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, Klinički bolnički centar Zagreb, Kišpatićeva 12, 10000 Zagreb, Hrvatska
Department of psychiatry, 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.

Indeksiran je u bazama: SCOPUS, PsychINFO, Excerpta Medica (EMBASE), Index Copernicus, Google Scholar, EBSCO, HRČAK, CiteFactor
Socijalna psihijatrija is indexed in SCOPUS, PsychINFO, Excerpta Medica (EMBASE), Index Copernicus, Google Scholar, EBSCO, HRČAK, CiteFactor

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., Paromlinska 2, 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 48 (3) 255-364 (2020)
ISSN 2459-6140

VOL. 48 – 2020
BROJ/NUMBER 3
ZAGREB, rujan/September 2020.

SADRŽAJ / *CONTENTS*

Poticanje rezilijencije, a time i kvalitete života kod stresom i traumom uzrokovanih poremećaja putem kriznih intervencija

/ Encouraging Resilience and Thus Also Quality of Life in Trauma and Stressor-induced Disorders Through Crisis Interventions

Silvija Topić Lukačević, Slobodanka Cvitanušić, Igor Filipčić, Mia Kosović

Psihijatrijska bolnica „Sveti Ivan", Zagreb, Hrvatska

/ Sveti Ivan Psychiatric Hospital, Zagreb, Croatia

Ubrzani ritam života donosi sve veći stres koji može dovesti do iscrpljenja i sloma prilagodbenih kapaciteta, a kod nekih pojedinaca s vremenom uzrokovati dugotrajne posljedice te psihotraumatizaciju. Novija istraživanja sve veću pozornost usmjeravaju podizanju kvalitete života oboljelih raznim intervencijama koje potiču rezilijenciju. Kriznim intervencijama, psihoterapijskim i farmakoterapijskim metodama u sklopu rada Dnevne bolnice specijalizirane za provođenje preventivnog i terapijskog programa stresom i traumom uzrokovanih poremećaja (DB STUP) potičemo zdrave snage ličnosti odnosno rezilijenciju što omogućava oporavak, odnosno vraćanje na premorbidno funkcioniranje i kvalitetu života. Cilj rada je pokazati kako su intervencije koje primjenjujemo u Dnevnoj bolnici utjecale na kvalitetu života i time povećale rezilijenciju. Prikazat ćemo evaluaciju našega rada tijekom četiriju godina (od 2015. do 2019.). Uzorak čini 129 pacijenata. Primijenjen je upitnik WHOQOL-BREF (*World Health Organization Quality of Life Brief Version questionnaire*) na početku i na kraju programa/hospitalizacije. Istraživanje je pokazalo statistički značajno poboljšanje kvalitete života pri izlasku iz programa/hospitalizacije. Našli smo poboljšanje u svim četirima domenama kvalitete života i to sljedećim redoslijedom: poboljšanje psihičkog zdravlja, fizičkog zdravlja, percepcija utjecaja okoline te društvenih odnosa. U aspektu sociodemografskih čimbenika kao značajan pokazao se isključivo spol – žene koje su izvještavale o značajnijem poboljšanju u aspektu društvenih odnosa, dok su u preostalim domenama spolovi izjednačeni. Naše je istraživanje pokazalo da se intervencijama u kriznim situacijama povećava rezilijencija pa time i kvaliteta života što je neodvojivo povezano.

/ The accelerated rhythm of the modern lifestyle has resulted in growing levels of stress, which can lead to exhaustion and a breakdown of a person's capacity for adjustment, sometimes even causing lasting effects and psychological trauma. Newer studies have increasingly focused on improving patient quality of life through various interventions that improve resilience. Crisis interventions as well as psychotherapy and pharmacological treatment are used in our Day Hospital, which specializes in the implementation of preventative and treatment programs for trauma and stressor-induced disorders (TSRD) in order to encourage healthy psychological strength, i.e. resilience, enabling recovery and return to premorbid functioning and quality of life. The goal of this study was to show how the interventions we apply in the Day Hospital have influenced the patient quality of life and thus increased their resilience. We will present an evaluation of our work over a period of four years (from 2015 to 2019). Our sample comprises 129 patients. We applied the WHOQOL-BREF (World Health Organization Quality of Life Brief Version) questionnaire at the start and at the end of the patients' hospital stay or program. The results show a statistically significant improvement in quality of life at the end of the program. We found improvements in all four quality of life domains, in descending order of magnitude: improvement in mental health, physical health, environment, and social relationships. Sex was the only sociodemographic factor that was significant – women reported more significant improvements in the social relationships domain, whereas the results were equal between the sexes in the other domains. Out study demonstrated that crisis interventions improve resilience and therefore also quality of life, as the two are unquestionably related.

ADRESA ZA DOPISIVANJE /
CORRESPONDENCE:
Silvija Topić Lukačević, dr. med.
Psihijatrijska bolnica „Sveti Ivan"
Dnevna bolnica STUP
Jankomir 11
10 090 Zagreb, Hrvatska
E pošta: topic.silvija@gmail.com

KLJUČNE RIJEČI / ***KEY WORDS:***
Rezilijencija / *Resilience*
Stres / *Stress*
Trauma / *Trauma*
Krizne intervencije / *Crisis interventions*
Kvaliteta života / *Quality of life*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2020.257

UVOD

Ubrzani ritam života donosi sve veći stres, koji kod nekih pojedinaca može dovesti do iscrpljenja i sloma prilagodbenih kapaciteta, a vremenom bez adekvatne intervencije i liječenja uzrokovati i dugotrajne posljedica te psihotraumatizaciju.

Stres definiramo kao skup psihičkih, fizičkih i ponašajnih promjena koje nastaju kada vanjski i/ili unutrašnji čimbenici (stresori) remete homeostazu, tj. fiziološku ravnotežu organizma. Stresor je svaki unutarnji ili vanjski podražaj, događaj ili situacija koji može dovesti do poremećaja u svakodnevnom funkcioniranju i zahtijeva prilagodbu. Način na koji će se pojedinac nositi sa stresorom rezultat je međudjelovanja osobina ličnosti, genetike, iskustva i karakteristika stresora. Reakcija na stres ne mora uvijek biti negativna. Stres koji ne nadvladava prilagodbene kapacitete može imati učinak cjepiva, tj. povećavati kapacitet za prihvaćanje i toleranciju budućih sličnih štetnih događaja. Međutim, ekscesivan stres može preplaviti kompenzacijske mehanizme i uzrokovati iscrpljenje s pojavom psihopatologije, traumatizacije uključujući i PTSP (1,2). Procjena pojedinca ključna je da se neki događaj ili situacija okarakteriziraju kao stresni. S druge strane, traumatski događaji malo ovise o procjeni pojedinca, toliko su teški da neizbježno pogađaju gotovo svaku osobu koja im je izložena. To su događaji koji izlaze izvan okvira uobičajenog

INTRODUCTION

The accelerated rhythm of the modern lifestyle brings increasing levels of stress, which can lead to exhaustion and a breakdown of a person's capacity for adjustment, sometimes even causing lasting effects and psychological trauma if timely intervention and treatment are not forthcoming.

Stress is defined as a group of psychological, physical, and behavioral changes that take place when external or internal factors (stressors) disturb the homeostasis, i.e. the physiological balance of the organism. A stressor is any internal or external stimulant, event, or situation that can lead to a disorder of everyday function and requires adjustment on part of the individual. The way an individual copes with a stressor is dependent on the interaction of personality traits, genetics, experience, and the characteristics of the stressor itself. The reaction to stress does not always have to be negative. Stress that does not overpower the person's capacity for adjustment can have an inoculative effect, i.e. increase their capacity to accept and tolerate such harmful events in the future. However, excessive stress can overcome a person's compensatory mechanisms and cause exhaustion coupled with the manifestation of psychopathology, traumatization, and even PTSD (1,2). The individual's own assessment of a situation is crucial in determining whether an event or

ljudskog iskustva i gotovo uvijek izazivaju patnju. Vrsta i jačina reakcije na traumatski događaj ovisi o osobinama pojedinca, dimenzijama traumatskog događaja i osobinama socijalne podrške (3). No što je trauma intenzivnija to je utjecaj prethodnog iskustva i osobina ličnosti na njegov učinak manji. Dakle, odgovor na traumu ili značajnu količinu stresnih događaja i situacija određen je interakcijom između individualnih značajki (kao što su genetika, epigenetika, rani razvoj, neurobiološki čimbenici) u određenom socijalnom okruženju (obitelj, kultura, ekonomski čimbenici, politički sustav) (4). Intenzitet reakcije na stresni ili traumatski događaj ovisi o kognitivnoj obradi situacije od pojedinca, tj. o doživljaju. Krizna situacija može biti izazov i mogućnost za brzo rješavanje problema i „rast", no krizna situacija može dovesti do psihičke neravnoteže, neuspješnih *coping* obrazaca, poremećaja u ponašanju i disfunkcionalnosti (5).

MKB-11 definira poremećaj prilagodbe kao neadekvatnu reakciju na psihosocijalni stresor ili višestruke stresore (kao što su razvod, bolest, socioekonomski problemi, konfliktne situacije u obiteljskom ili poslovnom okruženju i sl.). Prema MKB-11 poremećaj prilagodbe pojavljuje se unutar mjesec dana od pojave stresora i ne traje dulje od šest mjeseci. Poremećaj karakterizira zabrinutost uzrokovanu samim stresorom ili njegovim posljedicama, ponavljajuće uznemirujuće misli ili ruminacije o njegovim posljedicama te nemogućnost prilagodbe na stresni događaj. Poremećaj obilježava i značajno oštećenje na osobnom, obiteljskom, socijalnom, radnom i drugim područjima života.

Dijagnostička obilježja poremećaja prilagodbe u DSM-5 su prisutnost emocionalnih simptoma ili simptoma u ponašanju koji su odgovor na prepoznatljiv stresor. Subjektivne tegobe ili oštećenja funkcioniranja povezana s poremećajem prilagodbe često se manifestiraju kao smanjena učinkovitost na poslu ili školi te privremene promjene u socijalnim odnosima. Prema navedenom klasifikacijskom sustavu

situation will be perceived as stressful. On the other hand, traumatic events do not significantly depend on the individual's own assessment, as they are so severe that they unavoidably affect any person exposed to them. These are events that are beyond the scope of normal human experience and almost always cause suffering. The type and severity of the reaction to a traumatic event depends on the characteristics of the individual, the severity of the traumatic event, and on the characteristics of available social support (3). However, the more intense the trauma, the less influence a person's previous experience and personality can exert on its effects. The response to trauma or a significant number of stressful events and situations is thus determined by the interaction between individual characteristics (such as genetics, epigenetics, early development, neurobiological factors) in a given social environment (family, culture, economic factors, political system) (4). The intensity of the reaction to a stressful or traumatic even depends on the cognitive processing on part of the individual, i.e. their experience. A crisis can be a challenge and an opportunity to quickly resolve the problem and experience "growth", but a crisis can also lead to psychological disbalance, failed coping patters, behavior disorders, and dysfunctionality (5).

ICD-11 defines adjustment disorders as an inadequate reaction to a psychosocial stressor or multiple stressors (such as divorce, illness, socioeconomic problems, conflicts in the family or work environment, etc.). According to ICD-11, adjustment disorders manifest within a month of the appearance of stressors and does not last longer than six months. An adjustment disorder is characterized by anxiety caused by the stressors themselves or their consequences, recurrent upsetting thoughts or ruminations on the consequences of the stressful event, and the inability to adjust to the event. Adjustment disorders are also characterized by significant damage in personal, family, social, occupational, and other areas of the person's life.

poremećaj prilagodbe može se dijagnosticirati i nakon smrti voljene osobe kada intenzitet, kvaliteta ili trajanje reakcije tuge prelaze ono što se normalno može očekivati kada se uzmu u obzir kulturalne, vjerske ili dobi primjerene norme. Dijagnostički kriteriji za postavljanje poremećaja prilagodbe u DSM-5 su sljedeći:

A) Razvoj emocionalnih simptoma ili simptoma u ponašanju koji su odgovor na prepoznatljiv stresor;

B) Ti simptomi ili ponašanja klinički su značajni na što upućuje jedno ili oboje od sljedećeg:

   1. Značajna patnja koja nije proporcionalna težini ili intenzitetu stresora, uzimajući u obzir vanjski kontekst i kulturalne čimbenike koji mogu utjecati na ozbiljnost simptoma i prezentaciju.
   2. Značajno oštećenje u socijalnom, radnom ili drugim važnim područjima funkcioniranja;

C) Nisu ispunjeni kriteriji za neki drugi psihički poremećaj;

D) Simptomi u sklopu tog poremećaja ne predstavljaju normalno žalovanje;

F) Simptomi ne perzistiraju dulje od šest mjeseci.

Kao i MKB-11 i DSM-5 navodi da stresor može biti jedan događaj ili se može raditi o višestrukim stresorima, mogu biti ponavljajući ili kontinuirano prisutni, a neki mogu pratiti specifične razvojne događaje (polazak u školu, napuštanje roditeljskog doma, ulazak u brak, roditeljstvo, nepostizanje profesionalnih ciljeva, umirovljenje). Poremećaji prilagodbe prema DSM-5 počinju unutar tri mjeseca od pojave stresora, za razliku od MKB-11 gdje je za postavljanje dijagnoze potrebno javljanje simptoma unutar mjesec dana. Oba klasifikacijska sustava ograničavaju trajanje poremećaja prilagodbe na šest mjeseci.

Postotak osoba u izvanbolničkom programu liječenja psihičkih bolesti s glavnom dijagnozom

Diagnostic characteristics of adjustment disorders in DSM-5 comprise the presence of emotional or behavioral symptoms that are a response to a recognizable stressor. The subjective difficulties or damage in functioning associated with adjustment disorders often manifest as reduced efficiency at work or temporary changes in social relationships. According to this classification system, an adjustment disorder can also be diagnosed after the death of a loved one when the intensity, quality, or duration of the grief are beyond what can normally be expected considering the culturally, religiously, and age-appropriate norms. Diagnostic criteria for adjustment disorder in DSM-5 are as follows:

A) The development of emotional or behavioral symptoms in response to an identifiable stressor.

B) These symptoms or behaviors are clinically significant, as evidenced by one or both of the following:

   1. Marked distress that is out of proportion to the severity or intensity of the stressor, taking into account the external context and the cultural factors that might influence symptom severity and presentation.
   2. Significant impairment in social, occupational, or other important areas of functioning.

C) Criteria for a different mental disorder are not met.

D) The symptoms do not represent normal bereavement.

F) The symptoms do not persist for more than an additional 6 months.

As in ICD-11, DSM-5 indicates that a stressor can be a single event or multiple stressors which can be repeating or continuously present, with some perhaps accompanying specific developmental events (starting school, leaving the parental household, entering marriage, parenting, failure to achieve professional goals, retirement). According to DSM-5, adjustment disorders mani-

poremećaja prilagodbe kreće se otprilike od 5 do 20 %, dok je u bolničkom psihijatrijskom okruženju to najčešća dijagnoza koja doseže 50 %, navodi DSM-5. Istraživanja su pokazala da u cjelokupnoj populaciji 50 – 60 % doživi tešku traumu, a prevalencija bolesti povezanih s traumom kreće se oko 7,8 % (6). U svrhu sprječavanja toga krizne intervencije postaju područje aktivnijeg pristupa u radu psihijatara. Intervencije u kriznim situacijama imaju za cilj smanjenje intenziteta krize, lakše podnošenje i integriranje traumatskog događaja u vlastito iskustvo, ponovno uspostavljanje kontrole, psihičke ravnoteže i funkcionalnosti pojedinca prije krize te sprječavanje emocionalnog sloma i razvoja PTSP-a.

S obzirom na to da je kvaliteta života kod oboljelih redovno narušena, oporavak neminovno sa sobom donosi i podizanje kvalitete života (7). Pojam kvaliteta života subjektivni je doživljaj i osjećaj pojedinca što podrazumijeva postojanje osjećaja radosti, životnog zadovoljstva, postojanje unutrašnjeg mira. Ona se odnosi na život bez posebne opterećenosti, na život bez straha i neizvjesnosti (8).

U novije vrijeme znanstvenici se sve više okreću od rizičnih čimbenika za razvoj psihopatologije prema čimbenicima koji promoviraju rezilijenciju, tj. otpornost i blagostanje te se usmjeravaju na istraživanje intervencija u području životnog stila, psiholoških i bihevioralnih metoda koji tome mogu doprinijeti (9). Rezilijencija, iako ovisi o biološkim i psihološkim čimbenicima, ovisi i o naučenim *coping* mehanizmima, socijalnoj okolini i stilu života te se može potaknuti na razne načine. Također, može se mijenjati tijekom vremena kao funkcija razvoja i interakcije s okolinom. Rezilijencija se u bolničkim uvjetima može potaknuti raznim intervencijama u području životnog stila, psihološkim, biološkim (farmakoterapija) i bihevioralnim metodama (9).

Tijekom programa Dnevne bolnice koja je specijalizirana za rad sa stresom i traumom uzro-

fest within three months of the appearance of the stressors, as opposed to ICD-11 where diagnosis requires presentation of the symptoms within a month. Both classification systems limit the duration of adjustment disorders to six months.

The percentage of outpatients treated for mental illnesses with a primary diagnosis of adjustment disorder is between 5 to 20%, whereas this is the most common diagnosis in the inpatient setting, reaching 50% according to DSM-5. Studies have shown that 50-60% of the total population experiences a severe trauma, and the prevalence of illnesses associated with trauma is approximately 7.8% (6). In order to prevent this, crisis interventions have become an area where a more active approach is employed in psychiatric work. The goals of crisis interventions are to reduce the intensity of the crisis, improve tolerance and integration of the traumatic event into the individual's experience, regaining control, mental balance, and functionality on part of the individual before the crisis, and prevent emotional breakdowns and development of PTSD.

Given that quality of life is reduced in such patients, recovery always results in an improvement in quality of live (7). The concept of quality of life is a subjective perception and feeling of the individual that includes the presence of a feeling of joy, life satisfaction, and the presence of inner peace. It refers to life with no special burdens, life without fear and uncertainty (8).

Recently, the focus of scientists has increasingly shifted from risk factors for developing psychopathologies to factors that promote resilience, i.e. fortitude and wellbeing, focusing on studying interventions in the areas of lifestyle habits and psychological and behavioral methods that can contribute to it (9). Resilience, despite being dependent on biological and psychological factors, also depends on learned coping mechanisms, the social environment, and one's lifestyle, and can be encouraged in many different ways. It can also change over time as a function of development and inter-

kovane poremećaje (DB STUP) temeljimo se na kriznim intervencijama, psihoterapiji te socioterapijskim postupcima uz ostale metode koje mogu pridonijeti jačanju rezilijencije što će biti opisano u tekstu. Oboljeli koje primamo i liječimo pokazuju teškoće koje se uklapaju u dijagnozu poremećaja prilagodbe (krizna stanja) i traumom uzrokovanih poremećaja. Program je sastavljen od progresivne mišićne relaksacije, grupne psihodinamske psihoterapije, psihoedukacije po kognitivno-bihevioralnim principima i socioterapije što uključuje radno-okupacijske terapije, terapijski-rekreativni izlaz, radionicu posttraumatskog rasta, tj. radionicu „Zdravi ja" i terapijsku zajednicu. Uspješnost programa mjerimo baterijom testova prije i nakon uključenja u program. U Dnevnoj bolnici radi tim koji se sastoji od šest članova: dva psihijatra educirana iz područja grupne analize, psihologa koji se bavi kognitivno-bihevioralnom terapijom, dvije medicinske sestre educirane iz grupne terapije te radno-okupacijskog terapeuta. U programu je sudjelovao i educirani socijalni pedagog koji je primjenjivao pristup *mindfulness*.

INTERVENCIJE

Uspješna krizna intervencija početna je točka na kontinuumu skrbi. Ciljevi intervencija u krizi su (3):

a) Smanjenje psihološke napetosti i uznemirenosti (tjeskoba, očaj, zbunjenost, nemir);
b) Vraćanje na razinu funkcioniranja i aktivnosti prije krize;
c) Poticanje korištenja dostupnih vanjskih i unutarnjih *copinga* i socijalne podrške;
d) Razvoj novih načina percepcije, suočavanja s problemima i njihovog rješavanja.

Potrebno je paziti na vrijeme kada se pruža intervencija koja se treba prilagoditi potrebama i kapacitetima pacijenta. Intervencije koje pojačavaju i poboljšavaju rezilijenciju mogu se primijeniti tijekom i nakon stresne ili traumatske situ-

actions with the environment. In a hospital setting, resilience can be encouraged through various interventions aimed at lifestyle habits and using psychological, biological (pharmacotherapy), and behavioral methods (9).

The program of the Day Hospital, which specializes in working with trauma and stressor-induced disorders (TSRD), is based on crisis interventions, psychotherapy, and social therapy procedures along with other methods that can contribute to building resilience, as will be described below. Patients treated in our program suffer from adjustment disorders (states of crisis) and trauma-induced disorders. The program comprises progressive muscle relaxation, group psychodynamic psychotherapy, psychoeducation based on cognitive-behavioral principles, and social therapy, which includes occupational therapy, therapeutic recreational outings, a posttraumatic growth workshop, i.e. the *Zdravi ja* workshop, and a therapy community. The success of the program is measured using a battery of tests before and after a patient has been included in the program. The Day Hospital employs a team comprising six members: two psychiatrists with an education in group analysis, a psychologist working with cognitive-behavioral therapy, two nurses educated in group therapy, and an occupational therapist. A social pedagogist who applied the mindfulness approach also participated in the program.

INTERVENTIONS

Successful crisis intervention is the starting point on the treatment continuum. The goals of crisis interventions are (3):

a) Reducing psychological tension and agitation (anxiety, despair, confusion, restlessness).
b) Returning to the level of functioning from before the crisis.
c) Encouraging the use of available external and internal coping mechanisms and social support.

acije. Neke intervencije mogu biti učinkovitije u jednom, a neke u drugom razdoblju. Neke osobe primarno su kognitivne u kriznim situacijama (tj. teže ponovnoj uspostavi kontrole i rješavanju problema), a druge su afektivne (iskazuju potrebu za suosjećanjem, podrškom i ventilacijom) o čemu ovisi i pristup pacijentu (3).

Za razliku od uobičajenog funkcioniranja u kojem prevladava kognitivna domena, osoba u stanju krize toliko je preplavljena emocijama da kognitivno ne funkcionira adekvatno te se ne može koristiti mehanizmima suočavanja s problemima koje inače koristi (10,11).

Intervencije u kriznoj situaciji treba usmjeriti na pomoć kako iz krizne situacije izaći ili nositi se s njom. Intervencijama se pruža emocionalna podrška, prihvaćanje i razumijevanje te se potiče emocionalno rasterećenje. Potrebno je s pacijentom definirati problem, tražiti konkretne informacije te vremenom i postavljati konkretne zahtjeve u smjeru prilagodbe ponašanja. Također, treba potaknuti pacijenta da razvije strategije suočavanja što uključuje prihvaćanje situacije. Pružanje psihoedukacije o bitnim činjenicama iz područja stresa i traume pokazala se korisnom pacijentima kako bi razumjeli svoje reakcije. Kod traumatiziranih pacijenata najvažnije su intervencije koje potiču strukturirano i detaljno prorađivanje stresne/traumatske situacije uz usmjeravanje na emocionalne, kognitivne i ponašajne reakcije. Verbalizacija doživljaja, misli i stanja te pokazivanje osjećaja vezanih za traumatsko iskustvo pomaže pacijentima bolje procijeniti bolne traumatske i posttraumatske reakcije te ih integrirati u životno iskustvo (5). Pacijente je potrebno potaknuti da promijeni referentni okvir, tj. da se situacija zaista i shvati kao nesvakidašnja te da se reakcije prihvate kao karakteristične za traumatsko iskustvo. Ipak, inzistiranje na ventilaciji i otvorenom razgovoru o traumi u određenom broju traumatiziranih dovodi do preplavljivanja traumatskim iskustvima što se pokazalo kontraproduktivno (12). Naime,

d) Developing new ways of perceiving, facing, and solving problems.

The timing of the intervention must be considered and tailored to the needs and capacities of the patient. Interventions that build and improve resilience can be applied during or after stressful and traumatic situations. Some interventions can be more effective before the stressful or traumatic situation, while others can be more effective after has already taken place. Some persons are primarily cognitive in crisis situations (i.e. they strive to reestablish control and resolve the problem), while others are affective (expressing the need for empathy, support, and venting), which should inform the approach taken towards the patient (3).

As opposed to normal functioning where the cognitive domain is not dominant, a person in a state of crisis is so overwhelmed by emotions that they do not function adequately at a cognitive level and cannot employ the coping mechanisms they normally use (10,11).

Crisis interventions should be focused on leaving or coping with the crisis situation. Interventions provide emotional support, acceptance, and understanding and encourage emotional unburdening. It is important to define the problem together with the patient, looking for concrete information and in time setting concrete demands with regard to behavior adjustment. The patient should also be encouraged to develop coping strategies, which includes accepting the situation. Providing psychoeducation on important facts regarding stress and trauma has shown to be beneficial to patients in allowing them to understand their own reactions. In traumatized patients, the most important interventions are those that encourage structured and detailed processing of the stressful/traumatic situation with a focus on emotional, cognitive, and behavioral reactions. Verbalization of experiences, thoughts, and states and expressing feelings tied to the traumatic experience helps patients assess their painful traumatic and posttraumatic reac-

nisu svi pacijenti odmah spremni na strukturiranu i detaljnu proradu traume s obzirom na to da je izbjegavanje podsjetnika traumatskog događaja jedan od glavnih simptoma PTSP-a, kao i ponovno proživljavanje traumatske situacije što izaziva uznemirenosti. Kada je pacijent spreman za strukturirano prorađivanje traumatskog događaja možemo početi govoriti o putu prema izlječenju. Kod traumatiziranih osoba bitno je brzo uspostavljanje terapijskog odnosa uz neutralni i neosuđujući stav u cilju psihičkog smirivanja, stvaranja povjerenja u odnosu i osjećaja sigurnosti (13).

Nakon uspješne krizne intervencije može uslijediti psihoterapija. Psihoterapijske intervencije u krizi treba prilagoditi ovisno o težini poremećaja i strukturi ličnosti pacijenta.

U kriznim situacijama izrazito je bitna podrška okoline, obitelji i prijatelja te se intervencije trebaju usmjeriti na poticanje socijalnog povezivanja i resocijalizaciju, pružanja podrške i ohrabrenja da se ta podrška traži u socijalnoj okolini (među obitelji i prijateljima) (14). Grupne terapije u tom smislu pružaju oboljelima utočište i razumijevanje da u krizi nisu sami.

U grupnoj psihoterapiji radi se na uspostavljanju bazičnog povjerenja empatijskim razumijevanjem, kontejniranjem, sadržavanjem teških osjećaja te osiguranjem konstantnosti terapeuta i tima. Terapeut se usmjerava na rad s osjećajima i emocijama uz aktivno slušanje, pokazivanje zainteresiranosti i korištenje ohrabrujućih formulacija, refleksije i parafraziranja. Potiče se pozitivan način razmišljanja, instalacija nade i motivacije uz ohrabrenje i poticaj za rješavanje nelagodnih životnih situacija. Istražuju se alternativne mogućnosti za prevladavanje trenutačne situacije uz identifikaciju ranijih uspješnih mehanizama. Voditelj treba prihvatiti osjećaje pacijenta bez umanjivanja njihovog značenja, ali raditi na mijenjanju referentnog okvira da ih pacijent može vremenom integrirati u vlastito iskustvo (15). Također,

tions more clearly and integrate them in their life experience (5). Patients should be encouraged to change their frame of reference, i.e. actually perceive the situation as out of the ordinary and accept their own reactions as characteristic of a traumatic experience. However, insisting on venting and open conversation on the trauma can cause some patients to become overflown with traumatic experiences, which has shown to be counterproductive (12). Not all patients are immediately ready for structured and detailed processing of their trauma, given that avoiding reminders of the traumatic event is one of the main symptoms of PTSD, as is reliving the traumatic situation that causes anxiety. When the patient is ready for structured processing of the traumatic event, we can start saying that they are on the path to recovery. In traumatized individuals, rapid establishment of the therapeutic relationship with a neutral and non-judgmental stance is very important for achieving a calmer state of mind, trust in the relationship, and a feeling of security in the patient (13).

