

Characteristics of Participants in Community Health Promotion Programs: Four-Year Results

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Abstract: Four years of participant tracking data (N = 24,995) for community-based programs targeting cardiovascular disease risk factors are presented. Over two-thirds of contacts were female; age segment representation in these programs was comparable to the city's demography. However, the data show that programs of varying formats which target specific risk factors attract different types of participants. Implications for marketing strategy are discussed. (*Am J Public Health* 1987; 77:1342-1344.)

Introduction

Although there are many potential benefits of successfully implementing health promotion/disease prevention programs in community settings, the challenges are enormous. The problems that have been identified include the limited utility of individual and group approaches to health education within a community context and the difficulty of reaching specific subgroups of the population with health promotion programs.¹

We have applied social marketing principles to health promotion as a means of both developing effective programs and reaching large numbers of people in the community.*¹ Well-formulated programs are of little value if the intended audience is not exposed to or does not benefit by them. Process tracking, an element of social marketing, is also necessary to identify what kinds of people participate in specific programs to aid in marketing strategy development. This paper presents the cumulative four-year experience of the Pawtucket Heart Health Program (PHHP) in attracting individuals, through multiple channels, to participate in various types of health promotion/disease prevention programming.

Method

The PHHP is an 11-year community research and demonstration project in cardiovascular disease (CVD) prevention. Program overviews and intervention activities have been presented by Elder, *et al*,² Lasater, *et al*,³ and Lefebvre, *et al*.⁴

The process evaluation component of PHHP includes activity tracking and participant tracking systems. The activity file allows for the monitoring of all PHHP-sponsored activities including the type of activity, where it was held, and the date of the event since March 1982. The participant

tracking system supplements the activity file by including, for each direct contact activity, each participant's name, address, phone number, gender, and date-of-birth. This information is collected through a "contact card" that is completed by participants at every activity they attend.

Direct contact activities can be divided into three categories:

- *Risk factor groups* are state-of-the-art interventions designed to be carried out in 8-10 weekly sessions and led by trained and certified volunteers.

- *Screening, Counseling, and Referral Events (SCOREs)* feature risk factor assessment, immediate behavioral counseling for lowering risk (or maintaining low risk), follow-up, and referral to a health care professional (if indicated).

- *Self-help kits* are designed for an individual's use with educational/motivational material, specific instructions for self-monitoring and behavior change, and strategies for maintenance of change.

Risk factor groups, SCOREs and self-help kits exist for each of five CVD risk factors—blood pressure, blood cholesterol/nutrition, weight loss, smoking, and exercise (blood pressure groups have only been piloted and these participants are not included in the analyses). These programs are promoted through mass print and electronic media; intermediary groups and organizations such as worksites, schools and churches; and direct marketing techniques. Self-help kits are available at all SCOREs. In addition, each risk factor is the object of an annual community-wide awareness and behavior change campaign.⁵

The participant tracking system is not used to monitor exposure to broadly targeted community programs such as grocery store shelf-labeling, restaurant menu-labeling, and a regular newspaper column. Likewise, children in school-based activities are not tracked with contact cards except when involved in specific formative research projects. The data to be reported here, then, include only PHHP adult (age 18 years and older) contacts in group, SCORE and self-help activities from March 1982 through February 1986. Data provided by the Pawtucket Department of Planning and Development is used to compare PHHP participants with the city's age and gender characteristics.

Results

In the first four years of PHHP, 24,995 contacts were documented through risk-factor groups, SCOREs, and self-help kit distribution in the five risk factor areas (these include multiple contacts with individual participants). Two-thirds of all PHHP contacts have been with women. This gender disparity is most pronounced in the exercise and weight loss groups where 95 per cent and 91 per cent, respectively, of the participants are women. Blood pressure programs, exercise self-help kits, smoking cessation kits, and exercise and smoking SCOREs most closely approximate the 53 per cent/47 per cent female-to-male composition of the community. Nutrition kits and SCOREs are utilized in the proportion of 61 per cent female and 39 per cent male. In general, group programs are heavily attended by women (90 per cent of

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*Lefebvre RC, Flora JA: Social marketing and public health intervention. Manuscript submitted for publication.

TABLE 1—Breakdown of City and PPHP Participants by Age Segment for Risk Factor and Program Type

Pawtucket City		18–39 39%	40–59 30%	60+ 31%	Total 51,503
Blood Pressure	Group	*	*	*	*
	SCORE	1,390	1,364	1,839	4,593
	Self-Help	15	30	38	83
	Total	1,405(30%)	1,394(30%)	1,877(40%)	4,676
Exercise	Group	2,184	1,027	516	3,727
	SCORE	83	90	34	207
	Self-Help	111	131	80	322
	Total	2,378(56%)	1,248(29%)	630(15%)	4,256
Nutrition	Group	39	68	94	201
	SCORE	1,691	2,105	1,852	5,648
	Self-Help	1,423	1,505	1,158	4,086
	Total	3,153(32%)	3,678(37%)	3,104(31%)	9,935
Smoking	Group	191	192	49	432
	SCORE	663	272	67	1,002
	Self-Help	478	255	65	798
	Total	1,332(60%)	719(32%)	181(8%)	2,232
Weight Loss	Group	240	340	114	694
	SCORE	987	1,030	432	2,449
	Self-Help	322	308	123	753
	Total	1,549(40%)	1,678(43%)	669(17%)	3,896
Total, all activities		9,817(39%)	8,717(35%)	6,461(26%)	24,995

*Not Applicable—see text.

contacts), while men account for 38 per cent of SCORE and self-help kit contacts.

