Social Marketing and Public Health Intervention

R. Craig Lefebvre, PhD
June A. Flora, PhD

The rapid proliferation of community-based health education programs has outpaced the knowledge base of behavior change strategies that are appropriate and effective for public health interventions. However, experiences from a variety of large-scale studies suggest that principles and techniques of social marketing may help bridge this gap. This article discusses eight essential aspects of the social marketing process: the use of a consumer orientation to develop and market intervention techniques, exchange theory as a model from which to conceptualize service delivery and program participation, audience analysis and segmentation strategies, the use of formative research in program design and pretesting of intervention materials, channel analysis for devising distribution systems and promotional campaigns, employment of the "marketing mix" concept in intervention planning and implementation, development of a process tracking system, and a management process of problem analysis, planning, implementation, feedback and control functions. Attention to such variables could result in more cost-effective programs that reach larger numbers of the target audience.

SOCIAL MARKETING AND PUBLIC HEALTH INTERVENTION

Experiences gleaned from The National High Blood Pressure Education Program,[1] the Stanford Three-Community Study,[2] and other public health education efforts have pointed to the usefulness of social marketing principles in formulating and implementing broad-based behavior change programs. The expansion of health promotion/education activities from those that focus primarily on individuals and small groups to those that target whole communities, segments of society, or entire populations has brought with it the realization that traditional methods may not be as applicable or effective in these larger contexts. As practitioners gain more experience in working for health-promotive changes in populations, the shortcomings of classic educational approaches—especially group-based models in stimulating changes in

---

R. Criag Lefebvre, PhD is with the Pawtucket Heart Health Program, Division of Health Education, Memorial Hospital of Rhode Island, Pawtucket, RI and an Assistant Professor, Department of Community Health at Brown University, Providence, RI.

June A. Flora, PhD is with the Stanford Five-City Project, Stanford Center for Research in Disease Prevention, and an Assistant Professor, Department of Communication, at Stanford University, Stanford, CA.

Address reprint requests to: R. Craig Lefebvre, Pawtucket Heart Health Program, Division of Health Education, Memorial Hospital of Rhode Island, Pawtucket, RI 02860.

Health Education Quarterly Vol. 15(3): 299–315 (Fall 1988)
 CCC 0195-8402/88/030299-17$04.00

behavior have become apparent. Recent analyses of participant data from a large cardiovascular disease prevention program has shown, for instance, that less than 20% of all contacts have been made through group methods of behavior change. In addition, it was found that over 90% of weight loss and exercise group participants were female and came from highly specific age groups (i.e., younger to middle aged).[3] These data underscore three major problems which have confronted intervention efforts and stimulated the search for new methods to alter a population's health practices:

1. the limited reach of individual counseling and small group programming;
2. the low penetration of individual or group-based health education methods in many segments of the population, especially "hard-to-reach" groups; and
3. the overwhelming nature of the task to develop programs that will effect changes in populations, given the limited resources that are usually available and the lack of appropriate technology development.

This article reviews basic social marketing principles, techniques and their application. The discussion is based on the authors' experiences in two large community-based projects—the Pawtucket Heart Health Program[4] (PHHP) and The Stanford Five-City Project[5]—from which examples will be presented. The challenges posed by these projects lead us to conclude that social marketing is an invaluable referent from which to design, implement, evaluate, and manage large-scale, broad-based, behavior-change focused programs.

SOCIAL MARKETING: A DEFINITION

Many authors have offered definitions of social marketing. They usually include the notion that social marketing involves increasing the acceptability of ideas or practices in a target group,[6] that it is a process for solving problems,[7] that it applies marketing thoughts to the introduction and dissemination of ideas and issues,[8] and that it is a strategy for translating scientific knowledge into effective education programs (i.e., developing effective communication strategies).[9] Social marketing concepts and methods borrow heavily from the traditional marketing literature. However, social marketing is distinguished by its emphasis on so-called "nontangible" products—ideas, attitudes, lifestyle changes—as opposed to the more tangible products and services that are the focus of marketing in the business, health-care and nonprofit service sectors. While this lack of tangible goods and services is cited as a challenge to social marketers, we will provide examples of how tangible products and services can be developed and employed to support social marketing efforts. It should also be noted that often the business marketing and social marketing distinction can be blurred, as when fast service restaurants promote the nutritional value of their products, breakfast food manufacturers advertise the risk reducing qualities of their products, or condom manufacturers provide information on AIDS. It is often necessary to identify the objective of the source to clarify the issue of whether one is interested in increasing market share versus improving the public health. The two are not necessarily exclusive, yet expressed social concern can often times mask more "bottom-line" interests.

Social marketing principles are especially well-suited for the task of translating necessarily complex educational messages and behavior change techniques into concepts

and products that will be received and acted upon by a large segment of the population. Brief social marketing campaigns cannot be expected to result in substantial cognitive and/or behavior changes; yet, their strategic and continuous application are viewed here as a necessary condition for effective public health interventions.

We have distilled the essential aspects of social marketing into eight components: (1) a consumer orientation to realize organizational goals, (2) an emphasis on voluntary exchanges of goods and services between providers and consumers, (3) research in audience analysis and segmentation strategies, (4) the use of formative research in product or message design and the pretesting of these materials, (5) an analysis of distribution (or communication) channels, (6) use of the "marketing mix"—that is, utilizing and blending product, price, place, and promotion characteristics in intervention planning and implementation, (7) a process tracking system with both integrative and control functions, and (8) a management process that involves problem analysis, planning, implementation and feedback functions. Each of these components will be discussed with particular reference to the field of public health intervention/education.

