

A B S T R A C T

This paper examines factors that facilitate or impede the implementation of heart health activities in Ontario public health departments using survey (n=262) and depth interview (n=56) data from Canadian Heart Health Initiative-Ontario Project (CHHIOP). The data were consistent in revealing factors related to leadership, staffing, resources, internal organization, and characteristics of the surrounding community as the primary facilitators or barriers. Diversity within these common themes reflected variation due to external factors in the communities served by the health unit and factors internal to the health unit itself. The findings advance knowledge of the factors that influence predisposition and capacity to undertake community-based heart health promotion in public health departments, and they underscore the challenge of achieving integrated programs among partner agencies.

A B R É G É

Cet article examine les facteurs qui facilitent ou entravent la mise en place d'activités liées à la santé du coeur dans les services ontariens de santé publique. Dans le cadre de l'Initiative canadienne de santé du coeur - Projet ontarien, les recherches utilisent les données d'une enquête (n=262) et des entretiens détaillés (n=56). L'analyse a fait ressortir des thèmes qui ont identifié comme les principaux facilitateurs ou obstacles les facteurs liés aux domaines suivants : le leadership, l'affectation de personnel, les ressources, l'organisation interne et les caractéristiques de la communauté environnante. La diversité dans ces thèmes communs reflète les variations causées par des facteurs externes présents dans les communautés servies par l'unité de santé mais aussi par des facteurs internes au sein de l'unité de santé elle-même. Les résultats font progresser les connaissances acquises sur les facteurs qui influencent la prédisposition et la capacité à entreprendre, à l'échelle communautaire, la promotion de la santé du coeur dans les services de santé publique. Ils soulignent également le défi que représente la réalisation de programmes intégrés au sein des organismes partenaires.

Community-based Heart Health Promotion: Perceptions of Facilitators and Barriers

S. Martin Taylor, PhD,¹ Susan Elliott, PhD,¹
Kerry Robinson, MA,¹ Stuart Taylor, BSc²

Public health agencies play a central role in health promotion, but the external and internal factors which influence their effectiveness are not well understood and as a result are the focus of current research.¹⁻⁴ This paper examines factors that facilitate or impede predisposition and capacity to implement community-based heart health promotion in public health departments in Ontario. The research is part of the dissemination phase of the Canadian Heart Health Initiative⁵⁻⁸ and the data come from the Canadian Heart Health Initiative Ontario Project (CHHIOP).⁹ The conceptual framework for CHHIOP is guided by an ecological approach to health promotion,¹⁰⁻¹³ and is modelled after Orlandi et al.¹⁴ and Green and Kreuter¹⁵ whereby predisposition refers to the collective motivation to engage in (heart) health promotion and organizational capacity refers to skills and resources to implement programmes.

METHODS

CHHIOP has a two-stage longitudinal design combining quantitative and qualitative approaches.¹⁶ A Survey of Capacities, Activities and Needs (SCAN) is conducted bi-annually over four years in all 42 public health units (PHUs).¹⁷ Follow-up depth interviews in a subset of 8 units provide a more detailed examination of the factors affecting heart health promotion activities.

This paper uses data from the SCAN of

all 42 health units in December 1994 (n=262) and from depth interviews conducted in eight units with the SCAN respondents (n=56) in May/June 1995.¹⁸ In the SCAN, respondents were asked to list and rate at least three factors which in their view helped (facilitators) and three which limited (barriers) their unit's capacity to implement heart health activities. The depth interviews were guided by a topic checklist which included facilitators and barriers to implementation. The interviews were taped and transcribed verbatim for thematic analysis¹⁹ using Ethnograph.²⁰

RESULTS

The 1994 SCAN survey

Factors reported as facilitators and barriers were categorized as primarily related to either capacity or predisposition (Table I). The five (of 14) most frequently mentioned facilitators of capacity were: financial and material resources (59); staff experience, knowledge and skills (54); staff positions dedicated to heart health (35); availability of research data (35); and links with community agencies (34). The same five categories emerged when the frequency was weighted by perceived level of impact (1= slight, 2= moderate, 3= extreme). The five (of 19) most frequently mentioned barriers were: financial and material resources (150); number of staff (71); lack of staff positions dedicated to heart health (65); lack of coordination (38); and lack of research data (31). Again, the weighted frequency made no difference to the rank order. There is a striking consistency between the main factors listed as facilitators and barriers which either work for or against the implementation of heart health activities.

