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PERSISTENCE OF HARMFUL CONSEQUENCES OF CHILDHOOD TRAUMA IN ADOLESCENCE AND ADULT LIFE: BIOLOGICAL MECHANISMS, PSYCHOLOGICAL EFFECTS, CLINICAL EXAMPLES

Private practice

resiliency
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trauma psychotherapy

Summary

In this article, I will briefly present the biological mechanisms of the impact of psychological trauma on the child's brain, referring especially to the developmental consequences occurring in adolescence and adulthood. I will then describe a range of relational, behavioral and emotional problems, as well as mental disorders and illnesses related to the biological consequences of trauma. I will cite the results of quantitative research conducted in groups large enough to justify the view of regularities in the consequences of childhood trauma in adolescence and adulthood. I will illustrate the main theses of the article using two clinical examples from my own psychotherapeutic and supervisory practice conducted over several years, which allowed me to observe how trauma influenced the fate of child patients as they matured and entered adulthood. Finally, I will propose two conclusions regarding the practical usefulness of understanding the described regularities and taking them into account in building the concept of post-traumatic resilience.

Biological mechanisms of trauma

The mechanism of trauma's impact on the developing organism and the consequences for subsequent emotional, cognitive and social development were comprehensively described by De Bellis and Zisk [1].

One of the most important areas of the early impact of trauma on the body is the so-called HPA axis (from the first letters: hypothalamic-pituitary-adrenal axis), i.e., the system of the hypothalamus, pituitary gland and adrenal glands. It is a network of complex, bidirectional relationships in the field of hormonal regulation, responsible for reactions to stress and adaptation to environmental factors. The HPA axis plays a key role in preparing the body for the fight, flight or freeze response to a threat, and is also involved in regulating mood and shaping emotions.

In a simplified version, the way the HPA axis works can be described as follows. In response to a stressful stimulus, the action of corticotropin-releasing hormone (CRH), a neurohormone secreted in the hypothalamus and stimulating the production and secretion of adrenocorticotropic hormone (ACTH) in the anterior lobe of the pituitary gland, is intensified. ACTH reaches the adrenal cells via the circulatory system, stimulating them to increase the production of glucocorticosteroids, including cortisol, known as the “stress hormone”. One of the main functions of cortisol is to increase blood glucose levels to stimulate the body in response to a threat. In the cells of the adrenal glands and in the endings of the sympathetic system, there is an increased secretion of catecholamines, including epinephrine (commonly called adrenaline), responsible for mobilizing the body for exercise by constricting blood vessels and accelerating the heart rate.

In circumstances that do not exceed the adaptive capacity, the HPA system effectively mobilizes the body for periodic intense exercise, followed by a return to less intense activity. However, due to excessive stress, the functioning of the HPA axis has consequences that are harmful to the functioning of the body. Too high levels of glucocorticosteroids and catecholamines lead to the body maintaining a state of chronic stimulation, which may result in both excessive sensitization and (due to the action of negative feedback in the HPA system) insensitivity to threatening stimuli. Relationships have been demonstrated between improper cortisol and epinephrine management and a number of mental disorders, including: PTSD and depression.

Dysregulation of the HPA axis in response to trauma (i.e., threatening stimuli that exceed the individual’s ability to cope) in early childhood has consequences for the development of the entire body, especially the brain, which is associated with a number of emotional, psychological and social difficulties, in many cases leading to mental disorders. Whether stressful stimuli reach a traumatic level, i.e., exceeding the capacity for healthy adaptation, depends on many conditions, both individual and environmental, including: genetic factors, available social support, and the strength and nature of the trauma itself.