CONSUMER ORIENTATION

Social marketing has evolved from business marketing practices—the analysis by Kotler and Zaltman[10] marked its emergence as a distinct discipline. Business marketing practice in turn has evolved through a series of stages to its present-day consumer orientation.[6]

A "production orientation," the predominant business attitude for the first half of this century, is characterized by a concern for increasing output and reducing costs. In health promotion an analog would be "more programs at less cost" for the client, but more so for the sponsoring agency. The "we know what's good for them" attitude of health professionals toward their target groups dramatizes this approach.

The second phase of business philosophy, a "sales orientation," has been typified by a selling and promotion effort directed toward generating high sales and high profits. Social advertising methods that rely upon promotion to "sell" products, such as exercise equipment and "quit smoking" programs, are examples of this approach to health education.

Both the production and sales orientations are agency-centered; the generation or sale of the product—whether it be goods, services or ideas—is the goal of the sponsoring organization. Fine[8] has also referred to these types of orientations as "push" marketing, where the agency "pushes" its ideas, products and/or services onto consumers. These approaches give little attention to consumers' needs or preferences in the design or promotion of these products. The role of the client is to buy, or be persuaded to buy, the product. Although in many cases the client cost may not be monetary, as we will see later, all health promotion efforts involve costs to the consumer—costs that the sales approach attempts to convince the consumer he/she should incur.

In contrast to the production and sales orientations, modern business marketing addresses the client's needs and interests in the development and promotion of products and services, or what Fine[8] calls "pull" marketing where consumer's "pull" certain ideas, products and/or services out of agencies. The marketing concept has been

defined as (1) a consumers' needs orientation backed by (2) integrated marketing aimed at (3) generating consumer satisfaction as the key to (4) satisfying organizational goals.[5] In the context of public health intervention, this definition can be stated as:

> "Health marketing" refers to health promotion programs that are developed to satisfy consumer needs, strategized to reach as broad an audience as is in need of the program, and thereby enhance the organization's ability to effect population-wide changes in targeted risk behaviors.

As opposed to being "product-driven" (or "expert-driven"—e.g. "we know what they need"), the marketing philosophy underscores the necessity for health agencies to be aware of and responsive to consumer needs. While specific initiatives may be launched by public health professionals in response to data or conditions of which the general populace may not be sufficiently aware (e.g., The National Cholesterol Education Program, results of specific community needs analyses), these efforts should be designed in response to audience needs (i.e., what do they not know?), implemented to meet those needs, effective in satisfying the needs, and monitored both to ensure that they continue to meet these needs and to alert the agency to new or changing needs in the target group. A consumer orientation does not stop at the needs assessment stage. Rather, through the process of concept development and materials production, consumer input is sought and utilized by the developers. Knowing that "cholesterol awareness" is a need is not enough. One must also ensure that the products and services designed to meet this need will be attended to, comprehended, and acted upon by the target group.

A number of obstacles hinder the adoption and maintenance of a consumer orientation in public health oriented agencies. These barriers include (1) a lack of clearly specified organizational objectives (or mission), owing to a lack of intra-organizational consensus and/or inadequate audience needs assessment, (2) a failure to identify key target audiences which undermines valid needs surveys, (3) community organization pressures that place territorial/professional objectives above consumer needs, (4) organizational biases that favor "expert-driven" programs, and (5) situations that require working with multiple intermediaries who, in turn, may modify and dilute the message before it reaches the consumer. Recognition of these barriers from the outset of program planning, and the development of strategies that specifically address each of them, will help insure that consumer needs are solicited, listened to, and acted upon by the responsible agency.

EXCHANGE THEORY

While the underlying philosophy of marketing can be described as being consumer-driven, the primary operational mechanism is based on exchange theory.[6] According to exchange theory, individuals, groups, or organizations have resources that they want to exchange, or might conceivably exchange, for perceived benefits. In this sense, many different types of transactions could be characterized as exchanges. However, to be considered marketing transactions, ideas, products or services must be deliberately introduced into the transaction with a buy-and-sell intention. Such transactions in-

clude such diverse processes as information dissemination, public relations, lobbying efforts, and advocacy causes.[8]

Exchanges can occur on a number of levels: people can be threatened to exchange ("Eat cheese or die"), they can be coerced to exchange ("Just one more time—please?"), they can be commanded to exchange ("Uncle Sam wants *you*!"), or they can choose to exchange voluntarily. Marketing approaches focus on facilitating the voluntary exchange of resources. This needs to be distinguished from what many people mistakenly perceive as marketing; that is, product advertising which preempts voluntary choice, i.e., "high pressure sales." The critical difference between marketing and other forms of persuasion lies in marketing's orientation towards satisfying consumer interests through the utilization of techniques that facilitate *voluntary* exchanges between the consumer and the producer.

