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Chapter 1

Introductory Chapter: Anxiety Disorders and the Precursors

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1. Introduction

In the first ideas of this book, we were much concerned about the children with an anxiety disorder and the children whose parents were diagnosed with any anxiety disorders in their lifetime. So, we are eager to check out the different types of anxiety disorders with different underlying mechanisms.

Different anxiety disorders stand out in the center of many psychiatric conditions, independent of developmental periods and age. Accordingly, different anxiety issues play an important role in the psychopathology of a child and adolescent development. Today, we can detect childhood fears earlier and evaluate them as the pioneer of many adult psychiatric disorders.

Epidemiological studies on child and adolescent psychopathology have been conducted since the 1980s. Especially, studies on childhood anxiety are the most common. In this way, risk factors are better determined, leading symptoms are recognized and accordingly prevented, and therapeutic strategies are developed.

The developmental perspective will support a better understanding of the development of anxiety disorders and transition from childhood to adulthood. Developmental psychopathology is concerned with the causes and prognosis of improper misconduct and examines normal and pathological behaviors in the perspective of development. Its predecessors are Thomas Achenbach, Dante Cicchetti, Michael Rutter, and Alan Sroufe.

Each developmental period has its own developmental tasks. As Robert Havighurst described in 1948, development is a lifelong process and different life duties must be fulfilled in each life period [1]. In the meantime, the child is considered as an active learner in continuous communication with his environment. Successful completion of these developmental tasks will ensure that the child and the adolescent maintain their mental health in a healthy way. If these

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tasks are not fulfilled, it will lead to loss of happiness, loss of success, exclusion by society, and consequently loss of other related development tasks.

Anxiety formation can be understood as the fulfillment of developmental tasks in this background in a way that is not appropriate for the development period. For example, the development of separation anxiety is facilitated if the autonomy development, which is the assignment of the age of 3, is not successful.

An important developmental task of childhood is emotion control. Strategies used in emotion control of children are important in understanding clinical anxiety disorders.

1.1. Development of anxiety emotion

An important discussion in developmental psychology is related to the development of emotions. Does the newborn bring with them feelings or do emotions vary later? Walters and Sroufe [2] argue that emotions will be varied during ontogenesis. The sense of fear develops through steps. It has a sense of not receiving pleasure and is closely related to the child's cognitive and social development. The first observed fear predecessors in the newborn are compulsory attention and insecurity. Fear is activated when there is a negative movement for the child. Izard and Sroufe acknowledge that the first fear appeared in the 7th month. The baby becomes restless if visual stimuli are given to the baby for 10–15 days. First, he reacts calmly and then becomes active, crying and shouting, because the child's activity ability was cut by the object. The content of the visual stimulus is not important here. Infants become restless as a result of a person looking at the baby's face for 30 s. Here, the baby acquainted with other foreign factors. The content of the warning has gained importance. 30 s after the response is the development of fear. In contrast, fear and anxiety arise as a result of stimuli considered threatening.

From the 6th month, if a foreign person suddenly gets in the lap of the child, the babies react. This reaction is observed especially in all infants aged 10–12 months. Here, the foreign person is perceived as a kind of reverse event and creates a negative scheme in infants. This is the pioneer of fear/anxiety. As the age progresses, the content of the stimulus plays a greater role, and the fear is varied and defines this period as mistrust.

Fears are common in childhood. Their contents vary by age and are temporary. The cognitive development and developmental period of the child are in relation. For example, at the end of the first year, they fear foreign people, foreign places, and loud voices. At the age of 4, the fear of darkness, fears of animals, and fears of being left alone come to the surface.

1.2. The risk factors of anxiety development

The most commonly used model in explaining the causes of psychiatric disorders is the diathesis-stress model [3]. Diathesis refers to the Greek predisposition and is considered to be the susceptibility of the individual to both structural and environmental factors and diseases and non-normative behaviors. The definition of an individual's response to any stress caused by the environment can also be extended. This individual predisposition may be determined as genetic, organic, biochemical, psychiatric, and/or social. The concept of diathesis was first used in schizophrenia research [4]. The other definition mentioned with diathesis is the concept of risk.

Risk is defined as the probability of developing an individual's disease within a certain period of time.

