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Children and youth in the institutional setting – mental health characteristics of children from the Center for Protection of Infants, Children, and Youth in Belgrade

Deca i mladi u institucionalnom okruženju – karakteristike mentalnog zdravlja dece u Centru za zaštitu odojčadi, dece i omladine u Beogradu

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Abstract

Background/Aim. Unfavorable life experiences of children and youth, unmet emotional needs at an early age may lead to difficulties in emotional life and mental health or externalizing problems. The aim of the study was to determine the number of children in the Center for Protection of Infants, Children, and Youth (hereinafter Center) in Belgrade with mental health issues, their life circumstances, and the way their issues are manifesting. Methods. The study included all children in residence (n = 486) at the Center during 2015. The study was conducted in the period from February to April 2016. For the needs of the research, a questionnaire examining the children's mental health issues was developed. Both health workers and social workers participated in the research. The children's health status questionnaire was filled in from their health records, while social anamnestic data were taken from the social worker's records. The research included four group homes for children without parental care, ages between 7 and 18 years, 3 children's shelters for children from birth to 18 years, and organizational unit infirmary the (children with developmental difficulties, aged between 4 and 18 years). Results. Out of the total number of children placed in institutions during 2015 (n = 486), 96 (19.8%) children were diagnosed with mental health issues. The most frequent diagnoses were F90-F93 (behavioral and emotional disorders usually occurring in childhood and adolescence); F70-F72 (mental retardation); F30-F32.3 (mood disorder -

Apstrakt

Uvod/Cilj. Nepovoljna životna iskustva dece i mladih, nezadovoljene emocionalne potrebe u ranom uzrastu mogu dovesti do teškoća u emotivnom životu i mentalnom zdravlju ili do eksternalizacije problema. Cilj rada bio je da se utvrdi broj dece u Centru za zaštitu odojčadi, dece i omladine (u daljem tekstu Centar) u Beogradu sa affective disorder). The percentage of children with mental health issues diagnosed prior to their admission was 41.7% with one diagnosis, while 21.8% had two, three, or more diagnoses. After being received to the institution, 36.5% of children and youth got their diagnosis. Prior to their arrival at the Center, 74% of children had more than one life change. The average age of children was 11 years, although there were deviations in two group homes (15 years). After the paramedic emergency intervention, 21% of children were hospitalized. Inadequate parental care was the most prominent reason for institutionalization into the organizational units of children's homes, as well as the inability of parents to exercise their parental rights (76%). Inadequate parental care was neglected in 2/3 of children, while in 1/3 of children, it was abuse. Conclusion. Living in an institutional setting can lead to a number of problems in child development. The results of the research unequivocally show that children and adolescents placed in the social protection system are a vulnerable population and at a significantly higher risk of developing mental disorders, considering the negative influences and the absence of positive emotional stimuli from the earliest childhood. The type of consequence due to the stay at the institution depends on the age of the child, the length of the stay, their previous family experience, and the life changes that the child had.

Key words:

adolescent; child; mental disorders; mental health; psychology, social; risk assessment.

problemom mentalnog zdravlja, njihove životne okolnosti, kao i način na koji se problemi manifestuju. **Metode.** Ispitivanjem su obuhvaćena sva deca na smeštaju u Centru (n = 486), u toku 2015. godine. Istraživanje je sprovedeno u periodu od februara do aprila 2016. godine. Za potrebe istraživanja sačinjen je upitnik za ispitivanje problema mentalnog zdravlja dece. U istraživanju su učestvovali zdravstveni i socijalni radnici. Upitnik o zdravstvenom

