Social stress and implications for underserved populations

Stress, most notably distress, is a major factor — perhaps *the* major factor — in physical and mental health challenges. Inability to deal resiliently with negative stressors is closely related to heart disease, cancer, depression, dementia and serious mental health issues. Moreover, the vast majority of our clients bring some level of stress with them to the interview.

Personal experiences with stress and its impact

In spring 2015, I suffered a heart attack and was driven 30 miles to Dartmouth-Hitchcock Medical Center in New Hampshire with my wife, Mary, co-piloting the ambulance. We got there in time, as you can tell, but it was a bit dramatic. My heart stopped beating on the operating table (God bless the skilled physician). When people ask how I am doing, I say, "STILL HERE!"

Three weeks out of the hospital, I was referred for nine weeks of cardiac rehabilitation, three days a week for one hour each session. This consisted of exercising on machines and with weights, and also included weekly lectures on lifestyle issues, all designed to help prevent reoccurrence.

One of the educational units was supposed to be on stress management, but the hospital expert had moved on without a replacement. The rehab leaders discovered that I taught and wrote about communication and stress management, so the next thing I knew, I was appointed stress management instructor for my fellow patients. More recently, I have been working as a consultant on issues in the intensive care unit at Sarasota Memorial Hospital in Florida. Although this presents a very different population, the issues are similar and the treatment needs around stress management are virtually identical.

I'd like to share what I have done and what I have observed over time. I am convinced that counselors have an important role in the health professions and integrated care and that these neurocounseling columns are part of the learning process.

Social stress impact on brain and body

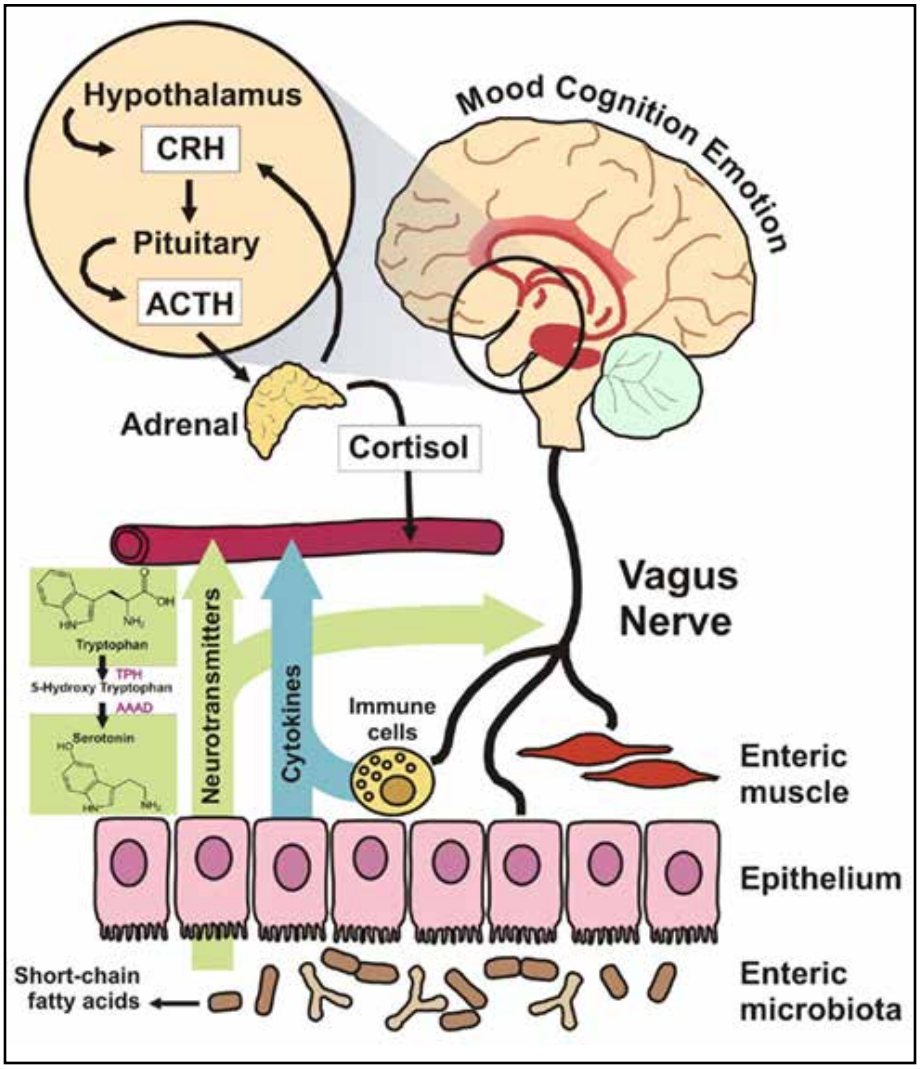
Think of severe stressors that your clients may encounter, such as an eviction notice, the loss of a job, a divorce or a major illness. Then think of common stressors, such as an argument with a spouse or friend, a lower grade than expected on a test or an unsatisfactory performance review from a boss. Each of these stressors impacts the brain directly, starting a complex process that over time can lead to physical illness or mental distress. The figure on the next page illustrates how stress can reach the immune system and even change DNA action.

