

Psychologist-Psychoanalyst Winter  
2005

# COUPLES AND HEALTH: THE ROLE OF ATTACHMENT, NEUROBIOLOGY, AND GENDER

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PART I: ATTACHMENT  
BONDS AND  
NEUROBIOLOGY IN  
COUPLES FACING ILLNESS

The saying “Life is what happens to you while you’re busy making other plans” is never more true than when illness strikes in an unpredictable and unwelcome way. The vicissitudes of life can be difficult and stressful, creating challenges which require rigorous coping skills. Although marriage (or being in a committed couple relationship) bodes well for overall longevity the state of being in a couple relationship does not ward off ill health. When one partner faces illness, acute or chronic, the other partner in the couple relationship is also

affected. In this two-part paper we will address the role of the couple’s attachment bonds and gender differences as they affect both the neurobiology of illness and the couple’s ability to regulate affect together in the face of a stressful health challenge. Although couple relationships may serve stress buffering and supportive functions, a dysfunctional intimate relationship may become an additional stressor as couples face illness together. The importance of couple therapy in both prevention and treatment of health issues will also be addressed.

SECURE VS INSECURE  
MARITAL ATTACHMENTS  
AND ILLNESS

Illness may be conceptualized as a stressful activator of the attachment system in a couple relationship. As Bowlby (1973) described, a behavioral attachment system is present throughout life and is activated when individuals are stressed, injured, or feel in danger. Hazen and Shaver (1987) found that attachment bonds and styles (secure, insecure-avoidant, and insecure-ambivalent) in adult intimate relationships are comparable to those between infants and their primary caregivers. Secure partners with secure partners are a common pairing, but secure partners with insecure partners

(insecure-avoidant or insecure-ambivalent) are also often found. Another relatively frequent pairing is a relationship between ambivalent and avoidant partners (Kirkpatrick & Davis, 1994).

The nature of attachment bonds in couples' relationships is an important factor in considering how effectively (or not) a couple will face the illness of one partner in the relationship. Schore (2003) notes that secure attachment would predict resilience in the face of stress, which involves the capacity to flexibly regulate emotional states through auto-regulation and interactive regulation through a cycle of attunement, misattunement, and repair. However, early social environments that result in insecure attachments inhibit the growth of a neurobiological affective control system and decrease adaptive coping functions and flexibility. Because spouses are on the front lines of support, both partners face the challenge of dealing with social, financial, care giving, and parenting changes. In order to face these changes adequately, resilience and flexible problem solving are needed by both partners, with mutual empathy for each other's feelings in facing the partner's illness. Relationships between two secure partners are best equipped to cope

with the illness of one partner since both partners have the ability to auto-regulate positive and negative emotions, yet can allow for interactive emotional regulation within their relationship. Each secure partner tends to feel comfortable with being in the dependent as well as the depended upon positions, relative to legitimate health needs in the present. The couples' flexible reciprocity allows them to effectively problem solve together, unimpeded by rigid patterns of relatedness. In attachment terms, the couple relationship is serving as a secure base or safe haven for the partners (Goldstein & Thau, 2004a). Thus, the relationship between two secure partners offers the optimal social environment within which to interactively regulate the emotions emerging from the process of facing illness together. Research by Schmidt et al. (2002) concludes that in each phase of coping with illness, attachment styles affect the way in which stressful events are managed and how information is processed. Because securely attached patients seek social support and have flexible coping strategies, a secure attachment can be considered "an important inner resource in the emotional adaptation to chronic disease" (Schmidt, et al., 2002)

Insecure partners (ambivalent and avoidant) have attachment histories that have made them especially susceptible to anxiety, separation, and rejection. They may be prone to interpret ambiguous behavior by a partner as rejecting and unsupportive. Also, insecure partners may show little awareness of the nature of the partner's experiences or effects of these experiences on either the self or other. Roles are rigid within the relationship, with a marked degree of asymmetry, e.g., one partner in the dependent and the other in the depended-upon position, and little flexibility in these roles.

Thus, when an insecure partner becomes ill, it may be difficult for him/her to accept care from the partner; it may also be difficult for the partner to give care, especially if this involves a reversal of their usual roles within the relationship. Individuals with insecure-ambivalent attachment styles excessively process emotion and engage in hyperactivating strategies of coping. Avoidantly attached personalities isolate, cut off emotion, and show deactivating strategies of coping including diverting and distancing from the threat of illness. In addition to affecting the coping styles of couples facing illness, the nature of attachment bonds in couples appears to have indirect effects upon the health of the individuals.

