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Sex Through a Looking Glass

To psychologist **Chris Kraft**, Ph.D., having a patient complain of low sexual desire is like telling the family physician, "Doctor, I've got a headache." It's a sign to pull out a variety of lenses, each one magnifying a layer of self.

If the medicine of sex differs from other Hopkins psychiatric specialties, it's because sexuality itself crackles with a cultural and emotional charge. But aside from having a deep awareness of that fact, psychologist Kraft and fellow clinicians with the Sexual Behaviors Consultation Unit (SBCU) employ the same diagnostic approach. And that's a strength.

"We rely heavily on the *Perspectives*," Kraft says of the seminal textbook, *The Perspectives of Psychiatry*, by Hopkins psychiatrists Paul McHugh and Phillip Slavney. It gives an orderly view of patients from four platforms, seeing where they stand medically, for example, or how they handle what life's dealt them.

Kraft, SBCU director **Fred Berlin**, M.D., co-clinical director Kate Thomas and colleagues evaluate local and international clients who come with a whole Crayola box of sexuality issues. Some patients are troubled by the kinds of sexual problems that resemble addictions. Others may have gender-identity concerns. But most SBCU consultations—some 75 a year—are for couples with sexual problems. And there, Kraft says, the *Perspectives*' lenses fairly snap into place.

A common scenario is of a professional couple, both in their late 40s: The long hours that "Husband" spends competing with the young buck attorneys in his office for clients preclude exercise. He's grown paunchy and sensitive about it. "Wife" works hard as well, but with the kids now in college, she's turned a sibyl's eye on the couple's sex life: There isn't any. The two live essentially separate lives in their home.

"Our workup brings to bear the tools and perspective of a large academic medical center," says Chris Kraft. "We've been consulting for sexual problems a very long time. And we've probably seen it all."

Wife initiates the SBCU visit. *I love him but we don't do anything. Is it his hormones?* During an initial separate interview, Husband says, *I dearly love my wife but I just don't see us together that way. The spark is gone.* A wide-reaching joint interview follows, then clinicians request hormonal and other blood work, psychological tests and psychiatric screening. Kraft suspects mild depression in both. And he also has Husband referred to a cardiovascular specialist.

It happens that the problem is neither hormonal nor depressive nor a wifely lack of "zing." It's circulatory and relational. Husband's potency is lessened by a hypertension drug his doctor prescribed and he's humiliated. Wife, not understanding, is resentful. Each explains the problem in unrealistic ways. Wife is sure she's grown undesirable; for Husband, it's that he's old and incapable. They avoid sex altogether by sidestepping anything that might lead there—even holding hands. "It's not uncommon to have these crossovers from the physical to the emotional to the relational," says Kraft. He's seen similar effects in patients on SSRI depression medication or in women following hysterectomy. Problems post-prostatectomy can also masquerade as low desire.

What's next for the couple? "When we give feedback," says Kraft, "we break it down into *Perspectives* and put it into a hierarchy we think most relevant." In this case, staff began with the medical issue, but in two successive visits, worked into the couple's relationship history, their self-esteem and body-image concerns. Both were counseled on normal role and physiology changes with age. They were given homework—structured activities that lead to intimacy.

"We're not content," says Kraft, "unless couples walk out of here happier, wiser and with a plan." ■

For information: 410-583-2688.

From the Casebook

Sexual problems that couples face vary in surprising ways. The summaries below give an idea of what Hopkins clinicians encounter. Names and other details have been adjusted to protect patient privacy.

Badr and his wife, Farah, in their mid-30s, came to the Sexual Behaviors Consultation Unit from the Middle East with problems that center on cultural norms—problems not uncommon in arranged marriages in traditional societies. Both husband and wife had no sexual experience before they wed; two years afterward, the marriage remained unconsummated. The pressure from their families to have children was intense and constant. SBCU clinicians saw that a combination of performance anxiety (Badr) and psychogenic vaginal pain (Farah) were at work.