Responding to stress, the hypothalamus activates the pituitary and the adrenocorticotropic hormone (ACTH) that regulates adrenal cortisol. Epinephrine (adrenaline) and glucocorticoids have an impact throughout the body, including the gut. The neurotransmitter norepinephrine increases heart rate and blood pressure, triggers glucose release from energy stores, increases blood flow to skeletal muscle and reduces blood flow to the gastrointestinal system. If this continues over time, the immune system can be weakened and the brain and body are damaged. All of this leads to the fight-or-flight syndrome and later to physical issues such as heart attack or cancer and challenging mental issues.

Ultimately, social stress can lead to changes in our DNA. Epigenetics is important in explaining how stress leads to changes in our genes. Our bodies react to what happens both in our bodies and in the environments in which we live. External stressors, such as a big argument with a loved one or bullying, can and will turn genes on and off. In turn, these external issues can result in physical stressors to the heart, lungs, etc., and genes related to these organs will turn on and off. And, of course, illness or health within the body will affect our genes.

Changes in our genes can be either growth producing or destructive. Each counseling interview that you conduct holds the potential for changes in gene expression that can be positive or negative in terms of brain/body impact and, ultimately, in behavioral and thought change. Think of "dancing genes" that respond to the relationships you develop. A warm, empathic, supportive counseling session results in calming through the vagus nerve and increased dopamine production.

As counselors, we are prepared through our skills and theories to help clients deal with excessive stress and build resilience. This resiliency leads to better mental and physical health. Nonetheless, we still have failed to realize fully the impact of excessive stress on the brain and body. Counseling theories courses are certainly useful in developing better social relations, but they need to be complemented with information and training on stress management and how to teach and facilitate therapeutic lifestyle changes.



This illustration shows the connections in the brain, the gastrointestinal system and the immune system that lead to bodily changes and eventual changes in DNA. (Used by permission of authors Sue Grenham, Gerard Clarke, John F. Cryan and Timothy G. Dinan, "Brain-gut-microbe communication in health and disease," Frontiers in Physiology*, Dec. 7, 2011.)*

I must confess that I am a bit hyper and a workaholic. I am committed to meeting deadlines and possess a strong desire for excellence. Some would call this perfectionism. This set me up for a lifetime of stress and overreaction, which I now realize affects not only my brain but also my body's physiology. At the same time, stress has delivered positive reinforcing results, providing me with energy and motivation for my basic research and writing in the areas of attending behavior, microcounseling and listening skills. But perhaps with counseling, I could have learned to better maintain my health and still be productive.

Multicultural issues and social stress

Stress is particularly important to discuss in the context of multicultural issues. I presented my first workshop on the issue of racism and its effects in 1967. I now feature information in my presentations and writings on how oppression of all types is a major stressor that leads to more illnesses and early mortality. Issues of oppression and related social stress have been a central issue to me for more than 50 years. At the same time, I believe that our profession's continued resistance to these ideas in the early years contributed to my stress level and eventual heart attack.

A stressful social environment impacts the brain and central nervous system. If you feel threatened and stressed, your social behavior is likely to change. As this happens, the way that others respond to your behavior also changes. Thus, a recurring cycle develops that magnifies itself over time: As you become more stressed, you are more likely to stress others, who in turn restress you. One of our tasks is to break that cycle through effective counseling intervention, which in turn builds our clients' resilience and healthier mental and physiological functioning.

Under stress, clients may become depressed or angry (or sublimate through work or other activity). Regardless, they affect the social environment, and if the social environment does not change or rejects the individual's behavior, we often see maintenance of ineffective behavior patterns.

Some may read this as blaming the individual for not responding with action to change his or her behavior. However, if the stressors include oppression related to racial, gender, sexual orientation or socioeconomic issues such as poverty or poor living conditions, we face a different counseling situation. We need to help these clients see how their distress is highly related to what is happening to them in their environment and what they can do to deal with the situation. As part of this, we may become more involved with social justice action. Another part is helping these clients see that environmental stresses may have had a negative impact on their physical condition. It may be important here to engage in consciousness-raising exercises and to teach therapeutic lifestyle changes.

