

WHEN
MOMMY
COMES
MARCHING

Home

MICHELE PARKINSON survived the near-daily bombings in Kirkuk. She managed the blood. She handled the nausea as she picked through the pockets of a corpse, searching for an ID. What she couldn't get through, it turns out, was a trip to the pharmacy back home in Massachusetts.

Even before Iraq, women in the military developed PTSD at alarming rates. What happens when today's battle-scarred servicewomen come home? BY BARI WALSH

A sergeant first class in the National Guard, Parkinson had been evacuated from Iraq in 2005, suffering from severe and medically mysterious headaches. When she arrived at

Fort Dix, she thought she was home free. And she felt fine — as long as she was in the company of other soldiers.

On a trip to the National Cemetery in Washington, D.C., she left her group of fellow soldiers to use the restroom. "When I came out of the stall, it seemed like there were a thousand women standing there," she recalls. "It was maybe about twenty. I went into a panic. I couldn't breathe, I started shaking. I pushed my way out, and I ended up falling to my knees. When I looked around and saw my soldiers standing there, I calmed right down.

"That was the beginning of it."



"It was one of the most extreme days of my life."

Donna Young was a Marine from 1965 to 1990. The last thing she ever thought she would do is go AWOL.

Young, of Dearing, Georgia, was a helicopter mechanic and pilot stationed in Lebanon in 1983. When the Marine barracks in Beirut was bombed on October 23 and 241 U.S. service members were killed, Young's unit flew in to assist the rescue effort.

"Because this was a squadron that I had been with for fifteen or sixteen years, I knew a lot of the people. At

the time, I didn't say, 'Oh my God, they're all dead.' I just said, 'We have to get the bodies out, we have to get their arms and legs put back together and get them into body bags and identify them as quickly as possible.' "

She was promoted and stationed with a reserve unit near home in Atlanta, but she was called frequently to attend funeral and memorial services, since ninety-three of the blast victims were from the South. By the following April, she says, "I was having a hard time in crowds, because a face would remind me of a face that I put in a body bag." Her marriage was breaking up, and she was dealing

with survivor's guilt.

One day, having been reprimanded by a superior with less experience than she, "I just got in my car and drove off," she says. She was hospitalized for nearly three years, treated for clinical depression and various physical injuries sustained in the service. Later she took a medical retirement and spent years pursuing her benefits and then a disability claim with the VA.

Today, after twelve years of therapy, she says she feels good most of the time. "I said to my therapist the other day, 'I've been with you longer than I have any of my marriages.' It has been a tremendous walk with her."

Within days of arriving home, says Parkinson, she started to experience extreme anxiety. One day at her pharmacy, she started to shake, and broke down in tears.

"I just totally lost it," she says. "For ten days I couldn't walk out my door without breaking down."

Parkinson is among the 190,000 military women who have served in Iraq and Afghanistan since 2001. And she's among the 20 percent of servicewomen who develop post-traumatic stress disorder (PTSD), a debilitating, life-threatening anxiety disorder that may affect as many as 300,000 veterans of the current wars. When we hear about military-related PTSD, it's mostly in worst-case

scenarios: damaged men doing destructive things when they return from service.

But women develop PTSD at more than twice the rate men do. Their suffering, generally quieter, is far less publicized, far less researched, and until recently, far less treated. Before this war, its primary cause was sexual trauma, not combat trauma. But now, with women returning from combat deployments in greater numbers than ever before in U.S. history, the Department of Veterans Affairs is scrambling to meet a need whose scope is still unknown. Much of the research to determine the need and shape a solution is being conducted at the VA's National Center for Post-Traumatic Stress Disorder, many of whose

leading investigators are Boston University professors who do their work at the VA Boston Healthcare System in Jamaica Plain.

DECONSTRUCTING PTSD

Post-traumatic stress disorder didn't exist as a diagnosis until 1980, says Terence Keane, a School of Medicine professor of psychiatry, who is the director of the Behavioral Sciences Division of the National Center for PTSD and who developed many of the most widely used PTSD assessment tools. That's when it was added to the *Diagnostic and Statistical Manual of Mental Disorders*, thanks to a research push in the 1970s by Keane and other pioneers in the field.

