

Communicating Effectively with Parents in Hastings and Prince Edward Counties

An Evidence Summary

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Executive Summary

Hastings Prince Edward Public Health (HPEPH) recognizes communication as a crucial piece in public health practice that must be appropriate and feasible to effectively reach all populations. As with other Ontario public health units, HPEPH faces challenges related to communication. Understanding the most effective communication strategies was deemed to be an important issue that merited further examination. To determine the existing knowledge base on how best to communicate with parents, a team of public health staff conducted a literature review using the question "what are effective (health) communication channels to reach parents?"

The team searched online health resources such as NICE Public Health, Cochrane Databases, TRIP Medical Database, Health Evidence, as well as hand-searched Evidence-Based Medicine, American College of Physicians Journal Club, Annals of Internal Medicine, Evidence-Based Nursing and Mental Health journals. A limited grey literature search was conducted. Articles were screened for relevance based on set criteria. The initial search yielded 21,966 articles and 8,691 grey literature resources. After title and abstract screen and full text screening, seven articles were selected for critical appraisal. Reviewers independently appraised the research, and selected three articles for inclusion that were rated as high (moderate to strong) in quality.

Several key findings emerged from the process. The most significant result is the need for more investigation to identify the most effective communication channels to reach parents. Parents and other priority populations should be asked where, when, and how they want to receive information. Though home and school were identified as preferred settings for parents to receive information, social media and the Internet are potentially effective communication channels, as well, despite some limitations. When communicating with parents, it may be beneficial to capitalize on existing communication channels or avenues.

After completing an applicability and transferability assessment of the findings, these were the recommendations that were identified to communicate more effectively with parents:

- Collaborate with local partners in order to share resources and foster knowledge translation on the most effective ways to communicate with parents.
- Conduct a local assessment on how to communicate with parents to expand the breadth of knowledge on their preferences and the most effective communication channels to reach them.
- If local assessment is not possible, consider using communication channels that allow parents to receive information at home or through schools.
- Review how parents use social media to determine how best use this channel.
- Incorporate communication into existing opportunities available to reach parents.
- Participate in proactive planning when developing communication strategies and use resources such as corporate templates and the Communications Specialist.
- Evaluate and document all communication initiatives so the results may be used to provide future insight based on lessons learned.

Final Report

Background

Issue

Communication involves more than the dissemination of information. Communication can be defined as the sharing of information between parties, where common symbols or behaviours are used to exchange a message. The efficacy of communication can be affected by several factors. These include the source of the information, the channel used for delivery or method of distribution, and how the message is perceived by the intended audience. 2

The ability to communicate information effectively is an essential part of public health practice. Communication is so integral to public health that it is included as a component in the (draft) Ontario Standards for Public Health Programs and Services. Communication is incorporated in the Foundational Standards section, which emphasizes that "effective public health practice requires boards of health to apply skills in evidence-informed decision-making, research, knowledge exchange, program planning and evaluation, and communication, with a continued focus on quality and transparency." The Effective Public Health Practice section of the Standards also recommends that varied communication strategies, tailored to local needs, should be included as a program component.

To ensure effective communication with the public and meet the requirements set out by the Ministry of Health and Long-Term Care, it is important to examine the communication channels and strategies that are most effective for reaching the intended audience. To determine the current evidence base on communicating with parents, the final research question examined through the evidence-informed decision making process was, "What are effective (health) communication channels to reach parents?"

Context

Hastings Prince Edward Public Health serves 17 municipalities with varying demographic and geographic distinctions. A communications audit of HPEPH conducted in 2013 identified room for improvement in both internal and external communication methods. The audit noted that residents of HPE Counties were "not receiving information the way they would prefer to receive it," and recommended that the health unit determine how and in what format the population would like to receive information.

Communicating effectively with the public is a challenge that has been experienced by other health units. In 2014, Haldimand Norfolk Health Unit conducted a survey to determine how to better target information and services to parents in their catchment area.⁵ The City of Hamilton conducted a situational assessment for the purpose of improving their immunization program that included a literature review and a parent survey.^{6,7} Key findings of this assessment included

general dissatisfaction with materials being offered as well as inadequacies in communication related to both the amount of information being provided and methods of delivery. Other jurisdictions are facing similar communication challenges and are actively taking steps towards identifying and resolving these issues.

