SOCIJALNA PSIHIJATRIJA – ČASOPIS HRVATSKOGA PSIHIJATRIJSKOG DRUŠTVA

SOCIJALNA PSIHIJATRIJA – THE JOURNAL OF THE CROATIAN PSYCHIATRIC SOCIETY

Izdavač/Publisher
Medicinska naklada

Adresa Uredničkog odbora/Address of the Editorial Board
SOCIJALNA PSIHIJATRIJA
Klinika za psihijatriju i psihološku medicinu, Klinički bolnički centar Zagreb, Kišpatićeva 12, 10000 Zagreb, Hrvatska
Department of Psychiatry and Psychological Medicine, University Hospital Centre Zagreb, Kišpatićeva 12, 10000 Zagreb, Croatia

Tehnička urednica/Technical Editor
Dunja Beritić-Stahuljak (Zagreb)

Oblikovanje korica/Cover design
Andrea Knapić (Zagreb)

Prijelom/Layout
Marko Habuš (Zagreb)

Tisak/Printed by
Medicinska naklada d.o.o., Zagreb

Časopis je utemeljen 1973. u Klinici za psihijatriju Kliničkog bolničkog centra Zagreb i Medicinskog fakulteta Sveučilišta u Zagrebu, gdje je i sjedište Uredničkog odbora.
The journal was established in 1973. in Zagreb, in the Clinic for Psychiatry, University Hospital Centre Zagreb, School of Medicine, Zagreb and the Editorial board headquarters are situated there as well.

Socijalna psihijatrija indeksirana je u/Socijalna psihijatrija is indexed in: SCOPUS, PsychINFO, Excerpta Medica (EMBASE), Index Copernicus, Google Scholar, EBSCO, HRČAK, CiteFactor (https://www.citefactor.org/impact-factor/impact-factor-of-journal-Socijalna-psihijatrija.php).

Izlazi četiri puta godišnje.

Godišnja pretplata za ustanove iznosi **300,00 kn**; za pojedince **150,00 kn**. Cijena pojedinačnog broja **50 kn** (u cijenu su uključeni poštanski troškovi).
IBAN: HR2223600001101226715, Medicinska naklada, Cankarova 13, 10000 Zagreb, Hrvatska (za časopis Socijalna psihijatrija).

The Journal is published four times a year. Orders can be made through our office-address above.
The annual subscription for foreign subscriber is: for institutions **40 €**, for individuals **20 €**, and per issue **10 €** (the prizes include postage).
Payment by check at our foreign currency account:
Zagrebačka banka d.d., 10000 Zagreb, Croatia
IBAN: HR2223600001101226715, **SWIFT:** ZABAHR2X (for Socijalna psihijatrija).

Kontakt/Contact
socijalna.psihijatrija@kbc-zagreb.hr
http://www.kbc-zagreb.hr/soc.psi

Socijalna psihijatrija

UDC 616.89
SPSIDE 49 (3) 177-256 (2021)
ISSN 2459-6140

VOL. 49 – 2021
BROJ/NUMBER 3
ZAGREB, rujan/September 2021.

SADRŽAJ / *CONTENTS*

PREGLED / *REVIEW*

L. Tomašić, Z. Kovačić Petrović
179 **Poremećaj kockanja – prevencija među adolescentima**
/ Gambling Disorder – Prevention in Adolescents

STRUČNI RAD / *PROFESSIONAL PAPER*

A. Pokrajac-Bulian, S. Calugi, P. Anić, M. Kukić, T. Mohorić, N. Damjanić
202 **Zabrinutost za oblik i tjelesnu težinu, suzdržavanje u prehrani i kognitivni obrasci hranjenja u hrvatskih adolescenata**
/ Shape and Weight Concern, Dietary Restraint and Cognitive Eating Patterns in Croatian Adolescents

PRIKAZI BOLESNIKA / *CASE REPORTS*

V. Marinović, M. Skelin, S. Uzun, O. Kozumplik, N. Mimica
214 **S ponosom nosim tetovažu Vrapča**
/ Proud to Have a Tattoo of Vrapče

I. Kober Vrbat, A. Kordić
228 **„Udaljeni, ali i dalje povezani" – kognitivno-bihevioralni tretman opsesivno-kompulzivnog poremećaja tijekom zdravstvene krize**
/ „Distant but Still Connected" – Cognitive Bihevioral Therapy in the Treatment of Obsessive-Compulsive Disorder in the Course of Health Crisis

IN MEMORIAM / *OBITUARY*

D. Begić
245 **Ljubomir Hotujac**
/ Ljubomir Hotujac

PRIKAZ KNJIGE / *BOOK REVIEW*

A. Mihaljević-Peleš
249 **D. Begić: Psihopatologija**
/ D. Begić: Psychopathology

253 **UPUTE AUTORIMA / *INSTRUCTIONS TO AUTHORS***

Poremećaj kockanja – prevencija među adolescentima / *Gambling Disorder – Prevention in Adolescents*

Lea Tomašić[1], Zrnka Kovačić Petrović[1,2]

[1]Klinika za psihijatriju Vrapče, Zagreb, Hrvatska; [2]Sveučilište u Zagrebu, Medicinski fakulet, Zagreb, Hrvatska / [1]*University Psychiatric Hospital Vrapče, Zagreb, Croatia;* [2]*University of Zagreb, School of Medicine, Zagreb, Croatia*

Orcid ID: https://orcid.org/0000-0001-7546-53 (Zrnka Kovačić Petrović)

Poremećaj kockanja ponavljajuća je kockarska aktivnost koja narušava opće stanje ili uzrokuje značajan problem za osobu. Prevalencija je ove bolesti u svijetu između 0,01 i 10,6 % u odrasloj populaciji, a među adolescentima je i češća. Najvažniji su okidači poremećaja kockanja velika dostupnost i pristupačnost kockanja, odnosno mogućnost kockanja *online*. Veći rizik za nastanak ovog poremećaja imaju muškarci, samci, osobe u socijalno depriviranoj okolini. Međutim, kao kritično razdoblje osjetljivosti mozga za razvoj ovisnosti pa tako i poremećaja kockanja nameće se doba adolescencije. U Hrvatskoj čak 12,9 % srednjoškolaca zadovoljava kriterije za problematično kockanje. Budući da poremećaj kockanja uzrokuje značajne psihosocijalne posljedice i da je povezan s brojnim psihičkim i fizičkim komorbiditetima, nužno je osmisliti kvalitetne preventivne intervencije. U svijetu i u našoj zemlji postoje brojni preventivni programi namijenjeni adolescentima, a najuspješniji su oni dužeg vremenskog trajanja koji obuhvaćaju multiple aspekte ovisnosti i utječu na promjene u ponašanju. Prevencija ove bolesti značajan je javnozdravstveni imperativ koji treba obuhvatiti pojedinca, obitelj, socijalno okruženje uz odgovarajuću zakonsku regulativu, financijsku podršku, interdisciplinarnu profesionalnu suradnju i znanstvenu evaluaciju učinkovitosti primijenjenih programa.

/ Gambling disorder is a recurrent gambling activity that disrupts the general condition or causes a significant problem for a person. The prevalence estimates of this illness in the world range between 0.01 and 10.6% in the adult population, and it is even more common in adolescents. The most important triggers of gambling disorder are the high availability and accessibility of gambling, i.e., the possibility of online gambling. Men, single people, and people living in a socially deprived environment are at a higher risk of developing gambling disorder. However, the critical age of brain sensitivity for the development of addiction, including gambling disorder, is adolescence. In Croatia, as many as 12.9% of high school students meet the criteria for problem gambling. Given that gambling disorder causes significant psychosocial consequences and is associated with numerous psychic and physical comorbidities, it is necessary to design high-quality preventive interventions. There are numerous preventive programmes in the world and in our country aimed at adolescents, the most successful being those of a longer duration that cover multiple aspects of addiction and affect changes in behaviour. Prevention of this disease is a significant public health imperative that should involve individuals, family, social environment and appropriate legislation, financial support, interdisciplinary professional cooperation and scientific evaluation of the effectiveness of the applied programmes.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*

Doc. dr. sc. Zrnka Kovačić Petrović, dr. med.
Šalata 3b
10 000 Zagreb
Bolnička cesta 32
10 090 Zagreb
E- pošta: zrnka.kovacic@gmail.com

KLJUČNE RIJEČI / *KEY WORDS:*

Adolescenti / *Adolescents*
Poremećaj kockanja / *Gambling Disorder*
Preventivni programi / *Prevention Programmes*
Problematično kockanje / *Problematic Gambling*
Psihosocijalne posljedice / *Psychosocial Consequences*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2021.179

UVOD

Poremećaj kockanja je prema Američkom psihijatrijskom udruženju (engl. *American Psychiatric Association*) ponavljajuća kockarska aktivnost koja uzrokuje značajan problem ili narušava opće stanje (1). Međunarodna klasifikacija bolesti i srodnih zdravstvenih problema, deseta revizija (MKB-10) navodi patološko kockanje kao posebnu dijagnozu pod šifrom F63.0 (2), dok Dijagnostički i statistički priručnik za duševne poremećaje, peto izdanje (DSM-5) ovisnost o kockanju svrstava u kategoriju poremećaja vezanih uz psihoaktivne tvari (PAT) (3). U MKB-11 u potkategoriji Poremećaji vezani uz ovisnička ponašanja navode se: poremećaj uzrokovan kockanjem (engl. *gambling disorder*) i poremećaj uzrokovan igranjem igrica (engl. *gaming disorder*) (4). Prevalencija poremećaja kockanja kreće se između 0,01 % i 10,6 % u odrasloj populaciji (5). U Republici Hrvatskoj (RH) je barem jednom u životu neku igru na sreću igralo 60,3 % odraslih, a 2,2 % osoba pati od negativnih posljedica uzrokovanih kockanjem (6). Istraživanja su pokazala kako je prevalencija kockanja kod adolescenata veća nego prevalencija u odrasloj dobi te da u nerazvijenim zemljama svijeta može sezati i do 34,3 % (7). Prevalencija kockanja i problematičnog kockanja među adolescentima u RH također je visoka, pa je tako istraživanje iz 2013. g. pokazalo kako 12,9 % adolescenata ima ozbiljne psihosocijalne probleme uzrokovane kockanjem (8). Ovaj poremećaj povezan je s većim rizikom za nastanak drugih psihijatrijskih poremećaja kao što su: ovisnost o alkoholu, veliki depresivni poremećaj (9), poremećaji ličnosti, anksiozni poremećaji te ovisnosti o psihoaktivnim tvarima (PAT) (10). Također, osobe s poremećajem kockanja većinom su lošijeg fizičkog stanja i s brojnim organskim komorbiditetima (11). Nadalje, dugoročne su posljedice financijski problemi i dugovi, gubitak posla zbog izostajanja, bračni sukobi i posljedični razvodi, kršenje zakona i delinkvencija itd. (12). U RH godišnji ekonomski i društveni trošak po jednom ovisniku o kockanju iznosi 10

INTRODUCTION

According to the American Psychiatric Association, gambling disorder involves repeated, problem gambling behavior that causes significant problems or impairs the general condition (1). The Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) lists pathological gambling as a special diagnosis under code F63.0 (2), while the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) classifies gambling in the category of disorders related to psychoactive substances (PAS) (3). In ICD-11, gambling disorder and gaming disorder are listed in the subcategory "Disorders due to addictive behaviours" (4). The prevalence of gambling disorders in the adult population ranges between 0.01% and 10.6% (5). In the Republic of Croatia (RH), 60.3% of adults have played a game of chance at least once in their life and 2.2% of people suffer from the negative consequences caused by gambling (6). Research has shown that the prevalence of gambling in adolescents is higher than the prevalence in adults and that in underdeveloped countries it can reach up to 34.3% (7). The prevalence of gambling and problem gambling among adolescents in Croatia is also high. A study conducted in 2013 found that 12.9% of adolescents experience serious psychosocial problems caused by gambling (8). This disorder is associated with a higher risk of developing other psychiatric disorders such as: alcohol use disorder, major depressive disorder (9), personality disorders, anxiety disorders, and psychoactive substance abuse (PAS) disorders (10). Also, individuals with gambling disorder are mostly in poorer physical condition and have a number of medical comorbidities (11). Furthermore, there are also long-term consequences, such as financial problems and debts, loss of employment due to absenteeism, marital conflicts and subsequent divorces, violations of the law, delinquency, etc. (12). In Croatia, the annual economic and social cost per gambling addict amounts to HRK 10,702.8. The largest part of this cost is

702,8 kuna, a najveći dio tog troška otpada na produktivnost i zaposlenost (68,9 %) (13). Iz navedenog proizlazi da je poremećaj kockanja značajan javnozdravstveni imperativ koji iziskuje kvalitetnu i učinkovitu prevenciju koja mora početi već u adolescentnoj dobi (9). U središte se ovog rada stoga stavlja poremećaj kockanja među adolescentima i prevencija kockanja.

TEORIJE NASTANKA POREMEĆAJA KOCKANJA

Etiologija poremećaja kockanja je složena jer uključuje *genetičke i okolišne čimbenike*. U istraživanjima na jednojajčanim blizancima pokazano je da genetički čimbenici pridonose do 66 % nastanku poremećaja kockanja (14), što je usporedivo s genetičkim doprinosom kod ostalih bolesti ovisnosti (10). Nadalje, budući da osobe s poremećajem kockanja češće boluju od ostalih psihijatrijskih komorbiditeta (9,10), izvjesno je da postoji genetička povezanost između poremećaja kockanja i ostalih psihičkih bolesti (9). Najvažniji geni u etiologiji poremećaja kockanja geni su koji kodiraju dopaminergičke i serotoninergičke neuronske putove. Osobe s poremećajem kockanja imaju slabiju aktivnost dopaminergičkih neurona u ventralnom strijatumu tijekom procesa nagrađivanja pa se nameće kao logičan zaključak da će povećanje dopaminergičke aktivnosti u frontalnim regijama mozga poboljšati kognitivno funkcioniranje osoba s poremećajem kockanja (15). Međutim, randomizirano dvostruko-slijepo placebom kontrolirano istraživanje, osmišljeno s ciljem traženja jednoznačne uloge promijenjene transmisije dopamina u etiologiji poremećaja kockanja, pokazalo je da bolesnici nakon dobivene jedne doze tolkapona (inhibitor katehol-o-metiltransferaze - COMT) koji povećava razinu dopamina, pokazuju pet puta veće rizično ponašanje od kontrolne skupine (15). Važnost uloge dopamina u nastanku poremećaja kockanja potvrđuje činjenica da je poremećaj kockanja češći u

associated with productivity and employment (68.9%) (13). It follows from the above that gambling disorder represents a significant public health imperative that requires quality and effective prevention that must begin as early as in adolescence (9). Therefore, gambling disorder among adolescents and its prevention lie at the heart of this paper.

THEORIES ON THE MECHANISM OF GAMBLING DISORDER

The aetiology of gambling disorder is complex because it involves *genetic and environmental factors*. Studies of identical twins have shown that genetic factors contribute up to 66% to the development of gambling disorders (14), which is comparable to the genetic contribution to other addictive diseases (10). Furthermore, having in mind that individuals with gambling disorder are more likely to suffer from other psychiatric comorbidities (9,10), it is likely that there is a genetic link between gambling disorder and other mental illnesses (9). The most important genes in the aetiology of gambling disorder are the ones that encode dopaminergic and serotonergic neuronal pathways. Individuals with gambling disorder have less dopaminergic neuron activity in the ventral striatum during the reward process, so it is logical to conclude that increasing dopaminergic activity in frontal brain regions will improve their cognitive functioning (15). However, a randomized, double-blind, placebo-controlled study designed to look for a clear role of altered dopamine transmission in the aetiology of gambling disorder found that patients after receiving one dose of tolcapone (inhibitor of the enzyme catechol-O-methyltransferase - COMT) expressed five times more risky behaviour than the control group (15). The importance of dopamine in the development of gambling disorder is confirmed by the fact that gambling disorder is more common in patients with Parkinson's disease who are treated with dopamine agonists (16). In addition to that, individuals treated with antipsychotic

oboljelih od Parkinsonove bolesti, koji se liječe dopaminskim agonistima (16). Također, osobe koje se liječe antipsihotikom aripiprazolom, parcijalnim agonistom presinaptičkih D2 receptora imaju 3,4 puta veću šansu razviti poremećaj kockanja (17).

Budući da se pojava i težina kliničke slike poremećaja kockanja ne mogu jednoznačno objasniti genima odgovornima za dopaminergičke projekcije, sve je više fokusa na epigenetičke mehanizme (14,18). Tako je u pretkliničkim istraživanjima pronađena povećana razina DNA metilacije u specifičnoj citozin-fosfat-gvanin dinukleotid (CpG) sekvenci gena koji kodira za serotoninski transporter u prefrontalnom korteksu štakora koji pokazuje ovisničko ponašanje (18).

Adolescenti su podložniji razvoju poremećaja kockanja zbog neurorazvojnih karakteristika adolescentnog razdoblja, odnosno razvoja dijelova mozga koji kodiraju psihičke funkcije važne u etiologiji ovisnosti poput motivacije. Motivacija je moždana aktivnost koja procesuira unutarnje stanje pojedinca i njegove okoline te određuje aktivnosti pojedinca prema okolini (19). Ona uključuje visoke moždane funkcije koje određuju ponašanje pojedinca kako bi mu povećale šansu za preživljavanje (20). Pojedinac ima više ciljeva vezanih za preživljavanje, primjerice nabaviti hranu ili pak osigurati sklonište za potomstvo. Međutim, ne mogu se svi ciljevi ispuniti u isto vrijeme pa mora postojati više strategija ponašanja za ostvarenje navedenih ciljeva. Motivacijska neuronska mreža stoga mora omogućiti mehanizme koji kvalitetno određuju prioritete i omogućuju alternativne aktivnosti kako bi preživljavanje bilo omogućeno (19). Tako su ponašajne ovisnosti krivo usmjerena motivacija koja daje veći prioritet zadovoljavanju određenih potreba (npr. žudnje za kockanjem) nego svrsishodnim aktivnostima kao što je primjerice odličan uspjeh u školi. Tako motivacija za brzim utaživanjem specifičnih potreba, što je definirano kao impulzivnost, nadvlada ostale motivacijske ciljeve. Osoba s

aripiprazole, a partial agonist of presynaptic D2 receptors, are 3.4 times more likely to develop gambling disorder (17).

Since the occurrence and severity of the clinical picture of gambling disorder cannot be unambiguously explained by the genes responsible for dopaminergic projections, there is an increasing focus on epigenetic mechanisms (14,18). Preclinical studies indicated increased levels of DNA methylation in the specific cytosine-phosphate-guanine dinucleotide (CpG) sequence of the gene encoding the serotonin transporter in the prefrontal cortex of rats showing addictive behaviour (18).

Adolescents are more susceptible to the development of gambling disorder due to the neurodevelopmental characteristics of adolescence, i.e., the development of parts of the brain that encode mental functions important in the aetiology of addiction, such as motivation. Motivation is a brain activity that processes the internal state of an individual and their environment and determines the activities of the individual towards the environment (19). It involves higher brain functions that determine an individual's behaviour to increase their chances of survival (20). An individual has several goals related to survival, such as obtaining food or providing shelter for the offspring. However, not all goals can be met at the same time and several behavioural strategies to achieve these goals need to be applied. The neural network responsible for motivation, therefore, has to provide mechanisms for setting priorities and allowing alternative activities to enable survival (19). Behavioural addictions are misguided motivations that give higher priority to meeting certain needs (e.g., craving for gambling) than to purposeful activities such as excellent school performance. Thus, the motivation to satisfy specific needs quickly, which is defined as impulsivity, gets priority over other motivational goals. An individual with behavioural addiction prefers to choose a smaller and faster than a larger but delayed reward and sets their goals accordingly (20). The primary motivational circuit consists of the prefrontal cortex and ventral

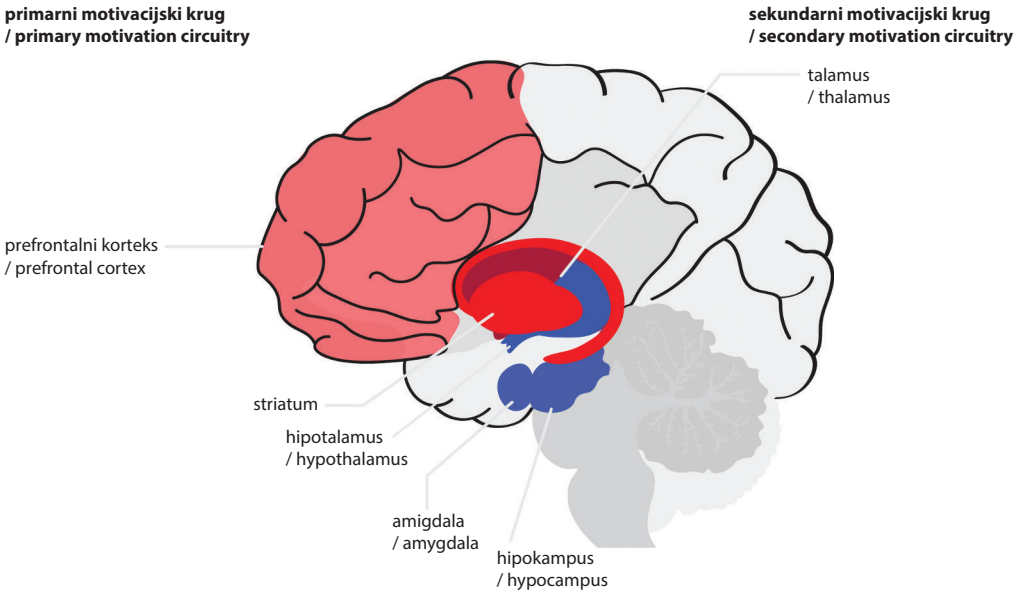
ponašajnom ovisnosti radije odabire manju i brzu nego veću, ali odgođenu nagradu te prema tome određuje svoje ciljeve (20). Primarni motivacijski krug čine prefrontalni korteks i ventralni strijatum koji utječe na odgovor motoričkih struktura (21). Taj primarni motivacijski krug povezan je sa sekundarnim motivacijskim krugom (slika 1.), koji primarni motivacijski krug opskrbljuje sa senzoričkim informacijama. Npr. hipokampus i amigdale primarnom motivacijskom krugu pružaju emotivno obojene informacije iz epizodičkog pamćenja povezane s motivacijskim podražajem, dok hipotalamus pruža manje složene informacije vezane uz instinktivno ponašanje kao što su hranjenje i reprodukcija. Navedene su strukture na početku konačnog razvoja u adolescenciji te su tako adolescenti vulnerabilniji za razvoj ponašajnih ovisnosti pa tako i poremećaja kockanja (19).

Primarni motivacijski krug čine prefrontalni korteks i ventralni strijatum koji dobivaju senzoričke informacije od sekundarnog motivacijskog kruga sastavljenog od hipokampusa, amigdala i hipotalamusa.

Nasuprot genetičkoj i neurorazvojnoj teoriji mnoštvo je okolišnih čimbenika koji utječu na striatum, which impacts the response of motor structures (21). This primary motivational circuit is connected to the secondary motivation circuit (Figure 1) supplying the primary motivation circuit with sensory information. For example, the hippocampus and amygdala provide the primary motivational circuit with emotionally salient information from episodic memory associated with a motivational stimulus while the hypothalamus provides less complex information related to instinctive behaviour such as feeding or reproduction. These structures are at the beginning of final development in adolescence, which explains why adolescents are more vulnerable to the development of behavioural addictions, including gambling disorder (19).

The primary motivational circuitry consists of the prefrontal cortex and the ventral striatum, which receive sensory information from the secondary motivational circuitry composed of hippocampus, amygdala, and hypothalamus.

Contrary to genetic and neurodevelopmental theory, there is a multitude of environmental factors impacting the occurrence of this mental illness. The most significant are the *availability* and *accessibility* of gambling, and therefore countries with greater availability and accessibility of



SLIKA 1. Neuronski motivacijski krugovi
FIGURE 1. Neural motivational circuitry

pojavu ove psihičke bolesti. Najvažniji od njih su *dostupnost i pristupačnost* kockanja pa tako zemlje s većom dostupnošću i pristupačnošću igrama na sreću imaju veću prevalenciju poremećaja kockanja (22). *Dostupnost* označava da postoje mjesta na kojima se priređuju igre na sreću u određenom području, a *pristupačnost* ističe mogućnost korištenja kockarskog sadržaja, npr. da je takva aktivnost zakonski dozvoljena punoljetnim osobama. Navedeni ekološki čimbenici ključni su za razvoj poremećaja kockanja, budući da bez njih i biološki predisponirani pojedinci nemaju mogućnost razvoja patološkog obrasca ponašanja. *Dostupnost* i *pristupačnost* potenciraju se javnom politikom i zakonodavstvom koji izravno i neizravno stvaraju okruženje u kojem se kockanje prihvaća, potiče i promovira na društvenoj razini (23). Također, pokazano je da je veća prevalencija kockanja u područjima gdje je konzumacija alkohola dostupnija što je povezano sa smanjenjem samokontrole pod utjecajem alkohola (22), ali isto tako ukazuje na komorbiditetnu povezanost ovisnosti o alkoholu i poremećaja kockanja (9,10,22). Nadalje, sama priroda igara na sreću pridonosi razvitku problema u vulnerabilnih pojedinaca. Gotovo sve igre na sreću funkcioniraju prema sistemu neposredne isplate što pojedinca može ohrabriti da ponovno zaigra igru koja mu je prethodno donijela dobitak. Iako se ovakav sistem igranja teško može smatrati uzrokom nastanka i održavanja ponavljajućeg kockarskog obrasca ponašanja, ipak utječe na veću prevalenciju društvenog kockanja u zajednici (22). Od okolišnih predisponirajućih čimbenika važna je obiteljska struktura pogođenog pojedinca pri čemu je zamijećeno da neuspjeh roditelja u uspostavljanju discipline i visoko vrednovanje materijalnih stvari u obitelji pridonose patološkom razvitku (12).

Također, *specifične osobine ličnosti* povećavaju vjerojatnost nastanka ovisnosti (12). Osobe s poremećajem kockanja sklonije su impulzivnim reakcijama i traženju uzbuđenja te teško izbjegavaju za njih štetne situacije (10,22). Impulzivnost se opisuje kao težnja za što bržim nagrađivanjem

gambling have a higher prevalence of gambling disorder (22). *Availability* hereby implies that places for gambling are available in a certain area whereas *accessibility* points to the possibility of using gambling content, e.g., adults are legally allowed to gamble. The above stated environmental factors are crucial for the development of gambling disorder because without them even biologically predisposed individuals do not have the possibility of developing a pathological behavioural pattern. *Availability* and *accessibility* are emphasized by public policies and legislation that directly and indirectly create an environment in which gambling is accepted, encouraged and promoted at the societal level (23). Also, it has been shown that the prevalence of gambling is higher in areas where alcohol consumption is more available, which is associated with reduced self-control under the influence of alcohol (22), but also indicates a comorbid relationship between alcohol use disorder and gambling disorder (9,10,22). Furthermore, the very nature of gambling contributes to the development of other problems in vulnerable individuals. Almost all forms of gambling function according to a direct payout system which might encourage an individual to gamble again. Although this system of gambling can hardly be considered the cause of the emergence and maintenance of repetitive gambling patterns of behaviour, it still affects the higher prevalence of social gambling in a community (22). The family structure of the affected individual is a significant environmental predisposing factor as it has been observed that the failure of parents to establish discipline and high valuation of material things in the family contribute to pathological development (12).

In addition to that, *specific personality traits* increase the likelihood of addiction (12). Individuals with gambling disorder are more likely to have impulsive reactions and seek excitement as they find it difficult to avoid situations that can cause them harm (10,22). Impulsiveness is described as a desire to receive a reward as quickly as possible - an individual finds it difficult to endure delayed gratification, acts without thinking about

i teškim podnošenjem odgođene gratifikacije, djelovanje bez promišljanja o posljedicama, neosjetljivost na negativne posljedice te teško podnošenje zabrana (12,22). Osobe s poremećajem kockanja pokazuju veću razinu uzbuđenja pri kockanju od ostalih igrača što se manifestira i tjelesnim znakovima kao npr. ubrzanim pulsom (22). Ovi pacijenti skloni su i kompulzivnosti što je težnja za ponavljanim izvođenjem neke radnje kako bi se smanjile teorijski negativne posljedice iako sama ta radnja može imati štetne posljedice. Zbog navedenog poremećaj kockanja i opsesivno-kompulzivni poremećaj (OKP) sličniji su, nego što se inače spominje u literaturi (10).

Prema *psihoanalitičkoj* teoriji poremećaj kockanja posljedica je poremećaja u procesu razvoja privrženosti (engl. *attachment).* Neadekvatno razvijena privrženost dovodi do emocionalne disregulacije koja se manifestira patološkim kockarskim ponašanjem (24). Pervazivni razvojni gubitak je temeljna odrednica kompulzivnog kockara što rezultira netolerancijom za predviđanjem budućih gubitaka, a žudnja za neprekidnim kockanjem je obrana od psihičke boli prouzročene razvojnim gubitkom prije samog početka kockanja (25). Također je aleksitimija, kao nedostatak razumijevanja, opisivanja i prepoznavanja vlastitih emocija (12), prisutna u osoba s poremećajem kockanja više nego u općoj populaciji (24). Navedeni je poremećaj, prema psihoanalitičarima, prisutan i u ostalim bolestima ovisnosti (26).

Kognitivno-biheviоralna teorija također nastoji objasniti podrijetlo poremećaja kockanja, koristeći se trima bitnim postavkama početka sudjelovanja u kockarskoj aktivnosti: negativnim emocionalnim stanjem, ponašajnim obrascima poput izbjegavanja suočavanja i kognitivnim zabludama o kockanju. Navedene postavke potvrđene su brojnim istraživanjima uzroka kockarskog ponašanja, a čini se da se navedene varijable međusobno isprepliću i da sve imaju podjednaku ulogu u nastanku poremećaja kockanja (22,27). Također, temelj su brojnim preventivnim programima namijenjenima adolescentima (28).

the consequences, has no sensitivity to negative consequences and finds it difficult to accept prohibitions (12,22). When gambling, individuals with gambling disorder express a higher level of excitement than other players, which is also manifested in physical signs such as rapid heart rate (22). These patients are also more inclined to compulsiveness, or the tendency to perform an action repeatedly in order to reduce consequences that are negative in theory, although the action itself might result in harmful consequences. Due to the above considerations, gambling disorder and obsessive-compulsive disorder (OCD) are more similar than it has been described in the literature (10).

According to *psychoanalytic* theory, gambling disorder is the result of a disorder in the process of attachment development. Inadequately developed attachment leads to emotional dysregulation manifested in pathological gambling behaviour (24). Pervasive developmental loss is a fundamental determinant of compulsive gambling resulting in intolerance to predict future losses whereas the craving for continuous gambling is a defence against the psychological pain caused by the developmental loss before gambling starts (25). Alexithymia, or the inability to understand, describe, and identify emotions experienced by oneself (12), is also more present in individuals with gambling disorder than in the general population (24). According to psychoanalysts, this disorder is also present in other addiction diseases (26).

Cognitive-behavioural theory also seeks to explain the origins of gambling disorder using three essential preconditions for early involvement in gambling activity: negative emotional state, behavioural patterns such as avoiding confrontation, and cognitive misconception about gambling. These assumptions have been confirmed by numerous studies on the causes of gambling behaviour. It appears that these variables are interlinked and all play an equally important role in the development of gambling disorder (22,27). They also form the basis for a number of prevention programmes for adolescents (28).

EPIDEMIOLOGIJA POREMEĆAJA KOCKANJA

Kockanje tisućljećima prožima različite kulture i društva. Osamdesetih godina prošlog stoljeća povećava se popularnost kockanja i značajno raste ukupni svjetski novčani dug nastao kockanjem (9). Zbog navedenog je kockanje 1980. godine uključeno u DSM. Tadašnji porast broja ovisnika posljedica je sve većeg prihvaćanja kockanja kao dijela stila života, širenja kockanja u područja gdje dotad kockarnice nisu postojale i globalizacijskih procesa čiji je primarni cilj zarada bez promišljanja o negativnom utjecaju na čovjeka (9). Bitan je čimbenik porasta broja ovisnika o kockanju razvoj tehnologije i novih proizvoda poput elektroničkih automata za kockanje koji su sve zastupljeniji od devedesetih godina prošlog stoljeća te omogućuju kockanje s početnim nižim novčanim ulozima (9). No, svakako se veliki doprinos širenju kockanja u posljednjem desetljeću mora pripisati mogućnosti *online* načina kockanja (9,29). Tako je u većini zemalja svijeta velika većina odraslih barem jednom sudjelovala u kockarskoj aktivnosti (30). Broj osoba koje pate od ovisnosti o kockanju posljednjih desetljeća još više raste te je današnja prosječna svjetska prevalencija u odrasloj populaciji 0,6 % (14), a prema nekim istraživanjima seže i do 10,6 % (5). Navedena diskrepanca između rezultata različitih epidemioloških istraživanja nastaje zbog zaista različite prevalencije kockanja u različitim dijelovima svijeta, ali i još uvijek nedovoljno usuglašenog instrumentarija i metodologije u procjeni učestalosti ove ovisnosti (14).

Muškarci češće imaju probleme s kockanjem od žena, međutim pojavnost i povezanost komorbiditetnih psihičkih poremećaja je izraženija kod žena. Naime, anksiozni i afektivni poremećaji češći su kod žena koje se javljaju na liječenje, dok kod ovisnosti o alkoholu i drugim PAT nema razlike između žena i muškaraca (14,32). Nadalje, studije provedene u zajednici pokazale su kako postojanje afektivnog ili anksioznog poremećaja može povećati rizik za kasniji razvoj poreme-

EPIDEMIOLOGY OF GAMBLING DISORDER

Gambling has been permeating different cultures and societies for millennia. In the 1980s, the popularity of gambling was on the rise and the total global monetary debt created by gambling increased significantly (9). Due to the above, gambling was included in the DSM in 1980. The increase in the number of addicts at the time was a consequence of the growing acceptance of gambling as part of lifestyle, the spread of gambling in areas where casinos had not existed before together with globalization processes whose primary goal was making profit without thinking about the negative impact on human lives (9). Another important factor related to the increase in the number of gambling addicts is the development of technology and new products such as electronic gambling machines, which have become more common since the 1990s and enable gambling with lower stakes initially paid (9). An even greater contributor to the spread of gambling over the past decade is definitely the possibility of online gambling (9,29). In most countries of the world, the vast majority of adults have participated in one of gambling activities at least once (30). The number of people suffering from gambling addiction has been growing even more in recent decades, and the current average global prevalence in the adult population is estimated to be 0.6% (14), and according to some studies it reaches as much as 10.6% (5). This discrepancy between the results of different epidemiological studies is due to a differing prevalence of gambling in different parts of the world but also to insufficiently harmonized tools and methodologies in estimating the frequency of this form of addiction (14).

Men are more likely to have gambling problems than women, however, the incidence and the association between comorbid mental disorders is more pronounced in women. To be specific, anxiety and affective disorders are more common in women who apply for treatment whereas alcohol use disorder and other PAS use disorders indicate no difference between women and men (14,32). Furthermore, community studies have shown that the presence of affective or anxiety disorder may

ćaja kockanja kod žena, ali ne i kod muškaraca (31,33,34).

Sve igre na sreću imaju određeni ovisnički ili adiktivni potencijal, ali taj je potencijal najveći kod igranja na aparatima, sportskog klađenja i ruleta. Obilježja ovih igara poput frekvencije događaja, mogućnosti manipuliranja ulozima, osjećaja da je dobitak blizu utječu na razvoj ovisnosti. Također, za sportsko klađenje potrebna je vještina što ovu igru čini iznimno popularnom. Nasuprot tome najmanje je ovisnika proizašlo iz ponavljajućeg igranja lutrijskih igara koje imaju niži adiktivni potencijal u odnosu na ostale igre na sreću (30).

Broj štetnih posljedica poremećaja kockanja je velik te približno jednak onima kod depresije i ovisnosti o alkoholu (9). Štetne su posljedice većinom uzrokovane financijskim problemima, utjecajem na emocionalne i obiteljske veze, oštećenjem zdravlja, nemogućnošću izvršavanja svakodnevnih aktivnosti (9,12). Nadalje, kao što je rečeno u uvodu, poremećaj kockanja je povezan s brojnim psihijatrijskim i organskim komorbiditetima (9), a suicidalne misli i ponašanje su 15 puta češći nego u općoj populaciji (35). Suicidne ideacije česte su u fazi gubitaka i u fazi očaja te kao posljedica reaktivnih depresivnih dekompenzacija ovisnika o kockanju (32,35). Štetne se posljedice vrlo često prenose transgeneracijski (31), a njihov teret većinom nose marginalizirane socijalne skupine te kockanje pridonosi socioekonomskoj bipolarnosti društva (5). Unatoč brojnim negativnim utjecajima, problem kockanja u većem dijelu svijeta nije dovoljno prepoznat kao javnozdravstveni problem (9).

EPIDEMIOLOGIJA PROBLEMATIČNOG KOCKANJA MEĐU ADOLESCENTIMA

Kockarska je aktivnost učestalija među adolescentima nego među odraslima pa je tako prosječna europska prevalencija problematičnog kocka-

increase the risk of later development of gambling disorder in women but not in men (31,33,34).

All games of chance have a certain addictive potential, however, this potential is highest in the case of gaming machines, sports betting and roulette. Some characteristics of these games, such as the frequency of events, the ability to manipulate stakes, and the feeling that the gain is close at hand strongly affect the development of addiction. Also, sports betting requires skill which makes this game extremely popular. In contrast to that, the smallest number of addicts is associated with repetitive playing of lottery games as they have lower addictive potential compared to other games of chance (30).