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statusu dece popunjavan je podacima iz zdravstvene dokumentacije, a socioanamnestički podaci su preuzeti iz dokumentacije socijalnog radnika. Istraživanjem S11 obuhvaćena četiri doma za decu bez roditeljskog staranja uzrasta od 7 do 18 godina, 3 prihvatilišta za decu uzrasta od rođenja do 18 godina i Radna jedinica (RJ) Stacionar (deca sa teškoćama u razvoju), uzrasta od 4 do 18 godina. Rezultati. Od ukupnog broja dece na smeštaju u toku 2015. godine (n = 486), 96 (19,8%) dece je imalo dijagnostikovane probleme mentalnog zdravlja. Najčešće dijagnoze bile su F90-F93 (poremećaji ponašanja i emocija koji se obično ispoljavaju u detinjstvu i adolescenciji); F70-F72 (mentalna retardacija) i F30-F32.3 (poremećaj raspoloženja - afektivni problemima poremećaj). Sa već dijagnostikovanim mentalnog zdravlja u ustanovu je primljeno 41,7% dece sa jednom dijagnozom, dok je 21,8% dece imalo dve, tri ili više dijagnoza; 36,5% dece i mladih dobilo je dijagnoze nakon smeštaja u ustanovu; 74% dece imalo je više od jedne životne promene do dolaska u Centar. Prosečno životno doba dece na prijemu bilo je 11 godina, iako je bilo odstupanja u dva doma za decu (15 godina). Ukupnio 21% dece bilo je hospitalizovano posle intervencije Hitne medicinske službe. Neadekvatno roditeljsko staranje bilo je najčešći razlog za smeštaj dece u RJ domske zaštite, kao i sprečenost roditelja da vrše roditeljsko pravo (76%). Neadekvatno roditeljsko staranje se kod 2/3 dece ispoljavalo kao zanemarivanje, a kod 1/3 dece kao zlostavljanje. Zaključak. Život u instituciji može dovesti do mnogobrojnih problema u dečjem razvoju. Rezultati istraživanja nedvosmisleno pokazuju da su deca i adolescenti smešteni u sistem socijalne zaštite vulnerabilna populacija i pod značajno većim rizikom od razvoja mentalnog poremećaja, s obzirom na činjenicu da od najranijeg detinjstva trpe negativne uticaje i nedostatak pozitivnih emotivnih stimulusa. Kako će se boravak u sistemu socijalne zaštite odraziti na dete zavisi od uzrasta deteta, dužine boravka u instituciji, prethodnog porodičnog iskustva deteta i životnih promena koje je imalo.

Ključne reči:

adolescenti; deca; psihički poremećaji; mentalno zdravlje; psihologija, socijalna; rizik, procena.

Introduction

A pediatrician Henry Kempe was the first to describe and use the term "The Battered Child Syndrome" in 1962 and provided the first epidemiologic data for this occurrence, introducing it into the clinical practice ¹. Noting the increasing number of abused and neglected children and the consequences it exerts on children's health, the World Health Organization (WHO) adopted the General Definition of Violence at the 1999 Consultation on Child Abuse Prevention in Geneva ². An estimated 40 million children worldwide suffer abuse and/or neglect, requiring removal from family and health care and treatment ³.

Childhood abuse affects five important interrelated areas: neurological and intellectual development, school success and life expectations, socio-emotional development, social relationships and behavior, and mental health in general ⁴. What is more, trauma can affect all aspects of life that are also closely linked to psychological functioning, behavioral problems, depression, and social competence.

The consequences of abuse and neglect in early childhood can occur soon after the act, can develop during the development of the child, and have long-lasting effects ^{5, 6}. The consequences to mental health include the onset of mental issues in childhood, adolescence, and later in adulthood. Typical symptoms of traumatism are reflected in the occurrence of somatization, anxiety, depression, hostility, aggression, posttraumatic symptoms, dissociative disorders, but also severe mental health issues, such as paranoid ideation, psychosis, self-harm, suicide, personality disorders, interpersonal dysfunction, abuse and addiction to psychoactive substances (PAS) ^{7–10}.

Abuse and neglect are the most common reasons for separating children from the family ^{11, 12}. Children whose right to live in a family is most often affected by parental violence in situations where the parent faces multiple

challenges, such as poverty, social exclusion, poor living conditions, disability, physical or mental health problems, or substance abuse ¹³. These families are long-term stressed, exhausted, marginalized, and socially excluded, without a supportive social network. They are characterized by a lack of impossibility to apply parental knowledge and skills in the conditions in which they live or the knowledge and skills are inadequate concerning the child's developmental needs. The parents of these children are often unable to recognize their developmental needs, do not respond to them, or do not respond in a way that is stimulating for the children ¹⁴. A child expects protection and love from the adults, trusts them, and approaches their world with confidence which means that inadequate actions will affect his/her mental health ¹⁵.

Research in developmental psychology shows that the absence of parental care, especially in childhood, puts children in a state of high risk on the existential, psychophysical, social, and educational level ^{16–18}.

Mary Ainsworth examined the way in which patterns of emotional attachment manifest. She examined the connection between the individual's style of affective attachment and the mother's parenting style in an experimental situation ¹⁸. Based on the obtained results, she singled out three types of bonding patterns in children: type A - insecure-avoidant bonding, type B - secure bonding, type C - uncertain ambivalent bonding. Conditions that contribute to inadequate models of emotional attachment were examined ¹⁶. Type IV, the so-called disorganized/disoriented bonding, mostly found in children who have been abused and experienced severe traumatic experiences 19, was discovered later. Mary Ainsworth's research enabled other researchers to monitor the effects of adverse developmental conditions (trauma, abuse, separation/loss, relocation, and lack of stability in life) on bonding styles. According to the theory of affective bonding, a human infant is born as a social being whose

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primary need is the need for an emotional connection with an adult ¹⁶. Many researchers cite a reduced ability to bond and fulfill true, deeper, and lasting relationships with others as a common feature of children growing up under (unfavorable) conditions in the institution, which may result in unsuccessful socialization of the child or disorders in social behavior and taking on social roles ¹⁶.

