

*PITCH 1 – my editor didn't like the lede  
early April*

In early 2009 in Nicaragua, three indigenous communities near the Coco River were gripped by something called *grisi siknis*, the pidgin name for “crazy sickness.” During the outbreak, 43 people from three villages – mostly young, mostly female -- exhibited tremors, shaking, and feelings of suffocation, all part of the classic psychiatric picture of a condition known as generalized anxiety disorder. It’s hard to resist seeing the outbreak as a metaphor for the global psyche, anxious no matter where it resides.

Cases of mass hysteria seem to tap into an underlying sense of anxiety and dread not only in the high-tech, fast-paced industrialized world where you would expect it, but also in remote, supposedly low-key regions like Nicaragua’s Coco River. It suggests that there’s something elemental about these anxious feelings, something about us that is hard-wired for anxiety. Which makes you wonder whether anxiety is always dangerous and crippling, or whether there might be some important benefit to a sense of worry and undifferentiated unease – and a hazard to trying so hard to tamp it down. As we dispense drugs ranging from the “mother’s little helper” Valium of the 1960s to the Halcion of the 1990s and the Xanax of today, maybe we are eliminating something crucial, too, something that helps us negotiate our way in a dangerous and frightening world.

Some studies suggest that the anticipation of pain – which is one version of generalized anxiety – releases endorphins, the body’s natural painkiller. It’s almost as though the anticipatory anxiety is a kind of kind of pain inoculation: when you dread the approach of something painful, the pain is blunted when you’re actually exposed to it. It makes some evolutionary sense: the “fight-or-flight” response sparked by anxiety, which helps you get away from the thing you’re afraid of, keeps on working even if you might otherwise be paralyzed by pain.

With uncertainty about our economy and the stress of modern living making free-floating anxiety common, scientists have been looking for a fuller explanation of anxiety disorders (of which there are five kinds: general anxiety disorder, obsessive-compulsive disorder, panic disorder, posttraumatic stress disorder, and phobias). Investigators at Harvard and at the University of Maryland are engaged in several longitudinal studies to find the genetics and neurochemistry of anxiety, and to differentiate what happens in the brains of the clinically anxious from what happens in garden-variety anxiety, the kind of worrying and ruminating that almost everyone engages in. The studies indicate that clinical anxiety is no more genetically determined than most other mental disorders, such as clinical depression. But the temperament associated with it, the underlying personality known as behavioral inhibition, is highly genetic; twin studies show a concordance for this temperament in identical twins of about 70 to 80 percent. People who are inhibited are significantly more likely to grow up to be anxious, to have a tendency to worry and fret, and also to develop a full-blown anxiety disorder, which scientists say affects about 29 percent of Americans at some point in their lives.

In a cover story for the Magazine, I'd like to focus on the most recent, and possibly the most dramatic, of these longitudinal studies. The investigator, Carl Schwartz of Harvard, is about to publish his results in a major peer-reviewed journal (admonitions from the editor have made him afraid to tell me where, but I suspect that it's Science magazine). He has followed a large group of children from the age of about four months; the oldest of them is now 18 years old. Recently, Schwartz conducted functional MRI studies on these older children, and he has found what he calls an "early footprint" of the anxious temperament. Identifying these anxiety-prone children early can, says Schwartz, help prevent many cases of anxiety disorder through early intervention and effective treatments like cognitive behavioral therapy. I hope to meet these young people, listen to how anxiety infects their lives, and tell the story of one or two of them. The article, I believe, will help the reader tease apart what about these young people are merely inherent, and sometimes useful, variations of normal – and at what point a particular quirk or personality trait crosses the line, and becomes a mental illness that needs to be diagnosed and fixed.

