

Use of an ecological approach to worksite health promotion.

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Abstract:

The purpose of this study is to outline the decline, implementation, and evaluation of a company-wide Health Risk Assessment (H RA) for employees of the Housing Authority of Birmingham District (HA BD). The planning team used "An Ecological Perspective on Health Promotion Programs" (McLeroy, Bibeau, Steckler, & Glanz, 1988) to ensure that intervention activities were implemented at appropriate levels of influence. For example, communication from upper management to employees supporting program participation and the provision of release time were instrumental in encouraging employee participation. The one-third participation rate compares favorably to other first-time, worksite single-focused programs.

Article:

A growing body of literature establishes a compelling case for health promotion initiatives and provides the impetus for worksite health promotion programs (Meurer, Meurer, & Holloway, 1997). Worksite health promotion activities can provide numerous benefits to both employer and employee. Healthy People 2010 (U . S. Department of Health and Human Services, 2000) specifically addresses worksite health promotion activities in eight different objectives. For example, the target for Objective 7-5 is that 75% of worksites with 50 or more employees will offer a comprehensive employee health promotion program to their employees. This objective illustrates the noted importance of worksite health promotion.

Many health educators believe that in order to achieve the overarching Healthy People 2010 (D H HS, 2000) goals of increased quality and years of healthy life, and eliminating health disparities, it is necessary for program interventions to be viewed from an ecological perspective. McLeroy, B ibeau, Steckler, and Glanz (1988) offered "An Ecological Perspective on Health Promotion Programs" as a framework that identified multiple levels of influence (or factors) in the design, implementation, and evaluation of health promotion programs. This paradigm describes behavior as a dynamic interaction between the individual and the environment. Intrapersonal factors such as acquisition of knowledge, attitudes, and skills have been the traditional emphasis of health education activities. The second level of influence, identified by McLeroy et al., is interpersonal processes and primary groups that provide social identity, support, and role definition.

Institutional factors such as rules and regulations that guide conduct of members within organizations constitute another level of influence. Community factors such as connections among groups within geo-political borders comprise the fourth level of influence. The fifth and final level of influence includes policy factors such as laws at the national, state, and local laws. Taken together, this ecological framework suggests that the potential for changes in individual lifestyle would be greatly enhanced through multi-level health promotion programs.

The basis of "An Ecological Perspective on Health Promotion Programs" is reciprocal causation between individuals and their environment. This focus shifts the locus of change from the individual to the system in which the individual resides. Using a system's approach to worksite health program involves addressing multiple levels of influence. For example, participants seeking opportunities for accurate health information represent the intrapersonal emphasis. Group discussions between participants and facilitators represent the interpersonal emphasis. Corporate sponsorship, promotion, and active recruitment of employees in health promotion programs reflect the institutional emphasis. Linkage with on-going community initiatives (such as

"Five-A-Day" and "The Great American Smokeout") represent the community emphasis. Finally, local, state and federal policies that provide rules and guidelines to follow (safety belt legislation, OSHA guidelines, and environmental tobacco smoke rules) reflect the policy emphasis. Thus, an ecological, systems approach to health promotion can account for far more improvement in health status than approaches that rely on a single level of influence.

The workplace is an important venue for influencing community and institutional factors of the ecological model. In the United States, more than 110 million adults are employed and each spends about one-third of his or her waking hours at work (Stokols, Pelletier, & Fielding, 1995). The worksite has significant potential to influence and support health norms and values due to pre-existing institutional and social structures (Reardon, 1998). Therefore, the work setting offers health education and health promotion practitioners opportunities to develop an institutional climate, sometimes referred to as a corporate culture, that supports and encourages healthful behaviors.

Contemporary health promotion should approach health problems on multiple levels. Therefore, when the authors were asked to design a Health Risk Appraisal (HRA) program for the Housing Authority of Birmingham District (HABD), their first task was to design a program within an ecological framework. With this caveat in mind, the purpose of this study is to outline the design, implementation, and evaluation of the company-wide HRA for HABD, and to discuss how this initiative articulated with "An Ecological Perspective on Health Promotion Programs" (McLeroy et al., 1988).

METHODS

PARTICIPANTS

The HABD workforce was comprised of 357 employees. Of this group, about one-third (107) voluntarily responded to the invitation to complete an HRA. Participants were either Caucasian or African American, with the majority (90.9%) being African American and female (51.1%). The percentage of young adults who were 17 to 25 years of age was 1.1%, compared to 14.8% of adults who were 26 to 35 years old. Most participants (65.9%), were between 36 to 55 years old, with the remainder (18.2%) being 56 years or older. Levels of education varied widely. Slightly less than one-quarter (22.8%) completed high school, while about one-third (31.6%) had some college. A little more than one-fourth (26.6%) completed college, and (15.2%) reported completion of professional education.

