board approval was obtained from Northwestern University and informed consent was obtained from all participants.

Recruitment Methods

Two active recruitment methods included a recruiter-initiated telephone call to age-eligible, female clients of the Erie Family Health Center, and mass mailings to homes in specific zip codes located near the Erie Family Health Center and with Latino surname indicated, followed by telephone calls. Passive recruitment strategies included attendance at a Women's, Infant's and Children's (WIC) Program located near the Health Center, where a recruiter briefly described the project, and women were invited to complete the phase I pre-eligibility questionnaire. In addition, recruiters attended community events where women who approached the recruiters were given more information and were invited to complete the phase I pre-eligibility questionnaire. Women were referred to the project by participants who completed the project and by local health-care providers. The project also was publicized on Spanish and English language radio and television, and in newspapers.

Screening for Eligibility and Data Collection

During the initial contact, the project was described briefly, and potential participants were screened for

phase I of pre-eligibility and willingness to participate (Figure 1). The phase I pre-eligibility questionnaire was interviewer administered via telephone or in-person, and included information on race/ethnicity, age, pregnancy and breast feeding status, personal history of diabetes or cancer, and primary recruitment source.

Women who were pre-eligible and willing to participate were invited to complete the phase I pre-eligibility questionnaire, which included frequency of alcohol intake, recreational drug use, and whether or not they were currently under medical care for an eating disorder. Screening for dietary fat intake was conducted using the Quick Check for Fat and Coronary Risk Questionnaire (6).

For women who were pre-eligible after phase I, final eligibility was determined at the baseline HCV where fasted blood samples were collected by venipuncture for assessment of serum cholesterol. Weight and height were measured with participants wearing no shoes. BMI was calculated as weight divided by height squared (kg/m^2). Information on date of birth, education, occupation, marital status, reproductive and menstrual history, personal and family history of cancer, medical history including binge eating disorder and bulimia nervosa (7), and use of prescription medications was collected.

Statistical Analysis

We first excluded eleven women for whom recruitment strategy was unknown. The proportion of women ineligible, pre-eligible and unwilling to participate and pre-eligible and willing to participate was first computed for each type of recruitment strategy. To assess the overall recruitment yield for each strategy, the proportion of women randomized from among those contacted was computed. Chi-square analyses were used to assess differences in the distributions of women across eligibility status as well as for women randomized between active and passive strategies, and to compare phase I pre-eligibility characteristics between women initially contacted by active and passive methods.

RESULTS AND DISCUSSION

Between June 1997 and May 2000, 2400 women were contacted and screened for phase I pre-eligibility (Figure 1). Of these women, 705 (29.4%) were ineligible, 1,238 (51.6%) were eligible but not

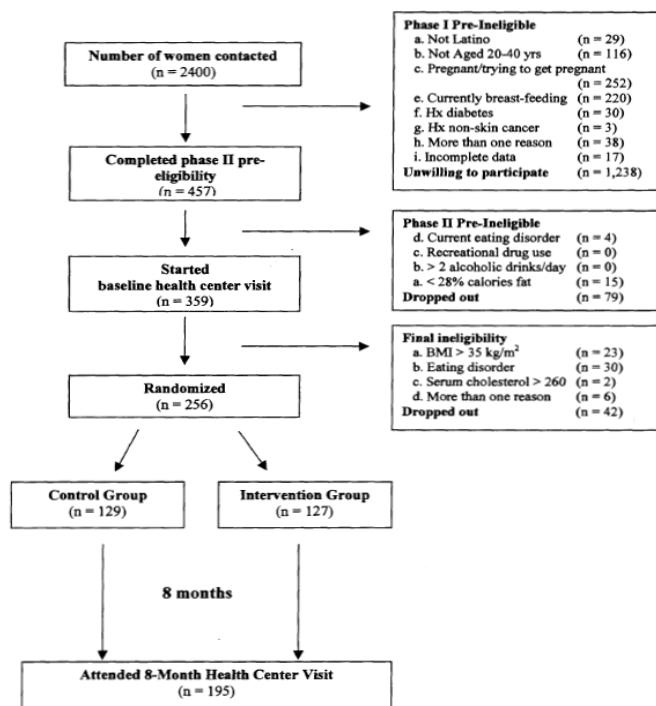


Figure 1. Schematic diagram of the Mujeres Felices Por Ser Saludables project.

willing to participate, and 457 (19%) completed phase II of pre-eligibility. Nineteen of the 457 women were ineligible because their reported total fat intake was less than 28% of total energy or were under the care of a doctor for an eating disorder, and 79 women dropped out prior to the baseline HCV.