A successful crisis intervention can be followed by psychotherapy. Psychotherapy interventions during the crisis should be adjusted based on the severity of the disorder and the personality structure of the patient.

Receiving support from one's environment, family, and friends is extremely important during crisis situations, and interventions should focus on encouraging social connections and resocialization, providing support and encouragement, and searching for that support in the patient's social environment (among family and friends) (14). In this sense, group therapy can provide patients with a refuge and help them understand they do not have to face the crisis alone.

Group therapy aims to establish basic trust through empathetic understanding, functioning as a container for difficult emotions, and ensuring constancy in the therapist and team. The therapist focuses on working with feelings and emotions with active listening, showing

pacijenta treba potaknuti da smanji one misli koje su previše samokritične i nisu racionalne. Time radimo na osnaživanju pojedinca kako bi se lakše nosio sa životnim nedaćama. Pravila u grupnom procesu između ostaloga zahtijevaju povjerljivost, odsutnost kritike, vrednovanje tuđih izjava tijekom govora, neophodnost da svi sudjeluju u iznošenju činjenica, svatko govori za sebe i preuzima odgovornost za izrečeno. Navedenim se potiče vraćanje osjećaja sigurnosti, djelujemo na ublažavanje psihopatologije, resocijalizaciju i jačanje ego snaga te u konačnici pogodujemo rezilijenciji pogođene osobe kao i kvaliteti života.

U osnovi cilj je intervencija integracija traume, ublažavanje utjecaja kriznog događaja, ubrzavanje oporavka te sprječavanje nastanka nepoželjnih dugoročnih posljedica. Drugim riječima, cilj je prevencija problema koju pacijenti mogu imati u obiteljskom, poslovnom i socijalnom okruženju kao i sprječavanje retraumatizacije i kronificiranja stresom i traumom uzrokovanih poremećaja.

ŠTO JE REZILIJENCIJA I KAKO JE POTAKNUTI?

Rezilijencija se definira kao sposobnost da se pod utjecajem štetnih čimbenika osoba ne slomi iako padne, ustane i prilagodi se novonastaloj situaciji (1). Rezilijencija je povezana sa sposobnošću da se angažira cijeli spektar *coping* strategija na fleksibilan način ovisno o specifičnom izazovu te da se potom koriste korektivne povratne informacije za prilagodbu tih strategija. Nedavna istraživanja ukazuju da je rezilijencija u ljudi aktivan, adaptivni proces, na koji se može utjecati, a ne jednostavno odsustvo patološkog odgovora, koji se inače javlja u osjetljivijih osoba nakon stresnog događaja (16).

Rezilijencija na neki traumatski ili stresni događaj definira se kao zdrav, stabilan, adaptivan način funkcioniranja nakon što je osoba bila

interest, and using encouraging formulations, reflections, and paraphrasing. Positive thinking is encouraged, as is installing hope and motivation with encouragement in dealing with difficult situations. Alternative methods to overcome the current situation are explored, along with identification of mechanisms that were previously successful. The group therapist should accept the patient's feelings without attempting to diminish their meaning, instead working on changing the reference frame in order to allow to patient to gradually integrate them into their own experience (15). The patient should also be encouraged to reduce those thoughts that are overly self-critical and irrational. This strengthens the individual, helping them cope with life's difficulties. Among other things, the rules of the group process require confidentiality, absence of criticism, respecting the statements of others when speaking, the necessity of everyone participating in presenting facts, everyone speaking for themselves, and taking responsibility of what one says. This encourages returning to a feeling of security, ameliorates the psychopathology, encourages resocialization and improves ego strength, and ultimately benefits the resilience and thus the quality of life of the affected person.

The basic goal of these interventions in integrating trauma, ameliorating the effects of the crisis event, quickening recovery, and preventing the development of adverse long-term consequences. In other words, the goal is preventing problems that patients can have in family, occupational, and social environments as well as preventing re-traumatization and chronification of disorders induced by stress and trauma.

WHAT IS RESILIENCE AND HOW TO ENCOURAGE IT?

Resilience is defined as a person's ability to not break under the influence of harmful factors, to get back up after falling down and adapt to the new situation (1). Resilience is associated with

izložena stresnom događaju (17,18). Dakle, ona uključuje svjesni trud da se krene naprijed, uključuje motivaciju da se nešto nauči iz stresne situacija s uvidom i integracijom pozitivnih aspekata te situacije kao lekcije koja je naučena nakon nekog stresnog iskustva (19,20). Rezilijencija se također odnosi na kapacitet osobe da izbjegne negativne socijalne, psihološke i biološke posljedice ekstremnog stresa koji bi inače kompromitirali psihičko i fizičko zdravlje.

Neke osobe mogu pokazivati veću otpornost/rezilijenciju u nekim područjima svog života u usporedbi s drugim. Također mogu pokazivati veću rezilijenciju tijekom jednog razdoblja života u usporedbi s drugim. Kada definiramo rezilijenciju, često se pokušava zauzeti stajalište je li rezilijencija prisutna ili odsutna. U realnosti rezilijencija može biti prisutna na kontinuumu u različitim stupnjevima u različitim područjima života (21). Recimo, osoba koja se dobro adaptira na stres na radnom mjestu može imati teškoće adaptacije u ljubavnim i emotivnim vezama. Rezilijencija se također može mijenjati tijekom vremena kao funkcija razvoja i interakcije s okolinom.

Rezilijencija se treba razgraničiti od vulnerabilnosti na stres i posttraumatskog rasta (22). Vulnerabilost na stres zbraja rizične čimbenike za razvoj PTSP-a, dok rezilijencija obuhvaća i pozitivan i negativan učinak izlaganja stresu. Rezilijencija dakle, kao i vulnerabilnost, obuhvaća predispoziciju za razvoj PTSP-a nakon traumatskog događaja, međutim zbraja i pozitivne učinke. Posttraumatski rast uključuje samo pozitivne promjene koje se pojavljuju u osobe nakon stresnog događaja (23-25). Moglo bi se reći da vulnerabilnost na stres kao i posttraumatski rast pripadaju u podskupinu rezilijencije te da je rezilijencija širi pojam. Ovdje bi trebali spomenuti da rezilijencija može koegzistirati s PTSP-om, omogućujući pomicanje prema integraciji i uvidu u pozitivnom smislu (26-28).

the ability to engage the whole spectrum of coping strategies in a flexible way depending on the nature of the specific challenge as well as the ability to then use corrective feedback to adapt those strategies to the situation. Recent studies have shown that resilience is an active, adaptive process that can be influenced, and is not just the absence of a pathological response that manifests in sensitive persons after a stressful event (16).

Resilience to a traumatic or stressful event is defined as healthy, stable, and adaptive functioning after being exposed to the stressful event (17,18). It therefore includes a conscious effort to move forward as well as being motivated to learn from the stressful situation using insight into and integration of positive aspects of the situation as a lesson that has been learnt after the stressful experience (19,20). Resilience also refers to a person's capacity to avoid negative social, psychological, and biological consequences of extreme stress that would otherwise compromise a person's physical and psychological health.

Some individuals can show greater resilience in some aspects of their lives than in others. A person can also show greater resilience at one point in their lives than at another. In defining resilience, resilience is often dichotomized as present or absent. In reality, the presence of resilience is on a continuum with different levels of resilience in different aspects of life (21). For example, an individual who adapts well to occupational stress may have issues adapting in romantic and emotional relationships. Resilience can also change over time as a function of personal development and interaction with the environment.

Resilience should be differentiated from vulnerability to stress and posttraumatic growth (22). Vulnerability to stress is the sum of risk factors for developing PTSD, while resilience also encompasses both the positive and negative effect of exposure to stress. Resilience, like vulnerability, encompasses the predisposition to develop PTSD after a traumatic event, but

Što determinira rezilijenciju i dalje je vrlo diskutabilno. Od čimbenika koji se jasno povezuju s rezilijencijom u odrasloj dobi najvažniji su zdrava privrženost, sposobnost emocionalne regulacije, samosvjesnost, kapacitet za vizualizaciju budućnosti i motivacijski sustav koji omogućuje osobi da uči iz iskustva, raste i adaptira se na okolinu.

Odrednice rezilijencije uključuju puno bioloških, psiholoških, socijalnih i kulturalnih čimbenika koji utječu jedna na drugu (29). Mnoga istraživanja pokazuju da psihološka rezilijencija dobrim dijelom ovisi o uvjetima odrastanja i razini skrbi tijekom ranog djetinjstva (tj. okolišu koji je pun ljubavi, emocionalno raspoloživ, dosljedan i pouzdan) (30). Adekvatni socijalni i okolišni uvjeti mogu podržavati razvoj individualnih osobina i vještina povezanih s rezilijencijom što uključuje sposobnost regulacije emocija, samoumirivanje, sposobnost rješavanja problema pod stresom, oblikovanje sigurne privrženosti, održavanje prijateljskih i intimnih odnosa, postizanje pozitivnih osjećaja i samoostvarenja. Međutim, kada je okolina u kojoj dijete odrasta kaotična i stresna, dolazi do neurobioloških, emocionalnih i ponašajnih odgovora na buduće stresore koji se mogu zadržati do odrasle dobi (31). Istraživanja pokazuju da izlaganje umjerenoj razini stresa tijekom života zahtijeva stalnu primjenu *coping* strategija što vodi stjecanju vještina, doživljaju uspješnog savladavanja prepreka, stavu da se sa stresom može izaći na kraj te se time potiče doživljaj kontrole nad nepredviđenim situacijama što promovira rezilijenciju u budućnosti (32,33). Navedeno upućuje da održavanje optimalne razine izloženosti stresu (što možemo nazvati i eustres, tj. stres koji se uspješno svladava i koji ne dovodi do slamanja prilagodbenih kapaciteta) može spriječiti razvoj većih psihijatrijskih poremećaja, no potrebna su daljnja istraživanja na tom području (34,35).

Istraživanja na području psihološkog razvoja ljudi u zadnjim dvama desetljećima pokazala su da je rezilijencija ponajprije rezultat adaptiv-

also includes the positive effects. Posttraumatic growth only includes the positive changes that appear in a person after a stressful event (23-25). It can be said that vulnerability to stress and posttraumatic growth are subsets of resilience, which is a wider concept. It should also be noted that resilience can coexist with PTSD, allowing movement towards integration and insight in the positive sense (26-28).

What determines resilience is still very much open to discussion. Among factors that are clearly associated with resilience in adulthood, the most important are healthy attachment, capacity for emotional regulation, conscientiousness, capacity to visualize the future, and a motivational system that allows the person to learn from experience, grown, and adapt to their environment.

The determinants of resilience include many biological, psychological, social, and cultural factors that influence one another (29). Many studies have shown that psychological resilience greatly depends on the circumstances an individual grew up in and the level of care during early childhood (i.e. a love-filled environment, emotional availability, consistency, and reliability) (30). Adequate social and environmental factors can support the development of individual traits and skills that are associated with resilience, which include the ability to regulate emotions, self-calming, the ability to solve problems under stress, shaping of safe attachment, maintaining friendships and intimate relationships, achieving positive feelings, and self-realization. However, if the environment a child is growing up in is chaotic and stressful, this can lead to neurobiological, emotional, and behavioral responses to future stressors that can be retained in adulthood (31). Studies have shown that exposure to a moderate level of stress during life requires the constant application of coping strategies, which leads to the acquisition of skills, experience in successful overcoming of obstacles, and the be-

nog *coping* odgovora na stresni čimbenik, a ne isključivo rijetka osobina, iako jedno ne isključuje drugo (36,37). Nasljedne osobine koje se povezuju s rezilijencijom su ekstraverzija i optimizam s obzirom na to da su povezani s kapacitetom za traženje i korištenje socijalne podrške.

Neke obitelji pokazuju veću rezilijenciju nego druge. „Rezilijentnije" obitelji pružaju objašnjenje za životnu patnju, daju osjećaj smisla, nade i reda te se okreću budućnosti. U „rezilijentnim" obiteljima prevladava stav da život zaista ima smisla unatoč kaosu, brutalnosti, stresu i očaju te se fokusiraju na ono što je ostalo, a ne što je izgubljeno. Ta nada ili smisao esencijalna je za takozvanu kulturalnu perspektivu rezilijencije (38-40).

Socijalna podrška izrazito je važna za održavanje i jačanje rezilijencije neke osobe. Sama spoznaja da imamo nekoga na koga se možemo osloniti, tko nam može pružiti pomoć i utjehu, posebno tijekom stresnih razdoblja, vrlo je značajna za psihološku otpornost (41,42). Rezultati meta-analiza pokazuju da je slaba posttraumatska socijalna podrška konzistentan rizični čimbenik za razvoj PTSP-a (12).

Učinkovitost socijalne podrške ovisi o vrsti podrške koja je pružena te dužini trajanja, a što bi odgovaralo individualnim potrebama koje se mogu mijenjati tijekom vremena. Govorimo o nekoliko aspekata socijalne podrške (43):

1. strukturalna socijalna podrška (veličina socijalne mreže pojedinca, frekvencija socijalnih interakcija),
2. funkcionalna socijalna podrška (percepcija da su socijalne interakcije korisne, tj. da omogućuju ispunjenje određenih emocionalnih potreba),
3. emocionalna socijalna podrška (ponašanja koja potiču osjećaj ugode, doživljaj da je osoba voljena i respektirana),
4. instrumentalna/materijalna socijalna podrška (pružanje dobara i usluga koje služe da se pomogne riješiti određeni problem),

lief that stress is something that can be handled, thus encouraging a feeling of control over unforeseen situations that promotes resilience in the future (32,33). This indicates that maintaining the optimal level of exposure to stress (which we can call *eustress*, i.e. stress that is successfully overcome and that does not lead to the breakdown of adaptive capacity) can prevent development of major mental disorders, but further research on this topic is needed (34,35).

Over the last two decades, studies on the psychological development of humans have shown that resilience is primarily the result of an adaptive coping response to the stressor, and not exclusively a rare characteristic, although one does not exclude the other (36,37). Hereditary characteristics associated with resilience are extroversion and optimism, since they are associated with the capacity to seek out and use social support.

Some families show greater resilience than others, and "more resilient" families provide an explanation for suffering, provide a sense of meaning, hope, and order, and are future-oriented. The attitude that life truly has meaning despite the chaos, brutality, stress, and despair is predominant in "resilient" families, and they focus on what remains rather than on what is lost. This hope or meaning is essential for the so-called cultural perspective of resilience (38-40).

Social support is extremely important for maintaining and building resilience in a person. Just knowing that we have someone we can rely on who can offer us support and consolation, especially during stressful periods, is very important for psychological resilience (41,42). The results of several meta-analyses show that poor posttraumatic social support is a consistent risk factor for the development of PTSD (12).

The effectiveness of social support depends on the type of support being provided and its duration, which must also suit the individual's needs that can change over time. There are several aspects of social support (43):

5. informacijska/kognitivna socijalna podrška (pružanje savjeta ili uputa s ciljem/namjerom da se pomogne osobi boriti se s trenutačnom situacijom).

Navedeni aspekti socijalne podrške mogu se unaprijediti i održavati u različitim sustavima kao obiteljskom, u području socijalne zajednice, države, nacije ili na razini međunarodnog sustava u raznim programima (43). Potpora koju pruža neka (šira) socijalna zajednica može pomoći jačanju rezilijencije pojedine osobe programima koji promiču sigurnu životnu okolinu, pristupačnim cijenama domova, stabilnošću u dostupnosti hrane i zaposlenosti, pristupom zdravstvenoj zaštiti, učinkovitim školstvom, pripremljenošću i osposobljenošću u slučaju katastrofe te raspoloživim i bogatim javnim prostorom koji se može koristiti za relaksaciju i vježbu (44).

Pokazalo se da je socijalna podrška poticanjem da se usvoje zdravi i reduciraju rizični oblici ponašanja, osjećajem da se osoba razumije te pomoću u procjeni da potencijalne stresne situacije nisu toliko opasne povezane s rezilijencijom na psihopatologiju. Socijalna podrška može povoljno utjecati na osjećaj kontrole ili sposobnosti za rješavanje potencijalno vrlo stresne situacije, može pojačati samopoštovanje te potaknuti korištenje adekvatnih *coping* strategija.

Što se tiče farmakoterapije, bitno je spomenuti da je utvrđeno značajno preklapanje između gena koji reguliraju rezilijenciju i onih koji su regulirani dugotrajnom uporabom antidepresiva (45). Navedeno može upućivati na to da antidepresivi potiču u pacijenata one adaptacije koje se prirodno pojavljuju u osoba koje posjeduju nasljednu sposobnost rezilijencije, tj. koji su rezilijentni. Smatra se da farmakoterapijom također možemo utjecati na epigenetsku modulaciju (46). Neka istraživanja pokazala su da primjena selektivnih inhibitora ponovne pohrane serotonina (SIPPS) odmah nakon traume može dovesti do redukcije rizika

1. Structural social support – the size and extent of the individual's social network, frequency of social interactions.
2. Functional social support – the perception that social interactions have been beneficial, i.e. that they meet certain emotional needs.
3. Emotional social support – behavior that fosters feelings of comfort, leading the person to believe that they are loved and respected.
4. Instrumental/material social support – providing goods and services that help solve concrete practical problems.
5. Informational/cognitive social support – provision of advice or guidance with the intent to help individuals cope with the current situation.

These aspects of social support can be improved and maintained in different social systems, such as in the family, at the level of the community, the state, the nation, or at the level of an international system with different programs (43). The support provided by a (wider) social community can strengthen the resilience of an individual through programs that promote a safe living environment, affordable housing, stability in access to food and employment, access to healthcare, effective education, readiness and training in case of a disaster, and the availability and richness of public spaces that can be used for relaxation and exercise (44).

It has been found that social support consisting in encouraging an individual to apply healthy and reduce risky forms of behavior, making the individual feel understood, and helping them assess potentially stressful situations as less dangerous than they first appear was associated with resilience to psychopathology. Social support can have a beneficial effect on an individual's feeling of control or ability to solve potentially very stressful situations, can improve self-respect, and can encourage the use of adequate coping strategies.

od razvoja poremećaja povezanih s traumom (47-49).

Također je utvrđeno da kognitivno-bihevioralna terapija kontroliranim izlaganjem stresnim situacijama, kognitivnom restrukturacijom/rekapitulacijom i tehnikama relaksacije nakon traumatskog događaja može pomoći osobama s PTSP-om u bržem oporavku (50). Psihofarmaci zajedno s psihološkim intervencijama i *mindfulness* programom mogu pomoći reducirati psihopatologiju koja je povezana s traumom (51-53). *Mindfulness* programi za redukciju stresa koji se temelje na usmjeravanju neosuđujuće pažnje na sadašnji trenutak i pozitivne emocije često se upotrebljavaju kao pomoć u promoviranju blagostanja i dobrog osjećanja (54,55).

ISTRAŽIVANJE

CILJ: Cilj istraživanja pokazati je kako su intervencije koje primjenjujemo utjecale na rezilijenciju i povećale kvalitetu života. Učinkovitost program dnevne bolnice STUP procjenjujemo baterijom testova prije uključivanja u program i na kraju programa/hospitalizacije. U ovom radu prikazat ćemo rezultate dobivene na upitniku kvalitete života SZO-a WHOQOL-BREF. Upitnik WHOQOL-BREF (*World Health Organization Quality of Life Brief Version questionnaire*) upitnik je koji pokriva četiri domene kvalitete života: fizičko zdravlje, psihičko zdravlje, društvene odnose te utjecaj okoline.

REZULTATI: Uzorak na kojem smo provodili istraživanje čini 129 pacijenata. Istraživanje smo provodili tijekom četiriju godina, od 2015. do 2019. godine. Upitnik o sociodemografskim podatcima ispitanici ispunjavaju samo na početku programa/hospitalizacije, dok upitnik koji mjeri kvalitetu života ispunjavaju pri ulasku i na kraju liječenja.

Od 129 pacijenata 96 (74,4 %) je u program Dnevne bolnice primljeno pod dijagnozom

As far as pharmacotherapy is concerned, it is important to note that significant overlap has been found between genes that regulate resilience and those that are regulated by long-term use of antidepressants (45). This can indicate that antidepressants stimulate those adaptations that naturally appear in persons who have hereditary resilience, i.e. who are resilient. It is believed that pharmacotherapy can also influence epigenetic modulation (46). Some studies have shown that the application of selective serotonin reuptake inhibitors (SSRIs) immediately after trauma can lead to reduced risk of developing trauma-related disorders (47-49).

It has been established that cognitive-behavioral therapy consisting of controlled exposure to stressful situations, cognitive restructuring/recapitulation, and relaxation techniques applied after a traumatic event can facilitate faster recover in persons with PTSD (50). Psychiatric drugs, together with psychological interventions and mindfulness programs, can help reduce trauma-related psychopathology (51-53). Mindfulness programs for stress reduction based on focusing non-judgmental attention on the present moment and on positive emotions are often used to facilitate promotion of well-being and comfort (54,55).

STUDY METHODS AND RESULTS

AIM: The aim of this study was to determine how the interventions we apply influenced patient resilience and improved their quality of life. The effectiveness of the Day Hospital TSRD program is assessed using a battery of tests administered before inclusion in the program and at the end of the program/hospitalization. Herein we will present the results gathered with WHOQOL-BREF (World Health Organization Quality of Life Brief Version questionnaire). WHOQOL-BREF is a questionnaire that covers four quality of life domains: physical health, mental health, social relationships, and the environment.

poremećaja prilagodbe (F43.2), jedan pacijent (0,8 %) primljen pod dijagnozom druge reakcije na težak stres (F43.8), a 32 pacijenta (24,8 %) u program su ušla zbog posttraumatskog stresnog poremećaja.

Sociodemografski podatci: Pogledaju li se podatci za spol ispitanika može se uočiti (grafički prikaz 1) kako je 48,8 % muškog, dok je 51,2 % ispitanika ženskog spola.

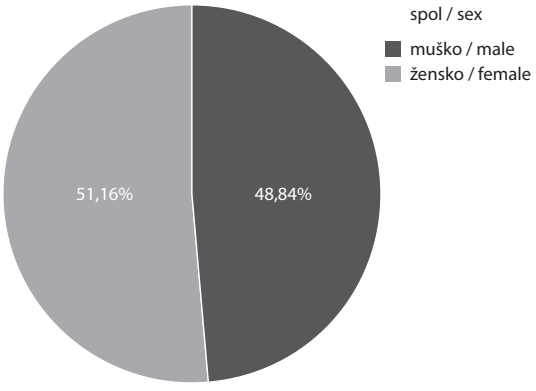
U odnosu na stupanj obrazovanja našlo se da 0,8 % ispitanika ima nezavršenu osnovnu školu, 8,5 % osnovnu školu, 64,3 % završilo je srednju školu, 24,8 % višu školu/fakultet, dok 1,6 % ima magisterij/doktorat (grafički prikaz 2).

Što se tiče radne aktivnosti (grafički prikaz 3) 67,4 % ispitanika navodi da su u radnom odnosu, 1,6 % ispitanika privatni su poduzetnici, 0,8 % studenti, 0,8 % domaćice, 12,4 % su umirovljenici. Nezaposlenih je 12,4 %, a 4,7 % navodi ostalo.

U odnosu na bračni status (grafički prikaz 4) 58,1 % ispitanika u bračnoj su zajednici, 12,4 % živi s partnerom, 4,7 % su udovci/udovice, 7.8 % su razvedeni, a 17,1 % nisu nikada bili vjenčani.

Rezultati obrade na upitniku kvalitete života - WHOQOL-Bref:

U tablici 2 prikazani su rangovi odgovora ispitanika kad su u pitanju rezultati za prvo i drugo



GRAFIČKI PRIKAZ 1.
FIGURE 1.

RESULTS: The sample on which the study was conduced comprised 129 patients. The study was conduced over four years, from 2015 to 2019. Participants completed the questionnaire on sociodemographic data only at the start of the program/hospitalization, whereas the questionnaire measuring quality of life was completed both at the start and at the end of the treatment.

Out of the total 129 patients, 96 (74.4%) were admitted to the Day Hospital program under the diagnosis of adjustment disorder (F43.2), one patient (0.8%) was admitted with the diagnosis of a second reaction to severe stress (F43.8), and 32 patients (24.8%) entered the program due to PTSD.

Sociodemographic data: based on the data the sex of the participants (Figure 1), we can see that 48.8% participants were men and 51.2% participants were women.

With regard to the level of education, we found that 0.8% of participants had not completed primary school, 8.5% had a primary school degree, 64.3% finished secondary school, 24.8% completed higher education/university, and 1.6% had a master's/doctorate degree (Figure 2).

As for occupational activities, 67.4% were employed, 1.6% were self-employed, 0.8% were students, 0.8% were housewives, 12.4% were retired, 12.4% were unemployed, and 4.7% selected "Other" (Figure 3).

Regarding marital status (Figure 4), 58.1% participants were married, 12.4% lived with their partner, 4.7% were widowed, 7.8% were divorced, and 17.1% had never been married.

