An integrated understanding of subjective disorders in clinical practice

In clinical practice we frequently encounter health complaints in patients who also face challenges in significant areas of their lives, such as with partners or at work. Such complaints are often accompanied by a lack of coping and vitality. By using a biopsychosocial model of health, as well as theories about stress and coping, clinicians may improve their understanding and provide better health assistance to their patients.

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e-fig. 1, e-fig. 2 and e-fig. 4 are available in the electronic edition of the Journal of the Norwegian Medical Association

The manner in which a patient copes with psychosocial stress factors may be described as «allostatic load» – the balance between the individual's coping resources and the sociocultural expectations and demands to which the individual is exposed. Context and biography are crucial for coping, and vulnerable individuals more readily develop an inability to cope. Maintaining factors for subjective disorders are negative expectations of coping and a pessimistic interpretation, such as helplessness and hopelessness.

This understanding may be further developed into a tool for the assessment and treatment of individuals with a subjective disorder Here we choose to emphasise *maintaining* factors, which are what we mainly encounter in clinical practice and regarding which we have an opportunity to intervene. *Triggering factors* vary – different aetiology may result in the same maintaining factors.

Subjective disorders

We choose to define *subjective disorders* as ailments reported by the patient, for which objective findings are disproportionate to the symptoms, and for which we do not have the technology available to objectify the patient's complaints. We perceive subjective disorders as being on a graded scale, and a continuum from the normal ailments of life to disorders that have become chronic and require treatment (1). Health may be considered an abundance of resources, and illness can be understood as a scarcity of these relative to everyday demands (2). We recognise that concepts of disease are perspective-dependent and cannot be defined exhaustively and unambiguously (3). In order to gain credence for the notion of both doctors and patients being jointly responsible subjects, we emphasise systemic perspectives, the associations of which are complex and mutually conditioned. George Engel, who is considered the father of the biopsychosocial model, often underscored that it was a misunderstanding to view his model as a summation of the three levels: the biological, psychological and social (4). His point was that the three elements were mutually interconnected and that human life had to be understood as an ecological system in which human acknowledgement and meaning-making has the opportunity to influence this system (5).

Dynamic homeostasis

Human health may be regarded as a homeostatic system, a state of dynamic equilibrium with buffering capacity in the form of compensatory mechanisms (6, 7). Pathogens cause strain and make the patient sick. Salutogens engender health, or change expectations and increase coping resources so that more rapid restitution becomes possible (8). (e-fig. 1). Homeostasis can also be understood as the capacity of individuals and groups to adapt to new conditions and meet the challenges that are part of life.

Humans are surrounded by salutogens and pathogens. Subjective and objective health is good when there is equilibrium between these factors. This compromise is a condition for being alive. It is important to be clear that this is not a static model of equilibrium but a dynamic and reciprocal model which perceives the person in a circular context, both as influenced and influencing. The patient cannot be perceived exclusively as a victim, but also as an acting, responsible subject.

Theory of stress and coping

The term *homeostasis* encompasses all biological regulatory mechanisms. *Allostasis* deals with the regulation of stress activation in social behavioural adaptation, and is therefore more suited when considering psychosocial stress (9). Allostatic overload corresponds to the critical homeostatic point for psychosocial overload.

When humans are exposed to danger, they react with stress responses. These are innate and learned programmes that are mobilised to survive danger. The programmes are mainly fight-flight-freeze (10).

Mental stress increases when there is a mismatch between adaptational demands and coping resources. We define coping with mental stress as the constantly adapted efforts at thoughts and behaviour that the individual uses to deal with specific external or internal demands, that are experienced as challenging, or which exceed the person's resources (11). However, the experience of mental stress can also occur when the demands are *less* than the coping resources, when people find that they are not able to use their abilities and talents to a satisfactory degree.

Another perspective is the distinction between positive and negative response expectation, the learned expectation about how one is going to cope with something, hereafter referred to as *expectation of coping*. Positive expectation of coping may be referred to as the optimism and self-confidence that arise from being accustomed to coping with challenges. Negative expectation of coping may be referred to as pessimism and low self-esteem, or in extreme cases as learned helplessness (12, 13).

