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Exploring Public Health's roles and limitations in advancing food security in British Columbia

OBJECTIVES:

This research analyzes the roles and limitations of Public Health in British Columbia in advancing food security through the integration of food security initiatives into its policies and programs. It asks the question 'can Public Health advance food security? If so how, and what are its limitations?'

METHODS:

This policy analysis merges findings from 48 key informant interviews conducted with government, civil society, and food supply chain stakeholders involved in the development of food security initiatives, along with an examination of relevant documents. The Population Health Template is used to delineate and analyze Public Health roles in food security.

RESULTS:

Public Health was able to advance food security in some ways, such as the adoption of food security as a core Public Health program. Public Health's leadership role in food security is constrained by a restricted mandate, limited ability to collaborate across a wide range of sectors and levels, as well as pressure

from Food Protection.

CONCLUSIONS:

Public Health has a role in advancing food security, but they also have significant limitations. If Public Health intends to continue working with other stakeholders in food security, practice may be more effective through positioning themselves as one player within 'regulatory pluralism', and through greater integration of the 'determinants of health' approach. Results also suggest that the historic role of Public Health in food security remains salient today.

Introduction

While Public Health has a historic role in food security, this policy analysis explores Public Health's[1] current roles and limitations in advancing food security. It examines departments of Public Health in British Columbia (BC), Canada as they emerged as key players in the BC food security movement in the mid-2000s through the integration of food security initiatives into their policies and programs. This analysis asks the question 'can Public Health advance food security? If so how, and what are its limitations?'

Public Health's role in food security was earlier established during the 1930's 'world food movement' (1, 2). As a result of concerns about the world food supply, a 'nutrition approach' to world agriculture (3) proposed the 'marriage of health and agriculture'; this linked nutrition and the public's health (consumption) to the food supply (production) (4). Public Health as a stakeholder and as a concept of the health of the public were both central to this movement (2, 4). Recent increases in obesity and diabetes, and concerns over food safety alongside the traditional concern of hunger strengthens the call for health as a driver in food policy and food security initiatives.

While Public Health Associations in Canada, the US, Australia and world-wide call for the involvement of Public Health professionals in food security and food policy (5-8), practitioners in Public Health appear to find themselves faced with many

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[1] The distinction is made here between Public Health as a player (in capital letters) and the public's health (health of the public). Definitions of Public Health centre on organized efforts that promote optimal health of the population, performing functions such as health surveillance; health promotion; prevention of disease and injury, and food and water safety. Public Health services in BC are provided by three levels of government – the Provincial Ministry of Health, the Provincial Health Services Authority and the (5) regional huthorities.

limitations, e.g. low funding. This policy analysis research categorizes limitations according to the Population Health Template, then compares and contrasts limitations identified with those found in the literature. As little research has been published about the limitations of Public Health in food security work, to some extent limitations will be also compared to Public Health work in the promotion of health in general.

Background

In BC, Public Health functions are carried out at three levels – the Provincial Ministry of Health, the Provincial Health Services Authority and five Regional Health Authorities. Food security initiatives focused on health promotion introduced into government departments in BC were led by either the Department of Public Health or other provincial ministries. This paper focuses primarily on the former, as the intent of this article is to examine the role of Public Health. Initiatives include the: Community Food Action Initiative; Food Security Core Public Health Program; and Provincial Health Officer's Report on Food. The introduction of these food security initiatives occurred within the context of Public Health renewal in Canada and in British Columbia in the early 2000s - driven by high profile issues such as SARS, drinking water, West Nile virus, food safety issues and the obesity 'epidemic' (9). The development of Core Programs in Public Health and prevention initiatives under the 'ActNow BC' banner were two key Provincial strategies in this renewal. For the over 20 core programs initially identified, food security was one of the first set of standards developed, in 2006. The Community Food Action Initiative was an 'ActNow BC' program, implemented at both province-wide and regional levels. 'ActNow BC' was the first cross-ministerial initiative to promote health, created to promote BC as the healthiest jurisdiction ever to