1. Department of Geography, McMaster University, Hamilton, ON
2. Department of Epidemiology, University of Ottawa, Ottawa, ON

Correspondence and reprint requests: Dr. Susan Elliott, School of Geography and Geology, McMaster University, Hamilton, ON, L8S 4K1, Tel: 905-525-9140 ext. 23139, Fax: 905-546-0463, E-mail: elliotts@mcmaster.ca

TABLE I
Facilitators and Barriers

Facilitators and Barriers to Predisposition					
Facilitators	# of Mentions	Weighted Score	Barriers: Lack of...	# of Mentions	Weighted Score
1. Collaboration with other agencies	65	161	1. Collaboration with other agencies	59	136
2. Support from administrative leadership (e.g., Board of Health, Medical Officer of Health)	49	132	2. Support from administrative leadership	44	110
3. Staff involvement and commitment	42	115	3. Community interest or involvement	35	80
4. Directive from Ministry of Health	19	51	4. Priority of heart health within the health unit	26	67
5. Community requests	19	47	5. Collaboration within the health unit	20	55
Facilitators and Barriers to Capacity					
Facilitators	# of Mentions	Weighted Score	Barriers: Lack of...	# of Mentions	Weighted Score
1. Financial and material resources	59	154	1. Financial and material resources	150	376
2. Staff experience, knowledge and skills	54	108	2. Number of staff	71	184
3. Staff positions dedicated to heart health	35	97	3. Staff positions dedicated to heart health	65	153
4. Availability of research data	35	93	4. Co-ordination	38	90
5. Links with community agencies	34	86	5. Research data	31	72

The five most frequently mentioned facilitators of predisposition were: collaboration with other agencies (65), support from administrative leadership (e.g., Board of Health, Medical Officer of Health) (49), staff involvement and commitment (42), directive from the Ministry of Health (19), and community requests for heart health initiatives (19). The weighted frequency, incorporating the impact rating, yielded the same results. The top five barriers, based on both the weighted and unweighted measures, were: lack of collaboration with other agencies (59), lack of support from administrative leadership (44), lack of community interest or involvement (35), lack of priority of heart health within the health unit (26), and lack of collaboration within the unit (20). These factors include some related to the reinforcement (or not) of past activities and those that might affect initial engagement in heart health promotion. As for capacity, there is striking consistency in the factors mentioned as facilitators or barriers depending upon their perceived sufficiency or deficiency.

Depth interviews

Facilitators

Five main facilitators of heart health promotion emerged from the interview transcripts: leadership, staffing, community involvement, resources, and internal organization. These five combine aspects of capacity and predisposition.

Leadership was a facilitator when it promoted innovation among staff and created training opportunities. The role of the Medical Officer of Health (MOH) as an external advocate ("the kingpin") for heart health was singled out as being particularly important. The need for two-way communication on ideas for heart health programmes was also voiced.

Staff-related facilitators centred on issues of allocation, ability and attitude. Staff allocation has generally increased, either through the formation of heart health teams or through those responsible for related programmes (e.g., tobacco) giving greater visibility to heart health. Increased heart-health training has enhanced skills and enthusiasm and has served an integrative function through promoting multi-disciplinary healthy lifestyles programmes and the adoption of a comprehensive population health perspective. Positive attitudes are reflected in a growing readiness to generate ideas and provide direction on innovative ways to design and implement activities. In addition, staff familiarity with the local community and with other heart-health-related agencies has been the catalyst for developing and strengthening community partnerships.

