AN INTEGRATED MODEL OF OCCUPATIONAL ASSISTANCE

Rick Csiernik

The workplace is a salient venue through which to address personal difficulties and to assist family functioning directly. Intervention in the workplace also assists the community by reducing the number and severity of problems experienced by families. Yet, what is the responsibility of social work to the workplace? Since the beginning of the industrial revolution in North America, an antagonistic relationship has existed between labour and management, with social workers acting as intermediaries. Responsibilities of occupational social workers have ranged from ensuring that young single women were living in virtuous Christian environments, to bringing widespread use of critical incident stress debriefing to Employee Assistance Programs (EAPs) in the 1980s. These initiatives by social workers and related counselling professionals supplanted self-helpers in the workplace who had become active through groups such as Alcoholics Anonymous as early as the 1940s (Brandes, 1976; McGilly, 1985; Popple, 1981; Thomlison, 1983).

Throughout the evolution of workplace-based social work, the profession has retained the aura of being an agent of social control (Corned, 1984; Csiernik, 1996; Pace, 1990; Roman, 1980). However, it is hypothesized that by applying an ecological orientation to occupational assistance, and thereby attempting to create both worker and workplace wellness, social workers can take the initiative in moving occupational social work from being a mechanism of social control to one of active social change in order to enhance workplace wellness. This process would entail integrating core practices, crisis and short term individual and family counselling, with theories based on mutual aid initiatives and organizational change. The profession is suited for this role as social workers are the group most comfortable in working with both of occupational assistance's target groups, namely individuals and organizations. Likewise, because of its ecological orientation, social work is the one profession that is best suited to understanding the reciprocal relationships that arise in workplace environments. Further, social workers are adept at examining the interface between the various subsystems and taking into consideration both lifestyle issues and the social organization of the workplace.

THE CORE PRACTICE OF OCCUPATIONAL ASSISTANCE

Occupational assistance programming provides a means to improve job performance and worker well-being through assistance to employees and their families. Problems might involve alcoholism, substance abuse and other related health, social and behavioural problems. While inaugural programs had mandatory participation components, this has slowly changed. Contemporary Employee Assistance Programs typically rely upon supervisory, union, peer or medical referral with an increasing emphasis on voluntary utilization. Programs attempt to resolve employee concerns by directing workers to appropriate treatment or self-help groups (Dickman et al., 1988; EAPA, 1990). EAPs are implemented by the public and private sectors because a single employee can threaten the safety, reduce the productivity, and affect the economic interests of all. Employers have increasingly come to believe that worksite-based intervention and counselling can minimize these potential risks (Keohane & Newman, 1984; Ontario Ministry of Health, 1993).

During the 1980s the disciplines of social work, psychology, psychiatry and medicine all directed increased energy into workplace issues to meet the demand for formali7ed occupational assistance progranuning (Favorini & Spitzer, 1993; McLean, 1993). Unfortunately, this "rush to treatment" mentality has led to attention being given primarily to professional intervention, at the expense of health promotion and risk-prevention programming (Bickerton, 1990). The task then is to refocus initiatives toward both the person and the work environment during the assessment, planning and problem-solving processes.

HENENVING MUTUAL AID/SELF-HELP

Self-help groups acted as a primary support in the development of the occupational assistance movement (Csiernik, 1993). The origins of self-help are rooted within kith and kin relations and the need for, and creation of, group coping mechanisms to better the chances of survival. The industrial revolution brought with it dramatic changes in the structures of business, industry, and the state leading to the depersonalization and dehumanization of social life, increased feelings of alienation and powerlessness and the decline of community (Robinson & Henry, 1977). With the changing pattern of industrialization and family and social relations, new forms of mutual aid emerged to replace weakened social connections, especially in North America. Self-help groups began to respond to the depersonalization in society and became an integral aspect of cooperation between people (Katz & Bender, 1976).