host the (2010 winter) Olympics. 'ActNow BC' mandated all Provincial Government ministries to develop a health initiative, arguing that if health was not addressed through all ministries, the health budget would soon overtake all other budgets. Many of these initiatives focused on food security. The Community Food Action Initiative is drawn upon heavily in this analysis as it was the only initiative at that time that had the stated intent of working in partnership with civil society; it had one of the broadest food security committee representations in the province; and it was the only program to consider a province-wide, holistic approach to food security. Many interviewees that were involved in other programs were also involved in the Community Food Action Initiative. The Provincial Health Officer's Annual Report 2005: Food, Health and Well-Being (10) is one of a series of reports published annually since 1993. These reports are required by the Health Act to communicate to British Columbians on their health and on policies and programs that could improve their health. This report was remarkable in that it brought together the areas of food insecurity, food sustainability, nutrition and food safety together in one document.

Food security stakeholders in BC define the term 'food security' broadly, and tend to use the terms community food security and food security interchangeably (11). The concept of community food security was first used in BC in the Community Nutritionists' Council paper - Making the Connection (12) – a document developed to advocate for the inclusion of food security into BC Core Programs in Public Health. At the time, community nutritionists and civil society representatives who wrote the paper were concerned that the use of the term 'food security' was too associated with

household and individual food insufficiency – oft referred to as 'food insecurity' (13). Mirroring the origins of term 'community food security' (14, 15) they sought a more comprehensive term. Food Security Core Programs and the Community Food Action Initiative subsequently adopted the definition: 'Community food security exists when all citizens obtain a safe, personally acceptable, nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone' (a definition adapted from Bellows and Hamm) (16). An adaptation of this definition was also used in the Provincial Health Officer's report.

As these terms are used interchangeably in BC, they are also used similarly in this paper.

Methods

This paper outlines the results of a stakeholder analysis which was one part of a broader policy analysis using Ritchie and Spencer's (17) categories of applied policy research: contextual; diagnostic; evaluative; and strategic. This ecological framework of policymaking focuses on stakeholders, context, drivers, consequences and power. This is in contrast to what Howlett and Ramesh (2003, p.13) refer to as one of the 'popular means for simplifying policy studies' – the policy making cycle. The choice toward this ecological view was significant, as the BC government had no intended articulation of food security policy, and a linear, stage by stage model was not followed in its development. Ritchie and Spencer's framework was found to be congruent with research objectives and policy frameworks posed by many research scholars; it also

provided a succinct framework for both the research questions and data analysis. Ethics approval was given by City University Senate Research Ethics Committee, London, UK.

Data Collection

The broad policy analysis was completed using key informant interviews and document analysis. This stakeholder analysis utilizes this broad analysis, narrowing in on civil society and government (with an emphasis on Public Health) documents and interviewees connected with the three Public Health led initiatives under review (Community Food Action Initiative; Food Security Core Public Health Program; and Provincial Health Officer's Report on Food).

Forty-eight key informant interviewees were completed with government; civil society; and food supply stakeholders, most of whom were involved in the food security initiatives under review. Government interviewees included nutritionists, food security managers and administrators from the three aforementioned levels of Public Health in BC; Food Protection inspectors; representatives from other ministries including Agriculture, Employment and Income Assistance, and Education. Food supply stakeholders were not involved in the three Public Health initiatives examined in the stakeholder analysis. Civil society representatives included representatives from food security networks, health NGOs, media, funders, and those with Aboriginal affiliations. A semi-structured interview format using open-ended questions developed from Ritchie and Spencer's (17) applied policy research categories, focusing on stakeholder mandates, relationships, mediating factors and consequences of the integration.

Questions were asked to elicit organizational responses. Forty three out of 48 interviews were conducted in person; five were completed by telephone. Interviews were recorded with a digital recorder and transcribed.

Over 75 documents from health promotion focused food security programs and policies in BC Public Health and other related initiatives since the 1990s were reviewed, examining processes and programs, socio-political context and key stakeholders involved. These included strategic plans, evaluations, and annual reports. Documents were used to elucidate findings from the interviews, to contrast and compare results and in some cases, to directly address the research questions. The research provides insight into a snapshot of time between 2002-2008, thus documents past 2008 were not used. Earlier documents were reviewed in order to gain perspective on the historical context and drivers of the integration.