The situation of chronic trauma that persists in childhood and adolescence results (among others, through the dysregulated operation of the HPA axis described above) in the incorrect functioning and development of many areas of the brain responsible for the control of behavior, processing of affect and the integrated experience of self-image. One of the consequences of trauma is faulty regulation of the dorsolateral prefrontal cortex of the brain, which is responsible, among other things, for the so-called executive functions, i.e., processes that allow you to control and regulate behavior and initiate purposeful activity. Disturbances in the functioning of this brain area, such as impaired inhibitory control, dysfunctions of working memory and planning, result in a reduced ability to delay gratification, an increase in aggression, impulsivity and antisocial behavior. Disturbed flow of dopamine, serotonin and oxytocin affects not only cognitive processing, but also the general modulation of fear and pleasure through, among others, receptors located in the cerebellum. The consequences of these multi-level disruptions are behavioral disorders, attachment disorders and mood disorders (e.g., depression).

The involvement of the limbic system (especially the amygdala and reward system) in the response to trauma has been widely described. In short, the amygdala plays an important role in the processing of affective information due to its connections with both the parts of the brain responsible for cognitive functioning and the autonomic nervous system, i.e., the area of the body's biological response to stress. It also plays an important role in information processing in the sphere of interpersonal contacts, as evidenced by the fact that the volume of the amygdala in humans is positively correlated with the size of the social network [2]. The functioning of the limbic system and the amygdala is closely related to the functioning of the HPA network: they are stimulated to work by adrenal hormones. Defective regulation of the limbic system and amygdala may lead to behavioral disorders and difficult social functioning, as well as – due to deregulation of the reward system – to anhedonia and habitual regulation of affect using substances, which may result in addiction. There is also data indicating disturbed development of interhemispheric communication (for which, among others, the corpus callosum is responsible) as a result of chronic trauma and dysregulation of the HPA axis. The consequences of impaired communication between the hemispheres include impaired maturation of the so-called resting state network (default mode network – DMN), or – to put it very simply – a mode of brain functioning that is not focused on the implementation of tasks in the environment. It seems that the DMN plays a role in the processes of self-awareness, building self-representations and creating narratives about oneself, because a poorly developed resting state network (observed in people experiencing trauma in childhood) is associated with negative thoughts and self-narratives, deficits in social functioning and weaker a sense of integration and an increased risk of experiencing dissociative symptoms.

The persistence of the above-described multi-level dysfunction of the developing brain during childhood and adolescence may lead to the parallel, secondary appearance of subsequent mental health disorders during adolescence, for example, neurotic, anxiety, depressive disorders, behavioral disorders and substance abuse, further impeding the proper functioning of the brain and development of the psyche. At the same time, disturbances in the functioning of the HPA axis resulting from childhood trauma may lead to overall poorer physical health that persists in adulthood: metabolic disorders, the risk of autoimmune diseases or premature aging.

The biological processes described above are the basis for a number of disorders that manifest themselves in adulthood and are a consequence of trauma experienced in childhood. Adolescence is often the time when these consequences crystallize in the form of clear relationship problems, behavioral problems, and emotional problems, which either already in adolescence or only in adulthood reach an intensity that allows for the diagnosis of mental disorders and diseases.

Relational problems as a consequence of childhood trauma

The most common relational problems resulting from trauma experienced in childhood include the tendency to self-isolation and the development of insecure attachment patterns.

Futa et al. [3] looked at the ways in which adult women deal with difficult memories from the past. In a group of 196 respondents, people who experienced trauma in childhood (sexual violence and/or physical violence) coped with memories in adulthood much worse than people without a history of trauma. Women who did not experience trauma in childhood were significantly less likely to distance themselves from other people, were more likely to seek social support and were more able to focus on the positive sides of life. Women who experienced traumatic violence tried to cope with painful memories primarily using the strategies of self-isolation and self-blame, which were their basic coping mechanism, while they decided to use social support much less often than women not burdened with trauma.

Erozkan [4] conducted a study on a group of 911 adults (492 women, 419 men), focusing on the relationship between childhood trauma and adult attachment patterns. Erozkán referred to the classification of Bartholomew and Horowitz [5], who, based on the works of Bowlby, Ainsworth and Main [in: 6], distinguished four attachment patterns in adults: secure, ambivalent, avoidant and anxious. People who experienced psychological, emotional and sexual violence, as well as mental and emotional neglect, were more likely to develop anxious, ambivalent and avoidant patterns. Respondents who did not experience such traumas in childhood were more likely to develop a secure attachment pattern. Unger and De Luca [7] obtained similar results in a group of 552 women and 294 men: according to their results, physical violence in the subjects' childhood was associated with avoidant and anxious attachment patterns. In Erozkán's study [4], the dimension of trauma most directly corresponding to insecure attachment patterns turned out to be emotional neglect, co-occurring with any other form of abuse and violence.