When there is a good balance between the individual's coping resources and sociocultural demands, the individual will cope well with the stresses of life and have a low level of allostatic load. He or she will have a low level of anxiety and depression, enjoy high self-esteem and have good health (e-fig. 2).

Biography

The patient's biography is the description of how he/she has interpreted and adapted

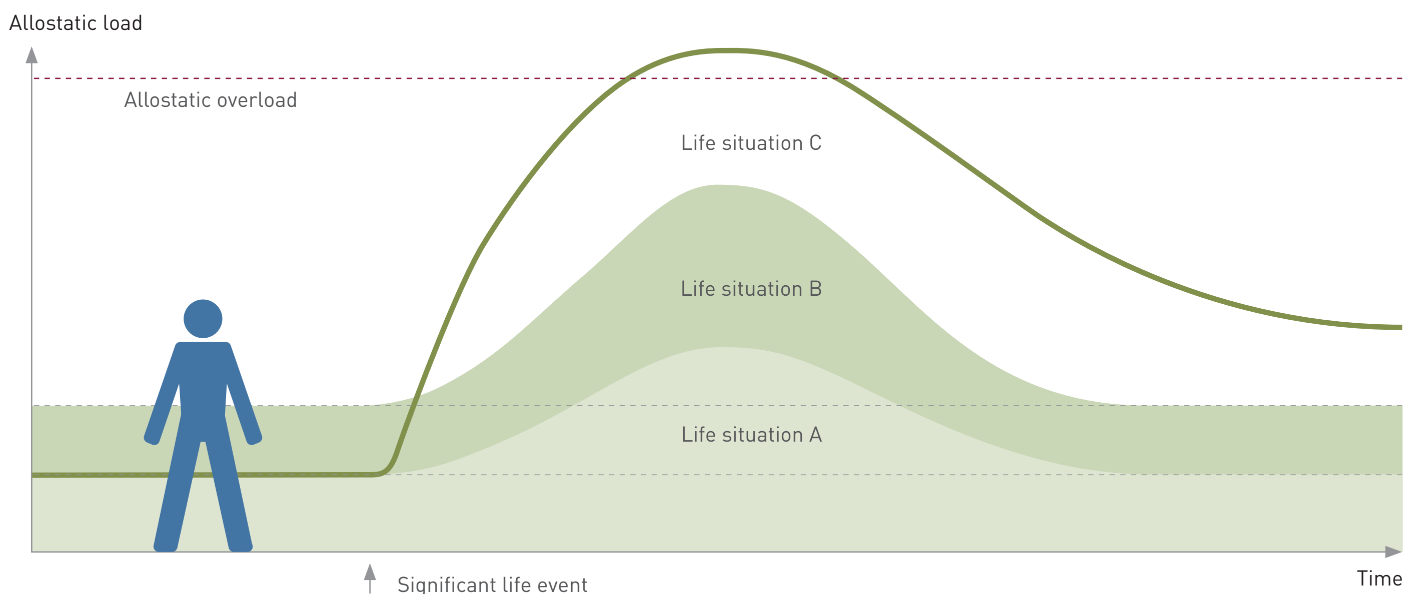

Figure 3 *Model for narrative script: the individual's learned self-regulation of allostatic load. A, B and C are three different life situations for the same individual, Ola. In the case of A and B, Ola has a low and medium allostatic load, respectively. In the case of a stressful life situation, allostatic load increases during the coping process, the adaptive buffer systems function well, the baseline value of the allostatic load remains unchanged, and he copes well, acquires «good memories» and builds a positive expectation of coping. In C a stressful life event intervenes and the buffer capacity overflows, insufficient self-regulation results in allostatic overload and the baseline value of allostatic load is set at a higher level. Ola has now acquired «bad memories» and negative expectations of coping, i.e. a reduced ability to cope with any stress that resembles the life event concerned. These types of psychobiological patterns, biographies that together constitute a narrative script, mark Ola for life and affect his stress-vulnerability system and health*

to his/her life events. The person is shaped by life experiences that are inscribed in the body as physiological preparedness. The result of this formation may be called a narrative script, a psychobiological «basic approach», «life approach» and «mentality» which decides a person's level of allostatic load, from rest to crisis management (14). The script represents a phenotype formed as an interplay between genotype and environment, in which genes are switched on and off through adaptation to environmental conditions. It is therefore not a case of «born that way» *or* «became that way», it is rather «born that way *and* became that way» – nature and nurture as one element. The psycho-neuro-endocrine-immunological script consists of cognitive patterns and an epigenetic approach of the nervous, hormonal and immune systems. Overall this forms a stress-vulnerability system (15) (Fig. 3).