Individuals with lower incomes and people of color typically face higher levels of stress than do middle- and upper-class whites. Social inequality, low income, racism, discrimination and other factors have a negative impact on health. The body's response to chronic social stressors results in increased cortisol, heart rate, blood pressure and cholesterol and, after continued exposure, diminished immune functioning. In a review of the literature, Kathy Sanders-Phillips, Beverlyn Settles-Reaves, Doren Walker and Janeese Brownlow note that psychological distress from social inequality and racial discrimination results in more illness and earlier mortality. When we put this together, we begin to understand that cancers, heart disease and a wide variety of illnesses are more likely to appear in bodies weakened by continued stress and threat.

The above situation is compounded by limited access to quality clinics, hospitals and mental health services. In turn, these facilities are largely staffed by white personnel, particularly when it comes to the influential positions of physicians, nurses and mental health personnel. Another complicating factor is that people of color often mistrust white physicians, which makes compliance with medications and other recommendations from these physicians problematic.

Twenty-five years ago, Cynthia Charatz-Litt wrote an article ("A chronicle of racism: The effects of the white medical community on black health") in which she pointed out that African Americans spent more time in the waiting room, received less time with the physician and possibly received rushed diagnoses, typically with little follow-up.

Sadly, the situation has not changed. In 2016, Michael O. Schroeder expanded this problem to minorities in general and provided a moving and important case example of this mounting discrimination. I highly recommended searching for and reading his article, "Racial bias in medicine leads to worse care for minorities" (easily found on the internet) to really understand this issue at a concrete level.

At the news site ThinkProgress, Tara Culp-Ressler termed this "medical racism." In hospitals, there is a significant difference in the way that people of color and whites are treated. As counselors, we need to take this to heart, because it is obvious that at least some of us, perhaps many of us, are likewise participating in "counseling and therapeutic racism."

Cardiac rehabilitation

In the 1950s, Herman Hellerstein introduced systematic cardiac rehabilitation that increased patient survival rates significantly and decreased later myocardial events. His basic methods — exercise, education and counseling — remain the core of heart rehab to this day. Counseling, whether cognitive behavior therapy (CBT) or another type, is still limited in most programs and primarily used with individuals.

The Hellerstein system is essentially the program that I participated in after my heart attack. The stress management component was missing in my hospital cardiac rehabilitation program until I was "volunteered" to conduct workshops with my fellow patients. A second cardiac rehabilitation program that I attended several months later emphasized exercise, stress management and group support systems, the latter a dimension of rehab that I believe is underused.

Unfortunately, it is estimated that only half of heart patients, at most, receive rehabilitation. My observation is that most rehab programs have been created by health personnel who are white and are attended only by those who are middle class or higher. I did not see any people of color when I was participating in cardiac rehab. Why would that be?

First, rehab participants are typically asked to attend three days a week for an hour at a time for anywhere from six to nine weeks. New Hampshire, where I started my rehabilitation, is a rural state, meaning that distance, time and money are important issues making it difficult for people of lower income to participate. The Dartmouth-Hitchcock Medical Center arranged for me to finish my rehabilitation in Sarasota, Florida, in a program that met twice a week for four hours at a time.

Sarasota's rehab program is located in a higher income area in a fancy health complex, almost an hour's drive from the areas where people of color and lower economic status live. Thus, populations that are underserved find it virtually impossible to attend. I asked about developing substitute smaller programs in another area in Sarasota and simply got puzzled looks.

Thus, despite extensive data showing that cardiac rehabilitation works and prolongs lives, many physicians ignore the opportunity and may fail to refer their patients, white or minority. If they do refer their patients, many may not realize its importance and fail to provide supportive follow-up. No physician ever asked me about my experience, and I suspect this is true nationally.

Preventive medicine, of course, gets little attention in medical school. Similarly, counselor education programs are typically entwined with traditional remedial therapy, with little to no attention paid to the critical importance of prevention, rehabilitation and therapeutic lifestyle changes.

All this means that people of color and people with lower incomes are less likely to obtain rehabilitation and preventive services, thus increasing their vulnerability to social stress and threat. This is part of the higher mortality rate for these groups. Combining a lifetime of oppression with little opportunity for sufficient professional help does not prepare those who have an illness for rapid recovery.

Teaching stress management and lifestyle changes

As I conducted stress management sessions, I presented the neuroscience of stress and its impact on the brain and body. This knowledge leads to a better chance for patient compliance, and we need to think of integration of this approach in much of our counseling work. Patients will do better if they understand the dangers of stress and start to deal with these challenges more regularly and effectively.