As self-help evolved, during the 20th century, from having primarily a treatment and normalization orientation to trying to influence social change, it has played a central role in transforming the focus of the occupational assistance movement from tertiary to primary prevention. The growth of mutual aid/self-help outside the workplace occurred as a

response to the pervasiveness of technology, the unavailability and increasing unresponsiveness of human services, the complexity and size of institutions and the increasingly dehumanizing and depersonalizing aspects of the work-place (Matzat, 1989).

Mutual aid has also been partially responsible for beginning to shift scrutiny from individual to organizational stressors that cause ill-health and employee problems. Self-help has the capacity to assist and direct the evolution of occupational assistance programs to their next plane of maturation. It has an active role in preventing occupational assistance from slipping back to being predominantly a mechanism of social control through activities such as mandatory drug testing and managed care (Ansel & Yandrick, 1993; EAPA, 1992). Self-help groups can also be one mechanism for enhancing workplace participation and democracy. They can assist in modifying the emphasis of occupational assistance from being solely worker-centred to focusing more upon problems created by the design of the workplace and the nature of the work itself. Those influenced by mutual aid principles have the capability to act as catalysts for positive social change in the workplace and for enhancing employee wellness, but whether that capacity will be utilized is still in question.

... SOCIAL WORKERS ARE THE GROUP MOST COMFORTABLE IN WORKING WITH BOTH OF OCCUPATIONAL ASSISTANCE'S TARGET GROUPS, NAMELY INDIVIDUALS AND ORGANIZATIONS.

WORKPLACE PARTICIPATION

Formal employee participation in workplace decision-making is not a new concept as it has existed in a variety of forms for decades.

Different organizational methods of enhancing employee participation in the workplace have emerged throughout the world. Some of the better known initiatives include: Total Quality Management (Deming 1938; 1950; Ishikawa, 1985; Juran & Gryna, Jr., 1970), Quality Control Circles, or simply QC Circles (Crocker, Chiu & Chamey, 1984; Dewar, 1980), Theory Z of Management (Ouchi, 1981), Quality of Working Life (QWL) enterprises (Ferman, 1985; Giordano, 1992; Ingle & Ingle, 1983; Kolodny & van Beinum, 1983) and the broader industrial democracy movement (Davies, 1979; Emery & Thorsrud, 1969; Obradoyic & Dunn, 1978; Prasnikar, 1991).

While the introduction of worker participation schemes implies and requires a change in the distribution of power within a work setting, the primary, if not exclusive, theme of these exercises has been on production issues. The focus of the majority of participation plans has tended to highlight more rudimentary changes such as profit-sharing schemes, job enlargement, job rotation, and improving communication pathways, all of which involve

minimal transfers of power between labourers and management. To date, participation plans that could change the nature of control over the actual decision-making processes and the work environment itself have been much less evident.

As occurred during the "Gomperism" era of the American labour movement, labour groups have 'primarily focused upon economic factors. (Gomperism, of course, is named after Samuel Gompers, president of the American Federation of Labour during the 1930s. The exclusive mandate under Gompers was the acquisition of enhanced financial benefits and working conditions; the "pay packet and lunch pail" philosophy, which superseded the broader Canadian labour goals of social justice and equality. Gomperism greatly negated labour's role in advocating for and providing occupational assistance to its membership (Kerans et al., 1988; Robin, 1968.)

The Gompers philosophy led many "enlightened" European Works' Councils to target their 'efforts toward enhancing the pay packet. While this is a valid use of their energies, it has come at the cost of further enhancing the physical, psychological and social health needs of the workforce. Increases in democratic initiatives do not necessarily eliminate workplace inequity, let alone societal inequalities. Organizational methods of worker participation are still primarily examples of representative, rather than direct democratic, endeavours. Individual employees in most systems make little contribution beyond their immediate work environments, with minimal attention paid to anything beyond their basic needs. Worker participation has been espoused as the next great step forward, but generally remains limited in its scope. The social and psychological elements of work have had some attention focused upon them, but the social and psychological needs of workers still remain largely neglected. Worker participation needs to be expanded so that it examines the social elements of work and the entirety of an employee's life. This is a vacuum which the "Integrated Model of Occupational Assistance" attempts to address.