Literature Review Question

To answer the research question, "what are effective (health) communication channels to reach parents?" The research group focused their search on parents, communication and channels and/or reach of information. See Appendix A for an example list of keyword search terms applied to the health resources and individual journal titles listed below.

Literature Search

The team searched the following online resources: NICE Public Health, Cochrane Databases, TRIP Database, Health Evidence, as well as hand searched Evidence-Based Medicine, American College of Physicians Journal Club, Annals of Internal Medicine, Evidence-Based Nursing and Mental Health journals. A limited grey literature search was conducted using Google search engine, the Registered Nurses Association of Ontario website, and the Centers for Disease Control and Prevention website.

Searches were limited to publications from 2009 to 2016 that were available in English. Reference list searches of articles selected for inclusion were also conducted. See Appendix B for screening inclusion and exclusion criteria.

Relevance Assessment

Publications were screened individually by title and abstract for relevance, with discrepancies resolved by group consensus. Full articles were reviewed by three reviewers in a group setting. Publications were included if they were published from 2009 to 2016, examined channels of communication (i.e. social media, in-person, webinars, email, phone calls, etc.) as an intervention, and if parents were the target population. While priority was given to those that included a rural, remote, isolated, small or farm setting, urban settings were included due to lack of results. Systematic reviews were preferred based on the hierarchy of evidence. Publications were excluded if they were published before 2009, had a study population other than parents, were set in under-developed countries, focused on communication between parents and children, or if they referred to communication "methods" or styles of communication (e.g. action or information messages) as opposed to channels of communication, such as mail, email, or social media.

Results of the Search

The search yielded 21,966 articles and 8,691 grey literature resources. After screening the title and abstract for relevance, 63 articles were found to meet the inclusion criteria (articles n=49 and grey literature n=14). Following full-text screening, seven studies were selected for critical appraisal (three systematic reviews, one single study, one qualitative study and two grey literature articles). See Appendix C for literature search results.

Critical Appraisal

Critical appraisal was conducted using tools specific to each type of literature. The Health Evidence Quality Assessment Tool was used to appraise systematic reviews. This tool enables assessment of systematic reviews based on specific criteria. Articles are scored out of 10, and quality assessment can range from weak (four or less) to moderate (five to seven) or strong (eight to 10). Grey literature was appraised using the Authority, Accuracy, Coverage, Objectivity, Date, and Significance (AACODS) Checklist. While this tool does not allow for scoring of publications, they can be assessed to determine quality based on key criteria.

Appraisals were completed by four independent reviewers, with disagreements resolved by group consensus. Of the seven studies that were critically appraised, four were excluded due to weak scores or low confidence in the quality of the publications. Three publications – two systematic reviews and one grey literature report – were selected for inclusion. The two systematic reviews were appraised using the Health Evidence Quality Assessment Tool; one was rated moderate and the other strong. As the grey literature report met most of the criteria outlined in the AACODS tool, the group was confident that this publication was of high quality.

Description of Included Studies

Article	Understanding the needs of parents - 2014 Haldimand and Norfolk parenting needs assessment report	
Author(s)	Haldimand and Norfolk Health Unit	
Publication Year	2014	
Paper type	Grey literature (Public Health)	
Quality rating	High quality - AACODS Checklist	
Setting	Haldimand and Norfolk Counties	
Population	Parents	
Intervention	A mixed methods (open and closed ended questions) survey was distributed online and through paper copies to parents in Haldimand and Norfolk Counties. The survey was created with input from parents, the health unit, and agencies involved in the delivery of parenting programs, services, or resources.	
Comparison	None	
Outcomes	Parents indicated that their preferred methods of receiving information were newsletters and the Internet. They identified home and school as their most preferred settings for receiving information. Parents noted that when they receive information at home, they are more likely to focus their attention on the information, at a time that best fits their needs.	
	Time was identified as a barrier that prevented parents from accessing resources included time (work schedules and the time programs/resources are offered).	
	Recommendation to provide parents with resources that can be easily accessed in their home setting.	

