OPEN ACCESS
Freely Available Online

JOURNAL OF PREVENTIVE MEDICINE AND CARE
ISSN NO: 2474-3585

Editorial

DOI : 10.14302/issn.2474-3585.jpmc-16-1106

Fostering Partnerships between Public Health Functions within Health and Social Services Organizations: A perspective from the province of Quebec (Canada)

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Abstract

Health and social services organizations discriminate too much between core public health functions. Health protection actions, services, and programs are often separate from those concerned with disease prevention and health promotion. In this comment, we advocate for more partnerships between all public health functions within health and social services organizations. Stronger bridges between such teams, services, and programs are needed to move forward with a more encompassing and integrated perspective aiming for social justice and equity. In this comment, we support this position with some examples. We also use smoking-related issues from a regional representative population-based sample (Eastern Townships, Quebec, Canada) to demonstrate how we can better struggle against social inequalities with a perspective that simultaneously considers all functions of public health within actions, services, and programs of health and social services organizations. We conclude with avenues to foster such partnerships.

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Citation: Mélissa Généreux, Linda Pinsonneault, Mathieu Roy (2016;) Fostering Partnerships between Public Health Functions within Health and Social Services Organizations: A Perspective from the Province of Quebec (Canada). Journal Of Preventive Medicine And Care - 1(2):22-26. https://doi.org/10.14302/issn.2474-3585.jpmc-16-1106

Keywords: Health services administration; Public health; Preventive health services; Models and organizations.

Received : May 16, 2016; **Accepted** : Sep 12, 2016; **Published:** Sep 24, 2016;

Academic Editor: Siddhartha Jonnalagadda, Northwestern University

Introduction

Health and social services organizations are often structured in two separate axes which supports different public health functions. From one side, health protection teams, services, and programs are concerned with issues related to infectious diseases and environmental or occupational health. They mainly deal with biological and chemical hazards that adversely contribute to health and well-being. Because a wide range of risks can occur in a population at any given time and since these risks require prompt public health responses, health protection teams must have a significant expertise on common agents that threaten population's health. On the other side, disease prevention and health promotion teams, services, and programs advocate for strategies enabling people and communities to increase control over their health. They deal with health/well-being and health-related behaviors (particularly among vulnerable groups) rather than on external threats and more immediate hazards. Given the wide range of outcomes covered by health promotion and disease prevention actors, the expertise of such teams must be related to strategies and interventions rather than on the causative agent itself. There is absolutely no doubt that actors of both teams have contributed to the understanding of health and diseases, their unequal distribution and ways to enhance population's health. However, they insufficiently exchange together despite a huge crossbreeding potential.

As the regional Public Health Director, researchers, professors, and scientific advisor in the health and social system of the province of Quebec (Canada), we confirm that many health and social services organizations are built along a structure that segregates professionals working in different public health functions. In this commentary, we address the historical reasons behind this structural segregation. We also give examples of outcomes which would benefit from teams, services, and programs based on integrating/connecting all public health functions within such institutions. We further elaborate using a regional representative population-based sample in Eastern Townships (Québec, Canada) to demonstrate how inequalities in smoking-related issues may be better addressed with a framework including the strengths of health protection, disease prevention, and health promotion. We finally advocate for fostering partnerships between such public health functions within actions, services, and programs of health and social services organizations.

The Perfect Public Health needs a Unifying Perspective

Traditional public health has been developed with the intent of protecting people from external threats. This protection function was further reinforced given that public health obtained its full legitimacy with the discovery of the world of the infinitesimally small [1]. During the 19th and 20th centuries, we moved toward the institutionalisation of disease prevention. Vaccines, improved nutrition, and better working conditions were characteristics of this period which ended with reduced infectious diseases and a higher prevalence of chronic diseases [1]. In 1986, the Ottawa Charter introduced a new perspective dealing with lifestyles, environments, and public policies [2]. These different periods in the history of public health have promoted the coexistence of different (and sometimes competing) paradigms in one single field of knowledge. A discourse on health and well-being is now standing beside others looking for disease prevention and protection against external threats. This paradigmatic face-to-face brings the winning conditions to segregate health protections activities from others focussing on disease prevention or health promotion within health and social services organizations.

We however think that many health-related issues would benefit from an integrated vision resulting from a collaboration between actors from those three core public health functions (*i.e.* protection, prevention, promotion). The current health and social services structures in the province of Quebec (Canada) promote few opportunities towards such collaborations. The examples below however illustrate how such partnerships may help various stakeholders from different levels (*i.e.* local, regional, national, international) to better tackle issues at the top of their respective agendas.

The Lac-Megantic train derailment tragedy.

A striking example of those partnerships is in the case of emergency measures. On July 6th 2013, a train derailment occurred in the small town of Lac-

Megantic (Quebec, Canada) causing a major human and environmental disaster. This tragedy resulted in a massive oil spill, many explosions, a major conflagration, 47 deaths, and the evacuation of 2,000 inhabitants (*i.e.* one-third of the town). Interested readers will find a thorough case description and analysis of undertaken actions by involved stakeholders elsewhere[3]. What we want to highlight here is that actions following such disaster need to be broadly diversified but still integrated. An immediate response involving health protection teams and actors was mandatory to deal with short-term chemical, physical, and biological risks in an emergency response phase. However, disease prevention and health promotion actors must definitely be involved in the post-impact recovery phase dealing with long-term psychosocial consequences and rehabilitation. Issues such as resilience, mental health, social support, and community development must be addressed. Health and social services organizations need to tailor their programs and/or services in order to develop an integrated emergency preparedness framework.