There is some evidence to suggest that institutional care, especially in the early stages of life, is detrimental to all areas of a child's development and that it predetermines intellectual ²⁰, behavioral ²¹, and socioemotional problems later in life ²². Evidence suggests that institutionalization in children up to three years of age is very likely to affect the development of brain functions, leaving long-term consequences on a child's social and emotional behavior.

Radojevic¹⁸ states: "Some research shows that even after the first year children can form affective attachments to a certain degree". However, from the perspective of research in the field of social protection, children who are adopted or placed in long-term foster care after spending the first year of life in institutions are at increased risk of poor outcomes in the psychological sense.

The results of numerous research unequivocally show that children and adolescents placed in the social protection system are a vulnerable population and at significantly higher risk for the development of mental disorders, considering that they suffer from negative influences and the absence of positive emotional stimuli from the earliest childhood. Moreover, numerous studies indicate an increased prevalence of mental disorders in children and adolescents placed in social care institutions ¹⁶.

Research shows that children who are placed in institutions have slower motor development, exhibit different cognitive deficits and unusual behaviors (repetitive and stereotypical or self-stimulating) more often ²³.

Adolescents in institutions often experienced loss, neglect, or violence in their relationship with caregivers, and quite certainly separation as well, which are all situations that signal the activation of the attachment system, whereas the security base is inaccessible or represents a threat itself²⁴. The conclusions of research about institutionalized children stated that "despite the good physical care that institutionalized children receive, the lack of continuous and close emotional contact with the mother produces retardation in emotional and cognitive development, adoption of speech and habits, and that these children are more insecure"²⁵. Bowlby ²⁶ was particularly interested in children undergoing long-term treatment in healthcare institutions and how separation from parents (mother) or loss of parents affect children. Working with children who have been deprived of parental care, Bowlby has theorized that young children establish a strong emotional connection and bond with the main caregiver; in case of that bond breaking, it causes great distress and suffering to the child.

Two forms of attachment disorder have also been identified, characteristic primarily of institutionalized children or children who lived without parents for a long period of time in their earliest childhood. The first disorder describes inhibition; the second disinhibition of attachment and the accompanying nondiscriminatory sociability ²³. Both occur significantly more often when it comes to very early and long separations from the attachment figure, with the former involving withdrawal, depressive appearance, and inability to establish attachment rejection, relationships, while the latter includes manifestation of excessive physical contact, verbal and social crossing of borders, unusual spontaneity and dealing with strangers as if they were figures of attachment ²⁴. Why does a percentage of children who have experienced early separation develop one or the other or none of these disorders has yet to be explained, and it is suggested that there may be some biological or epigenetic causes in the background. From the perspective of psychoanalytic theory, perhaps we can think of the underdevelopment of the "capacity to be alone" 27, as a consequence of the experience of hurts in early childhood and the loss or failure of a mother to meet the child's needs.

At the beginning of the 21st century, there had been increasing discussions in Serbia about the consequences on the development and health of children and youth who were separated from their families. It was the reform of the social protection system that began in the first years of the last decade that had a goal to reduce the number of children in residential accommodation, ie, deinstitutionalization. The Social Protection Development Strategy was adopted, which represented the policy framework for all future initiatives, including activities on the reform of the childcare system. Over the last ten years, the Republic of Serbia has made great efforts to move from a model that has relied heavily on residential institutions to a model of community services for children and families. The basic principle of the reform of the social protection system is to respect the rights of children – the right to live in a family. However, during this period, much emphasis has been placed on strengthening foster families and much less attention has been paid to supporting the natural family. Only recently, the state has begun to realize that the rights of the child are best being realized through the empowerment of families and children.

Today, the protection of children in residential care faces numerous challenges. As mentioned, the transformation of residential institutions was undertaken, the number of children in residential care was reduced, but the user structure was also changed. Faced with serious issues of children and youth, Center employees collaborate with mental health professionals. Understanding the current level and prospects of further development of child protection and the challenges that lie along the way is not possible without knowing and understanding the current situation in the Center. Adverse life experiences of children and youth and unmet emotional needs at an early age can lead to difficulties in emotional life or mental health or externalization of problems. Children and young people with behavioral problems are those who are trying to overcome psychological suffering and tension through violent, destructive, and self-destructive behavior.

Methods

The research was conducted at the Center for the Protection of Infants, Children, and Youth in Belgrade, Serbia. The goal was to determine the number of children with mental health problems, the way the problems manifest themselves, as well as their life circumstances. To this end, the children's records and documentation in the institution were analyzed.