Article	A systematic review of the use and effectiveness of social media in child health		
Author(s)	Hamm, M., Shulhan, J., Williams, G., Milne, A., Scott, S., & Hartling, L.		
Publication Year	2014		
Paper type	Systematic Review		
Quality rating	Moderate: 7/10 on the Health Evidence Quality Assessment Tool		
Setting			
Population	Children, youth, and their families		
Intervention	Using social media to target health outcomes such as acute conditions, chronic conditions, and health promotion. The social media studies included: collaborative projects, blogs/microblogs, content communities, social networking sites, and virtual worlds.		
Comparison	The comparison in the RCTs was an online tool without a social media component, non-technological aspect, or no intervention.		
Outcomes	The majority of the studies included in the review investigated the use of a discussion forum and assessed social media as one component. While there are reported benefits of using discussion forums, none of the studies reported significant results.		
	Social media tools may be more effective if efforts are made to identify what tools the target audience is already using and tailor the intervention to this identified tool.		
	Users were most drawn to the ability of social media to facilitate the development of a support network (specifically older users). Younger children were drawn to social media as an escape from their illness. No clear evidence that social media is effective in improving health outcomes in children and youth.		
	Noted that studies included were poor to moderate quality and many did not use rigorous study designs.		

Article	Face to face interventions for informing or educating parents about early childhood vaccination
Author(s)	Kaufman, J., Synnot, A., Ryan, R., Hill, S., Horey, D., Willis, N., Lin, V., & Robinson, P.
Publication Year	2013
Paper type	Systematic Review
Quality rating	Strong: 10/10 on the Health Evidence Quality Assessment Tool
Setting	Interventions were delivered primarily in a clinic or hospital, in the mother's home, or both.
Population	Parents, guardians, soon-to-be parents, or others fulfilling the parental role. Children - infants (less than1 year) or preschool-aged children (1 to 5 or 6 years old).
Intervention	Face-to-face communication interventions directed to parents to inform or educate them about routine childhood vaccinations were conducted in single or multi-sessions. These interventions described or imparted information about some feature of routine childhood vaccination with the purpose of changing consumer knowledge, beliefs, attitudes, behaviour, or self-efficacy.
Comparison	Compared to control or another face-to-face intervention.
Outcomes	Primary outcomes included immunisation status of the child and parents' knowledge or understanding of vaccination. A secondary outcome examined in one study was the cost of implementing the intervention. Found insufficient evidence to inform decisions about changing current practice related to face-to-face encounters. Concluded that interventions to inform or educate parents about childhood vaccination have little impact on immunization status, knowledge, or understanding of vaccination. Limited evidence found relating to the cost of implementing interventions.
	Noted that quality of the evidence was low to very low; imprecision was an issue related to most outcomes.

Synthesis of Findings

Each group member individually reviewed the full-text articles selected for inclusion and extracted data into table format. Data pulled from the articles included the study population, intervention/exposure, summary of conclusions, and link to the local context. The group met to review the data extraction tables and synthesize pertinent findings from the articles.

Several clear themes regarding communication with parents emerged from the research:

- 1. Further research is needed to identify the most effective communication channels to reach parents.
 - a. Further research is required to understand the most appropriate or best way to communicate with parents.^{4,8,9}
 - b. Some of the strategies identified might be effective for disseminating information, but not for changing behaviours.^{4,8,9}
 - c. Evidence supporting face-to-face interventions is low to very low quality and insufficient to inform decisions about changing current.⁹
 - d. Face-to-face interventions are so varied that clearer and more detailed descriptions of interventions and their components are needed in further research.⁹
 - e. Positive conclusions regarding the effectiveness and promise of social media as an intervention or tool for child health are rarely supported by statistical significance of results.⁸
 - f. The evidence base for social media includes studies of poor to moderate quality that lack rigorous study design.⁸
- 2. It is important to ask parents and other priority populations where, when, and how they would like to receive information.
 - a. It is important to identify the priority populations within your community (and target populations of your communications) as they may require alternate methods of data collection to identify their preferred communication methods.⁴
 - i. For example, a survey may not capture responses from the desired priority population; consider focus groups in this scenario.⁴
 - b. Parents may have specific preferences, such as more flexible program hours and increased advertising of existing programs.⁴
 - c. When planning services and programs, consideration must be given to barriers and difficulties that families experience in accessing such services.⁴
- 3. Parents' preferred settings for receiving information include home and school.
 - a. Parents prefer receiving information when they are at home they are more likely to focus their attention on the information when it is provided at a time that suits their needs.⁴