The number of women who were pre-eligible and scheduled a baseline HCV was 359 (i.e., 15% of those contacted). Sixty-one of these women were subsequently ineligible and 42 did not complete the HCV. The number of women randomized was 256 (i.e., 10.7% of those contacted).

Most women were initially contacted by active strategies (88.8%) using the Erie Family Health Center client list (Table 1). A slightly higher proportion of women contacted from the mailing list were ineligible compared to those who were Erie Family Health Center clients, but there was no meaning difference in the proportion eligible and willing to participate. Among the passive strategies, most women contacted were participants of the WIC program, and attendance at health fairs, and school events yielded the fewest number of contacts. Media advertisements resulted in the highest proportion of eligible and willing participants. In analyses comparing both active strategies to all passive strategies, a statistically significant higher proportion of women contacted by passive methods were pre-eligible and willing to participate compared to women contacted by active methods (i.e., 45% and 15.9%, respectively, $p < 0.0001$). Overall, although

active recruitment yielded the highest number of contacts, less than 9% of these women were randomized, whereas 26% of the women contacted through passive methods were randomized ($p < 0.001$).

There were no meaningful differences between active and passive methods in the percentages of women who were ethnically Latino (1.4% and 0%, respectively), aged 20-40 years (4.7% and 6.2% respectively), or had history of diabetes (1.3% and 1.2%, respectively). However, higher percentages of women contacted by active methods compared to passive methods were currently pregnant or trying to get pregnant (11.0% vs. 5.8%, respectively, $p = 0.001$), or were currently breast-feeding (9.9% vs. 3.5%, $p = 0.001$).

Our findings are similar to those for Project Walk, which recruited a multi-ethnic group of women aged 25-55 years, where the percentages of women randomized who were recruited by active and passive methods were 11% and 64%, respectively (4). Recruitment yields specifically for Latino women were not reported in that study. In the Women's Health Trial Feasibility Study in Minority Populations (WHT:FSMP), a multi-ethnic group of women aged 50-79 years were recruited for a randomized dietary intervention study (8). Among the Latino women who completed the basic screen, most (50%) were actively recruited through mass mailings.

In *Mujeres Felices*, data on reasons for non-participation were not collected from women who were unwilling to participate. Among Latinos, barriers to participation in research studies have included structural, cultural, and linguistic factors (3). However, several of these barriers were taken into consideration in the design of our study. Child-care was available during the HCVs and intervention sessions, and all sessions were held in the target community.

As mentioned previously, recruitment and research staff were bi-lingual and most were bi-cultural, and in the same age-range as the target population; written material was available in Spanish and English. It is possible that for some women the cost of transportation to the HCVs and intervention sessions might have affected their willingness to participate. In addition, it is not clear whether our findings can be generalized to all Latino women.

For example, one possible reason for the difference between the results of our study and that of the WHT:FSMP (8) is that the majority of Latino women who participated in the

Table 1.

Type of recruitment strategy	No. of women contacted	Eligibility status after initial contact							
		Pre-ineligible		Pre-eligible and unwilling		Pre-eligible and willing		Randomized	
		N	(%) ^a	N	(%) ^a	N	(%) ^a	N	(%) ^a
Active recruitment									
Erie Health Center client list	2,008	594	(29.6)	1096	(54.6)	318	(15.8)	178	(8.9)
Commercial list	123	55	(44.7)	48	(39.0)	20	(16.3)	9	(7.3)
Total	2,131	649	(30.4)	1144	(53.7)	338	(15.9)^b	187	(8.8)^c
Passive recruitment									
WIC program	107	25	(23.4)	45	(42.1)	37	(34.6)	25	(23.3)
Health fairs, etc	26	7	(26.9)	12	(46.2)	7	(26.9)	5	(19.3)
Referrals	67	13	(19.4)	16	(23.9)	38	(56.7)	19	(28.4)
Media advertisements	58	8	(13.8)	16	(27.6)	34	(58.6)	18	(31.0)
Total	258	53	(20.5)	89	(34.5)	116	(45.0)^b	67	(26.0)^c

a. Percentage of the total number of women contacted within each type of initial contact or for all active or passive types.

b. Percentage of women pre-eligible and willing to participate contacted by active methods was statistically significantly different than that for passive methods $\chi^2(2, N = 2389) = 126.7, p < .0001$.

c. Percentage of women randomized who were contacted by active methods were statistically significantly different than that for passive methods $\chi^2(1, N = 2389) = 71.6, p < .001$.

WHT:FSMP were Cuban-American, whereas, more than 80% of the *Mujeres Felices* participants were born in Mexico (5).

In summary, our results suggest that active methods of recruitment can yield a large pool of potential participants, but a lower proportion of women randomized than passive methods. The choice of using active versus passive methods, or both, could depend on the availability of an appropriate list, the final sample size, and available resources.

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