



Strengthening health promotion in Australian workplaces

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Abstract

The Australian workplace has emerged as an important venue for influencing the health of employees through regulations and behaviour change programs. Recent surveys have highlighted a growth in this activity but the effectiveness of these programs in changing unhealthy work practices and policies is questionable. The need for strengthening programs by stronger designs and evaluation, and addressing organisational factors and employee participation in planning and implementation processes is documented. Efforts in that direction in Queensland are cited. Building on these existing foundations, redirecting existing resources, and building intersectoral cooperation in public–private partnerships hold a creative, exemplary vision of the future for Australian workplace programming.

Introduction

The workplace has emerged as an important setting for enhancing health and preventing or reducing health problems (Terborg 1988; Fisher, Glasgow & Terborg 1990; Alderman 1993; Glasgow, McCaul & Fisher 1993) and has been identified as a central component for meeting Australia's national health goals and targets (Nutbeam et al. 1993). Employee health programs have evolved over a 15-year period from simple regulations concerning health or safety risks to broader socio-cultural changes to the worksite environment (Heirich, Erfurt & Foopte 1992; Noblet 1993; Terborg 1995). The workplace has not escaped the influences of the 'new public health' agenda generated through the World Health Organization at their Ottawa meeting in 1986 (World Health Organization 1986). Depending on the emphasis of the program, the benefits to individuals may be aimed at improved health and well-being, healthier working conditions, increased job satisfaction or productivity. This paper examines the major accomplishment in workplace health promotion in Australia in recent years and identifies areas needing strengthening.

Evolving concepts of workplace health promotion programs

There is a lack of agreement on what constitutes a worksite health promotion program intervention but Terborg (1995) identifies features upon which there seems to be agreement: the periodic delivery of educational materials and activities to maintain and improve employee health; and changes in organisational practices and policies conducive to health promotion. Legislatively mandated programs and activities in employee health and safety are generally excluded.

In the 1980s, growth in conceptualisation and delivery of worksite programs were labelled as first generation when health-relevant policies were introduced into worksites for a variety of reasons other than health, for example, safety or quality control; second generation, when a deliberate health focus on workers identified specific preventable risk and encouraged behaviour change; and third generation, when the recognition that most employees have more than one risk factor resulted in the introduction of comprehensive multiple risk programs. In fourth generation programs, a broader focus on health promotion, including health improvement as well as disease prevention, was seen (Goldbeck 1984).

The conceptualisation of workplace programming continues to widen as evidenced by recent ecological approaches in the literature, including the integration of health promotion and occupational health and safety programs

(Levi 1992; Heaney & Goldenhar 1996). Social ecology focuses on interactions between humans and their environments, emphasising the social, institutional and cultural contexts of relationships (Stokols, Pelletier & Fielding 1996). Its theoretical principles include individual's or groups' health status being influenced by multiple environmental and personal factors; emphasising linkages between the workplace and employees' other life settings (for example, residential, transport, community); emphasising multilevel, multidisciplinary perspectives on health and illness; and expanding workplace health promotion to the underserved, such as marginally employed and unemployed workers. Using intersectoral frameworks such as 'healthy communities' and 'healthy cities' initiatives are also suggested by the promulgators of these broad views (Baum & Brown 1989; Stokols, Pelletier & Fielding 1996).

Although occupational health and safety and workplace health promotion programs share the same goals of employee well-being, they traditionally operate independently. Health and safety professionals have been most concerned with physical hazards in the environment while health promotion professionals have focused on individual lifestyle change. However, many overlaps can be discerned. With the broad-based participatory, ecological approach envisioned above, an integrated model using strengths and resources from both programs is a logical consideration (Baker, Israel & Schurman 1995).

Recent activities in workplace health promotion in Australia

Reviews of workplace health promotion in Australia uncover a mixed bag of achievements. The results of a 1991 survey on the status of workplace health promotion in Australia by the National Coordinating Committee for Health Promotion in the Workplace (NCCHPW 1993) found that 25 per cent to 50 per cent of the worksites in Australia that responded had implemented some form of health promotion program. The figures suggest that there were hundreds of programs operating across Australia, but the majority of these programs were in worksites with over 100 employees. Much of what was considered 'health promotion' used printed material such as pamphlets and posters as the major form of intervention. This review confirmed findings by Jones (1988), whose national survey of 379 organisations reported that 46.5 per cent were 'involved in some form of health promotion initiative'. A telephone survey in Queensland of 304 company executives indicated a high level of involvement in health promotion, with 86 per cent of companies in this study adopting restrictive smoking policies, 37 per cent providing health information, 22 per cent providing blood pressure screening and 27 per cent employing a health consultant (Queensland Health 1994).

