

A Study of School Health Promotion Programs: Implications for Planning

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Abstract:

This article examines the results of a survey to assess the health promotion activities of school districts in the Commonwealth of Pennsylvania. These data reveal that of the 275 school superintendents who responded only 41 (14.9%) indicated that their districts offered health promotion programs for employees and staff. Physical fitness, hypertension screening, and stress management were the most commonly offered programs, and most of these programs were provided for both teaching and non-teaching staff members. Reasons why school districts did not have health promotion programs also are examined. Basic guidelines to help school districts begin the process of planning, implementing and evaluating effective health promotion pro-grams for faculty, staff, students, and community members are provided.

Article:

Recent concerns related to escalating health care costs have influenced the development of worksite-based health promotion Programs. Initially, the most visible programs were begun in large corporations and focused on physical fitness, Worksite health promotion programs have achieved widespread acceptance in recent years, and now are operational in numerous corporations,¹ Health promotion programs today are evolving to include a wide range of health Promoting activities from smoking cessation to women's health issues and are beginning to show Improvements in health care cost containment and employee and community relations.²⁻⁵

Public schools have been slow to develop work-site health promotion programming. Many school districts have the facilities and personnel resources to initiate the planning and implementation of such programs yet, do not do so for a variety of reasons. This article highlights the prevalence of school worksite-based health promotion activities in one state, Pennsylvania, and uses these data as a basis to discuss some basic program planning concepts.

Benefits of Worksite Health Promotion

Parkinson has defined workplace health promotion as "a combination of educational, organizational, and environmental activities designed to support behavior conducive to the health of employees and their families."³ Traditionally, programs designed to improve the health of people have been conducted for altruistic reason. Therefore, the motives of these programs were not in question. Programs offered by voluntary agencies (eg, American Cancer Society, American Heart Association, and American Lung Association, etc.) have been widely accepted.

In contrast, programs have been developed in worksite settings for many diverse reasons. Some were developed for health care cost containment reasons; others were developed for improvements in corporate culture. Possible benefits which may accrue from a worksite health promotion program include, but are not limited to: improved morale, reduced absenteeism, increased productivity, reduced health effectiveness, reduced education and training costs, enhanced corporate image and improved recruitment and retention of employees.²⁻⁷ Table 1 outlines the benefits which are most likely to result from some frequently occurring health promotion activities.

Studies on the effectiveness of worksite health promotion programs are becoming more prevalent. Many of these studies quantify the benefits of health promotion programs outlined in Table 1. For example, worksite

health promotion programs have been found to be effective in improving employee productivity,⁸⁻¹⁰ reducing absenteeism,¹¹⁻¹³ and reducing health insurance costs.¹⁴⁻¹⁷

Table 1
Health Promotion Program Areas Compared with Anticipated Benefits of Health Promotion

Possible Benefits of Health Promotion	Health Risk Assessment	Smoking Programs	High Blood Pressure Programs		Exercise & Fitness	Weight Control Programs	Nutrition Education	Stress Mgmt	Back Care Programs	Off-Site Accident Prevention
Improved Morale					X			X		
Reduced Absenteeism		X						X	X	X
Increased Productivity		X			X		X	X		
Reduced Health Ins. Cost	X	X	X			X	X			X
Reduced Ed. and Training Costs		X	X							X
Enhance Corp Image					X	X				
Improved Recruitment										

Table 2
Prevalence of Health Promotion Activities for Total Sample and Size of Workforce (%)

Type of Activity	Total (%)	Worksite Size (# of employees)			
		> 100	100-249	250-749	750 +
Off-the-Job Accident Prevention	19.8	13.2	21.6	33.8	38.3
Back Care	28.6	19.5	34.8	41.4	47.4
Nutrition Education	6.8	8.6	19.8	21.9	48.0
Weight Control	14.7	8.1	13.5	22.9	48.8
Exercise / Fitness	21.9	14.5	22.7	32.4	53.7
Stress Management	26.8	14.5	32.7	37.5	60.8
High Blood Pressure Control	16.5	8.7	17.9	23.8	49.8
Smoking Control	35.6	30.1	37.5	39.5	57.9
Health Risk Assessment	29.5	18.4	34.0	41.8	66.2

Source: National Survey of Worksite Health Promotion Activities, U.S. Department of Health and Human Services, 1986.