Community involvement was linked to the adoption of a community development approach whereby health department staff have partnered with community agencies and groups to promote a heart healthy community and an integrated network of

related agencies. The associated benefits include sharing of information through conferences, consistent messages for media campaigns, and more effective diffusion of heart health issues to target groups. Community involvement can transcend specific programmes as health departments move towards a community development approach to programme planning and design.

The allocation of sufficient financial and staff *resources* to heart health as well as access to research sources were frequently mentioned as essential facilitators. Emphasis was also placed on the more effective and efficient use of resources given diminishing budgets. Budget contraction was seen by some as catalyzing collaboration which might not have occurred otherwise. In one case, reorganization resulted in a healthy lifestyles group and a greater focus on health promotion by the nursing division. In other cases, the heart health demonstration projects accelerated the activities of health units by providing expertise and resources and by encouraging political advocacy and media strategies.

A major *internal organization* issue was the extent of the shift away from traditional divisions to more flexible multi-disciplinary programmes with integrated staff and resources. This was most evident in units where healthy lifestyles programmes had been established drawing upon staff from various areas (tobacco, nutrition, physical activity and social marketing) to share

responsibility for integrated heart health initiatives. Such changes have promoted comprehensive planning and programming, in increased collaboration, staff specialization, and improvements in community relationships.

Barriers

Six main barriers emerged from the interviews: changing roles and organizational structure; access to the community; resources; programme evaluation; leadership; and the priority of heart health.

Organizational and staffing changes can cause tension because of a lack of understanding about heart health programming and a reluctance to assign it greater priority. This was reflected in insecurity about the implications of change and possible conflicts over who was responsible for what. There were mixed views about a solution with the balance of opinion favouring a wait and see attitude recognizing that changes are ongoing and tensions may be temporary. In fact, we were encouraged to return at a later date to reassess progress towards a new equilibrium.

In the larger, and more rural, areas, distance is the primary *access* barrier, although lifestyle issues are also important (e.g., in the farming community). In metropolitan areas, the barriers are more social, cultural and linguistic due to the diversity of the groups in the community and associated differences in (heart) health beliefs and priorities. The urban lifestyle of the commuter population can be problematic when it creates a reluctance to commit scarce time at home to public health involvement.

Shrinking *resources* produced insecurity and tension due to competition between groups within health units and decreased collaboration due to turf protection. Concern was expressed that across-the-board cuts have meant that the remaining resources are spread too thinly over a wide range of programmes. Some felt that population health programmes, including heart health, were particularly vulnerable to resource reduction, because of their recent addition to the health unit mandate and because the benefits are difficult to establish in the short run given the lag time

between lifestyle change and measurable changes in heart disease rates. More specific concerns were the limited funds available to staff for conferences and the tendency to limit efforts to work with harder-to-reach groups in the community.

Programme evaluation was perceived as a barrier because of the difficulty of measuring behaviour change and linking this to population (heart) health change. For the advocate of heart health, there is the uncertainty of not knowing whether specific activities make a difference and therefore warrant continuation, and for the skeptic, the effectiveness of allocating diminishing resources is questionable, especially as financial accountability becomes the political watchword. The problem is compounded when staff lack training in evaluation methodology. A common dilemma is whether to focus on process or outcome evaluation. For outcomes, the question is whether to concentrate on shorter-term attitude and behaviour change or longer-term changes in disease incidence and prevalence.

Leadership was a barrier in the few cases where there were major changes in senior management. The result had led to a lack of direction, inconsistent priorities and an absence of a credible authority in the community. Where leadership was equivocal about the merits of non-traditional programmes, staff capacity and predisposition to support heart health were constrained, indicative of the sometimes difficult transition from traditional programming to population (including heart) health initiatives.