Kraemer et al. [5] identified different risk factors. The first step is whether the risk related to the disease occurs concurrently with the disease. Risk factors that are spontaneous or can be changed as a result of any intervention are defined as variable risk factors.

1.2.1. Family as a risk factor

In family research, the incidence of the same disorder is screened in the relatives of people with psychiatric disorders. A number of family studies reported that panic disorder showed familial frequency [21, 22]. In recent years, the subject is frequently investigated and the relationship between the anxiety of children and the anxiety of parents [6, 7].

In the last family researches conducted by Cynthia Last, [8] 83% of the children diagnosed with separation anxiety were found to meet the anxiety disorder criteria at their mothers' lifetime.

About 57% meet the criteria of an anxiety disorder at the time of research. The second major study by Last [9]. Relatives of children with anxiety disorders, relatives of children with attention deficit hyperactivity disorder, and relatives of children without any psychiatric diagnosis were included in the study. Anxiety disorder was found in 40.4% of the parents of children with anxiety disorders. In the other two groups, anxiety disorder was quite low. The most common type of anxiety disorder among children with anxiety disorders is excessive anxiety (18.9%) and phobic disorder (11.7%). Panic disorder, social phobia, obsessive compulsive disorder, and avoidant personality disorders are more common in the relatives of children with anxiety disorders than in the control group.

Children with a diagnosis of anxiety disorder in their parents have a higher risk of developing anxiety disorder. Both axis studies indicate familial clustering in anxiety disorders. Evidence of more specific transitions, especially in panic disorder and social phobia, was obtained.

1.2.2. Biological risk factors

The effect of biological risk factors on the development of childhood and adolescent anxiety disorders was investigated in few studies. Studies on the subject were mostly conducted using adult subjects. In these studies, locus ceruleus, sympathetic system, and HPA axis were investigated. It has been shown that the levels of cortisol increases in the stress of normal children [10]. In studies with children with social anxiety, it was observed that heart rate increased compared to normal children. Kagan [11] found the low stimulus threshold with the participation of the amygdala and hypothalamus in the limbic system in children with anxiety.

Shaffer et al. [12] argued that some of the signals could be interpreted as an anxiety disorder precursor. The parents of children with agora phobia were found to be more frequent than the children who had motor-mild symptoms without the agoraphobia (Kaplan et al. [13]).

1.2.2.1. Increased startle reaction

The startle reaction was observed for 6 months from the newborn period (Balaban [14]). In many studies, an increased startle reaction was found in individuals with anxiety disorder compared to the control group [23, 26]. Grillon found that parents with alcohol dependence showed an increased startle reaction to alcohol-dependent parents compared to their children. In the second study performed by the same study group, the startle reaction potentials of the parents of children with different anxiety disorders and the children of parents without a psychiatric disorder were compared. Higher startle potential was determined in girls. As a result, increased startle reaction may be considered as a predisposition factor in the development of anxiety disorder.

1.2.3. Gender

Childhood anxiety disorders constitute a risk factor for gender development in girls. Phobic disorder, anxiety disorder, and post-traumatic stress disorder are frequently seen. On the other hand, childhood obsessive compositional disorder is more common in boys. Separation anxiety disorders are seen equally in both sexes [25]. Biological and psychosocial study hypotheses were used to explain gender differences in anxiety disorders. The effects of sex hormones on monthly onset, menopause, pregnancy, and postpartum period anxiety symptoms in biological theories were investigated. In general, these explanations are not sufficient to explain the gender differences that we have found in childhood. Genetic factors are discussed as the cause of anxiety disorders in girls. For example, according to Drowe et al. (1983), the panic disorder is genetically inherited, and the genes responsible for panic disorders in women show a high transition. According to [24], genetic factors play an important role rather than gender-aware environmental factors. At present, it is unclear which gene causes gender difference in anxiety disorders.

1.2.4. Behavioral inhibition

Examining the temperament characteristics as the precursors of psychiatric disorders has been an important step in etiology research. The event mentioned as temperament and structurally inherited is defined as the predisposition that determines how the individual behaves against particular people in certain situations. It emerges in the very early period, remains constant at all times, and is influenced by biological factors. Behavioral inhibition is a temperament characteristic.