The research was conducted between February and April 2016; the sample included all documentation of children in residential care during 2015 (486 children). The study was conducted in four homes for children aged 7 to 18, these being: Residential Home for Children and Youth "Jovan Jovanović Zmaj" (54 children); Home "Drinka Pavlović" (50 children); Home "Moša Pijade" (54 children); Home for High School and University Youth (32 children). At the Shelter for Urgent Protection of Abused Children, aged 7 to 18 years, 53 children were included in the research, while within the Children's Home "Dragutin Filipović Jusa" containing the Small Home Community for children with disabilities and a receiving station for children aged 4 to 7, records of 58 children were included. Within the organizational infirmary unit, the children are in the care of the Intensive support department, 127 children from birth to 18 years old, including the receiving station for children from birth to 4 years, a total of 74 children (Table 1).

For the needs of the research, a questionnaire was developed examining the mental health issues of children. The research involved health professionals and social workers. The questionnaire on the health status of children was filled in from the health records by health workers; socio-anamnestic data were entered by the social worker/workers from the social worker records. Following the procedure, the permission to conduct a research at the Center was obtained by the Director of the Institution who was contacted by the researcher himself¹. The International Classification of Diseases (ICD) of the WHO , 10th revision (ICD-10) was used in this study $^{\rm 28}.$

Results

The survey showed that out of the total number of respondents in 2015 (n = 486), 96 (19.8%) children were diagnosed with mental health issues. Table 1 shows the distribution of children within the Center by organizational units and incidence. In some organizational units, 56.3% and 39.5% of children, respectively, were diagnosed with mental health issues, while 8.6% of children aged 4 to 7 years were diagnosed with such problems.

Out of the 96 children, 57% were male and 43% were female. On admission to the Center, 63.5% of children had previously been diagnosed with mental health problems.

Most commonly diagnosed were the issues from the F92 group -a mixed disorder of behavior and emotions (21), while in 17 children and youth, the diagnoses from F90 hyperkinetic disorder to F93 group - anxiety disorder in childhood were registered. The following most commonly reported disorders were from the F70-F79 group - mental retardation, with the most frequent incidence of F72 - severe mental retardation (8), F70 - mild mental retardation (4), F71 - moderate mental retardation (3), and F70.1 - mild mental retardation-a significant behavioral disorder that requires attention and treatment (2). F30-F39 mood disorders were registered from bipolar disorder to severe depression, as follows: F31 - affective bipolar mental illness (4), F32 - mild depressive episode (3), F30 - manic episode (2), F31.7 – affective bipolar mental illness in remission (1), F32.1 – moderate depressive episode (1), F32.3 – a severe depressive episode with symptoms of psychosis (1). Between two and six diagnoses were present in 21.8% of children, while 41.7% of children had one diagnosis.

At admission to the institution, 36.5% had not been previously diagnosed with mental health issues, but during their stay in the institution, these children and youth were

Table 1

Number of children Total number of Total number (%) of children Organizational unit (OU) with MHD children in OU with MHD male female Shelter for urgent protection of abused children 53 9 (17) 3 6 12 "Drinka Pavlović" 50 5 17 (34) Home for High School and University students 32 10 8 Infirmary 18 (56.3) 9 127 13 intensive support 22 (17.3) infirmary shelter 74 2 1 3(4.1)"Moša Pijade" 3 54 4 7(13) "Jovan Jovanović Zmaj" 38 8 7 15 (39.5) "Dragutin Filipović Jusa" 58 4 5 (8.6) 55 41 96 (19.8) Total 486

Children with mental health	difficulties (MHD) at resident	t care at the Center during 2015

¹In mid-2016, at the proposal of the Expert Council of the Center (the author of the paper is a member of the Expert Council), a Commission for giving opinions on professional training and conducting research at the Center was formed. This Commission was formed and modeled like other ethics committees in the health system.

diagnosed with disorders in the F10–F19 group (mental disorder and behavioral disorder caused by the use of PAS), which was not the case upon admission to the Center (this diagnosis had almost been missed). F30–F39 disorders were diagnosed in ten children and young adults; disorders F40–

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F48 (neurotic, stressful, and body manifest disorders), F80– F89 (mental development disorder), F50–F59 (behavioral disorder syndromes associated with physiological disorders and physical factors), and F60–F69 groups (personality disorder and behavioral disorder of adults) were recorded as well. During their stay in the institution, 23.96% of children received more than one diagnosis.

During the placement in the institution, 55% of the children had psychopharmacotherapy introduced by the prescribing specialist. During 2015 (the survey took the whole year, from January to the end of December), 82 (85.4%) children used psychopharmacotherapy (Table 2). The survey showed that 65.5% of children had between two and six administered medicines, 19.79% had one psychopharmacotherapy, while 14.58% had no therapy regardless of the confirmed diagnosis. In 68% of cases, administered psychopharmacotherapy was not reduced; in 17% of cases it was adjusted (reduced number of medications); in only 10% of cases, it was discontinued. The age of children and young people who used psychopharmaceutics in 2015 ranged from 10 to 18 years in 77.9% of cases. Looking at organizational units, 41.5% were aged 10-15 and 36% were aged 15-18. This age prevailed in all organizational units. More than seven percentage (7.5%) of children who used psychopharmaceutics were aged 7-10, most of them were in Intensive Care and Infirmary, while 14.6% of young adults (who were still in school) were mostly in the work unit of Center for high school and student youth (Table 3).