THE INTEGRATED MODEL OF OCCUPATIONAL ASSISTANCE

The new "Integrated Model of Occupational Assistance" draws upon the existing practice models of occupational assistance while placing a renewed importance on self-help. Worker participation is incorporated within an ecological framework to create an organizational plane to complement the historical emphasis upon the individual worker. The proposed model consists of two axes (Figure 1). The first axis focuses on the target. Individual wellness is balanced with organizational wellness, taking into account the needs of the range of stakeholders that exist in the immediate and extended workplace environment. The second axis is the method of intervention. It is divided into the categories of professional intervention and mutual aid/self-help. By combining both forms of assistance in the workplace, a greater range of access points and prevention alternatives are available for employees and their families (Figure 2).

Figure 1: An Integrated Model of Occupational Assistance

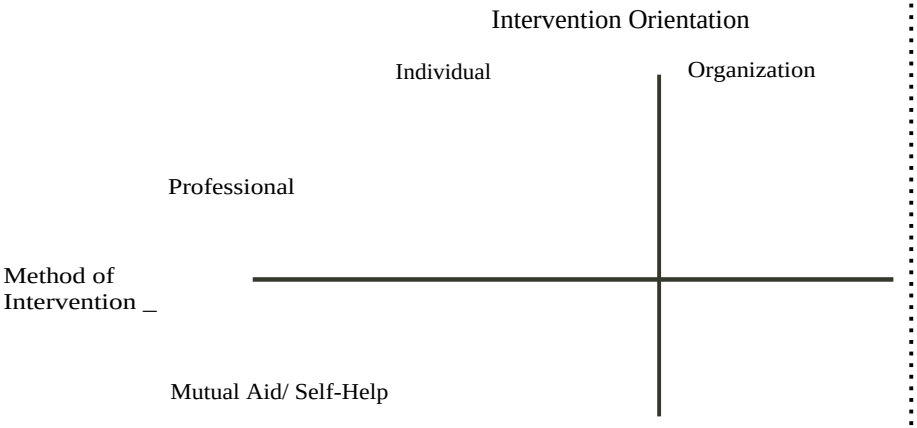

Figure 2: An Integrated Model of Occupational Assistance — Individual Quadrants

i) Professional — Individual

a) provide one-to-one counselling by formally trained counselling professionals (social workers, or related helping professionals) off site or on-site, depending upon organizational needs and preferences;

b) retain as the primary focus crisis intervention, brief solution-focused counselling and case management;

c) promote and extend assistance to family members so that the service becomes Employee and Family Assistance Programming;

d) provide proactive educational seminars and workshops to the workforce by social workers and other health and counselling professionals;

e) develop and promote activities that enhance wellness such as voluntary health screenings conducted by occupational health staff and voluntary• worksite-based fitness appraisals and programs;

o promote self-care activities for physical, psychological, intellectual, social and spiritual wellness;

g) respond to critical incidents with specially trained professional debriefers;

h) provide 24-hour crisis intervention and consultation accessible through a toll-free number; and,

i) incorporate a managed care component so that employees absent from work for an extended period of time receive contact from the workplace to inquire if any additional, non-financial, assistance is required.