People have many resources available to them for exchange. In health promotion, the most important include money, time, physical and cognitive effort (such as is needed to maintain an exercise program or quit smoking), lifestyle, psychological factors (e.g., coping skills/abilities, self-efficacy/esteem) and social contacts. Resources typically available in health agencies include money, technical expertise, and a variety of ideas, products, and services. While these resources represent the costs to each party who engages in a health promotion activity, the benefits to each should also be acknowledged in the development of a marketing plan. For example, people who become active in health promotion programs report such benefits as a better quality of life, higher self-esteem, a general feeling of well-being, better self-image, and more social contacts.[11,12] Health promotion agencies benefit from offering such programs by being able to meet their organizational goals, increasing their probability of funding from various external sources, and/or conducting more research in the field. However, seldom are these costs and benefits explicitly acknowledged by health education professionals, and rarely are intervention efforts viewed in terms of an exchange process. Rather programs are promoted to the target group with the express interest to minimize monetary costs to them and with only cursory attention given to promotion of the benefits. Two fallacies are evident in this approach: (1) consumer costs are construed only in economic terms, and (2) there is no recognition of the role of the exchange process in utilizing health programs. Public health professionals need to be more attentive to the resource exchange that is inherent in idea dissemination, product use and service delivery and seek to maximize the benefits to both parties rather than attempt only to reduce the costs to one. Later, we discuss incentives and their role in enhancing the exchange process.

AUDIENCE ANALYSIS AND SEGMENTATION

Audience analysis and the segmentation of a target market into meaningful subgroups is a direct expression of the consumer orientation philosophy. The intent of audience analysis is to identify its needs, document the perceived costs and benefits of addressing the needs, and formulate a program that addresses the needs in the most cost-beneficial manner to both the consumer and the agency. Audience segmentation has two major goals: (1) define homogeneous subgroups for message and product design purposes, and (2) identify segments that will target distribution and communication channel strategies. These segmentation variables include, but are not limited to,

geography (region, county, census tract), demography (age, gender, family size, occupation, race, social class), social structure (worksites, churches, voluntary agencies, families, legislative bodies), and psychography (lifestyle, personality, level of readiness for change, identified need- e.g., smokers, channels of communication).[6,7,13] Although in theory there are as many segments of an audience as there are individuals or social organizations who constitute the audience, each segment should be relatively homogeneous with respect to certain variables and likely to react differently to a message than other segments. In addition, each segment should be sufficiently large and important enough to justify the allocation of resources to it, should suggest a different marketing mix for the particular product or service, and should be able to be reached efficiently by the agency.[8]

Various direct and indirect methods exist for audience analysis and segmentation. Direct methods include random sampling surveys, observational techniques, questionnaires, and qualitative methods such as personal interviews or focus groups. Indirect methods, which unfortunately are those most often available and affordable by health agencies, include archival methods (e.g. census data, Chamber of Commerce reports) and use of secondary reference material that are based on other sampling populations (e.g. U.S. food consumption patterns, marketing surveys, national polls).[14] However, even these less precise data are underemployed by many health promotion programs though, in many instances, they can provide data directly applicable to the targeted health concern. By not seeking out how the audience perceives its needs, and assuming relative homogeneity of the audience—i.e., "They all have the same problem"—health educators ensure that there will be "hard-to-reach" audiences who are not receptive to their messages, products, and services. A thorough delineation of the target audience and specification of discrete segments that may require different "marketing mixes," while introducing additional complexity into the intervention effort, increases the potential reach and effectiveness of the message, product, or service and its receptivity by the target group. Further specification of the characteristics of these segmented groups relevant to the behavior change process (e.g. past experience, knowledge, intentions, perceived efficacy) can be pursued through the use of focus groups and other qualitative research methods to aid in designing products that not only reach the intended audience, but are effective in stimulating the desired behavior change.

FORMATIVE RESEARCH

The adoption of a marketing approach focuses attention on formative research methods as much as on summative ones. A major lesson to be learned from the marketing literature is the indispensability of market and consumer research that tests concepts, message content and design, and potential new products or services before they are widely disseminated. The importance of formative research is reinforced by Manoff, who suggests that message design is the major task of social marketing; without proper execution, it can be social marketing's critical weakness.[9]

Formative research involves the pretesting of ideas, messages, and methods with representatives of the target group(s) *before* implementation. However, given the pressure many agencies are under to field programs, formative methods are often the first casualty—if they ever appeared in the battle plan. Techniques such as focus groups,

samples of convenience, intercept interviews, and pilot studies to test new interventions are more often viewed as luxuries, rather than the necessities they are, by both health educators and administrators. The dangers that are posed by the lack of pretesting can range from the often-told stories of programs that were conceptually elegant but impossible to implement, to absolute public relations nightmares, such as when well-intentioned advertisers designed a message that stimulated unneeded publicity and public debate (e.g., a series of public service announcements for the prevention of child abuse that read "See Dick run. See Spot run. See Jane run . . . Daddy's home").

In an arena characterized by lower levels of funding, the importance of formative research cannot be overemphasized. Although budget-minded persons might view the additional costs of such research as frivolous, it will prove to be money well-spent. Not only can such research suggest changes in program content or delivery that will enhance its reach and/or effectiveness, but it can also circumvent a costly and ill-fated intervention before it receives broad exposure.

