

RELATIONSHIP BETWEEN EARLY PSYCHOTRAUMATISATION WITH THE ONSET AND THE COURSE OF PSYCHOTIC DISORDERS

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SUMMARY

Connections between specific types of altered brain functioning and some mental disorders are still not fully clarified. However, there is a large number of evidence that indicates mental disorders are results of complex interactions of biological and environmental factors. When it comes to environmental factors, the main focus in the scientific literature has been particularly focused on early psychotraumatization.

Early psychotraumatization is a multi-layered construct that essentially involves sexual, emotional and psychological neglect in childhood and emotional and psychological negligence, with about one-fourth of children experience a traumatic event before the age of 18. Although most children are resilient after traumatic exposure, some develop significant and potentially long-lasting psychiatric disorders. In addition, the high prevalence of trauma and neglect has been found in all types of psychiatric disorders.

While early psychotraumatization in patients with psychotic disorders was recently diminished or denied altogether, there is now strong evidence that the prevalence of childhood adversities in this population is exceptionally high. Regarding this, there is an increasing number of sophisticated studies that point out the fact that early psychotraumatization has an important impact on development and clinical course of psychosis in adults. It seems that this relation is causal, especially when considering severity, frequency, and number of traumatic events. In addition, psychotic patients who experience psychotraumatization at an earlier age along with their first psychotic episode are known to be hospitalized more often with their psychotic episodes lasting longer; further, they commit suicide more often and have more dissociative symptoms. These patients' is poorer such as their quality of life in comparison with patients without the experience of early psychotraumatization. Moreover, this type of traumatic experience is very often an important determinant of phenomenology of psychotic disorder.

Key words: early psychotraumatization – psychosis - sexual abuse - physical abuse

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INTRODUCTION

The psychotic disorder is a traditional term for impairment or loss of the ability to face the reality, i.e. incoherent perception assessment and conclusions about external and internal reality. It is a synonym for disorders of the schizophrenic spectrum, which apart from psychopathological substrates are characterized by severe damaging of personal and social functioning. It is manifested by delusions, hallucinations, confusion, memory impairment, disorganized behavior, agitation, incoherent speech... (Kaplan & Benjamin 1997, Jakovljević 2011).

Although schizophrenia is the most researched and the strongest-based mental illness compared to all other psychiatric disorders, its etiopathogenesis still remains unclear. Still, no consensus has been made whether it is neurodegenerative or neurodevelopmental brain disorder (Read et al. 2001). The dominant opinion about schizophrenia in the last three decades of the last century was that it is a neurodegenerative disorder, a disease that changes a normally developed brain. These conclusions came from a diathesis-stress model of schizophrenia that implicates data integration from biological, psychological and social paradigms (Norman & Malla 1993a, Walker & DiForio 1997).

According to the literature, the assumption of this model that diathesis is clearly genetic predisposition and psychosocial factors are exclusively precipitants of the

psychiatric disorder, do not give equal importance to traumatic events in diathesis-stress equation which makes it more difficult to analyze their real role in disorder development (Read et al. 2001). Yehuda reported that it seemed inarguable at the time that if mental illness was in the brain or in the genes, then stress was merely a precipitant of conditions that were bound to appear sooner or later, or an exacerbator of existing or dormant symptomatology (Yehuda 1998).

At the beginning of this century, the neurodevelopmental theories have gradually started to replace neurodegenerative theories which on its theoretical basis do not only integrate data from biological and psychosocial paradigms but also give them the same significance. According to neurodevelopmental theory, harmful life events or significant losses and deprivations are not only triggers for the development of schizophrenia, but if they occur early enough or if they are sufficiently serious, they can actually cause neurodevelopmental abnormalities that lie under the increased sensitivity to stressors found in adults with schizophrenia (Read et al. 2001). In other words, neurodevelopmental theory considers that schizophrenia is the consequence of disturbed brain development and that illness begins in fetal or early childhood, forms in adolescence and is clinically manifested in younger adults.