Table 2

Number of children using psychopharmacotherapy in 2015 (by number of psychopharmacotherapy)

			1
Number of medications	Number of children		Total
Number of medications	male	female	TOLAI
1	10	9	19
2	15	8	23
3	9	11	20
4	11	5	16
5	1	1	2
6	1	1	2
no medication	8	6	14
Total	55	41	96

Table 3

Number of children using psychopharmacotherapy in 2015 (by age and gender)

		8)
A go (voors)	Number of	of children	Total
Age (years)	male	female	children (%)
7–10	2	4	7.5
10-15	22	12	41.4
15-18	17	13	36.5
18 +	6	6	14.6
Total children (%)	57.3	42.7	100

Out of the total number of children hospitalized due to mental health issues in 2015, the largest percentage had been hospitalized only once, while one child had as many as 13 hospitalizations. During 2015, 36% of children with mental health issues were hospitalized during the year (Table 4). Emergency medical interventions addressed 34% of children and youth in the Center placement, and 21% of children remained hospitalized after emergency medical intervention. Aggressive behavior towards property, other children, and adults was exhibited in 22.9% of children and young people.

Table 4	
Number of hospitalizations	of children as
a consequence of mental prob	lems during 2015
Number of hegnitalizations	Children (%)

Number of hospitalizations	Children (%)
1	22
2	8
3	2
4	2
5	1

Systemic protection of children, upon separation from the inadequate environment in which the children were residing, showed that 73% of children had more than one major life change before being placed in the Center (Table 5), while a history of abuse and neglect was present in 69.7% of children and youth.

Table 5	
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Number of children/youth experienced changes prior to admission to the Center

<u>Children (%)</u> 22 28
28
29
11
5

Problems of children and youth in the placement in their everyday functioning, related to running away from the institution, were recorded in 23% of the examined; use of physical force in solving issues with other children was also present in 23% of cases; use of PAS in 9%.

The average length of stay for these children was 4 years, while 28.12% of children were staying in an institution between 6 and 13 years. 61% of children had contact with family and other significant persons, whether regular or occasional, while 33% of children maintained no contact with family and other significant persons. Children and young people diagnosed with F72 in 62.5% of cases did not have contact while others had regular (12.5%) or occasional (12.5%) contact with other significant persons (parents, relatives, foster parents, etc.) after being placed in the institution.

Discussion

Institutions were once considered the best solution for taking care of vulnerable children, children from risk groups, and children with disabilities. However, it has been shown that the care services provided by the institutions constantly give worse results, especially if the children are placed at an early age. The institutional environment can leave numerous consequences on children's development in the sphere of slow physical, cognitive development, speech development, intellectual development and motivation to achieve school success, depression, anxiety, behavioral disorders. Psychosomatic difficulties can be manifested to a significant extent. On the emotional level, there is a habit disorder (most often enuresis), aggression, and hyperactivity ^{16, 29, 30}.

The institutional environment itself is such that it creates additional inconveniences that can accompany a person staying in an institution for the rest of his/her life. Lack of personal life, autonomy, and disrespect for a person's personal integrity can jeopardize their emotional and social development. Expressions such as "social deprivation" and "learned helplessness" were coined to describe the psychological effects of being in an institution ²⁹.

The results of the research show that children in residential care have been diagnosed with mental health problems in certain Center organizational units between 39.4% and 56.2%. These units are Homes for Children Without Parental Care, ages 7 to 18, where the F70 group diagnoses were very rare. Most children with F70 diagnosis were placed in the organizational unit of the Infirmary -Intensive Support. Researches show that children in institutions for children in Serbia have a reported confirmation of some psychiatric disorder at the beginning of placement in 7.3% of cases, and 9.7% of children have a diagnosis in the last report. Among the problems reported, the hyperactive disorder (1.4%) is most commonly reported at the beginning of treatment, which is almost equally present in the last report (1.2%), while attention deficit, behavior, mood, and habit disorders, as well as autism were reported for 0.6% of children each. According to the latest report, the number of children diagnosed with a behavioral disorder has increased, and the proportion of children with a mood disorder has increased slightly ¹¹.

