

Policy Makers' Perceptions of the Role of Research in Injury Prevention Legislation

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Abstract

Introduction: Despite the importance of injury prevention policy in ensuring children's safety, these policies have not been uniformly adopted across Canada. This report examined policy makers' perceptions of the importance of research in implementing child injury prevention legislation.

Methods: Participants were recruited using purposive snowball sampling to complete an online survey in 2015.

Results: Fifty-seven policy makers participated with all 10 provinces represented. Research enablers to injury prevention legislation varied by topic.

Conclusions: The variability in enablers by topic is important to consider to facilitate injury prevention legislation implementation and bridge the gap between scientists and policy makers.

Key Words: injury prevention, policy, legislation, Canada, children

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Introduction

Health services research can influence policy making in a number of ways. Researchers can identify critical problems, advantages and disadvantages of implemented policy solutions, estimate the economic costs of policy proposals, and actively participate in the policy process to help with real-time decision making.(Clancy, Glied, & Lurie, 2012) Policies in injury prevention have not been uniformly adopted across Canada, which may reflect differing priorities between researchers and policy makers. Bridging the gap between science and policy is an important step to ensure that effective prevention solutions are adopted and implemented, and evaluated for effectiveness.(Choi et al., 2015)

Evidence indicates that injury prevention legislation is effective at reducing the burden of injuries in certain populations. For example, systematic reviews on graduated driver's licensing (GDL) have shown that these programs reduce the rate of motor vehicle collisions (MVCs) for young drivers.(Russell, Vandermeer,

& Hartling, 2011) Similarly, policies promoting and/or requiring booster seat use have shown a decrease in mortality among child occupants who are involved in a MVC.(Snowdon et al., 2009) Macpherson et al. (2015) found that there was variation between research evidence and policies related to pediatric injury prevention among Canadian provinces and territories.(Macpherson et al., 2015) It is essential that researchers and policy makers work together to develop and facilitate the enactment of injury legislation that is evidence-based. Little is known about policy makers views regarding the importance of injury research in the legislative process leading to injury prevention policies and laws. However, previous studies suggest that there may be a shift to a more integrative relationship between scientists and policy makers, focusing on mutual knowledge generation ("upstream") rather than knowledge translation ("downstream"). (Choi et al., 2015) Our previous study examined the top enablers of injury prevention policy implementation according to a survey of policy makers conducted in 2015, which identified

research and surveillance as the top enabler to the policy process.(Rothman et al., 2016) The purpose of this brief report is to further examine the results of the survey related specifically to policy makers' perceptions of the importance of research in facilitating child injury prevention legislation in Canada.

Methods

An online survey was designed by an expert panel of 6 Canadian researchers and policy makers in different provinces as part of a larger study conducted in 2015 examining barriers and enablers to enacting child- and youth-related injury prevention legislation in Canada. (Rothman et al., 2016)

A broad array of expertise from epidemiology, social sciences research to advocacy and policy implementation was represented by the panel. A previous systematic review by Oliver et al. examining the use of evidence by policymakers, guided the survey development.(Oliver, Innvar, Lorenc, Woodman, & Thomas, 2014) The Oliver review identified barriers, facilitators and themes related to the use of evidence by policymakers. Barriers and facilitators identified in Oliver's review were categorized in the current survey into the following themes depending on content:

Organizations and resources; Contact and collaboration; Research and researcher characteristics; Policymaker characteristics; and Policy Characteristics. Oliver's review identified access to quality research and the quality of the relationship between the researcher and the policymakers as being pivotal to the use of evidence by policymakers.

The survey was conducted in the winter/spring of 2015. Participants were identified who were involved in injury prevention research, practice and policy throughout Canada using, purposive snowball sampling.

The top 5 injury topics were identified by study participants according to the frequency of responses which reflected their involvement in the specific topic at the provincial level. A 5-point Likert-type scale (strongly agree, somewhat agree, neutral, somewhat disagree, strongly disagree) was used to rate the importance of potential enablers of injury legislation implementation by topic. The 5-point scale is a commonly used scale for assessing the level of agreement within surveys. The frequency of "somewhat: and "strongly agree" were tabulated for each question and percentages were calculated from the total number of responses for each question by topic. The somewhat/

strongly disagree responses were not presented, as these were simply the inverse of the somewhat/strongly agree as there were very few “neutral” responses. Perceptions, specifically of the role of research by injury topic, were identified. Ethics approval for this survey was obtained from York University, Office of Research Ethics, Human Participants Review Sub-Committee.