Biopsychosocial health model

Human health is described on three levels in this model: biological, psychological and social.

Biological

All somatic structures are connected to the brain and other parts of the central nervous system. The discipline that integrates the various organ systems with the brain is known as psycho-neuro-endocrine-immunology. Stress and vulnerability mechanisms can help to explain why different people develop stress-activation symptoms from different organ systems, for example poor regulation of the tonus of the autonomic nervous system, sleep disorders, tinnitus and hyperalgesia, hypertension, tachycardia, myocardial infarction, stroke and musculo-skeletal disorders (16, 17).

Psychological

The human mind consists, among other things, of thoughts and emotions. In evolutionary terms, these have functioned as tools for adaptation to the world and for survival – in the sense of producing as many offspring as possible. Thoughts and emotions are formed as internal bodily and physiological responses and as subjective expectations through the internalisation of sociocultural expectations and demands (7).

Psychological health is good when the individual's cognitive and emotional processes provide useful interpretive information and appropriate adaptation to the environment. If the cognitive and emotional processes lead to erroneous interpretation and dysfunctional coping, the result is poor adaptation to the environment and thereby poor psychological health. Mental health is balanced between psychological salutogens and pathogens; in other words between positive driving forces such as faith and hope, and negative driving forces such as distrust and hopelessness. The encounter between the ideal and the reality, results in a balance between the individual's subjective expectations of life, and society's objective life demands.

The individual's narrative script and behavioural patterns can be perceived as stress-vulnerability to the development of anxiety, substance dependency, eating disorders and post-traumatic stress disorder (PTSD) (18, 19).

Social

We can understand the social dimension in the light of evolutionary psychology. Cultural selection works by rewarding or punishing behaviour based on sociocultural expectations and demands, with respectively high or low status in a social group. In the case of negative cultural selection, inappropriate or undesirable behaviour is sanctioned first and foremost through negative cognitive and emotional feedback from the surrounding community. Such sanctioning is experienced as a drop in social status. Exclusion from «the flock» and «the tribe» is represented by a loss of a job or partner, imprisonment or other forms of social marginalisation and exclusion.

Integrated health model

We can combine the biopsychosocial model with homeostasis, allostasis and stress and coping theory. This is achieved by recogni-

sing the importance of balance between coping resources and demands in a system that is dynamic and open to influence. The individual's vulnerability is expressed through a narrative, psychobiological script as a sum of the individual's biography, a lived life with innate reactive patterns and learned behavioural patterns, a phenotype which is a result of an epigenetically adapted genotype. On the social level it is important to be included in the flock, and this may be illustrated by the degree of social support in the family and at work, and through political and religious social affiliation. Together these constitute a person's biopsychosocial identity (e-fig 4).

So, where does this leave us?

The aetiological approach we have described can form the basis of a more causal treatment. By learning to regulate allostatic load, the patient can achieve better symptom control. We prioritise the situation here and now by shifting the focus away from triggering factors and emphasising the reduction of maintaining factors. Psychoeducation can teach the patient to understand his/her health complaints and to live with them. The technique is to make use of personal experience of what prolongs the good phases and shortens the bad ones.

We must have the ability to recognise patients' health complaints and difficulties in coping. Empathic ability is important, but we must also be able to challenge patients in a respectful way. We can do this, for example, by taking an interest in the values that they stand for, what they want out of life, and by examining the degree to which distressing thoughts, symptoms and actions help or hinder them from achieving their goals in life. If we have a committing dialogue about life choices based on coping resources and sociocultural demands, the patient can be made more capable of acting like a rational agent, taking greater responsibility for his/her own life and becoming less of a victim of circumstances (20). The clinician together with the patient will then have achieved a lifestyle intervention that can enhance the capacity for self-sufficiency.

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