ii) Mutual Aid/Self-Help — Individual

a) utilize peers (union counsellors, referral agents, peer resource teams and/or peer advisors) to help employees to access appropriate forms of assistance and to provide on-going social support;

b) promote use of community-based self-help groups as an adjunct to individual assistance and to further enhance social support;

c) develop on-site self-help groups that deal with traditional problem areas and with wellness-related topics if the employee population is large enough or distinct worksite-specific problems arise and requests emerge; and,

d) respond to any critical incident situation with trained peer debriefers who understand the culture of the organization and the nature of the routine stresses as well as the potential range of stress reactions produced by a critical incident

iii) Professional — Organizational

a) provide ongoing worksite wide health promotion, safety and critical incident awareness and related wellness education programs;

b) provide consultation and training for ongoing organizational intervention, development and change including team-building initiatives;

c) enhance the health of work units through the provision of technical assistance including mediation or conflict-resolution services on both individual and organizational issues; and,

d) collaborate with individuals and groups external to the work-site in advocating for policy initiatives to increase the wellness and productivity of the workforce, to enhance the healthy functioning of workplaces, and to increase the profile of occupational assistance.

iv) Mutual Aid/Self-Help — Organizational

a) engage in team-building exercises and activities to acquaint the workforce with expectations, rights and responsibilities of being a team or group member;

b) develop mutual aid group(s) open to all employees that examine stressors both internal and external to the workplace which affect individual and group wellness;

c) develop work unit support groups to decrease work-related stress and to act as problem-solving and/or peer social support groups.

1. Professional—Individual Quadrant

The first quadrant of the "Integrated Model Of Occupational Assistance" is the individual—professional intersection. It consists of activities that are provided by the majority of mainstream Employee Assistance Programs and workplace health promotion programs. These activities include ongoing health promotion programming together with an increased emphasis on the provision of counselling and preventative services to family members of employees. This inclusion is an acknowledgment of the fact that workplace stresses are brought home, and that home stresses brought to work by employees further intensify organizational stresses. This interrelationship manifests itself at the worksite through

decreased performance and productivity. Highlighting the importance of the family within occupational assistance programming can be done in a variety of ways. Simple promotion activities such as sending information about the program to family members, or sponsoring seminars and activities for families, are standard mechanisms. Another option is actually changing the name of this component of occupational assistance. Organizations such as the Canadian Pacific Rail, the City of Saskatoon, MacMillan Bloedel and the Canadian Graphic Communications Workers Alliance have already changed the name of their EAPs to "Employee and Family Assistance Programs" (EFAPs).

2. Mutual Aid/Self-Help — Individual Quadrant

Mutual aid initiatives have a greater potential to span the gap between wellness and traditional one-to-one counselling than do professional, individually-focused counselling services. It has been stated by various EAP stakeholder groups that peer social support could be the best potential bridge between health promotion, prevention programming and Employee Assistance Programming (Csiernik, 1995).

> A SINGLE EMPLOYEE CAN THREATEN THE SAFETY, REDUCE THE PRODUCTIVITY, AND AFFECT THE ECONOMIC INTERESTS OF ALL

While the issue of confidentiality will always arise when discussing EAPs, this has not been a hindrance to many existing programs with very active self-help components (Bisogna, 1992; Eisman, 1991; Grant, 1992; Windsor et al., 1988). Self-help can be introduced through a variety of means. If there is uncertainty on how a mutual aid initiative will be received by a workforce, it would be judicious to begin with a physical health related or psycho-educational focused group. Treatment oriented groups could be considered if a specific request occurs from members of the workforce, or, of course, if a group arises spontaneously. For many organizations, on-site mutual aid/self-help groups will be much easier to support if they are focused upon wellness themes or upon issues of daily living, such as child care or dealing with the demands of aging parents.

3. Professional — Organizational Quadrant

The third quadrant now moves occupational social work into a new realm. It offers increased possibilities for organization-wide primary prevention and more proactive initiatives including acting as mediators between individuals and between work units in an alternative dispute resolution process. Activities within this quadrant recognize that workplace health does not simply relate to employees' engaging in healthy behaviours but also includes making the work environment healthier. According to Wenzel (1994), counsellors either internal or external to the workplace can act as facilitators for these types

of processes. This would enhance the probability that both individual risk factors and broader environmental and structural issues would be integrated into program undertakings.