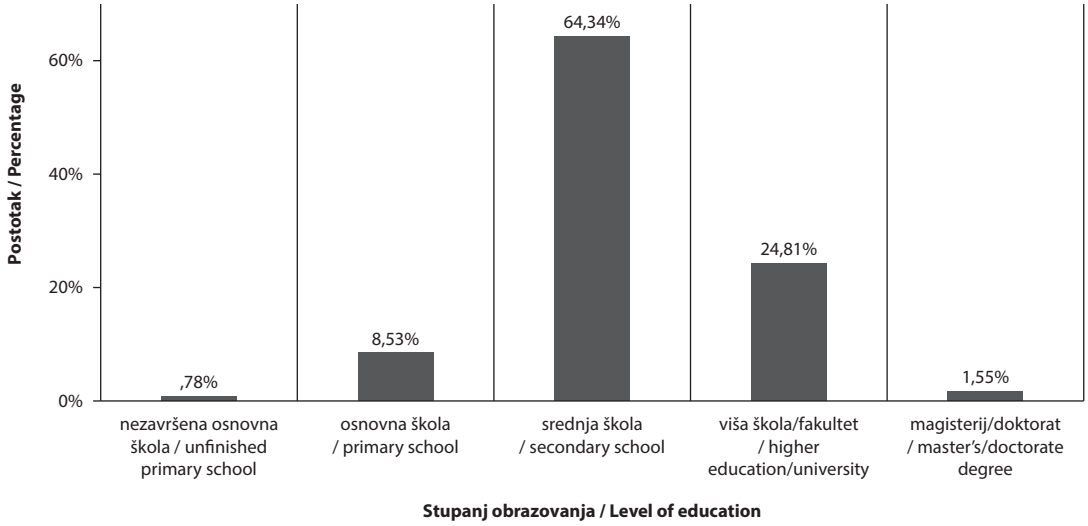
Results on the WHOQOL-BREF questionnaire:

Table 2 shows the response rankings for participants in the first and second measurement. We can see that responses in the *Physical Health domain* had a positive rank in 83 cases and a negative rank in 32 cases, with the response

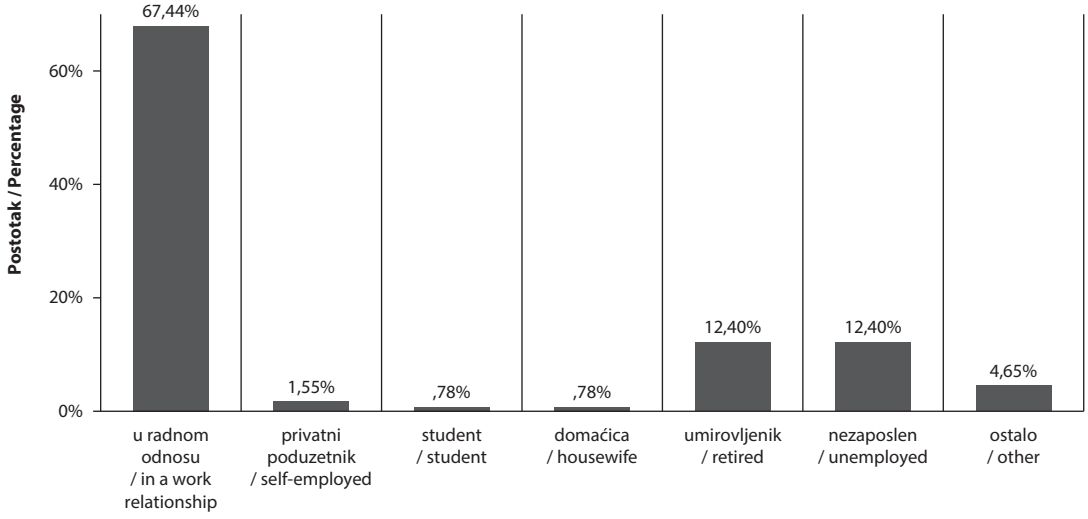
mjerenje. Opaža se da je za domenu *fizičko zdravlje* u 83 slučaja zabilježen pozitivan, a u 32 slučaja negativan rang, dok je u 14 slučaja jednaka vrijednost odgovora (jednak rezultat u početnom i izlaznom upitniku). Navedeno ukazuje trend *poboljšanja fizičkog zdravlja* pri izlazu iz programa.

Za domenu *psihičko zdravlje* u 88 slučajeva bilježi se pozitivan rang, tj. vrijednost odgovora pri izlazu iz programa kao veća od vrijednosti pri ulazu. U 29 slučajeva rang je negativan, dok 12 slučajeva izvještava o jednakoj vrijednosti values being equal in 14 cases (equal results in at baseline and endline). This indicates a trend towards improvement of physical health by the end of the program.

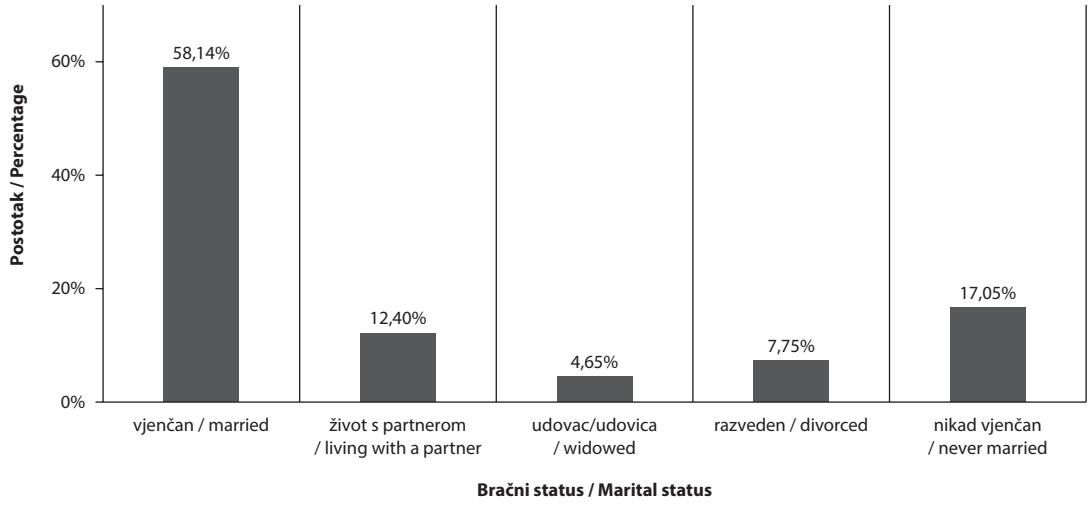
The Mental Health domain had a positive rank in 88 cases, i.e. the response values when exiting the program were higher than upon entry into the program. The rank was negative in 29 cases and equal in 12 cases. Consequently, we can conclude that mental health has *improved over the course of the program*.



GRAFIČKI PRIKAZ 2.
FIGURE 2.



GRAFIČKI PRIKAZ 3.
FIGURE 3.



GRAFIČKI PRIKAZ 4.
FIGURE 4.

TABLICA 1. Deskriptivni pokazatelji ispitanika za prvo i drugo mjerenje
TABLE 1. Descriptive indicators in participants for the first and second measurement

	N	$\bar{x}$	Sd	Min	Max
Fizičko zdravlje – ulaz / Physical health – baseline	129	11,2292	2,81529	5,14	18,86
Psihičko zdravlje – ulaz / Mental health – baseline	129	10,8837	3,00943	4,67	18,00
Društveni odnosi – ulaz / Social relationships – baseline	129	12,4651	3,14754	5,33	18,67
Utjecaj okoline – ulaz / Environment – baseline	129	12,9225	2,59841	7,00	18,50
Fizičko zdravlje – izlaz / Physical health – endline	129	12,7730	3,42455	5,71	20,00
Psihičko zdravlje – izlaz / Mental health – endline	129	12,5323	3,38130	4,00	20,00
Društveni odnosi – izlaz / Social relationships – endline	129	13,3230	3,24250	4,00	20,00
Utjecaj okoline – izlaz / Environment – endline	129	13,8953	2,57897	6,50	19,00

odgovora. Posljedično, može se zaključiti o *poboljšanju psihičkog zdravlja*.

U domeni *društveni odnosi* bilježi se 65 slučajeva pozitivnog, a 35 slučajeva negativnog ranga, dok 29 slučajeva bilježi jednaku vrijednost.

Domena *utjecaj okoline* u 83 slučaja bilježi pozitivan rang, tj. vrijednost pri izlazu viša je od ulazne vrijednosti. U 31 slučaju bilježi se negativan, a u 15 slučajeva jednak rang vrijednosti.

Dobivena je statistička značajnost testa manja od 0,05 ($p < 0,05$) za *psihičko zdravlje, fizičko zdravlje, društvene odnose, utjecaj okoline* kod prvog i drugog mjerenja, što znači da, s razinom pouzdanosti od 95 %, možemo reći da je zamjetna statistički značajna razlika prvog i drugog mjerenja.

In the Social Relationships domain, there were 65 cases of positive and 35 cases of negative rank, while the values were equal in 29 cases.

The Environment domain had positive rank in 83 cases, i.e. a higher endline than baseline value. There were 31 cases of negative ranks and 15 cases of equal ranks.

The statistical significance of the tests was lower than 0.05 ($p<0.05$) for the *Physical Health, Mental Health, Social Relationships, and Environment domains* at the first and second measurement, which means that we can say with 95% confidence that there was an observable statistically significant difference between the first and second measurement.

TABLICA 2. Rangovi mjerenih domena
TABLE 2. Ranking of the measured domains

		N	Aritmetička sredina rangova / Arithmetic mean of the ranks	Suma rangova / Sum of the ranks
Fizičko zdravlje – izlaz – Fizičko zdravlje – ulaz / Physical health – endline – Physical health – baseline	Negativni rangovi / Negative ranks	32[a]	37,73	1207,50
	Pozitivni rangovi / Positive ranks	83[b]	65,81	5462,50
	Jednako / Equal	14[c]		
	Ukupno / Total	129		
Psihičko zdravlje – izlaz – Psihičko zdravlje – ulaz / Mental health – endline – Mental health – baseline	Negativni rangovi / Negative ranks	29[a]	38,10	1105,00
	Pozitivni rangovi / Positive ranks	88[b]	65,89	5798,00
	Jednako / Equal	12[c]		
	Ukupno / Total	129		
Društveni odnosi – izlaz – Društveni odnosi – ulaz / Social relationships– endline – Social relationships – baseline	Negativni rangovi / Negative ranks	35[a]	43,26	1514,00
	Pozitivni rangovi / Positive ranks	65[b]	54,40	3536,00
	Jednako / Equal	29[c]		
	Ukupno / Total	129		
Utjecaj okoline – izlaz – Utjecaj okoline – ulaz / Environment – endline – Environment – baseline	Negativni rangovi / Negative ranks	31[a]	47,21	1463,50
	Pozitivni rangovi / Positive ranks	83[b]	61,34	5091,50
	Jednako / Equal	15[c]		
	Ukupno / Total	129		

a. Mjerenje_2 <Mjerenje_1 / Measurement_2 < Measurement_1.
b. Mjerenje_2 >Mjerenje_1 / Measurement_2 > Measurement_1
c. Mjerenje_2 =Mjerenje_1 / Measurement_2 = Measurement_1

TABLICA 3. Testna statistika ulaznih i izlaznih rezultata
TABLE 3. Test statistics of baseline and endline results

	Fizičko zdravlje – izlaz – Fizičko zdravlje – ulaz / Physical health – endline – Physical health – baseline	Psihičko zdravlje – izlaz – Psihičko zdravlje – ulaz / Mental health – endline – Mental health – baseline	Društveni odnosi – izlaz – Društveni odnosi – ulaz / Social relationships – endline – Social relationships – baseline	Utjecaj okoline – izlaz – Utjecaj okoline – ulaz / Environment – endline – Environment – baseline
Z	-5,953[b]	-6,404[b]	-3,519[b]	-5,146[b]
Asymp. Sig. (2-tailed)	**,000**	**,000**	**,000**	**,000**

a. Wilcoxon Signed Ranks Test / Wilcoxon Signed Ranks Test
b. Based on negative ranks / Based on negative ranks

Iduća razlika koju smo htjeli ispitati odnosila se na utjecaj sociodemografskih karakteristika, stoga smo ispitivali postoji li utjecaj spola, stupnja obrazovanja, radne aktivnosti te bračnog statusa na kvalitetu života.

U domeni *društveni odnosi* bilježi se vrijednost p manja od 5 % (p = 0,024) što znači da (uz ra-

The second effect that we wanted to evaluate was the influence of sociodemographic characteristics, so we analyze whether there was any influence of sex, level of education, occupation, and martial status on quality of life.

The p value in the Social Relationships domain was lower than 5% (p=0.024), which means

TABLICA 4. Deskriptivna statistika mjerenih domena upitnika kvalitete života u odnosu na spol
TABLE 4. Descriptive statistics of quality of life questionnaire domains with regard to sex

	Spol / Sex	N	$\bar{x}$	Sd
Fizičko zdravlje (izlaz – ulaz) / Physical health (endline-baseline)	Muško / Male	63	1,1406	2,54886
	Žensko / Female	66	1,9286	2,79136
Psihičko zdravlje (izlaz – ulaz) / Mental health (endline-baseline)	Muško / Male	63	1,4603	2,56208
	Žensko / Female	66	1,8283	2,67514
Društveni odnosi (izlaz – ulaz) / Social relationships (endline-baseline)	Muško / Male	63	,2328	2,91863
	Žensko / Female	66	1,4545	2,78435
Utjecaj okoline – (izlaz –ulaz) / Environment (endline-baseline)	Muško / Male	63	,6190	2,19918
	Žensko / Female	66	1,3106	1,82032

TABLICA 5. Rangovi
TABLE 5. Ranks

	Spol / Sex	N	Aritmetička sredina rangova / Score mean	Suma rangova / Score sum
Fizičko zdravlje (izlaz – ulaz) / Physical health (endline-baseline)	Muško / Male	63	58,58	3690,50
	Žensko / Female	66	71,13	4694,50
	Ukupno / Total	129		
Psihičko zdravlje (izlaz – ulaz) / Mental health (endline-baseline)	Muško / Male	63	62,82	3957,50
	Žensko / Female	66	67,08	4427,50
	Ukupno / Total	129		
Društveni odnosi (izlaz – ulaz) / Social relationships (endline-baseline)	Muško / Male	63	57,50	3622,50
	Žensko / Female	66	72,16	4762,50
	Ukupno / Total	129		
Utjecaj okoline – (izlaz – ulaz) / Environment (endline-baseline)	Muško / Male	63	58,91	3711,50
	Žensko / Female	66	70,81	4673,50
	Ukupno / Total	129		

TABLICA 6. Testna statistika
TABLE 6. Test statistics

	Fizičko zdravlje (izlaz-ulaz) / Physical health (endline-baseline)	Psihičko zdravlje (izlaz-ulaz) / Mental health (endline-baseline)	Društveni odnosi (izlaz-ulaz) / Social relationships (endline-baseline)	Utjecaj okoline - (izlaz-ulaz) / Environment (endline-baseline)
Mann-Whitney U	1674,500	1941,500	1606,500	1695,500
Wilcoxon W	3690,500	3957,500	3622,500	3711,500
Z	-1,912	-,651	-2,254	-1,815
Asymp. Sig. (2-tailed)	,056	,515	,024	,070

GroupingVariable: spol / Grouping variable: Sex

zinu pouzdanosti od 95 %) postoji statistički značajna razlika s obzirom na spol ispitanika – više rangove postižu ispitanici ženskog spola.

that (with a 95% confidence level) there was a statistically significant difference with regard to the sex of the participants – higher ranks were achieved by female participants.

Nadalje, ispitali smo postoji li utjecaj stupnja obrazovanja, radne aktivnosti te bračnog statusa, ali su vrijednosti statističkih značajnosti testa bile više od 5 % što implicira da se nisu pokazali kao statistički značajan čimbenik u istraživanju.

RASPRAVA

Temeljem naše obrade našli smo da pri izlasku iz programa/hospitalizacije pacijenti izvještavaju o statistički značajnom poboljšanju, a najviše u domeni psihičkog zdravlja, potom fizičkog zdravlja, zatim percepciji utjecaja okoline te kao zadnje poboljšanje u društvenim odnosima. U aspektu sociodemografskih čimbenika kao značajan pokazao se isključivo spol – žene su izvještavale o značajnijem poboljšanju društvenih odnosa, dok su u preostalim domenama spolovi izjednačeni. Stupanj obrazovanja, radna aktivnost te bračni status nisu se pokazali kao statistički značajni čimbenici za kvalitetu života. Takav rezultat tumačimo utjecajem dnevnobolničkog liječenja na jačanje rezilijencije na svim razinama.

Najveći broj pacijenata - 96 (74,4 %) u program Dnevne bolnice primljen je pod dijagnozom poremećaja prilagodbe (F43.2), a jedan pacijent (0,8 %) pod dijagnozom druge reakcije na težak stres (F43.8).

Ukupno 32 pacijenta (24,8 %) u program su ušla zbog posttraumatskog stresnog poremećaja pri čemu ih se 23 (17,8 %) može povezati s proživljenim ratnim traumama (te imaju dodatnu dijagnozu trajnih promjena ličnosti nakon katastrofe), dok ih je 9 (7 %) povezano s civilnom traumom.

Od 129 ispitanika 63 (48,8 %) je na ulazu imalo komorbiditet, tj. više od jedne dijagnoze. Dakle, gotovo polovica uzorka imala je komorbidne psihičke poremećaje. Od popratnih dijagnoza koje se pojavljuju u uzorku najveći dio zauzimaju trajne promjene ličnosti nakon

We also examined the effect of the level of education, occupation, and marital status, but the statistical significance test values were above 5%, implying that these were not statistically significant factors in the study.

DISCUSSION

Based on our data, we found that patients reported a statistically significant improvement upon ending the treatment program, with the greatest improvement being observed in the mental health domain, followed by physical health, perception of environmental influences, and lastly in social relationships. As for sociodemographic factors, only sex was significant – women reported a more significant improvement in social relationships, whereas the sexes had equal results in the other domains. Level of education, occupation, and marital status were not found to be statistically significant factors for quality of life. This result can be explained as the effect of day hospital treatment improving resilience at all levels.

The greatest number of patients – 96 (74.4%) – were admitted to the Day hospital program with the diagnosis of adjustment disorder (F43.2), and one patient (0.8%) was admitted with the diagnosis of a second reaction to severe stress (F43.8).

A total of 32 patients (24.8%) entered the program due to PTSD, of which 23 (17.8%) had PTSD that could be associated with wartime trauma (and who had the additional diagnosis of permanent personality changes after a trauma), and 9 (7.0%) in whom PTSD was associated with civilian traumas.

Of the total 129 participants, 63 (48.8%) had a comorbidity at baseline, i.e. more than one diagnosis. This means that almost half of our participant sample had comorbid mental disorders. Among the comorbid diagnoses present in the sample, most prevalent were permanent personality changes after a trauma (23

doživljene katastrofe (23 pacijenta ili 17,8 %), slijede poremećaji raspoloženja (19 pacijenata ili 14,7 %), zatim poremećaji iz anksioznog spektra (14 pacijenata ili 10,8 %) te poremećaji ličnosti (5 pacijenata ili 3,9 %). Jedan pacijent imao je dodatnu dijagnozu neorganske psihoze u remisiji (0,8 %) te je jedan pacijent imao dijagnozu štetna upotreba alkohola u svrhu samomedikacije (0,8 %).

Nešto više od polovice pacijenata (55,5 %) kojima je postavljena dijagnoza poremećaja prilagodbe uključeni su u program dnevne bolnice vrlo brzo nakon postavljene dijagnoze što je stvorilo mogućnost brzog interveniranja u svrhu sprječavanja daljnjeg pogoršanja psihičkog stanja. Većina pacijenata s dijagnozom poremećaja prilagodbe dolazi na liječenje zbog stresa u radnom okruženju. Za vrijeme liječenja pacijenti su na bolovanju, izvan nepodržavajuće sredine ili izvora stresa te se mogu programom i podrškom članova tima posvetiti rješavanju i sagledavanju problema u jednom drugačijem svjetlu. Nešto malo manje od polovice pacijenata (44,5 %) liječenih zbog poremećaja prilagodbe imali su dodatnu dijagnozu ili komorbiditet što je ukazivalo da su pacijenti zaprimljeni u težem psihičkom stanju, nakon izlaganja višestrukim prolongiranim stresnim situacijama te su se razvili poremećaje iz anksioznog spektra ili poremećaja raspoloženja. Liječenje pacijenata s komorbidnim dijagnozama pokazalo se zahtjevnijim te je primijenjena i psihofarmakoterapija.

Kod pacijenata s traumatskim iskustvom radili smo na proradi misli i osjećaja vezanih uz traumatsku situaciju. Pristup pacijentima zahvaćenim civilnim i ratnim PTSP-om nešto se razlikovao. Kod ratnog PTSP-a usmjerili smo se na smirivanje emocionalne napetosti i korištenje dostupne socijalne podrške. Pacijenti kod kojih je postavljena dijagnoza civilnog PTSP-a postupcima u Dnevnoj bolnici, prije svega detaljnom proradom traumatske situacije uz em-

patients, 17.8%), followed by mood disorders (19 patients, 14.7%), anxiety disorders (14 patients, 10.8%), and personality disorders (5 patients, 3.9%). One patient had a comorbid diagnosis of non-organic psychosis in remission (0.8%), and one patient was diagnosed with alcohol abuse as self-medication (0.8%).

Slightly over half of the patients (55.5%) diagnosed with adjustment disorder were admitted to the day hospital program very soon after the diagnosis was established, which allowed rapid intervention with the goal of preventing further exacerbation of their mental state. Most patients with adjustment disorder came to treatment due to stress in their work environment. During treatment, patients are on sick leave and away from the non-supporting environment or source of stress, allowing them to use the program and support from team members to start working on resolving and understanding their problems in a different light. Slightly less than half (44.5%) of the patients treated for adjustment disorder had an additional diagnosis or comorbidity, which indicates that these patients were admitted with severe mental distress after multiple prolonged exposures to stressful situations that caused them to develop anxiety or mood disorders. Treating patients with comorbid diagnoses was more demanding, and psychopharmacotherapy was used as well.

In patients with traumatic experiences, we worked on processing the thoughts and feelings connected with the traumatic situation. The approach to patients with wartime and civilian PTSD was somewhat different. For wartime PTSD, we focused on ameliorating emotional tension and using the available social support. Treatment of patients with a diagnosis of civilian PTSD at our day hospital primarily includes detailed processing of the traumatic situation with empathetic understanding and a supportive therapy relationship, which provides space to reconstruct the traumatic event in a safe and supportive environment in order

patijsko razumijevanje i podržavajući terapijski odnos, dobivaju prostor za rekonstrukciju traumatskog događaja u sigurnoj i podržavajućoj okolini kako bi traumu mogli integrirati u vlastito iskustvo i u konačnici zacijeliti.

Niska posttraumatska socijalna podrška konzistentan je rizični čimbenik za razvoj PTSP-a (56), a socijalna povezanost i podrška bitan su čimbenik održavanja i podržavanja rezilijencije zbog čega nam je fokus rad u grupi. Naime, grupni *setting* Dnevne bolnice predstavlja suportivnu socijalnu okolinu koja daje osjećaj prihvaćenosti i sigurnosti što potiče rezilijenciju. Tijekom programa potičemo socijalno povezivanje i resocijalizaciju te ohrabrujemo pacijente da tu podršku traže u socijalnoj okolini (među obitelji i prijateljima). Grupnim terapijama oboljeli dobivaju utočište, razumijevanje da u krizi nisu sami te stručnu pomoć kako iz krizne situacije izaći ili se s njom nositi (57).

Psihološke intervencije za povećanje individualne rezilijencije utjecale su na naše pacijente poticanjem osjećaja prihvaćenosti i razumijevanja, učenja/stjecanja novih socijalnih vještina, poticanja promjene životnih stilova (s naglaskom na tjelesnu aktivnost), kognitivnog reprogramiranja i pomoću programa *mindefulness*. Sve sastavnice terapijskog programa/hospitalizacije potiču stjecanje uvida, samorazumijevanja i prihvaćanja vlastitih osjećaja, misli i ponašanja.

Cilj nam je bio ublažiti psihopatologiju, u prvom redu anksioznost, jačanje osjećaja bazične sigurnosti i jačanje ego snaga, poticanje korištenja dostupne socijalne podrške uz razvoj novog načina percepcije. Navedeno je dovelo do ponovnog uspostavljanja kontrole, vratilo psihičku ravnotežu i funkcionalnost pojedinca. Zbog toga je najznačajniji rezultat našeg istraživanja poboljšanja kvalitete života u domeni psihičkog zdravlja što smatramo dobrom povratnom informacijom u evaluaciji našeg programa. Program koji traje šest mjeseci pokazao se dostatnim za ublažavanje psihičkih smetnji i

to integrate the trauma into their own experience and ultimately heal.

Low post-trauma social support is a consistent risk factor for PTSD development (56), and social connectedness and support are also an important factor in maintaining and supporting resilience, which is why we have focused on group work in our treatment. The group setting at the Day Hospital represents a supportive social environment that creates a feeling of safety and acceptance, which improves resilience. During the program, we encourage the formation of social connections and resocialization as well as encouraging patients to seek out such support in their social environment (among family and friends). Group therapy provides a sanctuary for our patients, helps them understand that they are not alone, and provides professional help in escaping or coping with the crisis situation (57).

Psychological interventions to increase individual resilience influenced our patients by increasing their feelings of acceptance and understanding, learning/acquiring new social skills, encouraging lifestyle changes (with an emphasis on physical activity), cognitive reprogramming, and through the mindfulness program. All elements of the treatment program/hospitalization encourage achieving insight, understanding oneself, and accepting one's feelings, thoughts, and behavior.

Our goal was to ameliorate the psychopathology present in our patients, primarily anxiety, to strengthen the feeling of basic safety and ego strength, and to encourage the use of available social support by developing of a new way of perceiving the situation. This leads to recovery of control and a return to mental balance and functionality in our patients. This is why the most important result in our study is the increase in the domain of mental health, which we consider very positive feedback in evaluating our program. The program, which lasts six months, was found to be sufficient to reduce mental issues and improve patients at the mental level and their perceived quality of life.

poboljšanje na psihičkom planu te percipiranoj kvaliteti života.

Općenito se u Psihijatrijskoj bolnici „Sveti Ivan" promovira integrativni pristup u liječenju, a Dnevna bolnica specijalizirana za provođenje preventivnog i terapijskog programa stresom i traumom uzrokovanih poremećaja pruža intervencije upravo u kriznim situacijama. Intervencije su prilagođene (individualizirane) kapacitetima i potrebama traumatiziranih osoba ovisno o težini poremećaja i psihološkoj strukturi ličnosti pacijenta. Provodimo psihoterapiju s naglaskom na psihodinamsko razumijevanje stresa i traume te psihoedukaciju pacijenta.

Psihoterapiju radimo u grupnom *settingu* male (8 – 12 članova) do srednje grupe (12 – 15 članova) po principima grupne analize. Iako se u Dnevnoj bolnici njeguje grupni rad, u vidu imamo i individualne značajke i različite kapacitete pojedinaca te po potrebi provodimo i individualne suportivne psihodinamske psihoterapije. Psihoedukacija se primjenjuje po principima kognitivno-bihevioralne terapije također u grupnom *settingu* kao i *mindfulness*. Primjena kognitivno-bihevioralnog pristupa s naglaskom na osvješćivanje procesa mišljenja, negativnih interpretacija i katastrofičnog promišljanja koji utječu na emocije, pomaže pacijentima sagledati problematiku iz drugog kuta. Također, primjenjujemo psihofarmakoterapiju ponajprije iz skupine anksiolitika i antidepresiva. Što se tiče farmakoterapije, antidepresivi potiču u predisponiranih osoba one adaptacije, tj. adaptivne mehanizme koji se prirodno pojavljuju u osoba koje posjeduju nasljednu sposobnost rezilijencije (45). Primjena farmakoterapije pomogla je našim pacijentima s težim simptomima i komorbiditetom brže ublažiti intenzitet simptomatologije kako bi se stekli preduvjeti za rad na sebi i za psihoterapiju.

Dobili smo i poboljšanje kvalitete života u domeni fizičkog zdravlja. Smatramo da je radionica „Zdravi ja" temelj našeg preventivnog rada u smislu fokusiranja, osvješćivanja zdra-

The Sveti Ivan Psychiatric Hospital promotes an integrative approach to treatment in general, and the Day Hospital is specialized in conducting a preventive treatment program for stressor- and trauma-induced disorders and specifically in providing interventions in crisis situations. The interventions are tailored (individualized) based on the capacities and needs of the traumatized persons, depending on the severity of the disorder and the psychological personality structure of the patient. We conduct psychotherapy with an emphasis on a psychodynamic understanding of stress and trauma and psychoeducation of the patient.

Psychotherapy is performed in a group setting with small (8-12 members) to medium groups (12-15 members) according to the principles of group analysis. Although our Day Hospital values group work, we also consider the individual characteristics and differing capacities of our patients and engage in individual supportive psychodynamic psychotherapy if necessary. Psychoeducation is also performed according to the principles of cognitive-behavioral therapy in the group setting, as are mindfulness exercises. The application of the cognitive-behavioral approach with an emphasis of being aware of thought processes, negative interpretations, and catastrophic thinking that influence emotions helps patients see their problem from a different angle. We also apply psychopharmacotherapy, primarily using anxiolytic and antidepressant medication. Regarding pharmacotherapy, antidepressants stimulate those adaptations, i.e. adaptive mechanisms, that naturally occur in parsons with a hereditary disposition towards resilience (45). Application of pharmacotherapy has helped those of our patients who presented more severe symptoms and comorbidities to more rapidly reduce the intensity of the symptoms to lay the groundwork for self-improvement and psychotherapy.

