

Anxiety as an enhancing phenomenon in origin of stress, CAN and PTSD in disabled children

Contribution to the ICD-10 re-classification

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Abstract

This paper studies the contribution of anxiety in origin of functional behavioural disorders of children. The intense sensing of anxiety attributes to the shaping of one's personality. Adaptation and adjustment, accommodation and assimilation to stressful conditions producing anxiety are analyzed. There are diagnosed reactions of organism to the circumstances of the CAN syndrome and trauma. In these circumstances, a primary perception of reality is at stake that consequently leads to sociopathological features. This paper also provides the authors' opinions of psychoanalytical and behavioural schools on origin of personal decompensation and neurotic disorders. Causes of panic disorder and other diseases, in which a stress trauma plays a role, are considered. For these reasons the authors suggest classifying the CAN syndrome as a separate nosologic unit in the future ICD-11.

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Introduction

Definition of mental disorders and behaviour has had its reflection in the Tenth Revision of International Statistical Classification of Diseases and Health Related Problems ICD-10 (WHO, 1992). Converging diagnostic criteria arranged in a diagnostic algorithm revealed deviations of ambiguity and redundancy in arranging

the system. The authors of ICD-10 proposal have encouraged to further research of these conditions regarding usefulness of innovative categories.

In the category F 40-49, there are in mutual interconnectivity anxious disorders, phobic disorders, reactions to major stress, disorders of adapt-

ability, disorders caused by stress and somatoform disorders.

Experiencing a life discomfort has a multifold impact on development of an integrated personality in children. Fairly well known is the situation with influence of trauma and CAN (Child Abuse and Neglect) syndrome on the child's organism. The ratio between physically abused and neglect and psychically abused children is 1:3 respectively. In Slovakia with 1.4 million children, there are 14, 000 to 70, 000 children (1-5%) suffering from the mentioned discomfort (Škodáček, 1993). Why is anxiety a common denominator of these conditions and contributes to their occurrence?

Anxiety and CAN syndrome

CAN syndrome in children is characterized by a major imbalance in adaptation and functional interaction with hostile environment. In the framework of maladaptation a disorder of a pre-morbid personality occurs. Here the anxiety plays one of the first roles in adaptation and in occurring functional disorders.

Threats from CAN doers towards the children tend to be the first sign of abuse. Threats themselves cause anxiety and burden stimuli lead to emotional suffering. Suffering induces compensation mechanisms with the aim to preserve the personal integrity (Škodáček, Činovský, 2004).

The CAN syndrome is characterized by an ability to adapt and cope with this situation applying the following functions: accommodation, assimilation and adjustment.

The situation of active and passive CAN syndrome takes a form of stress and load. Its handling results from psychoregulation of the maturing personality. Interaction of the child's adaptation activities and functions in homeostasis is related to the notion of disintegrated behaviour.

Classification of CAN syndrome

CAN syndrome is defined in the basic classification of coded items *Effects of other deprivations T 73* and *Syndromes from maltreatment T 74* and supportive classifications, what is in accordance with the opinions of others (Biskup, 2001).

CAN syndrome is described and defined in ICD-10, part Z. CAN syndrome negatively affects general health condition and is a reason for contacting health services. It should be seen closely related to problems of social environment: education Z 55, housing and economic circumstances including extreme poverty

Z 59, with social behaviour problems Z 60, with social exclusion and rejection Z 60.4, as well as with targeted adverse discrimination and persecution Z 60.5 and other specific problems.

CAN syndrome has also common grounds with coded classification *Other problems related to upbringing of children Z 62* with inadequate parental supervision and control, parental overprotection, institutional upbringing, hostility towards and scapegoating of child, emotional neglect of child, inappropriate parental pressure and other abnormal qualities of upbringing. Furthermore, the CAN syndrome is partially included in codes *Problems related to primary support group Z 63* and in problems in relationship with psychosocial circumstances Z 64 and Z 65.

CAN syndrome is pertinent also to *Problems related to negative life events in childhood Z 61*: loss of love relationship, removal from home, adversely altered patterns of family relationship, events resulting in loss of self-esteem, problems related to sexual abuse, physical abuse, personal frightening experience in childhood and other negative life events in childhood.

CAN syndrome should be also considered in the framework of code *Problems related to life-management difficulty Z 73* as in Z 73.2 Lack of relaxation and leisure, or Z 73.3 Physical and mental strain. Code *Family history of mental and behavioural disorders Z 81* as alcohol, tobacco and other psychoactive substance abuse, or Z 86 also contributes to this. There is a similar importance of non-compliance with medical treatment, poor personal hygiene, psychic trauma, self-harm and other physical trauma in personal history as mentioned in Z 91 (WHO, 1992; DSM-IV, 1994).