Heart health as a *low priority* was more commonly perceived to be a barrier in the community than within the health unit (e.g., resistance to tobacco control in tobacco-growing areas). Social, especially poverty, problems generate community priorities in which food security and adequate shelter take precedence, and skepticism is expressed about health promotion efforts which do not directly address these fundamental needs. Low priority for heart health demands considerable staff effort to inform the public of potential risks. Lifestyle issues can be seen as superfluous while more conventional public health programmes are viewed as the proper way to spend health care dollars.

CONCLUSION

This study combined survey and interview data to determine the factors perceived by public health department staff to facilitate or impede their collective predisposition and capacity to engage in heart health promotion. This focus reflects the central role of public health agencies in the delivery and dissemination of health promotion programmes¹⁻³ and the provincial mandate for Ontario public health departments to expand their involvement in heart health. Their role is changing in response to population health and community-based approaches to health promotion.^{15,21} It remains to be seen how this role will evolve in light of the changing political context of public health in Ontario (e.g., changes in leadership, the downloading of funding to municipalities, and the revision of mandatory guidelines).

The findings reveal factors perceived as facilitating or impeding heart health promotion which align quite closely with those previously identified in the health promotion literature,¹⁵ notably leadership, staffing, resources, internal organization, relationships with partner agencies, and characteristics of the local community. Diversity among the health units reflected external (e.g., economic and sociocultural characteristics) and internal (e.g., organization and leadership) factors. The former supports an ecological view of health promotion,⁴⁻⁶ central to which is the extent that heart health has been integrated in the department's overall mandate; an issue which underscores the importance of organizational dynamics in response to shifting public health priorities.¹⁻³ The value added by the interview data is their ability to reveal how and why facilitators and barriers operate in local context, for example, the somewhat counter-intuitive finding that financial constraints can operate as a catalyst for collaboration among agencies.

The results have been given to all 42 health units and to allied public health agencies together with other results drawn from both the SCAN and the interviews in the form of an implications report.²² The information has been well received and is being used to guide the planning of heart health activities, thereby linking the scien-

tific and programmatic objectives of CHHIOP and more broadly linking science and public health practice.