Lynne, turning 50, and her husband JP have always had an active social life as a couple. Lynne stayed home to raise their family. Her youngest just left for the Army. Staying fit and looking good have been her personal priority but lately, a touch of arthritis sidelined her from workouts at the gym. That and the empty nest, she says, caused her lack of interest in sexual intimacy. Husband JP, however, has traditional expectations and feels threatened by Lynne's unwillingness. He stays up late, checking Internet porn sites, a fact that shocks Lynne and cements her reluctance. After their SBCU visit, Lynne was diagnosed with mild depression; JP has an addiction. Both have body image difficulties and poor communication skills.

Brad and Kaitlin, both 26, became engaged just after starting graduate school. They'd dated, then shared an apartment for four months. Kaitlin called the SBCU for what she called "a premarital checkup," concerned about Brad's apparent low desire. Their problem turned out to have no physical basis and was rooted in Kaitlin's unrealistic expectations.

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Senior and Bipolar: Handle With Care

"One of the first patients I ever cared for was a devout Catholic, a 74-year-old woman in a manic episode," says psychiatrist **Susan Lehmann**. "She was convinced that the pope wanted to marry her." When Lehmann explained that the spiritual leader couldn't marry, the woman replied, "And how do you think *I* feel about *that*?"

"As an intern, I was surprised by such depth of conviction," says Lehmann, who was riveted by how far thinking could go astray in an articulate, mature person. It took only a few more sessions with like patients—plus finding that her mentors' extraordinary care made a real difference in that age group—to draw her into geriatrics, now her specialty some 20 years. As a clinician and founder of Hopkins' psychiatric day hospital for geriatric patients—one of few left in this country—Lehmann has been a willing student of late-life bipolar disorder.

"Bipolar disorder is far less common than depression in people over 65, so it's hard to believe that it's hugely overrepresented in inpatient psychiatric units," she says. Up to 19 percent of "geripsych" admissions are for the disease; it also trumps other mental illnesses for outpatient services. Why? Probably because geriatric BP can be truly hard to treat, she says, and relapses are more common.

The trickiness isn't the disease itself so much as other things. "For example," Lehmann says, "poorer executive function can appear in bipolar patients at any age. But the effect is often more pronounced in late life."

And as executive abilities often pale in older patients recovering from a hospital stay, the resulting difficulty of paying bills and planning daily life can end independent living. So, she adds, "we need to recognize that possibility and find ways to ride it out."

> **"Patients say, *I'm embarrassed to tell people at church where I was.*"**

Problems can arise, too, with medications. Fortunately, recent concerns about patients taking lithium—the gold standard—for decades appear unfounded, Lehmann says. But with age, lithium's side effects of tremor or unsteady gait become more bothersome. "And for our patients who develop hypertension or diabetes in later years, managing lithium, with its known small window of safety from kidney toxicity gets more precarious." HCTZ, for example, commonly taken for high blood pressure, can join with lithium in a hazardous mix. Even ibuprofen at arthritis-relieving levels is suspect.

Still, there's a bright side. Sure, greater expertise is called for in these patients, Lehmann says, but if it's available, they respond very well. That's one reason she founded the day hospital in 1992. It's an intensive program that gives elders the close monitoring and psychiatric oversight they need—especially after insurance shaves their inpatient stays.

There, Lehmann and colleagues have built in a high sensitivity to their charges' problems. "I find that stigma is a big issue for older patients," she explains. "They'll say, *I'm embarrassed to tell people at church where I was*. But that stigma keeps them withdrawn—exactly what they don't need." So role-playing becomes part of therapy, "and it gives patients tremendous relief.

"On the whole," says Lehmann, "we're able to keep people until they really are well." ■

For information: 410-955-6736.

"Cognitive problems in older patients with bipolar disorder can be more intense," says Susan Lehmann. "They target just what they need for independent living."

PTSD Raises Suicide Risk, but How?

