Engaging the Community: A Case Study in One Rural Community and the Knowledge Translation Process

Kim A Critchley, RN PhD

School of Nursing University of Prince Edward Island 108 Steel Building, 550 University Avenue Charlottetown, Prince Edward Island, Canada C1A 4P3 <u>kcritchley@upei.ca</u>

> Vianne Timmons, PhD Vice President of Academic Development University of Prince Edward Island

Barbara Campbell, PhD

School of Nursing University of Prince Edward Island

Alexander McAuley, EdD

Faculty of Education University of Prince Edward Island

Jennifer Taylor, PhD Director of Family and Nutritional Sciences University of Prince Edward Island

Fiona Walton, EdD

Faculty of Education University of Prince Edward Island

Abstract

This research involves the interaction between one rural community in Prince Edward Island (PEI) and a group of researchers to identify strategies to promote effective knowledge translation regarding the health issues facing the community. As per previous research, interactive engagement with communities results in effective knowledge translation (St Croix 2001) and this notion forms the premise of this case study. Over a two to three year span, this case study represents the effectiveness of an intense communication approach to determine pressing health issues in the rural community of O'Leary, PEI. Stemming from focus group results within the community a strategy was formed and produced to address the community's health issues. This case study describes how the members of one rural community engaged with researchers and used knowledge from focus group results to establish a youth centre. This research demonstrates how a community can translate research results into meaningful information for use in developing programs with positive changes through engagement and relationship building via a knowledge translation approach.

Keywords: knowledge translation, rural, community, engagement, health, youth

1.0 Background - Research Objective and the O'Leary Community on PEI

The overall purpose of this case study is to connect with a rural community on PEI and increase knowledge and awareness about current health issues. Specific research objectives attempted to: increase an understanding of the theory and practice of knowledge translation, identify barriers to knowledge translation strategies, and disseminate and share the results of the research process with the community and partners at large.

The rural community is O'Leary, located in western PEI, 130 kilometers from the province's capital city of Charlottetown. The community of O'Leary was formed 125 years ago, with the creation of the Prince County rail system, and as such, has always served as a centre for the larger community. The population of 860 is predominantly made up of White Anglo-Saxon and French descent. The Canadian Census (2001) reports the median age of the population is 45.3 and the median family income is \$37,892, with major sources of income being generated through fishing and farming. The unemployment rate is high at 25.7%. In examining the level of education for this population 47.1% of 45 to 64 year olds have less than high school 52.9% of 35 to 44 year olds had less than high school and 37.9% of 20 to 34 year olds had less than high school (Statistics Canada 2001b).

O'Leary has an elementary and intermediate public school, community churches and a 13-bed community hospital. Retail facilities are restricted to a few shops. The area has few recreational facilities, such as a skating arena and an existing youth centre. Figure 1 illustrates the Province of PEI and the location of O'Leary.

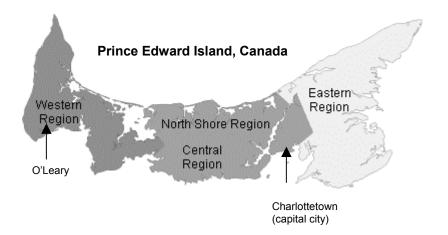


Figure 1. Location Map of O'Leary in Prince Edward Island Canada

2.0 Research Methodology/Approach

Knowledge translation implies the exchange of knowledge between parties that involves a high level of communication and participation, to not only share the researched knowledge, but also implement subsequent strategies. Rogers (1995) suggests that knowledge transfer is fundamentally a social process. Rynes *et al.* (2002) write that the "power of increased interaction between academics and

practitioners for generating new knowledge should not be underestimated (p. 23)." However the same authors further note the importance of participation: "the format of any new interaction [must] be designed not just with practitioners in mind, but in attendance." St. Croix (2001) in the newsletter "In Focus" states that the most effective means of research transfer are through interactive means of engagement. As well, the Institute for Work and Health (2001) has found that "research transfer is a two-way process that starts with building partnerships (p. 3)."

