Scholarship that is grappling with to become part of a community of in the United States doing original Program in Health Policy and Practice.

Earned entrance to the Harkness Associate Award, Kreindler has Netherlands, Switzerland and Germany.

A dozen researchers from the United annually – that will have her discussing by taking a critical look at what makes healthcare system. Community integration efforts succeed or fail.

“What does it take to create a real system that is organized around the needs of the people?” I hope to address this question with leading experts in the field.

Kreindler will be studying some of the issues researchers are grappling with as the United States have been asking “Healthcare is a team effort involving different groups can result in a poorly different perspectives, or cooperation lacking around the needs of the patient.” I hope to address this question by taking a critical look at what makes integration efforts succeed or fail.

BY KATIE CHALMERS-BROOKS

University of Manitoba researchers have uncovered a major clue about which children may be more at risk for developing inflammatory bowel disease (IBD), a lifelong condition that continues to stump scientists.

Their findings suggest infants given antibiotics before age one may be three times more likely to develop this chronic and painful disease. Comprised mainly of two ailments—ulcerative colitis and Crohn’s disease—IBD attacks the gastrointestinal tract, causing fatigue, recurrent diarrhea, and bloody stool, and takes a significant toll on the quality of life of those affected.

Led by Charles Bernstein, professor of medicine and director of the university’s IBD Clinical and Research Centre, the study compared the antibiotic prescription rates during the first year of life for children who were eventually diagnosed with IBD, and the rates among children who don’t have IBD.

Bernstein, along with Souradet Shaw, a research fellow at the centre, discovered 60 per cent of kids with IBD had received at least one antibiotic prescription before their first birthday, compared to 39 per cent of children who don’t have IBD.

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“I think that we’ve basically emerged from a period where there was over prescription to infants and children,” says Shaw, who is also a research associate at the Centre for Global Public Health. “Clinicians are moving away from that model, and I think that this study does two things: it gives pause to clinicians to maybe think twice about prescribing antibiotics, and illustrates that infants are different beings than adults or children.”

There are two hypotheses about why antibiotics during infancy increases the risk of IBD during childhood, both relating to changes in the flora located in the bowel. The first suggests that since antibiotics kill off bacteria that co-exist normally in the bowel, it doesn’t allow the developing organ to build up a tolerance for these bacteria, causing an irregular response to their presence.

The other suggests that antibiotics, in killing off bacteria that normally co-exist in the bowels, create an environment where ‘bad’ bugs are able to thrive.

Researchers gathered the data for the study from the University of Manitoba IBD Epidemiological Database, which houses information on all Manitobans diagnosed with IBD and is the most comprehensive database of its kind in North America. They cross-referenced the records of the 36 children age 11 and younger diagnosed with IBD between 1996 and 2008 with the provincial prescription database.

They did the same for a control group of 360 children without IBD, and compared antibiotic prescriptions between the two groups. Shaw acknowledges there are limitations to the study, given its smaller sample size since pediatric IBD is rare, but says the findings “open the door for others to explore this association.”

“We haven’t proved causality, but we’ve proven a link.”

The sample size will continue to grow as more children are diagnosed. The researchers also plan on looking at specific types of antibiotics prescribed, antibiotic exposure later in life, and possible confounding factors such as a family history of the disease.

There is no cure for IBD but there are drugs to control the condition. These drugs are particularly costly so any advancement in this field could ultimately have a positive impact on the healthcare system, says Shaw.

Manitoba has one of the highest rates of reported IBD in the world, he notes. Shaw suspects this likely has something to do with genetics but the causes of the disease remain unknown. Scientists believe a genetic predisposition accompanied by “some sort of triggering factor” plays a role.

“What that factor is, nobody really knows and what genetics are involved nobody really knows,” says Shaw. “It’s kind of a big mystery. We’re just putting in one piece of the puzzle.”