The aggregate total of all PPHP participants is roughly similar in age composition to Pawtucket residents (Table 1). However, distribution by activity differs. Almost 60 per cent of exercise and smoking cessation program participants are under 40 years of age. Blood pressure programs attract the highest percentage of persons aged 60 and over (40 per cent), whereas only 8 per cent of participants in smoking cessation programs are age 60 or above. Weight loss and nutrition programs appear to be most attractive to 40–59 year olds. The youngest age group (18–39 years) was least likely to participate in blood pressure and nutrition programs.

Participation rates show that blood cholesterol (nutrition) SCOREs are the most frequently attended activity. Exercise, blood pressure, and weight loss programs have drawn roughly similar numbers of people. The fewest number of participants have been in smoking cessation programs—primarily through SCOREs and self-help kits.

Discussion

The results highlight the extent to which the level of analysis can influence marketing strategy. Aggregated data on PPHP participants suggest that PPHP programs are attended by a closely age representative sample of the city's population (see bottom row of Table 1), but women are generally twice as likely as men to have been in programs. Yet, under more detailed analysis, the observed differences in age and gender representation have very different implications for program utilization and planning.

As important as the demographics of program participants is the finding that 55 per cent of contacts were through SCOREs, whereas only 20 per cent were through group programs. This latter fact argues for multi-faceted intervention strategies in community health promotion efforts. The

SCORE protocol—with its emphasis on brief contact, yet specifically designed for risk-factor measurement, immediate counseling, follow-up, and referral—appears to be an important vehicle for promoting health in large numbers of people through direct service delivery.

These data point out that the community has clear priorities for participating in various lifestyle change programs. These priorities vary by gender, age, and program format, and reinforce the necessity for health promotion programs to continually evaluate participation trends. Such information can be employed in making decisions about promotional channel use, instituting new products and services, repositioning existing ones, and developing marketing strategies that target segments of the community to engage them in specific programs. In the absence of such regular program feedback, even a professionally managed multi-channel undertaking can not guarantee participation rates that mirror major community segments. Without process tracking, health promotion programming becomes a "shot-gun" strategy with no clear target, no rational set of objectives, and a compromised ability to reach all segments of the community with effective programs.

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REFERENCES

- Lefebvre RC, Harden EA: Social marketing to promote community health. *Health Educ Focal Points* 1987 (in press).
- Elder JP, McGraw SA, Abrams DB, Ferreira A, Lasater TM, Longpre H, Peterson GS, Schwertfeger R, Carleton RA: Organizational and community approaches to community-wide prevention of heart disease: The first two years of the Pawtucket Heart Health Program. *Prev Med* 1986; 15:105–117.

3. Lasater T, Abrams D, Artz L, Beaudin P, Cabrera L, Elder J, Ferreira A, Knisley P, Peterson G, Rodrigues A, Rosenberg P, Snow R, Carleton R: Lay volunteer delivery of a community-based cardiovascular risk factor change program: The Pawtucket experiment. *In*: Matarazzo JD, Weiss JM, Herd JA, Miller NE, Weiss SM (eds): Behavioral Health: A Handbook of Health Enhancement and Disease Prevention. New York: John Wiley, 1984.
4. Lefebvre RC, Lasater TM, Carleton RA, Peterson G: Theory and delivery of health programming in the community: The Pawtucket Heart Health Program. *Prev Med* 1987; 16:80-95.
5. Lefebvre RC, Peterson GS, McGraw SA, Lasater TM, Sennett L, Kendall L, Carleton RA: Community intervention to lower blood cholesterol: The "Know Your Cholesterol" campaign in Pawtucket, Rhode Island. *Health Educ Q* 1986; 13:117-129.

UCN Offers Correspondence Course on Nutrition

The University of North Carolina has announced the availability of a new course on nutrition offered through its Independent Study by Extension program. The course, Nutrition 50 (Introduction to Human Nutrition), carries three semester hours of undergraduate credit. As correspondence course, it is designed to enable students to enroll at any time of the year regardless of their location and to complete course requirements on their own schedule. Student assignments and examinations will be evaluated by Dr. J. B. Anderson, UNC Professor of Nutrition, who also developed the course study guide.

Nutrition 50 presents material derived from several disciplines. Its focus is on the functions and sources of man's food; nutrient requirements and their relation to health and disease; and the relevance of nutrition to individuals in the course.

This typical one-semester course in basic nutrition has no pre-requisite course, but it is helpful for the student to have an understanding of biology and chemistry at a high school level. A distinguishing feature of this offering compared to nearly all other basic courses is the emphasis placed on health promotion and the prevention of nutrition-related diseases, including obesity, hypertension, cardiovascular disease, diabetes mellitus, cancer, and osteoporosis. The content of the course will serve the academic needs of both the general student, who is simply interested in learning more about his/her own food habits and nutrient intakes and needs, and also of the pre-professional student (nutrition graduate study, medicine, dentistry, nursing, pharmacy, public health, and allied health), who needs this offering to provide background information and concepts useful in professional curricula.

The enrollment fee for Nutrition 50 is \$150. Required books cost \$47.25. For enrollment materials and additional information, interested individuals may contact Independent Study by Extension, Abernethy Hall 002A, University of North Carolina, Chapel Hill, NC 27514. Telephone (919) 962-1106.