

Question:

Dr. Colantonio, it was reported that 46% of women with Traumatic Brain Injury (TBI) in your study experienced amenorrhea. Do you and the researchers know the etiology of amenorrhea? Was it related to stress or hormonal changes?

Answer:

Menstrual difficulties post TBI may be a sign of neuroendocrine irregularities which may affect other health issues such as cognition and mood. However, these relationships need to be studied further. In the study we conducted, we did not collect information, for example, on hormonal changes or on stress. We are only speculating at this point. We know that TBI is one of the etiologies for hypopituitarism found in up to 59% of patients several months, and even years, post TBI. We also know that low levels of sex hormones associated with hypopituitarism can cause amenorrhea and other menstrual disorders. Unfortunately though, screening for this after TBI is not typically done so this area is relatively under-diagnosed. We are leading an international taskforce on girls and women with TBI to study this area further. [Please view our study for more information](#): Colantonio, et al. (2010). Women's health outcomes after traumatic brain injury. *Journal of Women's Health, 19*(6), 1109-1116.

Question:

Are there any model programs in the U.S. or Canada that integrate concepts outlined today in settings that serve homeless people (for example: PRIMER)? Imagine a drop in center for homeless people that presumes the presence of Acquired Brain Injury (ABI) and cognitive impairments, which have adapted the environments and programming to fit the clients—and one where all staff are educated and trained about ABI and techniques to work with these clients...

Answer:

Unaware of any specific programs that does that now. We've been doing our Substance Use and Brain Injury (SUBI) training with groups; particularly one in Hamilton and their intention is to start doing that now.

Question:

It was suggested to me to use a Verbal Fluency Test to check for ABI. Is this appropriate?

Answer:

No, probably not the best measure to use alone. It's not functional at all; and usually part of a battery of

tests. If you suspect that there is an issue with a client, you'd likely get further with them by just asking questions about the presence of an ABI, then observe and talk with the person about what functional issues they're having. There probably is not a single test that has enough specificity or sensitivity in that setting to actually diagnose a brain injury.

Question:

What about depression and ABI? How do you diagnose and treat it?

Answer:

The diagnosis of depression and ABI is a little bit complicated because the vegetative symptoms associated with depression kind of overlap with primary symptoms in ABI. So, with things like fatigue and loss of interest, one has to really be careful to sort those things out as not being physical manifestations of the acquired brain injury. We diagnose it primarily when a person talks about having low mood, when activities are not pleasurable, and they are complaining about things like sleep and appetite that are not otherwise accounted for by their ABI. As far as treatment goes, there have been a number of studies that suggest cognitive-behavioral therapies are successful; and recently there have been a bunch of studies related to the use of mindfulness. In each of these cases, the programs were adapted to be simplified and longer with greater support.

One of the most overlooked treatments is the use of physical activity. There was a study that asked TBI survivors which form of treatment they preferred (i.e. between medicine, therapy, and physical exercise), respondents most often ranked their first treatment choice as physical activity. So this is also a possible intervention for consideration.