

Stress management in Medicine

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SUMMARY

Stress and burnout can result in errors, reduction in patient safety, and decreased productivity. They can cause absenteeism, depression, destructive behavior, alcohol, drug abuse, and even suicide. Several factors lead to professional stress, many of which are out of one's control, thus making intervention impossible. Physicians often neglect their health and ignore stress and burnout. They often deny the existence of stress as a way of adapting to it, which is an ineffective method of coping with this problem that can lead to negative coping strategies. For managing stress and burnout, it is paramount to recognize situations/conditions that may trigger them, identify their signs, and invest in well-being strategies. In this article, well-being promotion is addressed with a focus on strategies that can be used at the individual level. Topics such as stress management and resilience should be valued in medical training and profession. As long as they form a part of the "hidden curriculum", well-being will continue to be undervalued, when in fact it should be seen as fundamental to the health of professionals and patients.

KEYWORDS: Mental health. Occupational stress. Psychological burnout. Psychological resilience. Physicians. Medicine.

Stress does not discriminate when it comes to occupation, career length, or seniority and no health professional is immune to it¹. Stress and burnout can result in errors (since they affect attention, concentration, and decision-making ability), reduction in patient safety, and decreased productivity. They can cause absenteeism, depression, destructive behavior, alcohol, and drug abuse, and even suicide^{2,3}.

Stress is a complex phenomenon composed of three key elements: source (stressors), effects, and individual differences⁴.

Stressors can be classified as being extrinsic and intrinsic¹. Extrinsic factors include the following: high goals at work/college; excessive work/study hours; lack of resources required to do a good job; lack of socialization, good relationships, and support at work; sexual/racial discrimination; inadequate time for sleep; lack of proper feedback; lack of work recognition and autonomy; conflicts between personal values and organizational

values; excessive bureaucracy; increased responsibility (especially for residents); and negative events in one's personal life. Intrinsic factors include the following: being extremely self-demanding (perfectionism); denying vulnerability (denying stress or having difficulty recognizing it); being overly meticulous, idealistic, controlling, and/or self-critical; lack of determination; low self-esteem and self-confidence; pessimism; and feeling that one's work is meaningless^{1,3,5,6}. Traits such as compulsion, guilt, and self-denial (reflected as self-care negligence) can contribute to success in medical training. However, eventually, they become harmful⁵. Some personality types are risk factors for stress, such as neurotic personalities. Individuals with this personality type are usually nervous, oversensitive, tense, concerned, and have low frustration tolerance⁷.

Stress becomes harmful when the person realizes that they are not able to deal with excessive demands and when adaptive

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responses become counterproductive, leading to decreased performance¹. Stress also affects the learning process because it has a negative impact on memory. Stressful situations are internally evaluated for damage, loss, threat, or challenge based on the person's capabilities and resources when facing such situations. The confrontation process comes from the individual's efforts to balance demands with their available internal resources. In addition, the emotional experience of stress is influenced by the cognitive assessment of demand versus coping capacity. This explains why some stressors are seen as positive (challenges), while others are seen as negative (threat or damage). Stress is influenced by personal characteristics including emotions, self-esteem, and resilience. People can experience completely different emotions from a stressful situation, even when the external stressors are identical⁸.

Longstanding, unresolved stress can result in burnout. This occurs when meaningful and challenging work becomes unpleasant and no longer brings satisfaction, when enthusiasm gives way to emotional exhaustion, and when effectiveness turns to inefficiency. Physicians experiencing burnout have reduced capacity to feel compassion and to practice empathy, in addition to having less time and ability to support their patients^{1,9}.

Many physicians neglect their health and ignore stress and burnout. They often deny stress as a way of adapting to it, which is an ineffective method of coping with this problem that can lead to negative coping strategies. Some physicians simply have trouble realizing they are under stress and suffering from burnout, which is also harmful¹⁰.

Therefore, for managing stress and burnout, it is paramount to recognize situations/conditions that may trigger them (to avoid them when possible), as well as identifying their signs as shown below^{1,9}.

- Stress characteristics: isolation, retraction/introversion, rumination, procrastination, anger, crying easily, self-depreciation, excessive caution, lack of enthusiasm, reluctance to ask for help, inflexibility, difficulty in taking rest breaks, difficulty in concentration, irritability.
- Burnout characteristics: excessive emotional exhaustion, cynicism, loss of empathy, detachment (treating patients coldly and like objects), indifference and apathy towards work, feelings of failure and incompetence (even if they are not real), not feeling fulfilled at work.