Table 3
Geographic Location of School District
Total Sample and Subsamples

	Total Sample		With Program		Without Program	
	Number	Percent*	Number	Percent*	Number	Percent
Rural	125	45.7	14	34.1	111	47.4
Small Town	55	20.2	6	14.6	49	20.9
Suburban	64	23.4	10	24.4	64	23.1
Urban	12	4.4	6	14.6	6	2.6
Mixed	17	6.3	4	9.8	13	5.6
Missing	2	.7	1	2.4	1	.4

* May not total 100 due to rounding

$X^2 = 14.33$

$p < .001$

$df = 2$

The Office of Disease Prevention and Health Promotion designed a study to determine the nature and extent of worksite health promotion activities and what employers perceive as the direct and indirect benefits of their efforts to prevent disease and promote employee health. The sample consisted of worksites of 50 or more employees. It was stratified by geographic region, size of firm, and type of industry. Utilizing a telephone interview, data were collected on 320 worksites with 50-99 employees and on 1038 worksites with 10 or more employees.

The results showed that 65.8% of worksites surveyed had some form of worksite health enhancement activity. Smoking control activities were most prevalent with 35.6% of the respondents indicating that the corporation offered activity in this area. It is interesting to note that exercise/fitness programming was conducted in only 21.9% of the sites surveyed. Of the nine activities surveyed, prevalence patterns varied significantly with regard to the size of the corporation (Table 2).¹⁸

In addition, respondents were asked how their worksites benefited from each of the nine health promotion activities offered at their respective worksites. Improved employee health was the most often cited benefit. Very few respondents indicated that no benefits were derived from the health promotion activities.¹⁸ Properly planned, implemented, and evaluated programs in school worksites would yield similar results.

Health Promotion Activities in Pennsylvania Schools

Recently, a study was conducted under the auspice of the Center for Worksite Health Enhancement of The Pennsylvania State University to ascertain the status of public school-based worksite health promotion efforts in the Commonwealth of Pennsylvania. During the winter of 1986, the superintendents of each school district in the Commonwealth (N = 501) were mailed survey questionnaires regarding health promotion efforts currently being conducted in their districts. The return rate of the first mailing was approximately 37%. Each superintendent not responding was mailed a second questionnaire increasing the rate to 55% . The final sample consisted of 275 school districts. The questionnaire consisted of three sections.

Section 1 requested demographic information. Section 2 contained questions on health issues and concerns, absenteeism rates for both professional and non-professional staff, and cost-related factors which had shown the greatest increase in the past three years,

Section 3 was divided into two parts; one to be completed by superintendents whose districts had health promotion programs, and the other by those who did not. information requested from superintendents with programs included: kind of program, incentives, schedule, how long the program had been offered, who is responsible for the coordination of the program, percentage of participation, and the availability of the program to family and community members. Superintendents without implemented programs were asked if a program was being considered, the types of pro-grams which were in greatest need, resources they would consider utilizing to develop a program, the degree to which support for participation in community-based programs was provided, and possible barriers to the development of health promotion programs. Items on the survey were in the form of self-completion questions and rank order lists.

Table 4
Superintendent Rank Ordered Health Problems
Total Sample and Two Subsamples

Health Problem	Total Sample		With Program		Without Program	
	Number	Percent*	Number	Percent*	Number	Percent*
Low Back Pain	11	4	2	5	9	4
Respiratory Problems	143	52	18	44	125	53
Obesity	13	5	3	7	10	4
Cardiac Problems	4	2	1	2	3	1
Cancer	4	2	1	2	17	7
High Blood Pressure	22	8	5	12	17	7
Mental Health Problems	9	3	2	5	71	3
Diabetes	0	0	0	0	0	0

X² cannot be calculated due to low expected cell frequencies.

Of 275 superintendents who responded, 41 reported health promotion programming efforts were being conducted, The remaining 234 reported that their districts did not have health promotion programs.

Of the total sample, 34% were classified as rural, 20.2% as small town, 23.4% as suburban, 4.4% as urban, and 6.3% as mixed. A Chi-Square analysis comparing districts with and without programs indicated that urban districts were significantly ($p < .001$) more likely to have health promotion programs than either rural/small town or suburban districts (Table 3).

In section 2 of the questionnaire, superintendents were asked to rank order the top five health problems of the school district. Respiratory problems ranked highest for the total sample and both subsamples. High blood pressure was ranked second (Table 4).