Results

Fifty-seven policy makers, representing 10 provinces responded to the survey. The previous paper identified the 5 top topics and whether provincial legislation existed (Rothman et al., 2016). Bicycle helmets, cell phones/distracted driving, booster seats, ski helmets and graduated driver licensing were the topics that most respondents reported in having had involvement. In that study, the most frequently identified enabler of injury policy development was that research/surveillance was readily available (59%). (Rothman et al., 2016)

Other commonly reported research enablers were: research was easy to understand (47%), affiliation of researchers with reputable organizations (40%), research was of sufficient quality and quantity (39%) and presented in a

useful format (38% Figure 1). Less important, was that researchers had similar priorities as policy makers (29%), that policy makers had positive relationships with researchers (28%) and that researchers understood the policy process (21%).

The importance of different research enablers varied by injury topic. For example, research being readily available was identified as particularly important for GDL and booster seats, but was also identified by a large proportion of the respondents to be important for the other topics (Figure 2). Research being presented in a useful format was again most important for GDL, but much less important for cell phones and bicycle helmets.

Discussion

The results of this study emphasize the importance of research being readily available to influence policy development. Research that is easy to understand was the second most important factor identified by stakeholders after research being readily available. Other studies similarly found that the top strategies for bridging the gap between scientists and policy makers included a focus on policy (conducting research that has policy focused

questions), science-policy forums, and policy briefs.(Choi et al., 2015) These findings outline the need for research to be packaged in a format that is digestible by policy makers and other end users. Clancy et al. (2012) reported that research solutions are more likely to influence the policy making process if their logic and design are straightforward enough to be translated to non-experts.(Clancy et al., 2012) There was variability in the importance of research enablers by topic. Policy makers generally felt that it was less important that researchers had similar priorities or understood the policy process. This presents a challenge for researchers to conduct timely research. There is a need for ongoing relationships with policy makers with discussions early in the research process to facilitate the development of common injury prevention priorities to ensure research is used effectively in the legislative process.

Strengths

The strengths of this study were that policy makers were able to identify enablers of policy implementation related to specific childhood injury topics. The results are also generalizable to most of Canada as there was representation from all ten provinces.

Limitations

Although there was representation from all provinces across childhood injury topics overall, not every topic received a response from every province which made it difficult to analyze enablers by province. In addition, no responses were received from the three Territories.

Conclusion

Uniformly adopting evidence-based prevention legislation is necessary to ensure children's safety in Canada. Understanding the importance of research enablers in the implementation of that policy and legislation helps to bridge the gap between scientists and policy makers. This study found that research being readily available and easy to understand were two of the top priorities for policy maker stakeholders, however this varied somewhat depending upon the injury topic. Factors that were deemed less important included researchers having similar priorities as policy makers or understanding the policy process. Researchers should seek to develop ongoing relationships with policy makers by collaborating at the planning and outset of the research process so as to better ensure similar priorities that can be effectively integrated into legislation.

Conflicts of interest: None to disclose.

Author contribution: L.R. and A.M. were responsible for the conceptualization framework, the development and implementation of the survey, the analysis and interpretation and the writing and editing of the manuscript. I.P., K.B., L.O., and P.F., all contributed to the conceptualization of the framework of the study, the interpretation of the results and the editing of the manuscript. L.F. contributed to the conceptualization of the framework of the paper, and the writing and editing of the manuscript.

References

- Choi, B. C., Li, L., Lu, Y., Zhang, L. R., Zhu, Y., Pak, A. W., Little, J. 2015. Bridging the gap between science and policy: an international survey of scientists and policy makers in China and Canada. *Implementation Science*, 11(1), 16.
- Clancy, C. M., Glied, S. A., & Lurie, N. 2012. From research to health policy impact. *Health services research*, 47(1pt2), 337-343.
- Macpherson, A. K., Brussoni, M., Fuselli, P., Middaugh-Bonney, T., Piedt, S., & Pike, I. 2015. An evaluation of evidence-based paediatric injury prevention policies across Canada. *BMC Public Health*, 15(1), 707.
- Oliver, K., Innvar, S., Lorenc, T., Woodman, J., & Thomas, J. 2014. A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC health services research*, 14(1), 2.
- Rothman, L., Pike, I., Belton, K., Olsen, L., Fuselli, P., & Macpherson, A. 2016. Barriers and enablers to enacting child and youth related injury prevention legislation in Canada. *International journal of environmental research and public health*, 13(7), 656.
- Russell, K. F., Vandermeer, B., & Hartling, L. 2011. Graduated driver licensing for reducing motor vehicle crashes among young drivers.
- Snowdon, A., Rothman, L., Slater, M., Kolga, C., Hussein, A., Boase, P., & Howard, A. 2009. A comparison of booster seat use in Canadian provinces with and without legislation. *Injury Prevention*, 15(4), 230-233.