



by Professor Gordon Parker

# mind over matter

## On keys and locks

A woman's depression after surgery is linked to childhood events.

### HISTORY

GLORIA, a 58-year-old secretary, developed her first episode of depression following an unplanned but successful coronary bypass operation.

Her depression, though severe, lacked melancholic features. She was tearful and angry, with suicidal preoccupations – and she felt like “giving up”.

No other precipitants were elicited at interview. When asked how she had felt about the operation, she stated: “I felt violated.”

### THE DIAGNOSTIC QUESTION

At first pass, a reactive depression appeared the most appropriate diagnosis.

But why had she developed depression for the first time, having handled a number of life's vicissitudes and major stressors (e.g. divorce) without developing depression previously?

And why use the descriptor “violated” to describe the impact of the operation?

### CLARIFICATION

Gloria reported anger at two main aspects of her surgery:

- at the surgeon, an older man, for so little explanation of the need for the operation and for his curt responses to her questions.
- during post-surgery, when, shocked at the sight of her chest wound, she raged at the staff, telling them she felt her personal space had been trampled, her dignity lost and her independence challenged; they wondered if she had a personality disorder.

When led through her developmental history, she hesitatingly described a near-forgotten time

mid-primary school when, for two years, her father had sexually abused her and sworn her to secrecy, or he would kill her.

### DIAGNOSIS

A reactive depressive disorder induced by an event (cardiac procedure) had activated a reaction that had its origins in an earlier ‘violation’ (i.e. sexual abuse).

In both instances, a male had forced her to do something without respecting her, leaving her feeling unable to resist or negotiate. The triggering event of recent times had exposed her raw vulnerability.

### AN EXPLANATION

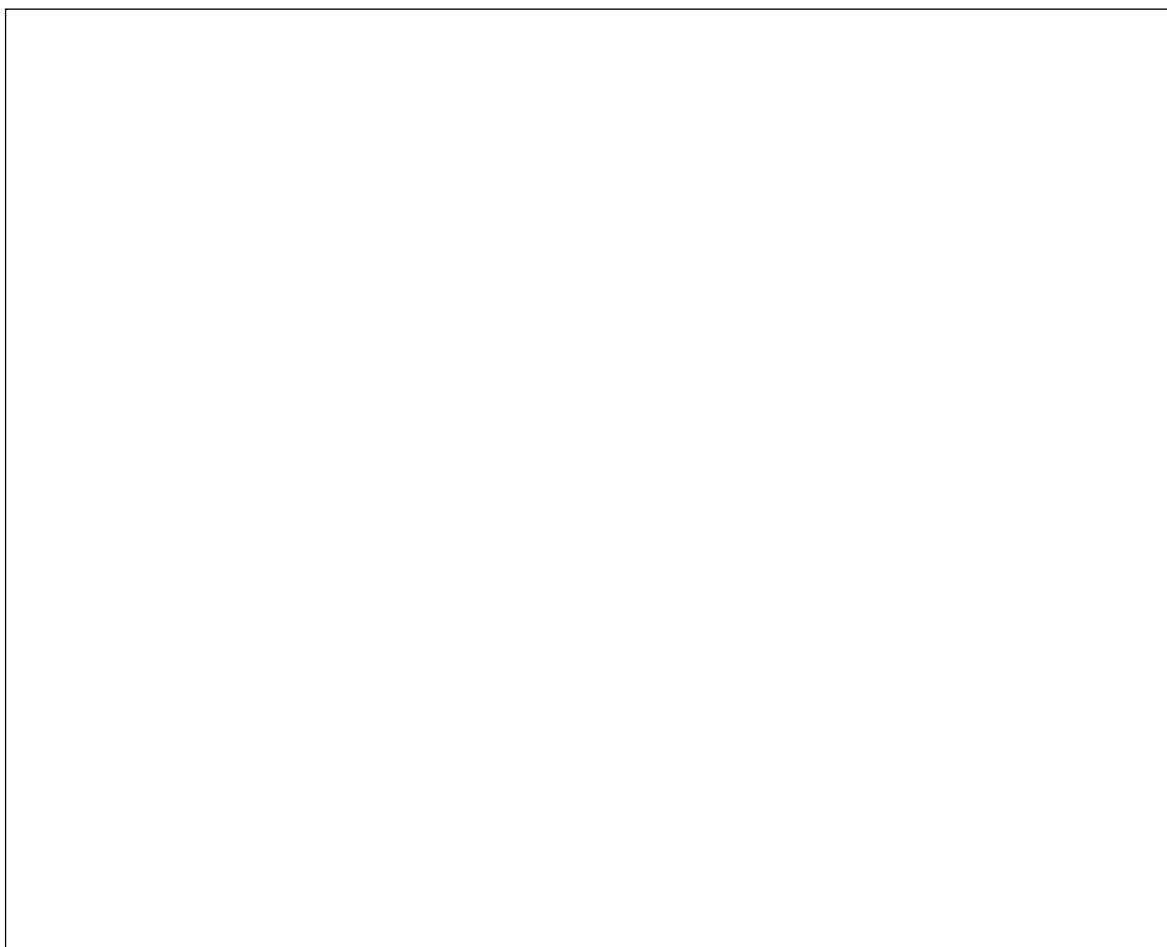
Once, the depressive disorders were divided into reactive and endogenous conditions, with reactive disorders viewed generally as understandable reactions to severe stressors.