The number of harmful consequences related to gambling disorder is high and approximately equal to the number of consequences related to depression and alcohol use disorder and PAS use disorders (9). Harmful consequences are mostly caused by financial problems, the impact on emotional and family relationships, impaired health, and the inability to perform regular daily activities (9,12). As stated in the introduction, gambling disorder is associated with a number of psychiatric and organic comorbidities (9) and suicidal thoughts and behaviours are 15 times more common in this group than in the general population (35). Suicidal ideations are common in the losing phase and in the phase of despair and as a consequence of reactive depressive decompensation of gambling addicts (32,35). Harmful consequences are very often transmitted transgenerationally (31) and their burden is mostly borne by marginalized social groups. In that way, gambling contributes to the socio-economic bipolarity of society (5). Despite numerous negative impacts, the problem of gambling has not been sufficiently recognized as a public health problem in most of the world (9).

EPIDEMIOLOGY OF ADOLESCENT PROBLEM GAMBLING

Gambling is an activity that is more common among adolescents than among adults and the average prevalence of problem gambling in Eu-

nja (zbog neurorazvojnih karakteristika za poremećaj kockanja u adolescentno doba koristi se termin *problematično kockanje)* 4 % (36), dok je u jugoistočnoj i istočnoj Europi prevalencija i veća. Provedena istraživanja pokazala su kako 12,9 % adolescenata u Hrvatskoj ima ozbiljne psihosocijalne probleme uzrokovane kockanjem te isto toliko u Bosni i Hercegovini (28,37). Osamdesetih godina prošlog stoljeća igranje igara na sreću postaje sve popularnije među adolescentima pa je Lesieurovo istraživanje tada pokazalo da je 5,7 % adolescenata patoloških kockara (tadašnji DSM III upotrebljava termin *patološko kockanje*) (38). Slično ranije navedenoj studiji presječno istraživanje koje je obuhvatilo 1313 španjolskih adolescenata pokazalo je da je 4 % adolescenata rizičnih kockara, i da je 1,2 % problematičnih kockara (39). Najpogođeniji adolescenti pripadnici su etničkih manjina pa su u Sjedinjenim Američkim Državama najčešći adolescenti problematični kockari Afro-Amerikanci (40,41) i Hispanci (41), što između ostalog ide i u prilog pretpostavkama da kockanje može pridonijeti separaciji i bipolarnosti društva (5). Kockari adolescenti mogu se razvrstati u tri skupine s obzirom na frekvenciju kockanja i razvijene psihosocijalne posljedice: društveni kockari, kockari pod rizikom i problematični kockari. Muški adolescenti čine većinu u svim skupinama (28). Kao i kod odraslih, najzastupljenije su igre vještine poput sportskog klađenja (42). Adolescenti koji kockaju *online* imaju 1,5 puta veći rizik razviti problematično kockanje nego oni koji kockaju uživo u kockarnicama i kladionicama. Razlozi toga su veća dostupnost i anonimnost kod *online* kockanja. Nadalje, *online* se kockanje većinom provodi putem mobilnih aplikacija koje slabo ili nikako provjeravaju punoljetnost igrača (43), što potvrđuje manjkavu zakonsku regulativu ove ovisnosti za razliku od ovisnosti o alkoholu i ovisnosti o PAT (10). Nadalje, na društvenim mrežama postoje skupine podrške kockara (većinu na tim platformama čine mladi kockari) koje služe kao platforma za razmjenu savjeta o uspjehu u kockarskim igrama i pronalazak partnera u tim igrama (44).

rope (due to neurodevelopmental characteristics of adolescent gambling disorder the term "problem gambling" is used) is at 4% (36) with an even higher prevalence in Southeast and Eastern Europe. Research has shown that 12.9% of adolescents in Croatia and the same number of adolescents in Bosnia and Herzegovina have serious psychosocial problems caused by gambling (28,37). In the 1980s, gambling became increasingly popular among adolescents and Lesieur's research indicated that 5.7% of adolescents were pathological gamblers (at the time, DSM-III used the term "pathological gambling") (38). Similar to the previous study, a cross-sectional study of 1,313 Spanish adolescents found that 4% of adolescents were at-risk gamblers, and 1.2% were problem gamblers (39). Ethnic minorities are the most affected group among adolescents. In the United States, the most common problem gamblers are African-American (40, 41) and Hispanic adolescents (41), which supports the assumption that gambling can contribute to separation and bipolarity of society (5). Adolescent gamblers can be divided into three groups according to the frequency of gambling and the developed psychosocial consequences, i.e., social gamblers, risk gamblers and problem gamblers. Male adolescents make up the majority in all groups (28). As with adults, skill games such as sports betting are the most common (42). Adolescents who gamble online have a 1.5 times higher risk of developing problem gambling than those who gamble live in casinos or betting shops. This can be explained by greater availability and anonymity in online gambling. Furthermore, online gambling mostly takes place via mobile applications that check the age of players poorly or not at all (43), indicating that there is a lack of legislation on gambling addiction in contrast to the existing legislation on alcohol use disorder and PAS use disorders (10). Furthermore, there are gambling support groups on social media (the majority on these platforms are young gamblers) that serve as platforms for the exchange of tips on successful gambling practices and for finding partners in gambling games (44).

VULNERABILNE SKUPINE

Veći rizik za nastanak poremećaja kockanja imaju muškarci (dva puta veći rizik od žena), mlađe odrasle osobe i adolescenti, osobe s manjim prihodima i samci (9,14). Dodatni rizični čimbenici su život u visoko depriviranoj okolini, nedostatak osnovnog obrazovanja i nezaposlenost (9). Većina rizičnih skupina živi u naseljima s velikim brojem prodajnih mjesta (9). Protektivni čimbenici su roditeljski nadzor, pripadnost religiji (14) i razvijene vještine donošenja odluka i rješavanja problema (45).

VULNERABLE GROUPS

Man are exposed to a higher risk of gambling disorder (the risk is twice higher than in women), followed by younger adults, adolescents, low-income individuals and single persons (9, 14). Additional risk factors are associated with living in a highly deprived environment, lack of primary education and unemployment (9). Most at-risk groups live in settlements with a large number of outlets (9). Protective factors include parental control, religious affiliation (14) and developed decision-making and problem-solving skills (45).

OBILJEŽJA KOCKANJA ADOLESCENATA – SITUACIJA U HRVATSKOJ

Kockanje adolescenata razlikuje se od kockanja odraslih zbog razvojne specifičnosti adolescentske dobi. To je razdoblje povećanog traženja uzbuđenja i rizika kako bi se preuzela kontrola nad životom što stvara osjećaj ugode i veću vršnjačku prihvaćenost. Budući da je kockanje ponašajna ovisnost u kojoj su jedni od glavnih obilježja traženje uzbuđenja i sklonost riziku, ne iznenađuje činjenica da su adolescenti rizična skupina za razvoj ovog poremećaja (46).

Istraživanje u Hrvatskoj koje je obuhvatilo 261 srednjoškolca dobi između 13 i 19 godina pokazalo je da je 75 % adolescenata kockalo barem jednom u životu (46). Navedeno istraživanje pokazalo je i da kockanje više pogađa muške adolescente što je u skladu sa svjetskim podatcima. Oni više igraju one kockarske igre koje su povezane s rizikom razvoja problematičnog kockanja kao što su klađenje u sportskim kladionicama, kartanje, igre na elektronskim automatima, rulet, poker i klađenje na utrke konja. Razlike između djevojaka i mladića ne postoje u frekvenciji igranja onih igara koje ne dovode do razvoja problematičnog kockanja kao što su Loto, Bingo i jednokratne srećke (46). Prema dobivenim podatcima u ovoj studiji u Hrvatskoj

CHARACTERISTICS OF ADOLESCENT GAMBLING - SITUATION IN CROATIA

Adolescent gambling differs from adult gambling due to the uniqueness of the development in adolescence. Adolescence is a period marked with an increased interest for excitement and risk in order to gain control over one's life and this creates a sense of comfort and better acceptance by peers. Taking into account that gambling is a behavioural addiction, the main features of which are seeking excitement and an appetite for risk, it is not surprising that adolescents are one of the main risk groups for developing this disorder (46).

A study conducted in Croatia comprising 261 high school students between the ages of 13 and 19 found that 75% of adolescents had gambled at least once in their lifetime (46). This study also indicated that gambling affects male adolescents more, which is in line with the international evidence. Adolescents are more interested in the gambling games associated with the risk of developing problem gambling, such as sports betting, card games, slot machines, roulette, poker and horse race betting. There are no differences between girls and boys related to the frequency of playing the games that do not result in problem gambling, such as lotto, bingo and lottery tickets (46). The data obtained in the above mentioned

je između 20 % i 25 % rizičnih te između 7 % i 11 % problematičnih kockara adolescenata, što je značajno više nego u općoj populaciji, ali i više nego u zemljama u okruženju. Iako je ovo istraživanje pokazalo da ne postoji razlika u rizičnosti za razvoj problema povezanih s kockanjem između strukovnih škola i gimnazija (46), druga je studija također iz 2011. g. na 403 srednjoškolaca trećih razreda pokazala da učenici strukovnih škola češće kockaju od učenika u gimnazijama (8). Prosječna dob društvenih, rizičnih i problematičnih kockara je 16,5 godina što pokazuje veliko značenje provođenja prevencije već u osnovnoj školi. Najznačajniji je prediktor rizičnosti kockanja, prema navedenom istraživanju, sklonost uključivanju u druga rizična ponašanja, npr. krađe, razbojništva i rizično seksualno ponašanje. Iz toga proizlazi teza da različite vrste rizičnog ponašanja ne možemo promatrati zasebno, nego da postoji sindrom problematičnog ponašanja. Iz priloženog se vidi širina problema (čiji je dio i kockanje) te su potrebne sveobuhvatne terapijske i preventivne intervencije, koje će uključiti ne samo vulnerabilne skupine nego i roditelje te širu zajednicu (8,47).

Recentnije istraživanje u Hrvatskoj s puno većim uzorkom od 2702 srednjoškolaca iz sedam hrvatskih gradova potvrdilo je zaključke ranijeg istraživanja (48). I ovdje je najčešća vrsta kockanja među hrvatskim adolescentima sportsko klađenje, te je registrirano da kod čak 12,9 % adolescenata postoje ozbiljni psihosocijalni problemi povezani s kockanjem (28,42,48) što je svakako alarmantan i zabrinjavajući podatak (48). Rezultati navedenog istraživanja pokazuju da je čak 72,9 % učenika kockalo barem jednom u životu, što ukazuje u prilog značajnoj dostupnosti i pristupačnosti igara na sreću što pokazuje da se zakonska regulativa u RH nedovoljno poštuje. Nadalje, ova je studija pokazala da je zastupljenost problematičnog kockanja podjednaka u svim razredima. Dakle, mladi počinju intenzivno kockati i prije srednjoškolskog obrazovanja te njihovo kockanje vrlo brzo iz društvenog prelazi u problematično. Navede-

study indicate that between 20% and 25% of adolescents in Croatia are at-risk gamblers while between 7% and 11% are problem gamblers, which is significantly higher than in the general population and the neighbouring countries. Although this study pointed out that there is no difference in terms of risk of developing gambling-related problems between vocational schools and gymnasiums (46), another study from the year 2011 comprising 403 third-grade high school students found that vocational school students gambled more often than high school students (8). The average age of social, at-risk and problem gamblers is 16.5 years, indicating the importance of prevention already in primary schools. According to that study, the most important predictor of gambling risk is the inclination to engage in other risky behaviours, such as theft, robbery and risky sexual behaviour. Hence the thesis that different types of risky behaviour cannot be observed separately but that there is a syndrome of problematic behaviour. The presented findings point to the scope of the problem (part of which is gambling) and require comprehensive therapeutic and preventive interventions, including not only vulnerable groups but also parents and the broader community (8,47).

A more recent study conducted in Croatia on a much larger sample of 2,702 high school students from seven Croatian cities confirmed the conclusions of the earlier study (48). It also found that the most common type of gambling among Croatian adolescents is sports betting and that as many as 12.9% of adolescents have serious psychosocial problems related to gambling (28,42,48), which is certainly very alarming and worrying (48). The results of this study indicate that as many as 72.9% of students gambled at least once in their lives, confirming significant availability and accessibility of games of chance on the one hand, and an inadequate application of legislation in Croatia on the other. Furthermore, this study showed that the prevalence of problem gambling is the same in all school grades. Thus, young people start gambling intensively even before starting high school, and their gambling

no je zaista zabrinjavajuće, budući da je rani početak kockanja značajan rizični čimbenik za razvoj poremećaja kockanja u odrasloj dobi (48).

Smatra se kako bitnu ulogu u prevenciji nastanka problematičnog kockanja u adolescenata imaju stručni suradnici (pedagozi, psiholozi, knjižničari, rehabilitatori, logopedi, socijalni pedagozi) zaposleni u srednjim školama. Istraživanje u Hrvatskoj objavljeno 2020. godine pokazalo je da stručni suradnici podcjenjuju veličinu problema kockanja i da je njihova procjena prevalencije problematičnog kockanja daleko ispod one utvrđene u istraživanjima. To se može pripisati činjenici da se stručni suradnici rjeđe susreću s problematičnim kockanjem jer puno više radnog vremena provode s problemima kao što su konzumacija cigareta, ovisnosti o internetu i video-igricama, specifične teškoće učenja, konzumiranje alkohola, poremećaj s prkošenjem i suprotstavljanjem, depresija, vršnjačko nasilje, poremećaji ponašanja i ovisnost o PAT. Nadalje, profesionalci koji rade s mladima u školama više obraćaju pažnju na ona ponašanja koja su veći problem u školama s obzirom na njihov učinak na razrednu i školsku atmosferu, dok je poremećaj kockanja više skriven te postane vidljiv tek kada nastanu značajne posljedice. Također, problematično kockanje ne uzrokuje tjelesne simptome za razliku od ovisnosti o PAT-u (49). Puno češće od zaposlenika škole problematično kockanje otkriju članovi obitelji, budući da kockanje značajno narušava obiteljsku dinamiku (50). Iz navedenog proizlazi da je stručnjake zaposlene u školama potrebno dodatno educirati o karakteristikama i posljedicama poremećaja kockanja, budući da su oni ti koji imaju snažan utjecaj na psihosocijalni razvoj mladih (49).

Najznačajniji prediktori za težinu problematičnog kockanja adolescenata su učestalost kockanja, ustrajanje u kockanju zbog dobitka, iskustvo ranog dobitka većeg iznosa novca, specifična motivacija za kockanjem, kao npr. postizanje većeg zadovoljstva, zarađivanje,

very quickly turns from social to problem gambling. This is indeed worrying, as early gambling is a significant risk factor for the development of gambling disorder in adult age (48).

It is considered that other professionals (pedagogues, psychologists, librarians, rehabilitators, speech therapists, social pedagogues) employed in secondary schools have a very important role in preventing the occurrence of problem gambling in adolescents. A study conducted in Croatia and published in 2020 found that professional associates underestimate the size of the gambling problem and that their assessment of the prevalence of problem gambling is far below what the research has found. This can be attributed to the fact that professional associates are less likely to encounter problem gambling because they dedicate much more of their working time to problems such as cigarette consumption, internet and video gaming addiction, specific learning difficulties, alcohol consumption, oppositional defiant disorder, depression, peer violence, behavioural disorders and addiction to PAS. Furthermore, professionals working with young people in schools pay more attention to the behaviours that represent a big problem because of their impact on the atmosphere in classrooms and schools. Thus, gambling disorder remains concealed and emerges only when significant consequences occur. Furthermore, problem gambling does not cause physical symptoms unlike the addiction to PAS (49). Family members can discover problem gambling much more often than school employees because gambling significantly disrupts family dynamics (50). It follows from the above that professionals employed in schools need to be further educated about the characteristics and consequences of gambling disorder since they are the ones who can have a strong impact on the psychosocial development of young people (49).

The most important predictors of the severity of adolescent gambling problems are gambling frequency, persistence in gambling for gains, experience of earning more money early on in life, specific motivation to gamble, such as accomplishing greater satisfaction, earning, and

unaprjeđenje vještina kockanja (51). Nadalje, lošiji školski i akademski uspjeh, slabiji stupanj obrazovanja roditelja, postojanje psihijatrijskih komorbiditeta također su prediktori razvoja i težine problematičnog kockanja (52).

PSIHOSOCIJALNE POSLJEDICE KOCKANJA ADOLESCENATA

Životni ciljevi adolescenata koji kockaju i onih koji ne kockaju se razlikuju. Adolescenti koji ne kockaju više cijene osobni rast i razvoj, međuljudske odnose, životnu zajednicu i zdravlje. Oni skloni kockanju više cijene bogatstvo i životnu slavu (53).

Kockanje uzrokuje brojne posljedice za adolescenta, a najizraženije su one psihološke, socijalne i financijske. Najznačajnija je pozitivna korelacija prisutna između navedenih posljedica i adolescenata koji spadaju u skupinu problematičnih kockara, a manje kod rizičnih kockara. Kockanje ostavlja trag na psihičko zdravlje pa tako što je više vremena provedeno kockajući, to je veća pojavnost depresije i drugih bolesti ovisnosti. Adolescenti kockari su i lošijeg fizičkog zdravlja budući da su češće intoksicirani alkoholom i drugim PAT (51, 52). Kockanje promiče antisocijalno ponašanje pa su tako adolescenti kockari skloniji delinkventnom ponašanju i kršenju zakona (51). Iz navedenog je vidljivo da su posljedice adolescentnog kockanja slične posljedicama kockanja u odrasloj dobi (12).

LIJEČENJE POREMEĆAJA KOCKANJA

Liječenje poremećaja kockanja odraslih

Otprilike 10 % osoba koje boluju od poremećaja kockanja potraži nekakav oblik stručne pomoći (14). Muškarci potraže stručnu pomoć nakon duljeg razdoblja kockanja i u ranijoj životnoj

improving gambling skills (51). Furthermore, poorer school and academic performance, lower level of parent's education, and presence of psychiatric comorbidities are also important predictors of the development and severity of problem gambling (52).

PSYCHOSOCIAL CONSEQUENCES OF ADOLESCENT GAMBLING

Adolescents who gamble and those who do not gamble have very different life goals. Adolescents who do not gamble value personal growth and development, interpersonal relationships, community they live in and health. Adolescents prone to gambling value wealth and fame more (53).

Gambling results in many consequences for the adolescent, the most pronounced being psychological, social and financial. The most significant is the positive correlation between the above stated consequences and adolescents belonging to the group of problem gamblers, which is less expressed with at-risk gamblers. Gambling impacts mental health and the more time an individual spends gambling, the higher the incidence of depression and other addictive diseases. Adolescent gamblers are also in poorer physical health as they are more often intoxicated with alcohol and other PAS (51, 52). Gambling promotes antisocial behaviour and adolescent gamblers are thus more prone to delinquent behaviour and breaking the law (51). The above that the consequences of adolescent gambling are similar to the consequences of gambling at adult age (12).

TREATMENT OF GAMBLING DISORDER

Treatment of gambling disorder in adults

Approximately 10% of individuals with gambling disorder seek some form of professional help (14). Men seek professional help after a long period of

dobi nego žene (14). Razlozi traženja stručne pomoći su raznoliki, no kao najčešći su financijski i obiteljski razlozi ali i sukob sa zakonom (14,47). Provedena istraživanja pokazala su da su psihološke terapijske intervencije najučinkovitija metoda liječenja ove skupine bolesnika te da dovode do značajnog poboljšanja u kliničkoj slici. Unutar kategorije psiholoških terapijskih intervencija studije provedene u posljednjih nekoliko godina pokazuju najveću učinkovitost kognitivno-bihevioralnih tretmana (54-59), ali i učinkovitost tretmana temeljenih na motivacijskom intervjuu (60-62, 59).

Liječenje problematičnog kockanja adolescenata

Trenutno ne postoje znanstveno potvrđene smjernice za liječenje adolescenata koji su problematični kockari. Ipak, zabilježeni su uspjesi s programima temeljenima na kognitivnoj terapiji, budući da su kognitivne distorzije o kockarskom ponašanju značajan prediktor težine kockanja u adolescenata (36). Kognitivno-bihevioralna teorija pretpostavlja da pogrešna uvjerenja adolescenata (npr. nedostatak razumijevanja nezavisnosti događaja, percepcija vještine u uspješnom predviđanju slučajnih ishoda i događaja te druge iluzije kontrole) potiču njihovo ponavljajuće i kontinuirano kockarsko ponašanje. Međutim, za razliku od odraslih ovisnika o kockanju adolescenti su manje skloni potražiti stručnu pomoć, a kada potraže pomoć već su suočeni s teškim psihosocijalnim posljedicama kockanja (36). S obzirom na to da značajan postotak adolescenata najprije potraži pomoć *online*, grupe podrške koje bi se provodile *online* mogu biti vrlo korisne kao dodatna terapijska intervencija ove populacije bolesnika, ali samo kao dodatak strukturiranim terapijskim protokolima (36).

Istraživanja su pokazala da mnogi adolescenti počinju kockati zbog utjecaja vršnjaka pa su vještine otpornosti vršnjačkom pritisku i vje-

gambling and at an earlier age than women (14). The reasons for seeking professional help are varied, but the most common include financial and family reasons as well as conflict with the law (14,47). Research has shown that psychological therapeutic interventions are the most effective method of treating this group of patients as they lead to a significant improvement in the clinical picture. In the category of psychological therapeutic interventions, studies conducted in recent years indicate the greatest effectiveness of cognitive-behavioural treatments (54-59) as well as the effectiveness of treatments based on motivational interviews (60-62, 59).

Treatment of problem gambling in adolescents

There are currently no scientifically accepted guidelines for treating adolescent problem gamblers. Nevertheless, successes have been reported with programmes based on cognitive therapy, as cognitive distortions about gambling behaviour are a significant predictor of the severity of gambling disorder in adolescents (36). Cognitive-behavioural theory assumes that misconceptions among adolescents (e.g., lack of understanding of event independence, perception of skill in successfully predicting random outcomes and events, and other illusions of control) encourage their repetitive and continuous gambling behaviour. However, unlike adult gambling addicts, adolescents are less likely to seek professional help, and when they do seek help, they are already faced with the severe psychosocial consequences of gambling (36). Given that a significant percentage of adolescents first seek help online, support groups that would provide counselling online could be very useful as an additional therapeutic intervention for this patient population but only as an addition to the structured treatment protocols (36).

Research has found that many adolescents start to gamble because of peer influence and thus resistance to peer pressure and decision making and problem solving skills are the foundation of

štine poput donošenja adekvatnih odluka te rješavanja problema temelj efikasnim preventivnim i terapijskim programima za adolescente koji su problematični kockari (45, 28, 63).

PREVENCIJA RAZVOJA POREMEĆAJA KOCKANJA MEĐU ADOLESCENTIMA

Uzimajući u obzir visoku prevalenciju problematičnog kockanja u adolescentskoj dobi (36, 38,39) te rezultate istraživanja prema kojima je dob početka kockanja povezana s težinom kliničke slike (14,64), važno je preventivne programe provoditi u adolescenciji (28).

Postoje dvije osnovne vrste preventivnih modela poremećaja kockanja, a to su model smanjenja štetnih posljedica i model odgovornog kockanja. Model smanjenja štetnih posljedica je primarni preventivni program, koji se temelji na identificiranju rizičnih i protektivnih čimbenika te njihovoj redukciji odnosno jačanju. Najznačajniji protektivni faktor koji je u modelu naglašen je edukacija o rizičnom ponašanju i dugoročnim štetnim posljedicama kockanja. S druge strane, model odgovornog kockanja uključuje programe i strategije koji podižu svjesnost o štetnosti kockanja u zajednici i omogućuju lakši pristup liječenju. Ovaj model većinom obuhvaća osobe koje već imaju probleme s poremećajem kockanja te djeluje na razini sekundarne i tercijarne prevencije. U ovom modelu postoje smjernice koje ukazuju na to kada kockanje prestaje biti aktivnost iz zabave (rekreativno kockanje) i postaje poremećaj (tablica 1) (65).

Brojni su preventivni programi dizajnirani prema modelu smanjenja štetnih posljedica, ali tek malobrojni uzrokuju pozitivne promjene u ponašanju. Prvi program koji je to uspio bio je kanadski program ,,Naslagani špil'' (engl. *Stacked Deck*) Williamsa i suradnika. Sadržaj programa, sastavljen od 6 lekcija, kreirao je interdisciplinarni tim, a cilj je bio implementirati program u obliku interaktivnih diskusija i multimedijskih predavanja. Osim

effective prevention and treatment programmes for adolescent problem gamblers (45, 28, 63).

PREVENTION OF THE DEVELOPMENT OF GAMBLING DISORDER IN ADOLESCENTS

Given the high prevalence of problem gambling in adolescence (36,38,39) and the results of research according to which the age of onset of gambling is associated with the severity of the clinical picture (14,64), it is important to implement prevention programmes in adolescence (28).

There are two basic types of gambling disorder prevention models, i.e., the harm reduction model and the responsible gambling model. The harm reduction model is a primary prevention programme based on the identification of risks and protective factors and their reduction or strengthening. The most significant protective factor highlighted in this model is education on risky behaviour and long-term harmful effects of gambling. On the other hand, the responsible gambling model comprises programmes and strategies that raise awareness about harmful consequences of gambling in the community and facilitate access to treatment. This model mostly includes people who are already faced with problems associated with gambling disorder and functions at the level of secondary and tertiary prevention. This model also provides guidelines explaining when gambling ceases to be a fun activity (recreational gambling) and becomes a disorder (Table 1) (65).

Numerous prevention programmes have been designed according to the harm reduction model but only a few cause positive changes in behaviour. The first programme to do so was the Canadian Stacked Deck programme created by Williams *et al*. The content of the programme consisting of 6 lessons was created by an interdisciplinary team and the aim was to implement the programme in the form of interactive discussions and multimedia lectures. In addition

TABLICA 1. Smjernice odgovornog kockanja s ciljem prevencije relapsa poremećaja kockanja (65).
TABLE 1. Responsible gambling guidelines aimed at preventing gambling disorder relapse (65).

SMJERNICE ODGOVORNOG KOCKANJA / RESPONSIBLE GAMBLING GUIDELINES
1. Ne posuđuj novac za kockanje. / Don't borrow money for gambling.
2. Kockaj samo s viškom novca, ne kockaj s novcem koji je namijenjen za svakodnevne troškove. Ograniči kockarske troškove na 1 % od ukupnih prihoda. / Gamble only with excess money, do not gamble with money that is intended for everyday expenses. Limit gambling costs to 1% of total revenue.
3. Imaj i druge aktivnosti u slobodno vrijeme osim kockanja. / Have other leisure activities besides gambling.
4. Odredi si budžet novca namijenjen kockanju i nemoj ga prekoračiti. / Set yourself a budget of money designed for gambling and don't overspend it.
5. Ne koristi automate za kockanje kako bi nabavio dodatan novac za kockanje. / Don't use slot machines to get extra money to gamble.
6. Nemoj ganjati gubitke. Prihvati ih kao sastavni dio zabave. / Don't chase losses. Accept them as an integral part of the fun.
7. Kockaj zbog zabave. Ne shvaćaj kockanje kao izvor prihoda. / Gamble for fun. Don't perceive gambling as a source of income.
8. Zadaj si vremensko ograničenje za kockarske aktivnosti. Nemoj kockati više od tri puta mjesečno. / Give yourself a time limit on gambling activities. Don't gamble more than three times a month.
9. Ograniči si izloženost kontinuiranom načinu kockanja, npr. *online* načinima. / Limit your exposure to continuous gambling, e.g. online gambling.
Kockaj manje od navedenog ili ne kockaj uopće, ako: / Gamble less than the above stated or don't gamble at all, if: • se trenutno liječiš od poremećaja kockanja. / you're currently being treated for gambling disorder, • si depresivan/na ili imaš druge psihičke tegobe. / you're depressed or have other mental health problems, • si u financijskim problemima. / you're in financial trouble.

narni tim, a težnja je bila na samoj provedbi programa, odnosno na interaktivnim diskusijama i multimedijskim predavanjima. Osim što je cilj programa bio poboljšati znanje o kockanju i otkloniti kognitivne zablude o kockanju, program je nastojao poboljšati interpersonalne i intrapersonalne vještine koje su pokazane kao značajan protektivni čimbenik poput jačanja otpornosti nad vršnjačkim pritiskom, vještine rješavanja problema i vještine donošenja odluka. Evaluacija programa 2010. obuhvatila je 1686 kanadska srednjoškolca, a nastojalo se obuhvatiti sve učenike jedne generacije kako bi se kontrolirao i smanjio vršnjački pritisak za sudjelovanjem u kockarskim aktivnostima. Svaka lekcija trajala je jedan sat i trideset minuta te se program provodio kroz više tjedana (zadnja *booster* lekcija bila je nakon mjesec dana od pete lekcije), jer je učenje tijekom duljeg razdoblja bolje od opetovanih lekcija koje slijede jedna za drugom u kraćem vremenskom razdoblju. Evaluacija programa pokazala je statistički značajno bolje znanje, ispravljene kognitivne zablude, bolje interpersonalne i intrapersonalne vještine četiri mjeseca nakon

to improving knowledge and removing cognitive misconceptions about gambling, the objective of the programme was to improve interpersonal and intrapersonal skills, which have been found to be significant protective factors such as strengthening resilience to peer pressure, problem-solving and decision-making skills. The evaluation of the programme conducted in 2010 included 1,686 Canadian high school students. Its aim was to cover all students of one generation in order to control and reduce peer pressure related to participating in gambling activities. Each lesson lasted one hour and thirty minutes and the duration of the whole programme was several weeks (the last "booster" lesson took place one month after the fifth lesson) because learning over a longer period of time produces better results than repeated consecutive lessons over a shorter period of time. The evaluation of the programme showed statistically significantly improved knowledge, corrected cognitive misconceptions, and better interpersonal and intrapersonal skills four months after the implementation of the programme in comparison with the results of the pretest. However, the importance of this programme results from a statistically

provedbe programa u odnosu na rezultate pretestiranja. Međutim, važnost je ovog programa u statistički značajnom smanjenju frekvencije kockanja četiri mjeseca nakon provedbe programa i statistički značajnom smanjenju broja problematičnih kockara u *booster* grupi u odnosu na kontrolu (45).

Nadalje, hrvatski preventivni program ,,Tko zapravo pobjeđuje'' također je kvalitetan program prevencije namijenjen srednjoškolcima. Program se razvijao od 2012. do 2015., a tijekom tog vremena brojni stručnjaci su educirani za samu provedbu intervencije te je 2016. godine implementiran u hrvatske srednje škole obuhvaćajući 190 hrvatskih srednjoškolaca, njihove roditelje i profesore u školama. Cilj i sadržaj isti su kao i u kanadskom programu te je program učinkovit u statistički značajnom poboljšanju znanja i redukciji kognitivnih zabluda vezanih uz kockanje. Međutim, program tada nije uspio smanjiti broj problematičnih kockara (28, 37). Nakon ove pilot implementacije sadržaj programa modificiran je tako da je prilagođen uskom školskom kurikulu te je raspoređen u kraće, ali brojnije radionice. Modificirani program obuhvatio je 629 srednjoškolaca iz 18 hrvatskih gradova. Rezultati pokazuju da program statistički značajno povećava znanje o kockanju, statistički značajno smanjuje kognitivne zablude o kockanju, npr. iluziju kontrole, praznovjerje i netočne koncepte vjerojatnosti. Međutim, mali je statistički značajan pozitivan učinak programa na smanjenje učestalosti sudjelovanja u sportskom klađenju i igranju lutrije, a drugi učinak na ponašanje nije zabilježen (66). No, svakako je ovaj projekt temelj pozitivnim promjenama u kockarskim navikama hrvatskih srednjoškolaca, budući da na njemu radi interdisciplinarni tim koji kontinuirano unaprjeđuje sadržaj i metode provedbe programa (28,37).

Talijanski stručnjaci predlažu jeftin i efikasan preventivni program, koji bi provodili posebno educirani učitelji u srednjim školama. Glavni

significant reduction in gambling frequency four months after the programme implementation and a statistically significantly reduced number of problem gamblers in the booster group compared to the control group (45).

Furthermore, the Croatian prevention programme entitled "Who Actually Wins" is a quality prevention programme intended for high school students. The programme was developed from 2012 to 2015, and during that period many experts were trained to implement the intervention. In 2016, it was implemented in Croatian high schools with the participation of 190 Croatian high school students, their parents and teachers. The objective and content of the programme were the same as in the Canadian programme. The programme proved to be effective as it led to statistically significant improvement of knowledge and reduction of cognitive misconceptions related to gambling. However, at the time the programme failed to reduce the number of problem gamblers (28, 37). After the pilot implementation, the content of the programme was modified and adapted to a restricted school curriculum and divided into a series of shorter but more frequent workshops. The modified programme included 629 high school students from 18 Croatian cities. The results indicate that the programme statistically significantly increases knowledge about gambling and reduces cognitive misconceptions about gambling such as the illusion of control, superstition, and incorrect concepts of probability. However, there is a limited statistically significant positive effect of the programme on reducing the frequency of participation in sports betting and playing lotteries. No other effect on behaviour was found (66). However, this project is certainly the basis for positive changes in the gambling habits in Croatian high school students since an interdisciplinary team has been working on it continuously to improve the content and methods for its implementation (28,37).

Italian experts suggest a cheap and effective prevention programme, the implementation of which would be in the hands of specially educated high school teachers. The main objective of the programme is to influence knowledge about

cilj programa je utjecati na znanje o kockanju i promijeniti ponašanje vezano uz to isto. Stručnjaci smatraju da pozitivna interakcija između učitelja i učenika može tome pridonijeti više nego javnozdravstvene kampanje. Proveli su istraživanje o učinkovitosti navedenog programa koje je obuhvatilo 33 učitelja i 393 učenika. Program se odvijao u dva stupnja. Prvi je stupanj obuhvatio edukaciju učitelja koji će provoditi program. Edukacija je bila podijeljena na četiri modula koncipirana u obliku predavanja i diskusija s ciljem poboljšanja znanja o kockanju, spoznaje o štetnim posljedicama oglašavanja kockarskih aktivnosti, razrješenja zabluda vezanih uz kockanje. Četvrti je modul najvažniji, jer uči učitelje kako prepoznati problematično kockanje među njihovim učenicima. Idući stupanj je bio provjera kvalitete edukativnog programa za učitelje, odnosno primjena naučenog u praksu. Istraživanje je pokazalo da je preventivni program snažno pozitivno promijenio znanje i ponašanje učenika vezano uz kockanje, a najveći rezultat programa je što je zaista smanjio broj učenika u grupi problematičnih kockara i osoba pod rizikom. Program ima dugotrajan učinak budući da je završno ispitivanje provedeno sedam mjeseci nakon zadnjeg dana programa. Učenici koji su prošli program pokazuju i manji stupanj kognitivnih distorzija i uvjerenja u zablude o kockanju. Ovaj je program drugačiji od drugih, jer ističe važnost edukacije učitelja kao glavnih nositelja borbe protiv ovisnosti adolescenata. Ograničenje ovog programa jest to što je manjina učitelja prihvatila rad u ovom projektu što znači da se mora poraditi na motiviranosti učitelja kako bi program bio još učinkovitiji. Nadalje, potrebno je uključiti i educirati druge bitne osobe u životima adolescenata, npr. roditelje, kako bi prevencija bila kompletna. Međutim, unatoč ograničenjima ovaj program je pokazao da se ne mora težiti skupim programima kako bi se postigla učinkovita prevencija već je potrebno educirati osobe koje su svaki dan u kontaktu s mladima pa samim

gambling and change the behaviour related to gambling. Experts believe the positive interaction between teachers and students can contribute to this more than public health campaigns. A study on the effectiveness of this programme was conducted including 33 teachers and 393 students. The programme was organized in two stages. The first stage included the education of teachers who would implement the programme. The training was divided into four modules in the form of lectures and discussions with the aim of improving knowledge about gambling, harmful effects of advertising gambling activities, and resolving misconceptions related to gambling. The fourth module is the most important because it educates teachers how to recognize problem gambling among their students. The next stage involves checking the quality of the training programme for teachers, i.e., the application of what has been learnt in practice. The study found that the prevention programme had a strong positive impact on the knowledge and behaviour of students in relation to gambling. The most important result of the programme is the fact that it in fact reduced the number of students in the group of problem gamblers and at-risk individuals. The programme has a long-lasting effect, which was evidenced in the final evaluation conducted seven months after the last day of the programme. Students who had passed the programme also showed a lower degree of cognitive distortions and beliefs in gambling misconceptions. This programme is different from other programmes because it emphasizes the importance of educating teachers as the main actors in the fight against adolescent addiction. The limitation of this programme is related to the fact that a minority of teachers have accepted to participate in the project, leading to a conclusion that the motivation of teachers should be further developed in order to make the programme even more effective. Furthermore, it is necessary to involve and train other individuals that play an important role in the lives of adolescents, e.g., parents, to make the prevention complete. However, despite its limitations, this programme showed that programmes do not have to be expensive in order to achieve effective prevention. Instead, it

time mogu najviše promijeniti njihove navike i razmišljanja (67).

Većina programa za ciljnu skupinu ima srednjoškolce, a malobrojni programi imaju studente na fakultetima. Međutim, i takvi programi imaju potencijal biti učinkoviti. Program Kinga i Hardyja temelji se na osnivanju tima zvanog Akcijski tim za kockanje (engl. *Gambling Action Team*, GAT) koji je sastavljen od brojnih stručnjaka koji organiziraju simpozije o kockanju, grupe savjetovanja za studente s poremećajem kockanja, kreiraju internetske stranice s ciljem podizanja svijesti o štetnosti kockanja, surađuju s medijima i predstavnicima vlasti. Ovakvi su programi obećavajući jer obuhvaćaju gotovo sve aspekte povezane s razvojem ovisnosti: samo-osvješćivanje, razvoj vještina, edukaciju, medijski utjecaj. Međutim, koliko je autoricama dostupno, ne postoji evaluacija ovog programa u literaturi, što je ograničavajući čimbenik u daljnjoj implementaciji ovog programa (63).