Limitations to effectiveness

To balance this encouraging picture, a 1992 review of workplace health promotion (Chu & Forrester 1992) found 69 programs that had a number of weaknesses. Many program reports did not describe any precise measures of process, impact or outcome. The major indicators were baseline measurements of participation rates and physiological measures (where they were relevant to the aims of the program), reflecting a narrow focus on physical health status. Other measures included assessing participant attitudes and rates of injury, absenteeism or work performance. They generally failed to include any details about the costs of their programs. Employee education aimed at raising awareness of health issues consisted almost entirely of distributing reading materials such as safety literature, fliers and pamphlets. The majority of programs were in large white-collar worksites within an existing health and safety infrastructure and which contained more than 100 workers.

The above review also surveyed providers of health promotion services in workplaces, non-profit organisations, private consultants, government departments and one tertiary institution that identified a number of factors that hindered efforts to promote health in the workplace. Their negative comments focused on the lack of activity in small businesses. Employer reluctance to implement a program seemed to centre on a lack of awareness of program costs versus the benefits. Common shortcomings also cited were too narrow a range of program activities; too much emphasis on exercise-based programs; insufficient follow-ups in the program design; a lack of evaluation of program effectiveness; and the failure to maintain program motivation (Chu & Forrester 1992).

Organisational factors that hindered that success of workplace health promotion programs included top-down management approaches where there was little evidence of employee consultation; an absence of worker representation on the program's steering committee; and no needs assessments. Lack of employee consultation resulted in low participation rates and participant enthusiasm for many workplace health promotion programs (Chu & Forrester 1992).

Selected case studies of workplace health promotion in Australia

The following case studies have been selected on the basis of providing a snapshot of the best examples of evaluation studies. Barratt and colleagues conducted an initial screening of staff of a large public hospital in Sydney (Barratt et al. 1994). They recorded serum cholesterol levels, weight, height, blood pressure, smoking and exercise habits of 80 per cent of the staff. They then implemented a two-treatment trial of a self-help package and nutrition course (compared to a self-

help package only in the control group) in an attempt to reduce the relatively high levels of serum cholesterol. They found that, while there were no changes in mean serum cholesterol levels in any group at the three- or six-month follow-up, the group that participated in a course of nutrition lectures significantly reduced their glucose intake and increased their fibre levels. Barratt attributed the failure of their program to organisational factors such as work pressures, and the time and travel required to attend sessions. They also stated that the population, being predominantly young and female, may have been a factor in reducing the participation rate.

The *Best of Health* program conducted at Telecom Australia stands out as a successful case study. This program, tailored specifically for Telecom, consisted of a series of health interventions described in a guidance manual that was to be implemented in whole or in part by regional managers of the hundreds of Telecom business units throughout Australia. Despite a number of implementation problems, the program claims to have contributed to a 14 per cent decline in absenteeism and a 25 per cent decrease in smoking costs (Schroeder 1993).

Mort reported on the program that has been operating in the Goodman-Fielder starch plant for the past three years (1992). The program, which consisted of cardiovascular disease risk screening and education sessions, is said to have resulted in a marked reduction in the number of employees who are overweight, have high blood pressure or elevated cholesterol levels, or who are smokers. Employees reported being impressed with the program in terms of its raising their awareness and knowledge about their personal health. The program's success was largely attributed to strong management support and integration with the plant's health and safety program. However, quantifiable outcomes have yet to be reported.

A program reported by Goldsmith, that has been in operation since 1990 at the Wrigley Company, consists of annual employee health assessments (1992a). This program reported 'saving' the life of at least one worker as well as increasing the number of employees who are exercising or who have changed their lifestyles, although no hard data back these claims about the impact of the program.