Posttraumatic stress disorder and young adulthood can be a lethal mix. For people in their late teens and early 20s, having PTSD puts them at increased risk of attempting suicide, a recent Hopkins study has shown.

"The tie to PTSD wasn't such a surprise," says the study's leader, **Holly Wilcox**, as other researchers have shown that exposure to sexual abuse or some other trauma—triggers for PTSD—raises the likelihood of a suicide try in adults.

But Wilcox's eye picked out something most studies had overlooked: the idea that having PTSD itself was what was important. "In other words," she says, "it's likely that the particular response to trauma is more crucial as far as suicide is concerned." And that's what her new study showed.

By following up on nearly 2,000 children tracked since they entered Baltimore public schools some 15 years ago, Wilcox's team gathered robust data implicating PTSD rather than trauma alone in raising the risk of suicide attempts. It's a find with the immediate benefit of sensitizing psychiatrists to this risk in their young adult patients. And what should raise more red flags is the study's conclusion that those most in danger have PTSD following "assaultive" violence like rape or stabbing.

Holly Wilcox asks about self-harm routes in the brain.

As important to Wilcox, though, is that the work adds to her mission to show how environment and genetics interact early on to turn people on the cusp of life against their own bodies. "What I want most," she says, "is to understand the biology behind self harm in young people—cutting as well as suicide." And her approach as a psychiatric epidemiologist—one of a handful at Hopkins—lets the large numbers of patients she studies become a laser pointer showing where to look for answers.

Wilcox holds that stress and trauma "dysregulate emotional parts of the brain," which, in turn, may make people more impulsive, more likely to hurt themselves. To prove that, though, some basic questions need answering. Exactly how might PTSD or depression—a more traditional suicide risk—alter emotional pathways? Do those disorders hold common genes that make such pathways vulnerable?

Wilcox's newest studies make a start. Currently, she's sampling the DNA of 100 older teens marked "at risk" by having a parent with a history of severe depression. A similar study is ongoing with her earlier PTSD subjects. She's also measuring their levels of cortisol, a byproduct of the HPA axis, the body's stress pathway.

"A dysregulated axis–with it's high cortisol–appears to make people more impulsive," Wilcox explains. And a body of work ties depression and high cortisol. "It's more complicated with PTSD, though," says Wilcox, "because there, cortisol response seems blunted. What it boils down to, I think, is that in either illness the HPA axis isn't working normally." The new work should help sort it out. ■

For information: 410-502-0629.

Cold Sores May Be No Friend to a Vulnerable Brain

The herpes virus holds a smoking gun in this new study.

Neuropsychologist David Schretlen.

A new Hopkins study holds the tantalizing possibility that a common virus, rather than schizophrenia by itself, accounts for troubling cognitive symptoms that people with the disease face.

In work led by neuropsychologist **David Schretlen**, patients with schizophrenia who'd been infected earlier with the common cold sore virus, herpes simplex type 1 (HSV-1), were slower and less able to respond to change than schizophrenic patients who tested negative for antibodies to the virus.

Further, virus-exposed patients had less gray matter in the brain regions that are home to that particular ability, the study showed, compared with patients without a trace of HSV-1. "This is the first study I know of," says Schretlen, "that simultaneously ties having the virus to changes in specific thinking abilities and to changes in brain anatomy—all the sides of the triangle."

A team including psychiatrist **Nicola Cascella**, who designed the study, and neurovirologist **Robert Yolken** reports the work in a coming issue of *Schizophrenia Research*.

Literally hundreds of studies agree that people with schizophrenia perform more poorly on neuropsychological tests. The new work suggests the virus has a hand in it.

It isn't such a leap to believe that those with schizophrenia, or even a genetic leanings toward it, might respond differently to HSV-1 infection, Schretlen says. And that, in turn could explain some of the cognitive difficulties. "The study design, however, won't let us go that far," he adds. "It just shows that in virus-exposed patients, those difficulties both exist and also track to abnormal brain areas." Wagging a causal finger, he says, will take further research.

