Physical Barriers on Bridges May Not Decrease Overall Suicide Rates

Toronto, ON (July 6, 2010) – New research examining Toronto's Bloor Street Viaduct, formerly the world's second most frequented suicide-by-jumping site, shows that barriers on bridges may not reduce overall suicide rates in the region.

Next to the Golden Gate Bridge in San Francisco, the Bloor Street Viaduct was the most frequented bridge for suicide in the world. However a barrier at that location, erected in 2003, did not reduce the number of suicides by jumping in Toronto.

"Although the barrier prevented suicides at the Bloor Street Viaduct, there was no change in the absolute rate of suicide by jumping in Toronto due to increases in suicides from other bridges and buildings," says Dr. Mark Sinyor, principal investigator of the study, and Psychiatry resident at the University of Toronto and Sunnybrook Health Sciences Centre. "While there is clear evidence that barriers decrease or eliminate suicides at bridges commonly used for suicide, this is the first study to demonstrate that when a barrier is placed on one bridge, there can be a significant increase in suicide-by-jumping from other bridges in the area."

The study, published in the July 2010 issue of the *British Medical Journal* (BMJ), set out to determine whether suicide rates in Toronto changed during the four-year period after a suicide barrier was erected at the Bloor Street Viaduct. The study reviewed records at the Office of the Chief Coroner of Ontario from 1993 to 2001 (nine years before the barrier) and from July 2003 to June 2007 (four years after the barrier).

"What this study shows us is that physical barriers alone are not sufficient to deter people who intend to commit suicide by jumping. Optimal suicide prevention programs involve comprehensive strategies to provide education, combat stigma and improve accessibility of services to individuals contemplating suicide," says Dr. Anthony Levitt, co-investigator of the study and Chief of Psychiatry at Sunnybrook Health Sciences Centre and Women's College Hospital, and Professor of Psychiatry at University of Toronto.

The study provided the best scenario to date for testing whether such a barrier is effective because the bridge had the second highest yearly rate of suicides in the world and because, unlike other locations, no bridges in Toronto span large bodies of water, meaning that essentially all suicides by jumping come to the attention of the coroner and are recorded.

The study authors question whether a different result would be observed at a bridge that holds a more powerful influence on suicidal individuals, as appears to be the case with the Golden Gate Bridge, the bridge with the highest rate of suicide by jumping in the world. "It's an important question," says Dr. Sinyor. "The movement advocating for barriers on bridges really originated from research at the Golden Gate Bridge and it seems that a safety net will finally be installed there in the next few years. A study similar to ours undertaken in San Francisco would add greatly to the field of suicide prevention and our understanding of individuals contemplating suicide."

The Office of the Chief Coroner of Ontario allowed the researchers full access to their records and charts making this research possible.

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