PROCEDURES

The "Healthier People" (HRA) was administered during the Fall 1998 to assess employee health risks, develop an organizational picture of employee health risk, and provide a discussion of personal health risk between employees and health education professionals. Representatives of HABD, Health Enhancement Solutions (HES) and The University of Alabama (UA) planned implementation activities. A timetable of six tasks were developed that included:

- * August 20th, 1998--HABD announced an upcoming HRA activity to all employees
- * August 28th, 1998--HES delivered HRA to HABD for immediate dissemination and data collection
- * September 19th, 1998--HABD returned completed HRA's to HES for data analysis
- * October 3rd, 1998--HABD staff offered employees the opportunity to sign up for small group session to discuss HRA results
- * October 5th-9th, 1998--UA data analysis staff mailed HRA results HABD employees residential addresses

* October 12th & 14th, 1998--Two health education doctoral students from UA presented oral presentations to HABD employees and facilitated a response and feedback forum. Employees received an incentive book entitled, Take Care of Yourself for participation in the HRA.

RESULTS

One hundred and seven employees submitted HRA data for analysis. Of this group, 18% (19 of 107) submitted an HRA with missing data on key health risk variables. Missing data prohibited accurate assessment of risk and protective factors. Although these incomplete appraisals were returned to employees for corrections, none were resubmitted. For this study, 88 complete "Healthier People" HRA's were used. After the results of the HRA were returned to individual employees, sessions were arranged to discuss the results. The HABD Human Resource Staff carefully advertised and promoted attendance at 30-minute health briefings to discuss group risk and individual protective health factors based on the HRA results. Invitees were employees who submitted a complete HRA. Two-thirds (58 of 88) of participants attended one or more follow-up discussion session conducted by two health educators from the Department of Health Science at UA. After a brief audio-visual presentation highlighting group data results, employees were asked to submit questions based on the results of their personal HRA. Employees could either ask questions during the discussion session or submit questions in writing to maintain anonymity. Employees were also asked to submit requests for follow-up health promotion programs based on their HRA results and personal interest. The two most requested programs were stress management/stress reduction and weight management.

DISCUSSION

This article documented the first organized health education initiative for employees of HABD. The planning process included selection, implementation, and evaluation activities to satisfy the goals of the worksite. A trilateral consortium that consisted of representatives from HABD, HES, and UA achieved consensus on goals and methodology. This group developed and agreed on a timeline of activities that informed and guided the delivery of products at prescheduled intervals. One-third of HABD employees voluntarily participated in the HRA. This level of involvement suggested that the program was reasonably successful in reaching employees, especially when compared to first efforts in other corporations. The participation level was particularly encouraging considering that this activity was the first of its kind conducted at this worksite. Much of the success of this first effort has been attributed to the careful attention to implementation of a program that articulated with the various levels of influence (see Figure 1) highlighted in "An Ecological Perspective on Health Promotion Programs" (McLeroy et al., 1988).

CONCLUSIONS

Based on the positive response to the HRA program at HABD, more opportunities for conducting health promotion programs have been planned. The stage has been set for the design of programs that examine how to enhance participation by implementing program activities at various levels of influence. Implementation of health promotion programs that embrace this multi-level approach appear critical to achieving the vision of Healthy People 2010 (DHHS, 2000). The recognition that knowledge alone is insufficient for increasing the quality and years of healthy life and eliminating health disparities makes this ecological approach particularly attractive.

Figure 1. Program Activities Related to Levels of Influence

| <i>Levels of Influence</i> | <i>HABD Program Activity</i> |
|----------------------------|---|
| Intrapersonal | <ul style="list-style-type: none">• Administered HRA• Conducted Follow-up Discussion Sessions |
| Interpersonal | <ul style="list-style-type: none">• Co-workers from Human Resources at the HABD promoted program participation |
| Institutional | <ul style="list-style-type: none">• All HABD communication channels were used to announce program features• HABD provided an incentive for program participation• Follow-up programs were scheduled based on employee requests• Upper management support of the program Activity was evident |
| Community | <ul style="list-style-type: none">• None |
| Policy | <ul style="list-style-type: none">• HABD provided release time for employees to participate in the program |

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