ZAKLJUČAK

Poremećaj je kockanja od velikog javnozdravstvenog značenja zbog visoke prevalencije i psihosocijalnih posljedica koje uzrokuje. Osobe s poremećajem kockanja zapostavljene su u usporedbi s ostalim ovisnicima. Naime, puno je manje literature o poremećaju kockanja nego literature o ovisnosti o alkoholu ili PAT. Naravno, to je s jedne strane opravdano jer je puno više ovisnika o alkoholu, zatim drugi oblici ovisnosti uzrokuju teške fizičke simptome te je ova ovisnost puno manje zanimljiva s forenzičkog aspekta. Međutim, ako problem sagledamo s perspektive u kojoj je poremećaj kockanja komorbiditetan s drugim psihičkim i tjelesnim bolestima, da su brojni adolescenti problematični kockari, da broj ovisnika o kockanju raste zbog kontinuiranog razvijanja načina kockanja *online*, da zakonski okvir u RH koji zabranjuje maloljetnicima sudjelovanje u igrama na sreću nije adekvatan, onda uviđamo da su potrebne

is necessary to educate those who are in everyday contact with young people and can thus have the biggest impact on young people's habits and ways of thinking (67).

Most programmes are targeted at high school students and only a few programmes focus on college students. However, those programmes have the potential to be effective as well. King and Hardy introduced a programme based on the establishment of a team called the Gambling Action Team (GAT) that consists of a number of experts who organize gambling symposia, counselling groups for students with gambling disorder, create websites to raise awareness about the dangers of gambling and collaborate with the media and government officials. Programmes like this are promising as they cover almost all aspects related to the development of addiction: self-awareness, development of skills, education, and media influence. However, as far as the authors of this paper know, there is no evaluation of this programme in the literature, which is a limiting factor for its further implementation (63).

CONCLUSION

Gambling disorder is a matter of great public health concern due to its high prevalence and the psychosocial consequences it causes. Individuals with gambling disorder are neglected compared to other groups of addicts. Namely, there is much less literature available on gambling disorder than on alcohol use disorder or PAS. Of course, this is to a certain degree justified, as there are many more alcohol addicts. Also, other forms of addiction cause severe physical symptoms, which makes this addiction much less interesting from a forensic point of view. Nevertheless, if we look at the problem from the perspective according to which gambling disorder is comorbid with other mental and physical illnesses, that many adolescents are problem gamblers, that the number of gambling addicts is growing due to the continuous development of online gambling, that the legal framework in the Republic of Croatia gambling is not adequate, we come to a conclusion

jasne javnozdravstvene strategije koje će spriječiti daljnju eskalaciju problema. U budućnosti je potrebno staviti naglasak na razvijanje kvalitetnih preventivnih programa koji će biti usmjereni prema vulnerabilnim skupinama podložnima razvoju problematičnog kockanja i poremećaja kockanja. Kao što je rečeno, stvaranje preventivnog programa složen je proces. Dugotrajni i sveobuhvatni programi (primjer su kanadski preventivni program „Naslagani špil" te hrvatski preventivni program „Tko zapravo pobjeđuje") temelj su kvalitetne primarne prevencije (68). Na temelju spoznaja iz spomenutih programa potrebno je u budućnosti razvijati preventivne intervencije koje će obuhvatiti sve aspekte razvoja ovisnosti – od individualnog razvoja pojedinca, obiteljskog i socijalnog okruženja do zakonodavstva uz multidisciplinsku i interdisciplinsku suradnju raznih profesionalaca te podršku politike.

that distinct public health strategies are needed to prevent further escalation of the problem. In the future, it is necessary to emphasize the development of quality prevention programmes aimed at vulnerable groups susceptible to the development of problem gambling and gambling disorder. As mentioned above, creation of a prevention programme is a complex process. Long-term and comprehensive programmes (e.g., the Canadian prevention programme named "Stacked Deck" and the Croatian prevention programme named "Who Actually Wins") are the foundations of quality primary prevention (68). Based on the knowledge gained from the above mentioned programmes, it is necessary to develop preventive interventions in the future that will include all aspects of addiction development, ranging from individual development, family and social environment to legislation together with multidisciplinary and interdisciplinary cooperation between various professionals and policy support.

LITERATURA / *REFERENCES*

1. American Psychiatric Association. What is Gambling Disorder. Preuzeto 6. veljače 2021. s: https://www.psychiatry.org/patientsfamilies/gambling-disorder/what-is-gambling-disorder.
2. Folnegović-Šmalc V. MKB-10 Klasifikacija mentalnih poremećaja i poremećaja ponašanja: klinički opisi i dijagnostički vodič, 10 revizija. Zagreb: Medicinska naklada, 1999.
3. Jukić V, Arbanas G. Dijagnostički i statistički priručnik za duševne poremećaje – peto izdanje (DSM-5). Jastrebarsko: Naklada Slap, 2014.
4. World Health Organization. International Classification of Diseases for Mortality and Morbidity Statistics (11th ed). Preuzeto 6. veljače 2021. s: https://icd.who.int/browse11/l-m/en.
5. Subramaniam M, Wang P, Soh P, Vaingankar JA, Chong SA, Browning CJ *et al*. Prevalence and determinants of gambling disorder among older adults: A systematic review. Addict Behav 2015; 41: 199-209. Preuzeto 11. vejače 2021. s: doi-:10.1016/j.ad dbeh.2014.10.007.
6. Glavak Tkalić R, Miletić G, Sučić I. Igranje igara na sreću u hrvatskom društvu. Zagreb: Institut društvenih znanosti Ivo Pilar, 2017.
7. Odame SK, Quarshie ENB, Oti-Boadi M, Arthur JA, Asante KO. Adolescent Problem Gambling in Rural Ghana: Prevalence and Gender Differentiation. J Gambl Stud 2021; 37: 83-105. Preuzeto 23. veljače 2021. s: https://doi.org/10.1007/s10899-020-0 9987-6.
8. Dodig D, Ricijaš N. Kockanje zagrebačkih adolescenata – uloga psihopatskih osobina, rizičnog i delinkventnog ponašanja. Krim Soc Integr 2011; 19(2): 45-55. Preuzeto 23. veljače 2021. s: https://hrcak.srce.hr/77210.
9. Abbott M. The epidemiology and impact of gambling disorder and other gambling-related harm. Discussion Paper developed for the WHO Forum on Alcohol, Drugs and Addictive Behaviours. Preuzeto 23. veljače 2021. s: https://www.who.int/docs/default- sou rce/substance-use/the-epidemiology-and-impact-of-gambling-disorder-and-other-gambling-relate-harm.pdf?sfvrsn=5901c849_2.
10. Yau YHC, Potenza MN. Gambling disorder and other behavioral addictions: Recognition and treatment. Harv Rev Psychiatry 2015; 23(2): 134-46. Preuzeto 23. veljače 2021. s: doi :10.1097/HRP.000000000 0000051.
11. Erickson L, Molina CA, Ladd GT, Pietrzak RH, Petry NM. Problem and pathological gambling are associated with poorer mental and physical health in older adults. Int J Geriatr Psychiatry 2005; 20(8): 754-9. Preuzeto 23. veljače 2021. s: doi:10.1002/gps. 1357.
12. Begić D, Jukić V, Medved V. Psihijatrija. Zagreb: Medicinska naklada, 2015.
13. Globan T, Rogić-Dumančić L, Ricijaš N, Omazić MA. Ekonomski i društveni troškovi ovisnosti o kockanju u Hrvatskoj-druga strana medalje. Ljetop Soc Rada 2021; 28(1): 37-70.

14. Potenza MN, Balodis IM, Derevensky J, Grant JE, Petry NM, Verdejo-Garcia A *et al*. Gambling disorder. Nat Rev Dis Prim 2019; 5(1): 51. Preuzeto 23. veljače s: doi:10.1038/s41572-019-0099-7.
15. Peters J, Vega T, Weinstein D, Mitchell J, Kayser A. Dopamine and risky decision-making in gambling disorder. eNeuro 2020; 7(3): 1-13. Preuzeto 23. veljače s: doi: 10.1523/ENEURO.0461-19.2020.
16. Cormier F, Muellner J, Corvol JC. Genetics of impulse control disorders in Parkinson's disease. J Neural Transm 2013; 120: 665-71. Preuzeto 23. veljače 2021. s: https: //doi.org/ 10.1007/s00702-012-0934-4.
17. Wolfschlag M, Håkansson A. Increased risk for developing gambling disorder under the treatment with pramipexole, ropinirole, and aripiprazole: A nationwide register study in Sweden. PLoS One 2021; 16(6): e0252516. Preuzeto 6. prosinca 2021. s: doi: 10.1371 /jour nal.pone.0252516.
18. Zoratto F, Romano E, Pascale E, Pucci M, Falconi A, Dell'Osso B *et al*. Down-regulation of serotonin and dopamine transporter genes in individual rats expressing a gambling-prone profile: A possible role for epigenetic mechanisms. Neuroscience 2017; 340: 101-16. Preuzeto 23. veljače 2021. s: doi:10.1016/j.neuroscien ce.2016.10.041.
19. Chambers RA, Taylor JR, Potenza MN. Developmental neurocircuitry of motivation in adolescence: a critical period of addiction vulnerability. Am J Psychiatry 2003; 160(6): 1041-52. Preuzeto 23. veljače 2021. s: doi:10.1176/appi.ajp.160.6.1041.
20. Chambers RA, Potenza MN. Neurodevelopment, impulsivity, and adolescent gambling. J Gambl Stud 2003; 19(1): 53-84. Preuzeto 23. veljače 2021. s: doi:10.1023/A:102 1275130071.
21. Kalivas PW, Churchill L, Romanides A. Involvement of the pallidal-thalamocortical circuit in adaptive behavior. Ann N Y Acad Sci 1999; 877: 64-70. Preuzeto 23. veljače 2021. s: doi:10.1111/j.1749-6632.1999. tb09261.x.
22. Sharpe L. A reformulated cognitive - Behavioral model of problem gambling: A biopsychosocial perspective. Clin Psychol Rev 2002; 22(1): 1-25. Preuzeto 23. veljače 2021. s: doi:10.1016/S0272-7358(00)00087-8.
23. Blaszczynski A, Nower L. A pathways model of problem and pathological gambling. Addiction 2002; 97(5): 487-99. Preuzeto 6. prosinca 2021. s: doi: 10.1046/j.1360-0443.2002.00015.x.
24. Di Trani M, Renzi A, Vari C, Zavattini GC, Solano L. Gambling Disorder and Affect Regulation: The Role of Alexithymia and Attachment Style. J Gambl Stud 2017; 33(2): 649-59. Preuzeto 23. veljače 2021. s: doi:10.1007/s10899-016-9637-3.
25. Whitman-Raymond R.G. Pathological gambling as a defense against loss. J Gambling Stud 1988; 4: 99-109. Preuzeto 1. ožujka 2021. s: https://doi.org/10.1007/BF01020106.
26. Alvarez-Monjaras M, Mayes LC, Potenza MN, Rutherford HJV. A developmental model of addictions: integrating neurobiological and psychodynamic theories through the lens of attachment. Attach Hum Dev 2019; 21(6): 616-37. Preuzeto 1. ožujka 2021. s: doi: 10.1080/14616734.2018.149 8113.
27. Raylu N, Oel TP, Loo JMY, Loo JMY, Tsai JS. Testing the Validity of a Cognitive Behavioral Model for Gambling Behavior. J Gambl Stud 2016; 32: 773-88. Preuzeto 1. svibnja 2021. s: https://doi.org/10.1007/s10899-015-9567-5.
28. Huic A, Kranzelic V, Dodig Hundric D, Ricijas N. Who Really Wins? Efficacy of a Croatian Youth Gambling Prevention Program. J Gambl Stud 2017; 33(3): 1011-33. Preuzeto 11. svibnja 2021. s: doi: 10.1007/s10899-017-9668-4.
29. Abbott MW. The changing epidemiology of gambling disorder and gambling-related harm: public health implications. Public Health 2020; 184: 41-5. Preuzeto 11. svibnja 20 21. s: doi:10.1016/j.puhe.202 0.04.003.
30. World Health Organization. Addictive Behaviours. Preuzeto 11. svibnja 2021. s: https://www.who.int/health-topics/addictive-behaviour#tab=tab_1
31. Black DW, Shaw M. The Epidemiology of Gambling Disorder. In: Heinz A, Romanczuk-Seiferth N, Potenza M. (ur.) Gambling Disorder. Cham: Springer, 2019.
32. Håkansson A, Durand-Bush N, Kenttä G. Problem Gambling and Problem Gaming in Elite Athletes: a Literature Review. Int J Ment Health Addict 2021: 1-17. Preuzeto 6. prosinca 2021. s: doi: 10.1007/s11469-021-00692-y. Epub ahead of print.
33. Blanco C, Hasin DS, Petry N, Stinson FS, Grant BF. Sex differences in subclinical and DSM-IV pathological gambling: results from the National Epidemiologic Survey on Alcohol and Related Conditions. Psychol Med 2006; 36(7): 943-53. Preuzeto 6. prosinca 2021. s doi: 10.1017/S0033291706007410.
34. Desai RA, Potenza MN. Gender differences in the associations between past-year gambling problems and psychiatric disorders. Soc Psychiatry Psychiatr Epidemiol 2008; 43(3): 173-83. Preuzeto 6. prosinca 2021. s: doi: 10.1007/s00127-007-0283-z.
35. Karlsson A, Håkansson A. Gambling disorder, increased mortality, suicidality, and associated comorbidity: A longitudinal nationwide register study. J Behav Addict 2018; 7(4): 1091-9. Preuzeto 11. svibnja 2021. s: doi: 10.1556/2006.7.2018.112.
36. Floros GD. Gambling disorder in adolescents: prevalence, new developments, and treatment challenges. Adolesc Health Med Ther 2018; 9 :43-51. Preuzeto 11. svibnja 2021. s:https://www.dovepress.com/gambling-disorder-in-adolescents-prevalence-new- d evelopments-and-treat-peer-reviewed-fulltext-article-AHMT.
37. Ricijaš N. Program prevencije kockanja mladih „Tko zapravo pobjeđuje?". Preuzeto 29. lipnja 2021. s: http://docplayer.rs/188408337-Program-prevencijekockanja-mladih-tko-zapravo-pobje%C4%91uje.html.
38. Lesieur HR., Klein R. Pathological gambling among high school students. Addict Behav 1987; 12(2): 129-35. Preuzeto 29. lipnja 2021. s: https://doi.org/10.1016/0306- 4 603(87)90019-0.
39. González-Roz A, Fernández-Hermida JR, Weidberg S, Martínez-Loredo V, Secades-Villa R. Prevalence of problem gambling among adolescents: a comparison across modes of access, gambling activities, and levels of severity. J Gambl Stud 2017; 33(2): 371-82.
40. Simmons JL, Whelan JP, Meyers AW, Wickwire EM. Gambling Outcome Expectancies and Gambling Behavior Among African-American Adolescents: Gender as a Moderating Variable. J Gambl Stud 2016; 32(1): 205-15. Preuzeto 29. lipnja 2021. s: doi: 10.1007/s108 99-015-9521-6.

41. Parham BR, Robertson C, Lever N, Hoover S, Palmer T, Lee P, Willis K *et al*. Enhancing the Relevance and Effectiveness of a Youth Gambling Prevention Program for Urban, Minority Youth: A Pilot Study of Maryland Smart Choices. J Gambl Stud 2019; 35(4): 1249-67. Preuzeto 29. lipnja 2021. s: doi: 10.1007/s10899-018-9797-4.
42. Ricijaš N, Dodig Hundrić D, Kranželić V. Sportsko klađenje i druga rizična ponašanja hrvatskih srednjoškolaca. Hrvat Rev Za Rehabil Istraz 2015; 51(2): 41-56. Preuzeto 23. srpnja 2021. s: https://hrcak.srce.hr/150117.
43. Wong IL, So EM. Internet gambling among high school students in Hong Kong. J Gambl Stud 2014; 30(3): 565-76. Preuzeto 23. srpnja 2021. s: https://doi.org/10.1007/s10899-013-9413-6.
44. Törrönen J, Samuelsson E, Gunnarsson M. Online gambling venues as relational actors in addiction: Applying the actor-network approach to life stories of online gamblers. Int J Drug Policy 2020; 85: 102928. Preuzeto 23. srpnja 2021. s doi: 10.1016/j.drugpo.2020.102 928.
45. Williams RJ, Wood RT, Currie SR. Stacked Deck: an effective, school-based program for the prevention of problem gambling. J Prim Prev 2010; 31(3): 109-25. Preuzeto 29. srpnja 2021. s: doi: 10.1007/s10935-010-0212-x.
46. Dodig D, Ricijaš N. Obilježja kockanja Zagrebačkih adolescenata. Ljetop Soc Rada 2011; 18(1): 103-25.
47. Kovačić Petrović Z, Bodor D. Nove ovisnosti-ovisnost o ponašanju. In: Jukić V i sur. (ed.) Hrvatska psihijatrija početkom 21. stoljeća. Zagreb: Medicinska naklada, 2018, str. 56-65.
48. Ricijaš N, Dodig Hundrić D, Huić A, Kranželić V. Kockanje mladih u Hrvatskoj – učestalost igranja i zastupljenost problematičnog kockanja. Kriminologija Soc Integr 2016; 24(2): 24-47. Preuzeto 1. kolovoza 2021. s: doi:10.31299/ksi.24.2.2.
49. Mandić S, Lamešić L, Ricijaš N. Kockanje mladih iz perspektive stručnih suradnika u srednjim školama. Školski Vjesn 2020; 69(2): 349-71. Preuzeto 1. kolovoza 2021. s: doi:10.38003/sv.69.2.12.
50. Valentine G. Literature review of children and young people's gambling. Preuzeto 1. kolovoza 2021. s: http://www.jogo-remoto.pt/docs/extra/GmOVqC.pdf.
51. Dodig D. Izazovi procjene i odrednice izraženosti psihosocijalnih posljedica kockanja adolescenata. Kriminologija Soc Integr 2013; 21(2): 1-14. Preuzeto 23. srpnja 2021. s: https:// hrcak.srce.hr/114585.
52. Livazović G, Bojčić K. Problem gambling in adolescents: what are the psychological, social and financial consequences? BMC Psychiatry 2019; 19: 308. Preuzeto 1. kolovoza 2 021. s: https://doi.org/10.1186/s12888-019-2293-2.
53. Bilić V. Životni ciljevi adolescenata sklonih kockanju. Život i škola 2012; 58(27): 77-91. Preuzeto 1. kolovoza 2021. s: https:// hrcak.srce.hr/83166.
54. Toneatto T, Ladoceur R. Treatment of pathological gambling: a critical review of the literature. Psychol Addict Behav 2003; 17(4): 284-92. Preuzeto 6. prosinca 2021. s: doi: 10.1037/0893-164X.17.4.284.
55. Petry NM, Ammerman Y, Bohl J, Doersch A, Gay H, Kadden R *et al*. Cognitive-behavioral therapy for pathological gamblers. J Consult Clin Psychol 2006; 74(3): 555-67. Preuzeto 6. prosinca 2021. s: doi: 10.1037/0022-006X.74.3.555.
56. Jiménez-Murcia S, Álvarez-Moya E, Granero R, Neus Aymami M, Gómez-Peña M, Jaurrieta N *et al*. Cognitive–behavioral group treatment for pathological gambling: analysis of effectiveness and predictors of therapy outcome. Psychotherapy Research 2007; 17(5): 544-552. Preuzeto 6. prosinca 2021. s: doi: 10.1080/10503300601 158822.
57. Carlbring P, Maurin L, Törngren C, Linna E, Eriksson T, Sparthan E *et al*. Individually tailored Internet-based treatment for anxiety disorders: A randomized controlled trial. Behav Res Ther 2010; 49: 18–24. Preuzeto 6. prosinca 2021. s: https:// www.researchgate.net/publication/257586108_Guided_Internet-Based_CBT_for_ Common_Mental_Disorders.
58. Rizeanu, S. Pathological Gambling Treatment – Review. Procedia Soc Behav Sci 2015; 187: 613-18. Preuzeto 6. prosinca 2021. s: https://doi.org/10.1016/j.sbspro.2015.03. 114.
59. Garcia-Caballero, A, Torrens-Lluch M, Ramirez-Gendrau I, Garrido G, Valles V, Aragay N. The efficacy of Motivational Intervention and Cognitive-Behavioral Therapy for Pathological Gambling. Adicciones 2018; 30: 21.
60. Cowlishaw S, Merkouris S, Dowling N, Anderson C, Jackson A, Thomas S. Psychological therapies for pathological and problem gambling. Cochrane Database Syst Rev 2012; 11: CD008937. Preuzeto 6. prosinca 2021. s: doi: 10.1002/14651858. CD0089 37.
61. Thomas K, Derenne A, Weatherly J. Delay and probability discounting in the context of gambling function and expectancies. J Gambl Issues 2015; 30: 35-56.
62. Yakovenko I, Quigley L, Hemmelgarn BR, Hodgins DC, Ronksley P. The efficacy of motivational interviewing for disordered gambling: systematic review and meta-analysis. Addict Behav 2015; 43: 72-82. Preuzeto 6. prosinca 2021. s: doi: 10.1016/j. addbeh.2014. 12 .011.
63. Oh BC, Ong YJ, Loo JMY. A review of educational-based gambling prevention programs for adolescents. Asian J Gambl Issues Public Heal 2017; 7(1): 4. Preuzeto 1. kolovoza 2021. s: doi:10.1186/s40405-017- 0024-5
64. Canale N, Griffiths MD, Vieno A, Siciliano V, Molinaro S. Impact of internet gambling on problem gambling among adolescents in Italy: Findings from a large-scale nationally representative survey. Comput Hum Behav 2016; 57: 99-106. Preuzeto 1. kolovoza 2021. s: http://doi.org/10.1016/j.chb.2015.12.020.
65. Ariyabuddhiphongs V. Problem Gambling Prevention: Before, During, and After Measures. Int J Ment Health Addict 2013; 11(5): 568-82. Preuzeto 1. kolovoza 2021. s: doi:10.1007/s11469-013-94292.
66. Dodig Hundric D, Mandic S, Ricijas N. Short-Term Effectiveness of the Youth Gambling Prevention Program "Who Really Wins?"—Results from the First National Implementation. Int J Environ Res Public Health 2021; 18: 10100. Preuzeto 6. prosinca 2021. s: doi 10.3390/ijerph181910100.
67. Tani F, Ponti L, Ghinassi S, Smorti M. A gambling primary prevention program for students through teacher training: an evidence-based study. Int Gambl Stud 2021; 00 (00): 1-23. Preuzeto 1. kolovoza 2021. s: doi:10.1080/14459795.2020.18 61056.
68. Tomašić L. Prevencija ovisnosti o kockanju [Diplomski rad]. Zagreb: Sveučilište u Zagrebu, Medicinski fakultet; 2021.

Zabrinutost za oblik i tjelesnu težinu, suzdržavanje u prehrani i kognitivni obrasci hranjenja hrvatskih adolescenata

/ Shape and Weight Concern, Dietary Restraint and Cognitive Eating Patterns in Croatian Adolescents

Alessandra Pokrajac-Bulian[1], Simona Calugi[2], Petra Anić[1], Miljana Kukić[1], Tamara Mohorić[1], Nataša Damjanić[1]

[1]Sveučilište u Rijeci, Filozofski fakultet, Odsjek za psihologiju, Rijeka, Hrvatska; [2]Villa Garda Hospital, Odsjek za poremećaje hranjenja i tjelesnu težinu, Verona, Italija

/ [1]*University of Rijeka, Faculty of Humanities and Social Sciences, Department of Psychology, Rijeka, Croatia;* [2]*Villa Garda Hospital, Department of Eating and Weight Disorders, Verona, Italy*

ORCID ID: https://orcid.org/0000-0001-9142-5781 (A. Pokrajac-Bulian)
ORCID ID: https://orcid.org/0000-0002-4028-1877 (S. Calugi)
ORCID ID: https://orcid.org/0000-0001-8841-5988 (P. Anić)
ORCID ID: https://orcid.org/0000-0002-1822-7807 (M. Kukić)
ORCID ID:https://orcid.org/0000-0002-5274-1850 (T. Mohorić)

Cilj je ovoga istraživanja bio ispitati simptomatologiju poremećaja hranjenja i njezin odnos s kognitivnim obrascima hranjenja, indeksom tjelesne mase (ITM) i spolom u hrvatskih adolescenata. Istraživanjem je obuhvaćen 649 sudionika, od čega je 50,4% bilo mladića. Svi sudionici bili su učenici prvih razreda srednjih škola u dobi od 14 do 16,5 godina, koji su popunjavali upitnike u školskim ambulantama tijekom redovnog zdravstvenog pregleda. Adolescentice su pokazale više simptoma poremećaja hranjenja i češću uporabu kognitivnih obrazaca hranjenja u usporedbi s adolescentima. Nadalje, adolescenti s većim ITM-om također su izvijestili o više simptoma poremećaja hranjenja i kognitivnoga suzdržavanja. Zaključno, kognitivni obrasci hranjenja i povezana psihopatologija poremećaja hranjenja relevantne su karakteristike hrvatskih adolescenata, uglavnom kod djevojaka s višim ITM-om.

***/** The aim of this study was to examine eating disorder symptomatology and its relationship with cognitive eating patterns, body mass index (BMI) and sex in Croatian adolescents. This study included 649 participants, of which 50.4% were boys. All of the participants were first-grade high school students with ages ranging from 14 to 16.5 years who completed the questionnaires in the medical centre during their regular health examination. Female adolescents showed more eating disorder symptoms and more frequent use of cognitive eating patterns than male adolescents. Additionally, adolescents with a higher BMI also reported more eating disorder symptoms and cognitive restraint. In conclusion, cognitive eating patterns and associated eating disorder psychopathology are relevant features in Croatian adolescents, mainly among female subjects with a higher BMI.*

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*
Prof. dr. sc. Alessandra Pokrajac-Bulian
Sveučilište u Rijeci, Filozofski fakultet
Odsjek za psihologiju
Sveučilišna avenija 4
51 000 Rijeka, Hrvatska
E-pošta: pokrajac@ffri.uniri.hr

KLJUČNE RIJEČI / *KEY WORDS*:
Poremećaji hranjenja / *Eating Disorders*
Kognitivni obrasci hranjenja / *Cognitive Eating Patterns*
Indeks tjelesne mase / *Body Mass Index*
Adolescenti / *Adolescents*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2021.202

UVOD

Poremećaji hranjenja i kontrola tjelesne mase uobičajena su ponašanja kod adolescenata različitih etničkih i sociodemografskih skupina (1). Pretjerano naglašavanje mršavosti u većini socijalnih sredina čini se čimbenikom koji u većoj mjeri pridonosi porastu prevalencije odstupajućih ponašanja i navika hranjenja (2). S druge strane, porast raširenosti pretilosti i njezinih zdravstvenih posljedica također je povezan sa zabrinutošću za težinu i oblik tijela, što nadalje dovodi do vrlo problematičnih ponašanja vezanih uz hranjenje (3).

Pritisak na mršavost puno je veći za žene negoli za muškarce, a percipirana idealna slika tijela postaje progresivno sve sitnija, dok trenutna prosječna tjelesna masa postaje sve viša, a pokušaji smanjenja tjelesne mase sve učestaliji (4). Opisana dinamika svakako pridonosi porastu raširenosti poremećaja hranjenja kod mladih žena i osoba koje su prekomjerno teške. Godine 2018., prosječno je, gotovo 20 % petnaestogodišnjaka u zemljama EU bilo preuhranjeno ili pretilo, što predstavlja značajan porast u odnosu na podatke iz 2010. godine (5). Istraživanje iz 2008. godine pokazuje da se 27,5 % adolescenata u Hrvatskoj procjenjuje "previše debelima", a taj postotak raste s dobi tako da se na taj način procjenjuje 38,9 % petnaestogodišnjakinja i 16,6 % petnaestogodišnjaka (6). Istraživanje objavljeno 2020. godine, koje je uključivalo 26 zemalja EU, pokazalo je da od 2002. do 2014. godine postoji značajan porast ponašanja usmjerenih na redukciju tjelesne težine kod adolescenata oba spola u Hrvatskoj (7) te je zabilježen značajan porast tih ponašanja sa 6,2 % na 11,9 %, posebno kod adolescenata višega ITM-a. Istraživanja na hrvatskim adolescentima češće se provode u sklopu komparativnih studija koje uključuju druge EU zemlje ili SAD, te se pretežito bave prevalencijom preuhranjenosti i pretilosti, dok istraživanja o simptomima poremećaja hranjenja u hrvatskih adolescenata, nisu tako česta.

Slijedom navedenoga, cilj je ovoga istraživanja procijeniti psihopatologiju poremećaja hranje-

INTRODUCTION

Disordered eating and weight-control behaviours are common among adolescents in ethnically and socioeconomically diverse samples (1). The excessive emphasis on thinness in most societies seems to be a major contributing factor to the increased prevalence of disordered eating attitudes and behaviours (2). On the other hand, the increase in obesity and its health consequences is also related to weight and shape concerns that, in turn, can produce problematic eating behaviours (3).

For women, the social pressure to be thin is higher than for men, and the perceived ideal body image has become progressively smaller while the actual mean body size has progressively become larger, and attempts to lose weight have increased (4). Such a dynamic might contribute to the increase in disordered eating among young women and individuals who are overweight. In 2018, on average, almost 20% of 15-year-olds were either overweight or obese across EU countries, which was an increase compared to 2010 (5). A survey conducted in 2008 shows that 27.5% of adolescents in Croatia evaluated themselves as "too fat", and this percentage increases with age, with 38.9% of 15-year-old girls and 16.6% of 15-year-old boys are self-assessing in this way (6). A study published in 2020, which included 26 EU countries, showed that in Croatia between 2002 and 2014 there was a significant increase in behaviours aimed at weight reduction in adolescents of both sexes (7) with an increase from 6.2% to 11.9% especially visible in adolescents of higher BMI. Research on Croatian adolescents is more often conducted as part of comparative studies involving other EU countries or the United States, and mainly deals with the prevalence of overweight and obesity, while research on of eating disorder symptoms is less common.

Thus, the aim of this study was to assess eating disorder psychopathology and eating pat-

nja i obrasce hranjenja te ispitati povezanost ovih značajki s indeksom tjelesne mase (ITM) i spolom u hrvatskih adolescenata, polaznika prvih razreda srednje škole.

METODA

Sudionici i postupak

Adolescenti (*N* = 649), od kojih 321 djevojka (49,5 %) i 328 mladića (50,40 %) ispunili su niz upitnika tijekom redovitih sistematskih (preventivnih) pregleda koje svake godine organizira Nastavni zavod za javno zdravstvo Primorsko-goranske županije (PGŽ) za učenike prvih razreda srednjih škola. Učenici su prosječne dobi 15 godina (*SD* = 0,32, raspona 14 do 16,5 godina). Tijekom zdravstvenih pregleda izmjerena je visina i težina učenika, te je izračunat indeks tjelesne mase [ITM - težina (kg)/visina (m)^2]. Istraživanje je provedeno u razdoblju prije javljanja pandemije COVID-19, od veljače do ožujka 2020. godine.

Prije liječničkog pregleda, učenici su obavili kraći razgovor s liječnikom školske medicine, te su prikupljene sljedeće informacije: uzimanje lijekova, ranija psihoterapija, kronične bolesti te provođenje dijete u cilju smanjenja tjelesne mase. Svi učenici koji su pristupili sistematskom (preventivnom) pregledu ispunili su ponuđene upitnike. Osim što su učenici za sudjelovanje u istraživanju dali svoj pristanak, o istraživanju su roditelji, ravnatelji i nastavnici informirani pismom koje je upućeno na adrese svih srednjih škola u Primorsko-goranskoj županiji.

Mjerni instrumenti

Upitnik simptoma poremećaja hranjenja (*Eating Disorder Examination Questionnaire* – EDE-Q, verzija 6.0) korišten je u ovom istraživanju za procjenu mogućih psihopatoloških ponašanja i simptoma poremećaja hranjenja u posljednjih 28 dana (8). Upitnik uključuje četiri različite podljestvice: *Suzdržavanje, Zabrinutost za hra-*

terns and to examine the relationship between these features and body mass index (BMI) and gender in Croatian adolescents attending first-grade high school.

METHODS

Participants and Procedure

Adolescents (*N* = 649), of which 321 girls (49.5%), and 328 boys (50.40%) completed questionnaires during regular preventive health examinations organized by the Institute of Public Health of Primorje-Gorski Kotar County (PGKC) every year and included first-grade high school students. They were mean age of 15 years (*SD* = 0.32, range 14 to 16.5 years). The height and weight of the students were measured during the examination, and the body mass index was calculated [BMI; weight (kg)/height (m)^2]. The study was conducted in the period prior to the COVID-19 pandemic, from February to March 2020.

Prior to the medical examination, the students had a short conversation with the school doctor, and the following information was collected: taking medications, previous psychotherapy, chronic illness, and dieting for weight loss. All students who approached the medical (preventive) examination, filled in the offered questionnaires. In addition to the students' consent to participate in the research, parents, school principals and teachers were informed about the research by a letter sent to all high schools in the Primorje-Gorski Kotar County.

Instruments

The *Eating Disorder Examination Questionnaire* (EDE-Q) version 6.0 was used in this study to assess possible eating disorder psychopathology and behaviours in the participants over the previous 28 days (8). The measure provides four attitudinal subscale scores: *Re-*

straint, *Eating Concern*, *Shape Concern*, and *Weight Concern*. An overall global score is expressed as the mean of the four subscale scores. Participants estimate the frequency or severity of specific cognitive, affective, and behavioural characteristics on a 7-point ordinal response (0 = *no days* – 6 = *every day*; 0 = *none of the time* – 6 *every time*; or 0 = *not at all* – 6 = *markedly*) scale. The 6 remaining items measure the frequency of specific behaviours. In particular, the participants were asked to provide the number of days or episodes in which they had experienced overeating, objective binge eating, self-induced vomiting, laxative misuse, and/or excessive exercising. In our sample, Cronbach's alphas were satisfactory for all subscales and the total score, ranging from .75 to .94.

The Croatian version of *the Three-Factor Eating Questionnaire* (TFEQ-R18), containing 18 items divided into 3 subscales, examining cognitive restraint, uncontrolled eating, and emotional eating, was used (9,10). The Cognitive restraint subscale of the latter refers to the constant and global restraint from eating instead of using hunger and satiety as eating regulators, as the goal of such behaviour is weight control. The Uncontrolled eating subscale measures tendencies to overeat with a sense of loss of control, while Emotional eating refers to the tendency to eat in response to negative emotions. In our sample, the reliability was satisfactory and ranged from .75 to .83.

Statistical analysis

Data are presented as the mean and standard deviation (*SD*) or as numbers and percentages, as appropriate. A t-test for independent variables was used to compare gender differences. Moreover, the relationship between BMI, EDE-Q and TFEQ-R18 was examined using Pearson correlation coefficients separately for boys and girls. To examine whether there were differences in the measured variables depend-

njenje, Zabrinutost za težinu te Zabrinutost za oblik tijela. Ukupni rezultat dobiva se zbrajanjem rezultata svih podljestvica i dijeljenjem dobivene vrijednosti brojem podljestvica (četiri). Sudionici procjenjuju učestalost ili težinu kognitivnih, afektivnih i ponašajnih karakteristika na ordinalnoj ljestvici od 7 stupnjeva (0 = *niti jedan dan* – 6 = *svaki dan*; 0 = *niti jednom* – 6 *svaki put* ili 0 = *uopće ne* – 6 = *značajno*). Šest preostalih čestica, koje ne čine podljestvice, mjeri učestalost specifičnih ponašanja. Posebno se sudionici pitaju o broju dana ili epizoda u kojima su doživjeli objektivna prejedanja uz gubitak kontrole, imali samoizazvana povraćanja, zlorabljali laksative i/ili pretjerano vježbali. U našem je uzorku Cronbach alfa zadovoljavajući za sve četiri podljestvice i za ukupan rezultat na upitniku, te se kreće u rasponu od .75 do .94.

Hrvatska verzija Trofaktorskog upitnika obrazaca hranjenja (*Three-Factor Eating Questionnaire* – TFEQ-R18) sadrži 18 čestica koje čine tri podljestvice, te ispituje: *Kognitivno suzdržavanje, Nekontrolirano jedenje i Emocionalno jedenje* (9,10). Podljestvica Kognitivno suzdržavanje odnosi se na kontinuirano i potpuno suzdržavanje od hranjenja umjesto korištenja osjećaja sitosti i gladi u njegovoj regulaciji, a u cilju kontrole težine. Podljestvica Nekontrolirano jedenje mjeri sklonost k prejedanju uz osjećaj gubitka kontrole nad hranom, dok se Emocionalno jedenje odnosi na tendenciju k jedenju zbog doživljavanja negativnih emocija. Na našem je uzorku pouzdanost zadovoljavajuća, te se kreće u rasponu od .75 do .83.

Statističke analize

Podatci su prikazani kao prosječne vrijednosti i standardne devijacije (*SD*) ili kao brojevi i postotci ako je to primjerenije. Kako bi se usporedile spolne razlike korišten je t-test za nezavisne varijable. Povrh toga, odnos između ITM-a, EDE-Q-a i TFEQ-R18 provjeren je korištenjem Pearsonovog koeficijenta korelacije, posebno za mladiće i djevojke. Kako bi se provjerilo postojanje razlika

u ispitanim varijablama s obzirom na tjelesnu masu sudionika (pothranjenost, normalna tjelesna masa, preuhranjenost i pretilost) korištena je analiza varijance (ANOVA) uz kontrolu spola.