CHANNEL ANALYSIS

Public health interventions require a variety of channels through which messages, products and services can be delivered to target groups. These channels may range from mass electronic and print media to influential community leaders and program volunteers. Any person, organization or institution having access to a definable population is a potential channel for health communication. Thus, schools, worksites, social organizations, churches, physicians' offices, and various nonprofit agencies can all be viewed as potential channels of communication. Identification of "life path points"—such as laundromats, grocers, restaurants, bus stops—can also uncover potential channels to reach certain audiences. In addition, techniques such as personal sales, public events, outdoor advertising, direct mail, and telemarketing also provide methods to communicate with the audience. To specify which of these channels, singly or in combination, will best serve the needs of the health agency to reach targeted segments of the community is the major task of channel analysis.

Thorough analysis and selection of communication channels not only presupposes a good understanding of what channels the target audience comes into contact with on a regular basis and perceives as being more influential/important, but also requires attention to the nature of the message, product or service that will be disseminated.[15] It is also important to be cognizant of the point in the behavior change process at which one is aiming the message. Information and persuasive appeals can be effectively transmitted by mass media channels. Yet, when an individual must decide whether or not to adopt the suggested behavior (e.g., quit smoking, cut down on fatty foods), the interpersonal network is often more influential.[16] Therefore, the nurturance of a group of intermediaries, or opinion leaders, is important to reinforce mass communicated messages and move people through the change process. This point underscores the desirability of targeting influential persons (opinion leaders) early in dissemination efforts so that those persons who are perceived by the social network as homophilous, authoritative and credible sources of information can reinforce adoption of new attitudes and behavior.[16]

Channels can differ in a number of other relevant dimensions.[8] Among the more important ones we include are:

- their ability to transmit complex messages
- their medium—visual, auditory, print, electronic
- their costs
- their reach, frequency, and continuity
- the number of intermediaries they require
- their potential for overuse—or the point at which they oversaturate the market and cease being attended to by the target group
- their capability for multiplicative effects (i.e., ability to build on one another).
- their degree of perceived authority/credibility

The orchestration of selected channels to optimize the reach and saturation of an effective behavior change message is an essential ingredient in health marketing campaigns.

MARKETING MIX

The core of designing and implementing marketing plans involves the blending of four distinct elements: (a) products, (b) prices, (c) places, and (d) promotion.[6,10] These so-called "4Ps" have been the object of vigorous research activity in the business and commercial sectors, but have only recently been discovered by the health promotion field. We will review each of these elements and discuss their applicability to social marketing and health marketing objectives.

Product

A product is typically conceived of as something tangible: a physical entity or service that can be exchanged with a target market. However, social marketing extends the concept of products to include ideas, social causes and behavior changes (e.g., use contraceptives, eat more fiber). As we have already discussed, a major obstacle to effective social marketing is the intangibility of many products that makes it difficult to market to potential consumers. For example, how does one buy a "healthier life"? The challenge is to begin to make these "intangibles" tangible in a way that appeals to the target audience.

In health marketing there is also the need to create a consumer market for health promotion products and services such as self-help smoking cessation kits, group weight loss programs, blood cholesterol screenings, or corporate fitness challenges. However, rather than viewing this task as simply repetition of health promotion messages, thought needs to be given to these messages as "products" as well. For example, production of public service announcements (PSAs) can appear to be rather straightforward, yet a division at the National Cancer Institute is devoted to pretesting such messages.[17] Curricula, and promotional print pieces such as flyers and posters, all can be treated as products: they are the tangible evidence of the agency to which the consumer can respond. The features, quality, styling, brand name and packaging of each of these "products" can have a far-reaching impact on how the agency is perceived by the market and whether or not consumers will be motivated to try a health promotion product.[6] As much attention needs to be given to these products as to the tests of the effectiveness of the change program.

Product line considerations must also be attended to by health marketing professionals. The dimensions of width, depth, and diversity require on-going monitoring and evaluation to ensure that programming reaches the largest possible segment of the target audience and can still be effectively managed by the agency.[6] For example, width can be thought of as the number of different target behaviors addressed by the product line (e.g., child accident prevention, breast self-examination and alcohol abuse). Depth refers to the number of products that target each risk behavior across a number of different audience segments (e.g., accident prevention programs directed toward children, older siblings, and parents). Product diversity is the variety of programming that is offered to each target group (e.g., safety talks in classrooms, home visits, informational brochures). Each of these areas should be periodically reviewed, and products added, modified or eliminated as consumer behavior dictates.[6] In health promotion efforts, one particular problem that appears to beset program planners is employing group programs as their major, or only, product line. Such an orientation, in our experience, results in interventions that have relatively low participation rates and may be discontinued within several years because of the lack of participants.[3]

Prices

Prices can be thought of in a variety of ways; in addition to economic reasons, there are social, behavioral, psychological, temporal, structural, geographic, and physical reasons for exchanging or not exchanging. The costs, or barriers, to consumer use of health promotion products receive the most attention. However, another distinguishing feature of the social marketing approach is its use of incentives to encourage participation. Incentives can be both real or perceived, tangible or intangible, financial or social, and so on. Much of what has been learned in social learning research is applicable to this area: people are motivated by incentives, especially those that are tangible and occur shortly after the behavior is practiced.[18] The challenge of health marketing is in both reducing barriers/costs of participation and creating incentives that will further engage people in health and behavior change. For instance, designing contests that offer prizes for individuals, teams, and/or organizations that lose the most weight, exercise most frequently in a given span of time, or quit smoking can result in large numbers of people attempting, and succeeding at, risk factor change.[19-22]