But long before then, medical professionals understood that the effects of trauma added up to a persistent set of symptoms in many thousands of sufferers. Shell shock, battle fatigue, post-Vietnam syndrome: these were a few of the names given to the severe adjustment problems experienced by some veterans of twentieth-century wars. As researchers began looking closely at what was happening with Vietnam veterans, others noticed remarkably consistent symptoms in some women who had been sexually assaulted and raped — a condition then called rape trauma syndrome — and in Holocaust survivors, who suffered from what was referred to as KZ syndrome.

"These researchers started to communicate with each other," Keane says, building a body of evidence for a single diagnosis that wasn't specific to the origin of the traumatic experience.

Researchers now believe that 20 to 25 percent of people exposed to a traumatic event will develop PTSD, Keane says. The diagnosis encompasses four types of symptoms: *reexperiencing*, *reliving* the

WATCH a video of an Iraq veteran describing her PTSD and BU's Patricia Resick explaining the origins and treatment of the disorder.

trauma through nightmares and flashbacks, sometimes brought on by triggers like a car backfiring; *avoidance*, compulsively steering clear of places or people even loosely associated with the trauma, working too much, or drinking too much; *numbness*, a lack of warmth for family members, a lack of trust, a lack of interest in favorite activities; and *hyperarousal*, a jittery sense of panic, a constant state of alert, trouble sleeping, trouble concentrating, and irritability.

These symptoms can become powerfully destructive. They can lead to substance abuse, broken relationships, unemployment, and suicide. And they can result in physical illnesses like obesity, heart disease, and diabetes.

Why some people are resilient in the face of trauma and others are not is a matter of continuing interest. "PTSD appears to develop in people who've had multiple exposures to trauma, and also different kinds of exposure," Keane says. Past trauma is like kindling, providing fuel when new trauma occurs.

Another risk factor, it turns out, is gender. Epidemiological studies in the 1990s helped establish that women, although less likely than men to be exposed to a traumatic event, are

much more likely to develop PTSD. The reason is unclear.

TRAUMATIC TRIGGERS

Patricia Resick and other Boston University researchers in the Women's Health Sciences Division of the National Center for PTSD are looking hard for answers, studying the psychology, psychobiology, and treatment of the disorder in women veterans. Their work is just now starting to fill large gaps in a field where the vast majority of research has been done on men.

One thing they would like to know is why 20 percent of women in the military develop PTSD, compared to only 8 percent of men. Resick, a professor of psychiatry and psychology and the director of the women's division, says that some of it has to do with the kind of trauma women experience.

In general, whether in the military or out, sexual trauma is a more significant risk factor for PTSD than combat or the types of trauma that men generally experience, says Resick. "Combat, car accidents, fights — those are impersonal events," she says. "When women are traumatized, they're often traumatized by people who are supposed to love or protect them." In a military setting, "your commanding officer is an authority figure who is supposed to protect you," she says. "Your fellow officers or soldiers are supposed to have your back. So when one of them attacks you, it's a huge betrayal."

Sexual assault and severe sexual harassment — collectively known as military sexual trauma (MST) — is nearly epidemic in the armed services. Amy Street, a MED assistant professor of psychiatry, who leads a VA support team devoted to the issue, says that VA screenings for MST, mandated

The Numbers ///

20

The percent of women in the military who develop PTSD, compared with 8 percent of men.

20

The percent of women who report experiencing military sexual trauma, compared with 1 percent of men.

194,000

The number of women in active-duty military service. They make up between 14 and 15 percent of all active-duty forces and 11 percent of the deployment to Iraq and Afghanistan.