REZULTATI

Prosječan ITM sudionika iznosi 22,49 (*SD* = 4,38), u rasponu od 12,38 do 47,59. U uzorku je 2,5 %, 74,9 %, 11,7 % i 10,9 % sudionika klasificirano redom kao pothranjeno, normalne tjelesne mase, preuhranjeno i pretilo. Većina je adolescenata normalne težine, ali je relativno visok postotak mladića i djevojaka koji su preuhranjeni ili pretili. Oko 23 % djevojaka i 22 % mladića ima prekomjernu tjelesnu masu.

Teorijski raspon pubertalnog statusa sudionika kreće se od 1 (*nije razvijen*) do 5 (*potpuno razvijen*). Prosječna je vrijednost 4,69 (medijan i mod = 5). U uzorku je redom 0.5 %, 30.1 % i 69.4 % sudionika klasificirano u 3., 4. i 5. pubertalni stadij. Prosječna dob javljanja menarhe u uzorku djevojaka iznosi 12,53 godina (*SD* = 1,25). Osim toga, jedna od djevojaka u uzorku navodi trenutno korištenje oralne kontracepcije.

Analizom dodatnih karakteristika sudionika utvrdili smo da 3 sudionika izvještavaju o ranijem psihoterapijskom tretmanu zbog poremećaja hranjenja; 30 ih navodi kroničnu bolest (4 dijabetes i 26 ostale bolesti = 4,6 %); 4 navodi korištenje farmakoterapije koja može izazvati porast tjelesne mase (0,6 %); dok 32 aktivno provodi dijetu u cilju smanjenja tjelesne mase (4.9 %).

Spolne razlike pokazuju da su EDE-Q i TFEQ-R18 podljestvice te ukupan rezultat na upitnicima viši u uzorku djevojaka nego mladića (tablica 1).

Korelacijske analize pokazuju umjerenu povezanost ITM-a i kognitivnog suzdržavanja iz TFEQ-R18 upitnika u oba uzorka. Korelacije emocionalnoga jedenja i nekontroliranoga jedenja iz TFEQ-18 upitnika s ITM-om različite su za mladiće i djevojke. Naime, na uzorku mladića

ing on the weight of the participants (underweight, normal weight, overweight and obesity), we also performed an analysis of variance (ANOVA) controlling for gender.

RESULTS

The average BMI was 22.49 (*SD* = 4.38), ranging from 12.38 to 47.59. In the sample, 2.5%, 74.9%, 11.7%, and 10.9% of participants were classified as underweight, normal weight, overweight, and obese, respectively. Most adolescents had a normal weight, but a relatively large percentage of both boys and girls were either overweight or obese. Approximately 23% of girls and 22% of boys were classified as having excess body weight.

The theoretical range of the pubertal status of participants ranges from 1 (*not developed*) to 5 (*fully developed*). The mean value was estimated at 4.69 (median and mode = 5). There were 0.5%, 30.1%, and 69.4% of participants classified as stage 3, 4 and 5, respectively. The mean age of menarche onset in the female sample was 12.53 years (*SD* = 1.25). Moreover, one girl reported currently taking an oral birth control pill.

When we analysed the additional characteristics, we found that 3 participants reported previously undergoing psychotherapy for an eating disorder; 30 reported a chronic illness (4 diabetes and 26 other illnesses = 4.6%); 4 reported pharmacological therapies that could cause weight gain (0.6%); and 32 were dieting trying to induce a weight loss (4.9%).

Gender differences indicated that the EDE-Q and TFEQ-R18 subscale and global scores were significantly higher in the female sample than in the male sample (Table 1).

Correlation analysis showed that BMI and TFEQ-R18 cognitive restraint were moderately correlated in both subsamples. TFEQ-R18 emotional eating and uncontrolled eating had

TABLICA 1. Spolne razlike u TFEQ-R18 i EDE-Q, ukupni rezultat i rezultati na podljestvicama
TABLE 1. Gender Differences in TFEQ-R18 and EDE-Q, global and subscale scores

	Ukupni uzorak / Whole sample		Djevojke / Females		Mladići / Males		*t*
	M	*SD*	*M*	*SD*	*M*	*SD*	
Emocionalno jedenje – TFEQ-R18 / Emotional Eating – TFEQ-R18	1.40	0.64	1.58	0.75	1.23	0.44	7.02**
Nekontrolirano jedenje – TFEQ-R18 / Uncontrolled Eating – TFEQ-R18	1.69	0.56	1.77	0.60	1.62	0.50	3.20**
Kognitivno suzdržavanje – TFEQ-R18 / Cognitive Restraint – TFEQ-R18	1.89	0.79	1.69	0.68	1.58	0.59	2.14*
Suzdržavanje – EDE-Q / Restraint – EDE-Q	0.82	1.19	0.95	1.32	0.70	1.01	2.66**
Zabrinutost za hranjenje – EDE-Q / Eating Concern – EDE-Q	0.45	0.80	0.60	0.94	0.31	0.58	4.75**
Zabrinutost za oblik tijela – EDE-Q / Shape Concern – EDE-Q	1.28	1.40	1.72	1.58	0.85	1.05	8.01**
Zabrinutost za težinu – EDE-Q / Weight Concern – EDE-Q	1.05	1.30	1.41	1.49	0.70	0.94	7.32**
EDE-Q – Ukupni rezultat / EDE-Q – Global score	0.95	1.09	1.15	1.15	0.64	0.76	6.57**
Upitnik simptoma poremećaja hranjenja, *n* (%) ako je dostupno / **Eating Disorder Examination Questionnaire**, n (%) if present							
Epizode objektivnoga prejedanja / Objective binge eating episodes	150 (23.5%)		85 (26.8%)		64 (20%)		
Samoizazvano povraćanje / Self-induced vomiting	32 (5.0%)		16 (5.0%)		16 (4.9%)		
Zlouporaba laksativa / Laxative misuse	24 (3.7%)		9 (2.8%)		15 (4.6%)		
Pretjerano vježbanje / Excessive exercise	160 (25.2%)		75 (25.5%)		85 (26.6%)		

Bilješka. TFEQ-R18: Trofaktorski upitnik obrazaca hranjenja; EDE-Q: Upitnik simptoma poremećaja hranjenja / *Note. TFEQ-R18: Three-Factor Eating Questionnaire; EDE-Q: Eating Disorder Examination Questionnaire*
* p <.05, ** p < .01.

nismo dobili povezanost između ITM-a i nekontroliranoga jedenja, dok je korelacija u djevojaka negativna i niska, iako statistički značajna (r = -.13, p < .05), dok emocionalno jedenje i ITM nisu u korelaciji kod djevojaka, a kod mladića su u značajnoj pozitivnoj, iako niskoj korelaciji (r =.14, p < .05). Korelacijski obrasci za kognitivno hranjenje mjereno upitnikom TFEQ-R18 i rezultati dobiveni na EDE-Q (na pojedinim podljestvicama i ukupnom rezultatu) jednaki su za oba spola, osim što je emocionalno jedenje iz TFEQ-R18 snažnije povezano sa zabrinutošću za hranjenje iz EDE-Q, dok je kognitivno suzdržavanje iz TFEQ-R18 snažnije povezano sa zabrinutošću za oblik tijela iz EDE-Q (tablica 2).

Usporedbom adolescenata različite uhranjenosti (isključili smo kategoriju pothranjenih s obzirom da je sadržavala mali broj sudionika) dobiveno je da se skupine međusobno značajno razlikuju u suzdržavanju iz EDE-Q upitnika (F(2, 606) = 21,62, p < .01; η^2=.07). Korištenjem SNK post

different correlation patterns with respect to BMI for boys and girls. In fact, we found no correlation between BMI and uncontrolled eating in boys and a significant negative but low correlation coefficient (r=-.13, p<.05) in girls, whereas emotional eating and BMI were not correlated in girls, but in boys, we obtained a significant, positive, and low correlation (r=.14, p <.05). The pattern of correlations of TFEQ-R18 cognitive eating and EDE-Q (subscales and global score) was the same for both genders, with TFEQ-R18 emotional eating strongly related to EDE-Q eating concerns and TFEQ-R18 cognitive restraint with EDE-Q shape concern (Table 2).

The comparison among weight categories (excluding the underweight category that had a very small number of respondents) indicated that the groups differed significantly in EDE-Q restraint (F(2, 606) = 21.62, p <.01; η^2=.07). Based on the SNK post hoc test, we found that

TABLICA 2. Pearsonovi koeficijenti korelacije mjerenih varijabli za mladiće (iznad dijagonale) i djevojke (ispod dijagonale)
TABLE 2. Pearson Correlation Coefficients of the Measured Variables for males (upper part) and females (lower part)

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10
1.	Dob / Age	-	-.04	.09	.02	-.01	.01	.08	-.01	-.02	.04
2.	ITM / BMI	-.02	-	.14*	-.03	.39**	.39**	.28**	.43**	.43**	.49**
3.	Emocionalno jedenje – TFEQ-R18 / Emotional Eating – TFEQ-R18	-.05	.02	-	.36**	.19**	.16**	.40**	.29**	.28**	.30**
4.	Nekontrolirano jedenje – TFEQ-R18 / Uncontrolled Eating – TFEQ-R18	-.12*	-.13*	.57**	-	.05	.01	.26**	.17**	.13*	.13**
5.	Kognitivno suzdržavanje – TFEQ-R18 / Cognitive Restraint – TFEQ-R18	.00	.26**	.01	.13*	-	.64**	.32**	.48**	.53**	.60**
6.	Suzdržavanje – EDE-Q / Restraint – EDE-Q	.04	.25**	.15*	.08	.73**	-	.44**	.54**	.57**	.75**
7.	Zabrinutost za hranjenje – EDE-Q / Eating Concern – EDE-Q	-.14*	.13*	.41**	.37**	.49**	.59**	-	.60**	.59**	.72**
8.	Zabrinutost za oblik tijela – EDE-Q / Shape Concern – EDE-Q	.01	.35**	.35**	.26**	.56**	.60**	.67**	-	.88**	.93**
9.	Zabrinutost za težinu - EDE-Q / Weight Concern - EDE-Q	-.05	.37**	.31**	.22**	.56**	.61**	.69**	.91**	-	.92**
10.	EDE-Q – Ukupni rezultat / EDE-Q –Global score	-.04	.37*	.32**	.24**	.66**	.78**	.80**	.95**	.94**	-

Bilješka. ITM: Indeks tjelesne mase; TFEQ-R18: Trofaktorski upitnik obrazaca hranjenja; EDE-Q: Upitnik simptoma poremećaja hranjenja / *Note. BMI: Body Mass Index; TFEQ-R18: Three-Factor Eating Questionnaire; EDE-Q: Eating Disorder Examination Questionnaire*
* p < .05, ** p < .01.

hoc testa, pronašli smo da sudionici koji su preuhranjeni (AS=1,32) i pretili (AS=1,43) imaju na toj varijabli više rezultate u odnosu na one normalne tjelesne mase (AS=0.66). Osim toga, adolescenti s pretilošću (AS=0,75) imaju značajno viši rezultat na podljestvici zabrinutosti za hranjenje iz EDE-Q upitnika (F(2, 599) = 7.50, p < .01; η^2=.02) u usporedbi sa sudionicima normalne tjelesne mase (AS=0,39). Nadalje, adolescenti s pretilošću (AS=2,02 u odnosu prema AS=1,59 za preuhranjene i AS=0,83 za one normalne težine) imaju najviši rezultat na EDE-Q podljestvici zabrinutosti za težinu (F(2, 588) = 34.43, p < .01; η^2=.10). Također i kod zabrinutosti za oblik tijela (F(2, 584) = 30.74, p < .01; η^2=.10) adolescenti s pretilošću imaju najviše rezultate (AS=2,26), a prate ih preuhranjeni adolescenti (AS=1,86) te oni normalne tjelesne mase (AS=1,.06). Konačno, dobiven je i zanimljiv rezultat u vezi kognitivnog suzdržavanja iz TFEQ-R18 koji je značajno niži u adolescenata normalne tjelesne mase (AS=1,77) u usporedbi s adolescentima koji su preuhranjeni (AS=2,28) i pretili (AS=2,29) (F(2, 586) = 24,01, p < .01; η^2=.08), dok za ostale dvije podljestvice nisu dobivene razlike.

subjects with overweight (AS=1.32) and obesity (AS=1.43) had significantly higher scores than normal weight subjects on this variable (AS=0.66). Moreover, adolescents with obesity (AS=0.75) had a significantly higher score on the EDE-Q eating concerns subscale (F(2, 599) = 7.50, p <.01 η^2=.02) than participants with a normal weight (AS=0.39). Furthermore, adolescents with obesity (AS=2.02 in comparison to AS = 1.59 for overweight, and AS = 0.83 for those of normal weight) had the highest score for the EDE-Q weight concern (F(2, 588) = 34.43, p <.01; η^2=.10). Additionally, in regard of body shape concerns (F (2, 584) = 30.74, p <.01; η2 = .10), adolescents with obesity have the highest scores (AS = 2.26), followed by overweight adolescents (AS = 1.86), and those of normal body weight (AS = 1.06). Finally, TFEQ-R18 cognitive restraint was significantly lower in adolescents with a normal body weight (AS=1.77) than in those with overweight (AS=2.28) and obesity (AS=2.29) (F(2, 586) = 24.01, p <.01; η^2=.08), while on the remaining two subscales, there were no differences.

RASPRAVA

Cilj je ovoga istraživanja bio ispitati odstupajuća ponašanja i psihopatologiju poremećaja hranjenja kod učenika prvih razreda različitih srednjih škola u PGŽ-u te ispitati kakvi su obrasci hranjenja u mladića i djevojaka s obzirom na njihovu različitu tjelesnu masu. Dobivena su tri glavna nalaza. Prvi je nalaz da je oko 25 % srednjoškolaca u prvim razredima u PGŽ-u preuhranjeno ili pretilo, podatak koji je u skladu s ranije dobivenim rezultatima istraživanja s adolescentima u različitim zemljama EU (11), dok je tek 2,5 % (N=16) adolescenata neuhranjeno, zbog čega je ova skupina izostavljena iz daljnjih analiza, no tome bi se svakako trebalo detaljnije posvetiti u budućim istraživanjima.

Drugo, pronašli smo da djevojke značajno češće koriste kognitivne obrasce hranjenja. Adolescentice su sklonije ograničavati unos hrane te se češće hraniti pod utjecajem emocionalnih čimbenika u odnosu na mladiće. Neka istraživanja pokazuju da mlade djevojke koje provode visoko restriktivne dijete u kombinaciji s drugim obrascima hranjenja, poput dezinhibicije, češće doživljavaju neuspjeh u svojim naporima suzdržavanja od hrane te u konačnici imaju više odstupajućih ponašanja u vezi hranjenja, poput primjerice, prejedanja (12). Ako ovim nalazima pridodamo činjenicu da se u tim trenutcima gubitka kontrole češće konzumira visoko kalorična hrana, onda dobiveni nalaz može ukazati na postojanje povećanog rizika u djevojaka za razvoj preuhranjenosti i pretilosti u budućnosti (13). Povrh toga, osobe koje se s negativnim emocijama suočavaju s povećavanjem unosa hrane mogu, kasnije, razviti i veći broj simptoma poremećaja hranjenja (14). Djevojke su sklonije ograničavanju veličine svojih porcija te češće jedu manje od onoga koliko bi uistinu željele pojesti. Ovi rezultati stoga ne iznenađuju ako uzmemo u obzir činjenicu da su djevojke izloženije visokoj razini socijalnoga pritiska na mršavost te na pritisak okoline u vezi očekivanog idealnoga izgleda tijela (vitkoga, mršavoga

DISCUSSION

This study aimed to assess eating disorder psychopathology and behaviours in first-grade high school students in PGKC and to evaluate the relationship with eating patterns in both male and female participants and at different levels of body weight. There were three main findings. First, we found that approximately 25% of first-grade high school students in PGKC are overweight or obese, confirming previous studies of students across EU countries (11), while only 2.5% (N = 16) of adolescents were underweight, which is why this group was left out of further analyses, but this should certainly be addressed in more detail in future research.

Second, we found that girls were significantly more likely to use cognitive eating patterns. Girls were more inclined to limit their food intake and have their diet affected by emotional factors than boys. It was shown in some research that young girls with high dietary restraint in combination with other eating behaviours, specifically disinhibition, were more likely to fail at their restrained efforts and had more eating disorder behaviours, such as binging (12). If we add the fact that high-calorie foods are more often chosen during such moments, such results may indicate an increased risk among these girls for the development of overweight and obesity in the future (13). Additionally, people who cope with negative emotions by increasing their food intake may later have a higher number of symptoms of eating disorders (14). Girls are more likely to limit their food portions and are more likely to eat less than they would truly like to. Such results are not surprising if we consider that girls are the ones who experience higher levels of social pressure regarding how their body should look like to be ideal (skinny, slim...), and then internalize that ideal more often. This can lead to dissatisfaction with their appearance and result in a variety of unhealthy

...), te stoga češće internaliziraju te ideale. Sve to može dovesti djevojke do nezadovoljstva vlastitim tijelom, što nadalje rezultira nizom vrlo nezdravih obrazaca hranjenja u cilju gubitka težine. Dobiveni su rezultati jasno pokazali da djevojke imaju više simptoma poremećaja hranjenja u usporedbi s mladićima, što je u skladu s brojnim ranije provedenim istraživanjima (npr. 15).

Treći se dobiveni nalaz odnosi na povezanost između hranjenja i emocija kod različitih skupina prema ITM-u. Adolescenti s preuhranjenošću i pretilošću pokazuju više rezultate u mjerama psihopatologije hranjenja. Pretili su adolescenti zabrinutiji hranjenjem nego njihovi vršnjaci čija je težina u zdravom rasponu, ali su također i zabrinutiji oblikom svojega tijela i svojom težinom u usporedbi s normalno teškim i preuhranjenim adolescentima (oni češće jedu u tajnosti, osjećaju krivnju tijekom obroka, boje se gubitka kontrole tijekom konzumiranja hrane, itd.). Ako se prisjetimo sociokulturnog ideala tjelesnog izgleda, socijalnog pritiska, te stigmatizacije kojoj su izložene osobe povišene tjelesne mase, ne začuđuje da se osjećaju nezadovoljno vlastitom težinom i oblikom tijela, da osjećaju nelagodu pred drugim ljudima te da koriste različite načine ne bi li smanjili svoju težinu, kao što je pokušaj praćenja strogih dijetnih režima, izbjegavanje nekih namirnica, izgladnjivanje, namjerno suzdržavanje od uzimanja hrane itd. (16). Ipak je, suprotno našim očekivanjima, dobiveno da su preuhranjeni i pretili adolescenti jednako skloni jedenju nakon percipiranja negativnih emocija te učestalom doživljavanju gladi i prejedanju, kao i adolescenti čija je težina u zdravom težinskom rasponu. Moguće objašnjenje ovih rezultata možemo potražiti u dobi naših sudionika. Postoji mogućnost da su učinci učestaloga osjećaja gladi i sklonosti ka prejedanju vidljivi na tjelesnoj težini tek tijekom kasnije životne dobi, a ne tijekom adolescencije (17). Osim toga, ponašanja adolescenata u vezi s hranjenjem obilježena su razdobljima gubitka

eating patterns with the goal of losing weight. The results obtained here showed that girls have more symptoms of eating disorders than boys, which is consistent with numerous studies (e. g. 15).

The third finding concerns the relationship between eating and emotion in different BMI categories. Adolescents with overweight or obesity showed higher scores in eating disorder psychopathology. Adolescents with obesity are more concerned about eating than healthy weight subjects, but they are also more concerned about their shape and weight than healthy weight and overweight adolescents (they will more frequently eat in secret, feel guilty during meals, have a fear of losing control during meals, etc.). Given the existing sociocultural ideals of physical appearance, social pressure, and the stigma people with excess weight are exposed to, it does not seem unusual for them to be dissatisfied with their weight and body shape, feel uncomfortable in front of other people and try to lose weight in different ways, such as by following certain dietary rules, exclusion of certain food, attempts to fast, intentional restriction of eating, etc. (16). However, contrary to expectations, in regard to eating after experiencing negative emotions and frequent feelings of hunger and overeating, adolescents with overweight and obesity are just as equally prone to eating as healthy weight adolescents. One possible explanation for such findings lies in the age of our respondents. It is possible that the frequent feelings of hunger and the tendency to overeat affect body weight only during older ages and not during adolescence (17). In addition, adolescents' eating behaviours are characterized by periods of loss of control when they tend to binge and are unable to stop, regardless of the adolescents' weight (18).

This study presents some limitations. First, the cross-sectional study design does not permit us to evaluate any causal inference between

kontrole u kojima su skloni prejedanju, bez mogućnosti zaustavljanja, neovisno o tome koja je njihova tjelesna masa (18).

Ovo istraživanje ima neka ograničenja koja je potrebno naglasiti. Prije svega, transverzalna priroda istraživanja ne dozvoljava nam provjeru kauzalnosti između psihopatologije poremećaja hranjenja i ITM-a. Drugo, korištenje upitnika samoprocjene u cilju ispitivanja odstupajućih obrazaca hranjenja, umjesto korištenja polustrukturiranih intervjua, zasigurno kvalitativno ograničava naše nalaze. Problem socijalne poželjnosti odgovora također je moguće ograničenje ovog istraživanja. Iako se radilo o anonimnom istraživanju, učenici su proveli i kratak intervju s liječnikom školske medicine što je moglo dovesti do potrebe za prikazivanjem u pozitivnijem svjetlu, prešućivanjem nekih informacija. No, istraživanje ima i svoje jake strane. Posebno je važno naglasiti da su podatci o ITM-u izračunati temeljem objektivno izmjerene visine i težine svakoga sudionika u liječničkoj ordinaciji. S druge strane, uključili smo veliki uzorak adolescenata iz PGŽ-a, što znači da se rezultati mogu generalizirati na adolescente prvih razreda srednje škole širom Hrvatske.

Zaključno, naše istraživanje pokazuje da su težina tijela, kognitivno suzdržavanje i nekontrolirano jedenje međusobno povezani kod hrvatskih adolescenata. Povezanost ovih varijabli, koja je replicirana u prospektivnim istraživanjima rizičnih čimbenika razvoja poremećaja hranjenja različitih kohorti u drugim zemljama, trebala bi pomoći u postavljanju ciljeva za intervencije u programima prevencije poremećaja prehrane među adolescentima.

Financiranje

Ovaj je rad u potpunosti financiran od strane Sveučilišta u Rijeci pod brojem projekta uniri-drustv-18-63: *Rizični i zaštitni čimbenici u razvoju povišene tjelesne težine i pretilosti u adolescenciji*

eating disorder psychopathology and BMI. Second, the use of self-report instruments to evaluate eating disorder features, instead of semistructured interviews, could limit the quality of our findings. The problem of the answer's social desirability is also a possible limitation of this research. Although it was an anonymous survey, the students also conducted a brief interview with a school physician which could have led to the need to present it in a more positive light, withholding some information. However, this study has some strengths. In particular, the BMI data were calculated based on objectively measured height and weight in the doctor's office. Moreover, we included a large proportion of adolescents with PGKC, and our data could be generalized to adolescents in first-grade high school across Croatia.

In conclusion, our findings indicated that body weight, cognitive restraint and uncontrolled eating are correlated in Croatian adolescents. The association among these variables, replicated in prospective cohort studies investigating risk factors for eating disorders in other countries, should provide some targets for interventions for eating disorder prevention programs among adolescents.

Funding

This work has been fully supported by the University of Rijeka under the project number uniri-drustv-18-63: *Risk and Protective Factors in the Development of Excessive Weight and Obesity in Adolescence*

Conflicts of interest/Competing interests

On behalf of all authors, the corresponding author states that there is no conflict of interest to declare that are relevant to the content of this article. Data are available upon request.

Sukobi interesa/Konkurentni interesi

U ime svih autora, autor za prepisku izjavljuje da ne postoji sukob interesa koji bi se mogao proglasiti relevantnim za sadržaj ovoga članka. Podatci su dostupni na zahtjev.

Etičko odobrenje

Cijeli je postupak istraživanja bio u skladu s etičkim standardima institucionalnog istraživačkog povjerenstva, međunarodnim standardima te s Helsinškom deklaracijom iz 1964. godine i njezinim kasnijim izmjenama, a odobrilo ga je Etičko povjerenstvo za istraživanja Nastavnoga zavoda za javno zdravstvo Primorsko-goranske županije (PGŽ) i Etičko povjerenstvo Sveučilišta u Rijeci tijekom procesa evaluacije projekta.

Informirani pristanak

Pisani informirani pristanak pribavljen je od svih zakonskih skrbnika i sudionika, prije prikupljanja podataka (roditelji i učenici).

Ethics approval

All procedure was in accordance with the ethical standards of the institutional research committee, the international standards and with the 1964 Helsinki Declaration and its later amendments, and it was approved by the Research Ethical Committee of the Teaching Institute for Public Health of Primorje-Gorski Kotar County (PGKC) and of the Ethical Committee of University of Rijeka during the process of Project evaluation.

Informed consent

Written informed consent was obtained from all legal guardians and participants, before the data collection (parents and students).

LITERATURA / *REFERENCES*

1. Hooper L, Puhl R, Eisenberg ME, Crow S, Neumark-Sztainer D. Weight teasing experienced during adolescence and young adulthood: Cross-sectional and longitudinal associations with disordered eating behaviours in an ethnically/racially and socioeconomically diverse sample. Int J Eat Disord 2021; 34(8) 1449-82.
2. Urquhart CS, Mihalynuk T V. Disordered eating in women: implications for the obesity pandemic. Can J Diet Pract Res 2011; 72(1):e 115–25.
3. Goldschmidt AB, Aspen VP, Sinton MM, Tanofsky-Kraff M, Wilfley DE. Disordered eating attitudes and behaviors in overweight youth. Obesity 2008; 16(2): 257–64.
4. Dellava JE, Thornton LM, Hamer RM, Strober M, Plotnicov K, Klump KL, Bulik CM *et al*. Childhood anxiety associated with low BMI in women with anorexia nervosa. Behav Res Ther 2010; 48(1): 60–7.
5. Inchley JC, Stevens GWJM, Samdal O, Currie DB. Enhancing understanding of adolescent health and well-being: The health behaviour in school-aged children study. J Adolesc Health 2020; 66(6): 3-5.
6. Zaborskis A, Petronyte G, Sumskas L, Kuzman M, Iannotti RJ. Body image and weight control among adolescents in Lithuania, Croatia, and the United States in the context of global obesity. Croat Med J 2008; 49(2): 233-42.
7. Dzielska A, Kelly C, Ojala K *et al*. Weight reduction behaviors among european adolescents—Changes from 2001/2002 to 2017/2018. J Adolesc Health 2020; 66(6): S70–80.
8. Fairburn CG, Beglin SJ. Eating Disorder Examination Questionnaire (6.0). In: Fairburn CG (ed.), Cognitive behaviour therapy and Eating Disorders. New York: Guilford Press, 2008, p.309.
9. Hajsok A. Depresivni simptomi, sram i krivnja zbog tjelesne težine u pretilih ljudi. University of Rijeka. Faculty of Humanities and Social Sciences. Department of Psychology, 2017.
10. Barbarić L. Uloga emocionalne regulacije, samoefikasnosti i depresivnih simptoma u objašnjenju prehrambenih navika studenata. University of Rijeka. Faculty of Humanities and Social Sciences. Department of Psychology, 2019.
11. Inchley J, Currie D, Budisavljevic S, Torsheim T, Jastad A, Cosma A, Kelly C *et al*. Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International Report. Volume 1. Key findings

12. Van Strien T. The concurrent validity of a classification of dieters with low versus high susceptibility toward failure of restraint. Addict Behav 1997; 22(5): 587–97.
13. Aparicio E, Canals J, Arija V, De Henauw S, Michels N. The role of emotion regulation in childhood obesity: implications for prevention and treatment. Nutr Res Rev 2016; 29(1): 17–29.
14. Stojek MMK, Tanofsky-Kraff M, Shomaker LB, Kelly NR, Thompson KA, Mehari RD, et al. Associations of adolescent emotional and loss of control eating with 1-year changes in disordered eating, weight, and adiposity. Int J Eat Disord 2017; 50(5): 551–60.
15. White HJ, Haycraft E, Goodwin H, Meyer C. Eating disorder examination questionnaire: Factor structure for adolescent girls and boys. Int J Eat Disord 2014; 47(1): 99–104.
16. Putterman E, Linden W. Cognitive dietary restraint and cortisol: importance of pervasive concerns with appearance. Appetite 2006; 47(1): 64–76.
17. Anglé S, Engblom J, Eriksson T, Kautiainen S, Saha M-T, Lindfors P *et al*. Three factor eating questionnaire-R18 as a measure of cognitive restraint, uncontrolled eating and emotional eating in a sample of young Finnish females. Int J Behav Nutr Phys Act 2009; 6(1): 1–7.
18. Megalakaki O, Mouveaux M, Hubin-Gayte M, Wypych L. Body image and cognitive restraint are risk factors for obesity in French adolescents. Eat Weight Disord Anorexia, Bulim Obes 2013; 18(3): 289–95.

S ponosom nosim tetovažu Vrapča

/ Proud to Have a Tattoo of Vrapče

Valentina Marinović[1], Marta Skelin[1], Suzana Uzun[1,2], Oliver Kozumplik[1], Ninoslav Mimica[1,2]

[1]Klinika za psihijatriju Vrapče, Zagreb; [2]Sveučilište u Zagrebu, Medicinski fakultet, Zagreb, Hrvatska

/ [1]University Psychiatric Hospital Vrapče; [2]University of Zagreb, School of Medicine, Zagreb, Croatia

Tetovaže su prisutne u gotovo svakom dijelu svijeta, kao i u gotovo svakom razdoblju povijesti. Njihova se uloga mijenjala tijekom povijesti, od funkcije obilježavanja prijestupnika preko omogućavanja međusobnog prepoznavanja pripadnika određenih zajednica do konačne uloge ukrašavanja tijela i popratne ekspresije emocija i stajališta. Premda su nositelji tetovaža nekoć bili izrazito stigmatizirani, taj se trend znatno promijenio te trenutno svjedočimo naglom porastu popularnosti tetoviranja. Opisani su brojni razlozi za tetoviranje, od potrebe za uljepšavanjem, iskazivanjem individualnosti ili ekspresijom emocija do označavanja pripadnosti različitim društvenim skupinama ili pak izražavanja otpora prema autoritetu. Tetovaže su povezane i s nekim psihijatrijskim poremećajima. Među tetoviranom populacijom veća je učestalost disocijalnog poremećaja ličnosti, zlouporabe droga i alkohola te graničnog i drugih poremećaja ličnosti. Ipak, one dopuštaju pojedincu izražavanje osjećaja, vrijednosti i stavova, kao i održavanje pozitivne slike vlastitog identiteta. U ovom je radu opisan bolesnik s brojnim tetovažama, njihovo značenje u tijeku liječenja pacijenta te važnost koje tetovaže imaju za njega. Posebna je pažnja obraćena tetovaži zgrade Klinike za psihijatriju Vrapče, gdje je pacijent hospitaliziran u više navrata, kojom je nastojao izraziti zahvalnost za pruženo liječenje.

/ Tattoos are present in almost every part of the world, as well as in almost every period of history. The role of tattoos has changed throughout history, from marking offenders and enabling the members of a particular community to recognize each other to the ultimate role of adorning the body and thus expressing certain emotions or attitudes. Although tattoo wearers were once highly stigmatized, this trend has changed significantly and we are currently witnessing a sharp rise in the popularity of tattooing. Many reasons for tattooing have been described, ranging from the need to beautify, express individuality or emotions to the need to mark one's affiliation to various social groups or to express resistance to authority. Tattoos are also linked to certain psychiatric disorders. In the tattooed population, the incidence of dissocial personality disorder, drug and alcohol abuse, and borderline and other personality disorders is higher. Yet, tattoos allow the individual to express their feelings, values and attitudes, as well as to maintain a positive image of their own identity. This paper describes a patient with numerous tattoos, their meaning during the treatment of the patient as well as the importance that tattoos have for him. Special attention was paid to the tattoo of the building of the University Psychiatric Hospital Vrapče, where the patient was hospitalized on several occasions, since this tattoo was the patient's attempt to express gratitude for the treatment provided.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*

Prof. prim. dr. sc. Suzana Uzun, dr. med.
Klinika za psihijatriju Vrapče
Bolnička cesta 32
10090 Zagreb, Hrvatska
E-pošta: suzana.uzun@bolnica-vrapce.hr

KLJUČNE RIJEČI / *KEY WORDS:*

Povijest / *History*
Tetovaža / *Tattoo*
Pacijent / Patient
Psihopatologija / Psychopathology
Motivacijski čimbenici / *Motivational Factors*
Bolnica / *Hospital*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2021.214

POVIJEST TETOVIRANJA

Povijest tetoviranja stara je gotovo koliko i povijest čovječanstva. O tome, s jedne strane, svjedoče sačuvani ostatci mumija, a s druge strane pisani spisi u kojima su tetovaže opisane. Charles Darwin je rekao da ne postoji gotovo nijedan dio svijeta u kojem barem u nekom obliku nije postojao običaj tetoviranja ili nekog drugog oblika ukrašavanja tijela (1). Najstariji poznati primjer tetoviranja datira iz 3000. godine prije Krista, a pronađen je na mumiji naziva Ötzi, koja je otkrivena u blizini talijansko-austrijske granice 1991. godine. Na tijelu mumije Ötzi izbrojana je čak 61 tetovaža, a većina ih je nastala na dijelovima tijela ispod kojih se nalazila osteohondrotična kost zbog čega mnogi smatraju da je tetoviranje zapravo pokušaj ublažavanja boli (2). Brojne tetovaže pronađene su i na egipatskim mumijama, a smatra se da je tetoviranje provođeno uglavnom na ženama te da je tematski većinom bilo vezano uz ples i glazbu. Tetovaža je imala vrlo važno mjesto u plemenskoj kulturi, gdje je redovito označavala ulazak u svijet odraslih. Postupak tetoviranja bio je dio rituala, odnosno procesa inicijacije koji je označavao početak punopravnog sudjelovanja u životu zajednice. S druge strane, Rimljani i Grci na tetovaže su gledali kao oblik barbarizma, stigmatizirajući nositelje tetovaža, a tetovirani su u to doba bila uglavnom robovi, gladijatori ili zatvorenici.

Tetoviranje je u kršćanskoj kulturi u početku bilo široko prihvaćeno, jer su njihovi pripadnici tetovirali kršćanske simbole kako bi se međusobno prepoznavali o čemu svjedoče i zapisi u Starom zavjetu. Međutim, s vremenom su na tetovaže počeli gledati posve drugačije. Rimljani su, primjerice, krajnje negativno reagirali na narod na koji su naišli na prostorima današnje Škotske, a koji su ih preplašili tijelima ispunjenim brojnim tetovažama, prema čemu su i dobili ime – Pikti (3). Prelaskom na kršćanstvo, car Konstantin u potpunosti je zabranio tetoviranje, naglasivši da je čovjek slika Boga i kao

HISTORY OF TATTOOING

The history of tattooing is almost as old as the history of mankind. This is on the one hand evidenced by the preserved remains of mummies, and on the other hand by the writings describing the tattoos. Charles Darwin wrote that there was no country in the world that did not practice tattooing or some other form of body decoration (1). The oldest known example of tattooing dates back to 3000 BC. It was found on a mummy called Ötzi discovered near the Italian-Austrian border in 1991. As many as 61 tattoos were counted on the body of the mummified Ötzi the Iceman and most of them had been made on parts of the body below the bone affected by osteochondrosis, which is why many believe that tattooing had actually been an attempt to alleviate pain (2). Numerous tattoos were also found on Egyptian mummies and it is believed that the tattooing had been performed mainly on women and that thematically tattoos had been mainly related to dancing and music. Tattooing played a very important role in tribal culture where it regularly marked the initiation into the adult world. The process of tattooing was part of the ritual, i.e., the process of initiation, which marked the beginning of full participation in the life of the community. On the other hand, the Romans and Greeks viewed tattoos as a form of barbarism. They stigmatized tattoo wearers and those who were tattooed at the time were mostly slaves, gladiators, or prisoners.

Tattooing was initially widely accepted in Christian culture, as Christians tattooed their symbols in order to recognize each other, which is evidenced by the Old Testament. However, they started looking at tattooing completely differently over time. The Romans, for example, reacted extremely negatively to the people they encountered in what is now Scotland as they frightened them with bodies covered with numerous tattoos, which is why they got the name - the Picts (3). By converting to Christianity, Emperor Constantine completely banned tattooing,

takav ne bi smio biti obilježavan (4). Unatoč tome, tetoviranje u Europi nikada nije sasvim iščeznulo, provođeno je tajno, primjerice u Svetištu Loreto, gdje su redovnici nastavili praksu tetoviranja (5).

Početkom kolonijalnog osvajanja tetovaže su ponovno postale dio europske kulture. Posjećujući polinezijske otoke, gdje su obitavali narodi Samoanci, osvajači su imali priliku upoznati se s njihovom nerijetko iznimno bolnom tehnikom tetoviranja, u kojoj su za izradu tetovaža korišteni dijelovi kosti, oklopa kornjače i drva. Najpoznatiji oblik tetovaže s kojim su se susreli jest Pe'a, tetovaža u obliku paralelnih crnih linija koje su se prostirale od donjeg dijela abdomena do koljena, čija je izrada znala trajati i do nekoliko godina (6). Od haićanske riječi tatau što znači obilježiti, dolazi i engleska riječ za tetovažu – *tattoo* (7).