Data Analysis

Data collected was organized using NVivo qualitative analysis software to create categories (nodes) based on Ritchie and Spencer's (17) categories of applied policy research. Data collected on Public Health roles was then further analyzed for this stakeholder analysis by comparing and contrasting roles identified in the data to roles outlined within the Population Health Template (18). The Population Health Template has a long history of use in Canada for defining population health (19). The Population Health Template (see left hand column of Table 1) takes program management roles (analysis of health issue; priority setting; taking action; evaluating results) and breaks them down into 'key elements'.

Findings were strengthened and generalizability was increased through three methods of triangulation: data came from two sources; methods examined several initiatives and interviews were derived from three different sectors; and 'theory triangulation' was employed by using multiple theories. Ritchie and Spencer's (17) categories of applied policy research facilitated the examination of relationships between the actors and institutions, including the distribution of power, as well as historical context; Lang's food policy triangle (20) was used to define categories of stakeholders (state, civil society, and the food supply chain); and Public Health roles in food security were analyzed by comparing and contrasting roles taken in BC with the Population Health Template categories.

Results

Findings that support Public Health's capabilities in advancing food security are first reviewed. Limitations follow, categorized according to Population Health Template categories: Analysis of Health Issues; Priority Setting; Taking Action; Evaluating Results.

Advancing Food Security

The adoption of food security as a Public Health Core Program was cited as one of the biggest successes of all of the initiatives by approximately one-quarter of the interviewees. The Public Health led Community Food Action Initiative was credited in creating the first long term provincial table on food security. These two programs also laid the foundation for the hiring of food security coordinators in all Regional Health Authorities and obliged Health Authorities to meet performance mandates. Policies and

programs that had previously been led by lower level Public Health employees and civil society were now integrated into a higher level of Public Health. Two key Public Health NGOs in BC were also involved as partners within the initiatives. Initiatives helped food security to acquire some legitimization within Public Health and at community and municipal levels, including the provision of food security funding to communities. Finally, while still acknowledged as a low government priority, this introduction of numerous food security initiatives within a short period of time supports some legitimization of food security within the government.

> *'Food security is now … I think it is very mainstream in [Public] Health.' Public Health 45*

Limitations of Public Health in Advancing Food Security

Findings also articulated limitations in Public Health's role in advancing food security. As noted in the methodology, roles were analyzed by contrasting and comparing to 'key elements' outlined in the Population Health Template. The authors posited that the Template's 'key elements' could be utilized to articulate Public Health functional roles in food security; results showed that each category under the Template was fulfilled by BC's Public Health food security initiatives. A summary of limitations related to these roles are presented below under each 'key element' from the Template, and summarized in Table 1.

(Insert Table 1)

Analysis of Health Issues

Numerous limitations of Public Health were articulated by interviewees. First, Public Health administrators felt constrained by pressure toward meeting measurable health outcomes, which are difficult to demonstrate for food security (as is true for many prevention initiatives due to the numerous confounding factors and protracted time period between an intervention and outcome). Second, interviews showed criticism of the focus on human health outcomes (e.g. fruit and vegetable intake) versus the broader determinants of health (e.g. physical environment); they suggested that these outcomes drive and therefore limit approaches to food security. Third, Public Health interviewees stated that it is becoming increasingly difficult for government employees to critically evaluate actions of the government (e.g. where social assistance allowances do not adequately meet requirements for housing and food needs). Finally, civil society responses identified the lack of ability by Public Health to 'trust' or incorporate grassroots evidence.

Priority Setting

Despite successes, examination of Public Health funding to food security initiatives as well as information garnered from interviewees and document analysis confirmed that food security is a low priority within the Public Health agenda, reflected by this typical quote:

'We have to get better about selling it to our colleagues in the acute care side and in the rest of Public Health. If we don't, then the efforts won't last.' Public Health 4

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Taking Action

Limitations were seen in all categories of 'taking action', which include: 'apply multiple strategies', 'collaborate across sectors and levels' and 'employ mechanisms for public involvement'.

