

'Love hormone' oxytocin carries unexpected side effect

January 22 2014

The love hormone, the monogamy hormone, the cuddle hormone, the trust-me drug: oxytocin has many nicknames. That's because this naturally occurring human hormone has recently been shown to help people with autism and schizophrenia overcome social deficits.

As a result, some psychologists are keen to prescribe oxytocin off-label, in order to treat mild social unease in those who don't suffer from a diagnosed disorder. Not such a good idea, say researchers from Concordia University's Centre for Research in Human Development. Their recent study, published in the American Psychological Association's journal *Emotion*, study shows that, in healthy young adults, too much oxytocin can actually result in oversensitivity to emotions in others.

To perform the study, PhD candidates Christopher Cardoso and Anne-Marie Linnen, and psychology professor Mark Ellenbogen recruited 82 healthy young adults who presented no signs of schizophrenia, autism or related disorders. Half of the participants were given measured doses of oxytocin while the other half was given a placebo.

Participants then completed an emotion identification accuracy test that had them compare different facial expressions showing various emotional nuances. As expected, the participants who had been given oxytocin saw greater emotional intensity in the faces that they were rating than did those given a placebo.

"For some, typical situations like dinner parties or job interviews can be a source of major social anxiety," says Cardoso, who was the lead author on the study. "Many psychologists initially thought that oxytocin could be an easy fix in overcoming these worries. Our study proves that the [hormone](#) ramps up innate social reasoning skills, resulting in an emotional oversensitivity that can be detrimental in those who don't have any serious social deficiencies."

Cardoso explains: "if your potential boss grimaces because she's uncomfortable in her chair and you think she's reacting negatively to what you're saying, or if the guy you're talking to at a party smiles to be friendly and you think he's coming onto you, it can lead you to overreact and can be real a problem. That's why we're cautioning against giving oxytocin to people who don't really need it."

Ultimately, oxytocin has solid potential to help those with diagnosed mental disorders overcome [social deficits](#), such as autism, but the potential social benefits of [oxytocin](#) in most people may be countered by unintended negative consequences, like being too sensitive to emotional cues in everyday life.

Provided by Concordia University

Citation: 'Love hormone' oxytocin carries unexpected side effect (2014, January 22) retrieved 3 May 2024 from <https://medicalxpress.com/news/2014-01-hormone-oxytocin-unexpected-side-effect.html>

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