By actualizing this theoretical model at the end of the past century, the former interest of researchers was focused only on the relationship between psychotrauma-

tisation and nonpsychotic disorders while now it has been extended on psychotic disorders as well. It has resulted in the influx of numerous studies that provide an indisputable link between early psychotraumatization and psychotic disorders (Morrison et al. 2003, Read et al. 2001, 2005, Bendall et al. 2013).

EARLY PSYCHOTRAUMATISATION

Interest for psychotrauma and its consequences increased dramatically in the mental health community after the introduction of post-traumatic stress disorder diagnosis (Read 2005). Although in the literature we find different versions of the trauma definition, common basis of all definitions is that trauma can be understood as a concept that connects outer occurrence with its specific consequences for an inner psychic reality (Negele 2015). Psychotraumatic external appearance is an uncontrollable experience that threatens the psychophysical integrity of a person and ultimately its physical survival (Horowitz 1986, Van der Kolk 1987, Herman 1992).

Early psychotraumatization represents a multi-layered construct that includes physical, sexual and emotional abuse, neglect and bullying (Bendall 2008, Khashan 2008, Kilian 2017). It is estimated that one fourth of children had experienced some type of early psychotraumatization before the age of 18. (Bendall 2013, Dvir 2013).

Studies that have dealt with psychosocial consequences of early psychotraumatization have until recently been focused on sexual and physical abuse in early childhood (Read et al. 2005). However, that focus of interests has lately been significantly extended on bullying, parental neglect and early institutionalization, along with other forms of early psychotraumatization, such as internet violence (Read et al. 2001).

According to the available literature, the incidence of the previous traumatic experiences is higher in psychiatric population that it is in a non-psychiatric sample (Read et al. 2001, 2005, Mueser et al. 2002)

EARLY PSYCHOTRAUMATISATION IN PATIENTS WITH CHRONIC PSYCHOSIS

According to findings in studies, a significant number of patients with severe mental illness reports sexual or physical abuse in childhood (Read 2005, Varese et al. 2012). In meta-analysis of 13 studies of "seriously mentally ill" women the percentage that experienced either sexual or physical abuse ranged from 45% to 92% (Goodman 1997). Another review encompassing 15 studies totaling 817 female psychiatric inpatients calculated that 64% reported either physical or sexual abuse (Read 1997). Moreover, studies in England and USA on male inpatients have also reported at least double rates of sexual abuse when compared to general male

population (Jacobson & Herald 1990, Palmer et al. 1994). In the review of Read et al. it is reported that majority of male patients (59%) have experienced sexual (28%) or physical abuse (50%) in childhood. (Read 2005).

Also, according to findings in studies, the prevalence rate of early psychotraumatization among patients with severe mental illness is even higher than among non-psychotic patients. Among female out-patients, 78% of those diagnosed with schizophrenia have suffered sexual abuse in childhood, compared with panic disorder (26%), anxiety disorder (30%) and major depressive disorder (42%) (Friedman et al. 2002).

These studies have opened up new concepts regarding the role and significance of the social component, with special emphasis on early psychotraumatization, along with the occurrence and development of the psychotic disorders.

RELIABILITY OF SELF-REPORT

Maybe one of the most enduring obstacles in clinical and scientific interest in psychotic patients with early psychotraumatization is lack of confidence in their self-report. There were great controversies about adult self-report about sexual abuse in childhood (Herman 1992, Loftus & Ketcham 1994, Pope & Hudson 1995, Brandon et al. 1998). However, according to findings of recent studies, self-reports of patients with psychosis who had been abused do not differ from self-reports of the healthy controls (Mueser et al. 2002). Despite that, many clinicians and scientists still believe that those reports are distorted and unreliable, primarily because of very often distorted thought processes in psychotic patients which may also result in psychotic distortions in reporting early psychotraumatization (Coverdale & Grunebaum 1998).

As early psychotraumatic experiences are frequently a very intimate field, no matter if they happened to psychiatric patients or healthy population, it is very difficult or even impossible to clearly verify the experiences of early psychotraumatization for most people (Ferguson et al. 2000). Another study found that the problem of incorrect allegations of sexual assaults was no different for schizophrenia than for the general population (Darves-Bornoz et al. 1995). The available research, however, indicates that psychiatric patients underreport rather than over report abuse (Dill et al. 1991, Read 1997, 2005).