Dio europskih osvajača je čak dovodio tetovirane pripadnike na europsko tlo, čime se i ostatak stanovništva imao priliku upoznati s običajem tetoviranja (8). Članovi plemenskih zajednica često su koristili tetovaže kako bi označili pripadnost vlastitim plemenima. Stoga su europski osvajači na tetovaže tamošnjih stanovnika gledali kao na otpor prema novim vladarima. To je jedan od razloga i zašto su tetovaže zadobile negativan prizvuk te zbog čega su povezivane s manjkom kulture. Slike prirode koje su autohtoni narodi oslikavali po tijelu tumačene su kao odraz njihova primitivnog života koji se bazira na instinktima. Možda odatle dolazi i današnje viđenje tetoviranja kao primjera nekonvencionalnosti i oblika otpora prema autoritetu.

ULOGA TETOVAŽA TIJEKOM POVIJESTI

Uloga tetoviranja u društvu značajno se mijenjala tijekom povijesti. Iako je oduvijek postojala skupina ljudi za koje je tetovaža bila odraz

emphasizing that man was created in the image of God and as such should not be marked (4). Nevertheless, tattooing has never completely disappeared in Europe but it was carried out in secret. For example, in the Sanctuary of Loreto monks continued the practice of tattooing (5).

At the beginning of the colonial conquest, tattoos once again became part of European culture. Visiting the Polynesian islands, where the Samoan people lived, the conquerors had the opportunity to acquire a knowledge of their often extremely painful tattooing technique, in which parts of bones, turtle shells and wood were used to create tattoos. The most famous form of tattoo they encountered was the Pe'a, a tattoo in the form of parallel black lines that stretch from the lower abdomen to the knees, which can take up to several years to make (6). The English word for tattoo originates from the Haitian word "tatau" meaning "to mark" (7).

Some European conquerors even brought tattooed individuals to European soil, giving the rest of the population the opportunity to learn about the custom of tattooing (8). Members of tribal communities often used tattoos to indicate affiliation to their tribes. For that reason, European conquerors viewed the tattoos of the locals as resistance to the new rulers. This is one of the reasons why tattoos acquired a negative connotation and why they were associated with a lack of culture. Images of nature that indigenous peoples painted on the body were interpreted as a reflection of their primitive life based on instincts. This is perhaps the origin of today's view of tattooing as an example of unconventionality and a form of resistance to authority.

THE ROLE OF TATTOOING THROUGHOUT HISTORY

The role of tattooing in society has changed significantly throughout history. Although there has always been a group of people for whom a

vlastite želje, značajan dio tetoviranih na to je bio primoran. Kod tih posljednjih tetovaža je bila način – obilježavanja. Robove i osuđene prijestupnike vlasti su žigosale vrućim željezom, a u ranu se potom stavljala tinta kako bi ostao trajni ožiljak. Kod Rimljana je pak česta praksa bila obilježavanje kršćana, čime su bili obilježeni kao skupina odmetnika naspram ostatka populacije, a s druge strane te su tetovaže samim kršćanima omogućile međusobno prepoznavanje (9).

Tetovaže su imale značajnu ulogu kao oblik kažnjavanja prijestupnika. U Srednjem vijeku, oblici kažnjavanja uključivali su paljenje dijelova kože vatrom, štipanje hladnim željezom, bušenje kože iglom, a to mjesto na koži potom bi se ispunjavalo ugljenom. Time je omogućeno i raspoznavanje prijestupnika – ovisno o vrsti ozljede, pa se moglo zaključiti koje je kazneno djelo prijestupnik počinio.

Dobrovoljne su tetovaže pak došle do izražaja tijekom križarskih ratova, kada su križari po sebi ocrtavali kršćanske motive, čime su htjeli osigurati kršćanski pogreb, u slučaju da poginu u stranoj državi. To je jedan od prvih primjera gdje tetovaže nisu bile bitne isključivo kao način označavanja pripadnosti zajednici, već i kao oblik osobne identifikacije. Na sličan su način i majke u siromašnim tirolskim zajednicama tetovirale vlastitu djecu koja su napuštala selo zbog obrazovanja, što je služilo kao oblik identifikacije (9).

Početkom 20. stoljeća popularnost tetovaža naglo je porasla među europskom aristokracijom. Poznato je, primjerice, da je carica Elizabeta Austrijska, poznatija pod nadimkom Sissi, imala tetovažu sidra na ramenu, što je primjer tetovaža kao nakita ili svojevrsnog modnog dodatka (10). Iako su od 30-ih godina 20. stoljeća tetovaže bila zabranjene u Njemačkoj, praksa tetoviranja nastavila se dalje u Francuskoj, SAD-u te u Japanu, gdje su tetovaže imale specifičan razvojni put.

tattoo was a reflection of their desire, a significant proportion of the tattooed were forced to do so. In the latter group tattooing was a way of marking. The authorities would stamp slaves and convicted offenders with hot iron and ink was then applied to the wound to leave a permanent scar. Romans on the one hand very often marked Christians as outlaws different from the rest of the population. On the other hand, these tattoos allowed Christians to recognize each other (9).

Tattoos have played a significant role as a form of punishing offenders. In the Middle Ages, various forms of punishment included burning parts of the skin with fire, pinching with cold iron, and piercing the skin with a needle after which that spot on the skin was filled with charcoal. This also enabled the identification of offenders, i.e., depending on the type of injury it was possible to conclude which criminal offense the offender committed.

Voluntary tattoos, on the other hand, became important during the Crusades when the Crusaders tattooed themselves with Christian motifs in order to secure a Christian funeral in the event of their death in a foreign country. This is one of the first examples where tattoos were not only important as a way of marking that a person belongs to a particular community but also as a form of personal identification. Similarly, mothers in poor Tyrolean communities tattooed their children who had to leave the village for education also as a form of identification (9).

In the early 20th century, tattoos suddenly became very popular among the European aristocracy. For example, Empress Elizabeth of Austria, better known by the nickname Sissi, had a tattoo of an anchor on her shoulder, which served as jewellery or a kind of a fashion accessory (10). Tattooing was outlawed in Germany in the 1930s but the practice continued in France, the United States and Japan, where tattoos developed in a specific way.

Kao i na Zapadu, u Japanu su tetovaže isprva bile sredstvo kažnjavanja ili obilježavanja neželjenih pripadnika zajednice, s vremenom postavši zaštitni znak pripadnika niže društvene klase, kriminalaca i prostitutki. Tetovaže su čak svojevremeno bile posve zabranjene u japanskom društvu. Međutim, u 18. je stoljeću, iz nepoznatih razloga, naglo porasla popularnost tetoviranja, kada je i nastao prepoznatljiv japanski stil tetoviranja. Riječ je o „irezumi", obliku japanskih tetovaža s motivima narodnih drevnih priča i mitova, čije slike su nerijetko prekrivale čitavo tijelo. U novijoj su povijesti tetovaže u Japanu ipak zadržale uglavnom negativnu konotaciju, ostavši prisutne pretežno na nepoželjnim članovima društva, npr. pripadnicima japanske mafije – yakuza (11).

MOTIVACIJA ZA TETOVIRANJE

U posljednjih nekoliko desetljeća svjedočimo naglom porastu popularnosti tetovaža. Razlozi za to su višestruki, s jedne strane snažna motivacija za tetoviranjem potaknuta je komercijalizacijom tetovaža u medijima, a s druge strane postoji tendencija smanjenju stigme tetoviranih pojedinaca s obzirom da tetovaže nisu više isključivo vezane uz određene subkulture. Nositelji tetovaža opisuju različite razloge za tetoviranjem, a Wohlrab i sur. motivacijske su čimbenike podijelili u deset skupina (12). Jedna od skupina motivacijskih čimbenika jest želja za uljepšavanjem tijela, dio tetovaža nastaje kao potreba za modnim dodatkom ili umjetničkim djelom. Sljedeći važan razlog za tetoviranje jest potreba za individualnosti, kreativnosti, odnosno za potvrđivanjem vlastitog identiteta i osjećajem posebnosti. Tetovaže služe i kao kanal za osobnu katarzu, ekspresiju vlastitih vrijednosti i doživljaja. Fizička izdržljivost je također opisana kao jedan od motivacijskih čimbenika za tetoviranje. Tetoviranje je način za prevladavanje vlastitih granica, naročito granica podnošenja boli. Premda ne u tolikoj mjeri

In Japan, as in the West, tattooing was initially used as a means of punishment or marking unwanted members of the community only to eventually become the hallmark of the lower social class, criminals and prostitutes. Tattoos were once completely banned in Japanese society. However, in the 18th century, for unknown reasons, the popularity of tattooing rose sharply. At that time a distinctive style of Japanese tattooing emerged. "Irezumi" is a form of Japanese tattoos with motifs from ancient folk tales and myths. Such tattoos often covered the whole body. In recent history we see that tattooing in Japan has retained a largely negative connotation given that it is popular predominantly among undesirable members of society, such as members of the Japanese mafia, or the yakuza (11).

MOTIVATION FOR TATTOOING

In the last few decades, we have witnessed a sharp rise in the popularity of tattooing. The reasons for this are multiple: strong motivation for tattooing is one the one hand driven by the commercialization of tattoos in the media and a tendency to reduce the stigma of tattooed individuals on the other given that tattooing is no longer exclusively linked to certain subcultures. Tattoo wearers give different reasons for tattooing and Wohlrab et al. established ten broad motivational categories (12). One of the motivational categories is the desire to beautify the body where tattooing arises as a need for a fashion accessory or work of art. Another important reason for tattooing is the need for individuality, creativity, or confirmation of one's own identity and sense of uniqueness. Tattoos also serve as a channel for personal catharsis and the expression of one's values and experiences. Physical endurance was also described as one of the motivational factors related to tattooing. Tattooing is a way to overcome one's personal limits, especially the limits of pain tolerance. Although

kao prije stotinu godina, tetovaže i dalje označavaju pripadnost određenim subkulturama i socijalnim krugovima pa je pripadnost grupi označena kao zasebna motivacijska kategorija. Usko povezan s prethodnom kategorijom jest otpor autoritetima i roditeljima, što dio ispitanika navodi kao bitan razlog tetoviranja. S druge strane, značajan broj nositelja tetovaža navodi da se na to odlučio upravo zbog očuvanja kulturne tradicije i ekspresije vlastite duhovnosti. Smatra se da tetoviranje ima određen ovisnički potencijal, vjerojatno zbog lučenja endorfina pri bolnoj penetraciji igle u tijelo, odnosno da se neki odlučuju na taj čin upravo zbog ovisnosti o tetoviranju. Postoji i seksualna motivacija tetoviranja s obzirom na široku rasprostranjenost genitalnog tetoviranja. Na kraju, dio ispitanika navodi da nisu imali nikakvu posebnu motivaciju, odnosno da se radilo prije svega o impulzivnoj odluci.

TETOVIRANJE I PSIHOPATOLOGIJA

Povezanost tetovaža i prisutnosti psihičkih poremećaja i simptoma psihičkih bolesti višestruko je proučavana, a smatra se da je ona rijetko jednoznačna. Psihijatrijski poremećaji poput dissocijalnog poremećaja ličnosti, zlouporabe droga i alkohola te graničnog i drugih poremećaja ličnosti, često su povezani s tetoviranjem (13). Stoga Raspa i Cusack smatraju da pregledom uočene tetovaže trebaju upozoriti liječnika na mogućnost postojanja podležećeg psihijatrijskog poremećaja. Prema Williamsovoj studiji, koja je proučavala zastupljenost tetovaža među novoprimljenim pacijentima na odjel psihijatrije, oko 16 % pacijenata imalo je tetovaže. One su bile značajno češće prisutne među muškim pacijentima, čak četvrtina primljenih muških pacijenata bila je tetovirana (14).

Uobičajeno se tetovaže povezuje s određenim karakteristikama ličnosti, rizičnim ponaša-

not as much as a hundred years ago, tattoos still signify that a person belongs to a certain subculture and social circle. For that reason, belonging to a group is a separate motivational category. Resistance to authority and parents is closely linked to the previous category, and some respondents state that resistance is an important reason for tattooing. On the other hand, a significant number of tattoo wearers state that they decided to get a tattoo because they wanted to preserve their cultural tradition and express their spirituality. It is believed that tattooing has a certain addictive potential, probably due to the secretion of endorphins during the painful penetration of the needle into the body. In other words, some choose to get a tattoo precisely because they are addicted to tattooing. Tattooing can also be sexually motivated given the prevalence of genital tattooing. Finally, some respondents state that they did not have any special motivation, i.e., that their decision to get a tattoo was primarily impulsive.

TATTOOS AND PSYCHOPATHOLOGY

The interdependence between tattooing and the presence of mental disorders and symptoms of mental illnesses has been profusely studied, and it is considered that it is rarely unambiguous. Psychiatric disorders such as dissocial personality disorder, drug and alcohol abuse, and borderline and other personality disorders are often associated with tattooing (13). Therefore, Raspa and Cusack believe that by examining an observed tattoo, they should warn the doctor about the possibility of the existence of an underlying psychiatric disorder. According to the study on the prevalence of tattoos among newly admitted patients to a psychiatric ward conducted by Williams, about 16% of patients had tattoos. They were significantly more common among male patients: as many as one quarter of all admitted male patients were tattooed (14).

njem, antisocijalnim poremećajem ličnosti, te samoozljeđivanjem. Studija Swamija i sur., na uzorku od 450 ispitanika iz središnje Europe, pokazala je da tetovirani pojedinci u odnosu na netetovirane u testovima ličnosti češće pokazuju znakove ekstrovertiranosti, traženja novih iskustava i potrebe za osjećajem posebnosti (15).

Slične karakteristike ličnosti među tetoviranim pojedincima pronađene su i u studiji Tatea i Sheltona na populaciji studenata, koja je pokazala da su studenti s tetovažama, za razliku od svojih netetoviranih kolega, u testovima ličnosti češće pokazivali crte otvorenosti i potrebe za jedinstvenosti, a mnogo rjeđe karakteristike savjesnosti (16). Prema Postu, postoji korelacija između posjedovanja tetovaža i poremećaja ličnosti, premda on naglašava da je nemoguće prema dizajnu ili vrsti tetovaža zaključivati o karakteristikama poremećaja ličnosti (17).

Studija Požgaina i sur. istražila je razlike između tetoviranih i netetoviranih pacijenata oboljelih od PTSP-a nakon sudjelovanja u Domovinskom ratu, a koji su bili liječeni na Odjelu za psihotraumu u KBC Osijek. Pacijenti s tetovažama nisu se razlikovali od netetoviranih prema intenzitetu simptoma PTSP-a, ali su pokazivali značajno veće razine impulzivnosti, avanturizma, empatije i neuroticizma (18).

Tetovaže su naročito popularne među određenim skupinama ljudi. Gittleson i sur. su, proučavajući opću mušku hospitalnu populaciju, pokazali da je među tetoviranim pojedincima tri puta veća vjerojatnost da su bili kazneno gonjeni nego netetovirani pojedinci (19). S druge strane, Romans i sur. proučavali su učestalost tetovaža u ženskoj populaciji i utvrdili da je prisutnost tetovaža kod žena povezana s anamnezom seksualnog zlostavljanja u djetinjstvu te prisutnosti nekih poremećaja ličnosti, poglavito graničnog poremećaja ličnosti (20).

Measey je pokazao da vjerojatnost prisutnosti poremećaja ličnosti kod nositelja tetovaža ra-

Tattoos are usually associated with certain personality characteristics, risky behaviour, antisocial personality disorder, and self-harming. Swami et al. conducted a study on a sample of 450 respondents from Central Europe and found that in personality tests tattooed individuals were more likely than non-tattooed individuals to show signs of extroversion, seek new experiences, and express a need to feel special (15).

Similar personality traits in tattooed individuals were found in a study conducted by Tate and Shelton on the student population. This study found that tattooed students, unlike their non-tattooed counterparts, in personality tests expressed more openness, greater need to feel unique and much less characteristics related to diligence. (16). According to Post, there is a correlation between having a tattoo and personality disorder, although he emphasized that it was impossible to infer the characteristics of personality disorder by the design or type of tattoo (17).

Požgain et al. investigated the differences between tattooed and non-tattooed patients with PTSD after participating in the Homeland War, who were treated at the Department of Psychotrauma at the Osijek Clinical Hospital. Patients with tattoos did not differ from non-tattooed patients in the intensity of PTSD symptoms, but they showed significantly higher levels of impulsivity, adventurism, empathy, and neuroticism (18).

Tattoos are especially popular among certain groups of people. Gittleson et al. studied the general male hospital population and found that tattooed individuals are three times more likely to be prosecuted than non-tattooed individuals (19). On the other hand, Romans et al. studied the incidence of tattoos in the female population and found that the presence of tattoos in women was associated with a history of childhood sexual abuse and certain personality disorders, particularly borderline personality disorder (20).

ste s brojem tetovaža, pogotovo ako se tetovaže nalaze na licu ili na dlanovima (21). Ferguson-Rayport i sur. usporedili su karakteristike tetovaža koje nalaze kod pacijenata s poremećajem ličnosti i onih sa shizofrenijom. Pacijenti koji boluju od poremećaja ličnosti češće su imali više od jedne tetovaže, i to češće na rukama, prsima ili nogama, a sadržaj je uglavnom bio vezan uz unutarnje konflikte i nepoštivanje socijalnih normi. S druge strane, osobe sa shizofrenijom uglavnom su imale samo jednu tetovažu, i to na skrivenim mjestima, redovito simboličnog značenja, vezanog uz otuđenje od svijeta (22).

Smatra se da osobe koje imaju tetovaže češće konzumiraju alkohol i droge (23,24). Carrol i sur. su proučavajući rasprostranjenost tetovaža među adolescentima pokazali da je prisutnost tetovaža povezana s povećanim rizikom od zlouporabe droga, seksualne aktivnosti u adolescentnoj dobi, razvoja poremećaja prehrane i suicidom (25). Pirrone i sur. istražili su karakteristike i praksu tetoviranja kod ovisnika o drogama te zaključili da oni uglavnom preferiraju velike tetovaže, nerijetko imaju velik broj tetovaža te počinju s tetoviranjem u ranijoj dobi. Također su pokazali da za njih tetovaže ne odražavaju toliko osobine ličnosti, koliko imaju funkciju iluzornog održavanja samopouzdanja i osjećaja kontrole (26).

Tetovaže su često povezane s disocijalnim poremećajem ličnosti. Cardasis i sur. ispitivali su učestalost antisocijalnog poremećaja ličnosti među populacijom pacijenata na forenzičkom psihijatrijskom odjelu. Znatno više pacijenata s disocijalnim poremećajem ličnosti bilo je u skupini tetoviranih pacijenata nego netetoviranih. Među tetoviranim bolesnicima, oni s disocijalnim poremećajem ličnosti obično su imali veće tetovaže te veći dio površine tijela koji je bio prekriven tetovažama. Tetovirani pojedinci s disocijalnim poremećajem ličnosti ili bez njega češće su imali povijest zlouporabe droga, seksualnog zlostavljanja i pokušaja suicida (27).

Measey showed that the likelihood of a personality disorder in tattoo wearers increases with the number of tattoos, especially if the tattoos are on the face or palms (21). Ferguson-Rayport et al. compared the characteristics of tattoos in patients with personality disorder and patients with schizophrenia. Patients suffering from personality disorders more often had more than one tattoo on their arms, chest or legs and the content of the tattoos was mostly related to internal conflicts and non-compliance with social norms. Patients suffering from schizophrenia generally had only one tattoo in hidden places, usually with symbolic meaning associated with alienation from the world (22).

It is also considered that tattooed individuals more frequently consume alcohol and drugs (23,24). Carrol et al. studied the prevalence of tattoos in adolescents and showed that the presence of tattoos is associated with an increased risk of drug abuse, sexual activity in adolescence, development of eating disorders, and suicide (25). Pirrone et al. investigated the characteristics and practice of tattooing in drug addicts and concluded that those individuals generally preferred large tattoos, often had a large number of tattoos and started tattooing at an early age. They also found that for them tattoos did not reflect personality traits as much as they had the function of maintaining illusory self-confidence and a sense of control (26).

Tattoos are often associated with dissocial personality disorder. Cardasis et al. examined the incidence of antisocial personality disorder in the patient population at a forensic psychiatric ward. Significantly more patients with dissocial personality disorder were found in the group of tattooed patients than in the group of non-tattooed ones. Among tattooed patients, those with dissocial personality disorder usually had larger tattoos and a larger portion of the body covered with tattoos. Tattooed individuals with or without dissocial personality disorder were more likely to have a history of drug

Ako je čovjek sam refleksija onoga što se događa oko njega, možemo reći da je njegova koža ogledalo u njegov unutarnji svijet. Tetovaže su način na koji drugima dopuštamo da vide što mislimo, osjećamo ili kako doživljavamo sami sebe. Može se reći da je koža tzv. prijenosnik svog iskustva koje je pojedinac doživio tijekom svojeg života (28).

PRIKAZ BOLESNIKA S TETOVAŽAMA I NJEGOVA PRIČA

Pacijent XY rođen je 1970. godine u Italiji, Rom je, otac je šestero djece, živi sa suprugom i djecom u Zagrebu. Bez formalnog je zanimanja i naobrazbe, a uzdržava se od socijalne pomoći i povremenih poslova u prodaji tekstila oko kojih je angažirana supruga. U višegodišnjem je psihijatrijskom tretmanu, uz česte hospitalizacije u Klinici za psihijatriju Vrapče, a pod dijagnozom: Poremećaj ličnosti - granični. Na bolnička liječenja u Kliniku za psihijatriju Vrapče često se zaprima u okviru suicidalnih i parasuicidalnih namjera koje se prema heteroanamnestičkim podatcima iz medicinske dokumentacije kreću od intoksikacije medikamentima do prostreljivanja potkoljenice. Od somatskih bolesti pacijent boluje od dijabetesa, gastritisa, a kolecistektomiran je.

Bolesniku je naglas pročitano pisano dopuštenje da se objavi ovaj prikaz s fotografijama, te se s tim složio i svojeručno ga potpisao.

Pacijent na svom tijelu ima oko 50 tetovaža, za koje nije posve siguran kojim slijedom su nastale. Odmah se primjećuje da su među motivima vrlo česti religija, obitelj, život i smrt. Premda je pacijent nepismen, ima ispisana četiri dulja teksta, koja naziva životopis (slika 1.). Radi se o njegovoj životnoj priči, a napisao mu ju je pacijent kojeg je upoznao u Klinici za psihijatriju Vrapče. U navedenim tekstovima opisani su trenutci u kojima se pacijent osjećao izgubljeno, bespomoćno i napušteno od drugih: „...srce

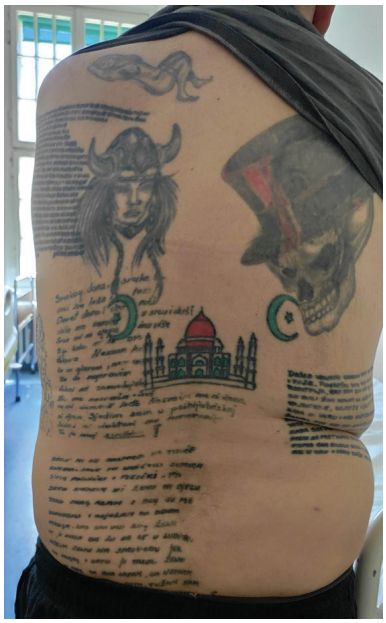
abuse, sexual abuse, and suicide attempts (27). If a person is a reflection of what is happening around them, we can say that a person's skin is a mirror to their inner world. Tattoos are the way we allow others to see what we think, feel or what is our experience of ourselves. It can be concluded that the skin is the so-called conveyor of a person's life experience (28).

REPRESENTATION OF THE TATTOOED PATIENT AND HIS STORY

Patient XY was born in 1970 in Italy. He is a Rom and a father of six children. He lives with his wife and children in Zagreb. He has no formal occupation or education and lives on social assistance and from what he earns working occasional jobs in textile sale in which his wife is engaged. He has been undergoing psychiatric treatment for many years and has been frequently hospitalized at the University Psychiatric Hospital Vrapče. He has been diagnosed with borderline personality disorder. He has been admitted to the University Psychiatric Hospital Vrapče due to suicidal and para-suicidal intentions, which, according to heteroanamnestic information from medical documentation, range from drug intoxication to shooting the lower leg. The patient's somatic diseases include diabetes, gastritis, and cholecystectomy.

A written permission to publish this description with the photos was read to the patient and he agreed and signed it in his own handwriting.

The patient has about 50 tattoos on his body and he is not entirely sure in what sequence they were created. It is immediately noticeable that very common motifs are religion, family, life and death. Although the patient is illiterate, he has four long texts tattooed, which he calls his biography (Figure 1). The texts are about his life story and they were written by a patient



SLIKA 1. Tetovaža četiri dulja teksta na leđima bolesnika koja on naziva životopis
FIGURE 1. Four long texts tattooed on patient's back, which he calls his biography

mi se cijepa, ne znam što ću, ne shvaćaju me ni žena ni djeca, dolazi mi samoubojstvo..“ U tekstovima je opisan i njegov odnos sa suprugom i roditeljima, navedeno je da mu žena predbacuje da je s 45 godina završio u Vrapču te da ne želi da ona bude na njegovu sprovodu. Dotaknuo se i toga da mu je u nekoliko navrata obitelj okrenula leđa, a u drugim prilikama je on obitelji okrenuo leđa, naročito majci.

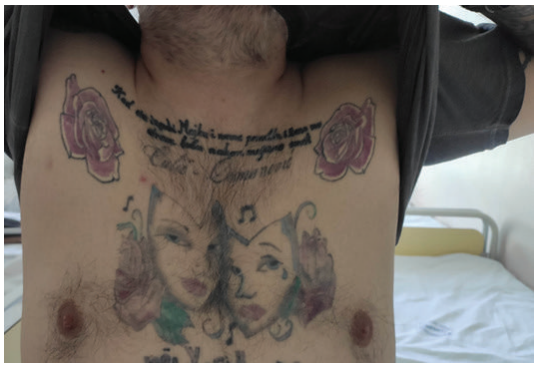
Mnogo je religioznih motiva iscrtano na tijelu našeg pacijenta. Na leđima između četiri teksta koje je pacijent nazvao životopis, nacrtana je džamija te polumjesec i zvijezda, iz čega možemo zaključiti da religija predstavlja centralno mjesto u njegovu životu, s obzirom na to da je i na tijelu bolesnika crtež džamije u središtu između nekoliko tekstova. Nekoliko je citata iz Kurana na tijelu bolesnika kao i crtež svete knjige (slika 2.). Prisutno je više molitvenih kuglica, a simboli polumjeseca i zvijezde nalaze se na nekoliko mjesta na tijelu bolesnika. Među tetovažama ponavlja se motiv smrti, o čemu svjedoče natpisi „Jednom se umire“ i „Do života stalo mi nije.“ Nekoliko je crteža granata i lijesa, a posebno se ističe tetovaža pištolja

he met at the University Psychiatric Hospital Vrapče. The texts describe moments when the patient felt lost, helpless and abandoned by others: “my heart is broken, I don’t know what to do, neither my wife nor my children understand me, I’m thinking of suicide...” The texts also describe his relationship with his wife and parents and state that his wife was reproaching him because he ended up in Vrapče at the age of 45 and that he did not want her to attend his funeral. He also touched on the fact that his family turned his back on him on several occasions, and that on other occasions he turned his back on his family, especially on his mother.

The patient’s body is covered in many religious motifs. In-between the four texts that the patient called his biography, there is a tattoo of a mosque and a crescent moon and a star. This can lead us to a conclusion is central to his life, given that the tattoo of a mosque is positioned in the centre between several texts. There are several quotations from the Koran as well as a tattoo of the holy book (Figure 2). Also, there are several beads and symbols of a crescent moon and a star in several places on the patient’s body. The motif of death is repeated several times as evidenced by the inscriptions “You die once” and “I don’t care about life.” There are also several tattoos of grenades and a coffin where a tattooed gun with the date 20 May 2012 stands out in particular (Figure 3). The patient explained that

SLIKA 2. Tetovaža s religioznim motivom
FIGURE 2. Religious motifs on a tattoo

SLIKA 3. Tetovaža pištolja
FIGURE 3. Gun tattoo



SLIKA 4. Tetovaža tužne i sretne maske
FIGURE 4. A tattoo of the happy and sad face mask

na kojoj je ispisan datum 20.5.2012. (slika 3.). Bolesnik objašnjava da je toga dana pokušao suicid tako što je pištoljem prostrijelio vlastitu potkoljenicu.

Nadalje, naznačen je i motiv podvojenosti, koji je vidljiv iz tetovaže tužne i sretne maske (slika 4.) te iz jedne od najzanimljivijih tetovaža – anđela i vraga ispred Klinike za psihijatriju Vrapče, uz koji je napisana godina 2006. (slika 5.). Objašnjava da je tetovaža nastala nakon jednog od hospitalnih liječenja, otprilike desetak dana nakon otpusta iz bolnice. Opisuje da se na tu tetovažu odlučio zato što je „čitav život u bolnici Vrapče", referirajući se na učestale hospitalizacije u Klinici. Dodaje da je njemu lijepo u Bolnici te da je to jedan od razloga zašto se odlučio baš na tu tetovažu. Godina 2006. nije godina kada je nastala tetovaža nego označava godinu kada se prvi puta počeo liječiti u Bolnici. Nikada nije liječen ni u jednoj drugoj bolnici niti bi to htio. Ispred bolnice su nacrtana dva anđela, za koje navodi da je jedan dobar, a drugi loš, jer „to tako obično biva u životu". Vezana uz pacijentovo psihijatrijsko liječenje jest i tetovaža u kojoj je nacrtana kocka za igranje u plamenu, ispod koje piše „Kocka je zlo." (slika 6). Dio je to pacijentove ispovijesti, objašnjava da je „nekoć mnogo kockao, a već dulje od deset godina ne kocka". Upravo zbog ponosa što je uspio prestati kockati, odlučio se baš za tu tetovažu.

he had attempted suicide on that day by shooting his own lower leg with a gun.

Furthermore, the motif of dichotomy is present, which is apparent from the happy and sad face mask tattoo (Figure 4) and from one of the most interesting tattoos, i.e., the angel and the devil in front of the University Psychiatric Hospital Vrapče with the year 2006 inscribed next to them (Figure 5). The patient explained that the tattoo had been created after one of the hospital treatments, about ten days after his discharge from the hospital. He explained that he decided on this tattoo because he "had spent his whole life in the Vrapče Hospital", referring to his frequent hospitalizations at the Clinic. He added that he had a good time at the Hospital and that this was one of the reasons why he decided to get this tattoo. The year 2006 is not the year when the tattoo was created, but it marks the year when he was first treated at the Hospital. He has never been treated in any other hospital nor would he have wanted to. There is also a tattoo of two angels in front of the hospital for which he stated that one was good and the other bad because "that's how it usually happens in life". The tattoo of a dice in flames with an inscription saying "Gambling is evil" is also related to the patient's psychiatric treatment. (Figure 6). In his confession, the patient explained that he "once gambled a lot, and has not gambled for more than ten years". Because he was proud of being able to stop gambling, he decided to get this tattoo.

SLIKA 5. Anđeo i vrag ispred glavne zgrade Bolnice Vrapče
FIGURE 5. Angel and devil in front of the main building of Hospital Vrapče

SLIKA 6. Kocka za igranje u plamenu
FIGURE 6. A dice in flames

ZAKLJUČAK

Premda postoje brojni razlozi tetoviranja, svima koji se odluče na tetoviranje zajednička je želja za eksternalizacijom važnih osjećaja i vrijednosti, koja tetoviranima pomaže u stvaranju i održavanju vlastitog identiteta. S obzirom na sveprisutnost tetovaža, neovisno o zemljopisnom položaju ili razdoblju u povijesti, jasno je da motivacija za tetoviranjem proizlazi iz kolektivnih težnji koje nadilaze osobno iskustvo. U zapadnoj kulturi tetovaže služe kao svojevrsna „psihička štaka", čiji je cilj pružiti nadu, ispraviti narušenu sliku sebe i smanjiti diskrepancu između vlastitih očekivanja i realnih mogućnosti (29).

Tetovaža je pokretač, posrednik u komunikaciji simbola. Kako navodi Wilson, tetovaže su aktivne, u trenutcima izloženosti drugima one projiciraju simbole drugima. Pojedincima tetovaže ne znače samo oznaku koja je u tom trenutku bila ideja ili želja, već dio identiteta njih samih (30).

Opisani obrazac motivacije za tetoviranjem možemo vidjeti i na temelju prikazanog pacijenta, kojem su tetovaže pomogle pri ekspresiji religioznih vrijednosti, ali i pri izražavanju najdubljih strahova, kao što je strah od smrti ili strah da će ga napustiti obitelj. Istovremeno,

CONCLUSION

Although there are many different reasons for tattooing, everyone who decides to get a tattoo shares a common desire to externalize important personal feelings and values, which helps tattooed individuals to create and maintain their own identity. Given the ubiquity of tattoos and regardless of geographical location or period in history, it is clear that the motivation for tattooing stems from collective aspirations that transcend personal experience. In Western culture, tattoos serve as a kind of "psychic crutch" whose goal is to inspire hope, correct the distorted image of oneself and reduce the discrepancy between one's own expectations and real possibilities (29).

The tattoo is the initiator and the mediator for communicating symbols. According to Wilson, tattoos are active as they project symbols at moments when one is exposed to others. For individuals, tattoos do not only represent a mark for something that was an idea or desire at the time, but also form part of their identity (30).

The above described pattern of motivation for tattooing can be observed on the patient presented in this paper, who used tattooing to express

na leđima je imao ispisan čitav životopis u obliku četiri tetovaže. Jasno je da su mu tetovaže pomogle povezati fragmentirane dijelove osobnosti, kao i podijeliti sa svijetom njemu značajne ideje i vrijednosti. Posebno je zanimljivo da je pacijent u jednoj od tetovaža uspio izraziti osjećaj pripadnosti i povjerenja koji je stekao prema instituciji u kojoj se liječi već dugi niz godina. Ovo je, koliko je nama poznato, jedini slučaj u 140-godišnjoj povijesti bolnice Vrapče da je netko nakon otpusta istetovirao glavnu zgradu bolnice Vrapče na svoju ruku i na taj način izrazio zahvalnost.

his religious values as well as his deepest fears, such as the fear of death or the fear of being left by his family. At the same time, the patient has four tattoos on his back that function as his biography. It is clear that tattoos have helped him to establish links between fragmented parts of his personality and to share the ideas and values that are important to him with the world. It is particularly interesting to see that with one of the tattoos the patient managed to express the feeling of belonging and trust in the institution where he has been treated for many years. As far as we know, this is the only case in the 140-year history of the Vrapče Hospital that a patient upon discharge tattooed the main hospital building on his arm, in order to expressed gratitude.

LITERATURA / *REFERENCES:*

1. Darwin C. The Descent of Man: And Selection in Relation to Sex. London: John Murray, Albermarle Street, 1871.
2. Dorfer L, Moser M, Bahr F, Spindler K, Egarter-Vigl E, Giullén S, Dohr G *et al*. A medical report from the stone age? Lancet 1999; 354(9183): 1023-5.
3. Noble G. The problem of the Picts: Searching for a lost people in northern Scotland. Curr Archaeol 2020; 364: 28-35.
4. Pesapane F, Nazzaro G, Gianotti R, Coggi A. A short history of tattoo. JAMA Dermatol 2014; 150(2): 145.
5. Sperry K. Tattoos and tattooing. Part I: History and methodology. Am J Forensic Med Pathol 1991; 12(4): 313-9.
6. Choong KY, Roberts LJ. Ritual Samoan body tattooing and associated sporotrichosis. Australas J Dermatol 1996; 37(1): 50-3.
7. Andreson LK. The Tattoo and Identity. 2008. https://www.academia.edu/15965521/The_Tattoo_and_Identity_2008_
8. Brady C. From punishment to expression: a history of tattoos in corrections. Corrections Compendium 1993; 18(9): 1-5.
9. Schmid S. Tattoos - an historical essay. Travel Med Infect Dis 2013; 11(6): 444-7.
10. Hametz ME, Schlipphacke H. Sissi's World: The Empress Elisabeth in Memory and Myth. New York: Bloomsbury Academic, 2018.
11. Ashcraft B. Japanese Tattoos: History * Culture * Design. Tokyo: Tuttle Publishing, 2016.
12. Wohlrab S, Stahl J, Kappeler PM. Modifying the body: motivations for getting tattooed and pierced. Body Image 2007; 4(1): 87-95.
13. Raspa RF, Cusack J. Psychiatric implications of tattoos. Am Fam Physician 1990; 41(5): 1481-6.
14. Williams K. Tattoos, scars, body adornment and dishevelment in an acute psychiatric population. Psychol Bull 1998; 22(2): 94-6.
15. Swami V, Pietschnig J, Bertl B, Nader IW, Stieger S, Voracek M. Personality differences between tattooed and non-tattooed individuals. Psychol Rep 2012; 111(1): 97-106.
16. Tate J, Shelton B. Personality correlates of tattooing and body piercing in a college sample: The kids are alright. Pers. Individ 2008; 45(4): 281-5.
17. Post RS. The relationship of tattoos to personality disorders. J Crim Law Criminol Police Sci 1968; 59(4): 516-24.
18. Požgain I, Barkić J, Filaković P, Koić O. Tattoo and personality traits in Croatian veterans. Yonsei Med J 2004; 45(2): 300-5. doi: 10.3349/ymj.2004.45.2.300.
19. Gittleson NL, Wallen GDP, Dawson-Butterworth K. The tattooed psychiatric patient. Br J Psychiatry 1969; 115(528): 1249-53.
20. Romans S, Martin J, Morris E *et al*. Tattoos, childhood sexual abuse and adult psychiatric disorder in women. Arch Womens Ment Health 1998; 1: 137-41.
21. Measey L. The Psychiatric and social relevance of tattoos in royal navy datinees. Br J Criminol 1972; 12 (2): 182-6.
22. Ferguson-Rayport SM, Griffith RM, Straus EW. The psychiatric significance of tattoos. Psychiatr Q 1955; 29(1): 112-31.
23. Guéguen N. Tattoos, piercings, and alcohol consumption. Alcohol Clin Exp Res 2012; 36(7): 1253-6.
24. Dukes R. Deviant Ink: A meta-analysis of tattoos and drug use in general populations. Deviant Behavior 2016; 37: 665-78.

