PROFESSOR USES ROBOT TO TEACH MED CLASS

Technology: Medical students took a virtual tour of a fish processing plant

KARISSA DONKIN TELEGRAPH-JOURNAL March 26, 2014

SAINT JOHN – More than 100 medical students in Saint John and Halifax were able to tour a fish processing plant in Blacks Harbour without so much as leaving their seats Tuesday.

Dr. Anil Adisesh, the J.D. Irving, Limited research chair in occupational medicine at Dalhousie University and Dalhousie Medicine New Brunswick, wanted to take his students inside a workplace to watch someone work. He focuses on the relationship between work and well-being and wanted to take a class of second-year medical students to analyze the health risks inside a fish processing plant.

With some of the class in Saint John and the rest participating by video in Halifax, that seemed impossible – until they found a robot. Adisesh sent a telepresence robot to Blacks Harbour, which transmitted images back to the classrooms in Saint John and Halifax live. Students were able to watch workers process and package fish live from the Cooke Aquaculture plant.

"I can see the workplace and understand better the medical problems that somebody may be having, because I know the types of exposures and the circumstances that somebody is working in Adisesh explained.

Built by InTouch Health, the robots come in a few different forms. Some are on wheels and can be moved remotely around a room, with the ability to zoom in on patients to examine them.

The one Adisesh used on Tuesday is about the size of a suitcase. It has a screen on its front and displayed Adisesh's face, as he chatted on a headset to a health and safety worker at Cooke Aquaculture. It's similar to video-chat service Skype, but with more robust technology.

The robots have been used in remote Labrador as a way of offering access to a doctor when one can't be there in person.

"Apparently the number of visits from patients doubled when the robot was there because the patients could interact with the doctor via the robot. And the nurses also have the ability to talk to the doctor," Adisesh said.

After seeing it used in Labrador, Adisesh began thinking about how he could use it to make workplace visits, a tool that he believes would help him treat patients more accurately.

"I may be able to use it in helping rehabilitate people," he said. "If you're thinking about returning somebody to work, if you understand what work they're going back to, it my be easier to suggest adjustments or accommodations that may be made for any disabilities they may have."

After teaching students about some of the health risks people face at work, students had a chance to watch fish processing technician Jennifer Soucy cut bits of fish by hand, and ask her questions about her job.

"We know (Adisesh is) focused on promoting healthy workplaces and preventing workplace illness and injury," Cooke Aquaculture spokesman Chuck Brown said.

"Anything we can do to help with that kind of research is a plus. We think our employees are going to benefit from the work that he's doing."

Adisesh doesn't believe the telepresence robots are being used at all in New Brunswick now, but would like to see that change. He hopes to apply for research funding on how to use the technology to make people healthier at work.