A heart event is more than a body event. The fact that it happened is closely related to what occurs in our minds, thoughts and emotions. Thus, learning how to handle and manage stress becomes a critical issue in treatment. I give a handout showing the path of stress through the body and its impact on mental and physical health. I find that if clients are aware of the science underlying treatment, they are more likely to follow through with behavioral change.

Cardiac rehabilitation patients are encouraged to start including stress-reducing activities as part of their recovery. Exercise, of course, is central to stress management and bodily health. Exercise plus appropriate diet and sleep are known to reduce damaging inflammation in the body and the brain.

Lifestyle counseling also is essential (see the 2014 edition of *Intentional Interviewing and Counseling: Facilitating Client Development in a Multicultural World*, which I co-authored with Mary Bradford Ivey and Carlos Zalaquett, for a comprehensive review of these issues). Although counseling is not yet a central part of heart rehabilitation, CBT strategies, especially positive cognitive reframing, can build optimism and an interest in health. We need to focus more

on positive psychology and the rewards of a healthy lifestyle with clients.

A great need exists for reform in health delivery because many individuals are underserved and receive less effective care. Holly Lynch, writing for *The New England Journal of Medicine* in 2013, noted some examples of discrimination: "Recent years have seen some highly publicized examples of doctors who reject patients not because of time constraints or limited expertise but on far more questionable grounds, including the patient's sexual orientation, parents' unwillingness to vaccinate (in surveys, as many as 30% of pediatricians say they have asked families to leave their practice for this reason), and most recently, the patient's weight."

Relationship counseling, group counseling and behavioral health

In 2016, I joined a second cardiac rehab program for nine weeks. The Dean Ornish rehab program includes as much time in support groups as in diet instruction, exercise and yoga/meditation. Ornish's research has found that the support group and the development of interpersonal connections seems equally important to the other three aspects of the formal program. If one accepts that heart conditions and other illnesses are closely related to excessive stress, it makes sense that group support is critical for compliance and maintenance of new behaviors. In that process, the interpersonal connections that develop positively affect mental and physical health, including less inflammation and improved immune system functioning.

Research on the importance of socialization and group support resulted in the *American Psychologist* journal publishing a full issue on these topics earlier this year. Among the offerings were articles on the neuroscience of relationship, socialization and illness, and the importance of social ties in physical and mental health. We counselors in the American Counseling Association could be described as "relationship professionals." We need to recognize this and increase our efforts in behavioral health.

It seems clear that individual counseling is not enough. If we wish to ensure follow-up and change, we need to include more group work. And as part of this, we need to teach our group members how to continue to support one another.

At the same time, we need to include information on exercise, diet, yoga and meditation in our individual and group practices. Relationship and supportive counseling is the basis, but sharing key neuroscience information, along with therapeutic lifestyle changes, will increase compliance and lead to better health results. We need to acknowledge our failings in the multicultural arena and increase our understanding of and efforts in these areas of growth that are essential for all.

Implications for counseling practice

The following key dimensions can lead to the beginning of an expanded and more culturally aware counseling practice that emphasizes working with the effects of social and psychological stressors on mental and physical illness.

❖ Supporting client rehabilitation in the areas of cardiac health, cancer, diabetes and many other illnesses needs to become a more central part of our practice as counselors. Encourage clients to seek rehabilitation and support whenever possible. With low-income and minority patients, see that the medical establishment treats them equitably. Consider developing support groups in your community. They will make a difference.

❖ Neurocounseling can benefit your professional practice. Give special attention to learning the scientific basis of our work. The most effective research validating the importance of social justice action comes from neuroscience and neurobiological research.

❖ There is a serious need to look at our educational curricula, continuing education programs, CACREP Standards and textbooks. The four are entwined in a circular loop, preventing significant change. We have focused too much on theory, with insufficient attention given to behavioral health and how all of our counseling efforts have an impact not only on the mind but also on the body.

❖ Does your personal counseling practice encourage clients to improve their lifestyles through exercise, proper diet and yoga or meditation? We cannot do this on our own. We need to consider engaging in more teamwork and a closer relationship with other professionals. We need to grow in our awareness that individual counseling is often not enough.

❖ Do you use cognitive reframing and other counseling skills to encourage clients to move from their individual issues to more awareness of others and greater connectedness? We need to focus on being in relationship even more centrally in our interviews and consultation. As part of this, it is critical to help all clients become aware of how environmental stressors are related to their issues. We have focused for too long solely on the individual in front of us. What can you do to take a more environmentally aware approach?

❖ Do you implement social justice concepts and teaching in your practice? Can you examine your medical communities for signs of narrowness and discrimination and encourage groups to work with them toward more balanced treatment? What are you doing to ensure multicultural competence in yourself and others? ❖

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