25. Carroll ST, Riffenburgh RH, Roberts TA, Myhre EB. Tattoos and body piercings as indicators of adolescent risk-taking behaviors. Pediatrics 2002; 109(6): 1021-7.
26. Pirrone C, Castellano S, Platania G, Ruggieri S, Caponnetto P. Comparing the emerging psychological meaning of tattoos in drug-addicted and not drug-addicted adults: A look inside health risks. Health Psychol Res 2020; 8: 125-30.
27. Cardasis W, Huth-Bocks A, Silk K. Tattoos and antisocial personality disorder. Pers Ment Health 2008; 2(3): 171-82.
28. Žaja N, Uzun S, Kozumplik O, Žakić Milas D, Mimica N. Život na Golom otoku kroz tetovaže. Soc psihijat 2018; 46: 102-17.
29. Grumet GW. Psychodynamic implications of tattoos. Am J Orthopsychiatry 1983; 53(3): 482–92.
30. Wilson SE. Marks of identity: the performance of tattoos among woman in contemporary society. Maryland: University of Maryland, 2008.

„Udaljeni, ali i dalje povezani“ – kognitivno-bihevioralni tretman opsesivno-kompulzivnog poremećaja tijekom zdravstvene krize

/ “Distant but Still Connected” – Cognitive Behavioural Therapy in the Treatment of Obsessive-Compulsive Disorder During a Health Crisis

Ivana Kober Vrbat, Ana Kordić

Psihijatrijska bolnica za djecu i mladež, Zagreb, Hrvatska

/ Psychiatric Hospital for Children and Adolescents, Zagreb, Croatia

ORCID:
0000-0001-5355-6959 (Ivana Kober Vrbat)
0000-0002-9950-2443 (Ana Kordić)

Cilj rada je prikazati slučaj desetogodišnjeg dječaka koji boluje od opsesivno-kompulzivnog poremećaja, opisati simptome poremećaja kod dječaka te prikazati kognitivno-bihevioralni tretman uz terapiju psihofarmacima. Dječak u dobi od 10 godina i 4 mjeseca dolazi na hitni pregled dječjem i adolescentnom psihijatru zbog pogoršanja teškoća iz anksioznog kruga, te se pregledom psihijatra ustanovi dijagnoza opsesivno-kompulzivnog poremećaja. U svakodnevnom funkcioniranju dječaku se javi opsesivna misao prijetećeg sadržaja, a cilj njegovih kompulzija bio je smanjiti povišenu razinu tjeskobe te prevenirati neki zastrašujući događaj, koji nije bio specificiran. Dječak je uključen u kognitivno-bihevioralni tretman uz psihofarmakološku terapiju propisanu od strane dječjeg i adolescentnog psihijatra. Zbog pandemije korona virusa tretman je prilagođen novonastalim okolnostima te se tijekom pandemije tretman održavao putem video poziva. U tretmanu opsesivno-kompulzivnog poremećaja u dječjoj i adolescentnoj dobi od iznimne je važnosti pravovremena dijagnostika i uključivanje u tretman, kao i uključenost roditelja u terapijski proces. Kognitivno-bihevioralna terapija je pokazala uspješnost u redukciji anksioznih teškoća dječaka, što je u skladu i s mnogobrojnim znanstvenim istraživanjima, pa se kognitivno-bihevioralna terapija smatra terapijom izbora u liječenju opsesivno-kompulzivnog poremećaja kod djece i mladih. Aktualna zdravstvena kriza promijenila je način pružanja psihoterapije u svijetu što zahtijeva i daljnje prilagođavanje novonastalim uvjetima, kako terapeuta tako i primatelja psihoterapijskih usluga.

***/** The aim of this paper was to present a case of a ten-year-old boy suffering from Obsessive Compulsive Disorder, to describe the symptoms of the disorder and to present cognitive-behavioral treatment with psychopharmaceutical therapy. A boy aged 10 years and 4 months came in for an urgent examination to a child and adolescent psychiatrist due to worsening anxiety difficulties, and a psychiatric examination established a diagnosis of obsessive-compulsive disorder. An obsessive thought of threatening content came to mind in the daily functioning of the boy, and the goal of his compulsions was to reduce the elevated level of anxiety and prevent some frightening event, which was not specified. The boy was then included in cognitive-behavioural treatment with psychopharmacological therapy prescribed by the child and adolescent psychiatrist. Due to the coronavirus pandemic, the treatment was adapted to the new circumstances and during the pandemic the treatment was maintained via video call. In the treatment of Obsessive Compulsive Disorder in children and adolescents, timely diagnosis and involvement in treatment, as well as the involvement of parents in the therapeutic process are of utmost importance. Cognitive Behavioural Therapy has shown success in reducing the boy's anxiety difficulties, which is in line with numerous scientific studies, so cognitive-behavioural therapy is considered the therapy of choice in the treatment of Obsessive Compulsive Disorder in children and adolescents. The current health crisis has changed the way psychotherapy is provided in the world, which requires further adaptation to the new conditions, both for therapists and recipients of psychotherapeutic services.*

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE*:
Ivana Kober Vrbat, mag. psych.
Dnevna bolnica
Psihijatrijska bolnica za djecu i mladež
Kukuljevićeva 11
10 000 Zagreb, Hrvatska
E-pošta: ivana.vrbat@gmail.com

KLJUČNE RIJEČI / *KEY WORDS*:
Kognitivno-bihevioralna terapija / *Cognitive-Behavioral Treatment*
Anksioznost / *Anxiety*
Opsesivno-kompulzivni poremećaj /*Obsessive-Compulsive Disorder*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2021.228

UVOD

Opsesivno-kompulzivni poremećaj (OKP) karakteriziraju intenzivna anksioznost, ponavljajuće opsesije i/ili kompulzije (1). Osim prisutnosti opsesija, kompulzija ili obojeg, među dijagnostičkim kriterijima DSM-5 za postavljanje dijagnoze OKP-a navedeno je i da opsesije i kompulzije zahtijevaju mnogo vremena, uzrokuju klinički značajnu patnju, uzrokuju oštećenje u socijalnom, radnom ili drugom važnom području funkcioniranja. Opsesivno-kompulzivni simptomi ne mogu se pripisati fiziološkim učincima nekog psihoaktivog sredstva ili drugom zdravstvenom stanju te se ova smetnja ne može bolje objasniti simptomima drugog psihičkog poremećaja (2).

Opsesije su intruzivne i ponavljajuće misli, a osoba ih doživljava iznimno snažnim i ometajućim za normalno svakodnevno funkcioniranje. Za razliku od opsesija kod psihotičnih poremećaja, osoba je u većini slučajeva svjesna iracionalnosti svojih opsesija, zna da su „plod njenog uma", a ne izvana nametnute misli. Osoba ih prepoznaje kao svoje te ih želi zanemariti, otkloniti ili ih neutralizirati drugim mislima (1). Opsesije mogu poprimiti različite oblike: opsesivne dvojbe, opsesivne misli, opsesivni impulsi, opsesivni strahovi te opsesivne predodžbe (3). Brojne osobe s OKP-om imaju disfunkcijska uvjerenja (nerealno veliki osjećaj odgovornosti, sklonost precjenjivanju prijetnje,

INTRODUCTION

Obsessive Compulsive Disorder (OCD) is characterized by intense anxiety, recurrent obsessions, and/or compulsions (1). In addition to the presence of obsessions, compulsions, or both, the DSM-5 diagnostic criteria for diagnosing OCD explain that obsessions and compulsions are time consuming, cause clinically significant suffering, and impair social, working, or other important areas of functioning. Obsessive compulsive symptoms cannot be attributed to the physiological effects of a psychoactive substance or other health condition, and this disorder cannot be better explained by the symptoms of another mental disorder (2).

Obsessions are intrusive and repetitive thoughts, and a person perceives them as extremely strong and disruptive to normal daily functioning. Unlike obsessions with psychotic disorders, a person is in most cases aware of the irrationality of their obsessions and knows that these are "the fruit of their mind" rather than externally imposed thoughts. A person recognizes them as their own and wants to ignore, eliminate or neutralize them with other thoughts (1). Obsessions can take many forms: obsessive doubts, obsessive thoughts, obsessive impulses, obsessive fears, and obsessive images (3). Many people with OCD have dysfunctional beliefs (unrealistically high sense of responsibility, tendency to overestimate the threat, perfectionism, intolerance of insecurity,

perfekcionizam, nepodnošenje nesigurnosti, davanje prevelikog značenja mislima te potreba za kontrolom misli) (2).

Kompulzije su ponavljana ponašanja pri čemu se osoba osjeća primoranom na izvođenje takvih ponašanja jer na taj način ublažava anksioznost te vjeruje kako smanjuje mogućnost pojave neke nesreće ili katastrofe (3). Najčešći oblici kompulzija odnose se na čistoću i urednost (npr. pranje ruku, čišćenje), a ponekad je i riječ o složenim ceremonijama (npr. ponavljanje „magijske" zaštitne mjere, brojanje, višestruko provjeravanje, složeni ritual objedovanja) (3). Osobe ne izvršavaju kompulzije radi ugode, iako neke osobe doživljavaju olakšanje od anksioznosti i patnje. Kompulzije ponavljanja radnji, pranja, provjeravanja i slaganja česta su kod djece (1), iako manja djeca ne moraju biti sposobna izreći ciljeve ovakvih ponašanja ili mentalnih aktivnosti (2).

I zdrava djeca ponekad pokazuju ritualistička ponašanja, no simptomi OKP-a se razlikuju od razvojno primjerenih ritualističkih ponašanja po visokom intenzitetu nelagode koju djeca iskazuju kada ih se u tome pokuša spriječiti. Često osobe s ovakvim ponašanjem razviju izbjegavajuća ponašanja – izbjegavaju ljude, mjesta i stvari koje započinju opsesije i kompulzije (2). Prevalencija opsesivno-kompulzivnih simptoma u populaciji djece i adolescenata je 1-2 % (4).

U SAD-u je prosječna dob početka OKP-a 19,5 godina, no u 25 % oboljelih poremećaj počne do 14. godine života (2). S obzirom na dob, kod dječaka se javlja ranije nego kod djevojčica, no djevojčice češće imaju teži oblik poremećaja s više simptoma i poteškoća u funkcioniranju (2). Najčešći je početak poremećaja između 10. i 12 godine, mada se može javiti i ranije, u dobi od 7 g. Kod mlađe djece (6-8 godina) učestaliji su rituali bez opsesija, dok su kod djece za razliku od odraslih učestalije opsesije bez kompulzija. Opsesivno-kompulzivni poremećaj često se javlja u komorbiditetu s drugim anksioznim

overemphasis on thoughts, and need to control thoughts) (2).

Compulsions are repetitive behaviors where a person feels compelled to perform such behaviors because it alleviates anxiety and is believed to reduce the possibility of an accident or catastrophe (3). The most common forms of compulsion are cleanliness and tidiness (e.g. hand washing, cleaning), and sometimes complex ceremonies (e.g. repetition of a "magic" protective measure, counting, multiple checking, complex dining ritual) (3). People do not perform compulsions for pleasure, although some people experience relief from anxiety and suffering. Compulsions of repetition, washing, checking, and arranging items are common in children (1), although younger children may not be able to articulate the goals of such behaviours or mental activities (2).

Healthy children also sometimes show ritualistic behaviours, but the symptoms of OCD differ from developmentally appropriate ritualistic behaviours in the high intensity of discomfort that children show when they are prevented from doing so. Often people with this behaviour develop avoidant behaviours - they avoid people, places and things that trigger obsessions and compulsions (2). The prevalence of obsessive-compulsive symptoms in the population of children and adolescents is 1-2% (4).

In the United States, the average age of onset of OCD is 19.5 years, but in 25% of patients the disorder begins by the age of 14 (2). With regard to age, it occurs earlier in boys than in girls, but girls are more likely to have a more severe form of the disorder with more symptoms and difficulty in functioning (2). The most common onset of the disorder is between the ages of 10 and 12, although it can occur earlier, at the age of 7. In younger children (6-8 years), rituals without obsessions are more frequent, while in children, unlike adults, obsessions without compulsions are more frequent. Obsessive Compulsive Disorder often occurs in comorbidity with other anxiety disorders (GAP, SAP, specific phobia) and depres-

poremećajima (GAP, SAP, specifična fobija) i depresijom, a kod ranog početka i s ADHD-om. Istraživanja pokazuju kako 5-7 % mladih s OKP-om zadovoljava kriterije za dijagnozu Tourettovog sindroma (1).

Kognitivno-bihevioralna terapija (KBT) u kombinaciji s medikamentnom terapijom ili bez nje pokazala se terapijom izbora u liječenju OKP-a. Istraživanje March i sur., kao i niz drugih dostupnih istraživanja (5) upućuje da se kognitivno-bihevioralna terapija provođena samostalno ili u kombinaciji s farmakoterapijom pokazala sigurnom, prihvatljivom i učinkovitom za djecu i adolescente s OKP-om. U KBT-u se primjenjuju razne tehnike kod tretmana OKP-a: psihoedukacija, poučavanje tehnikama disanja i relaksacije, te ostale kognitivne i bihevioralne tehnike, ali tek primjenom terapije izlaganja i prevencije odgovora (prevencije izvođenja rituala) dolazi do značajnijeg poboljšanja u tretmanu. Mnoga istraživanja upućuju na učinkovitost izlaganja s prevencijom odgovora u tretmanu OKP-a (6). Tijekom izlaganja s prevencijom odgovora osoba se izlaže (u imaginaciji ili *in vivo*) situacijama koje izazivaju kompulzivni čin (npr. dodirivanje prljave zdjele), pa se uzdržava od uobičajenog rituala (npr. pranja ruku), a ponavljanjem postupka dolazi do habituacije na određeni podražaj.

PRIKAZ BOLESNIKA

Dječak u dobi od 10 godina i 4 mjeseca dolazi na hitni pregled dječjem i adolescentnom psihijatru zbog pogoršanja teškoća iz anksioznog kruga, predominantno opsesivno-kompulzivnih simptoma. Dječak je učenik 4. razreda osnovne škole, živi s majkom te unazad godinu dana s majčinim partnerom. Roditelji dječaka rastavljeni su unazad više godina, komunikacija među roditeljima je adekvatna, dječak s ocem ima redovne susrete i viđanja. Kao razlog dolaska majka navodi kako je kod dječaka primijetila smetnje na planu pažnje i koncentracije.

sion, and in early onset also with ADHD. Studies show that 5-7% of young people with OCD meet the criteria for the diagnosis of Tourette's syndrome (1).

Cognitive-behavioural therapy (CBT) in combination with or without drug therapy has proven to be the therapy of choice in the treatment of OCD. The study by March et al., as well as a number of other available studies (5), suggests that cognitive-behavioural therapy conducted alone or in combination with pharmacotherapy has been shown to be safe, acceptable, and effective for children and adolescents with OCD. CBT uses various techniques in the treatment of OCD: psychoeducation, teaching breathing and relaxation techniques, and other cognitive and behavioural techniques, but only the application of exposure and response prevention therapy (prevention of ritual performance) leads to significant improvement in treatment. Many studies point to the effectiveness of exposure with response prevention in the treatment of OCD (6). During the exposure with response prevention, the person is exposed (in imagination or in vivo) to situations that provoke a compulsive act (e.g., touching a dirty bowl), so they abstain from the usual ritual (e.g., hand washing), and repeating the procedure leads to habituation to a particular stimulus.

PATIENT REPORT

A boy aged 10 years and 4 months came in for an urgent examination to a child and adolescent psychiatrist due to worsening anxiety difficulties, predominantly obsessive-compulsive symptoms. The boy was a 4th grade elementary school pupil, living with his mother and, for the past year, also with his mother's partner. The boy's parents had been separated for several years, communication between the parents was adequate, the boy had regular meetings and visits with his father. As the reason for the arrival, the mother stated that she noticed disturbances in the boy's attention in terms of attention

cije, te je pregledom psihijatra ustanovljeno da su u pozadini teškoća opsesivno-kompulzivni simptomi. Dječaku bi se tijekom izlaganja određenim vizualnim sadržajima (dokumentarni film, određene slike, određeni objekti) pojavila opsesivna misao prijetećeg sadržaja (da će se nešto loše dogoditi), uz prateći „osjećaj da nešto nije u redu", porasla bi mu razina tjeskobe, što bi on reducirao kompulzivnim brojanjem do određenog broja te bi se tek tada umirio. Opsesivna misao pojavljivala se u obliku „da će se nešto loše dogoditi", uz prateći osjećaj tjeskobe i straha. Dječak nije mogao specificirati sadržaj opsesivne misli, no možemo ustvrditi da je cilj njegovih kompulzija (u ovom slučaju brojanje) bio smanjiti povišenu razinu tjeskobe te prevenirati neki zastrašujući događaj. Manja djeca ne moraju biti sposobna izreći ciljeve svojih kompulzija ili mentalnih aktivnosti (2). Prema Dodik-Ćurković (1) kod mlađe djece (6-8 godina) češći su rituali bez kognitivnih opsesija. Također, istraživanja pokazuju kako se simptomi opsesivno-kompulzivnog poremećaja kod dječaka češće nego kod djevojčica pojavljuju u predpubertetu (7).

Roditelji opisuju kako dječak unazad nekoliko godina pokazuje slične teškoće koje su varirale u čestini i intenzitetu; unazad dvije godine učestalo se i dugotrajno tuširao, prekomjerno prao ruke, verbalizirao je strah od obolijevanja od neke smrtonosne bolesti, te je pokazivao intenzivnu zabrinutost i strah za život i zdravlje roditelja. Majka navodi kako intenzitet i učestalost teškoća aktualno ometaju svakodnevno funkcioniranje dječaka.

Dječaku je propisana farmakoterapija od dječjeg i adolescentnog psihijatra, a nakon primjene terapije roditelji zamjećuju povećanje kvalitete usnivanja i prosnivanja, ali dječak i dalje izbjegava određene aktivnosti i situacije koje su okidači za pojavu opsesivno-kompulzivnih simptoma.

Majka navodi da je u školi učiteljica zamijetila slabiju suradnju dječaka, da je tijekom školskog

and concentration, and an examination by the psychiatrist established that obsessive-compulsive symptoms were hidden behind the difficulties. During the exposure to certain visual content (a documentary, certain pictures, certain objects), the boy would have an obsessive thought of threatening content (that something bad would happen), accompanied by "a feeling that something was wrong", his level of anxiety would increase, which he would reduce by compulsively counting to a certain number and only then would he calm down. The obsessive thought appeared in the form of "something bad would happen", with an accompanying feeling of anxiety and fear. The boy could not specify the content of the obsessive thought, but we can say that the goal of his compulsions (in this case counting) was to reduce the elevated level of anxiety and prevent some frightening event. Younger children may not be able to articulate the goals of their compulsions or mental activities (2). According to Dodik-Ćurković (1), rituals without cognitive obsessions are more common in younger children (6-8 years old). Also, research shows that symptoms of OCD in boys occur more often than in girls in prepuberty (7).

The parents described how the boy over the past few years had shown similar difficulties that varied in frequency and intensity; for the past two years he had taken frequent and prolonged showers, washed his hands excessively, verbalized his fear of contracting a deadly disease, and showed intense concern and fear for the life and health of his parents. The mother stated that the intensity and frequency of difficulties at the moment interfered with the boy's daily functioning.

The boy was prescribed pharmacotherapy by the child and adolescent psychiatrist, and after the therapy the parents noticed an increased quality of falling asleep and sleeping, but the boy still avoided certain activities and situations that triggered obsessive-compulsive symptoms.

The mother stated that the teacher noticed weaker cooperation in the school, that he was absent, pensive, deconcentrated during school hours and

sata bio odsutan, zamišljen, dekoncentriran te da izbjegava određene „okidače“ za pojavu opsesivno-kompulzivnih teškoća (npr. gledanje nekog dokumentarnog filma). Dječak opisuje kako se prisilno brojanje javlja i među prijateljima, no prijatelji to ne primjećuju. Dječak također navodi da se brojanje ne događa kada radi nešto zanimljivo (primjerice kada je išao na klizanje) što možemo shvatiti kao aktivnosti koje dječaku služe kao distrakcija. Podatci iz istraživanja pokazuju kako u osnovnoškolskoj dobi prevladavaju opsesivne misli i kompulzivne radnje vezane za školu poput brojanja u sebi i ponavljanja određenih riječi u situacijama napetosti (7).

Dječak je rođen iz uredne trudnoće, poslije porođaja je utvrđena cista na mozgu te je tijekom prve godine života bio u mutidisciplinskom praćenju. Rani psihomotorni razvoj dječaka bio je uredan. Pri procjeni rizičnih faktora važno je uzeti u obzir i faktor neurorizika kod dječaka. Psihijatrijska i psihološka procjena nije se značajno fokusirala na neurorizik, s obzirom da je dječakov rani psihomotorni razvoj bio uredan te nije bio u praćenju neuropedijatra poslije prve godine života. Dječji i adolescentni psihijatar nije indicirao potrebu neuropedijatrijske obrade dječaka.

Dječaj je pohađao vrtić od 1. godine do polaska u školu u koju je krenuo redovno, bez teškoća separacije i adaptacije. Roditelji dječaka opisuju kao emotivnog i osjetljivog na teškoće drugih. Majka dječaka opisuje kako je ona sama često tjeskobna i u strahu te se u razgovoru doznaje da je nakon porođaja imala simptome opsesivno-kompulzivnog poremećaja koji nisu liječeni niti je ikada bila u tretmanu psihijatra ili psihologa. Nakon porođaja majka navodi da su joj se anksiozne teškoće intenzivirale, a svoj odgojni stil opisuje hiperprotektivnim i pretjerano popustljivim. Među vršnjacima dječak je dobro prihvaćen i uklopljen, voli se družiti.

Majka pri davanju podataka smatra bitnim skoro rođenje polusestre po ocu o čemu dječak ne

that he avoided certain “triggers” of OCD (e.g., watching a documentary). The boy described how forced counting also occurred among friends, but friends did not notice it. The boy also stated that counting did not happen when he did something interesting (for example, when he went skating) which we could see as the activities that served as a distraction for the boy. Observational data show that obsessive thoughts and compulsive actions related to school, such as silent counting and repeating certain words in situations of tension, predominate in primary school age (7).

The boy was born after a normal pregnancy, a cyst was found on his brain after the birth, and he was under multidisciplinary follow-up during the first year of his life. The early psychomotor development of the boy was orderly. When assessing risk factors, it was important to consider the boy’s neurorisk factor. Psychiatric and psychological assessment did not significantly focus on neurorisk, as the boy’s early psychomotor development was orderly and was therefore not monitored by a neuropediatrician after the first year of life. The child and adolescent psychiatrist did not indicate the need for neuropediatric treatment of boy.

The child attended kindergarten from the age of 1 until he started school, which he attended regularly, without any difficulty of separation and adaptation. The boy’s parents described him as emotional and sensitive to the difficulties of others. The boy’s mother described how she herself was often anxious and scared, and the conversation revealed that after the birth she had symptoms of OCD that were not treated, and she had never been treated by a psychiatrist or psychologist. The mother stated that her anxiety difficulties intensified following the birth and described her upbringing style as hyperprotective and overly lenient. Among his peers, the boy was well accepted and integrated, he liked spending time with his friends.

When providing information, the mother considered the birth of a paternal half-sister to be important, which the boy refused to talk to his

želi razgovarati s majkom, rastuži se te bude plačljiv kada se spomene ta tema. Sukladno mnogobrojnim istraživanjima, posebno stresni životni događaji mogu dovesti do pogoršanja simptoma i intenziviranja teškoća. Rođenje sestre po ocu možemo u ovom slučaju smatrati precipitirajućim faktorom koji je okidač ili pridonosi intenziviranju teškoća.

Dječaka je u hitnoj ambulanti pregledao dječji i adolescentni psihijatar te je postavio dijagnozu opsesivno-kompulzivnog poremećaja. Dječak je zatim upućen na psihologijsku obradu. Psihologijskom obradom utvrđeno je da se radi o dječaku neverbalnih intelektualnih sposobnosti na razini prosjeka kod kojeg dominiraju simptomi opsesivno-kompulzivnog poremećaja koji ga ometaju u svakodnevnom funkcioniranju. Nakon obrade, dječak je uključen u ambulantno praćenje dječjeg i adolescentnog psihijatra, uz adekvatnu farmakoterapiju i psihologijski tretman jednom tjedno, prema principima kognitivno-bihevioralne terapije. Uvidom u nalaze dječjeg i adolescentnog psihijatra, već pri prvom pregledu uvedena je farmakološka terapija, i to inhibitor ponovne pohrane serotonina (fluvoksamin) te anksiolitik (diazepam). Početna doza fluvoksamina bila je 50 mg, a nadležni dječji i adolescentni psihijatar bilježi u nalazu da je povećanjem doze na 100 mg uočeno i od strane psihijatra, majke dječaka i samoga dječaka značajno poboljšanje u obliku redukcije opće razine anksioznosti te intenziteta i čestine opsesivnih misli i kompulzivnih radnji.

RASPRAVA

Tijek tretmana

Dječak na inicijalni pregled dječjeg i adolescentnog psihijatra, psihologijsku procjenu i uključenje u tretman dolazi na inicijativu majke, koja je primijetila intenzivne teškoće pažnje i koncentracije, koje su utjecale na njegovu školsku i opću efikasnost, a u podlozi čega su

mother about and got sad and cried every time this topic was mentioned. According to numerous studies, particularly stressful life events can lead to worsening of symptoms and intensification of difficulties. The birth of a paternal half-sister can in this case be considered a precipitating factor that is a trigger or contributes to the intensification of difficulties.

The boy was examined by a child and adolescent psychiatrist in the emergency room and was diagnosed with OCD. The boy was then referred for psychological treatment. Psychological examination revealed that he was a boy with non-verbal intellectual abilities at the average level, dominated by symptoms of obsessive-compulsive disorder that interfered with his daily functioning. After examination, the boy was included in the outpatient follow-up by the child and adolescent psychiatrist, with adequate pharmacotherapy and psychological treatment once a week, according to the principles of cognitive-behavioural therapy. Based on the findings of the child and adolescent psychiatrist, the pharmacological therapy was introduced upon the first visit, specifically a serotonin reuptake inhibitor (fluvoxamine) and an anxiolytic (diazepam). The initial dose of fluvoxamine was 50 mg, and the competent child and adolescent psychiatrist found that increasing the dose to 100 mg showed a significant improvement, which was acknowledged by the psychiatrist but also by the boy's mother and the boy himself, in the form of reduction of general anxiety and intensity and frequency of obsessive thoughts and compulsive actions.

DISCUSSION

The course of treatment

The boy came in for an initial examination by a child and adolescent psychiatrist, psychological assessment and inclusion in treatment at the initiative of the mother, who noticed intense attention and concentration difficulties, which affected his school and general efficiency, and

bile opsesivno-kompulzivne teškoće. DSM-5 dijagnostički kriteriji ne zahtijevaju da djeca prepoznaju opsesije i kompulzije kao pretjerane i nerazumne, a najčešće su upravo roditelji ti koji opažaju simptome kada oni počnu ometati funkcioniranje djeteta ili obitelji (1). Iako je dječakova kompulzija bila „nevidljiva", odnosno bila je u mentalnoj formi, značajno je utjecala na svakodnevno funkcioniranje dječaka i kvalitetu života, što je zatim majci postalo vidljivo.

Na početku psihoterapijskog tretmana usvojeni su sljedeći ciljevi s dječakom i roditeljima: usvajanje tehnika suočavanja s opsesivnim mislima, usvajanje tehnika suprotstavljanja kompulzivnim radnjama te reduciranje anksioznosti u svakodnevnom životu, kao i osnaživanje i educiranje dječaka i roditelja u svrhu boljeg nošenja s teškoćama te podrški dječaku tijekom tretmana. Tijekom tretmana OKP-a kod djece nužna je uključenost roditelja ili skrbnika u tretman, što naglašavaju i rezultati istraživanja. Istraživanja pokazuju kako se čak 99 % roditelja uključuje u određena kompulzivna ponašanja djeteta, dok ih 77 % u svakodnevnim aktivnostima sudjeluje u OKP ritualima ili pomaže djetetu u izbjegavanju situacija koje izazivaju anksioznost (8). Obiteljske intervencije koje pomažu razvoj OKP simptoma mogu dovesti do ozbiljnog narušavanja svakodnevnih obiteljskih rutina (9) što naglašava važnost uključenosti roditelja u tretman OKP kod djece (10).

Prvi korak u tretmanu dječaka bila je psihoedukacija roditelja i dječaka o opsesivno-kompulzivnom poremećaju. Nakon psihoedukacije i postavljanja terapijskih ciljeva s dječakom je izrađena hijerarhija situacija koje izazivaju opsesije i kompulzije kako bi se započelo postupno izlaganje. Prema kliničkim smjernicama NICE (11) tehnika izlaganja s prevencijom odgovora (sprječavanje kompulzija) uvrštena je među preporuke o tretmanima koji se smatraju uspješnima za liječenje OKP-a, i kod djece i mladih i odraslih. Specifične smjernice i preporuke

which stemmed from his OCD. DSM-5 diagnostic criteria do not require children to recognize obsessions and compulsions as excessive and unreasonable, and most often it is the parents who notice the symptoms when they begin to interfere with the functioning of the child or family (1). Although the boy's compulsion was "invisible", i.e., it was in mental form, it significantly affected the boy's daily functioning and quality of life, which then became visible to the mother.

At the beginning of psychotherapeutic treatment, the following goals were adopted both with the boy and his parents: adoption of techniques for coping with obsessive thoughts, adoption of techniques for counteracting compulsive actions and reducing anxiety in everyday life, as well as for empowering and educating the boy and his parents to better cope with difficulties and to provide support to the boy during treatment. During the treatment of OCD in children, the involvement of parents or guardians in the treatment is necessary, which is emphasized by the results of the research. Research shows that as many as 99% of parents engage in certain compulsive behaviours of the child, while 77% of them participate in OCD rituals in daily activities or help the child avoid situations that cause anxiety (8). Family interventions that help develop OCD symptoms can lead to serious disruption of daily family routines (9), emphasizing the importance of parental involvement in the treatment of OCD in children (10).

The first step in the treatment of the boy was the psychoeducation of parents and the boy about OCD. After psychoeducation and setting therapeutic goals, a hierarchy of situations that provoked obsessions and compulsions was created with the boy in order to begin gradual exposure. According to the NICE clinical guidelines (11), the technique of exposure with response prevention (prevention of compulsions) is included among the recommendations on treatments considered successful for the treatment of OCD, both in children and adolescents and adults. NICE's specific guidelines and recommendations (11) for the

NICE (11) za liječenje OKP-a kod djece i mladih sugeriraju aktivno uključivanje obitelji ili skrbnika djeteta u planiranje liječenja i u postupak liječenja, posebno vezano uz tehniku izlaganja s prevencijom odgovora, u obliku pomoći djetetu/mladoj osobi u provođenju tehnike kao i poticanju primjene ERP-a (*Exposure Response Prevention*) ako se nakon liječenja pojave novi ili različiti simptomi.

U izlaganju su korišteni video i slikovni materijali koji su dječaku izazivali opsesivne misli i kompulzije brojanja te su hijerarhijski poredani od one koja je dječaku potencijalno najmanje do one koja je najviše stresna. Tijekom gledanja navedenih materijala inzistiralo se od terapeuta da dječak opisuje što vidi na ekranu na glas, kako istovremeno ne bi izvodio kompulzije (brojanje). Osim određenih crtanih filmova te crno-bijelih filmova, kod dječaka su okidač za opsesije bile i stare slike u kući bake i djeda te stara kuća u ulici u kojoj živi. Za domaću zadaću, roditelji i dječak trebali su se izlagati starim slikama kod kuće prema pravilima postupnog izlaganja o čemu su roditelji detaljno educirani. Upravo je uključenost roditelja u cjelokupan tretman bila od izrazite važnosti, budući da i sva relevantna istraživanja upućuju na potrebu da roditelj (barem jedan) prisustvuje seansama te bude savjetovan od terapeuta kako voditi dijete tijekom procesa izlaganja izvan terapijskog *settinga* (kod kuće). Roditelji su detaljno educirani kako adekvatno reagirati na djetetove simptome OKP-a te primjenjivati strategije upravljanja nepredviđenim situacijama, kao i potkrepljivanju pozitivnih pomaka u ponašanju (pohvala, mala nagrada) (12).

U tretmanu opsesivno-kompulzivnog poremećaja kod dječaka primijenjene su i kognitivne tehnike. U literaturi se navodi metoda 4 koraka kao vrlo uspješna kognitivna tehnika u tretmanu opsesivno-kompulzivnog poremećaja, a koja se sastoji od preimenovanja, pripisivanja, preusmjeravanja pažnje i ponovnog procjenjivanja (13).

treatment of OCD in children and young people suggest the active involvement of the family or caregiver in treatment planning and procedure, especially in relation to exposure response prevention techniques, in the form of assistance to the child/young person in the application of the technique, as well as in encouraging the use of ERP (Exposure Response Prevention) if new or different symptoms appear after treatment.

The exposure techniques involved video and pictorial materials that provoked the boy's obsessive thoughts and compulsions of counting and were hierarchically arranged from the one that was potentially the least stressful for the boy to the one that was the most stressful. While watching the above materials, the therapist insisted that the boy describe what he saw on the screen aloud, so as not to perform compulsions (counting) at the same time. In addition to certain cartoons and black-and-white films, the boys' triggers for obsessions were old paintings in their grandparents' house and an old house in the street where he lived. For homework, the parents and the boy had to be exposed to old paintings at home according to the rules of gradual exposure, about which the parents were educated in detail. The involvement of parents in the overall treatment was extremely important, as all relevant research suggests the need for a parent (at least one) to attend sessions and be advised by a therapist on how to guide the child during the exposure process outside the therapeutic setting (at home). Parents were educated in detail on how to adequately respond to the child's symptoms of OCD and apply strategies to manage unforeseen situations, as well as to support positive behavioural shifts (praise, small reward) (12).

Cognitive techniques were also used in the treatment of the boy's OCD. The 4-step method is cited in the literature as a very successful cognitive technique in the treatment of OCD, which consists of renaming, attributing, redirecting attention, and re-evaluating (13).

The boy named the disorder "Zloćko" ("Meanie") and was taught how to apply the first two steps of

Dječak je poremećaju dao ime „Zloćko“ te je poučen kako primjenjivati prva dva koraka iz navedene metode. Naučio je opsesije i kompulzije prepoznavati samo kao misli koje se pojavljuju i koje ne utječu na stvarni razvoj događaja te je naučio opsesije i kompulzije pripisivati poremećaju, a ne samom sebi. Primjerice, kada bi se javila opsesija dječak je naučio sam sebi reći *„To je samo moj Zloćko, to nisam ja, evo ga opet, baš je dosadan“*.

Dječak je od početka tretmana pokazivao dobar uvid u svoje teškoće, što je prema DSM-u 5(2) definirano na način da „osoba prepoznaje da uvjerenja opsesivno-kompulzivnog poremećaja sigurno ili vjerojatno nisu točna ili da mogu, ali i ne moraju biti točna“. Prema istraživanju slabiji uvid u teškoće povezan je s lošijim ishodom tretmana (14).

Nakon što se na seansi uspješno izlagao dokumentarnom filmu o Nikoli Tesli i njegovim izumima, dječak je sam predložio da s ocem za domaću zadaću ode u Tehnički muzej. Posjet muzeju je prošao odlično – otac daje podatke da nije primijetio napetost kod dječaka, navodi da je dječak cijelo vrijeme s njim razgovarao te da nije primijetio da je obuzet brojanjem, što potvrđuje i sam dječak, koji navodi da se poriv za kompulzivnim ponašanjem javio, no da mu se pomoću usvojenih tehnika uspio oduprijeti.

Roditelji su educirani da pohvaljuju dječaka kada primijete da se uspio oduprijeti brojanju ili kada nije primjenjivao izbjegavajuće ponašanje, te se uspio suočiti sa stresogenim situacijama ili objektima, a dječak je podučen da napiše popis uspjeha koje je postigao tijekom terapijskih susreta, a za koje je prije mislio da neće nikako moći te da taj popis spremi i pohvali se svaki put za uspješno suočavanje.

Roditelji suočeni s opsesivno-kompulzivnim poremećajem kod djece izražavaju teškoće u razumijevanju poremećaja, osjećaj bespomoćnosti u kontroli simptoma (9) te izražavaju nesigurnost u načinima nošenja i odgovora

this method. He learned to recognize obsessions and compulsions only as thoughts that arose and did not affect the actual development of events, and he learned to attribute obsessions and compulsions to disorder, rather than to himself. For example, when an obsession arose, the boy learned to say to himself "*It's just my Meanie, it's not me, here it is again, it's really annoying.*"

From the beginning of the treatment, the boy showed a good insight into his difficulties, which according to DSM 5 (2) is defined in such a way that "a person recognizes that obsessive-compulsive disorder beliefs are certainly or probably incorrect or may or may not be correct". According to research, poorer insight into difficulties is associated with a poorer treatment outcome (14).