Though there are many interlinked and interrelated categories and codes among factors influencing CAN syndrome, the CAN syndrome as such is not listed as a separate category with a specific three-character code in ICD-10.

Anxiety, CAN syndrome and stress

Stress is perceived as responding to potential or real threat of homeostasis including the immune conditions (Hoschl, 2002). The regulation of stress reaction is substantially affected by hippocampus, whose neurocytes are plastically changed similarly as in cerebellum and bulbus olfactorii. Thus the memory and learning functions are disturbed. Stress creates a certain level of "strain" which persisting for a long time leads to various forms of anxiety and depression (Smith, 1996). Children who experienced a trauma in their early childhood face an increased risk of developing anxiety disorders in adulthood. During a prolonged stress increased activity of corticotrofin releasing factor and ACTH secretion is observed. They lower the threshold for origin of anxiety and production of new neuronal cells in hippocampus by preventing the growth of stem cells in gyrus dentatus. These processes reduce hippocampus volume, what is seen during MRI in individuals with depression or PTSD – post-traumatic stress disorder (Libigerová, 2003). The neurogenesis and immune response is compromised.

The life instinct becomes the dominating motive of behaviour and frequently causes pathological conditions. Acceleration of passive and active traits of the CAN syndrome may result in severe damage of child's health. CAN syndrome stands for an objective stressor with a long-term effect, e.g. physical abuse, social isolation with elements of anticipation and reminiscence. A situation initiating stress is perceived as simultaneous threat and experiencing anxiety. Memories are related to cognitive anticipation and to importance of stress trigger that is accompanied by anxiety.

This is a psychosocial type of stress and to clarify the pathological adjustment reaction it is necessary to identify its ethiology. In category F 43 of the ICD-10, a consequence of actual, physical or mental stress or long-term persisting trauma caused by bullying can be assumed. Bullying is not a medically defined nosologic unit, however, it should be understood as a significant factor of a psychogenically acting agent in development

of CAN syndrome. This category is in practice coded as *Sibling rivalry disorder F 93.3*, what is not exactly the case from the etymological point of view.

Similar negative circumstances of living discomfort are primary and causal factors of adjustment disorders in all age groups of children and adolescents. Codes F 40–48 in ICD-10 include neurotic, stress-related and other somatoform adjustment disorders. The reason, why they have been included in this category, is to simplify the classification of such disorders manifested by a mixture of signs, for which it is not easy to find adequate simple and traditional psychological and psychiatric classification. They are characterized by a serious psychosomatic condition adversely influencing activities and behaviour of the individual. The ICD-10 authors claim that it is difficult to determine reliably this diagnosis, and therefore it is inevitable to verify these conditions and, if necessary, to refine their definition (WHO, 1992; DSM-IV, 1994).

Anxiety and the type of personality

Load presented by abusing and the personality with a regulated mode of behaviour, emotional stability and tendency to anxiety with a bipolar factor prone to extraversion or introversion are external and internal conditions of CAN syndrome. Relatively stable are personal orientation features that to a great extent characterize resistance towards the load and CAN syndrome situation. One of the effective factors of an integrated personality is emotional variability, i.e. experiencing and interaction with the CAN environment. Its dynamics and consequences in the area of behaviour comprise excitability, experiencing of strain and anxiety in particular.

A child perceives the CAN syndrome situation through a subjective assessment of its importance, activation and mobilization of physiologic system structures. The strain in CAN syndrome affects primarily experiencing and compromises the personal integrity.

CAN syndrome and bullying have usually a long-term effect on a child. Its organism responds by changes in psychic structure and functional systems. CAN syndrome changes cognitive, attention, creative and will dispositions. It leads to thought and emotional overload, excessive mobilization of internal force, what together ends in disintegrated behaviour in threat conditions especially if a child does not have opportunities to resolve the occurred situation by assimilation.

The relationship between the changed contact with reality manifested as hyperplasticity and emotional changes with increased anxiety in introversion was found out on a sample of 33 children with CAN syndrome aged 14.5 years within applied research of Činovský et al. (1993). There was a significant relationship between introversion and emotional lability and timidity. Behavioural maladaptation in children was manifested as depression with increased level of anxiety perception of reality.

Anxiety and PTSD

Protracted response to stressful situations is observed also in post-traumatic stress disorder with subsequent deep distress, which is listed in ICD-10 under code F 43.1 and 43.2. Experiencing of distress and related adjustment disorders compromises in particular social functioning and a performance of an individual. Personal predisposition or vulnerability plays a role in manifestation of adjustment disorders in stressful situation. These manifestations comprise namely anxiety and worries. It is a maladaptive neurobiological dysregulation and psychological dysfunction (Zohar et al., 2000). One-off trauma is typically associated with PTSD, but a long-term traumatizing child abuse has a different clinical picture with signs of rejection, dissociation, readiness to behavioural disorders, altogether affecting personal development.

