KTI 13. PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS

WHAT ARE PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS?

PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS DESCRIPTION

- Various patient-mediated interventions that can be used during a single clinical encounter.
- Examples of interventions include: booklet, brochure, website, computer program, print material, counseling session, video.

PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS GOAL(S)

- Improve patient's involvement in their own care, and communication with their provider(s).

CURRENT FINDINGS FROM THE EVIDENCE

- Single interventions involving print material achieved beneficial outcomes, as did more complex interventions.
- Few studies were eligible, and no studies evaluated patient harms, or provider outcomes.

POINTS TO KEEP IN MIND

- This review has focused on patient-mediated interventions used when patients are meeting with a healthcare professional and are providing information to improve self-management of their condition(s).
- The researchers used the following taxonomy to guide their self-management interventions:
    - Inform - Information that provides patients with knowledge about their condition and an understanding of how to manage it (e.g., about condition and treatment, activities of daily living, lifestyle advice).
    - Activate - Information or tools to prompt action for actively managing the condition and enhancing quality of life (e.g., decision aid, lifestyle monitoring, action plan).
    - Collaborate - Information or mechanisms that lead to interaction and engagement (e.g., communication with providers, available resources, social support)

SYSTEMATIC REVIEW OF THE EVIDENCE FOR PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS

Source: Gagliardi AR, Légaré F, Brouwers MC, Webster F, Badley E, Straus S. Patient-mediated knowledge translation (PKT) interventions for clinical encounters: a systematic review. Implementation Science. 2015 Dec;11(1):26.

EVIDENCE FROM THE SYSTEMATIC REVIEW	
Description of Patient-Mediated Knowledge Translation Interventions	Types of interventions used: • Print material (brochures 5, booklets 1, variety of print material 2, list of websites 2) • Electronic material (video 4, computer program 5, website 1) • Counseling (not specified) 10 studies offered a single PKT intervention (2 arthritis, 8 cancer), and 6 studies offered a multifaceted PKT intervention (3 arthritis, 3 cancer).
Setting	Healthcare settings: Ambulatory care Healthcare topic: Osteoarthritis, rheumatoid arthritis, breast cancer, prostate cancer. Study location: USA (n=10), Canada (n=1), UK (n=2), China (n=1), France (n=1), Netherlands(n=1).
Intervention Deliverer	Nurses, researchers, case managers, health educators, urologists, psychologists, public health personnel, medical librarian
Intervention Recipient	Patients with osteoarthritis, rheumatoid arthritis, breast cancer or prostate cancer
Quality of the systematic review	High risk of bias (Assessment tool: ROBIS)
Quality of studies included in systematic review	7 High quality 6 Low quality 3 Unclear quality
OUTCOMES OF SYSTEMATIC REVIEW	
Comparisons:	1. Patient-mediated intervention vs. none
Patient Process outcomes:	Knowledge outcome: • 1 RCT (high risk of bias) reported improved knowledge after text and graphic information. • 1 observational study (low risk of bias) reported improved knowledge with a computer application and list of websites. Decision-making outcome: • Decisional conflict, readiness or intention, anxiety, satisfaction, preparedness for decision-making, improved in 9 studies. Communication outcome: • 1 RCT (low risk of bias) reported no difference. Behaviour outcome: • 1 observational study (low risk of bias) reported that most participants intended to or were already following the lifestyle advice. Harms outcome:

	• no studies. Satisfaction outcome: • In 7 studies, majority of participants had favourable views of the intervention.
Health care provider process outcomes:	Provider satisfaction outcome: • In 1 study, high overall satisfaction with a print material toolkit (82%) was reported. • Intention to give the toolkit to patients fell from 92% before the study to 64% after the study.
System/organization outcomes:	Health service use: • In 1 study, no significant effect on number of visits to oncologist, time spent with oncologist, time spent in telephone consultations but significantly more time spent with nurses.

OPERATIONALIZATION OF PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS

No information was provided in the review.

STUDY EXAMPLE OF PATIENT-MEDIATED KNOWLEDGE TRANSLATION INTERVENTIONS FROM THE SYSTEMATIC REVIEW

Source: McDonald DD, Gifford T, Walsh S. Effect of a virtual pain coach on older adults' pain communication: a pilot study. Pain Management Nursing. 2011 Mar 1;12(1):50-6.

STUDY INFORMATION	
Goals of Intervention	To positively impact older adults who are experiencing pain by providing a virtual pain coach to improve their pain communication.

Description of Intervention	Virtual practitioner coach
	• Two important components that were taught to the patients:
	  ○ Practicing their selection of personally relevant pain management topics to discuss with the practitioner
	  ○ Practicing taking their turn and discussing their pain.
	• Virtual coach was a female, dressed professionally appearing in an examination room and was instructing the older patients to practice talking to her about their pain.
	• The coach detected and responded to pauses by encouraging older adults to describe additional information, provided general positive feedback on the practice session, and concluded the coaching session by encouraging older adults to share their important pain information with their practitioner.
	• 3 main statements:
	  ○ a) "I am going to help you practice talking with your healthcare practitioner so you can be sure to say all the important information about your pain that you need to

	when you talk. Pretend that I am your health care practitioner and respond out loud to me. Hello. Tell me about your pain, aches, soreness, or discomfort." ○ b) "Very good. Is there anything else you would like to tell me about your pain, aches, soreness, or discomfort?" and ○ c) "You have shared lots of helpful information about your pain. It is very important that you now tell your health care practitioner your pain information so that you can get your pain reduced to a mild or lower level." Video practitioner coach • Consisted of a videotaped practitioner verbalizing the 3 main statements as the virtual practitioner • Separate video clips appeared in the same sequence as the virtual practitioner statements with each statement initiated after the participant touched the space bar. • Unlike the virtual pain coach, the video coach was unable to detect pauses or encourage participants to continue talking about their osteoarthritis pain.
Setting	Community
Intervention Deliverer	Video or virtual practitioner
Intervention Recipient	Older patients
Quality of the Study	High quality
STUDY OUTCOMES	
Comparison	1. Virtual practitioner coach vs video practitioner coach vs no coach
Patient Process Outcomes	Older adults described M¼ 6.3 (SD ¼ 3.17), M¼ 3.0 (SD ¼ 2.08), and M¼ 5.2 (SD ¼ 2.40) items of important pain information as a result of the virtual coach, video coach, and no coach conditions, respectively. Older adults who practiced talking with the virtual coach described more than one additional item of important pain information. In conclusion, the virtual coaching and education intervention might enable older adults to communicate their pain management information more effectively to their practitioners.