Place

Place characteristics, or distribution channels, add another dimension to the marketing mix. Place decisions need to be based on such considerations as the level and quality of service/coverage one wishes to supply (the inverse rule of "More outlets = Greater reach, but lower quality" generally applies), the number and location of distribution points one can reasonably manage, the use and motivation of intermediaries in product delivery (e.g., gatekeepers, volunteers), and the availability of response channels that are compatible with the distribution system through which the target audience can access the product offering (e.g., tear-off coupons on a promotional flyer).[6] Place decisions are facilitated by in-depth channel analysis prior to implementation. Knowledge of where people are likely to encounter messages in their everyday

routines—life path points such as banks, shopping malls, airports—as well as where they congregate--churches, worksites, schools, social clubs—can be used in making distribution decisions. Place features have price implications as well; places can increase costs to consumers by their inaccessibility and distance. However, they can also be used as incentives as, for instance, when health screenings are held in conjunction with city-wide events that have "nonhealth" themes.

Promotion

No decision about the promotion of a health product should be made without a clear outline of the objectives of the promotion—who the target audience will be, what effect is sought, and what the optimal reach and frequency should be. Advertising, publicity, personal contact, and attention to creating an environment designed to produce specific cognitive and/or emotional effects on the target group (atmospherics) are specific ways by which promotion goals can be met.[6] Promotion strategy must be clearly tied to the product, its price, the channels for distribution and the intended target group. All too often, we see program "promotion" that involves very little thought given to the other parts of the equation. Promotion is more than awareness-development or public relations. Used properly, promotion can be a major tool to make health promotion products more acceptable to the public and enhance their utilization by the consumer.

PROCESS TRACKING

To provide an integrative and control aspect to the marketing of health promotion programs, it is important to have in place a system that tracks the on-going activities of the agency. This system should be able to meet a number of evaluation purposes simultaneously, but particularly, it should provide longitudinal data for assessing program delivery and program utilization trends. Specific information that can be included in process tracking includes:

- the activity name—e.g., a blood cholesterol promotion
- the date of the activity
- how it was delivered—e.g., televised PSAs
- the reach of the activity—e.g., 25,000 households
- its objective—e.g., promotion, behavior change, training

For program delivery activities, we would also want to know participant characteristics in addition to the above items. A minimum amount of information—age, gender and, if important to the agency, ethnicity—can provide a wealth of data that will enhance both program delivery evaluation and targeting of activities to underrepresented segments of the population. Over the course of a health marketing program, process tracking data can provide a "big picture" of the agency's activities, identify program elements that are either not offered often enough or are underutilized by the target groups, and help establish priorities in program planning and implementation. Without such data, the agency's management will fail to recognize both the strengths

and shortcomings of the marketing plan and will be unable to respond to the shifting needs and priorities of the consumer group.

MARKETING MANAGEMENT

Although we find that more health professionals are increasingly open to, and often zealous proponents of, the use of marketing principles in health promotion, the fact remains that in health agencies marketing activities are often poorly understood and insufficiently appreciated by administrators. In addition, if marketing is designated in the organizational structure, it is often inappropriately located.[14] This occurs because of several assumptions: (1) marketing connotes manipulation and thus has no place in the health field, (2) it will require more resources than are available which will then constrain programming, (3) audiences should not be segmented because this will lead to even more "under-served" groups, (4) the terms products, prices, distribution systems, etc., sound more appropriate for a business school than for health promotion, (5) all the emphasis on "research" will impede service delivery, (6) agencies rarely have the staff with marketing expertise to guide and implement a marketing plan, and (7) it demands an unacceptable level of planning and action that may be disruptive to the agency and staff.

There is, in both business and nonprofit sectors, the pervasive belief among managers that an organization that adopts the marketing concept will quickly become "marketing-driven." That is, all program decisions will be left to the whims of the consumer—or the marketing director. There are both pros and cons to this argument, but in setting up a marketing plan and structure within an existing agency, care should be exercised that cherished individual and organizational beliefs and behaviors will be blended into the process. In addition, strong reliance on sound health education and behavior change methods must be maintained.

CASE: THE PAWTUCKET HEART HEALTH PROGRAM "KNOW YOUR CHOLESTEROL" CAMPAIGN

One of the first community-wide cholesterol awareness and screening campaigns was conducted by PHHP during March and April, 1985.[24] This campaign was conceived of as the first step in introducing to the general public technology that utilized capillary blood samples for rapid total blood cholesterol determinations. Based on national random sampling data of both the general population and physicians which were available during the planning of the campaign, several objectives were formulated. These included:

- Physician education about the causal relationship of blood cholesterol levels and coronary heart disease (CHD), the technology and accuracy of rapid blood cholesterol analysis to be used in screenings, and action levels for either dietary or drug intervention to lower elevated blood cholesterol.
- Increased awareness among the general population of blood cholesterol as a risk factor for CHD.
- Increased numbers of people knowing their blood cholesterol level (i.e., attend-

ing screening, counseling and referral events—SCOREs—sponsored by PHHP).
- Large numbers of people showing reductions in their blood cholesterol level at two-month follow-up measurements.