Absenteeism rates were reported by superintendents for both professional and non-professional staff. Non-professional staff was defined as clerical , custodial, and cafeteria workers. For districts with health promotion

programs, the professional staff's mean absenteeism rate was 5.79; for districts without health promotion programs, the mean rate was 5.78. A test of significance revealed no significant difference ($p = .796$). Non-professional absenteeism rates were 5.19 for districts with programs and 5.22 for districts without. Test for significance between the two sample means revealed no significant difference ($p = .952$).

The final question in the health issues and concerns section was designed to determine what health-related costs have shown the greatest increase in the past three years, Superintendents Were asked to rank order the cost-related factors of life insurance benefits, sick leave benefits, and worker's compensation, Chi-Square analysis comparing districts with and without programs indicated that there was no significant difference between districts in relation to cost-related factors (Table 5).

Cost-Related Factor	Total Sample		With Program		Without Program	
	Number	Percent*	Number	Percent*	Number	Percent*
Worker's Compensation	64	23	6	15	58	25
Sick Leave Benefits	167	60	27	66	140	60
Life Insurance	18	7	2	5	16	7

$\chi^2 = 1.91$ $p < .05$
df = 2

School Districts with Health Promotion Programs

For districts with health promotion programs, variables surveyed included types of programs offered, incentives, scheduling of programs, availability of programs to family and community members, and identity of program administrator. Types of programs were divided into wellness/ lifestyle activities, screening and monitoring activities, safety and accident prevention programs, and employee assistance programs, Superintendents were asked to check programs which were offered within the health promotion program. The three most frequently offered programs were physical fitness, stress management, and weight reduction (Table 6).

Superintendents were asked to indicate incentives offered to increase participation by checking those incentives which applied to their program, The most frequently used incentive was time off (20%), followed by certificates of completion (17%), and public recognition (10%). Other incentives included mugs, buttons, visors/hats, t-shirts, and gift certificates.

To determine scheduling patterns, superintendents were provided a checklist of possible patterns and were asked to check all that were applicable to their program. Most programs were offered after school, followed by before school, evenings, during planning periods, weekends, and lunch hours.

Availability of the programs to family and community members was determined by a yes/no question. Spouses were permitted to participate in programs in 16 of the 41 districts with health promotion programs. Only 7 of the 41 districts allowed children of employees to participate. Finally, only 3 of the 41 districts opened programs to members of the community.

Table 6

Programs Offered By School Districts
With Health Promotion Programs

Programs Offered	Number	Percent
Wellness Lifestyle Activities		
Physical Fitness	26	63
Stress Management	21	51
Weight Reduction	19	46
Smoking Cessation	16	39
Nutrition	14	34
Alcohol and Drug Management	12	29
Women's Health Issues	7	17
Medical Self-Care	5	12
Support Groups	5	10
Other	1	2
Screening/Monitoring Programs		
High Blood Pressure	27	66
Diabetes	9	22
Glaucoma	3	7
Other	3	7
Colo-Rectal	2	5
Sickle Cell	2	5
Safety and Accident Prevention and Education		
CPR and Choke Saving Techniques	20	49
On the Job Safety Instruction	16	39
First Aid and Emergency Care	13	32
Seat Belt Usage	9	22
Lifting Techniques	6	15
Home Safety and Accident Prevention	3	7
Defensive Driving	2	5
Other	1	2
Employee Assistance Program		
Counseling Referral	11	27
Family Problems	9	22
Drug and Alcohol Problems	8	20
Marital Problems	8	20
On-Site Counseling	7	17
Problems Coping with Loss and Grief	6	15
Financial/Legal Problems	6	15
Other	1	2

Supervision of the program was measured by an open-ended question requesting superintendents to name the job title of the individual responsible for the coordination of the program. Answers were combined into categories such as administrators, health personnel (school nurses, health educators, and physical educators), outside agencies (hospitals, YMCAs), and volunteer agencies. School administrators were most frequently responsible for coordinating the health promotion program followed by health-related personnel.

Participating rates and length of time the program has been offered were also requested. Questions were open-ended in format. Mean participation rates reported by superintendents for professional staff was 57.8% and for the non-professional staff, 52%. Health promotion programs within the sample of 41 school districts have been in existence an average of 23 months.