After successfully exposing himself to a documentary about Nikola Tesla and his inventions, the boy himself suggested that he go to the Technical Museum with his father as part of homework. The visit to the museum went great - the father said that he did not notice tension in the boy, stated that the boy talked to him all the time and that he did not notice that he was obsessed with counting, which was also confirmed by the boy himself. The boy also explained that the urge for compulsive behaviour occurred, but he managed to resist it with the help of the adopted techniques.

Parents were educated to praise the boy when they noticed that he managed to resist counting or when he did not apply avoidant behaviour and when he managed to cope with stressful situations or objects. On the other hand, the boy was taught to write a list of successes he achieved during therapeutic encounters, for which he thought that he would not be able to achieve, and to keep that list and praise himself every time he had a successful confrontation.

Parents faced with obsessive-compulsive disorder in children express difficulties in understanding the disorder, feelings of helplessness in controlling the symptoms (9) and express insecurity in the ways of carrying and respond-

prema djetetovim simptomima (15). Iz svega navedenog te uzimajući u obzir ovisnost djeteta o roditeljima ili skrbnicima jasna je važnost uključenosti roditelja/skrbnika u tretman djeteta s opsesivno kompulzivnim poremećajem (10). Kako je ranije navedeno, majka je svoj odgojni stil procijenila hiperprotektivnim, a što je u skladu i s podatcima iz literature. Istraživanja pokazuju kako roditelji djece s OKP-om rjeđe nagrađuju nezavisnost djeteta u usporedbi s roditeljima djece iz kontrolnih skupina (16). Sukladno navedenim nalazima i druga istraživanja potvrđuju visoke razine roditeljske kontrole djetetovog ponašanja u obiteljima s OKP-om (10). Također, kao što je i ranije navedeno, majka dječaka je i sama imala simptome opsesivno-kompulzivnog poremećaja koji nisu liječeni, te navodi čest osjećaj straha i tjeskobe, što upućuje i na nasljednu ulogu, ali i utjecaj okolinskih čimbenika na razvoj teškoća. Genetska hipoteza upućuje na postojanje najmanje pet glavnih gena koji imaju važnu ulogu u nastanku OKP-a, no naglašava se uloga i okolinskih čimbenika u razvoju i održavanju OKP-a, jer je malo vjerojatno da će samo genetska komponenta imati utjecaj na razvoj bolesti. U mnogim slučajevima izostaje pozitivna obiteljska anamneza (17).

Važno je napomenuti kako je tretman uživo prekinut krajem ožujka 2020. godine zbog pandemije koronavirusa i djelomične obustave rada u zdravstvenim ustanovama, odnosno prilagođavanja načina rada zdravstvenoj krizi. Zbog pandemije korona virusa, ograničeni su kontakti kada to nije nužno te je obustavljen ambulantni rad u zdravstvenoj ustanovi. Iskustva iz drugih država Europske unije pokazuju kako su se mnogi stručnjaci mentalnog zdravlja suočili sa sličnim teškoćama te je tako broj pacijenata koji su bili u tretmanu uživo značajno smanjen, dok je povećan broj psihoterapija održanih na daljinu, putem interneta i telefonske veze (18). S roditeljima i dječakom tada su dogovoreni online susreti tijekom kojih smo se usredotočili na osnaživanje dječaka i roditelja te uvođenje strukture dana i održavanje postignutih napre-

ing to the child's symptoms (15). From all the above and taking into account the child's dependence on parents or guardians, the importance of the involvement of parents/guardians in the treatment of a child with OCD is clear (10). As mentioned earlier, the mother assessed her parenting style as hyperprotective, which is in line with the data from the literature. Research shows that parents of children with OCD are less likely to reward child independence compared to parents of children in control groups (16). Consistent with these findings, other studies confirm high levels of parental control of child behaviour in families with OCD (10). Also, as mentioned earlier, the boy's mother herself had symptoms of obsessive-compulsive disorder that were not treated, and she cited frequent feelings of fear and anxiety, which suggests a hereditary role, but also the influence of environmental factors on the development of difficulties. The genetic hypothesis suggests the existence of at least five major genes that play an important role in the development of OCD but emphasizes the role of environmental factors in the development and maintenance of OCD, as it is unlikely that only the genetic component will influence disease development. In many cases, a positive family history is missing (17).

It is important to note that the live treatment was interrupted at the end of March 2020 due to the coronavirus pandemic and the partial suspension of work in healthcare institutions, i.e. the adjustment of the way of working to the health crisis. Due to the coronavirus pandemic, contacts are limited when not necessary and outpatient work at the health facility has been suspended. Experiences from other EU countries show that many mental health professionals have faced similar difficulties, significantly reducing the number of patients receiving live treatment, while increasing the number of remote psychotherapies, via the Internet and telephone (18). Online meetings were then arranged with the parents and the boy, during which we focused on empowering the boy and the parents and introducing the structure of the day and main-

daka u terapiji. Nakon ponovnog otvaranja rada u zdravstvenim ustanovama, s dječakom i roditeljima uspostavljeni su susreti uživo. Susreti *online* putem video poziva bili su novi oblik rada i za psihologinju i za dječaka i njegove roditelje te je situacija zahtijevala brzu prilagodbu novim načinima susreta. I roditelji i dječak bili su voljni održavati susrete putem video poziva, no bilo je potrebno prilagoditi materijale, vježbe i tehnike susretima *online*. Istraživanja pokazuju kako kognitivno-bihevioralni tretman putem web kamere može biti efikasan u smanjivanju opsesivno–kompulzivnih simptoma kod mladih s OKP-om (12). Prednost *online* tretmana putem web kamere je dostupnost terapeuta i u situacijama fizičkog distanciranja kada su onemogućeni kontakti uživo, dostupnost tretmana i osobama koje žive na udaljenim lokacijama te mogućnost da se putem kamere vidi cijelo lice djeteta što je u kontaktu uživo onemogućeno nošenjem zaštitnih maski, dok je mana nedostatak "*face-to-face*" kontakta, moguće poteškoće u internetskoj vezi koje otežavaju komunikaciju te ograničene mogućnosti izlaganja podražajima koji izazivaju anksioznost.

Važno je istaknuti kako je dječak uz kognitivno-bihevioralni tretman imao i propisanu farmakoterapiju od strane nadležnog dječjeg i adolescentnog psihijatra, što je u skladu s nalazima iz stranih istraživanja koja pokazuju kako su kognitivno-bihevioralna terapija uz izlaganje te psihofarmakološki tretman prve dvije terapije izbora u tretmanu OKP-a kod djece (19). Tretman s jednom ili obje navedene terapije dovodi do klinički značajnog poboljšanja simptoma kod 50 % pedijatrijskih pacijenata s OKP-om (20). Vodeći se rezultatima brojnih i recentnih istraživanja te pod pretpostavkom da psihoterapija i farmakoterapija imaju aditivne i sinergijske učinke, kao i da dva učinkovita načina liječenja koja ciljaju različite mehanizme promjene u oboljele osobe ujedinjena postaju učinkovitija od bilo kojeg pojedinačno, možemo reći i da su i farmakoterapija i psihoterapija dala svoj zasebni, ali i sinergijski dio u ishodu liječenja dječaka.

taining the progress made in therapy. After the reopening of work in health facilities, live meetings were re-established with the boy and his parents. Online video meetings were a new form of work for both the psychologist and the boy and his parents, and the situation required quick adaptation to new ways of meeting. Both parents and the boy were willing to hold the meetings via video calls, but it was necessary to adapt the materials, exercises and techniques to the online meetings. Research shows that cognitive-behavioral treatment via webcam can be effective in reducing obsessive-compulsive symptoms in young people with OCD (12). The advantage of online treatment via webcam is the availability of therapists and situations of physical distancing when live contacts are disabled, the availability of treatment for people living in remote locations and the ability to see the whole face of the child, which is not possible in live contact because of protective masks that need to be worn. The disadvantage is the lack of face-to-face contact, possible difficulties in the Internet connection that hamper normal communication and limited opportunities to be exposed to stimuli that cause anxiety.

It is important to point out that the boy, in addition to cognitive-behavioural treatment, was administered pharmacotherapy, prescribed by the competent child and adolescent psychiatrist, which is in line with findings from foreign research showing that cognitive-behavioural therapy with exposure and psychopharmacological treatment are the first two therapies of choice for the treatment of OCD in children (19). Treatment with one or both of these therapies leads to clinically significant improvement in symptoms in 50% of paediatric patients with OCD (20). Guided by the results of numerous and recent studies and assuming that psychotherapy and pharmacotherapy have additive and synergistic effects, as well as that two effective treatments that target different mechanisms of change in patients together become more effective than any individually, we can say that pharmacotherapy and psychotherapy gave its separate but also

Sudjelovanje u kognitivno-bihevioralnoj terapiji od pacijenta zahtijeva aktivan pristup, uključenost u proces terapije, predanost, uvježbavanje terapijskih tehnika naučenih na seansi kod kuće te implementiranje u svakodnevni život. Na početku tretmana su opsesivno-kompulzivne teškoće dječaka bile do te mjere izražene da bi onemogućile adekvatno sudjelovanje u terapiji bez adekvatne medikacije. Lijek je pomogao u ublažavanju simptoma mehanizmima povezanima s kemijsko-biološkim promjenama unutar živčanog sustava, dovoljno da omogući dječaku da adekvatnije sudjeluje u psihoterapijskom procesu. Teško je točno razgraničiti veličinu utjecaja pojedinog mehanizma promjene, no možemo zaključiti da je uspješno liječenje uključivalo i farmakoterapijske i psihoterapijske postupke, što znači da se najbolji rezultati postižu kombinacijom navedenoga.

Nadalje, kao prediktore uspješnosti tretmana OKP-a, istraživanja navode kako predadolescenti imaju više koristi od tretmana nego adolescenti (19). Također, kod dječaka nisu dijagnosticirana komorbidna stanja. Prisutnost komorbidnih stanja, odnosno prisutnost nekih kliničkih stanja u kombinaciji s OKP-om (depresivnost, problemi ponašanja, ADHD) predviđaju lošiju prognozu liječenja KBT-om. Primjerice, prisustvo depresivnog poremećaja uz OKP može ometati proces habituacije anksioznosti tijekom terapijske tehnike izlaganja (21).

Navedeni podatci potvrđuju važnost rane dijagnostike teškoća i simptoma kod djece te što ranijeg uključivanja u tretman u koji je potrebno uključiti i roditelje.

EVALUACIJA, PROBLEMI TE REZULTATI TRETMANA

Tretman je provodila psihologinja u edukaciji iz kognitivno-bihevioralne terapije uz ambulantno psihijatrijsko praćenje nadležnog dječjeg i adolescentnog psihijatra. Marques i sur. (22)

synergistic contribution in the outcome of the boy's treatment. Participation in cognitive-behavioural therapy requires from the patient an active approach, involvement in the therapy process, dedication, practicing therapeutic techniques learned in sessions at home and implementation in everyday life. At the beginning of the treatment, the boys' obsessive-compulsive disorders were so severe that they would have prevented him from participating adequately in therapy without adequate medication. The drug helped alleviate symptoms by mechanisms associated with chemical-biological changes within the nervous system, enough to allow the boy to participate more adequately in the psychotherapeutic process. It is difficult to accurately delineate the magnitude of the impact of a particular mechanism of change, but we can conclude that successful treatment included both pharmacotherapeutic and psychotherapeutic procedures, which means that the best results are achieved by combining the above.

Furthermore, as predictors of the success of OCD treatment, research suggests that preadolescents benefit more from treatment than adolescents (19). Also, the boy was not diagnosed with comorbid conditions. The presence of comorbid conditions, i.e., the presence of some clinical conditions in combination with OCD (depression, behavioural problems, ADHD) predicts a poorer prognosis of CBT treatment. For example, the presence of depressive disorder with OCD may interfere with the process of anxiety habituation during therapeutic exposure technique (21).

These data confirm the importance of early diagnosis of difficulties and symptoms in children and the earliest possible inclusion in the treatment in which it is also necessary to include the parents.

EVALUATION, PROBLEMS AND TREATMENT RESULTS

The treatment was performed by a psychologist (student of cognitive-behavioural therapy studies) with outpatient psychiatric monitoring by

zamijetili su da primijenjena psihoterapija za OKP kod djece i mladih često nije utemeljena na znanstvenim dokazima, nije kognitivno-bihevioralna terapija te ključni elementi terapije izlaganjem nisu uključeni. Klinička iskustva podržavaju tu tezu te upućuju na ograničenu remisiju simptoma u takvim slučajevima. Tretman je osim kognitivno-bihevioralnih intervencija uključivao i psihofarmakološku terapiju. Istraživanja jasno podupiru tezu da je za liječenje OKP-a kod djece i adolescenata terapija prvog izbora KBT (uz terapiju izlaganja i prevencije odgovora), sama ili u kombinaciji s psihofarmakološkim liječenjem (selektivni inhibitori ponovne pohrane serotonina, SIPPS) (23,24).

Tretman je trajao od siječnja do kolovoza 2020. godine, sveukupno je provedeno 22 susreta koji su se u početku odvijali jedanput tjedno, a pred kraj tretmana su prorijeđeni na jedan susret u dva tjedna te kasnije na jedan susret u mjesec dana. Dogovoreno je javljanje po potrebi. Evaluacija kognitivno-bihevioralnog tretmana pokazala je kako su ostvareni ciljevi postavljeni na početku tretmana. Dječak ne izbjegava situacije koje su ranije izazivale opsesivne misli te se suprotstavlja kompulzivnim radnjama. Dječak je evaluirao uspješnost terapije na način: „Kada sam tek došao kod vas, 'Zloćko' je bio 100 % jak, a sada je samo 30 % jak." Simptomi opsesivno-kompulzivnog poremećaja kod dječaka su znatno smanjeni, pojavljuju se povremeno, jedanput u tjedan dana, dok su ranije bili prisutni svakodnevno čime je povećan broj dana kada kod dječaka izostaju opsesivno-kompulzivne teškoće. U svrhu praćenja učinka terapije te intenziteta teškoća dječaka prisutnih u pojedinim fazama terapije, provedeni psihologijski testovi pokazuju kako su kod dječaka i dalje prisutne opsesivne misli, no one više ne ometaju dječaka u svakodnevnom funkcioniranju.

Dječak je naučio bolje detektirati opsesivne misli (što je rezultat usvajanja tehnike samoopažanja – koji može utjecati na mjere samopro-

a competent child and adolescent psychiatrist. Marques et al. (22) noted that applied psychotherapy for OCD in children and adolescents was often not based on scientific evidence, was not cognitive-behavioural therapy, and key elements of exposure therapy were not included. Clinical experience supports this thesis and suggests limited remission of symptoms in such cases. In addition to cognitive-behavioural interventions, the treatment also included psychopharmacological therapy. Research clearly supports the thesis that for the treatment of OCD in children and adolescents, CBT is the first-choice therapy (with exposure and response prevention therapy), alone or in combination with psychopharmacological treatment (selective serotonin reuptake inhibitors, SIPPS) (23,24).

The treatment lasted from January to August 2020, a total of 22 meetings were held, which initially took place once a week, and towards the end of the treatment, these were diluted to one meeting in two weeks and later to one meeting in a month. It was agreed to report as needed. The evaluation of cognitive-behavioural treatment showed that the achieved goals were set at the beginning of treatment. The boy stopped avoiding situations that used to provoke obsessive thoughts and started to oppose compulsive actions. The boy evaluated the success of the therapy in the following way: "When I first came to you, "Meanie" was 100% strong, and now he is only 30% strong." Symptoms of obsessive-compulsive disorder were significantly reduced, occurring occasionally, once a week, while previously they had been present daily thus increasing the number of days when the boy did not present obsessive-compulsive disorder. In order to monitor the effect of therapy and the intensity of the boy's difficulties present in certain phases of therapy, conducted psychological tests showed that obsessive thoughts were still present in the boy, but they no longer interfered with his daily functioning.

The boy learned to better detect obsessive thoughts (as a result of adopting self-perception techniques - which can affect self-assessment

cjene, pa se može činiti kako u tijeku terapije njihov intenzitet i čestina ne opadaju dovoljno, a zapravo dijete se nauči boljem samoopažanju vlastitih kognitivnih procesa). Dječak procjenjuje da je usvojio adekvatne tehnike nošenja s opsesivnim mislima, bez obzira što se one i dalje pojavljuju. Roditelji su educirani o opsesivno-kompulzivnom poremećaju, načinima suočavanja s njim te su poučeni da njihov odnos prema simptomima OKP-a može imati važnu ulogu u održavanju samog poremećaja. Roditelji nerijetko u cilju smanjenja vlastite anksioznosti ili anksioznosti/patnje djeteta „sudjeluju" u kompulzijama, razuvjeravaju djecu, izvode „rituale" umjesto djeteta, no nažalost takav „angažman" jača i održava djetetove simptome te značajno utječe na živote svih članova obitelji (24). U ovom slučaju roditelji su bili partneri u tretmanu te nisu imali navedenih teškoća, pa je samim time i prognoza za uspješnost terapije bila veća, što je i u skladu s istraživanjima (26).

Simptomi nisu sasvim nestali, ali se pojavljuju rjeđe te kada se jave, dječak broji do broja četiri, umjesto do troznamenkastih brojeva, te je u mogućnosti promatrati OKP kao poremećaj s kojim se može suočiti.

Očekivana prepreka bila je i sama priroda opsesivno-kompulzivnog poremećaja u kojem se opsesije i kompulzije javljaju u sadržajno drugačijim oblicima. Ovisno o okidaču za pojavu opsesivnih misli (kasnije su to bili sadržajno neki drugi podražaji, npr. odjeća od tek rođene polusestre po ocu), iznova je rađena hijerarhija izlaganja, no pokazalo se s vremenom kako su kognitivne tehnike dječaku bile korisne te ih je naučio koristiti i primjenjivati neovisno o sadržaju, a tehniku izlaganja su usvojili i roditelji i dječak te su je mogli primijeniti u slučaju pojave novih oblika opsesija i kompulzija.

Roditelji su tijekom terapijskih susreta bili suportivni, spremni na sudjelovanje u terapijskom procesu, adekvatno su međusobno komunicirali, razmjenjivali informacije te su podjednako često dolazili na susrete u pratnji dječaka.

measures, as it may seem that their intensity and frequency did not decrease enough during therapy, in fact the child learnt better self-perception of own cognitive processes). The boy estimated that he had adopted adequate coping techniques with obsessive thoughts, regardless of the fact that they still appeared. Parents were educated about obsessive-compulsive disorder, ways to deal with it, and were taught that their attitude toward OCD symptoms could play an important role in maintaining the disorder itself. Parents often "participate" in compulsions, dissuade children, perform "rituals" instead of the child in order to reduce their own anxiety or the child's anxiety or suffering, but unfortunately such "engagement" strengthens and maintains the child's symptoms and significantly affects the lives of all family members (24). In this case, the parents were partners in treatment and did not have these difficulties, so the prognosis for the success of therapy was higher, which is in line with research (26).

The symptoms did not completely disappear, but they appeared less frequently, and when they did, the boy counted to number four instead of three-digit numbers and was able to view OCD as a disorder he was able to face.

The expected obstacle was the very nature of obsessive-compulsive disorder in which obsessions and compulsions occur in different forms. Depending on the trigger for obsessive thoughts (later these were some other stimuli, such as clothes from the new-born paternal half-sister), the hierarchy of exposure was redesigned, but over time it turned out that cognitive techniques were useful to the boy and he taught how to use and apply them regardless of the content. The exposure technique was also adopted by both parents and the boy and they were able to apply it in case of new forms of obsessions and compulsions.

During the therapeutic meetings, the parents were supportive, ready to participate in the process, they adequately communicated with each other, exchanged information and came to the meetings equally often to accompany the boy.

ZAKLJUČAK

U tretmanu opsesivno-kompulzivnog poremećaja u dječjoj i adolescentnoj dobi od iznimne je važnosti pravovremena dijagnostika i uključivanje u tretman te adekvatna suradnja s roditeljima. Roditelj djeluje kao koterapeut, uz psihoedukaciju o samim teškoćama djeteta te kako se adekvatnije nositi s njima, osvještava svoju ulogu u mogućem održavanju samog poremećaja te olakšava provođenje naučenih terapijskih tehnika kod kuće. Kognitivno-bihevioralna terapija je pokazala uspješnost u redukciji teškoća dječaka, na što upućuju i mnogobrojna istraživanja, pa se KBT smatra terapijom izbora u liječenju opsesivno-kompulzivnog poremećaja kod djece i mladih. Aktualna zdravstvena kriza s COVID 19 promijenila je način pružanja psihoterapije u svijetu, u obliku smanjenja osobnog kontakta te povećanja broja tele-terapije te pružanja psihoterapije putem interneta, što zahtijeva i daljnje prilagođavanje novim uvjetima, kako terapeuta tako i primatelja psihoterapijskih usluga.

CONCLUSION

In the treatment of obsessive-compulsive disorder in children and adolescents, timely diagnosis and involvement in treatment and adequate cooperation with parents are extremely important. The parent acts as a co-therapist, with psychoeducation about the child's difficulties and how to deal with them more adequately, becomes aware of his/her role in the possible maintenance of the disorder and facilitates the implementation of learned therapeutic techniques at home. In this case, cognitive-behavioural therapy has shown success in reducing the boy's difficulties, as is also evidenced by numerous studies, so CBT is considered the therapy of choice in the treatment of obsessive-compulsive disorder in children and adolescents. The current COVID-19 health crisis has changed the way psychotherapy is provided in the world, reducing personal contact and increasing the number of teletherapy and online psychotherapy, which requires further adaptation to new conditions, for both therapists and psychotherapists.

LITERATURA / *REFERENCES*

1. Dodig-Ćurković K i sur. Psihopatologija dječje i adolescentne dobi. Osijek: Svjetla grada, 2013.
2. Američka psihijatrijska udruga. Dijagnostički i statistički priručnik za duševne poremećaje (5. izdanje). Jastrebarsko: Naklada Slap, 2014.
3. Davison GC, Neale JM. Psihologija abnormalnog doživljavanja i ponašanja. Jastrebarsko: Naklada Slap, 1999.
4. Carr A. The handbook of child and adolescent clinical psychology: A contextual approach (3rd ed). London: Routledge, 2015.
5. March JS, Mulle K, Herbel B. Behavioral psychotherapy for children and adolescents with obsessive-compulsive disorder: an open trial of a new protocol-driven treatment package. J Am Acad Child Adolesc Psychiatry 1994; 33: 333-41.
6. Foa EB, Liebowitz MR, Kozak MJ, Davies S, Campeas R, Franklin ME *et al*. Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. Am J Psychiatry 2005; 162(1): 151-61.
7. Vulić-Prtorić A, Galić S. Opsesivno-kompulzivni simptomi u djetinjstvu i adolescenciji. Med Jad 2003; 33(1/2): 41-51.
8. Flessner CA, Freeman JB, Sapyta J, Garcia A, Franklin ME, March JS *et al*. Predictors of parental accommodation in pediatric obsessive-compulsive disorder: findings from the Pediatric Obsessive-Compulsive Disorder Treatment Study (POTS) trial. J Am Acad Child Adolesc Psychiatry 2011; 50(7): 716-25.
9. Futh A, Simonds LM, Micali N. Obsessive-compulsive disorder in children and adolescents: parental understanding, accommodation, coping and distress. J Anxiety Disord 2012; 26(5): 624-32.
10. Murphy YE, Flessner CA. Family functioning in paediatric obsessive compulsive and related disorders. Br J Clin Psychol 2015; 54(4): 414-34.
11. National Collaborating Centre for Mental Health (UK). Obsessive-Compulsive Disorder: Core Interventions in the Treatment of Obsessive-Compulsive Disorder and Body Dysmorphic Disorder. Leicester: British Psychological Society, 2006.
12. Storch EA, Caporino NE, Morgan JR, Lewin AB, Rojas A, Brauer L *et al*. Preliminary investigation of web-camera delivered cognitive-behavioral therapy for youth with obsessive-compulsive disorder. Psychiatry Res 2011;189(3):407-12.
13. Schwartz JM, Beyette B. Brain Lock: Free Yourself from Obsessive-Compulsive Behavior. New York: ReganBooks, 1997.

14. Türksoy N, Tükel R, Ozdemir O, Karali A. Comparison of clinical characteristics in good and poor insight obsessive-compulsive disorder. J Anxiety Disord 2002; 16(4): 413-23.
15. Waters TL, Barrett PM. The role of the family in childhood obsessive-compulsive disorder. Clin Child Fam Psychol Rev 2000; 3(3): 173-84.
16. Barrett P, Shortt A, Healy L. Do parent and child behaviors differentiate families whose children have obsessive-compulsive disorder from other clinic and non-clinic families. J Child Psychol Psychiatry 2002; 43; 597-607.
17. Leahy RL, Holland SJ, McGinn LK. Planovi tretmana i intervencije za depresiju i anksiozne poremećaje. Jastebarsko: Naklada Slap, 2014.
18. Humer E, Pieh C, Kuska M, Barke A, Doering BK, Gossmann K *et al*. Provision of psychotherapy during the COVID-19 pandemic among Czech, German and Slovak psychotherapists. Int J Environ Res Public Health 2020; 17(13): 4811.
19. Torp NC, Dahl K, Skarphedinsson G, Compton S, Thomsen PH, Weidle B *et al*. Predictors associated with improved cognitive-behavioral therapy outcome in pediatric obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 2015; 54(3): 200-207.
20. Watson HJ, Rees CS. Meta-analysis of randomized, controlled treatment trials for pediatric obsessive-compulsive disorder. J Child Psychol Psychiatry 2008; 49(5): 489-98.
21. Abramowitz JS. Treatment of obsessive-compulsive disorder in patients who have comorbid major depression. J Clin Psychol 2004; 60(11): 1133-41.
22. Marques L, LeBlanc NJ, Weingarden HM, Timpano KR, Jenike M, Wilhelm S. Barriers to treatment and service utilization in an internet sample of individuals with obsessive-compulsive symptoms. Depress Anxiety 2010; 27(5): 470-5.
23. March JS, Franklin ME, Leonard H, Garcia A, Moore P, Freeman J *et al.* Tics moderate treatment outcome with sertraline but not cognitive-behavior therapy in pediatric obsessive-compulsive disorder. Biol Psychiatry 2007; 61(3): 344-7.
24. Abramowitz JS, Whiteside SP, Deacon BJ. The effectiveness of treatment for pediatric obsessive-compulsive disorder: A meta-analysis. Behav Ther 2005; 36(1): 55-63.
25. Lebowitz ER, Panza KE, Su J, Bloch MH. Family accommodation in obsessive-compulsive disorder. Expert Rev Neurother 2012; 12(2): 229-38.
26. Merlo LJ, Lehmkuhl HD, Geffken GR, Storch EA. Decreased family accommodation associated with improved therapy outcome in pediatric obsessive-compulsive disorder. J Consult Clin Psychol 2009; 77(2): 355-60.

In memoriam

/ Obituary

Ljubomir Hotujac

14. rujna 1943. – 7. rujna 2021.

/ September 14, 1943 - September 7, 2021

Prof. dr. sc. Ljubomir Hotujac preminuo je iznenada, 7. rujna 2021. godine u Zagrebu.

Otišao je nestor hrvatske psihijatrije i jedan od njezinih utemeljitelja. Prof. Hotujac je bio u maloj skupini ljudi koja je početkom devedesetih godina prošlog stoljeća reformirala hrvatsku psihijatrijsku službu i oblikovala hrvatsku psihijatriju i uspostavila odnose u njoj koji postoje i danas.

Ljubomir Hotujac rođen je u Zagrebu 14. rujna 1943. godine, gdje se školovao i 1967. godine završio Medicinski fakultet.Do 1980. godine radio je u Istraživačkom institutu tvrtke „Pliva" u području pretkliničke i kliničke farmakologije. U tom je razdoblju proveo godinu dana na edukaciji iz pretkliničke farmakologije kod profesora Pavela Sterna na Institutu za farmakologiju Medicinskog fakulteta u Sarajevu, gdje se uvodi u istraživački rad i usmjerava u područje psihofarmakologije.

God. 1977. obranio je magistarski rad „Utjecaj blokatora beta-adrenergičkih receptora na promjene aktivnosti renina izazvane fizičkim

Professor Ljubomir Hotujac, PhD, suddenly passed away on September 7, 2021 in Zagreb.

One of the founders and leaders in the field of Croatian psychiatry departed this life. Professor Hotujac belonged to a small group of people who in the early 1990s reformed the Croatian psychiatric profession and shaped the Croatian psychiatry by establishing professional relations that still exist today.

Ljubomir Hotujac was born on September 14, 1943 in Zagreb where he studied and graduated from the Faculty of Medicine in 1967. Until 1980, he worked at the Pliva Research Institute in the field of preclinical and clinical pharmacology. During that period, he spent a year studying preclinical pharmacology with Professor Pavel Stern at the Institute of Pharmacology of the the Faculty of Medicine in Sarajevo where he was introduced to research and directed in the field of psychopharmacology.

In 1977, Professor Hotujac completed a master's thesis in "The Effect of Beta-Adrenergic Receptor Blockers on Changes in Renin Activity Caused by Physical Exertion" at the Faculty of Medicine of the University of Sarajevo. In 1979, he earned a PhD from the Faculty of Medicine of the Uni-

naporom“ na Medicinskom fakultetu Sveučilišta u Sarajevu. God. 1979. stekao je doktorat znanosti na Medicinskom fakultetu Sveučilišta u Ljubljani, s disertacijom pod naslovom „Interakcija simpatičkog živčanog sustava i reninangiotezin sustava u regulaciji krvnog tlaka“.

Od 1980. do 1986. godine radio je kao klinički farmakolog u Klinici za neurologiju, psihijatriju, alkoholizam i druge ovisnosti, gdje je i završio specijalizaciju iz psihijatrije, a 1987. godine prelazi u KBC Zagreb, u Kliniku za psihijatriju.

Tijekom 1987. god. boravi mjesec dana na studijskom putovanju u SAD, posvećenom problemu ovisnosti o drogama. God. 1993. postaje vršitelj dužnosti predstojnika Klinike, a od 1995. do 2007. je predstojnik Klinike na kojoj je radio do umirovljenja 2010. godine.

Na Medicinskom fakultetu Sveučilišta u Zagrebu vanjski suradnik postao je 1981. godine. U zvanje docenta izabran je 1990. god., izvanrednog profesora 1995., a redovitog profesora 1998. godine. Pročelnik Katedre za psihijatriju i psihološku medicinu bio je od 2002. do 2006. godine.

Sudjelovao je u svim oblicima nastave (diplomske, poslijediplomske, doktorske, izbornih predmeta, tečajeva trajne edukacije). Bio je nositelj predmeta „Psihijatrija“ koji je u potpunosti inovirao. Bio je mentor u više magistarskih i doktorskih radova. Objavio je preko 150 radova, imao preko 120 izlaganja na stručnim i znanstvenim skupovima. Autor i koautor je više desetaka poglavlja u temeljnim udžbenicima, monografijama, priručnicima. Urednik je udžbenika „Psihijatrija“ koji je objavljen 2006. god. Bio je član uredničkog odbora više časopisa („Anali KB Sestre milosrdnice“, „Alcoholism“, „Medicus“). Član uredničkog odbora časopisa „Socijalna psihijatrija“ bio je od 1986., a njegov urednik od 1997. do 2011. U tom je razdoblju omogućio da časopis redovito izlazi i povećao njegovu kvalitetu i prepoznatljivost.

versity of Ljubljana with a dissertation entitled “Interaction between the Sympathetic Nervous System and Renin-Angiotesin System in the Regulation of Blood Pressure.”

From 1980 to 1986, Hotujac worked as a clinical pharmacologist at the Clinic of Neurology, Psychiatry, Alcoholism and Other Addictions, where he completed a specialization in psychiatry, and in 1987 he transferred to the Clinic of Psychiatry at the University Hospital Centre Zagreb.

In 1987 he spent a month on a study trip to the USA where he studied drug addiction. In 1993 Hotujac became the acting head of the Clinic, and from 1995 to 2007 the head of the Clinic where he worked until his retirement in 2010.

He started working as an external associate at the Faculty of Medicine of the University of Zagreb in 1981. He was elected assistant professor in 1990, associate professor in 1995, and full professor in 1998. Hotujac was the head of the Department of Psychiatry and Psychological Medicine from 2002 to 2006.

He took part in all forms of teaching programmes (graduate, postgraduate, doctoral, elective courses, and continuing education courses). He was director of “Psychiatry” course, to which he introduced countless innovations. He was also a mentor to several master’s and doctoral theses. Hotujac published over 150 papers and gave more than 120 lectures at professional and scientific conferences. He was the author and co-author of dozens of chapters in basic textbooks, monographs and manuals. He was also the editor of the textbook entitled “Psychiatry” published in 2006 and a member of the editorial board of several journals (“Annals of the University Hospital Sestre milosrdnice”, “Alcoholism”, “Medicus”). He was also a member of the editorial board of the “Social Psychiatry” journal since 1986, and its editor from 1997 to 2011. During this period, Hotujac achieved regular publication of the magazine and increased its quality and visibility.

He organized the first five Croatian psychiatric congresses and seven Croatian Psychiatric Days as well as many other conferences, courses and lectures.

Organizirao je prvih 5 hrvatskih psihijatrijskih kongresa i 7 skupova Hrvatski psihijatrijski dani te niz drugih skupova, tečajeva, predavanja.

God. 1993. postao je predsjednik Hrvatskog psihijatrijskog društva i tu je dužnost obnašao do 2010. Bio je član mnogih odbora i povjerenstava Ministarstva zdravstva, hrvatskih branitelja i znanosti i obrazovanja. Između ostalog bio je predsjednik Povjerenstva za psihijatriju.

Redoviti član Akademije medicinskih znanosti Hrvatske postao je 1994. Prof. Hotujac zalagao se za uvođenje hrvatskih imena u psihijatrijsku publicistiku i periodiku, ali i u standardnu jezičnu praksu. Dobio je brojna priznanja i nagrade, a 2006. Nagradu Grada Zagreba.

Ljubomir Hotujac bio je liječnik, farmakolog, psihijatar, bio je redoviti profesor psihijatrije, znanstveni savjetnik, bio je predstojnik Klinike i pročelnik Katedre, bio je urednik časopisa, autor knjiga, organizator kongresa, ali prije svega bio je dobar čovjek. Bio je iskren, blizak, ulijevao je povjerenje i empatiju. Bio je očinska figura. Prof. Vlado Jukić jednom je rekao za prof. Hotujca da on svojom ličnošću liječi ljude.

Prof. Hotujac bio je inovator, na svakom poslu i funkciji unosio je nešto novo. U Vinogradskoj je osnovao Bilten o lijekovima, na Rebru je analizirao potrošnju lijekova, uveo je program edukacije za specijalizante koji je rezultirao promjenama u programu specijalizacije iz psihijatrije, među prvima je radio na destigmatizaciji psihičkih smetnji, osoba s psihičkim smetnjama, ali i psihijatrijske struke.

Bio je kršćanskog svjetonazora, uvjerenja da je svaki čovjek dobar, da ima potencijal. Govorio je kako taj potencijal treba otkriti i razvijati. Znao je reći kako je netko vizionar, a netko vodonoša. U svom timu našao je ulogu i mjesto za svakoga. Zato je bio omiljen kao šef. Volio je svoj posao, želio da sve štima. Znao se naljutiti i naglo reagirati, kad je nešto pošlo krivo.

In 1993 he became the president of the Croatian Psychiatric Society and held that position until 2010. He was also a member of many committees and commissions of the Ministry of Health, Croatian Veterans and Science and Education. Among other things, he was chairman of the Psychiatric Commission.

He became a full member of the Croatian Academy of Medical Sciences in 1994.

Professor Hotujac advocated the introduction of Croatian terminology in psychiatric literature and periodicals as well as in standard language practice. During his life, Professor Hotujac received numerous recognitions and awards, including the Award of the City of Zagreb in 2006.

Ljubomir Hotujac was a doctor, pharmacologist, psychiatrist, full professor of psychiatry, scientific advisor, head of the Clinic and head of the Department, editor of the scientific journal, author of many books, organizer of congresses, but above all, he was a good person. He was honest and devoted, and he instilled confidence and empathy. He was a father figure. Professor Vlado Jukić once said that Professor Hotujac healed people with his personality.

Professor Hotujac was an innovator as he knew how to bring something new to every post or function. In Vinogradska teaching hospital, he founded the periodical named “Bilten o lijekovima (Bulletin on Medicines) and in the University Hospital Centre Zagreb (“Rebro”) he analysed the consumption of medicines and introduced a training programme which resulted in changes in the psychiatry specialization programme. Professor Hotujac was among the first to work on the destigmatization of mental illnesses, people with mental disorders and the psychiatric profession as such.

He held a Christian worldview believing that every person is good and has potential. He used to say that the potential should be discovered and further developed and that some people were visionaries while other people were “water carriers”. He found a role and a place for every member of his team. Because of that, he was beloved as a boss. He loved his job and he wanted everything to work out in the

Oni koji nisu prepoznavali njegovu srčanost i energičnost tu ljutnju su doživljavali kao prijetnju. Međutim, uvijek je na kraju slijedio osmijeh, prijateljski zagrljaj i zajedničko rješavanje problema. On je bio autoritativan, ali ne i autoritaran. Radio je puno sa specijalizantima i znanstvenim novacima. Sve nas je poticao na učenje, istraživanje, pisanje.

Volio je svoju obitelj, bio ponosan na svoje kćeri, obožavao unuke. Kad god bi se sreli nakon njegovog umirovljenja govorio je o unucima i pokazivao njihove fotografije, sretan i razdragan.