Insecure attachment styles have been linked to depression, dissatisfaction, and increased conflict in partnerships, all of which create conditions of chronic stress or Type 2 allostatic load which is a risk factor for illness (Carr, 2004). Negative dyadic interactions can be a significant source of stress, resulting in acute and/or chronic physiological change.

Research indicates that people in distressed marriages, compared with partners in nondistressed marriages, have lower immune responses and that stressful marital interactions increase physiological arousal (Kiecolt-Glaser et al., 2001).

Heightened physiological arousal resulting from couple conflict may decrease immune functioning, lowering resistance to disease.

Individuals with insecure attachment styles are characterized by difficulty in regulating negative affect, particularly when stressed. Thus, couples with insecure attachment bonds are at a dual disadvantage: (1) the increased level of conflict in their relationship may lower their resistance to illness and increase the possibility of chronic illness; (2) their ability to cope effectively with illness is limited by the avoidant or anxious attachment styles, thereby interfering with taking in comfort from the partner. Therefore, the important goals of couple therapy with insecure couples facing illness of

one partner would include exploration of the couples' current coping strategies and strengthening of more secure attachment behaviors such as empathy, reciprocity, and mutual concern which have the potential to lessen conflict in the dyad, and thus reduce stressful physiological reactions in each partner. The health promoting benefits of couple therapy when one partner faces illness may be enhanced by incorporating knowledge of each partner's attachment style as it influences affect and arousal co-regulation in the couple dynamics.

#### PART I: GENDER AND NEUROBIOLOGY IN COUPLES FACING ILLNESS

Matrimony, the union of two individuals, creates many complex dynamics with issues of intimacy and dependency affecting both partners' nervous systems (Goldstein & Thau, 2004a). An understanding of the neurobiology of attachment deepens our ability to recognize these dynamics as they are enacted between partners dealing with the vicissitudes of life, especially illnesses, whether chronic or single incident.

Using the concepts of neuropsychobiology and of attachment promotes a way of viewing conjoint treatment consistent with psychoanalytic principles. In both paradigms the

therapist's role is to provide a secure base where both partners can safely reflect their own mutual contributions, both on conscious and unconscious levels (Thau, 2004). Through the application of these conceptualizations of attachment and neurobiology, the chaotic dynamics that accompany dyadic stress can be seen as more discrete patterns of response. Two different dyads will be presented as prototypes of couples impacted by this psychoneurobiological system. These couples' dynamics illustrate some of the complex interactive effects of attachment issues, neuropsychobiology, health, and gender. These patterns have been considered carefully in laboratory and therapeutic settings, and both conclude that female partners are generally the ones who express sensitivity to their mate's emotional state and the condition of their marriage (Kiecolt-Glaser et al., 2001). In addition, these conditions cause changes over time in the cardiovascular, immune, and endocrine systems, potentially affecting the individual's quality of life and possibly even mortality.

#### GENDER DIFFERENCES IN PROCESSING AFFECTIVE INFORMATION

It has been posited that females generally experience more

arousal because of the greater intensity, duration, and speed of norepinephrine production (Kiecolt-Glaser & Newton, 2001). Despite early controversies, gender differences in the limbic and autonomic nervous systems may account for formerly controversial observations that women hold their feelings longer and with more intensity and that men are more contained and linear. These data do suggest that any shift emotionally in a dyad may have greater reverberation for female partners.

Current brain research details male difficulty in reading nonverbal expression, especially those more powerful negative emotions of sadness and pain. This is fundamentally different from the intuitive way that a woman takes in the expressions on her partners' face. These expressions cue her as to the mood and emotional availability of her partner. The male in this relationship often does not have the same need for this signaling and is frequently less mindful of his partner's state of being. Women traditionally are more troubled by these differences in sensitivity (Ewart et al., 1991). Partners will often take these differences personally rather than recognize patterns of behavior that are governed by the differences in male and female neuropsychobiology and early attachment histories.