Unfortunately, a lot of stressors are out of one's control making intervention impossible. Thus, to manage stress, efforts should be focused on controllable elements that can promote resilience and improve global well-being^{1,11}.

When experiencing a stressful situation, self-reflection and self-awareness are fundamental, either individually, or with the

help of friends, co-workers, a mentor, or a mental health professional^{1,5}. Self-awareness means being aware of one's thoughts, emotions, and behaviors. It is essential for developing cognitive flexibility, which is the ability to mentally adapt to challenging situations, to accept that mistakes can happen, and to deal with uncertainties¹².

The following questions can help in the practice of self-reflection and self-awareness: How have I faced difficult situations and succeeded in dealing with them? What has worked out, despite these difficulties? What was decisive for overcoming these situations? Why haven't I dealt so well with other situations (e.g., skipping meals, not having enough time to rest)? What were the difficulties (e.g., lack of time management and establishment of priorities)? Which signs have demonstrated that I am not coping well with a situation (e.g., feeling frustrated, tired, irritated, having headaches and/or muscle contractures)^{1,5}? Some people believe that keeping a diary may be useful for self-reflection¹².

Using the wheel of life tool is an interesting exercise to assist in the process of self-awareness and in the development of strategies to establish an action plan for lessening the impact of stress on the person. A wheel of life is made of pre-defined domains that represent ways of describing life. Each domain should be classified according to its degree of satisfaction. For example, if the social life domain is classified as 7, its numbers from 0 to 7 are colored. Ranking all of the domains will result in a complete overview of the wheel of life. In this way, the focus will be on those areas that need to be improved and what can be done to improve them⁵. Within the health domain, there are issues such as the adequate amount of sleep, nutrition, and exercise¹². For resident physicians, in particular, the wheel of life is usually found to be unbalanced, because their investment in professional growth affects other areas related to family, social life, physical and mental health, spirituality, and finances¹³.

It has been noted that resilience is fundamental to be able to deal with stress. Resilience is the ability to overcome and recover from adversities, to bend rather than break, and to persevere and adapt when circumstances are difficult. It is the ability to develop and to adapt to challenges and to discover new ways to move forward without negative consequences for individual well-being. Improving resilience results in learning how to deal with stress in a way that protects mental health. A person with good resilience has the ability not only to survive troubled times but also to boost personal and professional development¹. Optimism and flexibility are important for resilience⁸. Some techniques that have been proven to increase the level of optimism are sharing good news, reflecting on daily successes and achievements, and showing people gratitude whether personally or in writing. In addition, other

factors that can contribute to greater resilience are a sense of purpose and meaning to life, high-quality leisure time, and a sense of humor¹².

Actions that provide well-being should be promoted to avoid stress. Below are five key attitudes for promoting well-being¹:

1. **Connect:** It is important to have support from family, friends, co-workers, and/or mentors. Reliable social relations (family, friends) bring a sense of safety so that individuals can be “themselves”, providing a stress outlet^{1,12}. Good relationships help build a sense of belonging and create opportunities to share positive experiences and to provide and receive emotional support. Some recommendations could be: have dinner with the family; meet friends you haven't seen in a while; have lunch with a co-worker; have a conversation or play a game with friends/family instead of watching TV; visit a friend or family member who needs help; volunteer; make video calls, and avoid keeping in touch only through text messages on social media channels^{11,14}. In general, physicians neither support each other nor provide positive feedback (acknowledgments, compliments) to co-workers. In this sense, a change of attitude contributes to improving the quality of relationships in the workplace¹⁰.
2. **Be active:** Physical activity reduces the intensity of emotions related to stress and increases self-esteem. Any physical activity is better than none. Physical exercise can release adrenaline (such as aerobic activities) or bring relaxation (such as eastern body-mind practices). People should try to be active every day, turning it into a habit. Doing exercise while listening to music or a podcast, in a group, or with the help of applications, helps to maintain motivation^{1,11,14}.
3. **Be aware:** People should use mindfulness to develop an awareness of their internal, emotional, and cognitive processes, as well as of their environment. This practice identifies stressors by their early signs and helps to balance emotions. It also ensures that actions are taken that optimize well-being before it is too late^{1,12,14}.

An important part of mindfulness is the reconnection with present thoughts and feelings. Being aware of our thoughts makes it easier to analyze their influence on our behavior¹⁴. By promoting professional and personal development, we understand more deeply our life history, experiences, personality, and how we see ourselves in comparison to how others see us. All of these factors influence our behavior and understanding their results in better management¹². Many free applications assist in mindfulness practice, some of which are recommended by the United Kingdom National Health Service (NHS)¹⁵.