We also achieved improvement in quality of life in the physical health domain. We are of

vih dijelova ličnosti. U radionicama „ponovno otkrivamo“ kreativnost, tj. potičemo da se pacijenti izražavaju raznim kanalima kao npr. fotografijom, crtežima, esejima, pjesmama, glazbom i slično. Također, potičemo zdrave stilove života, te stavljamo naglasak na fizičko zdravlje koje je u konačnici bitno i za psihički oporavak.

U našem istraživanju na zadnjem mjestu našli smo poboljšanje kvalitete života u domeni društvenih odnosa, što je naizgled paradoksalni rezultat. Međutim, znamo da krizna situacija po definiciji sa sobom donosi i niz poremećenih društvenih odnosa pa je jasno da je u toj kategoriji i promjena najmanja, odnosno traži duže vrijeme za povratak na razdoblje prije krize ili traume. U našem uzorku ispitanika žene su dobile bolje rezultate, odnosno značajnije poboljšanje u aspektu društvenih odnosa što objašnjavamo većim kapacitetima žena za psihologiziranje, tj. empatiziranje (58).

Ograničenje našeg istraživanja slabija je distribucija našeg uzorka po edukaciji i dijagnostičkim entitetima. Većina ispitanika našeg uzorka ima završenu srednju školu (stupanj obrazovanja), zaposlena je (radna aktivnost) te su vjenčani (bračni status). U odnosu na dijagnostičke entitete većina, tj. dvije trećine pacijenata iz uzorka liječeno je zbog poremećaja prilagodbe, dok se jedna trećina odnosila na pacijente s proživljenim traumatskim iskustvom. Polovica pacijenata iz uzorka imala je komorbidne dijagnoze što je bila otegotna okolnost u postizanju postavljenih terapijskih ciljeva.

ZAKLJUČAK

Naše istraživanje pokazalo je statistički značajno poboljšanje kvalitete života pri izlasku iz programa/hospitalizacije. Našli smo poboljšanje u svim četirima domenama kvalitete ži-

the opinion that the *Zdravi ja* workshops form the basis of our preventive work in the sense of improving focus in our patients and awakening the healthy parts of their personality. In the workshops, we “rediscover” creativity, i.e. encourage the patients to express themselves through various channels such as photography, drawing, essays, poems, music, etc. We also encourage healthy lifestyles and place an emphasis on physical health, which is ultimately of significant importance for mental recovery as well.

In our study, the social relationships domain was the one with the least improvement, which is a seemingly paradoxical result. However, we know that a crisis situation intrinsically includes numerous disordered social relationships, so it is understandable that the change would be the smallest in that category, or rather that this category requires the longest time to return to the state before the crisis or trauma. In our sample, women had better results, i.e. a more significant improvement in the social relationships aspect, which can be explained by the higher capacity for empathy in women (58).

A limitation of our study was the weaker distribution of our sample regarding education and diagnostic entities. Most participants in our sample graduated from secondary school (education level), were employed (occupation), and were married (marital status). Regarding diagnostic entities, most patients, i.e. two thirds of the sample, were treated for adjustment disorder, while one third of the participants were patients who underwent a traumatic experience. Half of the patients from the sample had comorbid diagnoses, which represented an additional difficulty in achieving treatment goals.

CONCLUSION

Our study showed a statistically significant improvement in quality of life at the end of the treatment program/hospitalization. We

vota i to sljedećim redoslijedom: poboljšanje psihičkog zdravlja, fizičkog zdravlja, percepciju utjecaja okoline te društvenih odnosa. U aspektu sociodemografskih čimbenika kao značajan pokazao se isključivo spol – žene koje su izvještavale o značajnijem poboljšanju u aspektu društvenih odnosa, dok su u preostalim domenama spolovi izjednačeni.

Pokazalo se da rezilijencija ne ovisi samo o nasljednim čimbenicima, već i o naučenim *coping* mehanizmima, socijalnoj okolini i stilu života te se može mijenjati tijekom vremena kao funkcija razvoja i interakcije s okolinom. Rezilijencija se u bolničkim uvjetima može potaknuti raznim intervencijama u području životnog stila, psihološkim, biološkim (farmakoterapija) i bihevioralnim metodama. Navedeno primjenjujemo tijekom liječenja u Dnevnoj bolnici koja je specijalizirana za rad s poremećajima uzrokovanim stresom i traumom (DB STUP).

Tijekom programa baziramo se na kriznim intervencijama, psihoterapiji te socioterapijskim postupcima. Psihoterapiju radimo u grupnom *settingu* po principima grupne analize. Iako njegujemo grupni rad, u vidu imamo i individualne značajke i različite kapacitete pojedinaca te po potrebi provodimo i individualne suportivne psihodinamske psihoterapije. Psihoedukacija se primjenjuje po principima kognitivno-bihevioralne terapije također u grupnom *settingu* kao i *mindfulness*. Također se po potrebi primjenjuje psihofarmakoterapija.

Psihološke intervencije za povećanje individualne rezilijencije utjecale su na naše pacijente poticanjem osjećaja prihvaćenosti i razumijevanja, učenja/stjecanja novih socijalnih vještina, poticanja promjene životnih stilova (s naglaskom na tjelesnu aktivnost), kognitivnog reprogramiranja i pomoću programa *mindfulness*. Sve sastavnice terapijskog programa/hospitalizacije potiču stjecanje uvida, samorazumijevanja i prihvaćanja vlastitih osjećaja, misli i ponašanja.

found improvements in all four quality of life domains, in descending order of magnitude: improvement in mental health, physical health, environment, and social relationships. Sex was the only sociodemographic factor that was significant – women reported more significant improvements in the social relationships domain, whereas the results were equal between the sexes in the other domains.

It has been shown that resilience does not depend solely on hereditary factors but also on learned coping mechanisms, the social environment, and the individual's lifestyle, all of which can change over time as a function of personal development and interaction with the environment. Resilience in the hospital setting can be encouraged using various interventions on the patient's lifestyle and various psychological, biological (pharmacotherapy), and behavioral methods. All of the above is applied during treatment at the Day Hospital, which specializes in the implementation of preventative and treatment programs for trauma and stressor-induced disorders (TSRD).

We base our treatment program on crisis interventions, psychotherapy, and social therapy procedures. Psychotherapy is conducted in a group setting based on the principles of group analysis. Although we foster group work, we also consider the individual characteristics and differing capacities in the patients we work with and conduct individual supportive psychodynamic psychotherapy sessions as needed. Psychoeducation is applied according to the principles of cognitive-behavioral therapy in the group setting, as is mindfulness therapy. We also apply pharmacotherapy if necessary.

Psychological interventions to increase individual resilience influenced our patients by encouraging feelings of acceptance and understanding, learning/acquiring new social skills, encouraging lifestyle changes (with an emphasis on physical activity), cognitive reprogramming, and through the mindfulness program.

Liječenje u programu Dnevne bolnice traje šest mjeseci što se pokazalo dostatnim vremenom da se postigne osnaživanje pacijenta i ponovno vraćanje u socijalnu i radnu okolinu.

Pravovremene primjene intervencija u krizi koje su prilagođene potrebama i kapacitetima svakog pojedinog pacijenta podigle su i / ili pojačale rezilijenciju djelujući na ego snage pacijenta, vraćanje funkcionalnosti a time i percepcije kvalitete života.

All elements of the treatment program/hospitalization encourage achieving insight, understanding oneself, and accepting one's feelings, thoughts, and behavior.

Treatment in the Day Hospital program last six months, which has shown to be sufficient to strengthen the patients and reintroduce them to the social and work environment.

Timely application of crisis interventions that are tailored to the needs and capacities of individual patients have increased and/or improved their resilience by influencing the ego strength of the patient and restoring functionality and therefore also improving perceived quality of life.

LITERATURA / *REFERENCES*

1. Levinsohn EA, Ross DA. To Bent and Not to Break: The Neurobiology of Stress, Resilience, and Recovery. Biol Psychiatry 2017; 15(82): 89-90. https://doi.org/10.1016/j.biopsych.2017.10.011
2. Begić D, Jokić Begić N. Heterogeneity of Posttraumatic Stress Disorder Symptoms in Croatian War Veterans: Retrospective Study. Croat Med J 2007; 48(2): 133-9.
3. Arambašić L, Ajduković M, Vidović V. Psihološke krizne intervencije: psihološka prva pomoć nakon kriznih događaja. Zagreb: Društvo za psihološku pomoć, 2000.
4. Jakšić N, Brajković L, Ivezić E, Topić R, Jakovljević M. The role of personality traits in posttraumatic stress disorder (PTSD). Psychiatr Danub 2012; 24(3): 256-66.
5. Everly GS. Five Principles of Crisis Intervention: Reducing the Risk of Premature Crisis Intervention. Int J Emerg Ment Health 2000; 2(1): 1-4.
6. Kessler RC, Sonnega A, Bromet E, Huges M, Nelson CB. Posttraumatic stress disorder in the national comorbidity survey. Arch Gen Psychiatry 1995; 52(12): 1048-1060. https://doi.org/10.1001/archpsyc.1995.03950240066012
7. Jakšić N, Aukst Margetić B, Šimunović Filipčić I, Šagud M, Jakovljević M. Temperament, Character, and Subjective Well-Being in Croatian War Veterans Suffering From Posttraumatic Stress Disorder. J Nerv Ment Dis 2020; 208(4): 340-3. https://doi.org/10.1097/NMD.0000000000001127
8. Haulik V, Kvaliteta života u zdravlju i bolesti. Radovi Zavoda za znanstvenoistraživački i umjetnički rad u Bjelovaru, 2013; 7: 251-7.
9. Linden DE. How psychotherapy changes the brain-the contribution of functional neuroimaging. Mol Psychiatry 2006; 11(6): 528-38. https://doi.org/10.1038/sj.mp.4001816
10. Ajduković M. Grupni pristup u psihosocijalnom radu. Zagreb: Društvo za psihološku pomoć, 2000.
11. Havelka Meštrović A, Kozarić-Kovačić D. Kognitivne funkcije kod oboljelih od PTSP-a. Soc Psihijat 2014; 42(4): 211-19.
12. McNally RJ, Bryant RA, Ehlers A. Does Early Psychological Intervention Promote Recovery From Posttraumatic Stress? Psychol Sci Public Interest 2003; 4(2): 45-79. https://doi.org/10.1111/1529-1006.01421
13. Bisson JI, Roberts NP, Andrew M. Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. Cochrane Database Syst Rev 2013; 13: 12. https://do.org/10.1002/14651858.CD003388.pub4
14. Ozer EJ, Best SR, Lipsey TL. Predictors of posttraumatic stress disorder and simptoms in adults: A meta-analysis. Psychol Bull 2003; 129: 52-73. https://doi.org/10.1037/0033-2909.129.1.52
15. Kezić S, Mihanović M, Molnar S, Sain I. Therapists psychological problems when treating posttraumatic stress disorder. Acta Med Croatica 2006; 60(4): 385-8.
16. Charney DS. Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaptation to extreme stress. Am J Psychiatry 2004; 161(2): 195-216. https://doi.org/10.1176/appi.ajp.161.2.195
17. Southwick SM, Bonanno GA, Masten AS, Panter-Brick C, Yehuda R. Resilience definitions, theory, and challenges: interdisciplinary perspectives. Eur J Psychotraumatol 2014; 5. https://doi.org/10.3402/ejpt.v5.25338
18. Russo SJ, Murrough JW, Han MH, Charney DS, Nestler EJ. Neurobiology of resilience. Nat Neurosci 2012; 15(11): 1475–84. https://doi.org/10.1038/nn.3234
19. American Psychological Association. The road to resilience. Washington, DC: American Psychological Assosiation, 2014.

20. Friedman MJ, Resick PA, Keane TM. Handbook of PTSD: Science and practice. New York: Guilford Press, 2014.
21. Pietrzak RH, Southwick SM. Psychological resilience in OEF-OIF Veterans: Application of a novel classification approach and examination of demographic and psychosocial correlates. J Affec Disord 2011; 133(3): 560-568. https://doi.org/10.1016/j.jad.2011.04.028
22. Meyerson DA, Grant KE, Carter JS, Kilmer RP. Posttraumatic growth among children and adolescents: a systematic review. Clin Psychol Rev 2011; 31: 949–64. https://doi.org/10.1016/j.cpr.2011.06.003
23. Levine SZ, Laufer A, Hamama-Raz Y, Stein E, Solomon Z. Posttraumatic growth in adolescence: Examining its components and relationship with PTSD. J Trauma Stress 2008; 21: 492–496. https://doi.org/10.1002/jts.20361
24. Tedeschi RG, Calhoun LG. The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. J Trauma Stress 1996; 9: 455-71. https://doi.org/10.1007/BF02103658
25. Jakšić N, Brajković L, Ivezić E, Topić R, Jakovljević M. The role of personality traits in posttraumatic stress disorder (PTSD). Psychiatr Danub 2012; 24(3): 256-66.
26. Yehuda R, Flory JD, Southwick S, Charney DS. Developing an agenda for translational studies of resilience and vulnerability following trauma exposure. Ann N Y Acad Sci 2006; 1071: 379–96. https://doi.org/10.1196/annals.1364.028
27. Yehuda R, LeDoux J. Response variation following trauma: A translational neuroscience approach to understanding PTSD. Neuron 2007; 56(1): 19–32. https://doi.org/10.1016/j.neuron.2007.09.006
28. Broekman BF. Stress, vulnerability and resilience, a developmental approach. Eur J Psychotraumatol 2011; 2. https://doi.org/10.3402/ejpt.v2i0.7229
29. Charney DS. Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaptation to extreme stress. Am J Psychiatry 2004; 161(2): 195-216. https://doi.org/10.1176/appi.ajp.161.2.195
30. National Scientific Council on the Developing Child. Early expiriences can alter gene expression and affect long-term development. Working paper no. 10, 2010.
31. Anacker C, O'Donnell KJ, Meaney MJ. Early life adversity and the epigenetic programming of the hypothalamic-pituitary-adrenal function. Dialogues Clin Neurosci 2014; 16: 321-333.
32. Lyons DM, Parker KJ, Schatzberg AF. Animal models of early life stress: Implications for understanding resilience. Dev Psychobiol 2010; 52: 616-24. https://doi.org/10.1002/dev.20500
33. Parker KJ, Buckmaster CL, Justus KR, Schatzberg AF, Lyons DM. Mild early life stress enhances prefrontal-dependent response inhibition. Biol Psychiatry 2005; 57: 848-55. https://doi.org/10.1016/j.biopsych.2004.12.024
34. Caspi A, Hariri AR, Holmes A, Uher R, Moffett TE. Genetic Sensitivity to the Environment: The Case of Serotonin Transporter Gene and its Implications for Studying Complex Diseases and Traits. Am J Psychiatry 2010; 167(5): 509-27. https://doi.org/10.1176/appi.ajp.2010.09101452
35. Wallace DL, Han HM, Graham DL, Green TA, Vialou V, Iniguez S. CREB regulation of nucleus accumbens excitability mediates social isolation-induced behavioral deficits. Nat Neurosci 2009; 12(2): 200-209.
36. Masten AS. Ordinary magic: Resilience processes in development. Am Psychol 2001; 56(3): 227-38. https://doi.org/10.1037//0003-066x.56.3.227
37. Bonanno GA. Loss, trauma and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? Am Psychol 2004; 59(1): 20-8. https://doi.org/10.1037/0003-066X.59.1.20
38. Panter-Brick C, Eggerman M, Ungar M. Understanding Culture, Resilience, and Mental Health: The Production of Hope. The Social Ecology of Resilience: A handbook of theory and practice. New York: Springer, 2012.
39. Panter-Brick C, Grimon MP, Eggerman M. Caregiver-child mental health: A prospective study in conflict and refugee settings. J Child Psychol Psychiatry 2014; 55(4): 313–337.
40. Eggerman M., Panter-Brick C. Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan. Soc Sci Med 2010; 71: 71-83.https://doi.org/10.1016/j.socscimed.2010.03.023
41. Eisenberg NI. An empirical review of the neural underpinnings of receiving and giving social support: Implications for health. Psychosom Med 2013; 75(6): 545-56. https://doi.org/10.1097/PSY.0b013e31829de2e7
42. Restek-Petrović B, Kezić S, Mihanović M, Grah M, Kamerman N, Mayer N. Suicide of a PTSD patient: Mourning reactions in the inpatient psychotherapeutic and sociotherapeutic programme. Soc Psihijat 2011; 38: 59-64.
43. Southwick SM, Sippel L, Krystal J, Charney D, Mayes L, Pietrzak R. Why are some individuals more resilient than others: the role of social support. World Psychiatry 2016; 15(1): 77-9. https://doi.org/10.1002/wps.20282
44. Norris FH, Stevens SP, Pfifferbaum B. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. Am J Community Psychol 2008; 41(1-2): 127-50. https://doi.org/10.1007/s10464-007-9156-6
45. Pizzimenti CL, Lattal KM. Epigenetics and memory: causes, consequences and treatments for post-traumatic stress disorder and addiction. Genes Brain Behav 2015; 14: 73–84. https://doi.org/10.1111/gbb.12187
46. Litz BT. Early intervention for trauma: Where are we and where do we need to go? A commentary. J Trauma Stress 2008; 21: 503–6. https://doi.org/10.1002/jts.20373
47. Litz B. Early intervention for trauma and loss: overview and working care model. Eur J Psychotraumatol 2015; 6: 28543. https://doi.org/10.3402/ejpt.v6.28543
48. Rakesh G, Morey RA, Zannas AS, Malik Z, Marx CE, Clausen AN *et al*. Resilience as a translational endpoint in the treatment of PTSD. Mol Psychiatry 2019: 24(9); 1268-83. https://doi.org/10.1038/s41380-019-0383-7
49. Mimica N, Uzun S, Kozumplik O, Folnegović Šmalc V. Pharmacotherapy of posttraumatic stress disorder. Medix 2010; (90): 61-4.

50. Rutter M. Annual research review: Resilience–clinical implications. J Child Psychol Psychiatry 2013; 54: 474–87. https://doi.org/10.1111/j.1469-7610.2012.02615.x
51. Russo SJ, Murrough JW, Han MH, Charney DS, Nestler EJ. Neurobiology of resilience. Nat Neurosci 2012; 15: 1475-84. https:/doi.org/10.1038/nn.3234
52. Domhardt M, Munzer A, Fegert JM, Goldbeck L. Resilience in survivors of child sexual abuse: a systematic review of the literature. Trauma Violence Abuse 2015; 16(4): 476–93. https://doi.org/10.1177/1524838014557288
53. Snijders C, Pries LK, Sgammeglia N, Jowf GA, Youssef NA, De Nijis L *et al*. Resilience Against Traumatic Stress: Current Developments and Future Directions. Front Psychiatry 2018; 9: 676. https://doi.org/10.3389/fpsyt.2018.00676
54. Kabat-Zinn J. Mindfulness-based intervenions in context: past, present and future. Clin Psychol Sci Prac 2006; 10: 144-56.
55. Ding X, Tang YY, Tang R, Poser MI. Improving creativity performance by short-term meditation. Behav Brain Funct 2014; 10: 9. https://doi.org/10.1186/1744-9081-10-9
56. Kušević Z, Mršić Hzsar S, Prosinečki N, Kulenović Somun A, Babić G, Vukušić H *et al*. Odnos intenziteta posttraumatskog stresnog poremećaja izazvanog ratnom traumom i socijalne podrške. Soc Psihijat 2012; 40: 70-5.
57. Kezić S, Britvić D, Caratan S, Goršić L, Ivezić E, Matić K *et al*. Day hospital treatment as a missing link for sigle patients with posttraumatic stress disorder (PTSD): A preliminary study. Psychiatr Danub 2016; 28(2): 184-7.
58. Mestre EMV, Samper GP, Frias Navarro MD, Tur Porcar AM. Are Women More Empathetic Than Men? A Longitudinal Study in Adolescence. Span J Psychol 2009: 12; 76-83. https://doi.org/10.1017/s1138741600001499

Zaštitni i rizični čimbenici u prilagodbi na pandemiju COVID-19 u Republici Hrvatskoj

/ Protective and Risk Factors in Adjusting to the Covid-19 Pandemic in Croatia

Gordana Buljan Flander[1], Romana Galić[2], Mia Roje Đapić[1], Ana Raguž[1], Krešimir Prijatelj[1]

[1]Poliklinika za zaštitu djece i mladih Grada Zagreba; [2]Gradski ured za socijalnu zaštitu i osobe s invaliditetom, Zagreb, Hrvatska

/ [1]*Zagreb Child and Youth Protection Center; Office for Social Protection and Disabled Persons of the City of Zagreb, Zagreb, Croatia*

orcid.org/0000-0003-3998-3932
orcid.org/0000-0002-6277-4197
orcid.org/0000-0002-2156-6260
orcid.org/0000-0002-8056-3684

Sukladno do sada provedenim istraživanjima u svijetu i Europi pandemija koronavirusa (COVID-19) izazvala je u samo nekoliko tjedana znatne negativne utjecaje na mentalno zdravlje stanovnika zahvaćenih zemalja. Ovaj je rad dio većeg istraživačkog projekta „Neki aspekti mentalnog zdravlja za vrijeme pandemije COVID-19" provedenog u Hrvatskoj. U istraživanju je sudjelovalo 1482 sudionika prosječne dobi 33,3 godine (SD= 12,2). Ispitana je povezanost različitih aspekata pandemije s rizičnim i zaštitnim čimbenicima mentalnog zdravlja sudionika. Kao instrumenti korišteni su Upitnik o određenim aspektima pandemije i Upitnik o sociodemografskim podatcima. Rezultati pokazuju da se sudionici razlikuju u procjenama rizičnosti, ozbiljnosti, praćenju medijskih novosti, percipiranom strahu od zaraze i elementima zdravstvene pismenosti s obzirom na opće demografske varijable (spol, bračni status, broj djece, broj članova kućanstva), ali i s obzirom na karakteristike koje ih stavljaju u rizik kao što su dob, mjere samoizolacije te prisutnost kronične bolesti. U radu su detaljno raspravljeni rezultati i praktične implikacije.

/ According to studies conducted so far both in Europe and globally, the coronavirus pandemic (COVID-19) produced a significant negative impact on population mental health in the affected countries within just a few weeks. This paper is part of a larger research project conducted in Croatia titled Some aspects of mental health during the COVID-19 pandemic. The study was conducted on a sample of 1482 respondents with an average age of 33.3 years (SD = 12.2). The focus of this paper was the correlation between various aspects of the pandemic and risk vs. protective factors for population mental health. The Pandemic Aspects Questionnaire and Questionnaire of Sociodemographic Data were used as research instruments. The results showed that respondents significantly differed in their assessments of risk and severity and in how closely they followed the updates in the media, in their perceived fear of infection, and in health literacy levels with regard to general demographic variables (sex, marital status, number of children, number of household members), but also in their risk characteristics such as age, self-isolation measures, and chronic disease. The results and practical implications are discussed in detail.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*
Ana Raguž, mag. psych.
Poliklinika za zaštitu djece i mladih Grada Zagreba
Đorđićeva 26
10 000 Zagreb, Hrvatska
E-pošta: ana.raguz@poliklinika-djeca.hr

KLJUČNE RIJEČI / *KEY WORDS*:
Pandemija / *Pandemic*
Koronavirus / *Coronavirus*
Mentalno zdravlje / *Mental Health*
Zaštitni čimbenici / *Protective Factors*
Rizični čimbenici / *Risk Factors*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2020.285

UVOD

Od prosinca 2019. godine širi se globalna pandemija koronavirusa (COVID-19). Većina zemalja na svim kontinentima uvela je stroge epidemiološke mjere kojima je cilj sprječavanje širenja virusa, a temelje se na strogom ograničavanju socijalnog kontakta među građanima (1). Neki građani su u karanteni, odnosno socijalno su izolirani i strogo ograničenog radijusa kretanja jer su (u izvjesnoj vjerojatnosti) bili izloženi virusu, koja traje do utvrđivanja njihovoga zdravstvenog statusa (2). Neki su pak u izolaciji, koja se odnosi na razdvajanje građana s potvrđenom dijagnozom od onih građana koji nisu zaraženi (2). Mjere ograničavanja socijalnog kontakta neminovno imaju niz posljedica za gospodarstvo, ali i za mentalno zdravlje građana.

Već sada bilježe se problemi mentalnog zdravlja vezani za globalnu pandemiju COVID-19 (3, 4) slični onima povezanima s epidemijom MERS-CoV (*Middle-East Respiratory Syndrome Coronavirus*) (5,6). U pregledu 24 objavljenih istraživanja o mentalnom zdravlju u prva tri mjeseca 2020. godine otkrivaju se brojni negativni psihološki učinci poput znakova post-traumatskog stresa, zbunjenosti i ljutnje. Incidencija i intenzitet simptoma posredovani su trajanjem mjera, osobnim strahovima od bolesti, doživljajem frustracije, dosade, manjkom ili nedovoljnom kvalitetom osnovnih zaliha, neadekvatnošću informacija, materijalnim gubitcima i stigmom

INTRODUCTION

The coronavirus (COVID-19) pandemic has been spreading globally since December 2019. Most countries on all continents introduced rigorous epidemiological measures to limit the spread. These measures have been based on strict restrictions of personal contacts among citizens (1), some of whom were placed in the quarantine, i.e. socially isolated with a firmly restricted radius of movement because they had been (to a certain level of probability) been exposed to the virus. The quarantine continues until they are diagnosed as healthy (2). Some citizens were placed in isolation, separating those sick with a contagious disease from those who are not sick (2). Measures restricting personal contacts have inevitably resulted in by a number of consequences to economy as well as the mental health of citizens.

Some mental health problems related to the global COVID-19 pandemic have already been recorded (3, 4). They are similar to those in the MERS-CoV epidemic (*Middle-East respiratory syndrome coronavirus*) (5, 6). Review of 24 published papers about mental health in the first three months of 2020 found a number of negative psychological impacts, like the signs of post-traumatic stress disorder, confusion, and anger. The incidence and intensity of symptoms were mediated by the duration of measures, personal fears of disease, frustration experience, boredom, insufficiency and low quality

oboljelih, a neka istraživanja upozoravaju na rizik dugotrajnog zadržavanja i razvijanja simptoma u budućnosti (1). Gao i sur. (7) nalaze klinički značajan porast depresivnosti i anksioznosti u Kini u proteklih tri mjeseca, a Wang i sur. (8) izvještavaju da preko polovine stanovništva Kine smatra da ima negativne posljedice za mentalno zdravlje zbog pandemije, što je u skladu s američkim podatcima (9). U Hrvatskoj prvo istraživanje vezano uz pandemiju pokazuje značajan porast brige građana i shodno tome povećanje potrebe za sigurnosnim ponašanjima, što se najviše utvrđuje kod roditelja, posebice majki i to neovisno o dobi te kod osoba oboljelih od kroničnih bolesti (10).

Kao zaštitni čimbenici identificiraju se socijalna podrška, osobito licem u lice (11) i zdravstvena pismenost (engl. *health literacy*) (12). Zdravstvena pismenost odnosi se na sposobnost pronalaženja, razumijevanja, uvažavanja i primjene adekvatnih informacija povezanih sa zdravljem (13). Rizičnim čimbenicima identificiraju se ženski rod (14,15), mlada odrasla (posredovano izloženosti medijima) i starija životna dob (15), status migranta (15), strah od nemogućnosti kontrole zaraze, nesigurnost u procjenu rizika i ozbiljnosti (3) ili visoke procjene rizika i ozbiljnosti situacije (16), pojačana izloženost medijima (7,16), odnosno informacijama iz medija (3), iskustvo osobne zaraze/sumnje na zarazu i ranije bolesti (12). Rizični i zaštitni čimbenici prikazani su sažeto u tablici 1.