- b. Parents prefer receiving information when it is provided in an avenue that reaches their home and is easy to access; such as school flyers and newsletters, or the internet.⁴
- c. Organizations that want to reach parents should work collaboratively with school boards to disseminate information and resources to parents.⁴
- 4. The Internet and social media are potentially effective communication channels.
 - a. The Internet is a preferred method for parents to receive information.⁴
 - b. Social media tools can be used for education or as a method of disseminating information.⁴
 - c. Web-based communications are helpful to develop social support networks; they are also cost-effective and low maintenance for the reach of a large population with minimal effort.⁸
 - d. Outreach strategies may be more effective if efforts are made up-front to identify social media tools that the target audience is already using and tailoring the intervention accordingly.⁸
- 5. It is important to consider the limitations of social media.
 - a. Due to the rapid evolution of social media, there is a gap between current tools and scientific evaluation of these tools; there may, therefore, be an absence of evidence as opposed to a lack of effectiveness.⁸
 - b. Further research is needed to determine whether social media is an effective channel and what characteristics contribute to its effectiveness.⁸
 - c. Social media has often been used as one component in complex interventions, making it difficult to tease out its specific impact.⁸
- 6. It is important to capitalize on existing communication channels and avenues with parents.
 - a. While evidence for face-to-face interventions is unclear, there may be some populations in which this communication channel is most effective; further evidence-gathering may be required for specific target populations and their preferences.⁹
 - b. In some cases, including additional information into an existing face-to-face encounter may be beneficial.⁹
 - i. For example, it may be cost-effective and appropriate to include communication about vaccination into a healthcare encounter rather than conducting a separate activity.⁹

Applicability and Transferability

Following critical appraisal and synthesis of the literature, applicability and transferability of the results were considered. The group attended a meeting with the Foundational Standards Manager, Child and Reproductive Health Manager, Communications Specialist, and a representative from Public Health Ontario. The purpose of this meeting was to determine whether the findings were feasible and generalizable to the local context. The recommendations were determined to be both politically and socially acceptable.

Politically, support at the provincial and local levels for improved communication within public health is indicated with the draft Ontario Public Health Standards. The Standards emphasize the importance of value-for-money and encourage collaboration between health units, Local Health Integration Networks (LHINs), and community partners. Local governments stand to benefit when constituents are well served and when public health has a greater involvement in their communities. Improved communication can increase organizational efficiency and effectiveness, which can, in turn, provide better value-for-money. The group discussed the potential for backlash from provincial or local governments if changes to communication, based on the recommendations, are not implemented. Lack of follow through and inability to meet the requirements of the new standards could potentially cause tension with local governments and LHINs as well as the Ministry.

From a public relations lens, improving communication would be beneficial for HPEPH. Better communication would broaden the reach of public health information and services to communities within the catchment area, increasing public knowledge of HPEPH. Communicating more effectively could also improve public opinion of the health unit by increasing the perception that public funding is being used efficiently.

Building and sustaining partnerships with external organizations was also discussed. Developing relationships with local community organizations would be integral to improving communication with the public, especially in rural areas. A key consideration would be what HPEPH can realistically commit to providing to other organizations in order to develop mutually beneficial relationships with these external partners while operating within the limits of organizational capacity.

The group noted that the ability of HPEPH to fully implement the recommendations may be restricted by limited human and financial resources. Competing priorities and budgetary constraints could make it difficult to allocate staff time or funding to improving communication. Changing staff roles, new personnel, and lack of staff expertise also have the potential to affect implementation by increasing the amount of support needed for staff and complexity of communication strategies. Internal assets that may help to mitigate this challenge include the Social Media Working Group, Communications Specialist, Foundational Standards Manager, new Medical Officer of Health, and veteran health unit staff who can provide knowledge and assistance to help implement the recommendations.

The reach of the recommended interventions would be influenced by population characteristics, which have the potential to impact generalizability. Hastings and Prince Edward Counties include a mix of urban and rural areas, some of which have their own distinct communication methods. An example that was discussed was the town of Marmora, where a resident writes and hand-delivers the local newspaper. As preferred communication methods can vary greatly between communities, ensuring that public health information is effective at reaching the target audience will likely require a case-by-case analysis. Profiling communication within the HPEPH catchment area would allow for better understanding of the communication tools and methods that would be most generalizable to residents. A situational assessment or primary data collection would provide a better understanding of how specific sub-populations want to receive information and can provide a foundation for other programs to build on. Addressing these factors and implementing necessary changes would increase the transferability of the recommendations.