Due to a notable distrust in psychotic patients' reports, studies had to establish the reliability of self-reports during the time among people who had experienced early psychotraumatization; their reports resulted in high test-retest reliability. However, compared to general population it is reported that the number of incorrect reports of sexual abuse did not differ from the reports of people with schizophrenia when (Darves-Bamez et al. 1995).

Finally, it can be concluded that reports of verified abuse of psychiatric patients including those with psychosis are extremely reliable (Meyer 1996, Goodman 1999, Read et al. 2003, 2005).

DOES EARLY PSYCHOTRAUMATISATION INCREASE THE RISK OF PSYCHOSIS?

Over the last decade, mechanisms and processes of psychotic disorders occurrence, are getting more and more attention. In order to understand those, it is necessary to fully integrate biological and psychosocial paradigms which are highly indicative that traumatic events in the childhood can lead to abnormal neurodevelopmental processes. Neurodevelopmental studies have reported that due to brain flexibility and its sensitivity to early childhood experience, traumatic events in the first few years of life may have long lasting impacts on emotional, behavioral, cognitive, social and physiological functioning (Ito et al. 1998, Heim et al. 2000). This is quite likely to happen, if events are difficult, unpredictable or persistent (Perry 1994). Study of Shevlin et al. reported that psychotic disorder is three times likely to occur to people who have experienced two traumas, seven times likely for people with three to four traumas and thirty times more likely to occur in people who have experiences five traumas (Shevlin et al. 2007, Sideli et al. 2012). A recent meta-analysis of the role of childhood adversity on the risk of developing psychosis found that the odds of developing psychosis were significantly increased as a result of sexual abuse (odd ratio due to non-traumatized controls) (OR=2.38), physical abuse (OR=2.95), emotional abuse (OR=3.40), bullying (OR=2.39), neglect (OR=2.90), but not parental death (Varese et al. 2012). The same study claimed that early psychotraumatization significantly increases the risk of developing psychosis in adults (OR=2.78). Same study found that if childhood adversity was entirely removed from the population (if causality is assumed and patterns of other risk factors remain unchanged), the number of people with psychosis would be reduced by 33% (Varese et al. 2012).

According to available review studies it has not been possible to determine the exact direction of causality between trauma and psychosis. However, it has been established that there is a clear correlation between a direct exposure to one type of trauma and the increase of risk for another trauma exposure; this too can be a serious risk factor for the development of psychosis (Breslau et al. 1991, 1995, Shevlin et al. 2007, Sideli et al. 2012). These findings support theory of causality of dose-effect of the early psychotraumatization and occurrence of psychosis in adults.

CAN SPECIFIC TYPES OF TRAUMA RELATE TO SPECIFIC PSYCHOTIC SYMPTOMS?

Childhood sexual abuse, especially rape, was associated with auditory verbal hallucinations, whereas victi-

mization (physical abuse and bullying) predicted paranoia as well as auditory verbal hallucinations (Beck & Van der Kolk 1987, Heins et al. 1990, Read et al. 2003). Separation experiences (placement in foster care or institutions) were associated with paranoia (Dvir 2013). Statistically speaking, in a study by Ross et al that was conducted on inpatients who were victims of physical and sexual abuse, a significantly higher number of positive symptoms (voices that were commenting them, paranoid delusions, the phenomenon of imposter thoughts and ideas, visual hallucinations, the phenomenon of mind reading and imperative hallucinations that were perceived as malicious) was found in comparison to patients who were not abused (Ross et al. 1994).

A New Zealand inpatient study found hallucinations in 53% of those subjected to sexual abuse, 58% of those subjected to physical abuse, and 71% of those who suffered both sexual and physical abuse in their childhood (Read & Argyle 1999). Study of Hardy et al researched the hallucination content of patients with non-affective psychosis showed that 45% of patients who had trauma (n=540) also had hallucinations that were thematically similar to their traumatic experience, while 12.5% of study sample had hallucinations with similar themes and content of the experienced trauma (Hardy 2005).

