

Evaluation of Worksite Health Enhancement Programs

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Abstract:

Although many corporations are planning and implementing health-promotion programs for their employees, few have attempted rigorous and thorough evaluative studies of program impact. This creates a void which properly trained health educators can fill. This article provides health educators with some basic points to consider when evaluating worksite health-enhancement programs. The six key points outlined provide basic concepts to guide the evaluation of worksite health-promotion programs.

Article:

Worksite health-enhancement programs are relatively new. Programs have been developed over the past decade to stem the rapid increase in healthcare costs and as means to improve productivity for companies and the quality of life for employees. In recent years, an abundance of health-education literature has extolled the virtues of developing comprehensive worksite health-enhancement programs. Various authors¹⁻⁵ have identified the benefits of such programs to include improved productivity, reduction in benefits costs, reduction of human resource development costs, and an improved image for the corporation. Although these programs have been developed to reap these benefits, only a few companies have made systematic efforts to rigorously evaluate the impact of their efforts.^{6,7}

Often, great promises are offered for work-site health-promotion programs with little more than anecdotal evidence to support program success. Piserchia and Hartwell state that "unfortunately, few companies have actually evaluated their programs to determine if they have a significant and meaningful impact upon their employees' health and lifestyles."⁷ Yet, evaluation of the impact and benefits of worksite health-enhancement programs is essential to demonstrate the immediate and long-range benefits and to guarantee the ultimate survival of quality programs.

To this end, this article provides health educators with some basic points to consider when evaluating worksite health-enhancement programs. Health educators possessing the skills to conduct rigorous and thorough evaluative studies will be marketable commodities in worksite settings. The six key points outlined provide basic concepts for the conduct of evaluation of worksite programs. Clearly, these represent a starting point in the development of a knowledge base to effectively evaluate worksite health-enhancement programs.

I - Know the Basic Reasons for Evaluation

Often researchers can develop elaborate sampling procedures and research design protocol, but fall short when asked to explain the need to evaluate programs in simplistic terms. Health educators must conceptualize the value of evaluation as a vital component of a total program, and they should be able to communicate these reasons to corporate officials. Evaluation can be viewed as a measure of how objectives have been achieved, a process of decision-making, or a method to assign value and worth. Yet, in simplistic terms, worksite health-promotion programs need CO be systematically and rigorously evaluated in order to accomplish the following points.

Anecdotal comments from employees on the worth of a health-promotion program are adequate when times are good. But, in a harsh economic climate or when administrative changes occur, hard evidence of the cost effectiveness and cost benefits of the program are needed.

To Contribute to the Knowledge Base

As mentioned previously, the field of worksite health promotion is young. Consequently, the literature base is sparse. Evaluation studies in all areas need to be implemented, refined, and replicated over an extended time period to weave a clear picture of the value of worksite health-enhancement programs. For example, the link between smoking behavior and health is now commonly accepted after years of study on all aspects of the issue. Similarly, there needs to be an evolutionary development of literature related to the effectiveness of all aspects of worksite health-enhancement programs to create a consensus in the business community of its value.

To Identify Areas for Modification

Evaluative studies should tell the decision-makers what works and what does not work and target programs that need modification. Evaluation serves as a means to improve pro-gram components. Clear process and summative evaluation procedures provide data which can serve as a basis to enhance, modify, and delete program offerings. These data are especially important in programs where employee participation and compliance are voluntary.

To Enhance Personal Career Development

Health professionals who can justify their effectiveness with hard data will be better able to be promoted within the organization and advance within the health-promotion profession. Hard data on the impact of programming efforts will greatly increase personal marketability.

To Provide a Structured Evolution for the Program

All programs need to evolve to meet the changing problems, needs, and interests of the workforce. Systematic evaluation will assist the program planner in the development of programs and activities to meet the needs and interests of a changing workforce.

Bezold, Carlson, and Peck⁸ believe that anticipated changes in the workplace, such as the continued evolution from a manufacturing to a service economy, the use of robotics, the change in the age structure, the increase of women and minorities in the workforce, the advent of "artificial intelligence," changes in the structure of the workforce, and changes in the financing of healthcare delivery systems mandate a commitment to a structured evolutionary approach to worksite health-enhancement programming.