Kako nam je u praksi cilj podržati zaštitne i umanjiti efekte rizičnih čimbenika za mentalno zdravlje, važno je razumjeti koja su obilježja građana i na koji način povezana sa specifičnim čimbenicima, kao i kako su pojedini čimbenici međusobno povezani o čemu se ne nalaze podatci u dosadašnjim istraživanjima. Ovaj rad usmjeren je stoga upravo na istraživanje povezanosti nekih karakteristika građana s aspektima pandemije koji se mogu promatrati kao zaštitni i rizični čimbenici za mentalno zdravlje.

Iz navedenog cilja proizlaze sljedeća dva problema: (1) Ispitati povezanost općih karakteristika

of basic supplies, inadequacy of information, material losses, and the stigma of disease. Some studies warn against long-term risk and symptoms developing in the future (1). Gao et al. (7) found a clinically significant increase of depression and anxiety in China in the past three months, while Wang et al. (8) reported that upward of half the population of China believed they suffered from negative mental health consequences due to the pandemic, which is consistent with American data (9). In Croatia, the first study related to the pandemic showed a significant increase in citizen concern and consequently an increase in the need for safety behaviors, which is mostly found in parents, especially mothers, regardless of age, and in people with chronic diseases (10).

Social support, especially face-to-face (11), and health literacy (12) have been identified as protective factors. Health literacy is related to the ability to find, understand, consider, and apply adequate health information (13). Risk factors have been identified as female sex (14, 15), young adult (due to media exposure) and elderly age (15), migrant status (15), fear of an inability to control the contagion, uncertainty about the perceived risk and severity (3), perception of high risk and severity of the situation (16), increased media exposure (7, 16) or media information (3), personal experience of being infected/suspected to have been infected, and prior diseases (12). Risk and protective factors are summarized in Table 1.

Since our aim in practice is to support protective factors and minimize the effects of risk factors for mental health, it is important to understand the characteristics of citizens and how they are linked to specific factors, as well as how some factors correlate. There are no such data in the existing studies. Therefore, this paper focused on studying the correlation between some citizen characteristics and the aspects of the pandemic which may be considered protective or risk factors for mental health.

Consequently, it was necessary to examine the correlation between the aspects of the

TABLICA 1. Rizični i zaštitni čimbenici za mentalno zdravlje u vrijeme COVID-19
TABLE 1. Risk and protective factors for mental health during the Covid-19 pandemic

Zaštitni čimbenici / Protective factors	Rizični čimbenici / Risk factors
Socijalna podrška općenito / General social support	Ženski rod / Female sex
Socijalna podrška osobnim kontaktom / Social support through social contact	Mlađa odrasla/starija životna dob / Young adult/the elderly
Zdravstvena pismenost / Health literacy:	Status migranta / Migrant status / Fear of (the inability to control) the infection
Pronalaženje adekvatnih informacija / Finding proper information	Strah od (nemogućnosti kontrole) zaraze / Uncertainty/perceived high risk
Razumijevanje adekvatnih informacija / Understanding proper information	Nesigurnost/visoke procjene rizika / Uncertainty/perceived high severity
Uvažavanje adekvatnih informacija / Respecting proper information	Nesigurnost/visoke procjene ozbiljnosti / Increased exposure to the media/information
Pridržavanje adekvatnih informacija/uputa / Following adequate instructions	Pojačana izloženost medijima/informacijama
	Osobno iskustvo zaraze/sumnja / Personal experience of infection/ suspected
	Ranije bolesti / Prior diseases

sudionika (spol, bračni status, broj djece, broj članova kućanstva) s aspektima pandemije te (2) Ispitati povezanost karakteristika sudionika koje ih stavljaju u rizik od COVID-19 (dob, ranije kronične bolesti, određena mjera samoizolacije) s aspektima pandemije.

Kao aspekti pandemije definirani su: procjena rizičnosti aktualne situacije, procjena ozbiljnosti aktualne situacije, izloženost medijskim informacijama, osjećaj osobnog straha od zaraze i elementi zdravstvene pismenosti (razumijevanje i pridržavanje adekvatnih informacija/mjera).

METODA

Sudionici

Rezultati navedeni u ovom istraživanju dobiveni su u okviru šireg istraživačkog projekta o određenim aspektima psihičkog zdravlja punoljetnih osoba za vrijeme trajanja pandemije COVID-19, odnosno koronavirusa. Istraživanje je provedeno na prigodnom uzorku od 1482 sudionika, prosječne dobi 33,3 godine (SD= 12,20). Ostali sociodemografski parametri uzorka vidljivi su *u* tablici 2.

pandemics (1) the general characteristics of respondents (sex, marital status, number of children, number of household members) and (2) the risk for COVID-19 characteristics of respondents (age, chronic comorbidity, prescribed self-isolation measures).

The aspects of the pandemic were defined as: risk assessment in the current situation, severity assessment in the current situation, the exposure to media information, a feeling of personal fear of infection, and elements of health literacy (understanding and compliance with adequate information/measures).

METHOD

Sample

The results in this study were obtained within the framework of larger research into some aspects of adult mental health during the COVID-19 (coronavirus) pandemic. The study was conducted on convenience sample, N=1482, at an average age of 33.3 (SD = 12.20). Other sample characteristics are shown in Table 2.

TABLICA 2. Sociodemografske karakteristike uzorka
TABLE 2. Socio-demographic characteristics of the sample

Sociodemografsko obilježje / Socio-demographic characteristic		N	M	SD	%
Dob / Age			33,3	12,2	
Spol / Gender	Žena / Female	1230			83,0
	Muškarac / Male	252			17,0
Bračni status / Marital status	U braku / Married	520			35,0
	Rastavljen/a / Divorced	65			4,4
	Slobodan/na / Single	476			33,1
	U vezi / In relationship	407			27,5
Djeca / Children	Ne / No	910			61,3
	Da / Yes	574			38,7
	Broj djece / Number of children		2,03	1,03	
Broj članova kućanstva / Number of household members			3,8	1,57	
Postojanje kronične bolesti / Chronic disease	Ne / No	1279			82,2
	Da / Yes	205			13,8
Samoizolacija / Self-isolation	Ne / No	1169			78,4
	Da / Yes	315			21,6

Instrumentarij

Pitanja o određenim aspektima pandemije postavljena su na kraju anketnog upitnika *online*, kako bi se izbjeglo dodatno udešavanje sudionika. Određeni aspekti pandemije ispitani su sa 6 pitanja na ljestvici od 5 stupnjeva i jednim pitanjem na dihotomnoj razini („Da"/ „Ne"). Sudionici su inicijalno trebali procijeniti rizik od trenutačne COVID-19 pandemije u tri situacije: U Hrvatskoj, u Europi i u svijetu na ljestvici od 5 stupnjeva, od 1 („Nikakav rizik"), do 5 („Značajan rizik"). Narednim pitanjem sudionici su trebali navesti koliko ozbiljno doživljavaju situaciju povezanu s pandemijom na ljestvici od 5 stupnjeva, od 1 („Ne shvaćam previše ozbiljno, to je vrlo slično gripi") do 5 („Shvaćam veoma ozbiljno, situacija nije niti malo bezazlena"). Idućim pitanjem sudionici su procijenili koliko se pridržavaju uputa nadležnih institucija na ljestvici od 1 do 5, pri čemu veći broj označava veće pridržavanje uputa. Jednim pitanjem sudionici su trebali na ljestvici od 5 stupnjeva odrediti koliko su svojevoljno provjeravali novosti vezano uz pandemiju, od 1 („Niti jednom") do 5 („Vrlo često"). Nakon toga, sudionici su trebali procijeniti svoj strah od moguće zaraze koronavirusom, od 1 („Nisam uopće uplašen/a") do 5 („Veoma

Instruments

Questions about some aspects of the pandemic were asked at the end of the online questionnaire in order to avoid additional response adjustments by respondents. The pandemic aspects were examined by 6 questions with a five-point scales and one dichotomous question ("Yes/No"). Respondents were initially asked to assess the risk of the current COVID-19 pandemic in three situations: In Croatia, in Europe, and globally on a five-point scale, from 1 ("No risk at all") to 5 ("Significant risk"). The next question required them to decide how seriously they experienced the situation related to the pandemic on a five-point scale, from 1 ("I do not consider it to be very serious, it is similar to the flu") to 5 ("I consider it to be very serious, the situation is by no means harmless"). The following questions required them to assess how much they followed the instructions of the institutions in charge. The five-point scale ranged from 1 to 5, where the higher number signified a higher level of following the instructions. One question required the respondents to assess how often they voluntarily followed the news related to the pandemic, by choosing 1 ("Not once") to 5 ("Very

sam uplašen/a“). Posljednjim pitanjem su na ljestvici od pet stupnjeva sudionici procijenili istinitost tvrdnje „Koronavirus izmišljena je ili u najmanju ruku pretjerano napuhnuta priča od strane farmaceuta i vladajućih.“, pri čemu se 1 odnosi na „Nimalo istinita“, a 5 „Vrlo istinita“ tvrdnja. Posljednjim pitanjem o COVID-19 sudionici su upitani nalaze li se u samoizolaciji. Ako su sudionici naveli da su u samoizolaciji, *online* upitnik ih je preusmjerio na pitanje o ukupnoj količini dana provedenih u samoizolaciji (uključujući dan ispunjavanja upitnika).

Pitanja o socio-demografskim obilježjima uključivala su varijable dobi, spola, bračnog statusa (slobodan/na, u vezi, u braku, razveden/a ili ostalo) te broja djece i dobi najmlađeg djeteta (ako imaju dijete/ djecu). Sudionici su dodatno navodili koliko članova živi u njihovom kućanstvu te boluju li od neke kronične bolesti (kardiovaskularne, endokrinološke, bubrežne, probavne, lokomotorne, plućne ili druge).

Postupak

Sudionike su metodom snježne grude regrutirali stručnjaci Poliklinike za zaštitu djece i mladih Grada Zagreba (U nastavku: Poliklinika) slanjem poziva za sudjelovanje u istraživanju s pristupnim linkom na e-poštu liste studenata, objavljivanjem poziva na službenoj *web* stranici Poliklinike, kao i na službenoj *Facebook* stranici Poliklinike. Također, poziv za sudjelovanje u istraživanju i pripadajući link proslijeđeni su i brojnim stručnim suradnicima osnovnih i srednjih škola u Republici Hrvatskoj s molbom da poziv proslijede na e-adresu roditelja učenika. Podatci su prikupljani pomoću *online* upitnika na platformi *Google Forms*, na koji su postavljene ranije navedene ljestvice, u razdoblju od jednog mjeseca, tj. od 19. ožujka do 17. travnja 2020. godine. Istraživanje je bilo u potpunosti anonimno te dobrovoljno. Premda se radi o prigodnom uzorku, sudionike iz ra-

often”). After that they were asked to assess their fear of a possible coronavirus infection from 1 (“Not scared at all”) to 5 (“Very much scared”). The final five-point scale question required them to assess the truthfulness of the statement: “Coronavirus is a fictitious or, at least, exaggerated story served up by the “big pharma” and governments.” On the five-point scale, 1 indicated “Not true at all” and 5 was “Very true.” Finally, the respondents were asked if they were in self-isolation. If they were, the online questionnaire directed them to the questions about the total number of days spent in self-isolation (including the day they were filling in the questionnaire).

Questions related to socio-demographic characteristics included variables of age, sex, marital status (single, being in a relationship, married, divorced, other), the number of children, and the age of the youngest child (if they had children). Participants also provided information about the number of members in their household and if they suffered from some chronic diseases (cardiovascular, endocrinological, renal, locomotor, gastrointestinal, pulmonary, or other).

Procedure

The researchers at the Child and Youth Protection Centre of the City of Zagreb used the snowball sampling method by sending invitations for participating in the study with an access link and also by uploading the invitations on the Centre’s web and Facebook pages. The invitations and access links were also forwarded to many professionals working in primary and high schools in Croatia with a request to forward it to e-mail addresses of their students’ parents. Data were collected by an online questionnaire on the Google Forms platform, where the above-mentioned scales were available during one month, more precisely from 19 March to 17 April 2020. The study was anon-

znih dijelova Hrvatske nastojalo se obuhvatiti upravo navedenim slanjem poziva školama diljem Hrvatske s molbom za prosljeđivanje upitnika roditeljima. Ispunjavanje upitnika trajalo je približno 20 minuta, a sudionici su ljestvice ispunjavali redoslijedom navedenim u opisu metode.

REZULTATI

Prosječne vrijednosti dobivene u istraživanju ukazuju da sudionici rizik u Hrvatskoj doživljavaju umjereno visokim (M=3,98; SD=0,91), pandemiju percipiraju ozbiljnom (M=4,36; SD= 0,80), procjenjuju da se pouzdano pridržavaju svih propisanih mjera (M=4,58; SD=0,656), novosti prate često (M=3,43; SD=1,3) te izražavaju da doživljavaju umjeren strah od koronavirusa (M=2,82; SD=1,1).

Opće karakteristike sudionika i aspekti pandemije

Kako bi se ispitale spolne razlike u aspektima pandemije proveden je niz Welchevih t-testova. Utvrđeno je da postoji značajna razlika u procjeni rizičnosti pandemije u Hrvatskoj prema spolu [t(332,3) = -5,15; p < ,001 (d = -0,39)], u percepciji ozbiljnosti pandemije [t(318,14) = -4,21; p < ,001 (d = -0,34)], u procjeni pridržavanja mjera [t(321,83) = -3,7; p < ,001 (d = -0,3)] te u strahu od koronavirusa [t(362,66) = -5,47; p < ,001 (d = -0,38)]. U svim su slučajevima žene postizale više rezultate od muškaraca. Razlike s obzirom na spol nisu pronađene u praćenju novosti [t(351,28) = -0,67; p = ,5].

Razlike s obzirom na bračni status ispitane su analizom varijance. S obzirom na bračni status utvrđene su statistički značajne razlike u percepciji ozbiljnosti pandemije [F(3, 1464) = 8,85; p < ,001 (η2 = ,02)], procjeni pridržavanja mjera [F(3, 1464) = 5,32; p = ,001 (η2 = ,01)], kod

ymous and voluntary. Although it was a convenience sample, we aimed to include participants from various parts of Croatia by sending invitations to schools all over Croatia, asking them to forward the questionnaire to their students' parents. Filling in the questionnaire took about 20 minutes, and the participants filled in the scales in the order described in the description of the methods.

RESULTS

The average values obtained in the study indicate that the participants in Croatia experienced the risk as moderately high (M=3.98; SD=0.91), perceived the pandemic as serious (M=4.36; SD= 0.80), intended compliance with all prescribed measures (M=4.58; SD=0.66), often followed the news (M=3.43; SD=1.30), and experienced a moderate fear of the coronavirus (M=2.82; SD=1.10).

General characteristics of the respondents and the pandemic aspects

A series of Welch's t-tests were conducted to examine sex differences in pandemic perception. We found significant sex differences in the perception of pandemic risks in Croatia t(332.3) = -5.15; p<.001 (d=-0.39), in perception of pandemic severity t(318.14) = -4.21; p<.001 (d=-0.34), in perceived compliance with the measures t(321.83) = -3.7; p<.001 (d=-0.3), and in fear of the coronavirus t(362.66) = -5.47; p<.001 (d=-0.38). Women scored higher than men in all tests except in following the news t(351.28) = -0.67; p=.5.

Differences regarding marital status were examined by variance analysis. Statistically significant differences were found in perception of pandemic severity F(3. 1464) = 8.85; p<.001 (η2 = .02), in perceived compliance with the

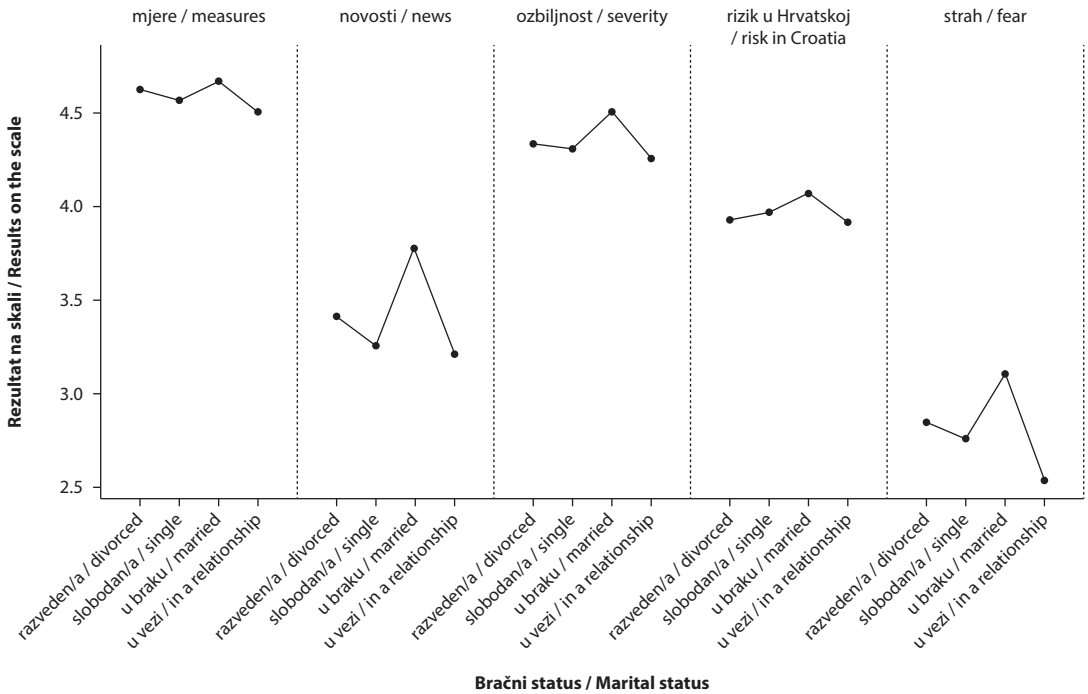
straha od koronavirusa [F(3, 1464) = 23,56; p < ,001 (η2 = ,05)] i praćenja novosti [F(3, 1464) = 19,73; p < ,001 (η2 = ,04)]. Schefféovi *post-hoc* testovi pokazuju statistički značajnu razliku za sve navedene aspekte pandemije između sudionika koji su u braku i slobodnih sudionika (p < ,001), pri čemu su sudionici koji su u braku postizali više rezultate od sudionika koji su slobodni te između sudionika koji su u braku i sudionika koji su u vezi (p < ,001) pri čemu su sudionici koji su u braku postizali više rezultate od sudionika koji su u vezi. Prikaz ovih razlika nalazi se na sl. 1.

Broj djece i članova kućanstva

Kako bi se ispitala povezanost procjene rizičnosti pandemije i broja djece te broja članova u kućanstvu izračunati su Pearsonovi koeficijenti korelacije. Zbog postojanja *outlier*-a u varijabli broja djece, isključeni su svi rezultati koji su više od tri standardne devijacije udaljeni od aritmetičke sredine. S obzirom da je povezanost između varijabli broja djece i broja članoprescribed measures F(3. 1464) = 5.32; p=.001 (η2 = .01), in fear of the coronavirus F(3. 1464) = 23.56; p<.001 (η2 = .05) and in following the news F(3. 1464) = 19.73; p<.001 (η2 = .04). Scheffé post-hoc tests showed statistically significant differences between married participants and those in a relationship in all the above aspects of the pandemic (p<.001), with married participants having higher scores than those in a relationship. These differences are presented in Figure 1.

Number of children and household members

Pearson's correlation coefficients were used to examine the relation between the perceived pandemic risk and the number of children and household members. Due to the existence of outliers in the number of children variable, all the results of more than three standard deviations from the arithmetic mean were excluded. Correlation between the variables of the number of children variable and the number



SLIKA 1. Aspekti pandemije s obzirom na bračni status
PICTURE 1. Aspects of the pandemic regarding marital status.

va kućanstva umjereno visoka, ali ne i potpuna (tablica 3), izračunate su zasebne povezanosti s aspektima pandemije.

Iz tablice 3 razvidno je kako je broj djece negativno povezan s procjenom rizičnosti u Hrvatskoj no nisu pronađene značajne povezanosti broja djece s percepcijom ozbiljnosti pandemije, procjenom pridržavanja mjera, praćenjem novosti ni strahom od koronavirusa. Također, nisu utvrđene značajne povezanosti broja članova kućanstva s procjenom rizičnosti, percepcijom ozbiljnosti pandemije, procjenom pridržavanja mjera, praćenjem novosti ni strahom od koronavirusa. S obzirom da je povezanost između varijabli broja djece i broja članova kućanstva umjereno visoka, ali ne i potpuna, u daljnjim su analizama korištene obje varijable.

Dob

S ciljem ispitivanja povezanosti procjene rizičnosti pandemije i dobi izračunati su Pearsonovi koeficijenti korelacije, a zbog postojanja *outlier*-a u varijabli dobi isključeni su svi rezultati koji su više od tri standardne devijacije udaljeni od aritmetičke sredine. Pokazalo se kako je dob negativno povezana s procjenom rizičnosti u pozitivnoj vezi s percepcijom ozbiljnosti pandemije, procjenom pridržavanja mjera, praćenjem novosti te strahom od koronavirusa (tablica 3).

of household members was moderately high but not complete (Table 3), and separate correlations with pandemic aspects were calculated. We found that the number of children negatively correlated with the perceived risk in Croatia. However, no statistically significant correlations were found between the number of children and the perceived severity of the epidemic, perceived compliance with the prescribed measures, following the news, or the fear of the coronavirus (Table 3). No significant correlations were found between the number of household members and the perceived risk, the perceived severity of the pandemic, the perceived compliance with the prescribed measures, following the news, the fear of the coronavirus (Table 3).

Age

Pearson's correlation coefficients were used to examine the relation between the pandemic risk and age. Due to the existence of the outliers in the number of children variable, all the results more than three standard deviations from the arithmetic mean were excluded. Age was found to have a negative correlation with perceived risk and a positive correlation with perceptions of pandemic severity, perceived compliance with the prescribed measures, following the news, and fear of the coronavirus (Table 3).

TABLICA 3. Povezanosti aspekta pandemije s nekim demografskim karakteristikama sudionika
TABLE 3. Correlations of pandemic aspects with some demographic characteristics of the participants

	Procjena rizičnosti u Hrvatskoj / Risk assessment in Croatia	Percepcija ozbiljnosti pandemije / Perception of severity	Procjena pridržavanja mjera / Assessment of compliance	Praćenje novosti / News tracking	Strah od koronavirusa / Fear of COVID-19	Broj djece / Number of children
Broj djece / Number of children	-,09*	-,03	-,03	-,03	-,02	
Broj članova kućanstva / Number of household members	-,07	-,05	,03	-,04	< ,001	,57**
Dob / Age	-,1**	,17**	,1**	,23**	,17**	

*Legenda / Legend: * - p < ,05, ** - p < ,01.*

Kronična bolest

Utvrđene su statistički značajne razlike s obzirom na prisutnost kronične bolesti kod procjene rizičnosti [t(291,18) = 4,18; p < ,001 (d = ,29)], ozbiljnosti pandemije [t(276,34) = 3,49; p < ,001 (d = ,26)], procjene pridržavanja mjera [t(305,82) = 3,04; p = ,003 (d = ,2)], praćenju novosti [t(275,46) = 3,52; p < ,001 (d = ,26)] i strahu od koronavirusa [t(268,71) = 7,08; p < ,001 (d = ,55)].

Chronic disease

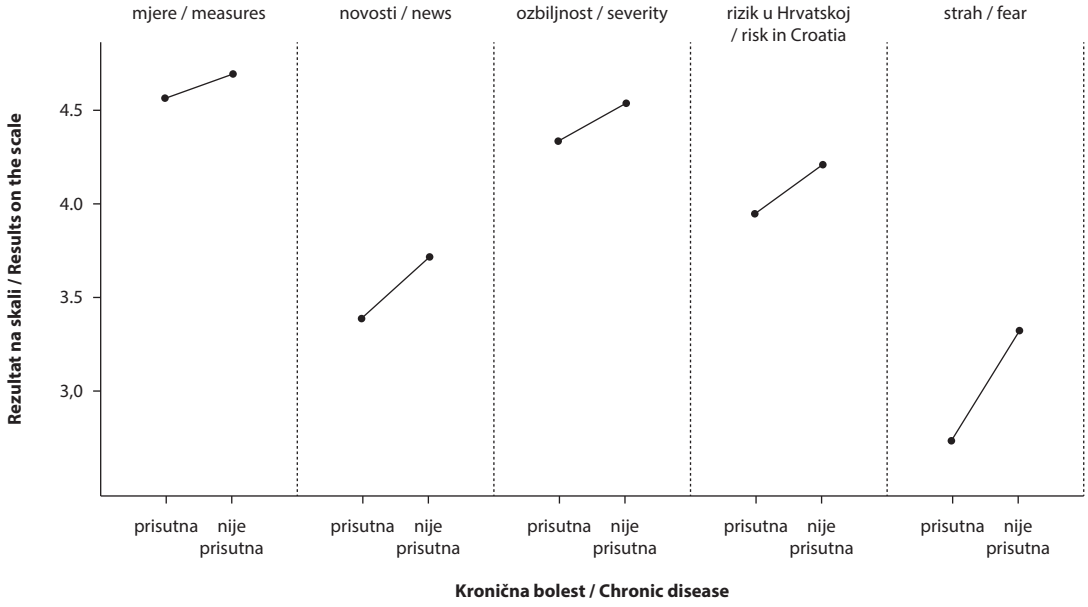
We found statistically significant differences regarding the presence of chronic disease in perceived risk t(291.18) = 4.18; p<.001 (d=.29), pandemic severity t(276.34) = 3.49; p<.001 (d=.26), perceived compliance with the prescribed measures t(305.82) = 3.04; p=.003 (d=.2), following the news t(275.46) = 3.52; p<.001 (d=.26), and fear of the coronavirus t(268.71) = 7.08; p<.001 (d=.55).