In terms of public health activities, the World Health Organization (1998) suggest that individuals and communities should gain more power over the personal, socioeconomic and environmental factors that affect their health and that any project planning should involve all those concerned about an issue at all stages. Bryant (2002) states, "Achieving such goals will require collaboration between experts and community members specifically by drawing upon community members' knowledge about their health and well being" (p. 97).

This case study represents an identification of effective knowledge translation strategies regarding the health issues of children in a rural PEI community. This case study also demonstrates a process of change that is built upon developing knowledge and strategies through a communicative partnership with that rural community. A main principle identified in knowledge translation research is that interactive engagement is the most effective means of research transfer (St. Croix 2001), and this notion provides the impetus for this research.

3.0 The Knowledge Investigated

Passive dissemination of information is generally ineffective in changing practice. This case study suggests that when rural communities are engaged in participatory forms of relationship building then approaches that translate research results into meaningful information and programs can result.

PEI faces critical issues related to the future health of its population. Sixty-seven percent of PEI adults are overweight or obese, exceeding national rates (Taylor, van Til and MacLennan 2002). Further, the highest death rates for cancer in Canada are in Nova Scotia and PEI (Second Report on the Health of Canadians 1999) and Atlantic Canadian provinces have had consistently higher mortality rates from cardiovascular disease than other provinces (Heart and Stroke Foundation of Canada 1997). The overall socioeconomic level of PEI places it second last among the provinces in Canada (Statistics Canada 2001a). These major determinants of health do not speak positively for the future of children's health on PEI and call for new initiatives to increase awareness of health issues and alert residents to this situation.

It is well known that knowledge is necessary to facilitate behavioural change (Wardle *et. al.* 2000). Researchers have demonstrated that adolescents have a general understanding of the connection between food choices, physical activity, and health (Birch 1992), but that this knowledge does not consistently influence their dietary and physical activity choices (Croll *et al.* 2001; Harrell *et al.* 1996; Hart *et al.* 2002; Keirle and Thomas 2000; Wardle *et al.* 2000). Knowledge alone is not enough to cause changes in children and adolescents' eating habits and physical activity patterns (Neumark-Sztainer 1996). Moreover, children and adolescents may not have the skills necessary to apply their knowledge or the motivation to make behavioural changes (Nestle *et al.* 1998).

Due to the dismal health issues on PEI, this research sought to identify the knowledge, potential strategies and resources via a knowledge translation process about the health concerns of children in the rural community of O'Leary on PEI.

4.0 Overview of the Knowledge Translation Process in O'Leary

This case study represents work undertaken over a three-year period. To begin with an advocacy committee was established in O'Leary to oversee and participate in the design and implementation of the research. The advocacy committee consisted of community members. This committee verified the results of the focus groups.

To attain information from the community a semi-structured questionnaire was developed for small focus group sessions. Three separate focus groups were held which consisted of youth, parents, and service providers from the community. The information obtained related to the community's awareness about health research and to determine the community's concerns about the health of their children.

From the focus group results a number of initiatives were developed to communicate information about children's health onto the larger community including, obesity rates, active living levels, nutrition habits, parenting and literacy levels. From this dissemination, working groups consisting of community members were established to create interventions based on the focus group results. The research team monitored and documented interventions that emerged in response to these methods, and evaluated the knowledge gains of community members.

5.0 Results from the Knowledge Exchange Process

A first step in the research process involved establishing an advocacy committee for O'Leary which consisted of six community members, including a Chairperson. The purpose of this committee was to oversee and participate in the design and implementation of the knowledge translation research and verify the results of the interviews with focus groups from the community. A semi-structured questionnaire was developed by the advocacy committee and focus group interviews were held with separate groups of youth (five members), parents (six members) and service providers (eight members) from each community. The data obtained related to their awareness of existing children's health research and establishing the health priorities for the children in their community. Participants for the focus group interviews were identified by the advocacy group. Each focus group interview was conducted by a common facilitator with the researcher in attendance and lasted between 1 $\frac{1}{2}$ and 2 hours.