School Districts Without Health Promotion Programs

Of 234 school districts without health promotion programs, 58 of superintendents reported that a program was under consideration. Respondents also were asked to provide input on the types of resources they would consider when planning programs and reasons why no program presently existed in their districts. Of resources that superintendents would consider utilizing to develop a health promotion program "health and physical educators" ranked first, school nurses rank second and outside consultants ranked third. Local hospitals and school physicians were ranked fourth and fifth, respectively. It should be noted that the Commonwealth of Pennsylvania still employs and trains the dual health and physical education professional. Generally, the professional preparation, attitude and aptitude of these teachers are almost exclusively related to Physical education. Clearly, this fact may provide one explanation for the prevalence of fitness activities in the public schools in the Commonwealth, while such was not the case with the Nationwide study conducted by Office of Disease Prevention and Health Promotion.

With regard to why there is no health promotion program currently being offered, the overwhelming answer was limited financial resources. Additional factors which inhibited programs from being offered were, in rank order, an uninterested faculty and staff, lack of school board support, lack of appropriate health promotion personnel, and little interest on the part of the administration. The issue of limited financial resources is one which business and industry also acknowledges, however, it has been documented repeatedly that prevention and early intervention are less expensive than treatment.^{2,14}

These data highlight some misconceptions administrators tend to have with regard to health promotion in the schools. The belief that there are limited financial resources indicates that school district superintendents tend to be educators first and businessmen second, since they generally do not recognize the possible cost savings which can accrue from an employee-based health promotion program. Moreover, health promotion programs have been shown to improve the morale of participants.^{6,7} This benefit is germane to school districts in three ways. Employee morale, especially when there is a dearth of teachers, is vital to the development and maintenance of an effective and efficient staff. This positive feeling is conveyed to the students, and students who feel good about their school tend to be less rebellious. Finally, offering health promotion programs to community members can help to foster positive school community relations.²⁰

Most people are concerned about their personal health and wellness. Therefore, to say that a group of teachers is not interested in personal well being is misleading. A workforce may not be interested in the types of health activities it has seen conducted previously in school and community settings. But, properly planned, marketed and implemented programs are of interest to most employees. Programs developed to meet employee needs and interests are valued commodities.

Implications for Planning

Planning is essential for the success of health promotion programs. The Office of Disease Prevention and Health Promotion has published guidelines for worksite health promotion programs. This model, outlined below, provides some guidelines to follow to plan, implement and evaluate a program.¹² Numerous other models are available and serve the same purpose.

Planning

Initial Stage. To ensure the success of a health promotion program at a school setting initial efforts must be made to enlist the support of key school district officials such as administrators, school board members, and union leaders. As was reported in the Pennsylvania survey, lack of school board and administrative support may contribute to non-initiation of programs and failure of existing programs. Enlisting support of key administrators often will enhance interest on the part of an "uninterested" faculty and staff. Initial planning should also establish a budget, delineate health problems of the district from the administrative perspective (ideally through longitudinal health records if available), and outline the basic goals of the program.

Planning Groups

Program Development Teams. After the initial stage has been completed, the next task is to develop a planning group. This group should include representatives from the faculty, staff, administration, health care professionals, and union members. It is interesting to note that superintendents reported a lack of "appropriate health promotion personnel" as a reason for not initiating a health promotion program, yet, reported that they would first utilize health and physical educators and secondly school nurses to plan programs.

Representatives of the many voluntary health agencies, local hospitals, and nearby colleges and universities found in many localities can serve as available program planning resources. For example, personnel with American Heart Association's "Heart at Work" program and the American Cancer Society's "Taking Control" program are excellent resources.

A primary goal of the planning group is to assess the current status of the school district with regard to health needs (real and perceived), health interests, environmental supports, availability of facilities, and community services. Health factors may be assessed with a commercially developed health risk assessment (HRA) tool. Caution is advised when using health risk assessment tools. These instruments tend to be more valuable as a means of collecting aggregate health behavioral data on a group than as a means of fostering individual behavior change. HRA's are useful to highlight health problems within a group. Planners are reminded that perceived needs are initially more important than real needs in order to create interest and encourage participation in the health promotion program. In most cases it is appropriate to address perceived needs and interest, get the faculty and staff involved initially, and then address real needs.

The program development team should assess services which already exist within the school district and the community to avoid undue replication. Inviting community agencies to use the school as a site for programs and encouraging the staff and faculty to participate have been proven to be successful in fostering school/community relations while providing a health promoting service to employees. Facilities available for use and the scheduling of these facilities should be inventoried. Lack of facilities, especially after school hours, may present problems. However, among those schools with health promotion programs, after school was the most frequent time reported by superintendents for offering the programs. For maximum participation, scheduling is of utmost importance. Surveying the target populations and providing programs at times and locations which meet their needs is mandatory.