Looking first to 'apply multiple strategies', the findings demonstrated that food security policies were competing with 'weightier' agendas such as food safety and trade rules. For example, awareness of competing agendas was heightened with the introduction of the Meat Inspection Regulation by Public Health, Health Protection Branch. The Regulation addressed the concern of the sale of uninspected meat from unlicensed slaughter establishments (21). Meeting the new requirements made the local processing of meat cost prohibitive for many smaller processors. So, while the Community Food Action Initiative worked within Public Health and civil society to promote local foods as part of food security, the Food Protection side of Public Health was seen by some to impede efforts as meat could no longer be processed locally.

Individual skill building, a focus of some initiatives, also falls under 'multiple strategies'. These initiatives were highly controversial as many interviewees were not satisfied with an alleviation approach to food insecurity. One suggested this focus may be the result of doing what is familiar:

> *'We're tinkling away here offering community kitchens, but in the meantime the local food source is disappearing. So, we've got to be careful we don't, you know, do the things that we are familiar with.' Public Health 15*

Relating to 'collaborate across sectors and levels', Public Health's ability to engage other ministries in the cross-ministerial Community Food Action Initiative was questioned by some government interviewees who queried the relevance of their department's participation. Further, food supply chain stakeholders were not involved in the initiatives, restricting the food supply 'lens' of the initiatives. However, most limitations cited under this category focus on 'employ mechanisms for public involvement'. As the Community Food Action Initiative was the only initiative holding a mandate for engaging community, most findings in this element come from this program. Two types of civil society organizations were involved: civil society food security networks (whose agenda centered more on the food system) and civil society health non-government organizations (NGOs) (whose agenda focused either on food insecurity or on the public's health). Findings showed that Health NGOs were seen to hold a greater legitimacy with the government than food security networks, as evidenced by greater collaboration with them and funding to them. Additionally, health NGOs have a similar 'professional' health culture to Public Health, comprised of mainstream health promotion and disease prevention groups, including Public Health employees. Thus, limitations related to collaboration centred primarily on engaging civil society food security networks. Civil society took a critical role in lobbying for the integration of food security into Public Health and anticipated an ongoing collaborative approach. However, many interviewees in both Public Health and civil society saw Public Health as expert driven and top down, suggesting that they did not know how to work effectively with 'community'. In fact, a loss of connection to communities was

reported by Public Health interviewees as a result of the integration of Public Health and hospitals into regional health authorities in the mid-1990s.

Numerous limitations were identified in relation to 'employ mechanisms for public involvement', another element under 'taking action'. Public Health employees advocating for civil society interests was raised as important by some interviewees, yet problematic by some Public Health administrators. Further, Public Health's limited mandate of human health in food security clashed with civil society's broad approach to food sustainability. Results also revealed that Public Health's lack of clarity in their food security mandate created confusion, contributed to tensions between stakeholders, and acted as a barrier in the progression of initiatives. Interviewees described tensions between Public Health and civil society as a 'clash of cultures'. This 'clash of cultures' was also demonstrated by the marginalization of civil society food security networks from participation at the provincial level. The following quote reflected sentiments from both Public Health and civil society interviewees:

> *'There was just to me a sense of potential exclusion, you know, of some of the grassroots community mobilizers … And so to me you can't afford that kind of luxury, that kind of elitism.' Public Health 41*

Interviewees warned that this restricted both the broad source of expertise which informed the initiatives and the political base for further integration. Alternatively, civil society food security networks were criticized for their adversarial approach, and were seen to lack formality in representation.

Evaluating Results

Finally, interviewee feedback related to 'valuating results' focused on accountability, stating that while the professionalized culture of Public Health articulates a requirement for accountability, they perceived that Public Health does not believe civil society networks are accountable to that standard. However, civil society questioned how accountability is defined, suggesting that the government practice of quickly allocating dollars at fiscal year-end is not accountable.

Discussion

Despite limitations, Public Health was able to advance food security – at a minimum, within Public Health. Limitations noted in the results, resultant tensions with other stakeholders along with recommendations to mitigate limitations and tensions are outlined in Table 2. The discussion will address key limitations and recommendations.