Somatic delusions such as delusional parasitosis (the belief that one is infested with parasites such as mites, lice, insects, or bacteria, often in or under the skin but sometimes internally or around bodily orifices) are also documented following traumatic life events such as rape and sexual assault (Oruc & Bell 1995).

Based on these findings, it is indicative that the phenomenology of psychotic disorder of people who had experienced early psychotraumatization is significantly determined by the type of psychotraumatic experience.

RELATIONSHIP OF EARLY PSYCHOTRAUMATISATION WITH THE SEVERENESS AND THE COURSE OF SCHIZOPHRENIA

According to the results of studies early psychotraumatization correlates with the severity of psychiatric symptoms and the course of disorder alone. Specifically, the history of sexual and physical abuse in people with severe mental illnesses is related to more severe symptoms such as hallucinations and delusions, depression, suicidality, anxiety, hostility, interpersonal sensitivity, somatization and dissociation (Muenzenmaier et al. 1993, Ross et al. 1994, Greenfield et al. 1994, Davies-Netzley et al. 1996, Figueroa et al. 1997). In one community survey, study that has included inpatients, reported that one or more DSM's five characteristic symptoms for schizophrenia (delusions, hallucinations, disorganized speech, disorganized behavior and negative symptoms), in 76% of those who had suffered sexual abuse, 75% of those who had suffered physical

abuse and 100% of those subjected to incest (Read & Argyle 1999). A study of 200 adult outpatients found that 35% of those abused as children had two or more of the five symptoms, compared to 19% of the non-abused patients (Read et al. 2003). A chart review of 658 patients with first psychosis episode showed that 34% had been exposed to sexual and physical abuse, and that these patients were more likely to have had PTSD, and/or substance use disorders before psychosis onset, to have more history of suicide attempts and poorer premorbid functioning (Mueser et al. 2002). These results were also found in other studies (Conus et al. 2010, Tikka et al. 2013). It has been established that previous traumatic experiences are related to more affective and positive symptoms in patients with the first psychotic episode (Burns et al. 2011). Moreover, it is also established that patients who have suffered sexual or physical abuse in their childhood are more likely to commit suicide, to be hospitalized at a younger age, to be hospitalized more often with prolonged or extended hospitalization periods, to receive higher drug doses and have higher levels of severe symptoms expression compared to other psychiatric patients without early psychotraumatization (Beitchman et al. 1992, Briere et al. 1997, Goff et al. 1991, Read et al. 2001).

All things considered, patients with mental difficulties necessitate everyday clinical work, especially patients diagnosed with psychosis. It is of utmost importance to actively monitor signs of early psychotraumatization in patients and provide them with adequate treatment if psychotraumatization is verified.

CONCLUSION

Every fourth child is approximately estimated to experience some sort of early psychotraumatization. Although until recently these statistics were ignored, the experience of early psychotraumatization showcases that the disorder is commonly found among people with psychotic disorders. Nowadays, there is much strong evidence that assures early psychotraumatization significantly increases the risk for psychosis development, making it an important determinant of severity, phenomenology and health outcome of psychotic disorders.

From the findings of present studies, it is evident that the implications of early psychotraumatization on development and clinical course of psychotic disorders are deep, so additional caution is highly necessary in prevention and treatment of psychotic disorders. Positively, the first step would be primary prevention, i.e. being committed to eradicating early psychotraumatization. Reducing violence, primarily domestic one, could have a “downstream” effect on reducing the incidence rate of psychosis as well as other numerous negative health and social outcomes associated with early psychotraumatization.

In clinical work, the first step should be clinicians' interest in their patients' former, potential experiences of early psychotraumatization, regardless of it being the first presentation or chronic form of psychosis. It is recommended that the clinician asks the patient about trauma during the first examination as otherwise the question is likely not be raised later. Having in mind that clinicians are lacking in knowledge and skills required, it would certainly be useful to create appropriate educational training programs for all clinicians who work with people with psychosis.

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Miro Klarić: studying this topic and writing toward previously selected articles;

Sanjin Lovrić: literature review, selection of the adequate articles and studying this topic.

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