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## **Worksite Health Programs: Working Together to Advance Employee Health**

The workplace is a common context within which health promotion, disease prevention, and injury prevention programs are conducted.<sup>1,2</sup> Health educators have been important contributors to the burgeoning area of worksite health promotion (WHP), with its traditional focus on individual behavior change of personal risk factors (e.g., smoking, lack of exercise, unhealthy diet). Recently, health educators and health behavior specialists are taking a more active role in occupational safety and health (OSH) programs that address the influence of physical, chemical, and psychosocial work exposures on employee health.

For WHP efforts, the worksite serves as a convenient venue for health programs, providing access to adult populations that might otherwise be hard to reach and providing organizational structures and norms that can facilitate successful individual behavior change (e.g., employer-provided incentives and the social influence of coworkers).<sup>3</sup> In contrast, OSH interventions attempt to reduce exposure to aspects of the worksite that are deleterious to employee health. OSH interventions may involve engineering strategies (e.g., making physical modifications to the worksite or work process), administrative strategies (e.g., management initiatives that modify the work process or environment), and individual behavior change strategies (e.g., educational training to increase personal protective equipment use).<sup>4</sup>

Perhaps because these two approaches to worksite health have different historical roots, disciplinary backgrounds, and intervention philosophies, they have tended to operate independently, even when present in the same workplace. In some cases, practitioners of these two approaches have viewed each other as competitors for resources rather than as partners working toward advancement in the field of employee health.<sup>5</sup> This theme issue is intended to foster a dialogue between those involved in designing, implementing, and evaluating WHP and OSH programs, thus creating an opportunity to explore potential points of synergy between these two approaches to worksite health. We believe that such a dialogue will help set an agenda for the advancement of the quality and scope of worksite health programs.

### **CROSS-CUTTING THEMES**

Three important themes that cut across both WHP and OSH efforts emerged during the process of putting this theme issue together. These themes are introduced below and are discussed in more detail in upcoming articles in this issue.

### **The Need for Broader, More Integrative Conceptual Frameworks**

Within their traditional paradigms, both WHP and OSH programs have faced challenges in developing effective strategies for advancement in the field of employee health. For example, even carefully developed and meticulously implemented WHP programs have failed to bring about substantial, meaningful changes in employee health behaviors.<sup>6,7</sup> There have been similar disappointing findings in the OSH arena.<sup>8,9</sup> One inference from such results is that perhaps broader, more integrative conceptual frameworks are needed to guide the effective design and evaluation of worksite health programs.

Several examples of such frameworks are presented and discussed in this theme issue. Stokols et al.<sup>10</sup> present a social ecological perspective that incorporates three basic principles: (1) that physical and social environmental factors, along with personal factors, jointly contribute to healthy workplaces and healthy workers; (2) that nonoccupational and community settings influence employee well-being and worksite health programs; and (3) that health and illness outcomes should be studied from a multilevel and multidisciplinary perspective. DeJoy et al.<sup>11</sup> present a work-systems perspective that takes into account individual, job/task, and organizational factors. The authors then provide an example of how self-protective behaviors need to be analyzed within the context of specific job demands as well as broader organizational and environmental influences. Finally, Baker et al.<sup>12</sup> present a model, adapted from the stress literature, to illustrate opportunities for integrating the traditional concerns of both health promotion and occupational health and safety interventions. They emphasize the importance of (1) psychosocial resources (social support and control) in the workplace and (2) comprehensive and participatory approaches to worksite health. These models all share the characteristics of being multilevel (incorporating individual-, job-, and organizational-level factors), integrative (addressing both WHP and OSH concerns), and comprehensive (addressing physical, chemical, psychosocial, and behavioral threats to health). In addition, they all highlight the importance of context (e.g., nonoccupational factors, economic climate) when developing worksite health programs.

To date, these models have been underused by researchers and practitioners involved in worksite health programs. Several of the empirical articles in this issue illustrate how the basic tenets of these models might be tested. Sorensen et al.<sup>13</sup> used an ecological framework to guide the development and evaluation of a worksite cancer prevention program that addressed both occupational exposures to carcinogens and lifestyle risk factors for cancer. Crump et al.<sup>14</sup> investigated the extent to which the organizational context and the implementation process of health promotion programs were related to the rate and patterns of employee participation in the programs. Kidd et al.<sup>15</sup> addressed injury prevention among farmers, an occupational group for which the boundaries between work and nonwork are typically blurred. The authors' multilevel, contextual approach identified psychosocial, economic, and physical environment factors that influence farmers' safety decision-making processes.

### **The Application of Theory in Program Development**

The conceptual frameworks described above provide an overarching view of the multitude of factors that are important to consider when developing worksite health

programs. The effectiveness of these programs may be further enhanced by using theories that outline strategies for changing factors that contribute to deleterious effects on the health of the target population.<sup>4</sup> When WHP programs have been informed by theory, they have typically made use of social psychological or learning theories,<sup>3</sup> while OSH programs have tended to be based on engineering principles or industrial hygiene models.<sup>4</sup> Each approach may benefit from an increased knowledge and application of theories that are more typical of the other. For example, in this issue Sinclair et al.<sup>16</sup> used a theory of health behavior (protection motivation theory) to address a serious occupational safety problem—needlestick injuries among workers in the health care industry. The authors provide a detailed account of the challenging process of translating theoretical constructs into components of an OSH training program using video technology.

### **The Use of Multiple Assessment and Evaluation Methodologies**

As comprehensive, context-inclusive, and systems-oriented frameworks are used more often to guide the development of worksite health programs, multifaceted data collection and data analysis methodologies are needed to adequately describe and assess worksite health problems and to evaluate the programs that are intended to address them.<sup>10,17-18</sup> In particular, worksite health practitioners and researchers may be called upon to use survey research methods; qualitative methods such as focus groups, field observations, and semistructured, in-depth interviews; physiological outcome measures such as biomarkers; and physical or chemical exposure measures more typical of industrial hygiene methods.

Several articles in this issue illustrate creative approaches to the collection and analysis of the data necessary for understanding the complex web of factors that affect employee health and worksite health programs. Crump et al.<sup>14</sup> used various data sources including case studies (developed from field observations and semistructured interviews with key informants) and employee surveys. Kidd et al.<sup>15</sup> used focus groups to collect qualitative data from farmers and their spouses and then systematically analyzed the data to develop a model of stress-related factors that lead to injury among farm families. Sinclair et al.<sup>16</sup> videotaped semistructured interviews with employees as part of the process of developing instructional materials.

## **CONCLUSION**

From the many high-quality manuscripts that were submitted for consideration in this theme issue, we have learned that there are numerous worksite health practitioners and researchers interested in and actively working toward integrating the fields of worksite health promotion and occupational safety and health. Whether spurred forward by the increasing application of social ecological principles to worksite health programs, or by the less than satisfactory performance of existing health programs and the accompanying recognition for the need for more comprehensive approaches, or by a desire to concentrate dwindling resources in collaborative efforts, the time seems ripe for developing interventions that are integrative and mutually beneficial to both worksite health promotion and occupational safety and health programs.

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