1/6

One in six veterans of the wars in Iraq and Afghanistan will develop PTSD; the figure is higher among National Guard members and reservists and among service members with multiple deployments.

since 1992 for every veteran, reveal that 20 percent of servicewomen report sexual assaults or severe, threatening harassment, compared to 1 percent of men. Those numbers, she says, are probably an underestimate. And many women veterans report that the sense of betrayal is compounded — and the trauma and shame intensified — when the chain of command fails to act on a reported incident, minimizes it, or even punishes women who report assaults.

Street recently found that even reservists, those military part-timers who serve two weeks a year and one weekend a month, experience "high and

PATRICIA RESICK has pioneered a cognitive therapy that teaches PTSD patients new ways to think about their trauma.



"I feel numb all the time."

Victoria Muse, who lives near Ithaca, New York, was a teenager determined to earn money for college when she enlisted in the Army in 1981.

Flush with pride in her strong performance during basic training, she was stationed at Fort Lewis in Washington, supporting Hawk missile repair.

She says her supervisor began to harass her in late 1983 and that lewd jokes were commonplace. One night, returning from a movie on the base, a

noncommissioned officer in her unit sexually assaulted her in her room. She reported the incident, but she had to continue working with her attacker, and other soldiers gave her a hard time.

When the case came to trial in a military courtroom, Muse was grilled about what she was wearing the night of the incident and why she hadn't closed her door, fueling the shame she already felt. She broke down on the stand. Her attacker was sentenced to ninety days.

Later, stationed in Germany, she began to drink heavily, consumed by anxiety. She says her female roommate raped her one night when they were

intoxicated after an evening out. Plagued by self-loathing, her drinking worsened.

Muse says that she's attempted suicide seven times over the years and endured a litany of other PTSD symptoms, including depression, failed relationships, and compulsive working.

Now, following treatment at several VA facilities, including a specialized PTSD clinic in Bay Pines, Florida, she feels stable, although her voice is flat as she describes her trauma.

And after years of trial and error with medication, Muse has found an effective dosage. "I'm still trying to get better," she says. "There are a lot of people who quit."

impactful" rates of MST, among both women and men. "So even people who had other lives outside of the military tended to experience a lot of harassment and assault," she says, "and even ten or twenty years later, those experiences were associated with higher rates of depression, poorer functioning, and higher rates of PTSD."

Women may also have a biological susceptibility to PTSD, a theory that Suzanne Pineles, a MED assistant professor of psychiatry, is exploring. Pineles, the clinical coordinator of the VA's Women's Stress Disorder Treatment Team, is working with a \$760,000 grant from the VA to see how women's menstrual cycles might affect

PTSD — its onset, symptoms, and longevity. Researchers have tended to avoid looking at the psychobiology of PTSD in women, perhaps because the fluctuating hormones of the menstrual cycle have been seen as complicating the picture. These same hormones may be the very keys to understanding the disorder in women.

"Estrogen and progesterone both affect stress-producing hormones and physiological processes associated with PTSD," says Pineles. "In this study, instead of trying to control for it, we're exploring the differences."

To do that, she will use what psychologists call the prepulse inhibition task, which measures how well people are able to

"gate," or filter out, irrelevant information. "If you give someone a startle stimulus" — like a mild electric shock — "they'll startle," Pineles says. "But if they have a little warning, almost imperceptible, they'll startle less."

A previous study had suggested that people with PTSD lack a robust ability to gate — to filter out unnecessary information — when compared to people without PTSD. It's also known that healthy women in the luteal phase of their menstrual cycle (when progesterone is spiking) gate less well than women in the early follicular phase (when progesterone is low) or than men. Pineles wants to see how much greater the effect is in women with PTSD, so she'll look at a group of women both with and without the disorder. She'll compare their performances on filtering tests and on fear response tests, measuring hormone levels as she goes. It could be that menstrual phases contribute not only to onset, but to the fact that women maintain PTSD symptoms longer than men.

Pineles has also done cross-gender research into so-called attentional biases, in an effort to learn whether PTSD is an overreaction to a trauma or an inability to recover from a trauma. "If you see a bear, your attention will be drawn to it, because it's threatening," she says. "That's adaptive, but people with anxiety disorders have more of that attentional bias, so they're more drawn to the bear."