Public Health's limited mandate in relation to their need to demonstrate individual health outcomes was a substantial limitation. Food security has broad determinants (e.g. economics, food systems, culture). For Public Health to effectively take a leadership role in food security, they must address the 'determinants of health' . This reflects global recommendations. The World Health Organization identifies 'Food' as one of ten 'social determinants of hHealth', focusing on the issues of both excess intake and food poverty, with policy implications focusing strongly on food systems (23). While the literature embraces this shift, as evidenced by this research, in practice there is a growing divide between these calls and the reality for practitioners. The need for a

broader lens and understanding reinforces the notion from Muller et al., (24, p. 225) that when faced with 'numerous policy drivers that impact the food system'…Public Health professionals… 'often focus on narrow objectives with disregard for the larger system'. The authors also suggest that Public Health may then focus on the familiar, echoing interviewee comments.

Another key limitation was articulated by some interviewees who noted that their trust in Public Health's leadership was diminished by the Food Protection arm of Public Health; their enactment of the Meat Inspection Regulation was seen to impede local food security. Food Protection monitors and regulates food safety standards. These standards are increasingly set at an international level as part of a system of global agrifood governance overseeing the corporate dominated global food system (25). As many interviewees from both civil society and Public Health distrust the industrial food system, they questioned Public Health's ability to advocate for a broad notion of food security given the powerful legislative position of Food Protection within Public Health. Interviewee concerns reflect literature articulating adverse health impacts from food safety policy (24-26). Findings also mirror global tensions between centralization and decentralization of the food supply (14, 27).

Public Health's limitations in relation to collaboration decreases the lens from which they analyze and address food security issues, limits their partnerships and threatens the source of external pressure needed from outside of Public Health to advance food security.

However, the 'clash of cultures' experienced between stakeholders often have institutional roots. For example, the Population Health Framework has been criticized in the literature for focusing on top down expert knowledge (versus lay knowledge) and ignoring some of the broader political and socio-economic forces and context in which people live (28). Tensions experienced related to Food Protection is another example. This understanding can lead to less judgement at the individual level, but it also means that mitigating these systemic limitations is more difficult.

This research suggests that Public Health's work in food security may be most effective when they are one player within regulatory pluralism. Gunningham et al. (29 p. 5) defines 'regulatory pluralism' as occurring when the 'government harness(es) the capacities of markets, civil society and other institutions to accomplish its policy goals more effectively, with greater social acceptance, and at less cost to the state'. Koc et al. (30) support the adoption of the concept of regulatory pluralism in food policy. This political paradigm calls for greater engagement of civil society, and for all sectors to work together toward common goals. Indeed, food security and other initiatives under ActNow BC demonstrates a shift toward regulatory pluralism, where the government declared that all ministries, and to some extent industry, needed to work toward a greater goal of Public Health in order to address upwardly spiralling health care costs. Moving toward 'regulatory pluralism' requires governments to commit to a greater engagement of other sectors. Possible approaches toward greater engagement outlined in this research include: increasing capacity building for civil society, finding ways to share power, and articulation of agendas and limitations. However, MacRae (31, p. 431) - echoing BC's experience – states:

'although new forms of regulatory pluralism are emerging, it is not obvious that governments and food system actors are skilled at, or committed to, their implementation'.

Perhaps food policy councils are one new form of regulatory pluralism emerging; they have been effective at local levels, and often incorporate 'bottom up' input (32-34).

Public Health's engagement in this issue may be crucially important in raising the awareness – particularly within the greater Health sector – of the health costs of negative externalities of the current food system (e.g. diabetes, contamination of food). This recognition could increase accountability by the private sector for these costs; this is in contrast to the status quo, where profits of the food system go to the private sector, and some negative externalities (i.e. health care costs) are paid for by the public sector.

Conclusion

This paper demonstrates that Public Health has a role in advancing food security, but that they also have significant limitations. As limitations are primarily systemic and institutional, recommendations to overcome them are not simple – requiring movement toward embracing the 'determinants of health' and 'regulatory pluralism'. Results also suggest that the historic role of Public Health in food security remains salient today.

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