Behavioral inhibition is defined as avoiding shy, conducting behaviors in the newly entered environment or against newcomers (Kagan [11]). This behavior can be observed from the 8th month. Inhibition of behavior during infancy shows as a disgrace (crying, yelling), as shy and anxious behavior in a small childhood, and as a social recessive behavior in school age. The constancy of this temperament property has been proven in many studies until adulthood (Biederman et al. [12]; Gest [13]; Matheny [14]).

Children with behavioral inhibition according to Kagan show a low stimulation threshold in the amygdala and the hypothalamus, in particular, against foreign conditions. In addition, increased sympathetic stimulation was observed.

According to Kagan the children of individuals with panic disorder and agoraphobia showed more behavioral inhibition than healthy parents (Rosenbaum et al. [15, 16]). According to the results of two prospective studies, children with behavioral inhibition are in a high-risk group in terms of developing childhood anxiety disorder.

As a result, in children with fixed behavioral inhibition in different time periods, more anxiety disorder can be diagnosed, and more behavioral inhibition is observed in the children of individuals with anxiety disorder.

1.2.5. Attachment

In 1973, Bowlby [17] first mentioned the theory of attachment; in later years, Ainsworth [18] defined attachment to be categorized.

Accordingly, in the first year of life, a special relationship behavior develops between the baby and the primary caregiver. As a result of standardized behavioral observations (foreign status test), three types of attachment style are mentioned: (1), secure; (2), ınsecure avoidant; and (3), insecure disorganized.

Parents of children who are securely connected can have empathy with the needs of the child and are aware of their needs. The parents of unsafe children cannot do so.

Depending on the attachment style, the child learns cognitions about interpersonal relationships and develops strategies for emotion control. The child creates an internal working model. What is present in this model is the person he trusts and the world. The child thus evaluates situations and regulates interpersonal relationships. This study model, if it occurs, automatically processes and continues as fixed.

A secure attachment style is a protective factor in the development of anxiety. However, more actual studies should be conducted.

1.2.6. Cognitive risk factors

Cognitive perceptions play an important role in the development of anxiety disorders in children. In recent years, these cases have been specifically investigated. The extent to which the cognitive factors investigated is the risk factors.

1.2.6.1. Control experiences in childhood

Chorpita and Barlow [19] developed a model of vulnerabilities related to the emergence of fear and depression. According to this model, early uncontrollable and predetermined stimuli result in poor control experience and increased neurobiological activity and consequently behavioral inhibition system introduced by Gray. Neurobiological activation leads to indeterminate somatic symptoms that have been described for the first time by Kagan [9]. This diminishing control experience is a risk factor in difficult life events in the future. Physiological effects as well as weakened control experience lead to chronic cognitive deviations and result in fear-anxiety phenomenon. This uncontrollability and prior uncertainty are experienced in the early period with primary caregivers (e.g., weak empathy of parents) [8].

1.2.6.2. Anxiety sensitivity

According to the definition of anxiety sensitivity, anxiety and related symptoms (e.g., physical symptoms), while in a continuous state, cause physical, mental, or social problems [20]. Anxiety sensitivity is considered as a variable that emerges at different degrees compared to individuals. It can be affected by different factors. These factors may be genetic factors, life experiences, or panic attacks. The risk of recurrent panic attacks is increasing in new cases. Life experiences may lead to miscognitions (e.g., palpitation is a heart attack).

1.3. Summary and results

Anxiety disorders are early developmental, psychosocial, and psychopathological complications. Although early anxiety syndromes show spontaneous recovery, the majority of children and adolescents with anxiety disorders tend to experience new syndromes or other mental disorders in similar situations during their lifetime (other anxiety disorders, depressive disorders, or substance use). Secondary depressive disorders are a common complication. Detection of vulnerabilities and risk factors in the early period is also important in terms of development of programs aimed at conservation. Although some strong risk factors (parental attitudes, parental psychopathology, temperament alterations) have been identified, the recognition of the most powerful pectorists and the complex biological and psychological mechanisms should have implications for the development of anxiety disorder. Different risk factors play a role in different anxiety disorders. This situation also differs according to developmental periods.

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