REFERENCES

- Parcel GS, Perry CL, Taylor WC. Beyond demonstration: Diffusion of health promotion innovations. In: Bracht N (Ed.), *Health Promotion at the Community Level*. Newbury Park, CA: Sage Publications, 1990;229-52.
- Steckler A, Goodman RM, McLeroy KR, et al. Measuring the diffusion of innovative health promotion programs. *Am J Health Prom* 1992;6(3):214-24.
- Chapman LS. The art of health promotion. *Am J Health Prom* 1997; Supplement 1(2):1-8.
- Johnson JL, Green LW, Frankish CJ, et al. A dissemination research agenda to strengthen health promotion and disease prevention. *Can J Public Health* 1996; 87(S2):S5-S10.
- Health and Welfare Canada. The Canadian Heart Health Initiative. *Health Prom* 1992;30(4) supplement: 1-20.
- Stachenko S. The Canadian Heart Health Initiative: Dissemination perspectives. *Can J Public Health* 1996;87(S2):S57-S59.
- MacDonald S, Joffres M, Stachenko S, et al. Multiple cardiovascular disease risk factors in Canadian adults. *Can Med Assoc J* 1992;146(11):2021-29.
- Riley B. Heart Health Action Program Preliminary Report. Toronto, Ontario: Ontario Public Health Association, 1995.
- Schabas R. Promoting heart health promotion. *Can J Public Health* 1996;87(S2):S54-S56.
- Bracht N (Ed.). *Health Promotion at the Community Level*. Newbury Park, CA: Sage Publications, 1990.
- Green LW, Richard L, Potvin L. Ecological foundations of health promotion. *Am J Health Prom* 1996;10:270-81.
- Richard L, Potvin L, Kishchuk N, et al. Assessment of the integration of the ecological approach in health promotion programs. *Am J Health Prom* 1996;10(4):318-28.
- Cameron R, Brown KS, Best JA. The dissemination of chronic disease prevention programs: Linking science and practice. *Can J Public Health* 1996;87(S2):S50-S53.
- Orlandi M. Health promotion technology transfer: Organizational perspectives. *Can J Public Health* 1996;87(S2):S28-S33.
- Green LW, Kreuter MW. *Health Promotion Planning: An Educational and Environmental Approach* 2nd Edn. Mountain View, CA: Mayfield, 1991.
- Baum F. Researching public health: Behind the qualitative-quantitative methodological debate. *Soc Sci Med* 1995;40(4):459-68.
- Elliott SJ, Taylor SM, Cameron R, Schabas R. Assessing public health capacity to support community-based heart health promotion. *Health Educ Res* (in press), 1996b.
- Elliott SJ, Taylor SM, Robinson K, Taylor SJ. A Qualitative Study of Heart Health Promotion in Ontario Public Health Units. Prepared for the Public Health Branch of the Ontario Ministry of Health, 1996a.
- Miles M, Huberman A. *Qualitative Data Analysis*. Beverly Hills: Sage Publications, 1994.
- Seidel J, Kjolseth R, Seymour E. *The Ethnograph: A User's Guide*. Littleton, CO: Qualis Research Associates, 1988.
- Thompson B, Kinne S. Social change theory: Applications to community health. In: Bracht N (Ed.), *Health Promotion at the Community Level*. Newbury Park, CA: Sage Publications, 1990;45-65.
- Walker R, Jolin MA, Elliott S, Taylor SM. Summary and Implications of CHHIOP's Main Findings about Heart Health Promotion in Ontario Public Health Units in 1994-95. Toronto: Ontario Ministry of Health, Public Health & Epidemiology Report Ontario, Special Issue 97-1, 1997.

Received: August 12, 1997

Accepted: April 28, 1998



Health
Canada

Santé
Canada

Medical Services
Branch

Direction générale
de services médicaux

Research Proposals

The Medical Services Branch is currently accepting research proposals contributing to the prevention and control of tuberculosis among Aboriginal peoples in Canada.

The selection process will be based on the degree of participation of Aboriginal people and of respect for culture, values, beliefs and traditions. This request for proposals is open to all groups participating in research.

Printed proposals must be received by Health Canada no later than March 1, 1999. Research projects must begin April 1, 1999 and be completed by March 31, 2000.

Candidates must submit a printed copy of their completed proposal. Proposals should include the primary investigator, and a description of the objectives, methods, budget, and timeline.

Please send proposals to

MSB Advisory Group for the Elimination of Tuberculosis
c/o Beth Kwavnick
Jeanne Mance Building
Postal locator 1920D, Tunney's Pasture
Ottawa, ON K1A 0L3

Projets de recherche

La Direction générale de services médicaux (DGSM) accepte présentement toute proposition de projet de recherche cherchant à contribuer à la prévention et à la lutte contre la tuberculose chez les peuples autochtones du Canada.

Le processus de sélection sera fondé sur le degré de participation des autochtones et le respect de leur culture, valeurs, croyances et traditions. Cette demande de propositions de projets s'adresse à tous les groupes qui s'engagent à la recherche.

Les candidats doivent soumettre une version imprimée de leur proposition finale, laquelle doit comporter le nom du chercheur principal ainsi qu'une description des objectifs, des méthodes, du budget et de l'échéancier du projet.

Santé Canada doit recevoir votre demande avant le 1^{er} mars 1999. Le projet de recherche doit débuter le 1^{er} avril 1999 pour se terminer le 31 mars 2000.

Prière de faire parvenir votre demande au

Groupe consultatif de la DGSM pour l'élimination de la tuberculose
a/s Beth Kwavnick
Immeuble Jeanne Mance
Indice d'adresse : 1920D, pré Tunney
Ottawa (Ontario) K1A 0L3