The obtained results are in line with numerous research on the negative impact of child development institutions. Numerous studies indicate that children and adolescents placed in social care institutions are significantly more reminiscent of the clinical population with mental health problems than of the general population of the same age ¹⁶. The results showed that, already during the placement in the institution, 21.8% of children had from two to six years diagnoses relating to mental health problems. Many studies show that the prevalence of psychopathology is higher in children and adolescents placed in homes for children without parental care, in contrast to children placed in foster care. The prevalence of psychopathology in foster children and adolescents ranges between 44% and 96%, while the prevalence of foster children and adolescents in foster care varies between 30% and 63% ¹⁶. In several studies, it has been observed that older children and adolescents are more likely to have mental health problems, while there are no clear differences according to gender. In addition to older age, the main predictors of mental health problems are the age at which one enters the social protection system, previous mental health problems, physical health, developmental characteristics, living conditions in institutions, access to health care, frequent changes in social protection (frequent change of guardians or caregivers)¹⁶.

The results obtained in Damjanović's ¹⁶ doctoral dissertation show that "Anxiety and depressive problems were present in a higher percentage in children and adolescents in foster care - 41.4% of children and adolescents from the home showed anxiety problems, and 29.5% of children and adolescents from foster care. Nearly 60% of children and adolescents from home and 33% of children and adolescents from foster care had depressive symptoms. Concerning gender and age, female subjects aged 13-18 years had more pronounced anxiety and depressive problems. Outsourcing problems were present in a higher percentage of respondents of both sexes and ages, in dormitory accommodation; 12.6-29% of children and adolescents from the home have externalizing mental problems, and in foster care, about 3-4%; 67% of children and adolescents in foster care had at least one mental disorder, while that percentage of foster children is about 44%".

Numerous studies prove that children who grow up in a foster family achieve better results than their peers who grow up in institutions, not only in terms of physical and cognitive development but also when it comes to success in education and integration into the community as adults ²⁹.

That is the reason why Serbia started the process of deinstitutionalization. Since 2001, the number of children in residential care without parental care has decreased, but the user structure has changed, and the number of children in foster families has increased (a survey for the period between 2006 and 2011 shows that 47% of children were placed in foster families), while kinship foster care was poorly developed ¹¹. However, changes in the placement of children with disabilities and children in conflict with the law are slow. Specialized foster care is making progress but not to a satisfactory extent.

It may be concluded that a large number of children and youth, at the moment of admission, have a diagnosed emotional disorder originating in childhood. Externalizing the problem is a basic feature of children and youth in placement, but a group of children and young people who have been diagnosed with the bipolar affective disorder is also evident. These disorders are characterized by impulsiveness, poor wish control, violent behavior, autoaggressive behavior, self-harm, and mood swings with depressive episodes. Most of these disorders occur early in life and are related to poor school performance and results, aggressive behavior, and joining the high-risk groups.

Moreover, the disorders in group F10–F19, which were not registered at the admission of children, are recorded during their stay at the institution. One of the contraindications for admission of children is the diagnosis from the F10–F19 spectrum. These children are not admitted to the institution until they are first treated, but there is a possibility that the admission documentation does not contain their health records, which occurs in reality. After entering the institution, problems become registered and a treatment procedure is initiated.

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The data show that a total of 85.4% of children have prescribed therapy in the form of two, three, and sometimes four medicines, while only 14.5% of children and adolescents do not have psychopharmacotherapy introduced. Once the therapy is introduced, it is rarely changed or reduced. In the majority of children and young people (68%), it remains the same, and only 17% of children received reductions in their prescribed therapy. This is significant information given that 85.4% of children are administered multiple-drug pharmacotherapy. In only 10% of cases, the therapy was discontinued. These data coincide with worldwide data that children in care homes are 16 times more likely to receive medication than children living in their families ³¹, and that is why caution should be taken when prescribing drugs in psychiatry ³². The report of the Initiative for the Mental Disability Initiative of Serbia (MDRI) Rights states: "The worrying fact is that even when it comes to children, the use of psychopharmaceutics is very common". The excuse of this practice is very debatable if the diagnoses of children are taken into account - severe developmental disabilities, autism, behavioral disorders. In Zvečanska (Center), 20-30% of children received neuroleptics. According to the employees, "children are overwhelmed with diagnoses, controls, and medication." It is positive that the employees of this institution carefully monitor the impact of drugs on children and point out possible problems ³³. However, the introduction of drugs into therapy, in addition to the targeted antipsychotic effect, reduces aggression, anger attacks, stereotypes, and hyperactivity ³⁴. When it comes to the abuse of psychopharmaceutics, there is evidence that some institutions (in the world) for children and adults with disabilities arbitrarily use psychiatric drugs to control behavior, when a psychiatric diagnosis does not exist, without regular drug review ²⁹.

Emergency medical intervention is associated with urgent hospitalization of children. It can be assumed that high anxiety, with acting out behavior is the reason for hospitalization but also self-harm or suicide threats. These are mostly situations where professional practitioners contact the emergency medical service.