II - Understand the Corporate Culture

Health-education researchers may not be aware that attitudes within a company about health, employees, and evaluation may influence the conduct of quality evaluation. Corporate executives may believe that the program is worthwhile solely because the employees "feel" better. Consequently, appropriate monies may not be budgeted for evaluation because of the perceived intrinsic value of a program. Clearly, evaluation is needed to justify the value of a program in demanding economic times and during corporate restructuring.

The human factors that influence attitudes towards evaluation in the worksite must not be overlooked. Data, if misused, can be a powerfully influencing factor. Knowledge of high-risk employee health behaviors must be confidential in order to maintain worker support for programs. Compliance with appropriate experimental design and methodologies may be seen as factors which will compromise the employee-relation benefits of the program. The evaluation must balance the need for evaluative rigor with the need for good employee relations. Good evaluation is expensive. Corporate program directors working with finite budgets may not believe that the benefits of evaluation will outweigh the cost. When money is tight, resources tend to be allocated in areas of personal expertise. Therefore, evaluation efforts are sacrificed to maintain program continuity and integrity.

III - View Evaluation in the Context of the Total Program

Evaluation efforts are often initiated after the program is in place. Effective evaluation needs to be planned, along with the initial program planning components. For example, the first step in planning a health-promotion program is often the identification of administrative goals for the program. These data are integral to the planning and evaluation components to follow. For example, if the chief executive officer perceives the health-promotion program as a vehicle to improve the image of the corporation, then the types of programs which need to be developed are those of high visibility such as elaborate physical fitness facilities, recreation programs, and other news-worthy activities. Evaluative activities need to focus on the assessment of changes in attitudes and morale toward the company, although other types of evaluative studies should be completed as supportive data.

If the chief executive officer perceives the program as a means to reduce healthcare costs, however, then the programs implemented should be those which would be more likely to result in an improved health status and reflect a cost benefit. Programs such as smoking cessation, hypertension screening and control, appropriate occupant protection procedures, and medical self-care often fall in this category. Evaluation of these programs should focus on a cost benefit analysis of the impact of these programs.

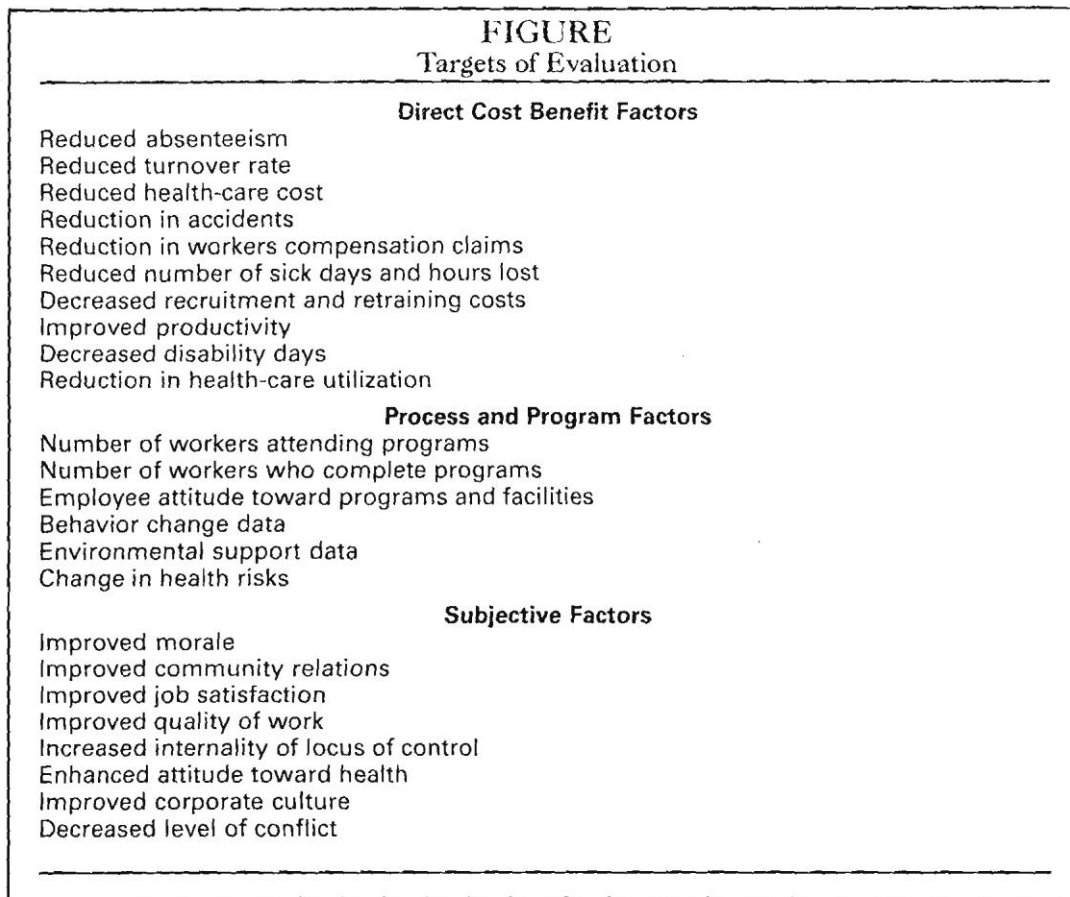
In both cases sighted earlier, the evaluative process must be considered in all aspects of program planning, implementation, and evaluation.