Samoizolacija

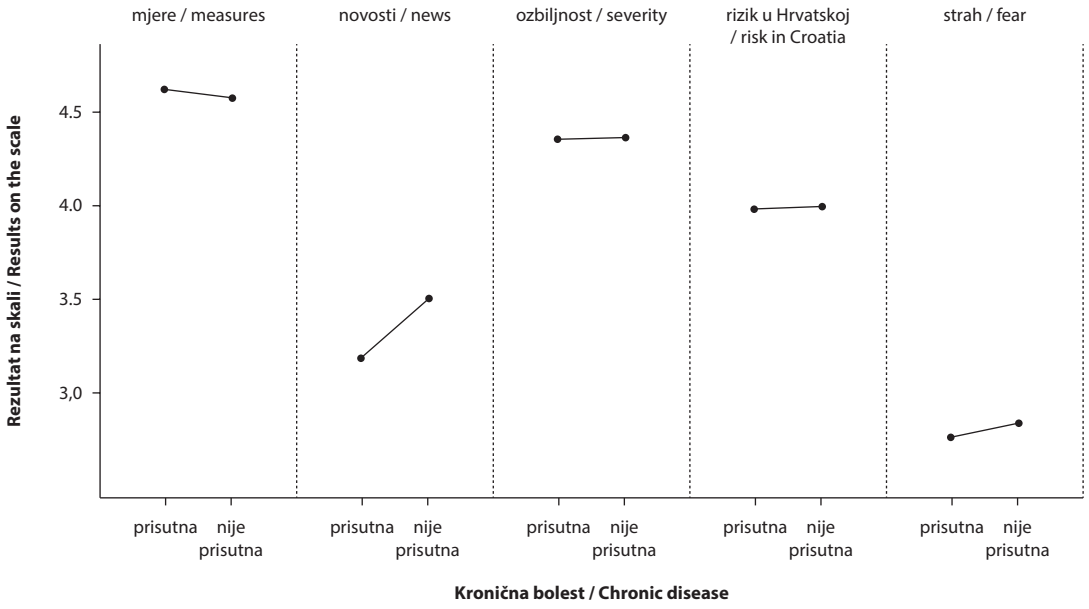
Utvrđene su statistički značajne razlike s obzirom na mjere samoizolacije kod praćenja novosti [t(479,65) = 3,8; p < ,001 (d = -,25)] pri čemu osobe koje nisu u samoizolaciji prate više novosti od osoba koje jesu u samoizolaciji. Nisu utvrđene statistički značajne razlike u drugim aspektima pandemije: procjena rizičnosti [t(479,57) = -0,18; p = ,85], percepcije ozbiljnosti pandemije [t(489,79) = -0,17; p = ,87], procjene pridržavanja mjera [t(531,31) = 1,37; p = ,17] i strahu od koronavirusa [t(456,02) = -1,02; p = ,31].

Self-isolation

Statistically significant differences were found in following the news with regard to self-isolation t(479.65) = 3.8; p<.001 (d=-.25). Individuals who were not in self-isolation followed the news more than those in self-isolation. There were no statistically significant differences in other aspects, i.e. perceived risk of the pandemic t(479.57) = -0.18; p=.85, perceived severity of the pandemic t(489.79) = -0.17; p = .87, following the news t(531.31) = 1.37; p=.17, and the fear of the coronavirus t(456.02) = -1.02; p=.31.



SLIKA 2. Aspekti pandemije s obzirom na anamnezu kronične bolesti
FIGURE 2. Aspects of the pandemic regarding chronic disease history.



SLIKA 3. Aspekti pandemije s obzirom na propisanu mjeru samoizolacije
FIGURE 3. Aspects of the pandemic regarding prescribed self-isolation.

RASPRAVA

Glavni cilj ovog rada bio je ispitati povezanosti nekih karakteristika građana s aspektima pandemije, koje se mogu promatrati kao zaštitni i rizični čimbenici za mentalno zdravlje, u aktualnoj zdravstvenoj krizi na uzorku punoljetnih građana Republike Hrvatske.

Rezultati pokazuju da žene doživljavaju situaciju više rizičnom, opasnom te da izvještavaju o više subjektivnog straha od muškaraca što je usklađeno s rezultatima zasad dostupnih istraživanja u Hrvatskoj (10). Na razini ličnosti žene svih dobnih skupina doživljavaju dominantno neugodne emocije pri suočavanju sa stresnim situacijama u odnosu na muškarce, odnosno postižu značajno više rezultate na neuroticizmu (17,18), što objašnjava ove nalaze, a i po dosadašnjim istraživanjima ženski rod pokazuje se rizičnijim za mentalno zdravlje zbog pandemije (14,15). Također, na razini ličnosti žene pokazuju višu razinu savjesnosti (19,20), što objašnjava njihovo izraženije pridržavanje mjera u okviru zdravstvene pismenosti u odnosu na muškarce. Muškarci pokazuju veću sklonost preuzimanju rizika u okviru antisocijalnih crta

DISCUSSION

The main aim of this paper was to examine correlations between some citizen characteristics and aspects of the pandemic, as observed on a sample of adults in the Republic of Croatia, as protective or risk factors for mental health in the current health crisis.

Results show that women experienced the situation as riskier and more dangerous and that they reported more subjective fear than men, which is in line with the results of currently available research in Croatia (10). At the level of personality, women of all age groups compared with men experienced dominantly more unpleasant emotions in coping with stress situations, i.e. they showed significantly higher scores on neuroticism scales (17, 18), which explains these findings. The existing research also shows that female sex is riskier for mental health in the pandemic (14, 15). At the level of personality, women showed a higher level of conscientiousness (19, 20), which explains higher scores in the perceived compliance with the prescribed measures by women than by men, within the framework of health literacy. Men showed higher scores in

od žena i u drugim situacijama te procjenjuju manje izvjesnim tragičan ishod, primjerice u rizičnoj vožnji i doživljaju rizika od prometne nesreće koja bi se mogla dogoditi (21). Mlađi sudionici, iako doživljavaju situaciju više rizičnom (moguće zbog veće izloženosti medijima i suvremenim tehnologijama) (22), osjećaju manji strah i slabije pokazuju elemente zdravstvene pismenosti kroz pridržavanje mjera. U funkciji dobi sudionika bilježi se, dakle, porast straha, ali jednako tako i pridržavanja mjera, što je u skladu s činjenicom da su stariji građani i objektivno u većoj opasnosti, a prema karakteristikama ličnosti više savjesni i manje skloni rizičnom ponašanju (23). Nadalje, pokazuje se da su doživljaj ozbiljnosti situacije, subjektivni osjećaj straha, pridržavanje mjera i razina informiranja najviši za osobe u braku, potom osobe u vezi, a najmanje su izraženi kod samaca. Ovi rezultati mogu ukazivati na pojačanu potrebu za zaštitom zajednice u odnosu na zaštitu samih sebe. Zaštitnički stav potencijalno dovodi do izraženijeg percipiranja opasnosti i s tim povezanih ponašanja uklanjanja rizika na što se u ovom kontekstu može promatrati kao na mehanizme preživljavanja u evolucijskoj perspektivi i teoriji srodstva (24).

U skladu s tim, ali i očekivanim efektima direktne socijalne podrške, očekivali bismo neke povezanosti aspekata pandemije s brojem članova kućanstva i brojem djece, no one su vrlo niske ili neznačajne. Broj djece čak je negativno povezan s procjenom rizičnosti situacije, što može ukazivati na veću preokupaciju roditelja svakodnevnim životnim obvezama u obitelji, koje otklanjaju prostor i kapacitet brigama oko pandemije. Ovi rezultati mogu djelomično biti i rezultat mjera zbog kojih određen broj obitelji doživljava ekonomsku nestabilnost, gubitke poslova i redovitih novčanih prihoda. Naime, Unicef (25) upozorava kako 8 od 10 mladih ljudi izražava zabrinutost oko obiteljskih prihoda zbog COVID-19 pandemije. S obzirom na to, nekolicina ljudi može osjećati dodatan pritisak

risk taking than women, consistent with antisocial traits in other situations as well. They also perceived less certainty of tragic outcomes, e.g. in risky driving and perceived risk of a traffic accident happening (21). Younger participants, although they do experience situations as riskier (possibly due to higher exposure to the media and modern technologies) (22), felt less fear and showed lower levels of health literacy elements expressed in the perceived compliance with the prescribed measures. The age function shows an increase in fear but also of the perceived compliance with the prescribed measures, which is consistent with the fact that older citizens have objectively been at higher risk and at the same time their personality characteristics showed that they were more conscientious and less prone to risky behaviors (23).

Furthermore, it was found that the perceived severity of the situation, the subjective feeling of fear, the perceived compliance with the prescribed measures, and the levels of acquired information were highest for married individuals, followed by those in a relationship, and they were lowest in single individuals. These results may indicate that there is an individuals feel more driven to protect the group than themselves. A protective attitude potentially leads to an increased perception of danger and related risk elimination behaviors, which in this context may be considered as mechanisms of survival from an evolutionary family theory perspective (24).

Consistent with the above and also with the expected effects of direct social support, we expected some positive correlations between aspects of the pandemic and the number of household members and children, but they were very low or insignificant. The number of children was even negatively correlated with perceived pandemic risk, which may indicate that parents were more preoccupied with everyday obligations in the family, which reduced the space and capacities for worries about the pandemic. These findings may partially be the

zbog većeg broja članova kućanstva i / ili djece koji objektivno uzrokuju i dodatne financijske izdatke, a što sve zajedno poništava blagotvorne efekte socijalne podrške u okviru obiteljske zajednice s više članova kućanstva.

Neki autori poput Fuller-Iglesiasa, Webstera i Antonuccija (26) napominju kako je razvojna priroda odnosa obiteljske podrške na dobrobit pojedinaca promjenjiva s obzirom na dob. S tim u vezi, neki pojedinci će doživljavati više podrške s većim brojem djece, dok kod drugih to neće biti slučaj. Zhang, Wu, Zhao i Zhang (11) nalaze socijalnu podršku kao jedan od zaštitnih čimbenika pri suočavanju s pandemijom COVID-19, a sukladno tome ovim je istraživanjem potvrđena njezina povezanost s procjenom ozbiljnosti pandemije i pridržavanjem mjera na hrvatskom uzorku. Još jednom se pokazuje da je važnija percipirana socijalna podrška od realitetnog broja ljudi u bliskom kontaktu za predviđanje raznih ishoda i ponašanja.

Praćenje vijesti i novosti vezanih uz situaciju s pandemijom pokazalo se statistički značajno češće kod osoba koje nisu u samoizolaciji nego kod onih koji imaju veću vjerojatnost da su već zaraženi koronavirusom zbog čega se i nalaze u samoizolaciji. Analizom empirijskih podataka Sairanen i Savolainen (27) izdvojena su dva vodeća razloga izbjegavanja zdravstveno orijentiranih informacija, a to su (a) želja za izbjegavanjem neugodnih emocija i (b) želja za izbjegavanjem informacija koje ne odgovaraju potrebama pojedinaca. Slični podatci dobiveni su i ranijim istraživanjima kod kojih se nakon postavljanja dijagnoze tumora kod sudionika nailazilo na smanjeno traženje informacija o tumoru kako bi se izbjegle dodatne neugodne emocije (28). Ipak, čini se da osobe u povećanom riziku od komplikacija zbog kroničnih bolesti i osobe u akutnom riziku zbog kontakta s oboljelima pokazuju drugačije mehanizme suočavanja. Slično kao što su tijekom epidemije SARS-a 2003. godine teže oblike bolesti i veće stope smrtnosti imale osobe s kroničnim

result of pandemic measures causing economic instability in some families, i.e. loss of employment and regular income. UNICEF (25) warns that 8 out of 10 young people expressed concern regarding family income due to the COVID-19 pandemic. Therefore, some people might be feeling additional pressure with more household members and/or children who objectively increased financial costs, which hampered the beneficial effects of social support in families with several household members.

Some authors, like Fuller-Iglesias, Webster, and Antonucci (26) said that the developmental nature of the relationship of family support varied according to age. Some individuals will experience more support with a larger number of children, while some other individuals will not. Zhang, Wu, Zhao, and Zhang (11) found social support to be one of the protective factors in coping with the COVID-19 pandemic. In line with that, this study has confirmed the correlation between social support and perceived pandemic severity and perceived compliance with the prescribed measures in the Croatian sample. It has again been shown that perceived social support was more important in projecting outcomes and behaviors than the actual number of people in close contact.

Following the news about the pandemic was statistically higher in individuals who were not in self-isolation compared with those at higher risk of already being infected by the coronavirus, which was the reason why they were in self-isolation. The analysis of the empirical data by Sairanen and Savolainen (27) found two main reasons for the avoidance of health-related information, which were: (a) a desire to avoid unpleasant emotions and (b) a desire to avoid information which does not satisfy the needs of the individual. Similar findings were obtained with previous studies where, after a diagnosis of tumor had been established, the participants decreased their requirement for information about the tumor in order to avoid unpleasant emotions

bolestima (29), tako i tijekom pandemije COVID-19 rizik za smrtnost je veći kod osoba s pridruženim zdravstvenim stanjima (30). Rezultati ovog istraživanja pokazali su kako je postojanje pridruženih zdravstvenih stanja povezano s više straha, višom razinom doživljaja rizičnosti i ozbiljnosti situacije, više praćenja novosti, ali i izraženijim pridržavanjem mjera, što je konzistentno nalazima istraživanja psihičkih posljedica teškog akutnog respiratornog sindroma (SARS) u Hong Kongu tijekom 2003. godine.

Potencijalna ograničenja ovog istraživanja uglavnom su metodološke prirode s obzirom da je uzorak ovog istraživanja prigodan, a sudionici prikupljani metodom snježne grude. Također, nedostatak provedenog istraživanja je i nesrazmjer u broju sudionika s obzirom na spol/rod, na što bi se u budućim studijama trebala usmjeriti dodatna pozornost. Provođenje istraživanja preko interneta ograničava mogućnost ponavljanja istraživanja na istim sudionicima u drugoj vremenskoj točki. Sukladno tome preporučuje se konstruirati longitudinalne nacrte istraživanja, koji bi mogli osigurati ispitivanje istih sudionika za vrijeme trajanja pandemije i nakon završetka pandemije. Uz to, *online* istraživanje onemogućava sudionicima koji nemaju elektroničke uređaje ili pristup internetu da sudjeluju u istraživanju, čime se dodatno gubi na reprezentativnosti samog uzorka. U nedostatku validiranih ljestvica mjerenje pojedinih varijabli (poput straha od koronavirusa), korištena su pitanja u obliku jedne čestice s ljestvicom slaganja od jedan do pet, što narušava statističko-metodološku snagu.

Glavni doprinos ovog istraživanja jest brzi i akutni probir relevantnih varijabli zbog interesa za mentalno zdravlje građana u pandemiji. Osim na same indikatore mentalnog zdravlja, koji se uobičajeno ispituju u studijama ovakvog tipa, poseban naglasak stavljen je na rizične i zaštitne čimbenike, kako za mentalno zdravlje, tako i za ukupno zdravstveno odgovorno pona-

(28). Still, it seems that individuals at a higher risk of complications due to chronic disease and those at an acute risk due to a contact with the infected individual presented with different coping mechanisms. Similar to the epidemic of SARS in 2003, when individuals with chronic diseases (29) presented more severe forms of the disease and higher mortality rates, the mortality risk during the COVID-19 pandemic has been higher for individuals with comorbidities (30). The results of this study show that the presence of comorbidities correlated with more fear, higher levels of perceived risk and severity of the situation, more closely following the news, and more expressed compliance with the prescribed measures, which is consistent with the findings in studies of the psychological consequences of a severe acute respiratory syndrome (SARS) in Hong Kong during 2003.

The potential limitations of this study are mostly of a methodological nature, given that it has been conducted on a convenient sample collected by the snowball sampling method. Additionally, one limitation of this study is the disproportion in the number of respondents regarding their sex/gender, which would require additional attention in future studies. Furthermore, conducting research via the Internet limits the possibility of repeating it on the same respondents at another time point. Consequently, constructing longitudinal drafts of research which would be able to ensure testing the same respondents during the pandemic and after the end of it is recommended. Online research is also not accessible to the respondents who do not possess electronic devices or internet access, which adds to the sample not being representative. Questions in the form of one item with a scale one to five were used in absence of validated scales to measure some variables (e.g. fear of the coronavirus), which limits the statistical-methodological effectiveness.

The main contribution of this study lies in the fast and focused screening of the rele-

šanje, što omogućava širu praktičnu primjenu u aktualnom vremenu.

ZAKLJUČAK

Zbog aktualne pandemije nalaze se određene karakteristike građana povezane s aspektima pandemije, odnosno rizičnim i zaštitnim čimbenicima za mentalno zdravlje, što je posebno važno s obzirom da će se nakon krize realne psihološke posljedice pratiti i bilježiti mjesecima, a potencijalno i godinama.

Opisani i raspravljeni rezultati zaključno govore o skupinama na koje je potrebno usmjeriti dodatnu pozornost pri prevenciji i ranoj intervenciji u domeni mentalnog zdravlja, ali i zdravstveno odgovornog ponašanja, osobito zbog očekivanja drugog vala pandemije. U jačanju kapaciteta i otpornosti posebno bi se trebalo usmjeriti na žene, starije osobe, samce i osobe s kroničnim bolestima. U promicanju zdravstvene pismenosti i odgovornog ponašanja trebalo bi se dodatno usmjeriti na muškarce, mlade i samce. Aktivnosti bi trebale uključivati vraćanje osobne odgovornosti osnaživanjem i pružanjem dostupne podrške, ali i preporukama medijima u odgovornom izvještavanju vezano uz aspekte pandemije.

vant variables due to the interest in citizens' mental health in the pandemic. In addition to examining mental indicators health, which is usual in studies of this type, a special emphasis was placed on the risk and protective factors regarding both mental health and overall health-responsible behavior, which now enables wider practical application.

CONCLUSION

In brief, these findings indicate which groups require additional attention in the prevention and early interventions in the field of mental health and health literacy, especially due to the expected second wave of the pandemic. In strengthening capacities and resilience, special attention should be given to women, the elderly, single individuals, and those with chronic diseases. Promotions of health literacy and responsibility should additionally focus on men, the young, and single individuals. Activities should include recovering a feeling of personal responsibility by internalizing the locus of control and training in problem-focused coping, as well as promoting social support not only in the form of objective contacts but in the perception of connectedness.

LITERATURA / *REFERENCES*

1. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N *et al*. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet 2020; 395(10227): 912-20. Available from: doi:10.1016/S0140-6736(20)30460-8
2. Centers for Disease Control and Prevention. Quarantine and isolation. [Internet] 2017. [Cited 2020 Mar 21]. Available from: https://www.cdc.gov/quarantine/index.html
3. Bao, Y, Sun, Y, Meng, S, Shi, J, Lu, L. 2019-nCoV epidemic: address mental health care to empower society. Lancet 2020; 395(10224): e37-e38. Available from: doi:10.1016/S0140-6736(20)30309-3
4. Yao H, Chen JH, Xu YF. Patients with mental health disorders in the COVID-19 epidemic. Lancet Psychiatry 2020; 7(4): e21. Available from: doi:10.1016/S2215-0366(20)30090-0
5. Jack A. Why the panic? South Korea's MERS response questioned. BMJ 2015; 350: h3403. Available from: doi:10.1136/bmj.h3403
6. Abdel-Moneim AS. Middle East respiratory syndrome coronavirus (MERS-CoV): evidence and speculations. Arch Virol 2014; 159(7): 1575-84. Available from: doi:10.1007/s00705-014-1995-5
7. Gao J, Zheng P, Jia Y, Chen H, Mao Y, Chen S. Mental health problems and social media exposure during COVID-19 outbreak. Plos one 2020; 15(4): e0231924. Available from: doi:10.1371/journal.pone.0231924
8. Wang C, Pan R, Wan X, Tan Y, Xu L, MxIntyre RS *et al*. A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. Brain Behav Immun 2020; 87: 40-48. Available from: doi:10.1016/j.bbi.2020.04.028

9. Psychological impact of COVID-19. American psychological association. [Internet]. 2020. [Cited 2020 May 1st]. Available from: https://www.apa.org/topics/covid-19/psychological-impact
10. Lauri Korajlija A, Jokic-Begic N. COVID-19: Concerns and behaviours in Croatia [preprint]. Br J Health Psychol 2020. Available from: doi:10.1111/bjhp.12425
11. Zhang J, Wu W, Zhao X, Zhang W. Recommended psychological crisis intervention response to the 2019 novel coronavirus pneumonia outbreak in China: a model of West China Hospital. Precis Clin Med 2020; 3(1): 3-8. Available from: doi:10.1093/pcmedi/pbaa006
12. Nguyen HC, Nguyen MH, Do BN, Tran CQ, Nguyen TTP, Pham KM *et al*. People with suspected COVID-19 symptoms were more likely depressed and had lower health-related quality of life: The potential benefit of health literacy. J Clin Med 2020; 31(9): 965. Available from: doi:10.3390/jcm9040965
13. The health illiteracy problem in the USA. Lancet. [Internet]. 2009 [Cited 2020 May 4th]. Available from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)62137-1/fulltext
14. Rohde C, Jefsen OH, Noerremark B, Danielsen AA, Ostergaard SD. Psychiatric Symptoms Related to the COVID-19 Pandemic [preprint]. medRxiv 2020. Available from: doi:10.1101/2020.04.16.20067744
15. Qiu J, Shen B, Zhao M, Wang Z, Xie B, Xu Y. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. Gen Psychiatr 2020; 33(2). Available from: doi:10.1136/gpsych-2020-100213
16. Tools for coping with COVID-19. Montana State University. [Internet] 2020. [Cited 2020 May 5th]. Available from: https://www.montana.edu/counseling/covid/index.html
17. Chapman BP, Duberstein PR, Sörensen S, Lyness JM. Gender differences in Five Factor Model personality traits in an elderly cohort. Pers Individ Dif 2007; 43(6): 1594-1603. Available from: doi:10.1016/j.paid.2007.04.028
18. Djudiyah MS, Harding D, Sumantri S. Gender Differences in Neuroticism on College Students. Dalam Asean Conference. 2nd Psychology & Humanity. Psychology Forum UMM, February 19-20, 2016.
19. Weisberg YJ., Deyoung CG, Hirsh JB. Gender differences in personality across the ten aspects of the Big Five. Front Psychol 2011; 2: 178. Available from: doi:10.3389/fpsyg.2011.00178
20. South SC., Jarnecke AM, Vize CE. Sex differences in the Big Five model personality traits: A behavior genetics exploration. J Res Pers 2018; 74: 158-65. Available from: doi:10.1016/j.jrp.2018.03.002
21. Cordellieri P, Baralla F, FerlazzoF, Sgalla R, Piccardi L, Giannini AM. Gender effects in young road users on road safety attitudes, behaviors and risk perception. Front Psychol 2016; 7. Available from: doi:10.3389/fpsyg.2016.01412.
22. Cheng C, Jun H, Liang B. Psychological health diathesis assessment system: a nationwide survey of resilient trait scale for Chinese adults. Stud Psychol Behav 2014; 12(6): 735-42.
23. Körner A, Geyer M, Gunzelmann T, Brähler E. The influence of socio-demographic factors on personality dimensions in the elderly. Z Gerontol Geriatr 2003; 36(2): 130-7. Available from: doi:10.1007/s00391-003-0085-1
24. Salmon C, Shackelford TK. (ed.). The Oxford handbook of evolutionary family psychology. Oxford: Oxford University Press, 2011. Available from: doi: 10.1093/oxfordhb/9780195396690.001.0001
25. 8 in 10 youth worried about their family income due to COVID-19: First survey of its kind in Thailand finds. Unicef. [Internet] 2020. [Cited 2020 April 30th]. Available from: https://www.unicef.org/thailand/press-releases/8-10-youth-worried-about-their-family-income-due-covid-19
26. Fuller-Iglesias HR, Webster Noah J, Antonucci TC. The complex nature of family support across the life span: Implications for psychological well-being. Dev Psychol 2015; 51(3): 277-88. Available from: doi:10.1037/a0038665
27. Sairanen A, Savolainen R. Avoiding health information in the context of uncertainty management. [Internet] 2010. [Cited 2020 May 10th]. Available from: http://informationr.net/ir/15-4/paper443.html
28. Lambert SD, Loiselle CG, MacDonald ME. An in-depth exploration of information-seeking behavior among individuals with cancer: part 2: understanding patterns of information disinterest and avoidance. Cancer Nurs 2009; 32(1): 26-36. Available from: doi:10.1097/01.NCC.0000343373.01646.91
29. Karlberg J, Chong DS, Lai WYY. Do men have a higher case fatality rate of severe acute respiratory syndrome than women do?. Am J Epidemiol 2004; 159(3): 229-31. Available from: doi:10.1093/aje/kwh056
30. Jordan RE, Adab P, Cheng KK. Covid-19: risk factors for severe disease and death. [Internet] 2020. [Cited 2020 April 30th]. Available from: https://www.bmj.com/content/368/bmj.m1198.long

Stigmatizacija psihičkih bolesnika – znanje i stavovi zdravstvenih i nezdravstvenih radnika

/ Stigmatization of Psychiatric Patients – Knowledge and Attitudes of Health and Non-health Professionals

Ana Pavelić Tremac[1], Dražen Kovačević[1], Joško Sindik[2], Narcisa Manojlović[3]

[1]Neuropsihijatrijska bolnica „Dr. Ivan Barbot", Popovača, Hrvatska; [2]Institut za antropologiju, Zagreb, [3]Ministarstvo za demografiju, obitelj, mlade i socijalnu politiku, Zagreb, Hrvatska

/ [1]Dr. Ivan Barbot Neuropsychiatric Hospital, Popovača, Croatia, [2]Institute for Anthropological Research, Zagreb, Croatia, [3]Ministry for Demography, Family, Youth and Social Policy, Zagreb, Croatia

Uz teškoće u svakodnevnom djelovanju zbog simptoma svojih bolesti psihički bolesnici se moraju suočiti i s osjećajem odbačenosti od drugih ljudi, a sve zbog straha od njihovih nepredvidivih reakcija. Cilj ovog istraživanja je utvrditi razlike u znanjima i stavovima o stigmatizaciji psihičkih bolesnika u odnosu na vrstu zanimanja (zdravstveni, nezdravstveni djelatnici i psihijatrijsko osoblje), razinu obrazovanja (osnovno-srednjoškolsko obrazovanje, dodiplomska i sveučilišna diploma), spol i psihijatrijski hereditet u obitelji. Na uzorku od 243 ispitanika [namjernog uzorka zdravstvenih radnika (23,4%), nezdravstvenih radnika (49%) i psihijatrijskog osoblja (27,6%)], heterogenih prema sociodemografskim obilježjima) ispitani su znanje i stavovi prema psihičkim bolesnicima. U istraživanju je primijenjena Revidirana ljestvica za mjerenje stavova prema psihičkim bolesnicima izrađena prema ljestvici Ljetne škole studenata psihologije 2003. te Ljestvica znanja o psihičkim bolesnicima (SZPB) preuzeta iz istraživanja Jokić-Begić, Kamenov, Lauri Korajlija, 2005. Rezultati su pokazali da psihijatrijsko osoblje ima veće znanje o karakteristikama mentalno oboljelih pojedinaca, liječenju te o nastanku mentalnih bolesti od zdravstvenog i nezdravstvenog osoblja, a kod muškaraca samo od zdravstvenih radnika. Nezdravstveno i zdravstveno osoblje više od psihijatrijskog osoblja vjeruje da su s njima poželjni neposredni kontakti, osim kod muškaraca gdje nisu pronađene razlike. Obrazovaniji ispitanici imaju veće znanje o psihičkim bolestima i smatraju u većoj mjeri da su psihički bolesnici radno sposobni i ugodni, kao i da su s njima poželjni neposredni kontakti. Manje obrazovani ispitanici u većoj mjeri vjeruju da psihički bolesnici zaslužuju poštovanje i suosjećanje kao ravnopravni članovi društva. Značajne su razlike dobivene između ispitanika sa psihološkim hereditetom i bez psihijatrijskog herediteta u odnosu na jedan od aspekata stava. Ispitanici bez psihijatrijskog herediteta smatraju da osobe sa psihičkom bolesti zaslužuju više poštovanja i suosjećanja. Rezultati pružaju okvirne smjernice potrebne za oblikovanje procesa destigmatizacije psihičkih bolesnika u populaciji zdravstvenih i nezdravstvenih stručnjaka, kao i osobama različitog stupnja obrazovanja, posebno onima koji rade s mentalno oboljelim pacijentima ili stupaju s njima u kontakt nakon hospitalizacije.