Audience needs analyses were based primarily on these data. In segmenting the community of Pawtucket, adults were a primary focus given that across gender and age awareness levels were equivalent in the national samples. Internists, cardiologists, family medicine specialists, and general medicine physicians were especially targeted for direct mail educational packages and grand rounds presentations on blood cholesterol and heart disease at the community hospital as these were the physicians most likely to see and treat people with high blood cholesterol. Middle-aged men who had previous contact with the PHHP were also the focus of a direct mail and telemarketing campaign to attend SCOREs during the campaign period.

Several formative research efforts preceded campaign planning. These included a pilot test of the efficacy of the self-help "Nutrition Kit" in lowering elevated blood cholesterol levels, and pilots of the SCORE protocol at the local hospital.[25]

Among the channels identified to reach the general and segmented publics were print mass media (because the PHHP comparison community is reached by mass electronic media, this channel was not employed); print media distributed through worksites, churches and schools; direct mail; telemarketing; and SCORE delivery at worksites, churches and various community locations identified as major life path points (e.g., grocery stores, St. Patrick's Day Parade, shopping plazas). In mixing the 4Ps, price emerged as an important variable. SCOREs were initially priced at $5.00 per person. This fee covered the costs of materials for both an initial and follow-up measurement. We reasoned that people who had already paid for a second measurement would be more likely to have a follow-up test than if they had to pay for it separately. This pricing strategy also allowed for price reductions/specials (e.g., all men targeted by direct mail and telemarketing efforts received coupons good for $1.00 off the "usual" price).

Promotional strategies included the "kick-off" SCORE at the St. Patrick's Day Parade and six weekly columns in the local newspaper on the diet, blood cholesterol, and CHD relationship that featured specific advice and tips on a heart health eating pattern. The selection of a variety of locations for SCOREs helped ensure that different segments of the Pawtucket population would have access to this service.

The process tracking data from this campaign have been previously reported.[24] Briefly, 39 SCOREs were attended by 1,439 adults, 60% of whom were identified as having elevated blood cholesterol levels. Two months after the campaign, 72.3% of these persons had returned for a second measurement. Nearly 60% of this group had reduced their blood cholesterol level by an average of 29.1 mg/dl. More important than these short-term results has been the integration of the essential components of this campaign into on-going PHHP intervention activities. This marketing strategy has led to over 10,000 persons having had their blood cholesterol measured in the subsequent two years, all of whom have received information on how to help themselves make dietary changes to manage elevated levels, and many have subsequently been referred to their physician for more intensive treatment. Interestingly, a recent survey of local physician's attitudes and practice towards treating elevated blood cholesterol found them to be more aggressive in initiating either diet or drug therapy than either their colleagues in a neighboring community or those who participated in a national sam-

pling of physicians conducted contemporaneously with our own. A major reason cited by Pawtucket physicians for changing their practice was patient requests for blood cholesterol measurements and/or dietary information.[26] One could conclude from these observations that an informed marketplace can, in fact, influence changes in physician's treatment of elevated blood cholesterol levels when coordinated through campaigns and strategic follow-up activities.

CASE: THE STANFORD FIVE-CITY PROJECT SMOKERS' CHALLENGE II

In February, 1983, the FCP launched a quit smoking contest after conducting a smoking cessation television series and a self-help print campaign. Smokers motivations to quit and their preferred methods of quitting were gathered from our community survey data. From these data, and with analyses of the demographic profiles of participants in group programs, we decided to reach smokers who were not highly motivated to quit, to try to get more men into the program, and to use incentives in the program. Several objectives were formulated for this 6-week quit smoking contest. These included:

- achieving broad awareness of the contest in the general population.
- recruiting a large number of smokers to sign up for the contest.
- encouraging over 50% of the participating smokers to use community resources to quit.
- achieving a quit rate at the end of the contest that was greater than other minimal contact programs (more than 20%).
- providing those quitters with the skills to remain nonsmokers for one year.

The audience needs analysis then led us to establish moderately motivated male smokers as the target audience for the program and to utilize incentives to recruit them to the program and to encourage compliance with quit smoking advice. Several phases of formative evaluation were carried out to refine the contest strategy and promotion. To decide upon a title for the contest and the types of appeal for the promotional materials, smokers at local bars and after work gatherings were shown titles and sample ads and interviewed about the effectiveness of these materials. The results of these informal interviews yielded a contest called "Smokers' Challenge"; an appeal to smokers only; and promotional materials focused on the title first, the prize second and the contest information third.

Smokers responding to a community random phone survey (n=97) were asked what type of incentive (if any) would motivate them to participate in the contest. They were presented with the option of a trip to a local urban area, a color television set, and a car. The rate of a positive response to each alternative corresponded to the size of the prize or the incentive (trip 25%, television set 47%, car 67%). All prizes were donated by community groups; however, we were unable to obtain a car as the grand prize. Instead we were able to get a trip to Hawaii for two. We reasoned that the price of this prize was somewhat between the price of a car and a television set in price and would suffice as an adequate incentive.

Based on past experience and community population data on media use patterns,

we selected television, newspaper, libraries, worksites, schools, stores, and physicians offices as the primary channels for promoting the contest. In addition, the community organization strategy of co-sponsorship was used to encourage the TV station to expand the frequency and intensity of message dissemination beyond traditional PSA play. Messages produced by the TV station were played 82 times in one month.