Larsen and colleagues [8] conducted research on a group of 338 women and 296 men, some of whom received help as a result of traumas experienced in childhood. They looked at, among other things, the quality of romantic relationships created by the subjects. The results indicated that respondents who experienced physical and/or sexual violence in childhood function worse in relationships as adults. Compared to respondents without a history of childhood trauma, they lacked social skills, experienced greater difficulties in building relationships, chose more problematic romantic partners, and experienced shame in relationships more often. The authors of the study pointed out that relationship difficulties affected men and women equally, and also emphasized that the tendency to enter into relationships with problematic partners exposes people with a history of childhood trauma to re-experiencing difficult situations in adulthood.

In a study involving 456 young people, a team led by Doba [9] showed that the intensity of the relationship between childhood trauma and PTSD symptoms in adolescence and early adulthood is mediated by emotion regulation strategies – not only those implemented independently, but also emotion regulation strategies in interpersonal relationships. The most important maladaptive interpersonal strategies are related to mentalization deficits and involve strong emotional excitability and the tendency to avoid emotional relationships.

It can be noted that a recurring phenomenon in the cited research results is the tendency to withdraw from deep interpersonal relationships while being sensitive to experiencing negative feelings in these relationships. Trauma experienced in childhood therefore clearly

affects the ability to build safe relationships and the ability to experience peace and stability in established relationships.

Behavioral problems as a consequence of childhood trauma

The behavioral problems that constitute the most common consequences of childhood trauma include a tendency to self-aggressive behavior, harmful substance use with the risk of addiction, and suicide attempts.

Serafini and colleagues [10] conducted a systematic review of the results of contemporary research on the relationship between violence experienced in childhood and non-suicidal self-aggressive behavior in adults. The total number of subjects covered by this systematic review was over 22,000 subjects in cohort samples, over 1,700 subjects in longitudinal trials and over 60,000 subjects in retrospective trials. The results of the review clearly indicate that there is a clear relationship between violence experienced in childhood and non-suicidal, self-aggressive behaviors in adulthood – as well as suicide attempts in adulthood. The factors mediating this strong relationship include the role of self-criticism, the severity of PTSD symptoms, low self-esteem and dissociative symptoms. A particularly strong relationship was present between non-suicidal acts of self-aggression and the experience of sexual violence. Researchers also drew attention to gender differences: among people experiencing violence in childhood, women were more likely than men to commit acts of self-aggression and suicide attempts in adulthood. Similar conclusions were reached by a team led by Brown [11], who looked at the relationship between childhood trauma and self-aggression in adulthood in a representative sample of German society (the study included 2,498 people). Among the respondents, 3% engaged in acts of self-aggression, and 30% reported experiencing violence in childhood. In the group of people engaging in acts of self-aggression, 72% of respondents experienced violence in the form of emotional neglect, which was the strongest relationship (stronger than in the case of acts of self-aggression and physical and sexual violence).

Bahk et al. [12] looked at the detailed path to the formation of suicidal thoughts by adults who experienced childhood trauma. A total of 211 people participated in the study they designed. The results indicated that the strongest direct relationship occurs between sexual violence experienced in childhood and suicidal thoughts in adulthood. Other forms of physical and emotional violence were associated with suicidal ideation through the most important primary mediator, which was the severity of anxiety. The exception were people who experienced traumatic emotional neglect – in their case, perceived social support played the role of the primary mediator.