Although it is acknowledged that research can only ever offer a partial insight into the lives of others (Jossellson 1996), the sample, generated through focus groups, gave access to a wide variety of experiences and opinions in this small, rural community on PEI. Figure 2 provides a summary of common themes that emerged from the focus groups. Responses to the main focus group questions are summarized below the figure.

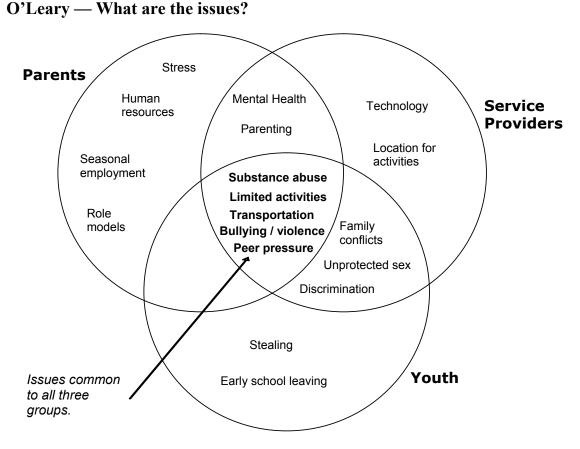


Figure 2. O'Leary Community Health Issues

5.1. Focus questions assessing previous knowledge about health research from the community

Research on risk behaviours, such as smoking, drinking, and drugs, were discussed by both the service providers and youth focus groups who replied to this question. The youth group's knowledge about children's health research was limited to risk behaviours. The parents and the service providers shared the same levels of knowledge related to childhood obesity/nutrition, asthma, mental health, and physical activities. The service providers' knowledge on children's health covered a much more diverse spectrum compared to the parents and youth. That spectrum included ADD/ADHD, addiction, learning disability, bullying, marginalization, and research related to street gangs.

Both the youth and parent groups commented they had some knowledge of research about drugs and alcohol. The service provider group reported they were aware of some research on poverty, marginalization, parenting, and autism. The youth group had information about peer pressure research. The parent group's research knowledge included information about suicide, inactivity, strategies for healthy living, and transportation issues. The following quotes highlight some community research knowledge:

"[Research on] drugs and alcohol. Pertaining to...[starting drugs and alcohol is] getting younger younger younger (age). Like growing up with drugs and alcohol just looks normal..." (Youth)

"...but lots of research is done on inactivity with children...family awareness" (Parent)

"Certainly we know from the media that Stats Canada had done research on poverty, youth poverty and the early childhood, big time on that, early intervention on kids." (Service provider)

5.2 Focus questions about what the community is seeking

The parent group expressed a need to know more research relating to nutrition/ breakfast programs and ADD/ADHD. The group was concerned about how to bridge the gap between research and children's health for the purposes of having research that will provide practical help. Also, the parent group questioned why the school cafeteria continues to sells unhealthy food with the current knowledge about the effects of fast food. The service provider group expressed an interest in research on children's mental and physical health on various levels, including research on recent drop outs, risk behaviours, childhood obesity, children's mental health, aspects of children's sexual health, and reasons children are less involved in sports (inactivity), and child poverty. The following quotes illustrate the community's inquiries:

"My other question is, [with] all of the research going on, why are the cafeterias still serving french fries on a daily basis. The kids are not really looking for that. They are looking for salads and they are looking for healthy meals but the french fries are in front of them they are going to eat them." (Parent)

"We would love to see research on violence. Violence within the home. Violence from parents, toward parents, and what their perceptions of violence is". (Service providers)