Gender differences in coping strategies are evident in the way each sex handles stressful situations. Taylor and associates (2000) examined the "tend and befriend" behavior that is characteristic of females in a stressful situation. While females in distress seek bonding, males in similar situations of threat may behave as if alerted to an aroused aggressive state. Gender differences have also been reported in a recent MRI study where women were found to have higher volume in their orbital frontal cortex as compared to males (Gur, 2002). This marked difference is associated with women's capacity for greater emotional regulation and dampening aggression. If the condition of illness is considered to be a destabilizing stressor, then gender differences will likely contribute to the chaotic disruption of marital attachment dynamics. In conditions of stress resulting from illness, a woman may seek connection and befriending while the male's process is to move into high alert problem solving, aggressively confronting the condition as a situation to be solved. These differences in processing may create a relational and emotional gulf between the partners.

ATTACHMENT FOCUSED  
MARITAL THERAPY AND  
CHRONIC BACK PAIN

Jane and Bob always had what would be considered a

tumultuous marriage. When Jane developed degenerative disc problems, she began to withdraw, decreasing her availability for interactive regulation. Because of his avoidant attachment history with an overbearing, inconsistent primary object, Bob read these behaviors as punishing him for his not good enough connection, and as a result, he became increasingly depressed. He would ruminate about the injustice of her treatment of him, thus fueling his distress and avoidant behavior. In his mind, he would alternate between wanting to make her better and withdrawing in hurt and anger. In this defensive style, one can see the activation of his attachment schema of feeling that his connections were conditionally based and only available when he was being pleasing to the other. In effect, his nervous system was shifting increasingly into sympathetic dominance as he became hypervigilant and irritable. "I know that your back hurts, but I don't believe that you really want to be with me."

Even in the early years of their marriage, Jane often was unable to be reassuring and would herself become angry at her husband's attachment needs. Once she developed chronic back problems, her tolerance for his attempts to engage her became almost non-existent. Whenever he began his

pleading behavior, she would grimace, sigh, and express disdain for his concerns: "What's the matter with you? Can't you see that I am in pain and am in no position to do anything for you? You're being such a baby!" Over time, Bob became increasingly more hopeless and demoralized.

His response was to minimize his needs knowing that most often his wife's condition made her emotionally unavailable. In couple therapy, he revealed that internally he was telling himself not to care and not to need while outwardly he appeared completely unaffected. What was the point of having any needs?

The initial phase of therapy involved establishing the idea of the treatment process as providing a safe base (Goldstein & Thau, 2004b). The two partners had become so isolated in their pain that they no longer served each other's emotional needs. In effect, neither could tolerate the other's needs. Time had to be spent on grieving the loss of their life as it was before Jane's severe back problems. Next, the dyad focused on learning about the dynamics of their relationship and how they would actually arouse each other into states of great distress. As they began to understand the triggers in their patterns of disruption, they were more open to the notion of repair, as

something they could actually accomplish rather than dreading their interactions. Jane's growing awareness of Bob's needs for connection made it possible for her to handle his bids for connection differently. Bob in turn began to be more interested in Jane's pain management and together they enrolled in a pain management program offered through a local hospital.

This couple was able to interrupt the cycle of punishing behavior and this in turn led to a renewed sense of commitment to the marriage.

Interrupting this cycle has benefits not only for the partnership but for the pain patient as well. There are in fact a number of research studies that link negative, punishing responses, marital dissatisfaction and the potential for increased perception of pain (Saarijarvi et al., 1990, Schwartz et. al., 1994). In fact, the hopelessness and helplessness experienced by Bob in reaction to Jane's condition is a frequent syndrome endured by caregivers in relation to their partner who is ill. In effect, there are two patients since both partners are impacted and neither is able to comfort the other.

#### MARITAL THERAPY AND CHRONIC HYPERTENSION

Conjoint therapy with John and Claire explores the interactive effect of problems of regulation and

attachment style as they affect medical problems of dysregulation such as chronic high blood pressure. As humans, we function best when our body is in balance, in the state of homeostasis. In contrast, the body's regulatory system is disturbed whenever there is intense arousal. This is especially detrimental if this arousal is not only intense but also chronic and frequent. In this situation, the body's autonomic nervous system responds as if a battle is being waged. Chronic high blood pressure is a condition that is susceptible to such physiological dysregulation with negative and hostile behavior causing this repetitive arousal. In conditions of chronic hostility women are most vulnerable to changes in blood pressure, with resulting depression (Ewart et al., 1991).