Price in the overall marketing mix included program cost, energy costs to sign up, and psychological costs (coping with urges, relapse prevention etc). The overall goal of the price analysis was to not impose barriers to participate in the contest for smokers who were moderately interested in quitting. Since large scale recruitment and participation was crucial to the success of the program, we decided to remove financial and access barriers in the recruitment (we could only recruit at a limited number of distribution sites if fees were charged for participating in the contest) and to advertise community quit smoking programs that either were free or that charged a fee in the participation phase of the contest.

As presented in a published report,[20] only some of the outcome objectives were achieved; the results of a random phone population survey indicated that approximately 60% of the community were aware of the program, 501 smokers signed up for the program, more women (55%) than men were recruited (though the proportion of men was higher than other FCP group and self-help programs in the community), only a few signed up for community programs (11 groups, 22% self-help materials), 45% quit for a short time, and 22% quit with a one year maintenance rate of 15%.

From analysis of the quit data, process tracking of the contest, and additional focus group discussions, it was decided that the promotion of the contest had been effective. It was also found that the quitting materials may not have appealed to the smokers who participated, that these quitting materials were sometimes not available at the contest sign-up locations, and that participating smoker's needed more support to stay quit. Revisions were made based on our experiences with the Smokers' Challenge I contest:

- New quitting materials were developed that were more directive, and gave smokers a day-by-day set of guidelines for quitting in 12 days. This revised self-help program was supported by a 12-day radio show that reinforced the principles in the booklet. Based on smoker's stated preference for "cold turkey" approaches to quitting, this new guide was titled "Cool Turkey."
- These new materials were the only quitting approach advertised in the recruitment materials: they were mailed to all participants requesting them, thus improving access to quitting information.
- The contest was expanded from six weeks to three months. Smokers could earn chances for both the final prize and for smaller prizes if they sent in monthly "quit cards."

A second Smoker's Challenge contest attracted 588 smokers. Forty-five percent of entrants were male, 40% had less than a high school education (similar to the first contest), over 70% of participants signed up for the "Cold Turkey" booklet, 30% sent in the quit cards at the end of the contest, and a survey follow-up at three months after the contest with an alveolar carbon monoxide assessment on 20 entrants revealed a 30% quit rate. We established that access to quitting information was important to use and quit rates, and that a longer contest—while much more difficult to manage—

yielded improved short term and interim results. We also saw that the demographics of contest participants were strikingly stable across both challenges. The new marketing mix with a revised product illustrates that process tracking during events and outcome evaluation are crucial to strategy refinement and goal readjustment.

LIMITS OF SOCIAL MARKETING

Given the many strengths and strategies provided by adopting social marketing principles for public health change, it is important to note that social marketing is not a panacea for many of the problems that beset health educators, planners, agencies, and policy-makers. Several years ago, Bloom and Novelli[14] outlined nine areas of problems and challenges that face the individual or organization attempting to apply social marketing principles. The areas highlighted by them included problems in market analyses, market segmentation, product strategy, positioning strategy, pricing strategy, channel strategy, communications strategy, organizational design and planning, and evaluation. The reader is referred to their article for a more complete review of their concerns.

Manoff[9] also noted that there are a variety of socio-economic constraints that must be addressed by social marketers. His list includes such factors as antithetical marketing practices by other concerns, faddist, and unhealthful lifestyles, lack of supportive public policies, a lack of consensus among health authorities (either on what the problem is or what to do about it), and a lack of coordination of various health agencies' efforts.

Social marketing has also been decried as another form of "blaming the victim"—that is, assigning the cause of health problems to individuals and focusing all attempts at change on individual-based strategies. However, this is a very narrow conceptualization of the purview of social marketing and, as indicated by Manoff, there are many socio-economic and environmental concerns that can be addressed, and should be addressed, by social marketers in marketing public health.

Discussions of marketing also raise ethical questions such as "What are we selling?", "Who are we selling it to?", "How are we selling it?", and "Whose side are we on?" These questions, and many other issues about "the business of health promotion" have been addressed in detail by others.[23] We believe that it is important for health marketers to ask themselves these tough questions, and be prepared to identify the limits of their knowledge and expertise. While social marketing practices can certainly be usurped in ways counter to ethical and professional sensibilities, it is equally likely that social marketing practices can be employed by persons with limited knowledge, appreciation and respect for what they can and cannot achieve.

CONCLUSION

What is the incentive for marketing health—rather than promoting it? Essentially, from our experience we believe that a well-functioning marketing operation can provide a manager/administrator with a level of analysis, planning, implementation, and control of agency operations that can lead to more effective and efficient use of resources and improved consumer satisfaction. Once staff members understand mar-

keting concepts, organizational objectives, and their role in the organization from a marketing perspective—and act on this information on a daily basis—they can formulate programs that are strategically designed to satisfy organizational goals. Health marketing has the potential of reaching the largest possible group of people at the least cost with the most effective, consumer-satisfying program. The availability of market research helps identify population needs and preferences. Audience analysis allows the agency to specify the goals of the program, identify relevant target audiences, and refine the proposed behavior changes. Formative research can be utilized to define and test the proposed change strategies, further elaborate audience needs and possible points of resistance to the proposed strategies, and guard against the misappropriation of resources to ineffective or unattractive products. Channel analyses can help formulate cost-effective ways to reach the target audience. Attention to the 4Ps in intervention planning and implementation, and the addition of a process tracking system that can provide basic information on activities and program participants, provide methods that can optimize the efficiency of the entire project and feedback valuable data that can be used to reposition products and fine-tune the change strategy. Finally, carefully controlled outcome studies on program effectiveness can provide the bottom-line test as to whether the marketing plan is, in fact, achieving its objectives and resulting in a healthier population.