Felitti et al. [13] introduced the concept of “adverse childhood experiences” (ACE), along with a measurement scale allowing for the estimation of their quantitative intensity. In subsequent years, researchers showed that higher scores on the ACE scale coexist with a higher risk of disease, low quality of life, premature death and dangerous behaviors (see, e.g., [14]). A team led by Dube [15] studied over 8,600 people, looking at the relationship between childhood traumatic events and harmful patterns of substance use. Each nega-

tive childhood experience increased the risk of harmful substance use and dependence by 2 to 4 times. This pattern remained stable across age groups, both adolescents and adults, leading researchers to conclude that ACEs account for at least half and perhaps as much as two-thirds of problematic substance use.

The results obtained by Rogers and colleagues [16] suggest that the number of negative experiences in childhood is a very good predictor of problematic substance use: a higher number of ACEs differentiates adolescents in terms of the amount and frequency of substance use in such a short observation period as even 30 days. All the above-mentioned researchers point out that harmful substance use and addictions are accompanied by an increased risk of subsequent negative life experiences, intensifying the difficulties that occurred during childhood.

Emotional problems as a consequence of childhood trauma

In addition to a number of relational and behavioral problems, the experience of childhood trauma results in a tendency to experience rigid negative affects, especially helplessness and low self-esteem.

Courtney and colleagues [17] looked at the affective experiences of adolescents who experienced traumatic events in childhood. The study was conducted in a group of 92 people reporting depressive symptoms. Courtney showed that the feeling of helplessness was the strongest factor mediating between the experience of emotional violence in childhood and severe symptoms of depression in adolescence, and she based the results of her research on the regularity found by the Alloy team in an exhaustive review of empirical data [18]: violence experienced in childhood correlates with mood disorders in adulthood with a strong involvement of cognitive distortions. Lamis and colleagues [19] attempted to investigate in even more detail the relationship between violence experienced in childhood and the sense of helplessness in childhood, focusing on factors that intensify or alleviate this relationship. Conducting research on a group of 121 women attempting suicide and experiencing violence in adulthood from their partners, Lamis' team noticed that the connection between previous violence experienced in childhood and the adult sense of helplessness is stronger the lower the sense of existential meaning and the lower the self-esteem. It can therefore be assumed that the affective problems of people with experience of childhood trauma overlap and mutually intensify, because one of the basic consequences of traumatic experiences in childhood is low self-esteem.

Briere and Runtz, in their important, widely cited work [20] devoted to psychopathological symptoms in adults who experienced neglect in childhood, indicate the relationship between childhood psychological trauma (emotional neglect) and low self-esteem as the strongest and most unambiguous correlation among all the variables studied (among other strong associations include the connection between physical violence experienced in childhood and aggression towards others, and between sexual violence experienced in childhood and risky sexual behavior). Karakus [21] showed that this strong relationship occurs already in adolescence. His research included a group of 915 Turkish high school

students. The analysis of the results indicated a strong, stable and repeatable relationship between traumatic childhood experiences (including the isolated factor of emotional neglect) and low self-esteem. This relationship is linear – the more severe the childhood trauma, the lower the self-esteem.

Adult mental disorders and diseases related to childhood trauma

The relational, behavioral and emotional problems described above may become so severe that specific psychopathological entities are diagnosed: mental illnesses and disorders. Psychopathology most often associated with the consequences of childhood trauma (and including the relational, behavioral and affective components described above) are mood disorders (depression and anhedonia), dissociative disorders and borderline personality disorder.

The links between childhood trauma and depression in adult life were pointed out in the above-mentioned publications by, among others, Briere and Runtz [20] and Petruccelli et al. [14]. Nowadays, researchers are interested in clarifying the details of this relationship rather than confirming its existence. An example of such a research structure is the investigation of Negele and colleagues [22] based on the search for connections between particularly persistent, chronic depressive disorders and trauma experienced in childhood. In their study group of 350 patients undergoing treatment for chronic depression, as many as 75% of respondents reported significant traumatic events from their childhood, and 37% experienced multiple traumas. Moreover, people experiencing a greater number of traumatic experiences experienced a significantly greater intensity of depressive symptoms (the number of traumas was the only factor clearly related to the severity of symptoms in patients suffering from chronic depression – neither the type of trauma nor the gender of the subjects differentiated the severity of symptoms).