An extraordinarily strong and intense CAN syndrome situation occurring suddenly and unexpectedly causes discrepancy between pressure of external conditions and conditions of forming personality. A child tries to cope with this situation. CAN syndrome continues to have impact on organism in form of PTSD even after the actual situation is over. (Škodáček, 2005)

Recurring and intrusive memories of the trauma from abusing affect the child's organism and personality development. Negative effects of PTSD are observed also in somatic signs of developed neuroses and reactive conditions. The victim often dramatically bursts up in panic and aggression.

Anxiety and aggression

Anxiety and hostile – aggressive reaction are often manifested simultaneously. It is possible to alleviate anxiety by aggressive behaviour and thus balance the arousal – the activation pressure. Such behaviour can be considered as a hyper-compensation caused by anxiety (Říčan, 1995).

We observed (Činovský et al., 2003) a more aggressive behaviour in adolescents aged 13–18 years influenced by CAN syndrome, namely in adolescent boys with forming extraverted orientation. It is a type of escape aggression resulting from emotional deprivation, which started in early development phases and led to creation of emotional lability as a reaction to coping with social anxiety and insecurity.

Due to anticipating a situation of abuse the tension increases and leads to disorganization of behaviour or to reduction or total discontinuation of performance. Asthenic individuals usually show a great deal of apathy (Škodáček and Činovský, 2004). Bullying associated with psychic abuse in the framework of CAN syndrome is aggression of an individual or a group focused on an individual or a group more or less helpless because of physical or psychical weakness or inability to defend themselves effectively. It is atrocious, i.e. naughty, pungent and wrathful behaviour from those who bully.

If the personality is prone to react by a sthenic form of behaviour, CAN syndrome and PTSD are characterized by signs of aggression. After experiencing a violent, over limited CAN syndrome situation and trauma, e.g. physical abuse or rape, physiological and psychical reactions of confusion, anger, dullness, anxiety, depression and helplessness are observed.

Anxiety and manifestation of panic disorder

Neurotic behaviour in a panic disorder is frequently activated during CAN syndrome and trauma situations.

As a result of a severe shake in the child personality structure a decline in performance is observed similarly to fatigue and overload. There is a disorder in perception, coordination, concentration, cognitive and governing functions and skills. Once such critical traumatic event is experienced, the repeated impulses recalling the trauma are predisposition for new hopelessness and increased effort to cope with anxiety emotional expression. Emotional stability and resistance towards sentiments or panic is not matured during the ontogenetic development of a child and adolescent. External impact of stressing trauma leads at later stages to behavioural demotivation, resignation and they block aspiration level.

The picture of trauma with anxiety accompanies neurosis from expectation likewise a revocation of memory imagination of such unpleasant experiences. Their long-term effect causes exhaustive conditions and has impact on development of mental and somatic syndromes, on drop in performance quality, origin of irritability, anxiety and tension, dysphoria and depression, hypervigilance and egocentricity. Neurotic behaviour is manifested by a disorder of adjustment abilities and a development of generalized and panic disorder in adolescents. Often learned reactions to stress in childhood with tendency to their maintenance in abusing conditions, or a hyperprotective approach from external environment are the reasons behind. It is the environment which contributes to excessive experiencing of anxiety. Therefore there are relationships between anxiety, type of personality and neurosis in a child patient (Horney, 1945). This is explained also by the psychoanalytical school as a sign of defensive mechanisms aimed at removal of anxiety, and in particular the behavioural school, where anxiety is interlinked with tension through a decompensating motivating factor during establishing neurotic signs (Wolpe, 1964; Praško and Kosová, 1998).

Conclusion

The category F 40–48 of the ICD-10 includes mutually interlinked: anxiety conditions, phobic and obsessive disorders, neurotic disorders and disorders caused by stress, somatoform disorders and reactions to severe stress with adjustment disorder. The authors of the ICD-10 proposal encourage to further sequential and innovative research of these conditions regarding its usefulness.

CAN syndrome is not categorized in ICD-10 as a separate nosologic coded unit, its description is included in categories F 40–48 and in T 73, 74; Z 55, 59, 60, 61, 73, 81, 86, 91, i.e. among factors affecting health. CAN syndrome is apparently linked to anxiety, stress and in particular to neurotic decompensation, psychosomatic diseases, worsening of somatic condition due to persistent bullying, CNS and immune system disorders.

There is enough evidence and information about a link between CAN syndrome and passive and active psychic, physical abuse, bullying as well as maltreatment. The consequent conditions are cross-influenced by anxiety. Thus anxiety participates in personality maladaptation in behaviour and personality decompensation similar to a situation in PTSD and other neurotic disorders especially panic disorders.

Therefore, we suggest considering the possibility of categorizing CAN syndrome as a separate coded item in the future ICD-11.

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