IV - Evaluation Should Occur at a Variety of Levels

The Figure provides an outline of possible targets of evaluation for worksite health-enhancement programs. From a global perspective, there is a need for evaluation studies in all of these target areas. From a local perspective, corporate based programs need to evaluate selected subjective, process, and cost benefit factors. Grana believes that programs should conduct both the cost benefit analysis (CBA) and cost effectiveness analysis studies.⁹ Cost effectiveness studies aim to determine which activities within a program, or which program among a group of program offerings, yield the greater improvement toward the stated outcomes for the least cost. However, CBA is designed to determine if the program results in a net profit for the corporation. Feldman believes that worksite based programs should address the following three major components of evaluation:¹⁰

- Program monitoring is designed to examine whether the program is reaching the appropriate target population, is implemented properly, and has legal and fiscal accountability.
- Program feedback examines whether the program meets the needs of the participants and expectations of the employees, and what components of the program they liked or disliked and would they recommend the program to coworkers.
- Program effectiveness examines whether the program has changed behaviors in the target population, has met the stated goals for the program, and is cost-effective.

Clearly, the need exists from pragmatic and programmatic perspectives to evaluate numerous targets of worksite health-enhancement programs.



V - Follow Appropriate Methodological and Design Procedures

Due to the nature of the corporate culture, rigorous evaluation studies may not be deemed feasible from an economic or human relations perspective. Suffice to say, good research is often a compromise between the ideal and the practical. Program directors should have a basic feel for appropriate research protocol and must carefully weave this protocol with the practical limitations imposed by the organization or program.

Pisarchia and Hartwell have identified five key research points which must be satisfied and understood before rigorous evaluation of worksite health-enhancement programs can be achieved:⁷ there must be a well defined target population; the target population must consist of both participants and nonparticipants; there must be a reference point for the comparison group against which observed changes in the target population may be judged; the sample size must be large enough so that real changes will not be obscured by chance fluctuations; and data collection must be of high quality.

VI - Know the Possible Pitfalls of Evaluation in the Worksite

Closely related to the need to adhere to rigorous research design methodologies is the need to be aware of some of the common pitfalls of evaluation. Some of these pitfalls include: inadequate data collection and analysis procedures, absence of baseline data and of true control groups, the impact of the Hawthorne effect, and the influence of multiple or intervening variables.

Problems with self-selection of participants is common and a difficult variable to control. Quite simply, participants who volunteer to freely participate in programs are more likely to change behaviors than nonparticipants and, in many cases, may have changed behaviors without the program. This is a common drawback of many physical fitness programs where employees who chose to enter the program are compared with those who do not. Often, there are inherent differences between these two groups; also, the exercise group may well have exercised without the availability of an onsite fitness center. A comparison of these two groups will most likely yield statistically significant differences. But, these differences would exist independently from the

employees participation in the program. For example, Bly, Jones, and Richardson" conducted a study with employees at Johnson and Johnson on the impact of participation in the "Life for Life" worksite health-promotion programs on changes in inpatient hospital costs, admissions, hospital days, outpatient costs, and other health costs.

The results revealed that inpatient costs increased more for the control group, while the experimental group (program participants) had a lower number of admissions and hospital days. No difference was found for outpatient costs and other health costs. The fatal flaw, in the study was that it compared employees who volunteered to participate in the program with those who chose not to participate, thus confirming what is already known: employees who engage in healthy lifestyle behaviors are less likely to use the health-care delivery system.

