Study shows impact of brain injury on women's health
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After a brain injury, women often ask how the injury will affect their fertility, pregnancy and postpartum health. Now a new U of T/Toronto Rehab study provides some much-needed answers.

Published in the June issue of the Journal of Women's Health, the study is the most comprehensive investigation to date of women's health issues after traumatic brain injury.

"Traumatic brain injury is a major public health problem, yet little is known about its long-term effect on women's reproductive health," said Professor Angela Colantonio of occupational science, a senior scientist at Toronto Rehab and principal author of the study. "Our findings provide important information for women who have experienced a traumatic brain injury, and for health professionals working with these women."

The study, which examined the health outcomes of 104 premenopausal women five to 12 years after mild to severe brain injury, found that:

* women with traumatic brain injury (TBI) were more likely to experience menstrual disturbances, including irregular cycles and amenorrhea (not having a period)
* women with TBI did not appear to have significantly more problems with getting pregnant when compared to women without brain injury
* women with TBI had fewer children
* significantly more women with TBI experienced postpartum difficulties, compared to women without brain injuries
* women with TBI reported lower levels of perceived health, including mental health, physical function, perceived support, and income.

"These findings inform prognosis after TBI for women and provide evidence for long-term monitoring of health outcomes and increased support after childbirth," the authors write.

They suggest there are many possible reasons for women with TBI having fewer children and experiencing more problems after childbirth. Contributing factors could include: more depressive symptoms and fatigue; physical and cognitive demands of rearing a child; and financial reasons that may lead to a conscious decision not to have more children.

April Ferguson, who has children ages 5 and 7, can attest to the challenges of parenting after a brain injury. In 1995, Ferguson sustained a TBI when she was hit by a car while riding her bike. She spent 28 days in a coma and the next five years - including two months at Toronto Rehab - recovering from paralysis, speech impairment and a variety of cognitive problems.

Said Ferguson: “Everyone knows how demanding parenting can be for anyone, especially in the early days. In my case, as a brain-injury survivor, multi-tasking was difficult - for example, handling a crying child or preparing food for one child, while sitting down to nurse another.”

The study was funded by the Canadian Institutes of Health Research and by Toronto Rehab, which receives an annual research grant from the Ontario Ministry of Health and Long-Term Care Care.

Data was drawn from eight participating centres: Toronto Rehab, Sunnybrook Health Sciences Centre, St. Michael's Hospital, Bridgepoint Health, Hamilton General Hospital, Chedoke Hospital, Thunder Bay Regional Health Sciences Centre, Brain Injury Services of Northern Ontario, and the University of Toronto.

Provided by University of Toronto