KNOWLEDGE TRANSFER AND EXCHANGE

Developing a contextual understanding of systematic review findings in OHS

Researchers from IWH and Memorial University develop a process to help users of workplace health and safety evidence answer the question, 'Will it work here?'

To take effective action to prevent workplace injuries and illnesses, people who design and implement occupational health and safety (OHS) interventions can look to the latest research evidence on what works.

A growing body of systematic reviews is now available to help decision-makers—policy-makers, health and safety professionals, employers, worker representatives, and more—tap into this evidence without having to stay up to date on what studies have been published and sort through sometimes contradictory findings.

Systematic reviews use explicit and reproducible methods to synthesize findings from all available studies on a given question that meet a certain standard of quality. Users of evidence can have confidence that the findings or recommendations produced at the end of the process represent what's known in the body of research up to a point in time.

But how to act on systematic review findings can be a challenge. Review recommendations may or may not suit local needs and resources. The service delivery systems may or may not have the competencies and infrastructure to easily carry out the recommendations. The values and culture of the local population may also be at odds with the options set out.

That's why researchers at the Institute for Work & Health (IWH) teamed up with Memorial University's Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) to develop and test a method for contextualizing systematic review recommendations in workplace injury and illness prevention.

When you synthesize evidence, you don't get the luxury of just synthesizing research findings from studies conducted within your jurisdiction or sector, says Emma Irvin, IWH director of research operations and lead of the Institute's systematic review program.

Often you have to synthesize evidence from studies conducted in other jurisdictions or other sectors, which users then have to struggle to adapt to their context. This project is about going beyond asking, 'Will it work?' to asking, 'Will it work here?'

The team recently produced a handbook written for OHS decision-makers about how to carry out contextualized reviews, as well as a report providing an example of contextualization. For this contextualization example, the team worked with stakeholders to update a systematic review on workplace interventions to help manage depression, and then tailored the findings for the province of Manitoba (see sidebar article).

The systematic reviews that IWH does are tremendous, says Bruce Cielen, manager of the Workers Compensation Board of Manitoba's Research and Workplace Innovation Program, which funded the project. But there's always one additional question that I have in my mind: How might this work in Manitoba's health-care sector? Or how might this work in Thompson, Manitoba, for Vale Mining?

As a result of this project, not only do you have a step-by-step process on how to go through and do a review of the available evidence in research, you now can look at how the research would fit into the local context, he adds. And that's a nice thing to have. That's why I believe it has potential for great uptake.

Contextual factors to consider

Many different factors can affect the implementation or effectiveness of occupational health and safety interventions recommended in systematic reviews. Which factors to take into account will vary, depending on both the intervention and the context. Below are a few examples of issues to consider:

- **Geography**: density and spread of workforce/workplaces; environmental conditions of workplaces (i.e. cold, remote, sheltered, urban, rural
- **Industry/workplace type**: type of industry (e.g. fisheries, oil and gas, mining); type of workplaces (e.g. large, small, local, national); level within the organization being targeted
- **Legislative/political environment**: legislated health and safety requirements; enforcement; policy context/history; media scrutiny; relevance to partisan/electoral politics; collective bargaining issues
- **Safety culture**: attitudes, beliefs, perceptions and values that employees share in relation to safety
- **Worker population**: characteristics of the workforce; staffing; retention/turnover; training; benefits and incentives
- **Infrastructure/services**: existing infrastructure and/or services; technological/logistical requirements; support/follow-up services; requisite inputs and supplies; appropriate academic and research environments
- **Economic factors**: fiscal constraints/opportunities; state of the provincial and regional economy; profitability of a firm or sector

Method adapted for work and health

The project team drew on a method for contextualizing systematic review findings first developed by Memorial University's NLCAHR, through its Contextualized Health Research Synthesis Program (CHRSP). The team first piloted the CHRSP method by selecting two IWH systematic reviews already completed and contextualizing them for Newfoundland and Labrador. Based on this experience, the team developed a handbook on contextualizing OHS evidence, which in turn guided the process for the synthesis on workplace depression management for Manitoba. Both the handbook and the sample contextualization can be found at: www.iwh.on.ca/systematic-reviews.

The contextualizing process, though not strictly an IWH innovation, hews closely to a process for engaging stakeholders in systematic reviews that IWH has developed and honed over the years.

In IWH's approach, stakeholders play an active role in the design, implementation and dissemination of systematic reviews. Their participation helps ensure that the research question chosen is relevant and useful to decision-makers and practitioners; that the scope and objective of the review are modified if the research literature cannot directly answer the research question; that the messages conveying key findings use language that would be meaningful for the target audience; and that the findings reported also take into account practices that have yet to be studied by scientists.

The contextualization process developed by the IWH-NLCAHR team extends the IWH approach to include an examination of how users' contexts may help or hinder the uptake of review findings. The factors to consider and questions to ask when contextualizing findings differ depending on the review topic, as does the membership of the group being consulted. And while consultation in the original CHRSP approach takes place via one-on-one interviews, the new process reflects the IWH approach of bringing stakeholders together for a more dynamic back-and-forth discussion.

There are pros and cons to each method, but we didn't get the impression that people were holding back in their comments because of the presence of other groups in the room, says Irvin. There was an incredible honesty. The energy was very much focused on the problem.

The IWH systematic review group will continue to evaluate this method in different contexts, says Irvin. She adds that stakeholders have long been asking for a method to contextualize evidence—and often not just at the sectoral or regional level, but also at the workplace level.

This method holds a lot of promise, as it's about bringing people together to solve a problem and identify how evidence-based recommendations can be tailored to the situation, she says.

Source: At Work, Issue 89, Summer 2017: Institute for Work & Health, Toronto