

## Authors and Disclosures

### Journalist

---

#### Caroline Cassels

A veteran health and medical journalist, Caroline is the News Editor for Medscape Psychiatry. During her career she has edited and written for publications aimed at both physician and consumer audiences. She helped launch, and was the Editor of Health Digest, a national, award-winning Canadian consumer health publication. She was also National Editor of the Heart & Stroke Foundation of Canada's Web site before joining Medscape Medical News in 2005. She is the recipient of the 2008 American Academy of Neurology Journalism Fellowship Award and the 2010 National Press Foundation Alzheimer's Disease Fellowship.

### From Medscape Medical News > Psychiatry Impact of Bed Bugs Much More Than Skin Deep



Caroline Cassels

May 16, 2011 (Honolulu, Hawaii) — One of the first studies to take a detailed look at the psychiatric implications of bed bugs shows the havoc these insects wreak may be much more than skin deep.

A case series presented here at the American Psychiatric Association 2011 Annual Meeting indicates these tiny culprits may be responsible for the development of a wide variety of affective, anxiety, and psychotic spectrum illnesses causing significant impairment, including suicidality and psychiatric hospitalization.

Notoriously difficult to detect and get rid of, bed bugs create a huge amount of uncertainty, which contributes to psychopathology, said principal investigator Patrick Ying, MD, director of the behavioral health programs at New York University in New York City.

It is a major undertaking to exterminate them and there is a great deal of social isolation and stigma that accompanies an infestation. This can contribute to anxiety and depression, but it can also have more serious mental health consequences, including new-onset psychosis and a destabilizing effect on patients being treated for an existing mental illness.

"Bedbugs can affect a broad variety of populations, and we think perhaps their psychological impact has been underappreciated. [These findings suggest] bed bugs can have an impact on the psychological health of otherwise healthy people and can also affect more vulnerable populations, including patients being treated for serious mental illness that can lead to serious decompensations," he told *Medscape Medical News*.

#### Making a Come-Back

The researchers note that although bed bugs were virtually eradicated in the United States in the 1950s pesticide resistance, modern air travel and the banning of DDT have all contributed to their resurgence, creating a great deal media attention.

"Our literature search revealed that since 2000 reports of bed bugs in the lay press and in the medical literature have significantly increased," said study coauthor Evan Rieder, MD.

Study coauthor Gareen Hamalian, MD, said the investigators' interest in the psychiatric sequelae was piqued when, about 2 years ago, psychiatric cases began presenting in the dermatology clinic, initially in patients who had delusional parasitosis involving bed bugs and subsequently in patients with confirmed bed bug infestations.

Although there have been passing references in the medical literature and lay press about anxiety and depression associated with bed bugs, Dr. Ying noted the psychiatric sequelae associated with them has not previously been described in detail.

To illustrate the psychiatric consequences of bed bugs, the researchers featured 6 "representative" cases in their study. Among the most extreme was a 21-year-old woman with no previous history of mental or physical illness. After discovering bed bugs in her apartment she developed bed bug-related anxiety and depression. Ultimately, the patient presented to the emergency department after attempting suicide via overdose of acetaminophen while intoxicated.

### **Destabilizing Effect**

A second case featured a 22-year-old, white, female graduate student with bipolar II disorder who had been stable for 2 years until discovering bed bugs in her home. Dr. Hamalian noted that the infestation led to the patient to "decompensate pretty significantly."

"She had an increase in anxiety and mood symptoms and had a lot of financial distress because of the amount of money she had to spend on exterminator costs and new linens and clothes etcetera. We talked about whether we should change her medication and treat her mood symptoms.

"Ultimately, we concluded that since we had identified this acute stressor we would wait to see how she did as the extermination process moved forward, and once that occurred she ended up doing a lot better," said Dr. Hamalian.

Other cases included a 35-year-old, white man with history of untreated depression and a significant family history of depression. This patient believed he had an infestation but had no evidence of bites. Similarly, a visit to his home by an exterminator failed to support his claim.

Ultimately, this patient became socially withdrawn for fear of exposing others to the perceived infestation. Although he was treated with an antipsychotic for delusional ideation his condition never fully remitted, and he attributed the partial improvement in his symptoms to the adoption of a daily bleach-scrubbing routine.

The investigators report that this patient's full-blown symptoms returned after he stopped taking his medication. Subsequently, they add, he developed symptoms consistent with a major depressive episode.

These and the other cases presented, said Dr. Ying, highlight the need for clinicians who diagnose bed bug infestations or who are treating patients already dealing with an infestation to screen for new-onset of psychiatric symptoms or monitor patients with existing mental illness for decompensation.

In addition, the investigators note it is important that clinicians take steps to educate patients and minimize fear and anxiety in an effort to contain the psychiatric sequelae of bed bug infestations.

### **High Anxiety**

Asked by *Medscape Medical News* to comment on the study, Caleb Adler, MD, Department of Psychiatry and Behavioral Neuroscience, University of Cincinnati, Ohio, said in his clinical experience the psychiatric impact of insect infestations in general, and bed bugs in particular, can be significant.

"There's a long history of that, of anxiety and particularly insect-related anxieties, and they really run the gamut in an interesting way from the 'mild' anxiety that most of us feel when we come into contact with insects to real phobias, which can be very disruptive, to full-blown delusional parasitosis where people are convinced that insects are infesting them even though there is no evidence to support an infestation," said Dr. Adler.

In 2004, he said, Cincinnati experienced 17-year periodical cicadas, insects that breed and hatch underground and

emerge en masse to complete their 6-week life span above ground — a phenomenon that generated similarly high levels of anxiety in the population.

"We saw an influx of healthy individuals who, although they didn't rise to a level of psychosis they had a lot of anxiety and some patients require short-term treatment."

In a way, said Dr. Adler, the fear of bed bugs and the subsequent psychological impact is similar to the fear of radiation.

"We have seen some of this in the aftermath of the meltdown of the Japanese nuclear plant where people have been assured over and over again that radiation contamination in the United States is minimal and yet there has been a run on Geiger counters and iodine pills, completely, as far as we know, unnecessarily.

"Bed bugs aren't easily visible, and people have this idea that you can't prevent them and once you have them you can never get rid of them, and this often generates anxiety and sometimes leads to overblown fears or phobias in previously healthy individuals."

However, with respect to the case in the study of the previously healthy young woman who attempted suicide following a bed bug infestation, Dr. Adler wondered whether there may have been some a preexisting condition.

"I would have to wonder whether this individual was entirely healthy at baseline. A level of high anxiety would not be unexpected, but such an extreme reaction suggests some underlying psychopathology," he said.

*The study authors and Dr. Adler have disclosed no relevant financial relationships.*

American Psychiatric Association (APA) 2011 Annual Meeting: NR01-51. Presented May 14, 2011.

Medscape Medical News © 2011 WebMD, LLC  
Send comments and news tips to [news@medscape.net](mailto:news@medscape.net).