Profesor Hotujac bio je otvoren prema različitim idejama i pogledima, bez primisli, tolerantan, nikada isključiv. Bio je široke kulture, volio je umjetnost, često je citirao književna djela. Volio je i sport. Tenis je igrao kad god je mogao. Organizirao je turnire za vrijeme psihijatrijskih simpozija. Znao je birati mjesto nekoga skupa po tome ima li hotel u blizini teniski teren. Bio je ležeran, neposredan, s naznakama blage ironije čovjeka sigurnog u sebe, imao je smisao za humor, pa i na svoj račun. Imao je izraženu socijalnu komponentu, okupljao je ljude oko sebe. U tim neformalnim druženjima vidjelo se koliko uživa u životu. U pauzi kongresa često bi ga se zateklo kako okružen kolegama govori o nekom povijesnom događaju u gradu koji je posjetio ili nekom vinu koje je kušao. Bio je ugodan u društvu. Blizak prijatelj bio je s mnogim kolegama iz drugih ustanova.

Sada kada nas je sudbina naglo razdvojila uočavamo koliko je prof. Hotujac bio velik u struci, predan, iskusan, častan. Sve to ga čini osobom koju oni koji su ga poznavali nikada neće zaboraviti. Prof. Hotujac zadužio je mnoge. Zadužio je svoje bolesnike, svoje suradnike, zadužio je studente, specijalizante, znanstvene novake, psihijatre. Zadužio je hrvatsku psihijatriju.

I zato, dragi profesore, hvala za sve što ste učinili i počivajte u miru!

Dražen Begić

best possible way. When something went wrong, he would get angry and react abruptly. Those who were unable to recognize his zeal and great energy perceived this anger as a threat. However, a smile, a friendly hug and a joint approach to problem-solving would always follow in the end. He was an authoritative but not authoritarian figure. He worked a lot with trainees and research novices. He encouraged us all to learn, research and write.

He also loved his family dearly - he was very proud of his daughters and adored his grandchildren. Whenever we would meet after his retirement, he would talk about his grandchildren and show photos of them with a lot of happiness and excitement.

Professor Hotujac was open to different ideas and views without any pretensions. He was tolerant and never narrow-minded. He was also a person of broad knowledge, a polymath, he loved art and often quoted literary works. He also loved sports. He played tennis whenever he was able to and organized tournaments during psychiatric symposia. He would pick a place for a gathering depending on whether the hotel had a tennis court nearby. In communication, he was casual, straightforward, with hints of the mild irony of a confident individual with a sense of humour, even at his own expense. He had a pronounced social component and knew how to gather people around him. Such informal gatherings showed how much he enjoyed life. During breaks between conference sessions, he would often be surrounded by colleagues talking about some historical event in the city he had visited or some wine he had tasted. People felt comfortable around him and he was a close friend to many colleagues from other institutions.

Now that fate has suddenly separated us, we are able to see how great, professional, dedicated, experienced, and honourable Professor Hotujac was. All these qualities made him a person that those who knew him will never be able to forget. Many are indebted to Professor Hotujac - his patients, his associates, his students, trainees, novices and psychiatrists. Croatian psychiatry also.

And so, dear professor, thank you for everything you did and rest in peace!

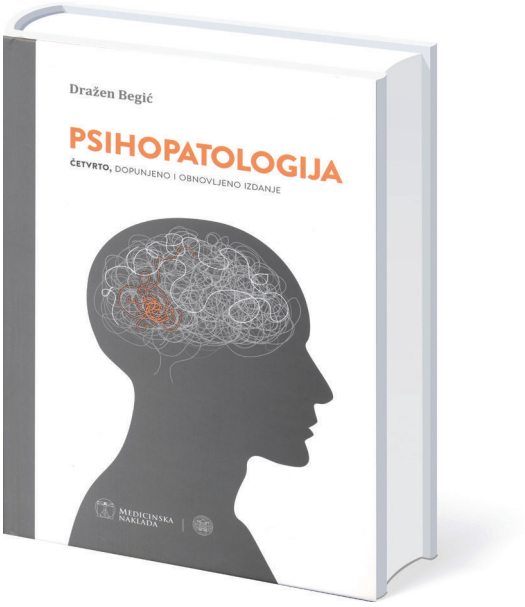
Dražen Begić

Dražen Begić

Psihopatologija

/ *Psychopathology*

Četvrto, dopunjeno i obnovljeno izdanje.
/ Fourth, supplemented and updated edition.
Zagreb: Medicinska naklada 2021.
(789 stranica, ISBN 78-953-368-007-1).
/ (p. 789, ISBN 78-953-368-007-1).



Prije 10 godina objavljena je knjiga „Psihopatologija“ profesora Dražena Begića. Ona je bila namijenjena, prije svega, studentima psihologije i medicine. Ta se knjiga u međuvremenu našla na popisu obvezne ili dopunske literature mnogih fakulteta i studija, a koristili su je stručnjaci različitih profila i usmjerenja u području mentalnog zdravlja. Svako sljedeće izdanje, koje je bilo dopunjavano i proširivano novim spoznajama, upotrebljavalo je sve više studenata različitih diplomskih i poslijediplomskih studija. I tako je ta knjiga stekla pomalo kultni status među čitateljima psihijatrijske publicistike.

Sada je pred nama četvrto, dopunjeno i obnovljeno izdanje, koje se najviše razlikuje od originala. Dodana su nova poglavlja (o epidemiologiji u psihijatriji i psihopatologiji, o transkulturalnoj psihopatologiji). Neka su poglavlja znatno promijenjena (ona o povijesti psihopatologije, o klasifikaciji psihičkih poremećaja, o dijagnozi psihičkih poremećaja, o bolestima ovisnosti, o suicidalnosti). Uvršteni su novi entiteti, npr. organski katatoni poremećaj, psihički poremećaji uzrokovani sintetskim kationima i kanabinoidima, bihevioralne ovisnosti, pore-

The book titled “Psychopathology” by Professor Dražen Begić was published a decade ago. Above all, it was intended for students of psychology and medicine. In the meanwhile, the book has found its way onto the list of required or supplementary literature at various faculties and studies and has been used by experts of various profiles and specializations in the field of mental health. Each subsequent edition supplemented and expanded with new findings was used by more and more students of various graduate and postgraduate studies. The book has thus achieved a kind of cult status among readers of psychiatric literature.

The book in front of us is the fourth, supplemented and updated edition, which differs the most from the original. New chapters have been added on epidemiology in psychiatry and psychopathology as well as on transcultural psychopathology. Some chapters have been significantly changed, i.e., the chapters on the history of psychopathology, classification of mental disorders, diagnosis of mental disorders, addiction and on suicide. A number of new entities has been included, such as organic catatonic disorder, mental disorders

mećaj s uvjerenjem o vlastitom neugodnom mirisu, ruminacijsko-regurgitacijski poremećaj, kompulzivni poremećaj seksualnog ponašanja i dr.

Najznačajnija promjena odnosi se na uvođenje 11. revizije Međunarodne klasifikacije bolesti (MKB-11). Ta revizija, koja na potpuno novi način konceptualizira psihičke poremećaje i uvodi novi oblik njihovog šifriranja, bit će u službenoj upotrebi 2022. godine. No, do njezine potpune primjene bit će potrebno u prijelaznom razdoblju rabiti i postojeću MKB-10 klasifikaciju. Stoga su u knjizi „Psihopatologija" uključene obje klasifikacije i međusobno uspoređene (kada god je to moguće). Naime, neki se entiteti nalaze u obje klasifikacije i tu je usporedba laka i jednostavna. Neki entiteti se nalaze u obje klasifikacije, ali su različito nazvani i/ili se nalaze na različitim mjestima u klasifikacijskom sustavu, a neki su navedeni u jednoj klasifikaciji, a nema ih u drugoj. Tim je situacijama autor vješto postupio objasnivši zašto je tomu tako. I pokazao je ideju vodilju u razvoju klasifikacija, opisao razlike u kliničkoj slici i dijagnostici te uveo usporedbu s DSM sustavom.

Ova je knjiga metodički iznimno dobro prilagođena studentima (stručna je, a istodobno jednostavna i jasna). Autor je tekst napisao slijedeći najsuvremenije znanstveno-stručne spoznaje, što je vidljivo iz samog rukopisa, ali iz iznimnog bogatog i suvremenog popisa literature. „Psihopatologija" će mnogim studentima koristiti u usvajanju znanja o psihičkim smetnjama, poremećajima i bolestima, a istodobno će i mnogim diplomiranim stručnjacima pomagačkih zanimanja biti nezaobilazan tekst u njihovu cjeloživotnom usavršavanju.

Ovaj udžbenik je originalan i praktički se ne može usporediti s drugim domaćim djelima. U usporedbi s najvažnijim stranim knjigama, ovo djelo izdržava bilo kakvu kritičku analizu i usporedbu u sadržajnom i strukturnom smislu.

caused by synthetic cations and cannabinoids, behavioural addictions, olfactory reference syndrome, rumination and regurgitation disorder, compulsive sexual behaviour and more.

The most significant change relates to the introduction of the 11th revision of the International Classification of Diseases (ICD-11). The 11th revision provides a completely new concept for mental disorders and introduces a new coding structure, which will be officially used in 2022. Until its full implementation, the existing ICD-10 classification will be used during the transition period. Therefore, the book *Psychopathology* comprises both classifications and cross-references between the two. To be specific, certain entities are contained in both classifications and in such cases the comparison is undemanding and simple. On the other hand, certain entities are listed in both classifications but under different names and/or headings in the classification system while some are listed in one classification and not in the other. The author of the book tackled the problem very skilfully by explaining the reasons. Also, he pointed to the guiding idea behind the development of the classifications, described the differences in the clinical picture and diagnostics and introduced a comparison with the DSM system.

In terms of methodology, *Psychopathology* is extremely well adapted to students. It is professional yet simple and concise. Professor Begić wrote *Psychopathology* incorporating state-of-the-art scientific findings, which is evident from the content as well from an extensive list of references. This book will be useful to many students in acquiring knowledge about mental disorders, symptoms and diseases. At the same time, it will be a very important resource for many graduate professionals in the course of their lifelong learning.

Psychopathology is an original textbook that practically cannot be compared to any other book published by a domestic author. Compared to the most important foreign books, it

Uvodni dio, prvih 10 poglavlja, posvećen je osnovnim pojmovima, paradigmama i znanstvenim istraživanjima psihopatologije i psihijatrijske dijagnostike, definira sve dijelove uzimanja psihičkog statusa te prepoznavanja patoloških fenomena u psihičkom pregledu bolesnika. U drugom dijelu, koji sadrži 12 poglavlja (opća psihopatologija), objašnjeni su psihički simptomi, detaljno i sustavno, svih promijenjenih psihičkih funkcija. U trećem dijelu (specijalna psihopatologija) opisani su psihički poremećaji. Ovdje se autor čvrsto drži strukture poglavlja: od epidemiologije, preko etiologije, komorbiditeta, kliničke slike i diferencijalne dijagnoze pojedinih psihičkih poremećaja. Nedostaje još samo terapija. Prof. Begić u predgovoru objašnjava zašto nema terapije („jer bi to bio udžbenik psihijatrije…a prezahtjevno bi bilo da ga piše jedan autor"). Zatim slijedi Rječnik psihopatologije. On je (sada znatno proširen) sveobuhvatan, sustavan, može se čitati kao samostalno djelo.

Knjiga sadrži kazalo pojmova, kazalo autora, popis kratica i literaturu. Na samom kraju su test pitanja iz područja psihopatologije s točnim odgovorima.

Knjiga „Psihopatologija" ima 789 stranica i preko 900 referenci. Ima 35 poglavlja (i isto toliko primjera, odnosno opisa nekog psihičkog poremećaja), 8 tablica, 19 slika. S pričama o nekom poremećaju (s njegovim opisom u prvom licu) počinju istoimena poglavlja specijalne psihopatologije. U prilozima (kojih ima 16) dani su zanimljivi opisi nekih fenomena, pristupa, poznatih eksperimenata u psihologiji, iskustvo čovjeka koji je preživio samoubilački skok.

Ova knjiga korespondira sa sadašnjim vremenom i novim izazovima koji su pred nama. Tako su obrađene teme „Utjecaj COVID-19 na psihičko zdravlje", „U ordinaciji dr. Googla", „Ekspati".

„Psihopatologija" je jedan od rijetko duboko promišljenih, strukturiranih i potpuno uravwithstands critical analysis or comparison in terms of its content and structure.

The introductory part of the book, or the first ten chapters, introduces the basic concepts, paradigms and scientific research on psychopathology and psychiatric diagnostics and defines all relevant elements for determining a mental status and recognizing pathological phenomena in the mental examination of patients. The second part comprises twelve chapters dedicated to general psychopathology and provides a detailed and systematic explanation of psychological symptoms of all the changed mental functions. The third part of the book (special psychopathology) provides a description of various mental disorders. In this part of the book the author firmly adheres to the structure of chapters dealing with epidemiology, etiology, comorbidity, clinical picture and differential diagnosis of individual mental disorders. The only missing aspect is therapy. In the preface, Professor Begić explains why therapy was not included: "because it would be a textbook on psychiatry… and it would be too demanding to leave everything in the hands of a single author". This part of the book is followed by the Dictionary of Psychopathology. This edition provides a considerably expanded, comprehensive and systematic dictionary that functions well independently.

The book also comprises an index, a list of authors and abbreviations as well as a list of references. At the very end of the book the author gives test questions from the field of psychopathology with correct answers.

Psychopathology is a book comprised of 789 pages, over 900 references, 35 chapters (and the same number of examples, i.e., descriptions of a mental disorder), 8 tables, and 19 pictures. The chapters dedicated to special psychopathology begin with a story or a description of a particular disorder (given in the first-person form), which is then also the title of that chapter. Sixteen annexes provide interesting descriptions of particular phenomena, approaches, well-

noteženih nastavnih tekstova s hrvatskog govornog područja. Premda postoje prethodna izdanja ovog sasvim jedinstvenog udžbenika, sadašnja dorada i dopuna ih nadmašuje. Usudila bih se reći da je ovo kapitalno djelo hrvatske psihijatrijske i psihologijske publicistike.

Prof. Vlado Jukić je u recenziji prvog izdanja „Psihopatologije" napisao da će se taj udžbenik čitati i citirati ne godinama, nego desetljećima. I bio je u pravu.

Alma Mihaljević-Peleš

known experiments in psychology, and the experience of a man who survived a suicide jump.

This book corresponds to the present time and the new challenges that lie ahead. In the light of that the topics such as "The impact of COVID-19 on mental health", "In the office of Doctor Google", and "Expats" were tackled.

Psychopathology represents one of the few deeply thought-out, structured and fully balanced teaching texts written in the Croatian language. Although this completely unique textbook had previous editions, its latest version containing supplements surpasses all of them. I would dare to say that *Psychopathology* is a major work of Croatian psychiatric and psychological literature.

In the review of the first edition of *Psychopathology*, Professor Vlado Jukić wrote that this textbook would be read and quoted not for years, but for decades. He had a point.

Alma Mihaljević-Peleš

Upute autorima

O časopisu

Socijalna psihijatrija je recenzirani časopis koji je namijenjen objavljivanju radova iz područja socijalne psihijatrije, ali i iz kliničke psihijatrije i psihologije, biologijske psihijatrije, psihoterapije, forenzičke psihijatrije, ratne psihijatrije, alkohologije i drugih ovisnosti, zaštite mentalnog zdravlja osoba s intelektualnim teškoćama i razvojnim poremećajima, epidemiologije, deontologije, organizacije psihijatrijske službe. Praktički nema područja psihijatrije iz kojeg do sada nije objavljen pregledni ili stručni rad.

Svi radovi trebaju biti pisani na hrvatskom i engleskom jeziku.

Svi zaprimljeni radovi prolaze kroz isti proces recenzije pod uvjetom da zadovoljavaju i prate kriterije opisane u Uputama za autore i ne izlaze iz okvira rada časopisa.

Uredništvo ne preuzima odgovornost za gledišta u radu - to ostaje isključivom odgovornošću autora.

Časopis objavljuje sljedeće vrste članaka: uvodnike, izvorne znanstvene, stručne i pregledne radove, prikaze bolesnika, lijekova i metoda, kratka priopćenja, osvrte, novosti, prikaze knjiga, pisma uredništvu i druge priloge iz područja socijalne psihijatrije i srodnih struka.

Iznimno Uredništvo časopisa može prihvatiti i drugu vrstu rada (prigodni rad, rad iz povijesti struke i sl.), ako ga ocijeni korisnim za čitateljstvo.

Tijekom cijelog redakcijskog postupka, *Socijalna psihijatrija* slijedi sve smjernice Odbora za etiku objavljivanja (*Committee of publication ethics* – COPE), detaljnjije na: https://publicationethics.org/files/Code%20of%20Conduct_2.pdf, kao i preporuke ponašanja, izvještavanja, uređivanja i objavljivanja znanstvenih radova u časopisima medicinske tematike kojeje objavio Međunarodni odbor urednika medicinskih časopisa (*International Committee of Medical Journal Editors* – ICMJE), detaljnije na: http://www.icmje.org/journals-following-the-icmje-recommendations/.

Urednici časopisa *Socijalna psihijatrija* također su obvezni osigurati integritet i promicati inovativne izvore podataka temeljenih na dokazima, kako bi održali kvalitetu i osigurali utjecaj objavljenih radova u časopisu, a sukladno načelima iznesenim u Sarajevskoj deklaraciji o integritetu i vidljivosti (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5209927/).

Uredništvo

Svaki rad zaprimljen u Uredništvu časopisa *Socijalna psihijatrija* pregledava glavni urednik. Ako rad ne zadovoljava kriterije opisane u Uputama za autore, glavni urednik časopisa rad vraća autoru. Radovi koji zadovoljavaju uvjete bit će upućeni na recenziju.

Recenzija

Radovi koji su pisani prema Uputama za autore, šalju se na recenziju.

Časopis *Socijalna psihijatrija* recenzentima savjetuje da se pridržavaju uputa u Uputama za recenzente koje su dostupne na mrežnim stranicama Časopisa.

Instructions to authors

Aim & Scope

Socijalna psihijatrija is a peer-reviewed journal intended for publication of manuscripts from the fields of social psychiatry, clinical psychiatry and psychology, biopsychology, psychotherapy, forensic psychiatry, war psychiatry, alcoholism and other addictions, mental health protection among persons with intellectual and developing disabilities, epidemiology, deontology and psychiatric service organisations.

All manuscripts must be written in the Croatian and English language.

All manuscripts undergo the same review process if they follow the scope of the Journal and fulfil the conditions according to the Author guidelines.

The Editorial board will not take the responsibility for the viewpoint of the Author's manuscript – it remains the exclusive responsibility of an Author.

Socijalna psihijatrija publishes the following types of articles: editorials, original scientific papers, professional papers, review's, case reports, reports on drugs and methods of treatment, short announcements, annotations, news, book review's, letters to the editor, and other papers in the field of social psychiatry.

Exceptionally, the Editorial board can accept other kinds of paper (social psychiatry event paper, social psychiatry history-related paper, etc.).

During the whole peer-reviewed process, the *Socijalna psihijatrija* journal follows the Committee of publication ethics (COPE) guidelines (https://publicationethics.org/files/Code%20of%20Conduct_2.pdf) as well as the "Recommendations for the conduct, reporting editing, and publication of scholarly work in medical journals" set by the International Committee of Medical Journal Editors (ICMJE - http://www.icmje.org/journals-following-the-icmje-recommendations/).

Editors at the *Socijalna psihijatrija* journal pay close attention to the integrity and visibility of scholarly publications as stated in Sarajevo Declaration (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5209927/).

Editorial board

Each received manuscript is evaluated by the Editor-in-Chief. The manuscripts that do not meet the main criteria listed in the Author guidelines are returned to the Author. Manuscripts that are qualified are processed further.

Peer-review

Manuscripts that meet the scope of the Journal and are prepared according to the Author guidelines are sent to peer-review.

Socijalna psihijatrija advises its reviewers to adhere to the Journal's Guidelines for peer-reviewers available on the Journal webpage.

Etički kodeks

Podrazumijeva se da su svi autori radova suglasni o publikaciji i da nijedan dio rada nije prije publikacije u *Socijalnoj psihijatriji* već bio objavljen u drugom časopisu te da nije u postupku objavljivanja u drugom časopisu.

Uredništvo može objaviti neki već prije tiskani tekst uz dogovor s autorima i izdavačima.

Rad objavljen u *Socijalnoj psihijatriji* smije se objaviti drugdje bez dopuštenja autora, uredništva i izdavača, uz navod da je već objavljen u *Socijalnoj psihijatriji*.

Autorska prava i licence

Nakon što je rad prihvaćen autori moraju jamčiti da su sva autorska prava na rukopis prenesena u časopis *Socijalna psihijatrija*. Izdavač (Medicinska naklada d.o.o.) ima pravo reproducirati i distribuirati članak u tiskanom i elektroničkom obliku bez traženja dopuštenja od autora. Svi objavljeni rukopisi podliježu licenci *Creative Commons Attribution* koja korisnicima omogućuje čitanje, preuzimanje, kopiranje, distribuiranje, ispis, pretraživanje ili povezivanje punih tekstova ovih članaka u bilo kojem mediju ili formatu. Također, korisnici mogu mijenjati tekst pod uvjetom da je originalni rad pravilno naveden i bilo kakva promjena pravilno naznačena. Potpuna zakonska pozadina licence dostupna je na: https://creativecommons.org/licenses/by/4.0/legalcode

Sukob interesa

Časopis *Socijalna psihijatrija* potiče i podržava sve autore i recenzente da prijave potencijalne sukobe interesa kako bi se osigurala transparentnost prigodom pripreme i recenzije radova. Prema ICMJE-u: „Sukob interesa postoji ako autorove (ili institucija u kojoj je autor zaposlen) financijske (zaposlenje, u posjedu dionica, plaćeni honorar), akademske, intelektualne ili osobne veze neprimjereno utječu na njegove odluke“ (detaljnije objašnjenje dostupno je na mrežnim stranicama ICMJE-a: http://www.icmje.org/conflicts-of-interest/).

Otvoreni pristup

Časopis *Socijalna psihijatrija* je časopis otvorenog pristupa i njegov je sadržaj dostupan besplatno na mrežnim stranicama časopisa.

Naplata troškova prijevoda radova

Autor snosi troškove prijevoda na engleski ili hrvatski jezik, odnosno lektoriranja rada.

Oprema rukopisa

Rad i svi prilozi dostavljaju se isključivo u elektroničkom obliku. Preporučena duljina teksta iznosi do 20 kartica (1 kartica sadrži 1800 znakova s razmacima). Tekstove treba pisati u Wordu, fontom postavljenim za stil Normal, bez isticanja unutar teksta, osim riječi koje trebaju biti u boldu ili italiku. Naslove treba pisati istim fontom kao osnovni tekst (stil Normal), u poseban redak, a hijerarhiju naslova može se označiti brojevima (npr. 1., 1.1., 1.1.1. itd.).

Autoru koji je zadužen za dopisivanje treba navesti titulu, ime i prezime, adresu, grad, državu i adresu e-pošte. Također je potrebno navesti i ORCHID identifikatore svih autora (više na https://orcid.org/register).

Naslovna stranica rada sadrži: naslov i skraćeni naslov rada, puna imena i prezimena svih autora, naziv ustanova u kojima rade. Sažetak treba sadržavati do 200 riječi. U sažetku treba navesti temu i svrhu rada, metodologiju, glavne rezultate i kratak zaključak. Uz sažetak treba navesti 3 do 5 ključnih riječi koje su bitne za brzu identifikacijsku klasifikaciju sadržaja rada.

Znanstveni i stručni radovi sadrže ove dijelove: sažetak, uvod, cilj rada, metode, rezultati, rasprava i zaključci.

Uvod je kratak i jasan prikaz problema; u njemu se kratko spominju radovi onih autora koji su u izravnoj vezi s istraživanjem što ga rad prikazuje.

Ethical code

All the submissions are accepted with the understanding that they have not been and will not be published elsewhere in any substantially format.

The Editorial board, with the agreement of the Author and Publisher, can republish previously published manuscripts.

The manuscript published in *Socijalna psihijatrija* can be published elsewhere without the permission of the Author, Editorial board and Publisher, with the note that it has already been published in *Socijalna psihijatrija*.

Copyright and publication licence

After a manuscript is accepted for publication, the Authors must guarantee that all copyrights of the manuscript are transferred to *Socijalna psihijatrija*. The publisher (Medicinska naklada d.o.o.) has the right to reproduce and distribute manuscripts in printed and electronic form without asking permission from Authors. All manuscripts published on line are subject to the Creative Commons Attribution License which permits users to read, download, copy, distribute, print, search, or link to the full texts of these articles in any medium or format. Furthermore, users can remix, transform, and build upon the material, provided the original work is properly cited and any changes properly indicated. The complete legal background of the license is available at: https://creativecommons.org/licenses/by/4.0/legalcode.

Conflict of interest

Socijalna psihijatrija encourages all Authors and Reviewers to report any potential conflicts of interest to ensure complete transparency regarding the preparation and reviewing of the manuscript. According to the International Committee of Medical Journal Editors (ICMJE): “Conflict of interest exists when an author (or the author’s institution) has financial (employment, consultancies, stock ownership, honoraria and paid expert testimony) or personal relationship, academic competition or intellectual passion that inappropriately influences his actions.” (available at: http://www.icmje.org/conflicts-of-interest/).

Open-access

Socijalna psihijatrija is an open-access journal, and all its content is free and available at the Journal’s webpage.

Article processing charges

The translation or language editing of the manuscript from Croatian to English (and *vice versa*) is funded by authors.

Manuscript preparation

Manuscripts, figures and tables should be submitted in electronic form. Normally, manuscripts should be no longer than 20 standard pages (one standard page is 1800 keystrokes – characters with spaces). Texts should be written in Microsoft Word, in a continuous font and style: the one set under the Normal style, with no additional font effects used other than words that should be in bold or italic. Tittles should be written in the same font as the rest of the text (Normal style) in a separate row, and title hierarchy should be shown using numbers (e.g. 1., 1.1., 1.1.1., etc.).

There should be a title, name and surname, address, town, state and e-mail indicated for the corresponding author.

The title page should contain: the full and shortened title of the article, full names and full surnames of all authors of the article, and the institution they work for. All the authors should also provide an ORCHID ID (please check the following website: https://orcid.org/register). The article should have a summary not exceeding 200 words. The summary should briefly describe the topic and aim, the methods, main results,

Cilj je kratak opis što se namjerava istraživati, tj. što je svrha istraživanja.

Metode se prikazuju tako da se čitatelju omogući ponavljanje opisanog istraživanja. Metode poznate iz literature ne opisuju se, već se navode izvorni literaturni podatci. Ako se navode lijekovi, rabe se njihova generička imena (u zagradi se može navesti njihovo tvorničko ime).

Rasprava sadrži tumačenje dobivenih rezultata i njihovu usporedbu s rezultatima drugih istraživača i postojećim spoznajama na tom području.U raspravi treba objasniti važnost dobivenih rezultata i njihova ograničenja, uključujući i implikacije vezane uz buduća istraživanja, ali uz izbjegavanje izjava i zaključaka koji nisu potpuno potvrđeni dobivenim rezultatima.

Zaključci trebaju odgovarati postavljenom cilju istraživanja i temeljiti se na vlastitim rezultatima.

Tablice treba smjestiti unutar Word-dokumenta na kraju teksta, a označiti mjesto njihovog pojavljivanja u tekstu. Ako se tablica daje u formatu slike (tj. nije izrađena u Wordu), za nju vrijede upute kao za slike. Svaka tablica treba imati redni broj i naslov.

Slike treba priložiti kao posebni dokument u .tiff ili .jpg (.jpeg) formatu, minimalne rezolucije 300 dpi. Uz redni broj svaka slika treba imati legendu. Reprodukciju slika i tablica iz drugih izvora treba popratiti dopuštenjem njihova autora i izdavača.

Rad može sadržavati i zahvalu na kraju teksta.

U tekstu se literaturni podatak navodi arapskim brojem u zagradi.

Literatura

Časopis *Socijalna psihijatrija* usvojila je Vancouverski stil citiranja literature, prema standardima ICMJE koji preporučuju citiranje djela objavljena u cijelosti, odnosno ona koja su javno dostupna, što ujedno znači da treba izbjegavati navođenje sažetaka, usmenih priopćenja i sl.

Ponovno citiranje nekog rada treba označiti istim brojem pod kojim je prvi put spomenut.

Prigodom doslovnog navođenja izvatka iz drugog teksta koriste se navodnici. Ovaj način citiranja treba koristiti samo u slučajevima kada se informacija ne može kvalitetno preformulirati ili sažeti (npr. kod navođenja definicija).

Sekundarno citiranje odnosi se na slučaj kada autor koristi navod iz djela kojemu nema pristup, već je do navoda došao posredstvom drugog rada u kojem je izvorni rad citiran. Ovaj način citiranja treba izbjegavati gdje god je to moguće, odnosno uvijek treba pokušati pronaći izvorno djelo. Ako to nije moguće, u popisu literature se navodi rad koji je zaista korišten, a ne rad u kojem je informacija primarno objavljena.

1. Autori

Ako djelo ima šest autora, navode se svi autori. Ako djelo ima više od šest autora, navodi ih se prvih šest, a ostali se označavaju kraticom *et al.* ili *i sur.* Prvo se navodi prezime, a potom inicijali imena. Više inicijala imena iste osobe piše se bez razmaka.

2. Naslov i podnaslov rada

Prepisuju se iz izvornika i međusobno odvajaju dvotočkom. Samo prva riječ naslova i vlastita imena (osobna, zemljopisna i dr.) pišu se velikim početnim slovom.

3. Naslov časopisa

Naslovi časopisa skraćuju se sukladno sustavu koji koristi MEDLINE (popis kratica dostupan je na adresi: http://www.ncbi.nlm.nih.gov/nlmcatalog/journals). Naslov časopisa se ne skraćuje ako se on ne nalazi na prethodno navedenom popisu kratica.

4. Numerički podatci o časopisu

Arapskim brojkama upisuju se podatci koje se može pronaći u samom izvorniku ili u nekoj bibliografskoj bazi podataka i to sljedećim redom: godina, volumen ili svezak, sveščić ili broj (engleski *issue* ili *number* – no.), dio (engleski *part*), dodatak (engleski *supplement* ili *suppl.*),

and conclusion. The summary should be followed by 3 to 5 key words for easy identification and classification of the content of the article.

Original scientific and professional papers should be arranged into sections as follows: summary, introduction, aim, methods, results, discussion and conclusion.

The Introduction section is a short and clear overview; it briefly mention Authors involved with the research of the paper.

The Aim section briefly describes the goals and intentions of the research, i.e. the point of the research.

The Methods section should be presented in such way as to allow the reader to replicate them without further explanation. Methods known from the literature need not be described but should simply be referred to by their generic names (trade names should be given in parentheses).

The Discussion section includes the results and their comparison with the results of other researchers and well known scientific knowledge in that area. It should also explain the significance of the results and their limitations, including implications regarding future studies, statements and conclusions that are not verified by the results should be avoided.

The Conclusions section should correspond to the aim of the study and be based on its results.

Tables should be placed at the end of the text in the Word document and with an indication where they are to appear in the published article. If the table is submitted as an image (i.e. is not constructed in Microsoft Word), the same instructions as for images apply.

Images should be submitted separately in .tiff or .jpg (.jpeg) format, with a minimum resolution of 300 dpi. Every image should have a number and caption. Reproduction of images and tables from other sources should be accompanied by a full reference and authorization by their Authors and Publisher.

The manuscript may have an acknowledgement at the end of the text.

References should be written with Arabic numerals in parentheses.

References

Socijalna psihijatrija applies the Vancouver referencing style according to the International Committee (ICMJE) standards. ICMJE recommends citation of the complete manuscripts, i.e. publicly accessible manuscripts, meaning that summaries, announces, etc. should be avoid.

Repeated citing of a manuscript should be marked by the same number as when it is mentioned for the first time.

Quotation marks should be used when citing another text. This mode of citation should only be used when the information cannot be properly reformulated or summarized (e.g. when referring to a definition).

Secondary citations refer to cases when Authors quote a passage from an inaccessible work to using a different text than the one where the quote originated. This kind of quotation should be avoided as much as possible i.e. always try to find the original scientific manuscript. In cases when it is not possible, the manuscript should cite the work that was used and not the work in which the information was primarily published.

1. Authors

In case the manuscript has six or fewer Authors, all of them should be listed. Should the manuscript have more than six Authors, the first six should be listed and the rest of them marked with the abbreviation *et al.* or i sur. First list the surname and then the initials of the first name(s). Multiple initials for the same person should be written without spaces.

2. Title and subtitle

Titles and subtitles are copied from the original and separated by a colon. Only the first word of the title and name are written in capital letters.

3. Journal title

Journal titles are shortened according to the MEDLINE system (a list of abbreviations is available at: http://www.ncbi.nlm.nih.gov/nlmcatalog/journals). The title of the journal is not shortened if fit is not found in the abovementioned shortcut list.

stranice (engleski *pages*). Broj sveščića upisuje se u okruglu zagradu, a obvezno ga je upisati ako paginacija (numeracija) svakog sveščića počinje od 1. Ako ne možete prepoznati broj/sveščić časopisa (primjerice, kad su sveščići uvezani), taj se podatak može izostaviti. Stranice rada se upisuju od prve do zadnje.

Primjer:

Kingdon DG, Aschroft K, Bhandari B, Gleeson S, Warikoo N, Symons M et al. Schizophrenia and borderline personality disorder: similarities and differences in the experience of auditory hallucinations, paranoia and childhood trauma. J Nerv Ment Dis 2010; 10(6): 399-403.

5. Izdanje knjige

Navodi se rednim brojem i kraticom izd. Rednom broju sveska knjige (ako je djelo u više svezaka) prethodi oznaka sv.

6. Grad izdanja

Upisuje se prvi grad naveden u izvorniku, za sve ostale se dodaje itd. (engleski *etc.*).

7. Izdavač

Prepisuje se iz izvornika.

8. Godina izdanja

Prepisuje se s naslovne stranice, a ako nije navedena godina izdanja, bilježi se godina copyright-a © koja se često nalazi na poleđini naslovne stranice.

Primjer:

Kring AM, Johnson SL, Davison GC, Neale JM. Abnormal Psychology. New York: Wiley, 2013.

9. Poglavlje u knjizi

Opisuje se prvo autorima i naslovom poglavlja, nakon čega slijede podatci o knjizi. Ispred navođenja urednika knjige stavlja se riječ u: (engleski *in:*), a iza u okrugloj zagradi ur. (engleski *ed.*)

Primjer:

Millon T. Brief History of Psychopathology. In: Blaney PH, Millon T (eds.) Oxford Textbook of Psychopathology. New York: Oxford University Press, 2009.

10. Stranica knjige

Navode se samo ako se citira dio knjige, uz oznaku str. (engleski *pages*).

Primjer:

Mimica N. Delirij. U: Begić D, Jukić V, Medved V. (ur.). Psihijatrija. Zagreb: Medicinska naklada, 2015, str. 84-86.

11. URL/Web adresa

Obavezno se navodi za mrežne izvore.

12. Datum korištenja/pristupa

Obavezno se navodi za mrežne izvore.

13. DOI

Ako postoji, obavezno se navodi za mrežne izvore.

Primjer:

Cook A, Spinazzola J, Ford J, Lanktree C, Blaustein M, Cloitre M, DeRosa R, Hubbard R, Kagen R, Liautaud J, Mallah K, Olafson E,van der Kolk B. Complex trauma in children and adolescents. Psych Ann 2005; 35(5): 390-398. Preuzeto 14. listopada 2017. shttps://doi.org/10.3928/00485713-20050501-05.

4. Numerical journal data

The data that can be found in the original or in any of the bibliographic database should be written in Arabic numerals, in the following order: year, volume, issue, part, supplement, pages. Issue number is entered in parentheses and it is required to enter it starting from 1. In case the issue of the Journal cannot be recognized (e.g. when the issues are bonded), that data may be omitted. The page numbers are written from first to last.

E. g.

Kingdon DG, Aschroft K, Bhandari B, Gleeson S,Warikoo N, Symons Metal. Schizophrenia and borderline personality disorder: similarities and differences in the experience of auditory hallucinations, paranoia and childhood trauma. J Nerv Ment Dis 2010; 10(6): 399-403.

5. Book issue

Book issue is indicated by the ordinary number and the abbreviation “Ed”. In case the book has more than one volume, use the abbreviation “Vol”.

6. City of issue

Insert only the first city from the original work. For every additional city, use the abbreviation etc.

7. Publisher

Copy from the original.

8. Year of issue

Copy it from the main page. In case the year is not indicated, the copyright year should be written (it can be found at the end of the book).

E.g.

Kring AM, Johnson SL, Davison GC, Neale JM. Abnormal Psychology. New York: Wiley, 2013.

9. Book chapter

Book chapter should list the authors and title followed by book data. Use the abbreviation “In” before the Editor’s name:

E. g.

Millon T. Brief History of Psychopathology. In: Blaney PH, Millon T (eds.) Oxford Textbook of Psychopathology. New York: Oxford University Press, 2009.

10. Book page

Book pages are marked with “pages” only if a part of the book is being quoted:

E. g.

Mimica N. Delirij. U: Begić D, Jukić V, Medved V. (ur.). Psihijatrija. Zagreb: Medicinska naklada, 2015, pages: 84-86.

11. Web address

Required for online resources.

12. Date of use

Required for online resources.

13. DOI

If available, it is mandatory to cite online resources.

E. g.

Cook A, Spinazzola J, Ford J, Lanktree C, Blaustein M, Cloitre M, et al. Complex trauma in children and adolescents. Psych Ann 2005; 35(5): 390-398. Accesed 14. October 2017. https://doi.org/10.3928/00485713-20050501-05.