This quadrant also introduces the idea that occupational assistance can and should enter into the broader context of policy change and advocacy beyond the workplace. There is a place for workplace wellness to be discussed and debated at societal and political levels. While the immediate impact of this aspect of the model may be minimal, in the long term it could be the most important dimension in creating not only well workplaces but also healthier communities. Advocacy efforts may come from researchers or professional associations as well as from groups with vested interests in the workplace. Examples of these are Chambers of Commerce, the Canadian Labour Congress and government-mandated health and safety associations such as the Industrial Accident Prevention Association (LAPA) along with professional associations such as the Canadian Association of Social Workers.

4. Mutual Aid/Self-Help — Organizational Quadrant

SELF-HELP GROUPS BEGAN TO RESPOND TO THE DEPERSONALIZATION IN SOCIETY ...

The fourth segment of the model is the organization—mutual aid/self-help dimension. Programming arising from this quadrant reflects the need for labour and management to work together to define, identify, and diagnose organizationally-created problems. The two groups need to work together to find and implement solutions that can counter organizationally-produced reductions in both productivity and wellness. There are two primary options for these types of support groups; either broad organization-wide groups open to all employees, or groups organized along departmental or work unit lines. The organizational culture will be the predominant factor in determining whether either or both types of groups emerge. Training and education on what teams are, how to use them,. and their strengths and limits would be essential steps in properly developing the goals identified in this quadrant. Beginning the process by providing training would be preferable to simply telling employees that they were being placed in teams and expecting them to know not only how to function in this new manner but also how to function more efficiently. The educatiim process that precedes this dimension could be conducted by peers or by professionals internal or external to the workplace as previously discussed in the professional/organizational quadrant.

CONCLUSION

The "Integrated Model of Occupational Assistance" is premised upon the idea that to

achieve wellness, the workplace needs to address both production and personal issues. The various ideas all hinge, to varying degrees, on the assumption that participatory democracy is a valuable commodity toward which all workplaces should be evolving. Locke, Schweiger & Latham (1984) claimed that participation is not an ethical imperative but simply a Managerial technique that is appropriate only in certain situations. However, in the social work field, participation is not only deemed ethically correct, it is a professional mandate. Social workers are instructed to place great value on self-determination and to regard it as one of the core foundations for all human interaction and development. Yet within the workplace there appears to be little interest in this concept and slight effort by social workers to promote the philosophy.

The delivery of the "Integrated Model Of Occupational Assistance" is intended to be flexible with a range of implementation options. An organization may begin by developing a physical health promotion component before adding other health promotion or treatment elements. An organization that has a traditional Employee Assistance Program in place could easily incorporate the mutual aid/self-help dimension. These options allow for mutual aid/self-help or organizational intervention dimensions to be added to mature occupational assistance programs, or even to be a foundation for new programming. Implementation will be dependent upon the nature of the workplace and workforce. Presentation of the model to workplaces may be adequately vague and generic to allow each organization to take ownership of the program's evolution and adapt the different elements to its own needs.

THERE IS A PLACE FOR WORKPLACE WELLNESS TO BE DISCUSSED AND DEBATED AT SOCIETAL AND POLITICAL LEVELS.

The intent of this second generation model of occupational assistance is to move away from the notion of intervention as social control. Its goal is not to isolate but rather to integrate physical, social and organizational aspects of the workplace with behavioural and lifestyle aspects of work. It is structured in a manner that, when fully implemented, should improve the overall functioning of the workplace and health of employees and their families.

Social workers involved in occupational assistance, because of their knowledge, skills, entry points and positioning in organizations, have the opportunity to improve the quality of life for workers by becoming active change agents and by encouraging participatory democratic action. However, occupational assistance is but a small subsystem of any organization. Programs and their champions cannot control all acts of employers and there are inherent limits on what can be realistically accomplished. Thus, to change workplace wellness also

requires changes in our cultural norms, public and social policy, labour legislation and existing institutions. Again the profession of social work can provide leadership. Social workers have the theoretical knowledge and skill base to recognize and act upon these diverse factors. Real world limits exist on the pace of change that is practical, but that does not mean that positive change is not possible; only that it may be slow to evolve.