The fact that the children had undergone several changes before coming to the Center shows that the children are being "dragged" through the system. A large number of children have experienced changing multiple families (foster care families, relatives) until placement in a social care facility. Often, children were exposed to traumas of early separation, frequent changes and relocations, unreliable and unpredictable upbringing and raising, hospitalizations, life in institutions. These circumstances are among the risk factors that increase the possibility of developing mental health disorders ³⁴.

Once children enter residential care, they become "forgotten" by the system, as evidenced by the fact that some children stay in institutions between 6 and 13 years. Most often, these children are diagnosed with F70–F72, which is confirmed by the fact that in 62.5% of cases, children with the F72 diagnosis do not have any contact with other significant persons (parents, relatives, foster parents, etc.)

after being placed in an institution. The placement of these children practically from the maternity ward, that is, the abandonment of these children by their parents, indicates the need for the development of preventive services as well as synchronized functioning of health and social institutions in the community, in order to provide timely assistance to pregnant women at risk that may result in abandonment of a child, as well as additional psychosocial and material support after childbirth or the first months of a child's life.

All organizational units included in the research within the Center provide accommodation services. The difference is whether the accommodation is short-term within the shelter (up to 6 months) or is a home accommodation that can sometimes last for years. Children in accommodation are very different in relation to age, disability, length of stay in the institution, and different family experiences, which can be a limiting factor of this research. However, it is characteristic of all children to experience abandonment, abuse, and neglect. All children have parents or relatives, and experiencing separation from family is always a traumatic experience.

Conclusion

The research shows that institutional care for children can have a number of consequences for children's development. Young children and children who have spent many years in the institution are, particularly, at risk. Children in such accommodations represent a vulnerable group, and the data from the conducted research show that 19.8% children were diagnosed with mental health problems. In 63.5% of children, these problems were diagnosed at the time of admission to the institution, and in 36.5%, during their stay in the institution. A history of abuse and neglect was present in 69.7% of children and young people, while 45% had multiple life changes before being placed in the Center (three, four, five), and 28% had two life changes.

Given the growing body of evidence, modern researchers think that institutional care means poorer outcomes for children of all ages, as well as a lower quality of life.

In order to adequately respond to the needs of children and young people in accommodation, it is necessary to reduce the number of life changes, reduce accommodation capacities, improve the quality of care, enable individualized approach as much as possible, shorten children's stay in institutions, develop short-term treatment programs together with mental health professionals and professional assistance who will help with the implementation of psychosocial support programs. Furthermore, it is necessary to strengthen the biological family in order to create conditions for the faster return of children to the family. Developing family support programs based on their strengths and needed community support is crucial.

Investing in services such as early response, family support, reintegration, and high-quality alternative care can help prevent poor outcomes, such as early school leaving, unemployment, homelessness, addiction, antisocial behavior, and crime.

REFERENCES

- Bonevski D, Novotni A. Child abuse in panic disorder. Med Pregl 2008; 61(3–4): 169–72. (Serbian)
- Milosavljević-Đukić I. Functioning of health care, justice and social welfare system to protect children from abuse and neglect [dissertation]. Belgrade: Faculty of Political Science, University of Belgrade; 2015. (Serbian)
- World Health Organization. Report of the Consultation on Child Abused prevention. Document number WHO/HSC/PV/99.1. Geneva; Worlad Health Organization; 1999. Available from: http://whqlibdoc.who.int/hq/1999 /WHO HSC_PVI_99.1pdf
- Ajduković M. Prevention of child abuse and neglect. Zagreb: Child and Society; 2001; 3(1–2): 161–72. (Croatian)
- Afifi TO, Mota N, MacMillan HL, Sareen J. Harsh physical punishment in childhood and adult physical health. Pediatrics 2013; 132(2): e333–40.
- Flaherty EG, Macmillan HL. Committee On Child Abuse and Neglect. Caregiver-fabricated illness in a child: a manifestation of child maltreatment. Pediatrics 2013; 132(3): 590–7.
- Bernstein DP, Stein JA, Handelsman L. Predicting personality pathology among adult patients with substance use disorders: effects of childhood maltreatment. Addict Behav 1998; 23(6): 855–68.
- Kendler KS, Bulik CM, Silberg J, Hettema JM, Myers J, Prescott CA. Childhood sexual abuse and adult psychiatric and substance use disorders in women: an epidemiological and cotwin control analysis. Arch Gen Psychiatry 2000; 57(10): 953–9.
- Silverman AB, Reinherz HZ, Giaconia RM. The long-term sequelae of child and adolescent abuse: a longitudinal community study. Child Abuse Negl 1996; 20(8): 709–23.
- Zanarini MC, Williams AA, Lewis RE, Reich RB, Vera SC, Marino MF, et al. Reported pathological childhood experiences associated with the development of borderline personality disorder. Am J Psychiatry 1997; 154(8): 1101–6.
- Žegarac N, Bugrund A, Milanović M. In the labyrinth of social protection. Lessons learned from research on children in care. Belgrade: Faculty of Political Science, University of Belgrade; 2014. p. 154–68. (Serbian)
- Republic Institute for Social Protection. Report on the work of institutions for accommodation of children and youth for 2018. Belgrade: Republic Institute for Social Protection; 2019. p. 16. (Serbian)
- Strengthening families from vulnerable groups. A look at opportunities. Belgrade: UNICEF Serbia; 2018. p. 9. (Serbian)
- Milosavljević-Đukić I, Burgund Ž, Radovanović J, Marković L, Jovanović Lj, Vuković-Jovanović M, et al. Basic Work Programme. Belgrade: Document Center for Protection of Infants, Children and Youth; 2019. (Serbian)
- 15. Buljan-Flander G, Kocijan-Hercigonja D. Child abuse and neglect. Zagreb. National University Library; 2003.
- 16. *Damjanović VM*. Characteristic of quality of life and mental health among children and adolescents in the social welfare system [dissertation]. Belgrade: Faculty of Medicine, University of Belgade; 2012. (Serbian)
- 17. Vidanović V. Marginalization and social exclusion of children without parental care. Socijalna misao 2008; 15(1): 61–70. (Serbian)
- Radojević B. Behavioral problems and the development of insecure attachment patterns: the role of the context of growing up children at risk [dissertation]. Belgrade: Faculty of Philoso-