***/** With functional problems resulting from the symptoms of their illness, people with mental illness also face the feeling of being rejected by other people, partly because of the fear of their specific and unpredictable reactions. The objective of this study was to determine the differences in knowledge and attitudes regarding psychiatric patients affecting their stigmatization, with respect to the type of employment (health and non-health professionals and psychiatric personnel), level of education (elementary and secondary school, undergraduate degree, university degree), gender, and psychiatric heredity in the family. We used a sample of 243 respondents (intentional sample of health (23.4%), non-health professionals (49%), and psychiatric personnel (27.6%), heterogeneous by socio-demographic characteristics) to examine knowledge and attitudes towards individuals with mental illness using appropriate measuring instruments. The Revised Scale for Measuring Attitudes toward Mental Patients, developed according to the scale of the Summer School of Psychology Students in 2003, and the Scale of Knowledge on Mental Patients (SKMP) taken from the study by Jokić-Begić, Kamenov,*

Lauri Korajlija, 2005, were applied. Psychiatric personnel were found to have more knowledge on the characteristics of individuals with mental illness as well as treatment and the development of mental illness regarding psychiatric patients compared with non-health and non-health professionals, and in men only compared with non-health professionals. Non-health and health professionals, to a greater extent than psychiatric personnel, feel that direct contact with individuals with mental illness was desirable, except in men where no differences were found. The more educated respondents had greater knowledge about individuals with mental illness and largely believed that individuals with mental illness are able to work and participate in the society as well as that direct contact with them was desirable. Respondents with lower educational status were more likely to believe that psychiatric patients deserve respect and compassion as equal members of society. Significant differences were found between subjects with and without psychiatric heredity in relation to one aspect of the attitude. Respondents without psychiatric heredity believe that people with mental illness deserve more respect and compassion. The results provide the framework guidelines needed to design the process of destigmatization of psychiatric patients in the populations of health and non-health professionals as well as people of different levels of education, especially those who work with psychiatric patients or come into contact with them after hospitalization.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*
Ana Pavelić Tremac, klinički psiholog
Neuropsihijatrijska bolnica „Dr. Ivan Barbot"
Služba za psihodijagnostiku i psihološko liječenje
Jelengradska 1
44 317 Popovača, Hrvatska
Tel.: 044 569 307
E-pošta: ana.pavelic-tremac@bolnicapopovaca.hr

KLJUČNE RIJEČI / *KEY WORDS*:
Psihička bolest / Mental Illness
Stavovi / Attitudes
Zdravstveni i nezdravstveni djelatnici / Health and Non-health Professionals
Stigmatizacija / Stigmatization

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2020.301

UVOD

Svjetska zdravstvena organizacija izvijestila je da je otprilike 20-25 % svjetske populacije tijekom života bolovalo od mentalnog ili neuropsihijatrijskog poremećaja (1). Gotovo trećina odrasle populacije u Europi je tijekom 2017. doživjela neki oblik mentalne bolesti, a trećina te odrasle populacije je doživjela više od jednog problema mentalnog zdravlja ili zlouporabe sredstava ovisnosti (2). Kessler je sažeo rezultate Svjetske ankete mentalnog zdravlja (WMH) koju je provela Svjetska zdravstvena organizacija u 28 zemalja širom svijeta o prevalenciji i (ne)liječenju mentalnih poremeća-

INTRODUCTION

The World Health Organization (2001) reported that approximately 20-25% of the world population was affected by a mental or neuropsychiatric disorder at some time during their lives (1). Almost a third of the adult population in Europe during 2017 has experienced some form of mental illness, and a third of that adult population has experienced more than one mental health problem or substance abuse (2). Summarizing the World Health Organization results in the World Mental Health Survey (WMH) conducted in 28 countries around the world on prevalence and (non) treatment of

ja, koji su pokazali da se mentalni poremećaji prema DSM-IV (kombinacije anksioznih poremećaja i poremećaja raspoloženja, smetnji ponašanja i zloupotrebe supstanci) tijekom života pojavljuju s 18,1-36,1 % učestalosti (3). Unatoč tome, mentalna bolest ostaje jedno od najstigmatiziranijih ljudskih stanja (4). Stigma, odnosno skupina negativnih stavova i vjerovanja koja mogu dovesti do negativnih posljedica, poput negativnog etiketiranja, socijalne izolacije, smanjene mogućnosti zapošljavanja, otežanog dobivanja pomoći, općenito znatno ograničava mogućnosti mentalno oboljele osobe (5-8). Kod oboljele osobe zbog navedenih razloga može doći do pojave osjećaja odbačenosti, bespomoćnosti, besperspektivnosti te do niskog samopoštovanja i samopouzdanja. Stigmatizacija ima znatan utjecaj na mogućnost integracije mentalno oboljele osobe u svojoj socijalnoj zajednici (9,10), na njenu kvalitetu života (11,12) i na suradljivost bolesnika (13). Općenito se smatra da je stigma najveća prepreka kvaliteti života ljudi s mentalnim poremećajima i njihovih obitelji, čak i u većoj mjeri od same bolesti (14). Stigmatizacija bolesnika može biti povezana s relapsom bolesti i povećanom potrebom za hospitalizacijama (9), a može se povezati i s povećanim rizikom za suicid (15).

Istraživanja o stigmatizaciji mentalnih poremećaja provode se u različitim populacijama, najčešće u općoj populaciji, među mentalno bolesnim osobama i njihovim obiteljima te među zdravstvenim radnicima i stručnjacima (14,16-19). Brojna su istraživanja pokazala da je stigmatizacija pojedinaca s mentalnim poremećajima vrlo raširena i da mnoge sociokulturne zajednice imaju predrasude, tj. negativne stavove prema mentalnim bolesnicima (20) te da je stigmatizacija oboljelih od mentalnih poremećaja prisutna u različitim kulturama (21-24).

Istraživanja dosljedno pokazuju da su pružatelji zdravstvenih usluga skloni pesimističkim

mental disorders, Kessler estimated that mental disorders versus DSM-IV (combining anxiety, mood, disruptive behavior, and substance disorders) appear during the lifetime with a frequency of 18.1-36.1% (3).

Despite this, mental illness remains one of the most stigmatized human conditions (4). Stigma, i.e. a group of negative attitudes and beliefs that can lead to negative consequences, such as negative labelling, social isolation, reduced employment opportunities, and difficulty in obtaining help, generally significantly limits the possibilities of a person with mental illness (5-8). Due to the reasons listed above, a person with mental illness may experience feelings of rejection, helplessness, hopelessness, and low self-esteem and self-confidence. Stigmatization has a significant impact on the integration of a person with mental illness in their social community (9, 10), on their quality of life (11, 12), and on the cooperation of patients (13). It is generally considered that stigma represents the greatest obstacle to quality of life in people with mental disorders and their families, to an even greater extent than the disease itself (14). Patient stigmatization may be associated with relapse of the disease and an increased need for hospitalizations (9) and may also be associated with an increased risk of suicide (15).

Studies on stigmatization of mental disorders have been conducted in various populations, most commonly in the general population, among individuals with mental illness and their families, and among health professionals and experts (14, 16-19). Numerous studies have shown that stigmatization of individuals with mental disorders is very widespread and that many socio-cultural communities have prejudices and negative attitudes toward the mentally ill (20), and that stigmatization of people with mental disorders is present in different cultures (21-24).

Research has consistently demonstrated that healthcare providers tend to hold pessimistic

pogledima na stvarnost i vjerojatnosti oporavka što se doživljava kao izvor stigme i prepreka oporavku osobama koje traže pomoć u slučaju mentalnih bolesti (25-30).

Byrne je naglasio da se pojedinci s mentalnim poremećajima suočavaju s dva problema: samom bolesti kao primarnim problemom, a dodatni problem je sram te predrasude s kojima se suočavaju (31). Giorgianni navodi da se i u razvijenim i nerazvijenim zemljama stigmatizirani pojedinci osjećaju zarobljeni u osjećaju srama i inhibira ih neodobravanje društva do te mjere da značajno smanjuje njihovu kvalitetu života i ograničava mogućnost oporavka (32). Unatoč znatnim negativnim posljedicama, ako se ne liječe, utvrđeno je da manjina osoba s mentalnim smetnjama u većini zemalja dobiva liječenje i da ih još manje dobiva visoko kvalitetan tretman (3). Upravo se strah od predrasuda i stigme smatra glavnim razlogom zašto ljudi koji pate od mentalnih poremećaja ne traže stručnu pomoć ili ju traže sa značajnom odgodom (14).

Izraz stigma podrazumijeva tri osnovna problema: problem znanja (neznanje), problem stava (predrasude) i problem ponašanja (diskriminacija) (33). Danas se pojam stigmatizacije najčešće primjenjuje, istražuje i analizira u kontekstu (ne)znanja, stavova i posljedičnih socijalnih nedostataka pojedinaca s diskreditacijskim stanjem ili bolešću (14), u ovom slučaju mentalno bolesnih pojedinaca.

Jedan od najpoznatijih, Linkov i Phelanov teorijski koncept, objašnjava stigmatizaciju kao rezultat procesa kombiniranja pet međusobno povezanih sekvencijalnih komponenti: 1) označavanje (negativno označavanje na temelju različitosti, na primjer, prisutnost mentalnih bolesti), 2) stereotipizacija (povezivanje označenih razlika s drugim nepoželjnim karakteristikama, npr. pretpostavkom da je mentalno bolesna osoba sklona nasilničkom i nepredvidivom ponašanju), 3) odvajanje (po-

views about the reality and likelihood of recovery, which is experienced as a source of stigma and a barrier to recovery for people seeking help for mental illnesses (25-30). Byrne has further emphasized that individuals with mental disorders face two problems: the illness itself as a primary problem, and the shame and prejudice they face as an additional problem (31). Giorgianni states that both in developed and underdeveloped countries stigmatized individuals feel trapped in the sense of shame and are inhibited by the disapproval of society to such an extent that it significantly reduces their quality of life and limits the possibility of recovery (32).

Despite the significant negative consequences if untreated, it has been established that only a small minority of people with mental disorders receive treatment in most countries and that even fewer receive high-quality treatment (3). It is precisely the fear of prejudice and stigma that is considered to be the main reason why people suffering from mental disorders do not seek professional help or seek it with a significant delay (14).

The term stigma implies three basic problems: the problem of knowledge (ignorance), the problem of attitude (prejudice), and the behavioral problem (discrimination) (33). Today, the notion of stigmatization is most commonly used, investigated, and analysed in the context of (lack of) knowledge, attitudes, and consequent social deprivation of individuals with a discrediting condition or illness (14), in this case individuals with mental illness.

One of the most famous theoretical concepts advanced by Link and Phelan explains stigmatization as a result of a process of combining five interrelated sequential components: 1) labelling (negative marking based on diversity, for example on the presence of mental illness), 2) stereotyping (linking of labelled differences with other undesirable characteristics, for example the premise that a mentally ill individual is prone to violent and unpredictable behavior), 3) separa-

djela na „nas“ i „njih“ koja izaziva sumnjičavost i negativne emocije, npr. mentalno bolesni pojedinci odvojeni su od socijalne okoline) i 4) diskriminacija i gubitak statusa (nakon što je prethodna komponenta stvorila osnovu za njihovu devalvaciju, odbacivanje i isključivanje). Kao ključnu, petu komponentu, autori ističu ulogu moći, budući da pojedincima s manjom moći i utjecajem, poput psihijatrijskih bolesnika, nedostaje društvena, kulturna, ekonomska i politička moć da promijene odnos snage, primjerice u odnosu na medicinsko osoblje (34).

Stigma psihijatrijskih pacijenata najčešće podrazumijeva netočne i štetne prikaze o njima kao nasilnima, nesposobnima ili smiješnima, što može dovesti do toga da ljudi imaju izmijenjen pogled o sebi (35). „Osoba koja doživljava stigmatizirajuće stavove i ponašanja nesumnjivo će se osjećati diskreditiranom i obezvrijeđenom i vjerojatno će imati smanjenu sposobnost sudjelovanja ili osjećaja socijalne uključenosti” (36).

Pojedinac osjeća utjecaj stigme u izravnoj komunikaciji sa svojim neposrednim okruženjem, ali i drugim društvenim okruženjem: u obrazovnim ustanovama, zdravstvenom sustavu, na radnom mjestu, u pravnom sustavu i na razini institucija administracije i vlade (14). Iako bi zdravstveni radnici trebali imati značajnu ulogu u poštivanju prava pacijenata i razvijanju poštovanja i razumijevanja, mnogi pacijenti izvješćuju o prisutnosti stigme u zdravstvenom sustavu (28), što potvrđuju i rezultati istraživanja o stigmatizaciji mentalno oboljelih osoba od zdravstvenih radnika. Članovi obitelji mentalno oboljelih osoba (37,38) i profesionalci koji se bave duševnim zdravljem, osobito psihijatri, mogu biti i stigmatizirani, ali i stigmatizatori (39,40).

Posljedice stigmatizacije u zdravstvenom sustavu očituju se kasnim prepoznavanjem i dijagnosticiranjem bolesti i lošijim terapijskim učinkom. Smatra se da je stigmatizacija pru-

tion (division into “us” and “them” that causes suspiciousness and negative emotions, and, for example, causes individuals with mental illness to be separated from the social environment), and 4) discrimination and loss of status (after the above component had created the basis for their devaluation, rejection, and exclusion). As the fifth key component, the authors emphasize the role of power, since individuals with lower power and influence, such as psychiatric patients, lack social, cultural, economic, and political power to change power relationships, for example in relation to medical personnel (34).

Stigma of psychiatric patients most often implies inaccurate and hurtful representations of them as violent, incompetent, or comical, which can lead to people having an altered view of themselves (35). “A person experiencing stigmatizing attitudes and behaviours will undoubtedly feel discredited and devalued and is likely to have reduced ability to participate or feel socially included” (36).

An individual feels the impact of the stigma in direct communication with their immediate surroundings, but also in other social environments: in educational institutions, in the health care system, in the workplace, in the legal system, and at the level of the government institutions (14). Although healthcare professionals should play a significant role in respecting patient rights and developing respect and understanding, many patients report the presence of stigma within the health system (28), which is also confirmed by the results of research on stigmatization of individuals with mental illness by health professionals. Family members of people with mental illness (37, 38) and mental health professionals, especially psychiatrists, can be both stigmatizing and stigmatized (39, 40).

The consequences of stigmatization in the health care system manifest as late recognition and diagnosis of the disease and poorer therapeutic effect. Stigmatization among healthcare providers towards people with mental illness is

žatelja zdravstvenih usluga prema osobama s mentalnim bolestima prepreka učinkovitoj skrbi (28,32,41,42), dovodi i do nedostatnog pristupa njezi, do nedovoljnog liječenja (32,43,44), socijalne marginalizacije (45) i može narušiti odnos između pacijenta i pružatelja zdravstvenih usluga. Možda najvažnije, stigmatizirajući stavovi pružatelja zdravstvenih usluga vjerojatno će produbljivati i kompli cirati čovjekov osjećaj odbijanja i izolacije i biti prava prepreka pri dobivanju odgovarajuće skrbi (46).

Schulze (36) izvještava da se vjerovanja stručnjaka mentalnog zdravlja ne razlikuju od vjerovanja opće populacije. Istraživanje je pokazalo da su stavovi zdravstvenih radnika bili bolji od stavova opće populacije u pogledu psihijatrijskog liječenja i građanskih prava pacijenata, ali uglavnom su bili u skladu s negativnim stavovima opće populacije o stereotipima i socijalnoj distanci. Jedno je istraživanje pokazalo da se profesionalci za mentalno zdravlje, poput psihijatara, medicinskih sestara i psihologa, ne razlikuju od opće populacije u željenoj socijalnoj udaljenosti osoba s mentalnim poremećajem (47). Druga su istraživanja također došla do istih zaključaka (48). Osim toga, stavovi prema mentalno bolesnim osobama uvjetovani su osobnim znanjima o psihijatrijskoj bolesti, kulturnim stereotipima, medijskim slikama i znanjem o institucionalnoj praksi (49). Praktičari koji imaju najviše znanja o mentalnim bolestima uglavnom najmanje stigmatiziraju (50). Osobno iskustvo s osobama s mentalnom bolešću može dovesti do pozitivnijih stavova, iako ovo nije univerzalni nalaz (50).

Istraživanje u susjednoj Bosni i Hercegovini pokazalo je da stariji ljudi koji imaju niži stupanj znanja o psihijatrijskoj bolesti, nižeg su socioekonomskog statusa, niže razine obrazovanja i koji nemaju mentalno oboljelih osoba u svom okruženju, imaju više razine predrasuda prema psihički bolesnim osobama (51).

believed to present obstacles to effective caregiving (32, 41, 28, 42). It leads to a lack of access to care, under-treatment (32, 43, 44), and social marginalization (45), and can undermine the relationship between the patient and the provider. Perhaps most importantly, stigmatizing attitudes by health care providers are likely to compound a person's feelings of rejection and isolation and be a real barrier to receiving appropriate care (46).

Schulze (36) reports that the beliefs of mental health providers do not differ from those of the general public. The study found that attitudes of health professionals were better than the public with regard to psychiatric treatment and patient civil rights, but were generally in line with negative public views about stereotypes and social distance. One study found that mental health professionals such as psychiatrists, nurses, and psychologists did not differ from the public on desiring social distance from individuals with mental health conditions (47). Other studies have also come to similar conclusions (48).

In addition, attitudes towards persons with mental illness are conditioned by personal knowledge about psychiatric disease, cultural stereotypes, media images, and knowledge about institutional practice (49). Professionals with the most knowledge about mental illness are generally the least stigmatizing (50). Personal experience of those with mental illness may lead to more accepting attitudes, although this is not a universal finding (50).

Research in neighboring Bosnia and Herzegovina has shown that older people who have lower levels of knowledge about psychiatric disease, those from lower socio-economic status, with lower levels of education, and who do not have a person with mental illness in their environment have higher levels of prejudice towards persons with mental illness (51).

In one Croatian survey, 80% of the general adult population would accept socializing with the

U jednom našem istraživanju, na deklarativnoj razini, 80 % opće odrasle populacije prihvatilo bi druženje sa psihičkim bolesnikom, ali kad ih se direktno upitalo o socijalnoj intimnosti, gotovo ih 50 % ne bi prihvatilo psihičkog bolesnika čak ni kao susjeda. Pokazalo se i da što više ljudi znaju o psihičkoj bolesti, njihovi stavovi su pozitivniji i stupanj društvene prihvaćenosti je veći (52). Stavovi također ovise o vrsti psihičke bolesti, a najveća socijalna distanca pokazuje se prema osobama koje pate od shizofrenije i ovisnosti o drogama, dok je najniža prema onima koji pate od depresije, anksioznosti i PTSP-a. U jednom istraživanju odnos mladih u Hrvatskoj prema PTSP-u manje je povezan sa stigmom nego sa stavom prema shizofreniji (53). Istraživanje u Hrvatskoj (54) pokazalo je prisutnost predrasuda i stigmatizirajućih stavova shizofrenih bolesnika među liječnicima, medicinskim sestrama i tehničarima i studentima medicinskog fakulteta. Najčešći razlozi stigmatizirajućih stavova učenika i medicinskih sestara su strah i nedovoljno znanje, dok je visok postotak pozitivnih odgovora o njihovoj rehabilitaciji i resocijalizaciji. Liječnici su potvrdili strah, nepovjerenje i stigmatizirajuće stavove prema shizofrenim pacijentima koji su pronađeni i u općoj populaciji u Hrvatskoj.

S obzirom na važnost teme broj domaćih radova može se smatrati neprimjerenim jer problemu stigmatizacije mentalno oboljelih, posebice od strane zdravstvenog osoblja, treba obratiti osobitu pozornost kao i znanstvenim istraživanjima te odgovarajućim programima i aktivnostima usmjerenim na njihovo destigmatiziranje.

Prema gore navedenom, cilj ovog istraživanja je istražiti znanje i uvjerenja o psihijatrijskim pacijentima na odgovarajućem uzorku u Hrvatskoj, prema struci (zdravstveni i nezdravstveni stručnjaci i psihijatrijsko osoblje), razini obrazovanja i psihijatrijskom hereditetu u obitelji.

mentally ill on the declarative level, but when they were asked directly about social intimacy, almost 50% of them would not accept an individual with mental illness even as a neighbor. It has also been shown that as many people learn about the mentally ill, their attitudes become more positive and their degree of social acceptance is greater (52). Attitudes also depend on the type of mental illness, and greatest intensity of desire for social distance has been reported towards people suffering from schizophrenia and drug addictions, while the lowest levels were found towards those suffering from depression, anxiety, and PTSD. In one study, the relationship of young people in Croatia to PTSD was less related to stigma than the attitude towards schizophrenia (53). A further Croatian study (54) showed the presence of prejudices and stigmatizing attitudes of patients with schizophrenia among physicians, nurses, and technicians and medical faculty students. The most frequent reasons for stigmatizing attitudes of students and nurses are fear and insufficient knowledge, although a high percentage gave a positive answer about their rehabilitation and resocialization. Physicians have reported fear, mistrust and stigmatizing attitudes towards patients with schizophrenia that are found in the general population in Croatia.

Given the importance of the topic, the number of Croatian publications on it can be considered inadequate since the problem of stigmatization of patients with mental illness, in particular by health care personnel, should be afforded due attention in both scientific research and through appropriate programs and activities aimed at their destigmatization.

According to the above, the aim of this study was to explore knowledge and beliefs towards psychiatric patients on an appropriate sample in Croatia, according to profession (health and non-health professionals and psychiatric personnel), the level of education, and psychiatric heredity in the family.

ISPITANICI I METODE

Metodologija

Na uzorku od 243 ispitanika zaposlenika Neuropsihijatrijske bolnice „Dr. Ivan Barbot", DV „Proljeće" i SS „Ivan Švear" (namjerni uzorak zdravstvenog i nezdravstvenog osoblja te psihijatrijskog osoblja) anonimnim upitnikom ispitani su znanje i stavovi prema psihičkim bolesnicima primjerenim mjernim instrumentima. Svi su ispitanici upoznati sa svrhom ovoga istraživanja i dali su svoj pristanak za sudjelovanje.

Uzorak

Kao što se vidi iz tablice 1, u uzorku je bilo 68,6 % (166) žena i 31,4 % (76) muškaraca u dobi od 16 do 69 godina (M = 38,7, SD = 1,6).

S obzirom na sociodemografske karakteristike koje su nezavisne varijable u ovom istraživanju, uključeni su ispitanici različitih stupnjeva obrazovanja, zanimanja i psihijatrijskog herediteta u obitelji. S obzirom na vrstu zanimanja, 49,0 % (119) ispitanika je nezdravstvenog osoblja, 23,4 % (57) zdravstvenog osoblja, dok 27,6 % (67) ispitanika radi na psihijatriji. Ukupno 58,3 % (141) ispitanika

SUBJECTS AND METHODS

Method

Knowledge and attitudes towards persons with mental illness were tested using appropriate measuring instruments on a sample of 243 participants who were employees of the Dr. Ivan Barbot Neuropsychiatric Hospital, Proljeće kindergarten, and Ivan Švear secondary school (intentional sample of health and non-health professionals and psychiatric personnel). All respondents were familiarized with the goal of the study and gave their consent to participate.

Sample

As can be seen from the data in Table 1, the sample consisted of 68.6% (166) women and 31.4% (76) men in the age range of 16 to 69 years (M = 38.7, SD = 11.6).

Socio demographic characteristics represented independent variables in this study, and participants of different levels of education, occupational activity, and psychiatric heredity in the family were included. Regarding the type of occupation, 49.0% (119) of respondents belonged to non-medical professionals, 23.4% (57) to medical personnel, and 27.6% (67) of

TABLICA 1. Sociodemografski podatci ispitanika
TABLE 1. Socio-demographic characteristics of research participants

Sociodemografske karakteristike / Socio-demographic characteristics		f	%
Spol (16-69 god) / Gender (16-69 years)	ženski / female	166	68,6
	muški / male	76	31,4
Zanimanje / Occupation	nezdravstveno osoblje / non-health professionals	119	49,0
	zdravstveno osoblje / health personnel	57	23,4
	psihijatrijsko osoblje / psychiatric personnel	67	27,6
Obrazovanje / Education	osnovno, srednjoškolsko / elementary, secondary	141	58,3
	VŠS, bacc. / higher, B. Acc.	53	21,9
	VSS, mr.sc., dr.sc. / high, MSc, PhD	48	19,8
Psihijatrijski hereditet / Psychiatric heredity	da / yes	54	22,3
	ne / no	188	77,7

Legenda: Missing vrijednosti nisu uključene u izračun postotka / Legend: Missing values are not included in the percentage calculation

ima osnovno ili srednje obrazovanje, 21,9 % (53) više ili bacc., a 19,8 % (48) ima visoko obrazovanje ili titulu mr. sc./dr. sc. Pozitivan psihijatrijski hereditet u obitelji ima 22,3 % (54) ispitanika.

Instrumenti

Ljestvica stavova

Stavovi su ispitani korištenjem revidirane ljestvice za mjerenje stavova prema psihičkim bolesnicima (SSPP) izrađene prema ljestvici Ljetne škole studenata psihologije 2003. (55) koja se bavila problemom stigmatizacije psihičkih bolesnika, ovisnika o drogama, alkoholičara, homoseksualaca i tjelesnih invalida. Ljestvica se sastoji od 25 tvrdnji. Za svaku tvrdnju, ispitanik je na ljestvici od pet stupnjeva označio u kojoj se mjeri tvrdnja odnosi na njega. Označavanje broja 1 znači „to se na mene uopće ne odnosi“, a broja 5 znači „odnosi se na mene u potpunosti“. Ukupni stav prema psihičkim bolesnicima dobiva se zbrajanjem svih odgovora i u tu svrhu se pojedine (negativno formulirane) tvrdnje rekodiraju tako da viši ukupni rezultat znači pozitivniji odnos prema psihički bolesnim osobama. Ukupni rezultat mogao se kretati od 25 do 125.

Ljestvica znanja

Ljestvica znanja o psihičkim bolesnicima (SZPB) preuzeta je iz istraživanja Jokić-Begić, Kamenov, Lauri Korajlija, 2005. (52). Sastoji se od pet tvrdnji na koje su ispitanici odgovarali s „točno“ ili „netočno“, korištena je za ispitivanje njihovog znanja o karakteristikama mentalno oboljelih pojedinaca, liječenju te o nastanku mentalnih bolesti. Netočni odgovori su šifrirani s 1, a točni s 2 boda, tako da je ukupni rezultat mogao varirati od 5 do 10.

Na kraju upitnika ispitanici su odgovorili na nekoliko pitanja o sebi: dob, spol, stručna sprema, zanimanje, bračni status i psihijatrijski hereditet.

respondents worked in psychiatry. A total of 58.3% (141) of respondents had elementary and secondary education, 21.9% (53) higher or B. Acc., and 19.8% (48) had high education or a title of MSc/PhD. Psychiatric family heredity was present in 22.3% (54) respondents.

Instruments

Attitude scale

Attitudes were examined using the revised Scale for Measuring Attitudes towards Psychiatric Patients (SAPP) constructed according to the Summer School for Psychology Students 2003 (55), which deals with the problem of stigmatization of psychiatric patients, drug addicts, alcoholics, homosexuals, and physically disabled. The scale consists of 25 statements. For each statement, the participant indicated on a five-degree scale the extent to which the claim relates to them. A grade of 1 meant “it does not apply to me at all”, and grade 5 meant “it applies to me completely”. The overall attitude towards patients with mental illness was obtained as a sum of all responses, and individual (negatively formulated) claims were converted so that a larger overall score indicated a more positive attitude towards individuals with mental illness. The total score ranged from 25 to 125.

Knowledge scale

The Scale of Knowledge on Psychiatric Patients (SKPP) was taken from the study by Jokić-Begić, Kamenov, Lauri Korajlija, 2005 (52). It has five statements which participants graded as “correct” or “incorrect”, which was used to test their knowledge on the characteristics of the treatment of individuals with mental illness and the development of mental illness. Incorrect answers are scored with 1 and correct answers with 2 points, so that the total score can vary from 5 to 10.