Another possible pitfall is that the impact of business and economic factors are likely to enhance or mask program results. For example, a program designed to reduce healthcare cost is subject to changes in the financing of health care within the corporation. The increased popularity of PPO, HMO, and increased deductibles will have a significant impact on the cost of health care to the corporation. Consequently, it is difficult to separate the impact of the health-risk reduction efforts from the restructuring of the benefits package. Similarly, a program designed to improve morale may be dramatically influenced by factors over which the health-promotion program often has minimal or no control, such as increased layoffs, forced retirements, or labor strikes.

The evaluator also needs to be aware of the impact of endogenous changes which may ,obscure the evaluation of program effectiveness. An endogenous change occurs independently from the health-promotion program and often reflects a widespread societal phenomenon. The decrease in the percentage of adult cigarette smokers and the gradual increase of the percentage of the adult population engaging in regular physical activity are prime examples.

Health-Care Cost Containment

There is ample evidence that poor employee health behaviors lead to increased healthcare costs.^{12,13} Anecdotal and case study examples highlight the economic impact of a corollary accident or the cost to treat an unbelted crash victim. It would seem logical then, that health-promotion and fitness programs designed to improve employees health behaviors would yield reduced utilization of expensive medical services. The real promise of health promotion is the reduction of health risks which subsequently should reduce monies spent on medical care.

Although this linkage seems tautological given the constraint often inherent in evaluating the impact of employee health-promotion programs, it is easy to provide suggestive evidence of the cost effectiveness of health promotion, but more difficult to provide clear linkages between programs and cost containment. It should be noted that it is virtually impossible to predict the economic impact of preventing a coronary or cerebral vascular accident by regular participation in an exercise regimen, which would delay onset of cardiovascular disease, on cost savings. Such cost savings, even if easily quantifiable, would not appear for 15 to 30 years. Therefore, the suggestive and logical evidence of the economic impact participation in employee fitness program needs to be reiterated.

A comprehensive approach to healthcare cost containment would focus on four distinct yet interrelated components: social marketing, corporate culture, health promotion, and health-insurance design.

Social marketing efforts related to health and health promotion are designed to increase the acceptability of a social idea or cause in target groups. Social marketing efforts systematically promote the image that the organization is concerned with the health and well-being of its employees and their dependents. In addition, social marketing efforts can be designed to change employees' knowledge, attitudes, and behaviors related to identified health risk factors (e.g., seat-belt utilization, drinking and driving, hypertension control, etc).

Corporate culture refers to the composite of all factors which influence the work environment as related to health. Corporate culture is influenced by policies, procedures, and attitudes, both written and unwritten. For example, a corporate culture supportive of employee health would provide environmental support activities to support healthy behaviors, view health as an organizational goal, not just the sole responsibility of the employee, and identify policies that would support and deter appropriate health behaviors. In essence, a supportive corporate culture would send a clear message of the organization's role and responsibility in being a "healthy company."

Health promotion refers to structured interventions designed to improve health or decrease health risks. Health-promotion programs, in order to have maximum cost effective potential, should be offered both on a widespread basis to all employees (e.g., physical fitness programs, stress management seminars, occupant restraint programs, etc) and to targeted, high-risk employees (e.g., how to deal with hypertension, smoking cessation techniques, low back care, etc).

Health insurance designs show how policies can be modified to encourage subscribers to engage in health-promoting and preventive activities. For example, does the policy cover preventive screening procedures or second opinions for targeted conditions? In essence, most consumers of healthcare services can only purchase what they can afford. Therefore, the benefits of a program designed to reduce the number of unnecessary surgical procedures will generally have an impact only if the insurance plan covers the cost of a second surgical opinion. The design of the health-insurance package in an organization can have a significant impact on the health-related behaviors of employees.

In the process of evaluating the impact of a health-promotion program on health-care cost containment, it is vitally important to consider the six points discussed earlier when developing a protocol to evaluate these four components of health-care cost containment. Viewing health-care cost containment from a comprehensive organizational perspective, systematic evaluation of the four components of health-care cost containment and modified intervention programs based on cost containment will increase the likelihood of reducing health-care cost in an organization.

Summary

The points outlined in this article are basic for health educators working in worksite settings. It should be reiterated that the survival of health-promotion programming efforts in worksite settings rests with the ability of key personnel to effectively evaluate their efforts. It is hoped that a review of these key points will foster an awareness of the skills necessary and the need to effectively evaluate worksite health-promotion programs.

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