Interesting conclusions regarding the relationship between childhood trauma and depression in adults come from the comparison of results obtained in two independent studies: Aunola and team [23] and Raków and team [24]. The latter analyzed the relationship between parent depression and child internalizing disorders, paying particular attention to the role of inducing guilt in children. The group that the team studied included 129 children (in 102 families). Parents' behaviors involving inducing guilt in children turned out to be a factor mediating the development of internalizing disorders in children, and consistency was demonstrated between the parents' observable behaviors and the subjective experiences reported by children.

Aunola's team [23] looked at interactions in 152 Finnish families in terms of tenderness and control shown by parents – and the relationship between these behaviors and children's anger and anxiety. Excessive control led to increased anger and anxiety, while tenderness shown in everyday interactions had no effect on the level of anger and anxiety. Comparing the results obtained by these two teams, it can be concluded that emotional neglect consisting in inducing a sense of guilt and excessively strict parental control leads to internalizing disorders that prevent the healthy experience and expression of anxiety and anger – which

would be a convincing explanation of the documented relationship between internalizing disorders in childhood and depression and anxiety disorders in adulthood (e.g., [25]).

The connections between traumatic childhood experiences and dissociative disorders are an area of intense research by researchers, including the seminal works of van der Kolk [26, 27]. Van der Kolk explains the biological background of dissociation mechanisms, which involve the inability to express overwhelming sensations and emotions in words or to include them in a cognitive image of oneself and one's own experiences based on verbal self-narrative, which leads to the subjective impression of these fragments being detached from the rest of one's psychological life.

In the enormous wealth of literature devoted to these issues, we can emphasize the role of research focused on the relationship over time between traumatic experiences in childhood and dissociation in adulthood. In this context, Lyons-Ruth and colleagues [28] emphasize the key role of the parent-child relationship as a factor shaping attachment and thus mediating between trauma experienced in childhood and dissociative disorders in adult life. Lyons-Ruth indicates that secure attachment patterns between a child and parents can effectively protect them against the dissociative consequences of trauma if its source were external factors or relationships with people other than parents. Therefore, the most harmful are situations in which the child experiences trauma from the parent (especially when both parents are abusive or the child is raised only by the abusive parent): the trauma both initially disrupts the child's functioning in the present (childhood) and may lead to the consolidation of insecure patterns of attachment, which exposes the child to dissociative disorders in the future (adulthood).

Kong and colleagues [29] looked in more detail at the mediating role of attachment relationships in shaping the relationship between childhood trauma and childhood dissociation. Isolating individual types of violence and individual affects in the attachment relationship, they showed that emotional violence, physical violence and care neglect in childhood result in dissociation in adulthood, the greater the intensity of anxiety in the attachment relationship, and in the case of sexual abuse in childhood – dissociation in adulthood life is stronger the more fear and avoidance in the attachment relationship. The specific combination of the described relational, emotional and behavioral problems into a permanent style of experiencing oneself takes the form of borderline personality disorder. One of the breakthrough points in the systematic study of the relationship between borderline personality disorder and the history of childhood trauma was the work published over 30 years ago by researchers who in the following decades strengthened their position as leading experts in this field of knowledge: Herman, Perry and van der Kolk [30]. Looking at a small sample of patients ($N = 21$), the authors showed strong relationships between borderline psychopathology and reported histories of childhood trauma: the more traumatic events in the childhood history, the more the intensity of psychopathology moved from "borderline traits" towards full-blown personality disorder. Methodologically insufficient, but clinically important, the publication provided the impetus for a huge number of research projects devoted to the relationship between borderline disorder and childhood trauma.