One of the few published experimental studies in Australia analysed the efficacy of strategies designed to reduce the risk of cardiovascular disease in participants from the New South Wales Ambulance Service (Gomel et al. 1993). They compared methods at four levels of intensity: health risk assessment; risk factor education; behavioural counselling; and behavioural counselling plus incentives. Impact measures were used in reducing baseline measures of overweight, serum

cholesterol, cigarette smoking and blood pressure, and in increasing aerobic capacity at intervals of 3, 6, 9 and 12 months. A participation rate of 84 per cent of eligible employees was reported, together with significant changes to baseline physiological measures at the three and six-month intervals. However, most measures returned to baseline at the 12-month mark, indicating few long-term changes in health status measures. The authors claim that the behavioural counselling and behavioural counselling plus incentive conditions produced larger changes in some cardiovascular risk factors when compared to risk factor screening plus education. Determining whether the absence of change in physiological measures for this group was due to less enthusiastic participation or to the ineffectiveness of the intervention to produce the expected leaves the results open to question.

In a subsequent economic analysis reporting the cost-effectiveness of these four interventions, the risk factor screening plus educational materials was shown to be cost-effective in the initiation of risk factor change in the short term, but failed to produce sustained change. The individualised behavioural counselling (individualised goal-setting, feedback on progress, teaching of behavioural self-management strategies, and provision of self-instructional materials relevant to the stage of change) had the most potential for maintenance of risk factor reductions (Oldenburg et al. 1995).

More in-depth analyses like that described above in the New South Wales Ambulance Service study are sorely needed. There appears to be little progress towards quantifying outcomes from workplace health promotion programs. Most of the anecdotal evidence of program quality, and useful information about participation rates and/or baseline physiological measures, add up to little more than assessments of the effectiveness of the *delivery* of the program rather than the impact on ameliorating health or safety problems.

In some cases the information may be downright misleading. According to Chu and Forrester (1992), participation rates often do not reflect average or typical rates of attendance or participation, but peak and maximum rates. The majority of the reports are case study examples with no control or comparisons against which to measure real program effects or account for secular trends and improvements in health within the general population. Assessments about the impact of a program, in terms of progress towards realisation of objectives, seem to be limited to the studies that compared several methods but no control groups.

Organisation-related factors

The structural advantages that the worksite holds over other sites are often ignored in designing or implementing programs. Some of these advantages include the ability to reach a large number of adults (an estimated 70 per cent of adults aged 18–65 are employed on a regular basis); employers having records on employees, making long-term follow-up possible; the opportunity of altering the work environment; social support maintenance – important for participation, adherence and long-term behaviour change; attendance and participation are convenient; and, finally, there is the opportunity for manipulation of financial rewards as well as non-monetary incentives (Terborg 1988).

A specific example of not taking structure into account or according it only token mention is the above-cited Gomel et al. study. The authors state that interventions aimed at changing individual behaviour should be complemented by those aimed at changing organisational or environmental factors (Gomel et al. 1993). They then cite interventions that seemingly failed to take account of the organisational factors that might have helped or hindered the uptake of healthy behaviour.

An example is smoking among the ambulance workers in their study. Smokers often claimed that they smoked to deal with stressful situations. Performing life-saving procedures, driving at high speeds through crowded streets, having the lives of others in one's hands, all part of the ambulance worker's job, are stressful and contribute to maintaining relatively high smoking rates in this population. Yet the study's intervention did not seem to deal with these stressors at an organisational or institutional level by means of, perhaps, shorter shifts or having more personnel on duty. Instead their program seemed to focus on individual risk factor objectives in isolation from the environments that may have been sustaining the behaviour. Thus it is not surprising that few long-term changes were observed for smoking, or for any other health behaviour in this study.

The dilemma described by this and many similar studies focusing on behavioural outcomes suggests that crucial organisational environmental factors strongly associated with health outcomes (for example, changing shift times, number of employees on duty, overtime pay and awards, union regulations) are either unable to be manipulated or at best are extremely difficult variables to control. Unless such factors are negotiable at the brokering or preliminary stages of setting up a study intervention, then it seems likely that future successful outcomes will be frustrated.