However, in our research, we have found that precipitants are usually better defined by their salience than by their severity, and we use a ‘key and lock’ metaphor.

The ‘key and lock’ model assumes that certain stressful events in childhood lay down a cognitive vulnerability or predisposition (a ‘lock’).

In later life, certain stressful events may, if they mirror the early stressor, act as a ‘key’, activating the earlier established cognitive set and precipitating a depressed state.

Many people may have a ‘good enough’ sense of self-worth but, like Swiss cheese, have lacunae (or vulnerability tunnels) that allow the slings and mirroring arrows to pass through and precipitate depression; for example, the individual demeaned in childhood as “useless” by a parent and who later overreacts to any explicit or implicit reference to being



“useless” in adult life.

Such an overreaction is a marker to the valency of the trigger – that it carries its own hurt but, more importantly, the baggage of the past.

### MANAGEMENT

Gloria's management involved first allowing her to talk out her feelings about the surgery and, more gently, the impact of the sexual abuse in her childhood and on her subsequently.

She had not previously recognised the link – ignorant and abusive father figures who did things to her against her will – and experienced relief at its identification.

She could then see how she often overreacted to situations in which she was exploited or demeaned.

She was progressively able to

address some of the pain of the sexual abuse (suppressed and unrecognised over the decades).

Though never entirely resolved, its valency was attenuated.

Thus, the management strategy involved letting her talk through ‘depressogenic impact’ situations, drawing the links between ‘key and lock’ scenarios, enabling insight and partial emotional rapprochement.

### FINAL MESSAGES

Reactive depression is common and often in response to severe life-event stressors, but, of greater interest, it reflects salient or history-laden mirroring events.

Counselling and allowing individuals to tell their stories are fundamental, with the therapist progressively drawing attention to the links, and so

allowing the burdens of earlier developmental events to lessen.

Our research team has recently quantified an interesting gene-stress association in which those who have the short ‘s’ allele of the serotonin transporter gene appear more vulnerable to developing depression following exposure to adverse life events.<sup>1</sup>

This research will further enrich discussion of the issues detailed here. **MO**

*Gordon Parker is scientia professor, University of New South Wales, and executive director, Black Dog Institute ([www.blackdoginstitute.org.au](http://www.blackdoginstitute.org.au)).*

### REFERENCE

1. Wilhelm, K, *et al.* Life events, first depression onset and the serotonin transporter gene. *Br J Psych* 2006;188:210-15.

## clinical trials

### Alzheimer's disease study

SYDNEY researchers are currently recruiting for a study investigating the relationship between chronic stress and Alzheimer's disease.

The trial, being conducted at Macquarie University, plans to determine whether chronic stress affects the severity of Alzheimer's.

Researchers will look at a cohort of patients already diagnosed with Alzheimer's disease and measure a number of biological variables in order to calculate a physiological measurement of chronic stress known as the allostatic score.

The variables measured to determine the allostatic score will include blood pressure, waist-to-hip ratios, serum HDL levels, total cholesterol, total glycosylated haemoglobin,

and the levels of various hormones in the blood and saliva.

Participants will also be assessed with the mini-mental state examination (MMSE) to calculate the severity of their Alzheimer's.

By repeating the allostatic score measurement and the MMSE after eight to nine months, a better understanding can be achieved as to how these two conditions might relate to each other.

To be eligible for the study, participants will need to live in the greater Sydney area and have had a diagnosis of Alzheimer's disease.

Once enrolled in the study, they will need to give blood and saliva samples and undergo an MMSE. These tests will be repeated after eight to nine months.

For more information, contact Stephney Whillier on 02 9850 8301 or email [swhillier@bio.mq.edu.au](mailto:swhillier@bio.mq.edu.au).