In the study, 40 schizophrenia patients had MRI brain scans. Blood tests picked up those with antibodies to HSV-1. The team then compared antibody positive and negative patients on neuropsychological tests, including the well known "Trails B," which tests cognitive speed and flexibility.

In the end, positive patients' psychomotor speed and executive ability were clearly below par. And brain volume had decreased in the anterior cingulate and parts of the cerebellum.

Does this imply that HSV-1 ups the risk of having schizophrenia? "No", says Schretlen. "But exposure to the virus might in some way amplify cognitive problems that schizophrenia patients suffer." Perhaps, he explains, it's just one more insult to their vulnerable brains. ■

For information: 410-955-3268

Through Clenched Teeth

Anger's natural, but squelching it can be a real pain.

Anyone who has ever stubbed a toe knows firsthand the connection between anger and pain. That's the example **Phillip Quartana, Ph.D.**, uses when discussing his novel research. "It's not enough to respond to your sore toe," says the clinical psychologist. "We also want to yell at the object that caused pain. We want to hurt it back. There's an anger component that underlies the experience of pain."

Quartana is one of a close-knit group of pain researchers looking into patients' emotional responses to stressors. By cataloguing anger's effects and explaining what's going on cognitively, he hopes to discover tactics to reduce the misery of chronic pain.

The connection between anger and pain harkens back to Freudian thought, the idea that suppressed motives and impulses convert into physical symptoms. Newer research also leans that way but remains mostly anecdotal. Quartana's team, however, has tested the theory—first on healthy subjects by provoking anger, encouraging them to suppress it and then inducing pain by soaking hands in ice water. The anger-suppressors rated their experience as more painful than those free to react any way they wished.

Quartana's team has dubbed their findings the "ironic process model of pain suppression." It's an offshoot of an existing theory that says instructing the mind *not* to think of a concept calls it forth more often. It's like the teaser, "Don't think of a pink elephant." Thus, trying to ignore pain and suppressing its sidekick, anger, Quartana argues, should cause more pain and anger over time.

The underlying rationale is fascinating: When you suppress anything, he says, you activate an unconscious "monitor"—a cognitive search engine that targets failure of suppression. When the monitor uncovers anger, it tells the mind *eliminate it*. Doing that, though, requires cognitive resources and energy. "When you're under stress," Quartana says, "that's an added cognitive load. The complying mind has fewer resources to maintain control." Meanwhile, the automatic monitor, needing no resources, just keeps chalking up anger.

"The cold pressor test is safe," says Phil Quartana, here with a volunteer, "and it quickly tells us about someone's level of pain and emotional state."

"We also want to yell at the object that caused pain. We want to hurt it back. There's an anger component that underlies the experience of pain."

And in stressed people, he explains, the mounting anger breaks through, becoming "hyper-accessible" to consciousness. Quartana later supported the hyperaccessibility idea with other research.

Now he and his team are discovering similar results in patients with chronic low back pain. Not only do patients told to suppress anger exhibit more pain behavior, like grimacing, but testing shows exaggerated tension in their lower back muscles.

Quartana hopes that drawing the physical connection between pain and emotional suppression will widely improve treatment. "If we can identify what processes are at work," he says, "that should help us refine therapy. Spotting people who need to express their emotions, for example, and finding the optimal way for them to do that would likely lessen pain." ■

For information: 410-550-7984

Psychosis Help of EPIC Proportions

Social skills were never Daniel Lawson's* strong suit. He excelled in math, though, and sailed through his high school's advanced classes. So when Lawson enrolled at Hopkins as a math major, his parents thought he was on track. And he was, until his sophomore year.

One evening when they came to visit, his parents found him sitting in his apartment in the dark, amidst the scattered contents of his tabletops, cupboards and closets. Voices had told him to empty them out so he could hide from the campus police.