Pineles studied Vietnam veterans and a group of women veterans who'd been sexually assaulted, and she found the same effect in both groups: the trouble wasn't that they responded more quickly or dramatically to trauma — it was that they could not dis-

engage from trauma.

“Their attention gets glued” on the traumatic trigger, she says. “It’s like they’re stuck.”

A LOOMING CRISIS

Of the 1.6 million service members who have deployed to Iraq and Afghanistan since 2001, at least one in six is at risk of developing PTSD. That’s hundreds of thousands of fragile, wounded veterans flooding the VA — or worse, not flooding the VA and self-destructing elsewhere. The Department of Defense has responded to the looming crisis, pledging \$25 million over the next five years — its largest PTSD grant ever — to put in place the best treatments for the disorder. One of the two treatments being studied is called cognitive processing therapy (CPT), and it was developed by Resick.

“People walk away from traumatic events having shattered any preexisting positive beliefs they might have had about themselves or the world,” she says. In CPT, a systematic twelve-session program, therapists take their patients through the trauma and attempt to find out what meanings they’ve assigned it, and where they’re getting stuck.

Most people blame themselves, Resick says, because they

want to think they had more control over the event than they did. CPT helps people let go of that blame, and it also helps them cope with the reality that “sometimes traumas happen and we can’t prevent them,” she says. “Bad stuff can happen, and it could happen again, and then people only have the choice of coping or not coping. That idea is so scary for some people that they will go way out of their way not to believe it.”

CPT is dramatically successful in treating rape victims and battered women, the populations for whom Resick developed it. In one study, she found that 80 percent of women lost their PTSD diagnosis and had, on average, a 75 percent reduction in symptoms after twelve sessions.

Resick’s current project will look at active military personnel and compare CPT’s effectiveness in group versus individual treatment. The study could have significant policy ramifications, because many VA hospitals provide only or mostly group treatment. “If it turns out that groups don’t work as well, that will have budgetary implications, and the VA will have to plan accordingly,” Resick says. “Group treatment is more cost-effective, and if it turns out that group is as good as individual, then it’s justifiable.”

Resick is also teaching the therapy to clinicians across the country. “Last year we trained 1,200 therapists, 800 just in the VA,” she says. “We’ll train another 800 this year, and 800 the year after. There’s never been a systematic movement like this, to teach therapists to use evidence-based treatments. The VA has invested in this, and I think we’re having an impact.”

One big question that remains unanswered involves the experiences of women in combat settings. Women

are prohibited by law from serving in direct ground combat troops, but in the Iraq and Afghanistan wars, any deployment is a combat deployment. “This is guerilla war, so anything you do is dangerous,” says Amy Street, the specialist in military sexual trauma. She and colleagues at the National Center for PTSD are launching a study that she hopes will provide some of the first solid information on combat-induced trauma in women and on the kinds of MST women experience in war zones.

“And the thing we really don’t know is how women are doing following deployment,” Street continues. “Because we get asked the question all the time, about whether these direct ground combat positions should be open to women. It’s a hot political topic.”

“I WANT TO BE LIKE I WAS”

National Guard veteran Michele Parkinson, who is not a part of any Boston University research project, is proud of her military service. She says she loves the camaraderie of the military, and her life still revolves around her National Guard duties. She is taking medication and seeing a counselor, and she says her dog helps her keep calm and focused when she’s in a crowd. But she still has days when “my mind is going a thousand different ways.” Like a paranoid mob boss, she sits with her back to the wall when she goes to restaurants; she can’t stand to have people behind her, people she can’t see.

“My doctors tell me this is going to get better, and it has,” she says. “But I want to be like I was, and I don’t think that’s going to happen.” ■



SUZANNE PINELES is looking at how hormones affect the onset of PTSD, and its longevity, in women.



AMY STREET is helping to launch a study to collect some of the first good data on combat and sexual trauma among women veterans of Iraq.