

## **Session C-6: Addressing Health Promotion/Health Protection in the Worksite: Implications for Intervention Research**

Thursday, October 28, 2004

10:00AM – 11:30AM

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### ***Work organization, job stress and health promotion***

**Paul Landsbergis**

#### Typical Job Stress Research Constructs

- Work schedules
- Job characteristics
- Workplace climate

#### Changing World of Work

- Organizational changes: restructuring, downsizing, outsourcing, contracting
- External changes: economic globalization, deregulation, information technology

#### Trends

- Over the past 20 years, the hours worked per year has increased in the U.S. while the number of hours worked per year has decreased in developing countries.
- The gap between the rich and poor has increased.
- Increased rates of U.S. workers who report “working very hard,” “working very fast,” and “not having enough time.”

#### Health Effects

- Studies (U.S. and European) have shown job strain associated with increased risk of cardiovascular disease, musculoskeletal disorders, psychological disorders, sleep disorders, injuries, and sedentary behavior.

#### Interventions

- Opportunities for interventions to reduce job stress exist on numerous levels:
  - Primary prevention: social change, organizational change, job redesign
  - Secondary prevention: individual coping
  - Tertiary prevention: individual treatment, rehabilitation
- Examples
  - Swedish government office workers: Intervention groups showed decreased lipid levels following an educational program, relaxation training and developing action plans.
  - Dutch manufacturing employees: Intervention groups showed decreased cardiovascular risk, improved ergonomics, greater perceived job control,

reduced job demands and reduced absenteeism following individual and organizational level intervention.

### Research Agenda

- Utilization of Occupational and Environmental Medicine Clinics
- Occupational cardiology
- Impact of lack of Workers Compensation for occupational disease on access to care and recovery from illness
- Employer-initiated systems of work organization
- Legislative, regulatory, collective bargaining approaches
- Integrated work stressor reduction-stress management programs

### ***Manager beliefs regarding worksite health promotion and protection: Findings from Working Healthy Project 2***

**Laura Linnan**

### Previous Research

- Managers are integral to the successful adoption and implementation of worksite health promotion programs; however, little is known about manager's knowledge, attitudes and beliefs about health promotion and protection at work.

### Working Healthy Project 2: Management Survey

- Goals:
  - Assess manager beliefs, attitudes and perceptions regarding health promotion/health protection programs offered at work.
  - Use results to assist with planning and implementation of worksite-based interventions
- Sample: 24 manufacturing worksites, 65.9% response rate (1133/1719) categorized by manager type (senior manager, middle manager, line supervisor)
- Results:

#### AMONG ALL MANAGERS COMBINED:

- 75% health promotion at work is important
- 98% strongly agreed that employers had a responsibility to protect employees from hazards, while only 41% strongly agreed that employers had a responsibility to promote healthy lifestyles
- combining all manager responses on the perceived benefits of offering health promotion programs: 80% strongly believed that HPPs would improve employee health, 68% believed they would improve health care costs, 67% employee morale
- among all managers, respondents strongly believed in the following perceived barriers to offering health promotion programs: 56% employees have no time to participate, 54% strongly believed that staff time was a barrier, and 41% strongly believed that production costs were a barrier to offering HPPs at work

#### DIFFERENCES AMONG DIFFERENT LEVELS OF MANAGERS

- Senior managers and middle managers significantly more likely than line supervisors to believe employers have a responsibility to promote healthy lifestyle;
- No significant differences by manager type on their beliefs about the employer responsibility for workplace accidents
- No significant difference by manager type re: beliefs about the importance of offering HPPs..and no differences in beliefs about employer responsibility for protecting employees for occupational hazards
- No significant differences by manager type in most perceived benefits of offering health promotion programs except senior managers were significantly more likely to believe that health care costs would be improved (than were middle managers or line supervisors)
- Re: beliefs about barriers to offering HPPs: middle managers were more likely to believe that staff time, cost, lack of management support and production conflicts were a barrier to offering HPPs; senior managers were less likely to believe that space was a barrier

#### DIFFERENCES BY MANAGERS WITH HPP EXPERIENCE (VS. THOSE WITH NO EXPERIENCE)

- Managers with previous HPP experience were less likely to believe that health information or social support (alone) were effective strategies for promoting employee health at work; and they were less likely to perceive staff time, cost or management interest as barriers to offering these programs.
- Strategies for working with managers – consider social marketing to manager type and level of experience
  - Senior managers: focus on benefits of controlling health care costs; productivity; talk about potential barriers
  - Middle managers: address perceived barriers of costs, production conflicts, space, staff time/experience
  - Line supervisors: address need to advocate for employees with middle and senior managers; address importance of relationship between line supervisor and employee
  - Experienced managers: champions for health promotion, health protection and disease prevention who realize that information alone (or social support alone) is not enough to effectively promote health – need multi-level interventions

#### ***The Wellworks-2 integrated OHS and workplace health promotion trial: OHS effectiveness evaluation results***

**Anthony LaMontagne**

#### Principles

- Workplace health promotion should target occupational safety and health risks to complement its traditional focus on individual health behaviors.

- Workplace health promotion should combine person-directed and organizational/environment-directed strategies.
- Intervention development and implementation should involve participation from employees at all levels.

### Wellworks-2

- Hypotheses:
  - Workers in integrated intervention condition will be more likely to make smoking and nutritional behavior changes in occupational safety and health risks addressed simultaneously in comparison to ‘standard care’ workplace health promotion.
  - Integrated intervention sites will show greater improvements in occupational safety and health programs and exposure prevention in comparison to non-occupational safety and health intervention controls.
- Intervention: 16-months with person-directed strategies (printed materials, educational sessions, self-assessments) and organizational/environmental directed strategies (consultation and technical assistance).
- Results:
  - Health behaviors: Integration of occupational health and safety and workplace health promotion resulted in 2-fold higher smoking quit rates in hourly workers in health promotion plus health protection groups, compared to ‘standard care’ health promotion intervention; No changes found in fruit and vegetable consumption.
  - Occupational safety and health management systems: Consistently greater improvements in intervention versus control group in all four ‘essential elements’ and overall program score, with ‘Management .Commitment & Employee Participation’ essential element significantly great in intervention versus controls.
  - Exposure Prevention Ratings: Improvement patterns *within* the intervention condition consistent with emphasis on upstream or source-focused intervention; Improvement patterns *within* controls consistent with prevalent practice (more downstream). Mixed model analysis of variance showed two-fold greater improvement in EP Ratings in intervention versus controls (0.46 versus 0.20 points on 6-point scale), but not statistically significant ( $p = 0.19$ )
- Conclusions:
  - Intervention in large manufacturing sites can begin to change occupational safety and health management but more sustained or intense management-focused intervention needed to significantly improve exposure prevention efforts.
  - Intervening on occupational safety and health management systems and exposures prevention facilitates improvement in health behaviors among blue collar workers. Recommendation: to greatly increase the effectiveness of workplace health promotion smoking cessation programs, conduct substantive and visible organizational/environmental occupational safety and health intervention in parallel.

## References:

LaMontagne AD, Stoddard AM, Youngstrom RA, Lewiton M, and Sorensen G (in review): Improving the prevention and control of hazardous substance exposures: a randomized controlled trial in manufacturing worksites. *American J Industrial Medicine*.

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LaMontagne AD, Youngstrom R, Lewiton M, Stoddard AM, McLellan D, Wallace L, Barbeau E, and Sorensen G (2004): Assessing and intervening on OSH programs: effectiveness evaluation of the Wellworks-2 intervention in 15 manufacturing worksites. *Occupational & Environmental Medicine* 61:651-660.

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