ACKNOWLEDGMENT

The author would like to thank Deborah Edwards for her assistance in completion of this article.

REFERENCES

Ansel, D. & Yandrick, R. (1993). Building an Integrated EAP-Managed Behavioural Health Care Program: Tying Up Loose Ends, *EAPA Exchange,* 23(3), 33-35.

Bickerton, It (1990). Employee Assistance: A History in Progress, *LAP Digest, 11(1),* 34- 42; 82-84.

Bisogna, G. (1992). Surviving Recession, *EV Digest* 12(3), 12; 40-41.

Brandes, S. (1976). *American Welfare Capitalism, 1880-1940.* Chicago: University of Chicago Press.

Cornell, W. (1984). History, Philosophy and Objectives of an Employee Recovery Program. *In W.* Albert, B. Boyle & C. Ponee *(Eds.), EAP Orientation: Volume II - Important Concepts.* Toronto: Addiction Research Foundation.

Crocker, 0., Chiu, J.S.L. & Charney, C. (1984). *Quality Circles: A Guide To Participation and Productivity.* Toronto: Methuen.

Csiernik, R (1993). The Role of Mutual Aid/Self-Help in North American Occupational Assistance: Past, Present and Future, *Employee Assistance Quarterly,* 9(2), 21-45.

Csiernik, It (1995). *An Integrated Model of Occupational Assistance,* unpublished dissertation, University of Toronto.

Csiernik, R. (1996). Occupational Social Work From Social Control to Social Assistance?, *The Social Worker,* 64(3), 67-74.

Davies, R. (1979). Industrial Democracy in International Perspective. *In* G. Sanderson & F. Staplehurst (Eds.), *Industrial Democracy Today.* Toronto: McGraw-Hill Ryerson.

Deming, W. E. (1938). *Statistical Adjustment of Data.* New York Dover Publications, Inc..

Deming, W. E. (1950). *Some Theory of Sampling.* New York John Wiley and Sons.

Dewar, D. (1980). *The Quality Circle Guide to Participation Management.* Englewood "Cliffs, N.J.: Prentice-Hall Inc..

Dickman, E, Challenger, B., Emener, W. & Hutchison, W. (1988). *Employee Assistance Programs:A Basic Text.* Springfield: Charles C. Thomas, Publisher.

EAPA. (1990). *Introduction to the Employee Assistance Professionals Association.* Arlington: EVA.

EAPA. (1992). Outcome Studies, *EAPA Exchange,* 22(10), 48-49.

Eisman, C. (1991). Is Corporate America About to Embrace Self-Help Groups? *Self-Helper,* 6(2), 1-5.

Emery, F.E. & Thorsrud, E. (1969). *Form and Content in Industrial Democracy.* London: Tavistock.

Favorini, A. & Spitzer, K. (1993). The Emergence of External Employee Assistance Programs: Report of a Survey and Identification of Trends, *Journal of Employee Assistance Research,* 2(1), 23-35.

Ferman, L. (1985). Quality of Work Life Programs and EAPs: The Reorganization of the Workplace. *In* S. Klarreich, J. Francek & C. Moore (Eds.), *The Human Resource Management Handbook.* Toronto: Praeger Press.

Giordano, L (1992). *Beyond Taylorism: Computerization and the New Industrial Relations.* New York St. Martin's Press.

Grant, G. (1992). Workplace Peer Power, *EAPA Exchange,* 22(8), 22-25.

Ingle, S. & Ingle, *N. (1983). Quality Circles in Service Industries.* Englewood Cliffs: Prentice-Hall, Inc.