Housing Conditions.

Housing conditions also affect health and its distribution across various populations[4]. This is not surprising when we learn that people spend two thirds of their life within their home environment[5]. Poor housing conditions are associated with increased odds of accidents and/or injuries[6], higher rates of respiratory symptoms[7], cardiovascular complications[8], and mental health problems[9]. Here again, health protection teams from one side and health promotion/disease prevention actors on the other side should benefit from each other to reach their ultimate goal (*i.e.* produce health/well-being or eliminate disease). As we already noted in an original study[10], interventions struggling against external threats or aspects related to physical environments (*i.e.* molds, carbon monoxide, radon, pests, and insects) must also be monitored to improve population health and not only aspects related to social and built environment.

Smoking-Related Issues.

Another example highlighting the need to foster partnerships between health promotion, disease prevention, and health protection within programs and services of health and social services organizations is related to health inequalities. Efforts to reduce such inequalities have been disproportionately directed towards health behaviors or access to care, and far less frequently towards physical, chemical or biological hazards. Smoking is usually considered by health promotion and disease prevention teams as an unhealthy lifestyle whereas health protection actors focus on second-hand smoke, a significant chemical hazard. A quick search on Pubmed showed that combining socioeconomic status and smoking keywords gave 586 hits whereas socioeconomic status and second hand smoke only gave 42 references. The scientific literature on social inequalities in health is thus underdeveloped for second hand smoke as compared to smoking-related behaviors. Yet, we observed in a representative population-based survey conducted among 2,000 adults in Eastern Townships (Quebec, Canada) that inequalities in exposure to second hand smoke was much larger than inequalities in smoking-related behaviors [10]. Even though prevalence ratios indicated a two- to fourfold increase in current and daily smoking as a function of individual- and community-level indicators of social position, the same ratios were between four and eight for second hand smoke exposure (Table 1). Quitting smoking (or choosing not to smoke) to protect others may be easier (or social pressure may be greater) than doing the same at a population level. This suggests that those who fail to make healthy choices to protect their loved ones are more likely to belong to lower social classes as compared to those able to quit. Once again, an integrated response tackling health-related behaviors and lifestyles from one side, and immediate chemical hazards on the other side, needs to be built to better struggle against smoking-related issues.

Advocating for More Partnerships

We believe it is time to advocate for fostering enhanced partnerships between health promotion, disease prevention, and health protection within health and social services organizations. By merging their assets into one single integrated approach, health and social services actors (and stakeholders) will deliver more effective interventions to improve population health and tackle inequalities. This will lead to a more equitable health and social system aiming for social justice. In the context of smoking-related issues, this means that interventions aiming to reduce second hand

Table 1: Prevalence of smoking-related issues according to individual- and community-level indicators of social position, Eastern Townships, 2011 (n = 2000 adults)

	Education level						Quintiles of material deprivation						
Smoking-related issues	ES	HS	COL	UN	Total	PR P1/P4	Q1 (-)	Q2	Q3	Q4	Q5 (+)	Total	PR P5/P1
	P1	P2	P3	P4			P1	P2	P3	P4	P5		
Current smoking	25.9	27.6	18.4	13.1	22.8	1.98	16.1	19.7	28	24.1	25.3	22.9	1.57
Daily smoking	22.2	22.5	13.2	8.6	18.1	2.65	11	17	22.6	18.8	20.2	18.1	1.84
Ever smoking	66.5	58.2	50.4	45.9	56.6	1.49	52.4	50.2	64.6	56.1	58.4	56.6	1.11
Quitting smoking	61.4	52.6	63.7	72.1	59.9	0.85	69.7	61.4	56.5	57.1	57.2	59.9	0.82
SHS (overall)	29.9	26.5	17.2	7.4	22.4	4.04	12.7	18.2	25.6	26.1	27.7	22.5	2.18
SHS (non-smokers)	10.8 *	10.5	6.3 *	3.3 *	8.3	3.27	6.3 **	5.5 *	8.9	9.7 *	11.1	8.3	1.76
SHS (families with children)	50.9	24.8	11.3 *	6.1 **	21.7	8.34	8.1 **	18.1 *	30.1 *	19.4 *	33.2	21.8	4.1

Note. * = Coefficient of variation between 16.6 and 33.3; ** = Coefficient of variation > 33.3; COL = College; ES = Elementary school; HS = High school; P1 to P5 = Proportion #1 to #5; PR = Prevalence ratio; Q1 to Q5 = Quintile #1 to #5; SHS = Second-hand smoke; UN = University.

smoke exposure in poorer (or less educated) households not only promote smoking cessation but also contribute to reduce such hazards for people involuntarily exposed (*e.g.* children). For housing conditions, this means to collaborate with health promotion and disease prevention teams to communicate key risks associated with indoor environment to more vulnerable households. For emergency responses, this means to introduce a long-term recovery perspective in major environmental or man-made disasters.

Toward this integrated framework, structural changes have to be done within health and social services organizations. Rather than building teams, services, and programs around specific public health functions, we must explore other strategies. It could be relevant to evaluate whether the United Kingdom reform has been fruitful. On April 1st 2013, around 70 health and social services organisations were brought together to form *Public Health England*. This mega-structure now collaborates with each actor of the society with the leitmotif of protecting and improving the nation's health and wellbeing, and reducing health inequalities. Decision makers may also decide to regroup their staff under issues at the top of their agenda on the basis of including actors from all functions of public health. No matter the strategy, the *Quebec Public Health Program 2015-2025* is aiming at breaking such silos and its capacity to foster integration of public health function in actual actions will need to be assessed as it is implemented.

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