Bozzatello et al. [31] proposed a systematic review of research conducted in this field over the last 20 years. Ultimately, their analysis included 171 publications created after January 1, 2000. The conclusions of the review confirm both the clinical intuitions of Herman, Perry and van der Kolk [30] and remain consistent with the other results reported in this study. Bozzatello, based on currently available empirical data, states that the interaction of temperamental, environmental and genetic factors may result in the development of borderline personality disorders already at a very early age. Available data suggest that childhood abuse, neglect and bullying, as well as innate temperamental aggression and negative affectivity, interact with a dysfunctional family environment and structural and functional brain aberrations and gene polymorphisms: all of which significantly increase the risk of developing borderline disorder. The effects of childhood trauma are therefore more serious if they occur in dysfunctional families and against the background of congenital temperamental traits and/or gene polymorphism.

Clinical examples

In order to provide a practical illustration of the impact of childhood trauma on subsequent stages of development, adolescence and adulthood, I will briefly present the stories of two people whose development over the course of over 10 years I had the opportunity to observe in various professional contexts. I would like to emphasize that the presented clinical situations do not constitute an attempt to provide additional argumentation for the theses presented in the article, and their purpose is only to illustrate the regularities described above. The short form of the presentation does not allow this content to be considered full-fledged case studies, and the lack of a uniform methodology for presenting clinical work means that the presented stories should be treated only anecdotally, i.e., as an indication of individual examples from the author's experience, in which examples of phenomena empirically demonstrated by cited researchers can be found. However, I think that it is worth reaching also into this layer of inquiry in order to give a fuller meaning to the collected data using the ability to empathize and feel.

I met the patient, whom I will call "Janek", in 2007 at a public center providing psychological assistance to children from alcoholic families, where I worked at the time. Janek was 15 years old then. He received individual psychotherapy at the center for 2 years, and then for another 3 years at the next place where I worked. We ended our regular work when he was 20, and then we carried out further, short-term, several-month-long therapeutic contracts when Janek was 22, 25 and 27.

Janek's childhood was burdened by at least four "adverse experiences" (ACEs), chronically traumatizing the boy. The patient's father was deeply addicted to alcohol. Moreover, he used mental and physical violence against family members – primarily his wife, but he also sometimes beat his children, including Janek. The boy felt that his mother was not emotionally available to him because she focused almost exclusively on the conflict with his father, often using Janek as an ally. Due to the father's alcoholism, the family also struggled with various financial and social problems.

When starting psychotherapy, Janek reported, first of all, very low self-esteem, a tendency to withdraw from relationships with peers, loneliness, and a strong fear of his own anger – a feeling that, in his experience, brought him dangerously closer to his father. The main theme of five years of individual therapeutic work with Janek was developing the ability to enter into relationships. Janek needed support to gain confidence in his own relational competences and to appreciate his own ability to love. One of the most difficult challenges in this regard was alleviating the feeling of guilt inherent in love for his father (the family wanted Janek to hate his father). In the final phase of the first therapeutic contract, when Janek was already an adult, the burden of work shifted to the need to integrate his own drives (aggression, ambition, competitive needs, sexual impulses) with the adult self-image.

Janek's subsequent returns to short-term contracts were associated with subsequent repetitions of relationship problems. The impetus for the first return was a serious crisis in the relationship resulting from the inability to talk openly about one's needs. The impulse for the second return was repeated episodes of deep depression, resulting from a sense of lack of existential meaning and lack of self-esteem despite obtaining external achievements – obtaining education, maintaining a relationship, living independently, earning money. Our last therapeutic contact was motivated by another crisis related to the birth of Janek's son. The emotional tension and organizational burdens inherent in family life and fatherhood meant that Janek increasingly began to relieve his anxiety using marijuana, which he associated with his father's alcoholism and caused waves of powerful guilt.

Based on this brief description, it can be noted that Janek, over the years, made persistent attempts to build healthy relationships and a constructive life, which in moments of increased stress related to natural development processes (building relationships, becoming independent or starting a family) broke down and led to re-intensification of psychological problems. It can be assumed that the biological changes that occurred in the boy's body as a result of childhood traumas still affect his life, which is only moderately susceptible to change through psychotherapy. Nonetheless, the fact that the patient was able to fulfill important life roles and effectively reach for adequate help in situations of normative crises can be highlighted as therapeutic success.