4. **Learn new things:** Having a proactive attitude to seeking out challenges reduces stress. Learning new things improves self-confidence and self-esteem, and helps to build a sense of purpose and connections with other people. Some examples are: learning a new sport, a new language, or a new hobby, cooking a new dish, trying to do things on your own (like fixing a bicycle or hemming pants), and taking on new responsibilities at work. Using mistakes as learning experiences help to overcome their negative effects on a person's well-being^{1,11,14}.
5. **Help others:** Devoting time and compassion to co-workers and patients prevents burnout because it creates positive feelings and a sense of reward. It also builds a sense of purpose and helps a person to connect with people. Other ways of helping include spending time with friends or relatives who need support or company, and asking how a friend, a co-worker, or relative is, and listening to them^{1,11,14}.

Finally, it is important to emphasize that unhealthy habits should not be used (use of alcohol, cigarettes, and caffeine) as a means of coping with stress¹¹.

Topics such as stress management and resilience should be valued in medical training and profession¹⁶. As long as they form part of the “hidden curriculum”, well-being will continue to be undervalued, when in fact it should be seen as fundamental to the health of professionals and patients.

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Eruptive vellus hair cyst syndrome or exuberant atypical keratosis pilaris?

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Dear Editor,

A generally healthy 35-year-old man presented with complaints of trunk skin lesions since his early childhood. He reported no symptoms and lesions were stable so far. Clinical examination revealed slightly hyperchromic, multiple, and disseminated perifollicular small papules on the anterior aspect of the trunk (Figure 1). No lesions were found at any other place on full-body skin examination. Eruptive vellus hair cyst (EVHC) syndrome was considered as a main diagnostic hypothesis, but the patient declined to undergo a skin biopsy for diagnostic confirmation. Treatment with a compounding cream of 20% urea

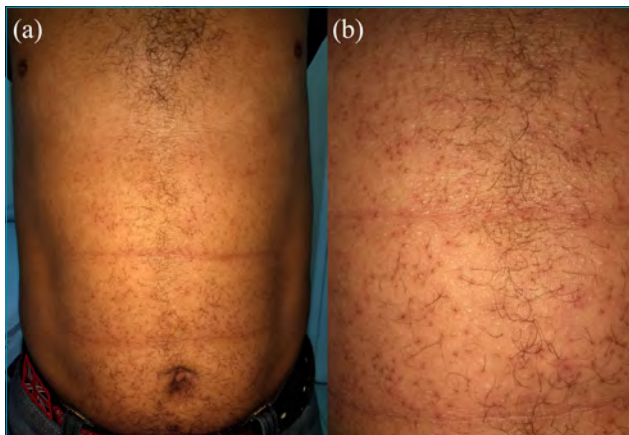


Figure 1. (a) shows the patient's frontal aspect of the trunk, covered by slightly hyperchromic, multiple, and disseminated perifollicular small papules on the anterior aspect of the trunk; (b) presents a closer view of skin lesions.

plus 5% salicylic acid was prescribed and the patient reported moderate improvement after 3 months of use.

EVHC, firstly described by Esterly et al. is considered a rare condition that affects equally different genders and ethnicities¹⁻³. There is a predilection to adolescents and young adults², as in the current report. Even though most reports present sporadically, some believe its pathogenesis comes from autosomal dominant inheritance and follicular occlusion by keratin and folding of multiple vellus hairs²⁻⁴. Clinical features are as described in our patient and can affect limbs, face, abdomen, gluteal and genital region, as well as the trunk^{2,4}. Keratin-17 mutations were described on EVHC patients⁵.

Clinical differential diagnosis of EVHC includes keratosis pilaris, acneiform eruptions, steatocystoma multiplex, milia, contagious mollusk, and folliculitis²⁻⁵. Definitive diagnosis is confirmed by skin biopsy exam¹⁻⁵. Our patient did not want to undergo a skin biopsy because of personal concerns with scar raising. Thus, the exact diagnosis of the current case remains unclear.

As for clinical practice, though, we considered an exuberant and atypical form of keratosis pilaris as the main differential diagnosis for the current case, given its presentation. Both conditions are benign skin lesions and may be managed with topical keratolytic agents, such as urea, retinoids, salicylic acid, and lactic acid^{2,4,5}. Laser, surgical and oral treatment is also described, but with limited results⁵.

This communication aims to stress that even though without a precise and definitive diagnosis, the current case

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