## Population Health Matters

## Rolling the Dice on the Social Determinants of Health

Becky, a white female born into a low-income family, had a difficult childhood marked with poor nutrition and little physical activity. Not graduating from high school and having two children at a young age sealed Becky's fate into a difficult adulthood. Ultimately, she died at a relatively young age, overcome with mental health issues that no doubt stemmed from her early life events.

Jane was a black girl born to a family of lower middle socioeconomic status. In her childhood, her mother lost her job and she was the victim of racial bias, but she endured. Unable to afford college, Jane was thrilled to receive a scholarship and entered the workforce as a trained professional, moving up in her socioeconomic status and overcoming childhood adversity. However, at age 50, Jane was diagnosed with invasive kidney cancer and died shortly thereafter.

Inigo Montoya was born to parents who emigrated from El Salvador yet raised him in a middle-class household in a safe neighborhood. Inigo graduated from college and had a stable adulthood, eating well and staying active. Despite suffering a heart attack while shoveling snow, he recovered and continued working into his old age. He had an excellent pension, took vacations, golfed and loved to travel. A proud grandparent, he finished out his days in a retirement home with his wife.

While these descriptions might sound like characters in an upcoming movie, they are the fictional lives experienced by our MPH students in Social and Behavioral Foundations of Health (PBH 502) as part of an exercise to understand the far-reaching impact of the social determinants of health. Students formed pairs to compete in The Last Straw, a board game created at the University of Toronto to promote discussion about the social determinants of health, help students build empathy with marginalized people, and encourage learning in a fun and supportive environment. Some may question playing board games in class, but it's a fantastic teaching tool to supplement our in-class discussions. We all have fun while learning together.

At the beginning of the game, each player developed a character profile that included gender, socio-economic status and race. The character moved through various life stages, from childhood to adolescence to adulthood and finally to old age, experiencing common life events that were either helped or hindered by their social status. Characters with higher social status at birth often lived in safer neighborhoods, attended schools with better resources, completed college, and got a safe and fulfilling job, as compared to their counterparts with lower socioeconomic status. The higher social status characters often easily made it into old age, dodging health issues like diabetes and strokes that claimed the lives of their fellow characters.



Dr. Leader with students participating in the Last Straw game.

MPH student Valencia Sarkisian described her experience: "You never think you can learn so much from a board game, but it did an amazing job at showing us exactly how social determinants affect the entire course of a person's life and, moreover, their health. Seeing how community problems such as subsidized housing plans or not having access to public transportation affected our character, who was born into a low socioeconomic status, really put theory into practice."

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