When referring to the issues children face in their community, all three focus groups indicated the following as their concerns in the community: limited activities, transportation issues, easy access to alcohol and drugs, bullying/violence, and peer pressure. The service provider and parent groups were also concerned about issues such as children's mental health (grief and loss, overall happiness), lack of available human resources, poor supervision /parenting parents' separation/ divorce/blended skills. families. and adverse labeling/stigma/reputation. The quotes below are such examples:

"(Violence is) everywhere. Ah, like I'm in O'Leary and kids...there's always one community picking on another...for no apparent reason I can't figure it out yet. All the time. Harassment and discrimination." (Youth)

"But I also get a sense, and maybe it is just me, that they want a home environment. I am all for youth centers but these kids, a lot of time, have come to our place rather than going up...I get a feeling this is a home base...Cookies coming from the kitchen, and all those things, they want that. They want stability." (Parent) "Around here, there is a problem with they have their activities in the school, but that's a long distance for a lot of the parents to travel... Then they are stuck at home hanging around on the street, the parking lot, exactly, and we are chasing them around." (Service provider)

5.3 Assessing what knowledge is most important to translate and strategize

The three focus groups had distinct opinions about the most important issues in their community. Both the service providers and the youth groups talked about the easy access to alcohol and drugs. And the service provider and the parent groups thought that poor parenting, lack of role models, and community support were top issues in their community. The service provider group considered poverty as one of the most important issues, while the youth group stressed transportation, limited activities, and peer pressure as the top issues. The parent group stated that youth suicide issues were important and felt that low self-esteem needed to be addressed. The quotes below evidence the community's main concerns:

"I find transportation (is an important issue) and, cause if people were doing more things then they wouldn't have time to....stay out and do drugs and drinking. If there were more things to do..." (Youth)

"I am just going to go with overall happiness of kids... If other kids in the area could be half as happy as he is, then they would have less to deal with peer pressure, drugs and alcohol." (Parent)

"I agree with parenting, but I also think that poverty plays a big deal in it. Because I think that the parents are so busy, and it's so hard just to feed the family, but often times they are not there in those early years when they need to be there to set sort of their goals and that kind of thing." (Service provider)

The youth group strongly voiced that the following were the most important issues during the interview: updating the youth centre, the need for more activities and a commitment to beliefs and values. The parent group set their targets on helping children to become happy and healthy adults, while the service provider group stressed the importance of networking to help children and youth become healthier.

"The youth center is only open from 6 to 10 on most days, and Fridays it's open 'till2 and I think Saturday's and Sundays there's no schedule but that's the only place that, you know, to hang out..." (Youth)

"Important thing you need is trying to find ways to raise my children to be happy, healthy adults. To get them from kids to being happy responsible adults" (Parent).

"...our work should be encouraging us to go into, and network with other agencies, for the sake of the youth." (Service provider)

5.4 Assessing community strengths for future strategy processes:

The three focus groups were grateful for any existing classes, activities, and programs offered for children and youth in the community. They mentioned activities such as school field trips, church activities and programs at the current youth centre were positive steps. The parent group stated that they valued the community family picnics and enjoyed them greatly. The service providers group pointed out children and youth resiliency, special abilities and talents, and stated that the children's willingness to learn new things should be treasured. These quotes highlight some regarded strengths in the community.

"Yeah, O'Leary has a lot of programs that people can do, like curling, hockey, vacation bible school in the summer. They have a lot of good stuff that people can do with their families..." (Youth)

"(family picnics) trying to get all the families together. Mom/Dad to the teenager to the younger ones for all of them to have a place to spend 2-3 hours. To spend with each other and not worrying what is going on down the streets. Just sitting there, eating ice cream, cooking hotdogs or... What is wrong with spending quality time with the family?" (Parent)

"When I think of positives, what always strikes me is just the resiliency of the kids that I work with, and the things that they have lived through at their very young age, where I think as an adult I don't know if I could cope to the degree that they are coping." (Service provider)

5.5 Assessing community challenges for future strategy processes:

Both the service provider and parent groups were concerned about the negative impacts of stigma on their children and youth related to living in a rural area. Violence was emphasized by the service provider and youth groups. In addition, each group individually added the health issue of stress to the other issues. Stresses included: lack of money for sports and school leavers (youth), transportation and a lack of sense of right or wrong (parents) and poverty (service providers). The below quotes demonstrate these concerns.