Ishikawa, K. (1985). *What Is Total Quality Control? TheJapanese Way.* Englewood Cliffs, New Jersey: Prentice-Hall Inc..

Juran, J.M. & Gryna, F. Jr. (1970). *Quality Planning and Analysis.* Toronto: McGraw-Hill Book Company.

Katz, A. & Bender, E. (1976). *The Strength In Us.* New York New Viewpoints.

Keohane, R. & Newman, C. (1984). A Family Agency's Approach to Providing Employee Assistance Programs in Industry. *National Association of Social Workers.* December, 295-297.

Kerans, P., Dorver, G. & Williams, D. (1988). *Welfare and Worker Participation.* New York: St. Martin's Press.

Kolodny, H. & van Beinum, H. (1983). *The Quality of Working Life and the 1980s.* New York Praeger.

Locke, E., Schweiger, D. & Latham, G. (1984). Participation in Decision Making: When Should It Be Used? *Organizational Dynamics,* 14(3), 65-79.

Matzat, J. (1989). Some Remarks on West Germany's Health and Welfare System and the Position of Self-Help. *In* S. Humble & J. Unell (Eds.), *Self Help In Health and Social Welfare.* New York Routledge.

McGilly, E (1985). American Historical Antecedents To Industrial Social Work, *Social Work Papers oftbe School of Social Work, University of Southern California,* 19, 1-13.

McLean, A. (1993). Psychiatry and the Organization: A Brief History of Occupational Psychiatry. *In* J. Kahn (Ed.), *Mental Health in the Workplace.* New York Van Nostrand Reinhold.

Obradovic, J. & Dunn, W. (1978). *Worker's Self-Management and Organizational Power in Yugoslavia.* Pittsburgh: University of Pittsburgh.

Ontario Ministry of Health. (1993). *Partners in Action: Ontario Substance Abuse Strategy,* Toronto.

Ouchi, W. (1981). *Theory Z,* New York Avon Publishers.

Pace, E. (1990). Peer Employee Assistance Programs for Nurses, *Perspectives on Addictions Nursing,* 1(4), 3-7.

Popple, P. (1981). Social Work Practice in Business and Industry, 1875-1930, *Social Service Review,* 55, 257-269.

Prasnikar, J. (1991). *Workers' Participation and Self-Management in Developing Countries.* San Francisco: Westview Press.

Robin, M. (1968). *Radical Politics and Canadian Labour.* Kingston: Industrial Relations Centre.

Robinson, D. & Henry, S. (1977). *Self-Help and Health.* Bungay: Chaucer Press.

Roman, P. (1980). Medicalization and Social Control in the Workplace: Prospects for the 1980s, *Journal ofApplied Behavioural Science,* 16(3), 407-422.

Stephens, E. (1980). *The Politics of Workers' Participation.* Toronto: Academic Press.

Thomlison, R. (1983). Industrial Social Work Perspectives and Issues. In *Perspectives on Industrial Social Work,* Toronto: Family Service Canada.

Wenzel, E. (1994). Conceptual Issues In Worksite Health Promotion. *In* C. Chu & It Simpson (Eds.), *Ecological Public Health: From Vision to Practice.* Toronto: ParticipACTION.

Windsor, R., Lowe, J. & Bartlett, E. (1988). The Effectiveness of a Worksite Self-Help Smoking Cessation Program: A Randomized *Trial,journal of BehaviouralMedicine, 11(4),* 407-421.

RICK CSIERNIK IS AN ASSISTANT PROFESSOR AT ma SCHOOL OF SOCIAL WORK, KING'S COLLEGE, UNIVERSTTY OF WESTERN ONTARIO, LONDON, CANADA. HIS SPECLAL INTERESTS INCLUDE EMPLOYMENT ASSISTANCE PROGRAMS, AND HE CAN BE REACHED AT (519) 433-3491 Ea 377, OR BY E-MAIL AT CSIERNIK@ MCMASTER.CA