Bridging the Gap from Physical Activity and Cancer Research to Practice: a Knowledge Translation Strategy for Oncology Nurses

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Research suggests that regular physical activity (PA) after cancer diagnosis may be a valuable supportive care strategy for improving quality of life (Speck et al., 2010).

Relatively few health services are available that offer cancer-specific PA support to cancer survivors (Karvinen et al., 2013).

Recent research suggests lack of knowledge and confidence may impede PA counselling practices of oncology nurses (Karvinen et al., 2012).

The following pilot trial tests the utility of an online knowledge translation intervention strategy for improving oncology nurses’ PA counselling practices.

The primary purpose was to compare changes in oncology nurses’ PA counselling practices after participating in a knowledge translation intervention compared to a control group.

Secondary purposes were to examine the effect of the intervention on barriers to, and self-efficacy for, providing PA counselling to survivors.

It was hypothesized that oncology nurses in the knowledge translation condition, compared to the control condition, would indicate improvements in PA counselling practices, self-efficacy for providing PA counselling, and reductions in barriers to providing PA counselling to cancer survivors over the course of the intervention.

The knowledge translation intervention strategy may have resulted in a reduction in barriers to providing PA counselling to patients.

Although changes in the KTC in self-efficacy for providing PA counselling and actual PA counselling practices did not reach statistical significance, Cohen’s effects sizes (d) ranged from small-medium to medium. Future trials may use more interactive opportunities within the learning modules to further increase PA counselling practices and self-efficacy.

These pilot data suggest that an online knowledge translation strategy may be a cost-effective means of providing oncology nurses’ with tool for improving PA counselling. Larger trials are warranted.

METHODS

Participants & Procedure

Participants (N=53) were recruited to the study through emails to oncology nurse listservs.

Participants were randomly assigned to the knowledge translation condition (KTC) or control condition (CC).

The intervention lasted 12 weeks.

Knowledge Translation Condition (KTC)

KTC participants completed six online learning modules and quizzes consisting of: (1) Benefits of PA, (2) PA Guidelines, (3) Motivational Interviewing, (4) Motivational Strategies for Behaviour Change, (5) Strategies for Keeping Active, and (6) Barriers to PA Counselling.

KTC participants were given individual password protected logins.

Each module was completed within a two week time frame.

Condition Condition (CC)

CC participants were given access to the modules after completing all measures

PA Counselling Practice was assessed by modified scales by Sherman & Hershman (1993) and Walsh et al. (1999) and queried the percentage of patients that participants provided PA counselling to in the last month.

Self-Efficacy for PA Counselling was measured using a modified version of the Counsellor Activity Self-Efficacy Scale (Range: 0-9; Lent et al., 2003).

Perceived Barriers to PA Counselling was assessed by asking participants to rate five barriers to PA counselling based on two previous studies assessing barriers to PA promotion by oncology clinicians (Range: 1-5; Karvinen et al., 2010; 2012).

Statistical Analyses

Repeated measures ANOVAs controlling for baseline PA counselling were used to assess the primary and secondary outcomes. Cohen’s effect sizes (d) were calculated.

RESULTS

The sample was on average 45.7±10.7 years old, the mean years of practice was 19.5±11.4, 52 (98%) were female, 44 were Caucasian (82%), and 40 (75%) lived the United States while 13 (25%) resided in Canada. Five (9.4%) reported having received formal training in PA.

Results indicated a non statistically significant increase in the percentage of patients the KTC provided PA counselling to from baseline to postintervention (from 50% to 61% compared to no change in the control group; p=.174; d=.37).

A significant decrease was found in several barriers for PA counselling in the KTC compared to the CC, most notably in “unsure what PA to recommend” (F=3.03, p=.043; d=0.58; Figure 1) and “unsure that PA is safe for patients” (F=9.15, p=.004, d=0.89).

A trend was found suggesting an increase in self-efficacy for providing PA counselling in the KTC compared to the CC (F=3.11, p=.08, d=0.48; figure 2).

REFERENCES