"Well, if you want to go in hockey or a lot of sports, you can't if you don't have money, you can't go. To buy all your equipment and ..." (Youth)

"And people, not from the church, but from the youth group have offered to come and pick the children up and drive them home. That means so much." (Parent)

"We are so financially strained with the services that we can provide. I mean it's an investment, it's an investment for the future." (Service provider)

6.0 Next Step - Sharing Knowledge to Form New Developments

This project was intended to identify and document effective ways of communicating research results with rural communities. Therefore, it was vital to share the knowledge and insights gained during the analysis of findings with the community residents of O'Leary. Researchers met with the advisory group who verified the analysis of findings from the focus groups. A general meeting of community residents to discuss preliminary findings was then organized. A further presentation was provided to the Community Council members at a regularly scheduled monthly meeting. These events constituted a two-way process whereby findings were presented and explained by the researcher and a debate with community residents was encouraged. These feedback sessions afforded the opportunity to share knowledge and ascertain areas of potential misunderstanding. As such, the relationship was fostered during the interview process and continued

after data collection and analysis - underlining the importance of maintaining community access, trust and credibility during the life of the project.

It was confirmed through this process that the development of a new youth centre, with programming for all ages, was the priority health concern for the children of O'Leary. The focus group results led to the need for a new youth-orientated centre. Once this was identified as the priority issue for the rural community of O'Leary, the research project then worked to bring the community, organizations and residents together to make the youth centre a reality.

The research group provided evidence based on the literature about youth groups that have been developed in Canada. By writing letters to federal and provincial funding agencies, local businesses and organizations, funds were brought together to provide a facility for youth, seniors and all members of the community. The centre was constructed in an inclusive way. For example, a local construction foreman hired unskilled laborers from the community and trained them on the job. The importance of this endeavor was to then have these newly skilled workers to find further employment after the youth centre project was complete.

New Years Day 2006 marked the official opening of the Alice Duncan Intergenerational Centre. Nancy Wallace, Chairperson for the community of O'Leary, stated in the local newspaper, "The youth centre has been the front and centre for council for some time but it wasn't until the community became the focus of a University of Prince Edward Island study, Engaging the Community, that a plan came into clearer focus" (*The Journal-Pioneer* Dec, 31, 2005). The Intergenerational Centre will be affiliated with the Boys and Girls Club, Community Inclusions, and the Council for the Disabled. The youth are excited about the fact that RCMP officers will be located in the building. The officers are enthusiastic about mingling with and getting to know the youth. The door to the centre will always be open with the RCMP present.

7.0 Summary

The knowledge translation process in this case study spans a two to three year process. At the start, a group of UPEI researchers concerned about the health of rural children found that typical approaches to engaging and informing the community about research were not effective. In response, innovative community outreach activities proved to be very effective. Through these mechanisms the communities became familiar with the research and the researchers were known to the communities. Relationships and interactions fostered the knowledge translation. This process engaged willing participants and generated community interest and ownership in the mobilization of research knowledge. Once focus group data was attained, the researchers facilitated the formation of a working group in the community that would address the main health concerns by implementing a strategy that came from the community. For the community of O'Leary a community youth center was of utmost importance to address their broad health issues. Through the collaboration of resources the youth centre was successfully established to provide safety, education, and healthy alternatives.

In year three (2005-2006) the researchers are assessing the sustainability of this research strategy and engaging each community's Advocacy Committee in reflection and analysis. The team recognizes this is a very short time frame in terms of evaluating the impact of knowledge translation and the results from this

work must be considered preliminary. However, this case study can provide a foundation for analyzing the knowledge translation methods implemented with this community.