The healthy lifestyle program of the Brisbane City Council is run wholly by the occupational health section, focusing mainly on cardiovascular risk assessments

that are provided upon request from employees. The program also uses community-based organisations to offer sessions on specific topics for special populations of workers (for example, breast cancer prevention, back care). A follow-up survey indicated that 40 per cent of participants have changed their attitudes to diet, 32 per cent to exercise and 6 per cent to smoking – while another report indicated that around 280 employees have quit smoking since the program's inception (Goldsmith 1992b).

Re-orienting program emphases – a case study from Queensland

Recent initiatives in Queensland give rise to optimism about creating stronger programs. A new effort in workplace health promotion pioneered by Queensland Health seeks first and foremost to address issues that are of most concern to workers and management. This includes issues that are usually identified as being within the domain of industrial relations and organisational development. For example, a recent survey of section managers from the Division of Workplace Health and Safety revealed that the number one issue affecting the health of their workers was restructuring of their organisation (Queensland Health 1994). Restructuring was generally seen to involve changes to job requirements. Managers also identified related issues such as work pressures and time constraints as affecting worker health. Significantly, personal lifestyle issues, such as cancer and stress, were mentioned by only one manager, perhaps indicating the relative low impact that addressing these issues in the workplace is perceived to have.

While it is acknowledged that the survey was only of managers and was not a complete sample, it does illustrate the Queensland Health comprehensive approach to needs assessment and formative evaluation. It moves closer to the broad-based, participatory ecological model described earlier in this paper.

The Queensland model is particularly attractive because it makes intuitive sense. Programs that address needs that are felt or expressed rather than normative (that is, reflecting statistical or general trends in a population) will probably be more attractive to potential participants. Therefore, they are more likely to be well supported. Workers (and participants) are given ownership of the program and interest is more likely to be sustained. While risk factor issues may be of lower priority initially, the long-term nature of the workplace health promotion program will ensure that they will eventually be addressed. Creating social change in the short term can lead to better health in the long term (Robertson & Minkler 1994; Wallack & Dorfman 1996). When the higher priority items (that is, those that are highly relevant and meaningful to employee and employer) have

been addressed, workers and management will be more enthusiastic about dealing with issues that directly affect their personal health, such as smoking or weight loss. The public health agenda is often a secondary or even tertiary consideration in the initial stages of program goal-setting and employee ownership development.

Strengthening current workplace health promotion efforts

To a large extent, it appears that workplace health promotion programs in Australia are in a second or third generation mode, preoccupied with health risk factor issues, usually in isolation from environmental or organisational supports. In general, programs as described are developed and implemented without consulting workers or participants about the proposed directions or processes of delivery. They also lack a theoretical base, and systematic procedures or measures for either impact or outcome evaluation so that the extent to which the original aims of the program have been attained or whether the program is cost-effective cannot be readily determined.

What might it take to make these programs more robust and efficient? Fortunately, a number of programs appear to need very little to get them into shape for an impact evaluation. Most programs have management support, which is encouraging. The existence of workplace health and safety committees and officers in the majority of Australian worksites has the potential for overcoming some hurdles in redirecting resources away from individual change towards issues and problems of company-wide concerns and, thereby, greater effectiveness.

In order to be effective, health promotion practitioners focusing on programmatic lifestyle changes need to take social support, the structure of work, and exposure to hazardous working conditions into account (at a minimum). Occupational health and safety workers use a hierarchy of interventions for health protection, beginning with eliminating the hazard, followed by control of transmission of hazardous substances and, finally, control of the worker behaviour through regulatory measures. Many programs focus on the latter, focusing on changing worker behaviour, because it is the least expensive way of complying with regulations (Baker, Israel & Schurman 1995).

Staging richer, long-term health programs in workplaces that combine participatory ecological, environmental approaches for long-lasting health outcomes is the fourth generation of workplace programs. This vision appears potentially attainable in Australia with a public-private partnership using existing resources. The academic research community must be willing to put aside their

immediate objectives for longer term gains (Alderman 1993); the health promotion and health and safety professionals must focus on their similarities and strengths rather than their differences (Goldbeck 1984); the proactive leadership and systematic plan must come from the government. Baum and colleagues speak eloquently to the potential role of State and national government in their recent evaluation of the National Better Health Program (Baum et al. 1996). If government acts as a catalyst and focuses on structural change, with an emphasis on collaboration across sectors as well as community participation, the twenty-first century will be an exciting, productive, and healthy time for Australian workplaces.

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