The authors extend their appreciation to several people who participated in the pretesting of this manuscript: Terry Bellicha, Richard Carleton, Elizabeth Harden, Dorothy Maysey, Charles Nelson, William Rakowski and three anonymous reviewers. Their comments and insights added considerably to the final product. Janet Bungay provided editorial assistance.

References

1. Ward GW: The National High Blood Pressure Education Program: A description of its utility as a generic program model. *Health Educ Q* 11:225–242, 1984.
2. Meyer AJ, Maccoby N, Farquhar JW: The role of opinion leadership in a cardiovascular health education campaign, in Ruben BD (ed.): *Communication Yearbook I.* New Brunswick, NJ, Transaction Books, 1977.
3. Lefebvre RC, Harden EA, Rakowski W, Lasater TM, Carleton, RA: Characteristics of participants in community health promotion programs: Four-year results. *AJPH,* 77:1342–1344, 1987.
4. Lefebvre RC, Lasater TM, Carleton RA, Peterson G: Theory and delivery of health programming in the community: The Pawtucket Heart Health Program. *Preventive Med,* 16:80–95, 1987.
5. Farquhar JW, Fortmann SP, Maccoby N, Haskell WL, Williams PT, Flora JA, Taylor CB, Brown, Jr. BW, Solomon DS, Hulley SB: The Stanford Five-City Project: Design and methods. *Am J Epid* 122:323–334, 1985.
6. Kotler P: *Marketing for nonprofit organizations.* Englewood Cliffs, NJ, Prentice–Hall, 1975.
7. Novelli WD: Developing marketing programs, Frederickson LW, Solomon LJ, Brehony KA, (eds.): *Marketing health behavior: Principles, techniques and applications.* New York, Plenum, 1984.
8. Fine SH: *The marketing of ideas and social issues.* New York, Praeger, 1981.
9. Manoff RK: *Social marketing.* New York, Praeger, 1985.

10. Kotler P, Zaltman G: Social marketing: An approach to planned social change. *J Marketing* 35:3–12, 1971.
11. Blair SN, Smith M, Collingwood TR, Reynolds R, Prentice MC, Sterlin CL: Health education for educators: Impact on absenteeism. *Preventive Med* 15:166–175, 1986.
12. Green LW, Wilson AL, Lovato CY: What changes can health promotion achieve and how long do these changes last? The trade-offs between expendiency and durability. *Preventive Med* 15:508–521, 1986.
13. Murphy PE: Analyzing markets, in Frederickson LW, Solomon LJ, Brehony KA, (eds.): *Marketing health behavior: Principles, techniques and applications.* New York, Plenum, 1984.
14. Bloom PN, Novelli WD: Problems and challenges of social marketing. *J Marketing* 45:79–88, 1981.
15. Lefebvre, RC, Harden EA, Zompa B: The Pawtucket Heart Health Program: Social marketing to promote community health. *Rhode Island Medical Journal* 71:27–30, 1988.
16. Rogers EM: *Diffusion of Innovations* (3rd ed.). New York, Free Press, 1983.
17. U.S. Department of Health and Human Services: *Pretesting in health communications* (NIH Publication No. 84-1493). Bethesda, MD, National Cancer Institute, 1984.
18. Bandura A: *Social learning theory.* Englewood Cliffs, NJ, Prentice-Hall, 1977.
19. Elder JP, McGraw SA, Rodrigues A, Lasater TM, Ferreira A, Kendall L, Peterson GS, Carleton RA: Evaluation of two community-wide smoking cessation contests. *Preventive Med* 16:221-234, 1987.
20. Nelson DJ, Sennett L, Lefebvre RC, Loiselle L, McClements L, Carleton RA: A campaign strategy for weight loss at worksites. *Health Education Research: Theory and Practice* 2:27–31, 1987.
21. Altman DG, Flora JA, Fortman SP, Farquhar JW: The cost-effectiveness of three smoking cessation programs. *AJPH* 77:162–165, 1987.
22. King AC, Flora JA, Fortman SP, Taylor CB: Smokers' challenge: Immediate and long-term findings of a community smoking cessation contest. *AJPH,* 77:1341–1342, 1987.
23. McLeroy KR, Gottlieb NH, Burdine JN: The business of health promotion: Ethical issues and professional responsibilities. *Health Educ Q* 14:91–109, 1987.
24. 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* 13:117–129, 1986.
25. Peterson GS, Lefebvre RC, Ferreira A, Sennett L, Lazieh M, Carleton RA: Strategies for cholesterol lowering at the worksite. *J Nutr Educ* 18:S54–S57, 1986.
26. Block LW, Banspach SW, Gans K. Harris C, Lasater TM, Lefebvre RC, Carleton RA: Impact of public education and continuing medical education on physician attitudes and behavior concerning cholesterol. *American Journal of Preventive Medicine,* in press.