The group reached a consensus that the recommendations made to increase communication capacity and efficacy with parents in HPE Counties are applicable to the local context. Although potential difficulties may be encountered, steps can be taken to mitigate these while capitalizing on strengths already present in the organization. With support from the applicability and transferability assessment, the recommendations outlined in the section below should be pursued and encouraged.

Recommendations

Findings from the literature were re-examined after the applicability and transferability assessment to produce recommendations for HPEPH. Implementing these recommendations would improve the efficacy of communication between HPEPH and parents in HPE Counties.

- 1. Look to existing organizations for resources and partner with other community organizations and stakeholders to share knowledge and information about the most effective communication channels to reach parents.
 - a. Avoid duplication of efforts by looking at what is already being done by local organizations and if, or how, HPEPH can access this information.
 - Consider partnerships with organizations that are already working with parents (especially priority populations) to increase data collection response rates and better identify preferred methods of communication.
 - c. Consider specific target communities and gain a better understanding of what partner organizations are doing in these communities, on what topic areas, and how they are addressing these topics.
 - d. Centralize where the information gathered from partner organizations is collected and stored to ensure access for all staff.

- 2. Conduct local assessment to identify the communication channels parents prefer and consolidate these with the most effective strategies for reaching parents in HPE.
 - a. Conduct an evaluation of the best channels for communicating with parents and incorporate this information into communication strategies when possible.
 - b. Consider obtaining input from parents during the development of feedback tools, such as surveys.
 - c. Identify priority populations within the target group, as they may require alternate methods of data collection (e.g. focus group versus traditional survey, data collection tools in another language) to identify their preferred communication methods. Consider developing and providing alternative communication methods for these priority groups.
 - d. When developing tools such as surveys, include both online and paper versions; also consider using a mix of open and closed ended questions for better feedback from parents.
 - e. Consider the barriers and challenges that families experience in accessing services and how these can be overcome.
- 3. Consider parents' preferred settings for receiving information when determining how best to communicate with them.
 - a. Provide resources and programs online that can be accessed in the home so that parents can review information at their time of choice.
 - b. Home and school were identified by parents as preferred locations for receiving information; use channels that allow information to be received in these settings if local evaluation is not possible.
- 4. Re-evaluate how social media is being used to communicate with parents.
 - a. Evaluate which social media sites or apps parents are already using; consider that subgroups (moms, dads, or different age groups) may use social media differently.
 - b. Look at the social media tools/methods that other Public Health Units and community organizations are using to reach parents.
 - c. Examine how current social media practices align with what parents are doing on social media (or not) and how HPEPH can increase social media reach and engagement with this population.
- 5. Capitalize on existing communication channels and opportunities with parents.
 - a. Integrate communication into existing encounters with parents rather than creating separate events, when possible.
 - b. Establish what worked well and what was unsuccessful and build on this information.

- 6. Communications strategies should continue to be developed using the corporate communication plan template and conducting proactive planning to develop strategies.
 - a. Develop SMART objectives to ensure communication strategies are measuring magnitude.
 - b. When planning, consider program objectives and the target audience to determine how best to communicate.
 - c. Consider having communications plans reviewed by the Communications Specialist as a central resource.
 - d. Collect indicators throughout the process and evaluate internal work and individual activities.
- 7. Document and evaluate what has already been completed and what is currently underway.
 - a. Formalize the information sharing process; consider sharing information through meetings or staff discussions.
 - b. Evaluate campaigns and highlight what was successful, what did not work, and any limitations.

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Appendix A: Example Keyword Search Terms

What are effective communication channels to reach parents?			
Population	Intervention	Comparison	Outcome
Parents	Communication Strategies Communication Methods Communication	Reaching Informing Channels Education Promotion Initiative Campaign Marketing Website Advertisement Social Media Social Network Increase Public Health	N/A

Appendix B: Literature Search Inclusion Criteria

Inclusion Criteria	Exclusion Criteria
 2009-Present (2016) Discussed channels of communication (interventions): Social media, in-person, webinars, emails, phone calls, etc. Study Population: Parents 	 Before 2009 Study Populations: Non-parents Setting: Under-developed countries Based on the best ways for parents to communicate with their kids Opinion or editorial pieces Refers to communication methods as styles of communication (e.g. action messages, information messages, etc.)

Appendix C: Literature Search Results

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Search results flow chart developed and adapted from Health Evidence and Peel Health