*PITCH 2 – my editor liked it, passed it on to the higher-ups, it was basically accepted, though I was asked to come in and talk about it a bit in person (which was kind of unusual)  
mid-April*

Free-floating anxiety has become a metaphor for modern life, especially in our uncertain economy. But there are shadings to the anxious personality, ranging from a fretful ruminator to someone with crippling phobias and fears. Scientists are studying what differentiates the clinically anxious from the garden-variety worry-wort, trying to pinpoint where along the way true disorder begins. Is anxiety always a detriment, or might there be some benefit to a sense of undifferentiated dread – and a hazard to trying to tamp it down? As we dispense drugs ranging from the “mother’s little helper” Valium of the 1960s to the Halcion of the 1990s and the Xanax of today, maybe we are eliminating something crucial, too, something that helps us negotiate our way in a dangerous and frightening world.

Neuroscientists now are looking for a fuller explanation of anxiety disorders (of which there are five kinds: general anxiety disorder, obsessive-compulsive disorder, panic disorder, posttraumatic stress disorder, and phobias). Some studies suggest that the anticipation of pain – which is one version of generalized anxiety – releases endorphins, the body’s natural painkiller. They suggest that anticipatory anxiety is a kind of inoculation: when you dread the approach of pain, the anticipation blunts the pain when it finally arrives. It makes evolutionary sense: the “fight-or-flight” response sparked by anxiety, which helps you get away from the thing you’re afraid of, keeps on working even if you might otherwise be paralyzed by pain.

Clinical anxiety seems to be no more genetically determined than most other mental disorders, such as clinical depression; scientists say about 30 or 40 percent of its occurrence can be traced to genes. But the temperament associated with anxiety, an underlying personality known as behavioral inhibition, is highly genetic; twin studies show a concordance for this temperament in identical twins of about 70 to 80 percent. People who are behaviorally inhibited as babies are significantly more likely to grow up to be anxious, to have a tendency to worry and fret, and also to develop a full-blown anxiety disorder, which affects about 29 percent of Americans at some point in their lives.

In a cover story for the Magazine, I’d like to focus on one particular kind of study of anxiety: the longitudinal study. One of the most prominent has been going on for nearly 20 years, originated at Harvard by psychologist Jerome Kagan. Among its findings is that when you follow children who were behaviorally inhibited as infants – babies who clung to their mothers in novel situations, refusing to explore the unknown – you find that one-third of them become anxious adolescents. But as interested as I am in that one-third – in whatever genes or neural structures make them different from their calmer peers – I’m even more interested in the other two-thirds, the ones who DON’T become anxious.

How does someone with an inborn propensity for extreme shyness, social phobia, and anxiety manage to overcome it?

One of Kagan's colleagues at Harvard, psychiatrist Carl Schwartz, is about to publish his results in a major peer-reviewed journal (admonitions from the editor have made him afraid to tell me where, but I suspect that it's Science magazine). He has followed a large group of children from the age of four months; the oldest of them is now 18 years old. Recently, Schwartz conducted functional MRI studies on these teenagers, and he has found what he calls an "early footprint" of the anxious temperament. Identifying anxiety-prone children early, says Schwartz, can help prevent many cases of anxiety disorder through treatments such as cognitive behavioral therapy.

I have been in touch with Schwartz and Kagan, as well as several of their colleagues at Harvard, and I'm hoping they will introduce me to some of the young people in their longitudinal study, as well as their parents. I've also been in touch with Moira Rynn at Columbia, Jack Nitschke at the University of Wisconsin, and Jack Hettema at Virginia Commonwealth University, who have all expressed a willingness to have me visit, to watch them at work, observe patients getting functional MRIs and electroencephalograms, and talk to some research subjects. Through the lens of one or two of the most vivid of these subjects – who will most likely come from the longitudinal studies at Harvard, if all goes as planned – I will describe how anxiety infects the lives of those who suffer from it. And I'll raise questions about to what extent their problems are inborn, and to what extent they exhibit quirky, but sometimes useful, variations of normal. I'll also ask how the biology of clinical anxiety resembles and differs from normal worrying, and at what point a fretful personality crosses the line to become a mental illness that needs to be diagnosed and fixed.

I look forward to hearing from you.

Best,  
Robin