The girl, whom I will call "Ania", was under the care of a sociotherapeutic institution supervised by me from the age of 11 to 18, and then our fates crossed again – during the supervision of another institution – when Ania was 22 years old. From the age of 14 to 17, Ania received individual psychotherapy, and thanks to the support within one institution, the team of educators and psychologists I supervised had access to general conclusions about the course of her therapy.

Both of Ania's parents were addicted to alcohol, and their relationship broke up when the girl was 6 years old. Throughout her childhood, Ania experienced violence both from her mother, with whom she lived, and from her mother's subsequent partners. When Ania was 8 years old, one of her mother's partners sexually abused her, which triggered an intervention process that ended with the girl being placed in a related foster family. The socioeconomic conditions were poor both in the mother's apartment and in the foster fam-

ily. In the above brief childhood history, at least seven “adverse experiences” (ACEs) can be identified that constitute her childhood trauma.

Educators carrying out sociotherapeutic work with Ania tried to support her in a number of problems the girl had. Ania was impulsive, she had outbursts of aggression, even though she was liked in the group, she did not establish any deeper friendships and she often treated other children manipulatively. Despite her high intelligence, she was not interested in learning, which led to educational problems. At the same time, Ania aroused a lot of sympathy and compassion in educators, who over the years undertook many sensitive and helpful sociotherapeutic interventions. Primarily, they worked with her on the ability to perceive her own resources, and also tried to increase her level of empathy by deepening her relationship with the group. At the same time, they taught Ania consistency by setting clear limits to her oppositional behavior.

In her later adolescence, Ania began to engage in risky and destructive behavior: she regularly smoked cigarettes and consumed alcohol, she shoplifted sometimes, and she dressed in a way that other children perceived as vulgar. In the individual psychotherapy she was using at that time, the therapist tried to support Ania in mastering these behaviors, develop her sense of responsibility for herself and include elements of sexual education, especially in the field of risky behaviors. When Ania began to approach adulthood, she was offered help in becoming independent, which required continuing education and cooperation with specialists, but Ania did not take up this offer and almost immediately after turning 18 she stopped using institutional support.

Four years later, in another institution where I supervised the work of a team dealing with domestic violence, one of the psychologists told about a complicated situation she had encountered. A young woman, the mother of a 2-year-old girl, sought shelter in a hostel due to violence from her alcohol-dependent partner, who was over 20 years her senior. She presented herself to the team’s employees as demanding, manipulative, inappropriate in behavior and uncaring towards the child; they also suspected that she was also abusing alcohol. Only her neglected daughter clearly aroused sympathy and willingness to help. In the middle of the conversation, I suddenly realized that we were discussing the situation of Ania, whom I knew very well, and who, after four years of independent living, had managed to get into serious problems that would probably affect the next generation as well.

In the light of the phenomena described above, it can be assumed that biological conditions combined with the overwhelming burden of multiple, deep childhood trauma and the lack of a supportive home environment did not allow for a lasting positive change in negative patterns. Despite the efforts of specialists involved in helping the girl, the stress inherent in the transition to subsequent stages of development, adolescence and then early adulthood, pushed Ania towards further destructive solutions, causing her even greater problems.

When reflecting on the difference in the fate of Ania and Janek, attention can be drawn not only to the different intensity of traumas experienced in childhood (while the subjective intensity of trauma cannot be compared, the conclusions from research on ACEs allow us to formulate such a thesis), but also the probable impact of differences in the scope of

individual protective factors. Sikorska [32], based on a review of contemporary concepts, indicates that important protective factors include trust in people and the ability to be emotionally close, as well as the efficiency of cognitive processes, autonomy, internal sense of control and good social competences. It seems that the feature that differentiated these two young people particularly strongly was the ability to be emotionally close, which was preserved in Janek's case and was deficient in Ania's case. Thanks to this feature, Janek was able to engage in important, deep and supportive relationships: including an intense therapeutic relationship and a deep, long-term romantic relationship with his partner. Ania was unable to experience her psychotherapy as important and meaningful. Even though she started therapy voluntarily, based only on the teacher's suggestion (she was not forced to participate in psychotherapy and could withdraw at any time), according to the therapist, the sessions were superficial, and Ania never decided to talk openly about her deeper feelings or reflections.

