Effectiveness of web-based dissemination and implementation knowledge translation interventions in cancer prevention

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Background

- Pervasiveness of cancer
- Cost of cancer
- Existing research evidence
- Gap in knowledge translation (KT)
- Emerging online KT strategies
With the implementation of three KT strategies (tailored email messages, Twitter™, webinars):

1. Determine if there is a change in the awareness and/or use of high quality cancer prevention research evidence in public health.

2. Assess participant satisfaction with the online KT strategies received.
Methods

**Design**
- Prospective cohort before and after

**Sample**
- Public health professionals in Canada
- Cancer prevention

**Intervention**
- 18 months
- Tailored email messages, Twitter™, webinars
Tailored email messages

- Summarized findings and links to systematic reviews from Health Evidence™
- Monthly
• Tweets sent from @HealthEvidence
• Actionable messages from high quality reviews on Health Evidence™
• Three times per week
Webinars

- Quarterly
- 60-90 minutes
- WebEx software
- Polling questions
- Recordings and slides posted on Health Evidence™
### Methods: Data Collection

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<th>Question</th>
<th>Description</th>
<th>Example</th>
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| **Awareness of research evidence** | • Nine knowledge statements  
• ‘yes’ or ‘no’ responses regarding effectiveness  
• Total score summed out of 9 | Sun-safety programmes in the working environment foster sun-protection habits among people working outdoors. |
| **Use of research evidence**      | • ‘yes’ or ‘no’ responses                                                                 | Did findings from a systematic review influence a decision in your health unit in the last 12-18 months? |
| **Satisfaction**                  | • Six satisfaction statements per KT strategy  
• 7-point Likert scale  
• 1 = strongly disagree to 7 = strongly agree | I was satisfied with how often I received the tailored messages (i.e. monthly) as part of this study. |
Results: Sample Demographics

- **34% Nurse; 19% Dietitian; 28% Other**
- **54.5% from Ontario; 18% Eastern; 17% Central-West and Northern**
- **54% Bachelor’s degree; 32% Master’s degree**
- **10.4 years in PH**

n = 134
Results: Selected Interventions

- TMs: 43.3%
- Webinars: 28.4%
- TMs + webinars: 22.4%
- TMs + Twitter: 1.2%
- TMs + Twitter + webinars: 0.7%
Results: Awareness & Research Use

• Awareness
  • No statistically significant increases in awareness of research evidence from baseline to follow-up

• Research Use
  • No statistically significant increases from baseline to follow-up
Results: Satisfaction

Mean score out of 7
7 = strongly agree

KT intervention
- Raising awareness of evidence
- Promoting use of evidence
- Amount of info

TMms
Webinars
Twitter

- 5.4
- 5.1
- 5.3
- 5.2
- 5.1
- 5.2
- 4.3
- 4.2
- 4
Conclusions and Implications

• No increases in use of research evidence and awareness
  • Consider:
    • Length of intervention
    • Dissemination of tailored, topic-specific, relevant research evidence

• Favored online KT strategies:
  • TMs and webinars

• High levels of satisfaction for:
  • raising awareness of research

• Use of social media (e.g., Twitter™) as KT strategy needs further consideration

• Consider preference of public health professionals for online KT interventions