Evaluating the Effectiveness of Health Canada's Health Product Public Advisories: A Comparative Study of Health Literacy Burden and Clarity

M. Lebrun, B. Beauchamp, J. DiMuzio, S. Reid, V. Hogan, Marketed Health Products Directorate, Health Products and Food Branch, Health Canada, Ottawa, Canada

INTRODUCTION AND BACKGROUND

Health Canada is developing best practices to evaluate the effectiveness of its health product risk communications in terms of their reach (dissemination), clarity and impact.

Research has shown that the ability to read and understand health risk information is critical in making informed decisions on health.[1]

This comparative study used well established methods to look at health literacy burden and clarity of Health Canada's health product Public Advisories before and after adopting a new consumer-focused template.

Changes to the template included using coloured boxes to highlight and sort important information, and the effective use of images and captions to increase the clarity of the message.

OBJECTIVES

1. To examine the health literacy burden of Public Advisories before and after implementation of the new template.

2. To determine which health literacy assessment method(s) were most suitable to measure the health literacy burden imposed by Public Advisories.

MATERIALS AND METHODS

Public Advisories used in this study were for pharmaceuticals, biologicals and natural health products written in English and issued by Health Canada between May 3rd 2009 and May 4th 2011.

The Suitability Assessment of Materials (SAM)[2] and 7 readability tests were run by 3 independent evaluators on 46 Public Advisories (14 before and 32 after template revision).

Student's t-tests were conducted at a pre-selected significance level of ($p<0.01$).

RESULTS

Health Canada's Public Advisories, using the consumer-focused template, scored significantly better (18% on average) on the SAM due to improvements in Literacy Demand, Graphics and Layout and Typography ($p<0.01$).

Figure 1. The average SAM scores (horizontal line) of Public Advisories before and after implementation of the new consumer-focused template

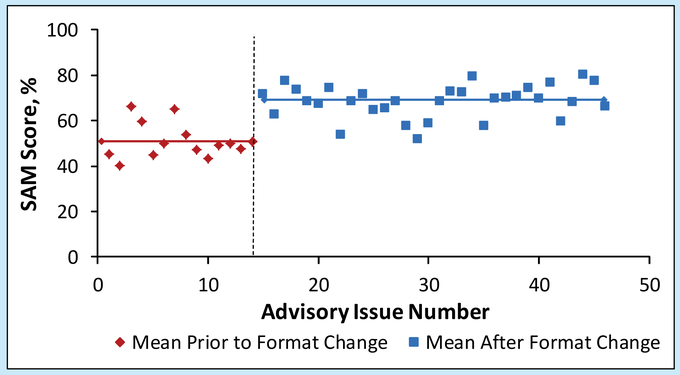


Figure 2. Average SAM scores of Public Advisories before and after implementation of the new consumer-focused template, sorted by SAM categories. Error bars represent the standard error of the mean (SEM).

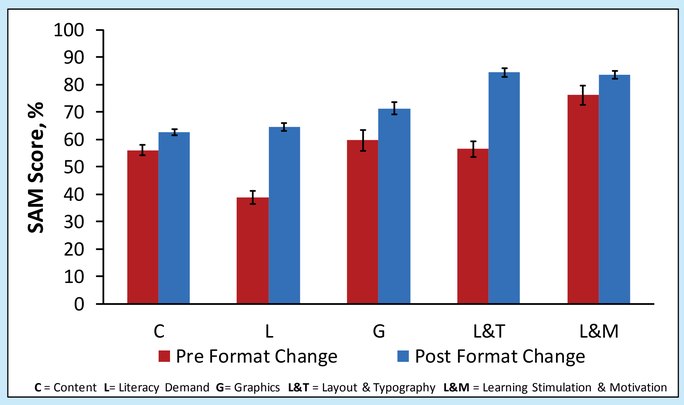
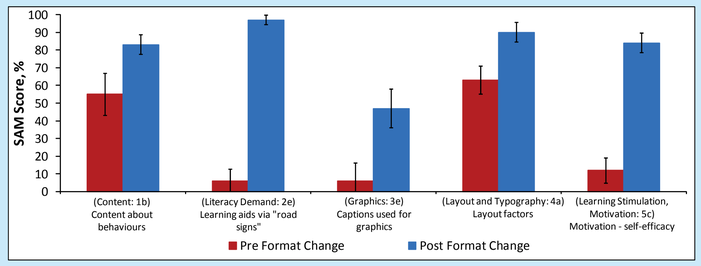


Figure 3. Average SAM scores for the subcategories where a significant change was measured between the Public Advisories before and after implementation of the new consumer-focused template. Error bars represent the standard error of the mean (SEM).



CONCLUSIONS

Revisions to Health Canada's Public Advisory template had a positive effect on reducing the health literacy burden. Changes to the presentation elements, including the use of coloured boxes to highlight and sort important information, and effective use of images and captions, increased the clarity of the public advisories.

However, readability testing indicated that the majority of Public Advisories read at a college and university level, and are too difficult for the general Canadian public to read and understand.

This comparative study showed how improving elements of risk communication materials can improve the clarity of risk communications.

The SAM was also determined to be a suitable method to measure the effectiveness of Health Canada's risk communications, informing on the clarity of the safety information.

REFERENCES

1. Canadian Council on Learning. *Health Literacy in Canada: A Healthy Understanding.* (Ottawa, ON, 2008).
2. Doak, C., Doak, L., Root, J. *Teaching Patients with Low Literacy Skills.* (J.B. Lippincott Company. Philadelphia, 1996).