Another responsibility of the planning group is to assess the school district's benefits package and work environment. The benefits package may potentially contain conditions which promote illness as opposed to wellness such as sick days and lack of medical coverage for prevention services. Efforts should be undertaken to change the benefits package to support a health promotion lifestyle. Such efforts should be initiated with the support of the faculty and staff.

Additionally, the ability of the school district to provide environmental support for health promotion programs should be examined. Examples of environment support issues which should be considered are the development and enforcement of a smoking policy, providing some healthy snack food alternatives in vending machines, ventilation and temperature control and, serving nutritious foods in the cafeteria.

The planning group should also explore incentives to increase program compliance and adherence to behavior change regimens. The appropriate use of incentives has been shown to be effective for a variety of health enhancement programs (eg, physical fitness, safety belt, weight reduction, smoking cessation).

Finally, planners need to be particularly aware of the notion that health behavior change is most easily achieved if individuals receive social support for their efforts. One way to enhance social support is through the inclusion of family members in the health promotion program. Support groups for ex-smokers, weight watchers, and exercisers have been shown to improve program continuance and have enhanced the likelihood of the maintenance of a behavior change.

Programs

Programs are divided into three broad areas: wellness/lifestyle activities; screening, monitoring and follow-up programs; safety and accident prevention and education; and employee assistance programs (Table 6). Like other co-curricular school programs, health promotion Programs have liability implications. It is recommended that legal counsel review the proposed program and determine the adequacy of the school's current liability insurance. Although the negligence element must be considered, it should not prevent an employer or school system from implementing a program.²⁰

Evaluation

Although worksite health promotion programs for employees in business and industry have become widespread, health promotion programs for educators are not widely available. Less available are well-documented and well-researched studies that have evaluated school site programs.⁷

Evaluation often is a key factor in program continuance. Ideally, it should include both qualitative and quantitative measures. Qualitative evaluation looks at participation rates, degree of satisfaction with program selection, scheduling facilities, facilitators; and incentives. Quantitative evaluation looks at the effectiveness of the health Promotion programs in bringing about the desired change in health attitudes, behavior, knowledge, absenteeism, and other variables of interest. Qualitative information may be obtained through the use of short questionnaires given to program participants and the recording of utilization rates. Both types of evaluation make it necessary to create and maintain accurate records so that future program decisions are based on sound data. Planning for evaluative activities needs to be a component of the program planning process. Appropriate baseline data must be gathered from which judgments of programmatic worth can be offered. If appropriate emphasis on evaluation is not included in the planning process, it may be difficult to arrive at a theoretically sound evaluative protocol at mid-course.

Program goals will determine the type of evaluative activities which should be emphasized. A program designed to improve employee morale should focus on employee morale. While a program earmarked to reduce health care costs should assess those variables.

Discussion

School districts are viable sites for implementing effective and cost effective health promotion programs. Schools often possess the personnel and facility resources to effectively plan, implement, and evaluate quality health promotions programs for students, faculty, and community.

Since the 1900s, the school health program traditionally has included three components: health instruction, health services, and health environment. Recently, Kolbe presented and expanded concept of the comprehensive school health program. New components include the integrated efforts of school and community agencies, the physical education program, and the health promotion programs for faculty and staff. A school health promotion program might attempt to alter the total health environment by including strategies for the lunchroom, the school clinic, the health and physical education program, policies regarding use of substances such as tobacco, rewards through health insurance plans, and the opportunity for daily fitness activities.⁷

Most importantly, schools have the ultimate responsibility for the health of students during the school day. Teachers and staff act as role models and should be the primary link between students and their acquisition of health enhancing knowledge and behaviors.⁷

An example of a major initiative that has fostered school wellness and health promotion programming is the Seaside Health Promotion Conference (SHPC). The SHPC is a five-day, teacher inservice program held annually each summer on the Oregon coast at Seaside. The SHPC attempts to enhance individual, school, and community health by facilitating the acquisition of necessary skills and knowledge to initiate health promotion by health educators and other school personnel. This project has been emulated by other states. Also, several

other organizations have developed documents, support materials, and references to assist school districts in planning health promotion programs.⁷ Also, schools seeking to implement a comprehensive school health promotion program need to consider working with expertise in the areas of health promotion. The development of quality health promotion programs in the schools of the nation is both possible and economically feasible if schools and communities work together in a systematic manner to achieve this goal.

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