Conclusions

I described above the biological consequences of trauma experienced in childhood and how these biological changes can affect the development of the brain and body in adolescence and their functioning in adulthood. I also presented a number of conclusions from psychological research confirming that traumas experienced in childhood cast a shadow throughout later life, leading to numerous problems, disorders and diseases. Using two clinical illustrations, I tried to translate the statistical picture resulting from quantitative research into the language of practice of contact with human suffering. I will summarize my considerations on these topics by introducing two conclusions.

First, a better understanding of the biological mechanisms behind the consequences of childhood trauma and the psychological difficulties that result from them may be useful to professionals trying to find an appropriate way to understand adult patients who seek psychotherapy not complaining about childhood trauma, but about its adult consequences. In the case of some people suffering from, among others: borderline personality disorder, chronic depression, social isolation or mood regulation disorders (through self-harm or intoxicating substances) – their problems are based on difficult childhood experiences, even though these events may no longer be significant in their own narrative. If the combination of the clinical picture with interview data allows to justify such a hypothesis, clinicians can use the rich resource of contemporary tools for working with the consequences of trauma (e.g., [27]). It is worth emphasizing that this does not mean the need to carefully reveal the painful experiences of childhood trauma and discuss these memories in detail with the patient – rather, it is crucial to take into account the impact of this past on the present and try to develop ways of dealing with the effects of trauma that are less costly than those that have allowed survival so far. In other words: the goal of trauma therapy is not to tell what happened, but to create a new, healing story [33].

Second, awareness of the powerful, devastating impact of childhood trauma on the brain, mind, and emotions of children, adolescents, and adults can help us appropriately

calibrate our therapeutic ambitions and respectfully address situations in which the weight of the consequences of childhood trauma outweighs our efforts to obtain mental health. The concept of resilience as a phenomenon with an important role of individual factors [34] or the increasingly popular idea of shaping or developing resilience based on “training skills” [35, 36] has obvious advantages, but in the case of people particularly burdened with the burden of trauma and adversity, it may lead to even deeper stigmatization, a sense of failure and shame on both sides of the helping relationship: if after many efforts it is not possible to recover from the consequences of the trauma, then perhaps someone (patient? therapist?) is doing “something wrong”, is a “bad patient” or “not a good therapist”? This type of self-stigma is described, for example, by Corrigan, Larson and Rüsche [37]. It seems that an alternative concept, more consistent with the perspective presented in this article, is to perceive resilience as a phenomenon resulting from a very complex, two-way dynamic between risk and protective factors, as proposed by, for example, Ungar [38, 39]. This point of view assumes that resilience is embedded not only in individual characteristics and social interactions, but also in the socio-cultural context, which is responsible for both the network of available forms of help and the conditions that enable reaching for this help. Risk factors and protective factors are therefore always of a combined biological, psychological, social and environmental-cultural nature, and resilience is not only the ability of an individual to find these resources, but also the state of the environment (family, society, culture) that creates and offers these resources in an accessible way [39]. This approach allows us to notice that in many situations where the destructive consequences of childhood trauma persist in adult life (as in the examples described), failure does not result from deficiencies in individual resilience or the ineffectiveness of specialists providing help, but from the constant impact of the multifactorial, two-way dynamics between risk factors and protective factors.

Progress in brain research brings a lot of optimism about the possibility of memory reconsolidation and the repair abilities of the nervous system, and this work is not an attempt to nihilistically eliminate this optimism. However, it is an attempt to supplement the reassuring narrative about possible post-traumatic growth with a more painful, but also true, perspective; emphasizing that in some situations – especially if a person with experience of childhood trauma is pressured by a complex family, socio-cultural system of supporting influences and retraumatizing forces, especially with the predominance of the latter – the possibilities of therapeutic influence may be limited. In my deep belief, it is worth making these efforts with perseverance despite moderate hopes for improvement.

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