phy, Department of Psychology, University of Belgade; 2015 (Serbian)

- Išpanović Radojković V. Devotion and bonding disorders in childhood. In: Bojanin S, Popović Deušić S, editors. Developmental psychiatry. 65–73. Belgrade: Institutefor mental health; 2012. p. 65–73. (Serbian)
- Beckett C, Maughan B, Rutter M, Castle J, Cohrert E, Groothues C, et al. Do the effects of early severe deprivation on cognition persist into early adolescence? Findings from the english and romanian adoptees study. Child Dev 2006; 77(3): 696–711.
- Ellis BH, Fisher PA, Zaharie S. Predictors of disruptive behavior, developmental delays, anxiety, and affective symptomatology among institutionally reared romanian children. J Am Acad Child Adolesc Psychiatry 2004; 43(10): 1283–92.
- O'Connor TG, Marvin RS, Rutter M, Olrick JT, Britner P.A. English and Romanian Adoptees Study Team. Child-parent attachment following early institutional deprivation. Dev Psychopathol 2003; 15(1): 19–38.
- 23. *Dozier M, Ratter M.* Challenges to the development of attachment relationships faced by young children in foster and adoptive care. In: *Cassidy J, Shaver PR*, editors. Handbook of attachment: Theory, research, and clinical applications. New York: The Guilford Press; 2008; 2: 698–717.
- 24. *Protić, S.* The role of attachment and mentalization in understanding the relationship between trauma and delinquency [dissertation]. Belgrade: Faculty of Philosophy, University of Belgrade; 2016. (Serbian)
- Burlingham D, Freud A. Infants without families. Oxford, England: Allen & Unwin; 1944.
- 26. Bowlby J. Maternal care and mental health. Geneva: WorldHealth Organization; 1951.
- 27. Winnicott DW. The maturational processes and the facilitating environment: Studies in the theory of emotional development. London: Hogarth Press; 1965.
- World Health Organization. International Classification of Diseases – ICD. Geneva: World Health Organization; 1993.
- European Commission. OHCHR United Nations Human Rights Office of the High Commissioner. Available from: www.zavodsz.gov.rs>smernice-eu-deinstitucionalizacija, derived [cited 2020 August 10]
- Rutter M, Beckett C, Castle J, Cohert E, Kreppner J, Mehta M, et al. Effects of profound early institutional deprivation: An overview of findings from a UK longitudinal study of Romanianadoptees. Eur J Dev Psychol 2007; 4(3): 332–50.
- Sparks, JA, Duncan, BL. The ethics and science of medicating children. Ethical Hum Psychol Psychiatry 2004; 6(1): 25–39.
- 32. *Kažii T*. Medicalization in society and psychiatry. In: *Ćorii B*, editor. People Speak. Belgrade: Faculty of Special Education and Rehabilitation, University of Belgrade; 2010. p. 89–109. (Serbian).
- 33. Initiative for the Rights of Persons with Mental Disabilities (MDRI-S). 2012. Available from: www.mdri-s.org
- Popović-Deušić S, Aleksić O, Pejović-Milovančević M. Developmental psychiatry in our environment. Psychiatry Today 2002; 34(1-2): 197-214. (Serbian)

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