Claire and John were referred for conjoint treatment because Claire, in her forties, was being treated for increasingly high blood pressure. Claire's family doctor became concerned when he saw a significant change over the period of only a year. When asked what might be contributing to this, Claire volunteered that her husband had been traveling more. John and Claire were reluctant to be seen for marital therapy. Neither expressed much understanding of what brought them to the initial consultation. When asked if they

had marital problems, neither indicated concern. But upon further inquiry about what might have changed between them, John volunteered that they were fighting more often. John explained that when they had met he felt very protective of Claire because her father had abandoned her when she was two. He acknowledged that lately he had become fed up with her because all she did was yell and complain about his business trips. This pattern was enacted regularly with her hostility becoming explosive. John in turn became increasingly annoyed because it made no sense to him that she was so uncontained. "What's the matter with you since you know I have to travel for my job. Why are you doing this to me?" When John talked about this, his unresponsive face appeared almost mask-like revealing no trace of understanding or concern. In reaction to this, Claire would escalate into more extreme agitation. When asked later about his lack of facial expression, he explained that his wife's sense of his unavailability was accurate since he would stop being present at the least sign of her dissatisfaction. "I read her face, mouth, body posture and eyes. All this tells me to keep away since I don't like what I feel towards her." Claire explained that not only was she feeling abandoned and unloved, but

also because of the regularity of this hostility, she was repeatedly feeling aroused and upset. "I guess this is literally making by blood boil." This couple had no idea that John's travel had stirred up frightening abandonment feelings for his wife. He had never seen her fear about his leaving as related to her sense of being secure. In addition, John had not realized how he his unresponsiveness was actually frightening Claire. He became interested in learning that women are very adept readers of nonverbal cues and his mask-like face actually said a lot.

Reframing their interactions as co-created via mutual misattunement helped each to understand their contribution to the current difficulties. They had each reverted to their old patterns of defense when each felt uncared for by the other. Neurobiologically, each was in a state of disruption becoming increasingly aroused and upset. Once these connections were made, this couple had a good enough attachment to return to their earlier more attuned way of relating.

INTERPERSONALNEUROBIOLOGY  
ANDEMOTIONAL  
COMMUNICATIONS  
WITHINTHEMARITALDYAD

So are these partners doomed to lives of desperation and conflict? We think not. Once again our neurology is in our favor since we are capable of reflecting upon our own behavior. Our purpose in treatment is to help partners learn more about their own relational neurobiology and its effect upon each other. In this model, treatment emphasizes repair, which is neurobiologically-based as it evolves out of partners learning to slow their aroused states down through reflection, and increased awareness of nonverbal and verbal communication. When partners can understand their own neurobiology and attachment needs, they can create a union where both individuals actually function to the best of their respective capacities. Couples are constantly reading each other for attachment signals of engagement or disengagement. The individual partners are nonconsciously transmitting signals, on a right brain-to-right brain basis, about their own emotional state while reading cues that are being transmitted back and forth within the dyad (Schoore, 2003). These signals are subliminally received by the brain of each partner and are immediately processed at a physiological level causing bodily changes. But is important to note that facial expressions and bodily changes in heart rate and muscle tone may or may not be consciously perceptible to the

partner. Women are generally more accurate and detailed readers of these changes in facial expressions, tone of voice, and body posture. These changes are simultaneously producing brain changes that are identified as conscious feelings. MacLean explains women's brains this way: "women showed stronger crisscrossed function between hemispheres, men had stronger back-and-forth activity within the dominant hemisphere" (MacLean, 1996, p. 425) This may explain why women are more emotionally responsive. One way of considering this is to designate emotions as what is being seen by one's mate and feelings as what the individual being seen is experiencing internally (Bechara & Naqvi, 2004). Being able to understand feelings requires reflection, which is often less possible when conditions of illness may be all-consuming. Without reflection, partners have difficulty communicating feelings effectively to each other. The work of couple therapy in these cases is to understand how the conditions of illness are affecting the partner, and the nature of emotional transactions occurring from the illness. Since gender differences and attachment styles are part of this consideration, couples gain perspective in learning how these differences may be impacting their partnership. This knowledge may normalize the

emotional maelstrom as the couple faces health issues together.

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