Daniel was "deeply into a first psychotic episode when he came here," says psychiatrist **Shannon Barnett** who heads the Early Psychosis Intervention Clinic (EPIC) at Hopkins' Bayview campus. But now, six years later, the young man is finishing up a Ph.D. program. "He'd be the last to admit to anyone outside EPIC that he has schizophrenia," says Barnett, "but he's religious about checking in monthly and he's doing well."

When the clinic opened, the idea was to marry adult and child psychiatry into a service for young adults new to schizophrenia, bipolar disease or to disorders that overlap the two. "We believe there's no other focus like this in Baltimore—and, really, only a few exist nationwide," explains primary therapist **Krista Baker**, the force behind its start.

Atypically, EPIC staff treat psychosis itself as a target. "Because every psychotic episode harms the brain, it's especially crucial that patients this age stay on treatment," Barnett says. "We don't want kids to have these serious symptoms long enough, even, to find out what their illness *is*."

The clinic tries to take advantage of the newness of the illness while there's a significant chance for change. Otherwise, she says, young adults can get tagged with bipolar disorder or schizophrenia, put on medication and that's that. "Most adults that I see in my hospital practice have become defined by their illness," adds Barnett. "Stepping in at this age, we believe, makes that less likely."

"Stepping in" involves practicing traditional medicine more astutely than usual. It also means tailoring care to a high degree. So when EPIC psychiatrist **Russell Margolis** interviewed a teenage patient who came to the clinic diagnosed with absence seizures, he instead suspected auditory hallucinations. Margolis, who heads Hopkins adult inpatient schizophrenia program, is a point person on psychosis. A standard antipsychotic took the young patient's "seizures" away.

Krista Baker, Shannon Barnett and Russ Margolis aim to nip psychosis in the bud.

When Eileen*, with schizoaffective disorder, found that the very olanzepine that expanded her abilities also brought a weight gain of 40 pounds, staff recognized a threat to the young woman's stability. They enrolled the 20-year-old in a hospital aerobics program. They also take mile walks at her clinic visits. Now in her own apartment, Eileen cooks healthier food thanks to EPIC-accompanied grocery shopping.

Finally, because patients' needs are complex, EPIC taps Hopkins' nearby community psychiatry services. For John*, whose persistent use of amphetamines turned him both psychotic and violent, the staff of EPIC and CODA—a substance abuse program for his age group—mapped out joint therapy. When Lakeisha's* social anxiety kept her from clinic visits, the Child Mobile Treatment Services came to her door. And the Psychiatric Rehabilitation Program devised incentives that kept her coming. ■

For information: 410-550-0137.

**For privacy, we've changed names and details.*

Bauer Aims for Better Depression Awareness

When Ted W. Bauer was inducted into the Lacrosse Hall of Fame, his coach said, "Of a decade when Washington and Lee was perceived as David slaying Goliaths, the best of the best was Teddy Bauer." Today, some three decades later, Bauer is still tilting at Goliaths.

Bauer went on to become a noted Baltimore restauranteur. His most recent enterprise, the Oregon Grille in Maryland's Hunt Valley horse country, is a favorite destination. And it was in that business that he met, he says, "the best employee I ever had, and a wonderful person as well."

Bauer knew James Wah more than 26 years. He became a family friend and frequent guest in Bauer's home. Unfortunately, not long ago, Wah succumbed to depression and took his own life. Now Bauer is again in the game, with mood-disorders as the opposition; The man once quick with a lacrosse stick has been fast to help Hopkins' efforts to increase mood disorder education. "My hope," Bauer explains, "is that awareness will keep other young people who aren't well on a better path."

Last year his funding from the Charles T. Bauer Foundation helped the Adolescent Depression Awareness Program. And now he's raised more than $200,000—some from a successful annual golf tourney he's begun—as seed money for broader understanding of depression. Part of the James Wah Fund for Mood Disorders, for example, will increase medical professionals' expertise in mood disorders. ■

Ted W. Bauer

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