The researchers, the chairperson for the community of O'Leary, and community members believed that the model for this centre can inspire other rural communities to work towards the same concept. The key to this community's success is the residents' willingness to work with the research group from UPEI and provide support when such projects take place. Nancy Wallace, Chairperson for the community of O'Leary, notes that the community is willing to work again with the research group as they do follow up studies in order to move the community forward.

8.0 Acknowledgment

The authors would like to thank Rosalyn Adamowycz for her editorial assistance with the manuscript.

9.0 References

- Birch, L.L. (1992). Children's preference for high-fat foods. *Nutrition Review*, 5: 249-255.
- Bryant, T. (2002). Role of knowledge in public health and health promotion policy change. *Health Promotion International*, 17 (1), 89-98.
- Croll, J.K., Neumark-Sztainer. D., & Story, M. (2001). Healthy eating: what does it mean to adolescents? J Nutrition Education, 33, 193-198.
- Harrell, J.S., McMurray, R.G., Bangdiwala, S.I., Frauman, A.C., Gansky, S.A., & Bradley, C.B. (1996). Effects of a school-based intervention to reduce cardiovascular disease risk factors in elementary-school children: the Cardiovascular Health in Children (CHIC) study. *Journal of Pediatrics*, 128, 797-805.
- Hart, K.H., Bishop, J.A., & Truby, H. (2002). An investigation into school children's knowledge and awareness of food and nutrition. J Hum Nutr Dietet., 15, 129-140.
- Health Canada. (1999). Second report on the health of Canadians. [On line]. Available: <u>http://www.hc-sc.gc.ca/hppb/phdd/pdf/errata_e.pdf</u>
- Heart and Stroke Foundation of Canada. (1997). [On line]. Available: <u>http://ww1.heartandstroke.ca/</u>
- Institute for Work and Health. (2001). *Putting research to work*. InFocus: Current Workplace Research -- A Supplement To at Work, 20(a), 1-4.
- Jossellson, R. (Ed.). (1996). *Ethics and process in the narrative study of lives*. London: Sage.
- Keirle, K. & Thomas, M. (2000). The influence of school health education programmes on the knowledge and behaviour of school children towards nutrition and health. *Res Sci Tech Educ.*, *18*, 173-190.
- Nestle, M., Wing, R., Birch, L., DiSogra, L., Drewnowski, A., Arbor, A., Middleton, S., Sigman-Grant, M., Sobal, J., Winston M., & Economos, C.

(1998). Behavioural and social influences on food choice. *Nutrition Review*, 56, S50-S74.

- Neumark-Sztainer, D. (1996). School-based programs for preventing eating disorders. *Journal of School Health, 66,* 64-71.
- Province of Prince Edward Island, Office of Higher Education, Training and Adult Learning. (1998). Tough challenges, great rewards: A strategy for adult literacy/education. Charlottetown, Prince Edward Island: Queens Printer.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York, NY: Free Press.
- Rynes, S. L., Bartunek, J. M. & Daft, R. L. (2002). Across the great divide: Knowledge creation and transfer between practitioners and academics. *Academy of Management Journal, 44* (2), 340-355.
- Statistics Canada. (2001a). [On line]. Available: http://www.statcan.ca/start.html
- Statistics Canada. (2001b). Community profiles. [On line] Available: hppt://www12.statscan.ca
- St. Croix, C. (2001). Putting Research to Work. In Focus: Current Work Place Research – a Supplement to At Work. Issue 20 (A) February 2001.
- Taylor, J., van Til, L. & MacLennan, D. (2002). The PEI Nutrition Survey. Charlottetown: PEI Department of Health and Social Services.
- The Journal-Pioneer. Engaging the Community. Newspaper. Dec, 31, 2005.
- Wardle, J., Parmenter, K., & Waller, J. (2000). Nutrition knowledge and food intake. *Appetite*, 34, 269-275.
- World Health Organization. (1998). Ottawa charter for health promotion. Geneva: Author.