

Occupational Therapist Spearheads Groundbreaking Study

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Occupational therapist Azeena Ratansi never imagined herself in the role of a researcher. But after spearheading a groundbreaking study linking her work to positive behavioural changes in the lives of patients with osteoporosis, she's hooked.

"I guess I'm embedded in research," she says, with a laugh. The personable occupational therapist works in the Multidisciplinary Osteoporosis Program, the Women's Cardiovascular Health Initiative and Rheumatology at Sunnybrook and Women's. The bulk of her time is spent educating patients with osteoporosis on fall prevention and proper biomechanics.

The comprehensive osteoporosis assessment and treatment program at the Women's College campus was the only one of its kind at that time to use OTs, according to Ratansi, and the literature was sparse. Only one article, written in 1987, alluded to the role of OTs. Since then, one other program has added an OT to its roster.

"Part of what drove me was the need to justify OT; to look at its value. And I was curious about answering this one little question about what we do and whether or not it works," she explained.

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Begun in 1996, the study, "Occupational Therapy Intervention in Osteoporosis," by Ms. Ratansi, Dr. Gillian Hawker and Dr. Susan Jaglal was partially funded by the Canadian Occupational Therapy Foundation. Its premise was simple: to determine whether or not intervention by an OT makes a difference in the lives of patients one year later.

From the beginning, Ms. Ratansi, the principal investigator, was intrigued by the process. The learning curve for her was steep - dealing with ethics and recruitment to preparing proposals and final submissions - but the support offered by a team approach was tremendous. "And it was exciting to be involved in something that had never been done before."

Eleven questions were asked of study participants including how they gardened, snow shoveled, put on socks and shoes, unloaded their groceries, vacuumed, as well as what they stood on to reach high items. Ms. Ratansi said her practical experience in the past nine years with Sunnybrook and Women's led to the questions on the survey as well as what patients reported about how they fell and/or fractured. Patients would then talk to her for 20 minutes and receive suggestions on how to decrease the risk of falling and reduce excessive spinal loading.

One year later, the results were significant: the 20-minute intervention the previous year resulted in improved biomechanics and fall prevention behaviours. For instance, 62% of patients bent forward when they vacuumed, increasing their risk of excessive spinal loading. One year later, that had dropped by half to 31%.

She has since presented the study results at international conferences in Boston, San Francisco, Florida and Toronto.

The next step is to publish it and explore in subsequent research some of the determinants of falls revealed in the study. For instance, the data shows that younger, active people fall (in their 40s and 50s; 67% participated in recreational exercise) and most falls occurred outside the home (only 23% occurred inside the home). This highlights a gap in the literature on fall prevention -- it tends to be directed at indoor falls by older individuals -- and shows why the study results are so important.

"In the end," says Ratansi with a wide smile, "I was thrilled with it."