At the end of the questionnaire, the respondents answered several questions about them-

tet, odnosno je li netko iz obitelji bolovao ili boluje od mentalnog poremećaja.

Statističke analize

Sve statističke analize provedene su korištenjem statističkog paketa IBM SPSS 24.0. Kao mjera interne konzistencije (pouzdanosti) upitnika Ljestvice za ispitivanje stavova prema psihičkim bolesnicima (SSPB) i Ljestvice znanja o psihičkim bolesnicima (SZPB) korišten je Cronbachov koeficijent alfa. Faktorskom analizom (metoda glavnih komponenti, Varimax rotacija, s prethodno provedenim Bartlettovim i Kaiser-Meyer-Olkinovim testom) utvrđene su latentne dimenzije koje reprezentiraju prostor definiran česticama upitnika. Za utvrđivanje razlika u znanju i stavovima o mentalno bolesnim osobama s obzirom na vrstu zanimanja i stupanj obrazovanja korištena je jednosmjerna analiza varijance (ANOVA). *Post hoc* test korišten za daljnje usporedbe bio je Scheffeov test. Nezavisnim t-testom ispitane su razlike u znanju i stavovima o mentalnim bolesnicima između ispitanika s različitim psihijatrijskim hereditetom. Razina statističke značajnosti bila je ,05, što je uobičajeno za istraživanja u društvenim znanostima.

selves: age, gender, education, occupation, marital status, and psychiatric heredity, i.e. whether someone in the family had or is suffering from a mental disorder.

Statistical analysis

All statistical analyses were performed using the IBM SPSS 24.0 statistical package. Cronbach's alpha coefficient was used as a measure of internal consistency (reliability) of the questionnaires, the Scale for Measuring Attitudes towards Psychiatric Patients (SAPP) and Scale of Knowledge on Psychiatric Patients (SKPP). Factor analysis (principal component method, Varimax rotation, with previously performed Bartlett and Kaiser-Meyer-Olkins test) determined latent dimensions representing the area defined by questionnaire items. One-way analysis of variance (ANOVA) was used to determine differences in knowledge and attitudes about persons with mental illness with regard to the type of occupation and degree of education. Scheffe's test was the post hoc test used for further comparisons. Independent samples t-test was used to investigate differences in knowledge and attitudes about psychiatric patients between participants with different psychiatric heredity. The level of statistical significance was .05, which is standard for studies carried out in social sciences.

REZULTATI

Za primijenjenu revidiranu Ljestvicu za ispitivanje stavova prema psihičkim bolesnicima (SSPB) analizirana je latentna struktura i provjerena pouzdanost za svaku od utvrđenih glavnih komponenti (faktora), što je prikazano u tablici 2.

Rezultati Kaiser-Meyer-Olkinove mjere te Bartletovog testa sfericiteta pokazuju da je matrica korelacija između čestica SSPB pogodna za faktorizaciju. Primjenom Kaiser-Guttmanova te *Scree Plot* kriterija pokazalo se da kovarijacije čestica SSPB mogu najbolje objasniti četiri

RESULTS

The latent structure and verified reliability for each of the identified main components (factors), as shown in Table 2, were analysed for the revised Scale for Measuring Attitudes towards Psychiatric Patients (SAPP).

The results of Kaiser-Meyer-Olkin's Measure and Bartlet's Test of Sphericity show that the matrix of correlations between SAPP items was suitable for factorization. Using Kaiser-Guttman's and Scree Plot criteria, it was found that covariates of SAPP items can best illustrate the four main components (factors): F1 = able to work

TABLICA 2. Latentna struktura revidirane Ljestvice za ispitivanje stavova prema psihičkim bolesnicima (SSPB) uz pripadnu pouzdanost (metoda glavnih komponenti, varimax rotacija) (svi ispitanici)
TABLE 2. Latent structure of the revised Scale for Measuring Attitudes towards Psychiatric Patients (SAPP) with appropriate reliability (main component method, varimax rotation) (all participants)

R.br. / No	Čestice / Items	Komponente / Components				Komunaliteti / Communalities
		F1	F2	F3	F4	
22.	PB ne bi smjeli konkurirati na radna mjesta za normalne osobe / Individuals with MI should not compete for workplaces for normal individuals	,732				,550
23.	PB isključivo je mjesto u bolnici / Individuals with MI have to be committed to hospital	,706				,566
25.	Smatram da PB ne bi trebali imati djecu / I believe that individuals with MI should not have children	,652				,437
24.	PB nisu sposobni raditi niti jedan posao / Individuals with MI are not capable of performing any profession	,616				,503
21.	PB iskorištavaju svoj položaj / Individuals with MI exploit their position	,568				,347
20.	Način na koji se ponašaju PB razdražuje / The manner in which individuals with MI behave is irritating	,493				,314
11.	Nikada nisi siguran u društvu PB / People are not safe in a company of individuals with MI	,460				,347
10.	Ako je netko PB, treba se truditi da to sakrije / If someone is an individual with MI, he/she should try to hide it	,410				,336
16.	Kad vidim PB osjetim nelagodu / When I see an individual with MI, I feel discomfort	,393			-,371	,391
14.	Netko može biti PB, a ujedno i dobar čovjek / Someone can be an individual with MI and be a good person		,782			,633
9.	Poštujem PB kao ljude / I respect individuals with MI as people		,773			,630
15.	Mogu razumjeti PB / I can understand individuals with MI		,676			,525
19.	PB su jednako vrijedni kao i ostali / Individuals with MI are just as valuable as other individuals are		,666			,463
8.	Dobro je što se PB bore za svoja prava / It is good that individuals with MI fight for their rights		,577			,460
12.	PB osoba u meni pobuđuje sažaljenje / Individuals with MI excite compassion in me		,491			,386
13.	Imam vrlo negativno mišljenje o PB / I have a very negative opinion about individuals with MI			,761		,626
7.	Kada bih za nekog poznanika saznao da je postao PB, počeo bih ga izbjegavati / If I found out that one of my acquaintances had MI, I would avoid him/her			,749		,597
4.	Prema PB osjećam ljutnju / I feel anger towards individuals with MI			,666		,452
6.	PB bi trebalo izbjegavati / Individuals with MI should be avoided			,638		,575
18.	Bilo kakvo druženje s PB ne dolazi u obzir / Any kind of socializing with individuals with MI is out of the question			,534		,443
5.	Bojim se PB / I am afraid of individuals with MI			,462	-,376	,464
17.	PB ne zaslužuju brigu društva / Individuals with MI do not deserve the care of society			,453		,378
3.	Ugodno se osjećam u društvu PB / I feel comfortable in the company of individuals with MI				,731	,550
2.	Zaposlio bih PB u svojoj firmi / I would hire an individual with MI in my company				,661	,474
1.	S PB bih samoinicijativno stupio u kontakt / I would initiate a contact with an individual with MI				,655	,447
	Pouzdanost (Cronbachov alfa) / Reliability (Cronbach's alpha)	0,775	0,767	0,788	0,600	
	Svojstvena vrijednost / Eigenvalue	3,416	3,205	3,195	2,072	
	Objašnjena varijanca (%) / Variance Explained (%)	13,666	12,821	12,778	8,290	
	KMO mjera / Kaiser-Meyer-Olkin Measure	,787				
	Bartlettov test sfericiteta (df=300) / Bartlett's Test of Sphericity (df=300)	1736,505 (p<0,001)				

Legenda: podebljano – rekodirane čestice; PB – psihički bolesnik / Legend: bold – converted items; MI - mentally ill

glavne komponente (faktora): F1= sposobni za rad i sudjelovanje u društvu; F2 = zavrjeđuju uvažavanje i suosjećanje; F3 = ne zaslužuju negativan odnos niti izbjegavanje; F4 = poželjni u neposrednom kontaktu. Svi faktori zajedno tumače 48 % ukupne varijance, uz pouzdanost koja varira u rasponu od relativno niske za F4 (0,60) do visoke za F1, F2 i F3 (0,78, 0,77 i 0,79). Također je analizirana latentna struktura i provjerena pouzdanost Ljestvice znanja o psihičkim bolesnicima (SZPB), što je prikazano u tablici 3.

Iz tablice 3 je razvidno da je pouzdanost Ljestvice (*Cronbach's alpha*) na razini relativno nižih vrijednosti (0,61 kod svih ispitanika, 0,63 kod muškaraca i 0,61 kod žena).

U tablici 4. prikazana je analiza razlika u stavovima o psihički bolesnim osobama s obzirom na vrstu zanimanja (ANOVA). Nađena je samo jedna statistički značajna razlika (u daljnjem tekstu M_{raz}) u aspektu stigme psihičkih bolesnika, između ispitanika s obzirom na vrstu zanimanja i svih ispitanika. Ispitanici koji imaju stav da je izravan socijalni kontakt sa psihič-

and participate in society; F2 = deserve respect and compassion; F3 = do not deserve a negative attitude and avoidance; F4 = desirable in direct contact. All factors together account for 48% of the total variance, with reliability ranging from relatively low for F4 (0.60) to high for F1, F2, and F3 (0.78, 0.77, and 0.79, respectively).

The latent structure and the verified reliability of the Scale of Knowledge on Psychiatric Patients (SKPP) were also analysed, as shown in Table 3.

Table 3 shows that the reliability of the Scale (Cronbach's alpha) was relatively low (0.61 in all participants, 0.63 in men and 0.61 in women).

Table 4 shows the analysis of differences in attitudes towards individuals with mental illness with regard to the type of occupation (ANOVA). There was only one statistically significant difference (hereafter denoted as M_{diff}) in the aspects for the stigma towards psychiatric patients between the participants engaged in different types of vocations and all the participants. Participants who have the attitude that direct social contact with psychiatric patients is desirable were more likely to be members of

TABLICA 3. Latentna struktura Ljestvice znanja o psihičkim bolesnicima (SZPB) uz pripadnu pouzdanost (metoda glavnih komponenti)
TABLE 3. Latent Structure of the Scale of Knowledge on Psychiatric Patients (SKPP) with Reliability (Principal Component Method)

R.br. / No	Čestice / Items	Svi ispitanici / All participants		Muškarci / Men		Žene / Women	
		r	h^2	r	h^2	r	h^2
1.	Zajednička karakteristika PB je da nisu svjesni svojih postupaka. / The common characteristic of individuals with MI is that they are unaware of their actions.	,541	,292	,509	,259	,550	,302
2.	PB su agresivni i opasni za okolinu. / Individuals with MI are aggressive and dangerous to the environment.	,586	,343	,679	,461	,534	,286
3.	Roditelji pravilnim odgojnim postupcima u potpunosti mogu spriječiti pojavu PB kod djece. / Parents with proper upbringing can completely prevent the occurrence of MI in children.	,699	,488	,741	,549	,699	,489
4.	Sve se PB mogu liječiti razumijevanjem i razgovorom. / All MI can be cured by understanding and talking	,650	,422	,721	,520	,618	,382
5.	Svaki PB mora se liječiti u bolnici. / Every individual with MI must be treated in a hospital.	,670	,449	,539	,291	,722	,522
	Pouzdanost (Cronbach's alpha) / Reliability (Cronbach's alpha)	0,614		0,632		0,609	
	Svojstvena vrijednost / objašnjena varijanca (%) / Eigenvalue / Variance exp. (%)	1,995 / 39,895		2,079 / 41,571		1,981 / 39,620	
	KMO / Bartlett's Test (df=10) / KMO / Bartlett's Test (df=10)	,690 / 122,144**		,658 / 49,885**		,677 / 83,391**	

Legenda: PB – psihički bolesnik; r – korelacija varijable s faktorom; h^2 – komunalitet; ** p<0,001 / Legend: MI - mentally ill; r –variable with factor correlation; h^2-communality; ** p <0.001

TABLICA 4. Razlike u aspektima stigme psihičkih bolesnika kod ispitanika s obzirom na vrstu zanimanja
TABLE 4. Differences in the aspects of the stigma towards psychiatric patients among participants engaged in different types of vocations

Faktori/aspekti stigme / Factors/aspects for the stigma	Zanimanje / Vocation	Svi ispitanici / All participants			Muškarci / Men			Žene / Women		
		M	SD	F (df= 2, 213)	M	SD	F (df= 2, 67)	M	SD	F (df= 2, 142)
Sposobni za rad i sudjelovanje u društvu / Able to work and participate in social activities	nezdravstveno osoblje / non-health professionals	0,058	1,016	0,431	0,159	0,970	0,670	-0,030	1,055	0,095
	zdravstveno osoblje / health personnel	-0,038	0,894		0,728	0,883		-0,092	0,880	
	psihijatrijsko osoblje / psychiatric personnel	-0,086	1,057		0,000	1,095		-0,113	1,069	
Zavrjeđuju uvažavanje i suosjećanje / Deserve respect and compassion	nezdravstveno osoblje / non-health professionals	-0,052	1,064	0,779	0,050	1,001	1,547	-0,140	1,117	0,626
	zdravstveno osoblje / health personnel	-0,047	0,910		-0,733	0,367		0,001	0,919	
	psihijatrijsko osoblje / psychiatric personnel	0,144	0,937		0,298	0,657		0,087	1,026	
Ne zaslužuju negativan odnos niti izbjegavanje / Do not deserve a negative attitude and avoidance	nezdravstveno osoblje / non-health professionals	-0,022	1,023	0,205	-0,003	0,850	0,130	-0,039	1,158	0,143
	zdravstveno osoblje / health personnel	-0,034	0,979		-0,164	0,110		-0,025	1,012	
	psihijatrijsko osoblje / psychiatric personnel	0,074	0,984		0,087	0,849		0,073	1,048	
Poželjni u neposrednom kontaktu / Desirable in direct contact	nezdravstveno osoblje / non-health professionals	0,167	0,949	**7,739****	0,069	0,910	2,224	0,252	0,981	**6,452****
	zdravstveno osoblje / health personnel	0,107	0,934		0,411	1,290		0,086	0,921	
	psihijatrijsko osoblje / psychiatric personnel	-0,427	1,045		-0,453	0,781		-0,462	1,106	

Legenda: F = vrijednost ANOVA-e / Legend: F = value of ANOVA statistics;, * p < ,05; ** p < ,01

kim bolesnicima poželjan vjerojatnije pripadaju zdravstvenom i nezdravstvenom osoblju, u usporedbi sa psihijatrijskim osobljem. Rezultati *post-hoc* testa pokazali su da psihijatrijsko osoblje ima statistički značajno više negativnih stavova u ovom aspektu u usporedbi sa zdravstvenim (M_{raz}= -0,535, p<,05) i nezdravstvenim osobljem (M_{raz} = -0,594, p<,01).

Postoji samo jedna statistički značajna razlika između ispitanika s obzirom na vrstu zanimanja za stigmu psihičkih bolesnika i to kod žena. Žene koje imaju stav da izravni socijalni kontakt sa psihičkim bolesnicima nije poželjan češće su članovi psihijatrijskog osoblja. Scheffeov test pokazao je da psihijatrijsko osoblje ima statistički značajno više negativnih stavova prema ovom aspektu u odnosu na zdravstveno (M_{raz} = -0,548, p<,05) i nezdravstveno osoblje (M_{raz} = -0,714, p<,01).

health and non-health professions, if compared with psychiatric personnel. The results of the Post Hoc Test revealed that members of the psychiatric personnel had statistically significant more negative attitudes in to this aspect compared with health (M_{diff} = -0.535, p<.05) and non-health professions M_{diff} = -0.594, p<.01).

In women, there was only one statistically significant difference between the participants in different types of vocations regarding the stigma towards psychiatric patients. Women who had the attitude that direct social contact with psychiatric patients was not desirable were more likely to be members of psychiatric personnel. Scheffe's test revealed that psychiatric personnel had statistically significant more negative attitudes in this aspect compared with members of health (M_{diff} = -0.548, p<.05) and non-health professions (M_{diff} = -0.714, p<.01).

U uzorku muškaraca nijedna od razlika nije bila statistički značajna. Drugim riječima, sve tri skupine ispitanika imaju sličan odnos prema psihičkim bolesnicima.

S obzirom na znanje o tipičnim karakteristikama osoba sa psihičkim poremećajima i njihovom liječenju, na temelju ANOVA rezultata prikazanih u tablici 5, dobivene su statistički značajne razlike između ispitanika različitih vrsta zanimanja kod svih ispitanika, i muškaraca i žena. Kod svih ispitanika je Scheffeov test dao statistički značajne rezultate i pokazao da psihijatrijsko osoblje ima veće znanje u usporedbi sa zdravstvenim (M_{raz} = 1,098, p<,001) i nezdravstvenim osobljem (M_{raz} = 1,100, p<,001). Slični (statistički značajni) rezultati dobiveni su za žene: psihijatrijsko osoblje imalo je veće znanje od nezdravstvenog (M_{raz} = 1,168, p<,001) i zdravstvenog osoblja (M_{raz}= 1,183, p<,001). Međutim, kod muškaraca se pokazalo da postoji statistički značajna razlika između psihijatrijskog i nezdravstvenog osoblja u količini njihovog znanja o psihijatrijskim bolestima i njihovom liječenju. Psihijatrijsko osoblje ima više znanja u odnosu na nezdravstveno osoblje (M_{raz} = 1,006, p<,05).

Na temelju ANOVA rezultata prikazanih u tablici 6 nađene su statistički značajne razlike između ispitanika različitih obrazovnih razina u odnosu na tri od ukupno četiri aspekta stigme psihičkih bolesnika: sposobni za rad i sudjelovanje u društvu, zavrjeđuju uvažavanje i suosjećanje, i poželjni u neposrednom kontaktu. I kod

In men, none of the differences were statistically significant. In other words, all three groups of participants had similar attitudes towards people with psychiatric diseases.

With respect to knowledge about the typical characteristics of persons with psychiatric disorders and their treatment, based on ANOVA results shown in Table 5, statistically significant differences were found between the participants engaged in different types of vocations in all participants, in both men and in women. In all the participants, Scheffe's test yielded statistically significant results and revealed that psychiatric personnel had greater knowledge when compared to health (M_{diff} = 1.098, p<.001) and non-health professionals (M_{diff} = 1.100, p<.001). Similar (statistically significant) results were obtained for women: psychiatric personnel had more knowledge than non-health (M_{diff} = 1.168, p<.001) and health professionals (M_{diff} = 1.183, p<.001). However, in men there was a statistically significant difference between psychiatric and non-health personnel in their knowledge about psychiatric diseases and their treatment. Psychiatric personnel had more knowledge compared with the group of non-health professionals (M_{diff} = 1.006, p<.05).

Based on the ANOVA results shown in Table 6, there were statistically significant differences between participants with different educational levels with respect to three out of four aspects of the stigma of psychiatric patients: able to work and participate in society, deserve respect

TABLICA 5. Razlike u znanju o psihičkim bolesnicima pojedincima kod ispitanika s obzirom na vrstu zanimanja
TABLE 5. Differences in the knowledge on mentally ill individuals among participants from different professions

Zanimanje / Profession	Svi ispitanici / All participants			Muškarci / Men			Žene / Women		
	M	SD	F (df= 2, 232)	M	SD	F (df= 2, 73)	M	SD	F (df= 2, 155)
Nezdravstveno osoblje / non-health professionals	8,424	1,411	**17,872****	8,464	1,427	**4,135***	8,387	1,407	**14,862****
Zdravstveno osoblje / health personnel	8,426	1,283		9,333	0,577		8,373	1,296	
Psihijatrijsko osoblje / psychiatric personnel	9,524	0,820		9,471	0,943		9,556	0,785	

Legenda: F = vrijednost ANOVA-e / Legend: F = value of ANOVA statistics, * p < ,05; ** p < ,01

TABLICA 6. Razlike u aspektima stigme psihičkih bolesnika između ispitanika s obzirom na razinu obrazovanja
TABLE 6. Differences in the aspects of the stigma towards psychiatric patients among participants with different education levels

Faktori/aspekti stigme / Factors/ aspects for the stigma	Obrazovanje / Education	Svi ispitanici / All participants			Muškarci / Men			Žene / Women		
		M	SD	F (df= 2, 212)	M	SD	F (df= 2, 67)	M	SD	F (df= 2, 142)
Sposobni za rad i sudjelovanje u društvu / Able to work and participate in social activities	osnovna i srednja škola / elementary and secondary school	-0,259	0,950	**9,930*** **	-0,168	0,955	**7,298** **	-0,300	0,951	**5,944** **
	dodiplomska diploma / undergraduate degree	0,309	1,010		1,081	0,758		0,126	0,983	
	sveučilišna diploma / university degree	0,350	0,947		0,296	0,882		0,403	1,025	
Zavrjeđuju uvažavanje i suosjećanje / Deserve respect and compassion	osnovna i srednja škola / elementary and secondary school	0,216	1,081	**7,680** **	0,366	1,049	**5,561** **	0,149	1,094	**3,486***
	dodiplomska diploma / undergraduate degree	-0,141	0,865		0,087	0,951		-0,195	0,848	
	sveučilišna diploma / university degree	-0,408	0,758		-0,404	0,473		-0,412	0,974	
Ne zaslužuju negativan odnos niti izbjegavanje / Do not deserve a negative attitude and avoidance	osnovna i srednja škola / elementary and secondary school	0,069	1,017	0,923	-0,014	0,920	0,125	0,106	1,061	1,051
	dodiplomska diploma / undergraduate degree	-0,165	1,047		-0,073	0,726		-0,187	1,116	
	sveučilišna diploma / university degree	-0,008	0,919		0,072	0,732		-0,089	1,085	
Poželjni u neposrednom kontaktu / Desirable in direct contact	osnovna i srednja škola / elementary and secondary school	-0,016	1,016	**4,243***	-0,216	0,807	2,722	0,073	1,089	2,989
	dodiplomska diploma / undergraduate degree	-0,290	0,997		-0,134	1,012		-0,328	1,004	
	sveučilišna diploma / university degree	0,296	0,879		0,323	0,978		0,270	0,789	

Legenda: F = vrijednost ANOVA-e / Legend: F = value of ANOVA statistics, * p<,05; ** p<,01; *** p<,001

muškaraca i kod žena utvrđene su statistički značajne razlike za dva (od četiri) aspekta stigme psihijatrijskih bolesnika: sposobni za rad i sudjelovanje u društvu, kao i zavrjeđuju uvažavanje i suosjećanje.

Scheffeov test pokazao je da svi ispitanici koji imaju sveučilišnu ili dodiplomsku diplomu izražavaju pozitivnije stavove prema osobama sa psihičkim poremećajima od onih koji su završili samo osnovnu ili srednju školu (M_{raz} = 0,659, M_{raz} = 0,568, obje p<0,01). Te razlike su kod žena bile značajne samo za ispitanice sa sveučilišnom diplomom i one koje su završile osnovnu ili srednju školu (M_{raz} = 0,703, p<,01). Kod muškaraca, ispitanici s diplomom pokazali su pozitivnije stavove od onih s osnovnom ili srednjom školom (M_{raz} = 1,249, p<,01).

and compassion, and desirable in direct contact. In both men and women, statistically significant differences were found for two (out of four) aspects of the stigma towards psychiatric patients: able to work and participate in society as well as deserving respect and compassion.

Scheffe's test showed that all participants who had some university or undergraduate degree expressed more positive attitudes towards people with mental disorders than those who completed elementary or secondary school only (M_{diff} = 0.609, M_{diff} = 0.568, respectively, for both of them p<.01). In women, these differences were significant only among participants with a university degree and those who completed elementary or secondary school (M_{diff} = 0.703, p<.01). In men, participants with

Što se tiče aspekta stigme "zavrjeđuju uvažavanje i suosjećanje", *post-hoc* test je pokazao da su ispitanici s akademskom diplomom imali negativnije stavove od ispitanika koji su završili osnovnu ili srednju školu (M_{raz} = -0,624, p <,01). Sličan obrazac je dobiven kod muškaraca (M_{raz} = -0,770, p <,01). Kod žena je statistička značajnost ove razlike bila blizu razine 0,05 (M_{raz} = -0,561, p = ,06).

Što se tiče aspekta stigme "poželjni u neposrednom kontaktu", Scheffeov test pokazao je da ispitanici sa sveučilišnim diplomama izražavaju pozitivnije stavove od ljudi s dodiplomskim diplomama (M_{raz}= -0,587, p <,05).

Na temelju rezultata ANOVA-e prikazanih u tablici 7, jasno je da postoje statistički značajne razlike u znanju o osobama sa psihičkim poremećajima s obzirom na razinu obrazovanja ispitanika.

Scheffeov test pokazao je da su ispitanici s preddiplomskom ili sveučilišnom diplomom imali više znanja o ovoj kategoriji ljudi u usporedbi s onima s osnovnom i srednjom školom. Svi su rezultati bili statistički značajni: M_{raz} = 0,795, p <,01 (dodiplomska razina u odnosu na osnovnu / srednju školu na cijelom uzorku), M_{raz} = 0,695, p <,01 (sveučilišna razina u odnosu na osnovnu / srednju školu na cijelom uzorku), M_{raz} = 1,346, p <,05 (dodiplomski stupanj u odnosu na osnovnu / srednju školu u skupini muškaraca) i M_{raz} = 1,124, p <,01 (sveučilišna razina u odnosu na osnovnu / srednju školu u skupini

an undergraduate degree showed more positive attitudes than those with either elementary or secondary school (M_{diff} = 1.249, p<.01).

As for "deserve respect and compassion", the post hoc test revealed that participants with an academic degree had more negative attitudes than participants who finished either elementary or secondary school M_{diff} = -0.624, p<.01). A similar pattern of data was found in men (M_{diff} = -0.770, p<.01). In women, the statistical significance of this difference was close to .05 (M_{diff} = -0.561, p = .06).

As for "desirable in direct contact", Scheffe's test showed that people with an university degree express more positive attitudes than people with an undergraduate degree (M_{diff} = -0.587, p<.05).

Based on the ANOVA results shown in Table 7, it is clear that there were statistically significant differences in knowledge about people with psychiatric disorders based on the participants' level of education. Scheffe's test revealed that participants with an undergraduate or university degree had more knowledge about this category of people compared with those with elementary and secondary school. All findings were statistically significant: M_{diff} = 0.795, p<.01 (undergraduate level vs. elementary / secondary school on the whole sample), M_{diff} = 0.695, p<.01 (university level vs. elementary / secondary school on the whole sample), M_{diff} = 1.346, p<.05 (undergraduate level vs. elementary / secondary school in men), and M_{diff} = 1.124, p<.01 (university level vs.

TABLICA 7. Razlike u znanju o psihičkim bolesnicima između ispitanika u odnosu na razinu obrazovanja
TABLE 7. Differences in knowledge about psychiatric patients among participants with different education levels

Razina obrazovanja / Education level	Svi ispitanici / All participants			Muškarci / Men			Žene / Women		
	M	SD	F (df= 2, 232)	M	SD	F (df= 2, 73)	M	SD	F (df= 2, 155)
Osnovna i srednja škola / Elementary and secondary school	8,409	1,443	**9,537*** **	8,209	1,505	**8,443** **	8,500	1,412	**3,423***
Dodiplomska diploma / Undergraduate degree	9,204	1,118		9,556	0,726		9,125	1,181	
Sveučilišna diploma / University degree	9,104	0,951		9,333	0,817		8,875	1,035	

Legenda: F = vrijednost ANOVA-e / Legend: F = value of ANOVA statistics, * p < ,05; ** p < ,01; *** p <,001

muškaraca). Kod žena je statistički značajna razlika utvrđena samo u usporedbi ispitanica s preddiplomskom razinom s onima s osnovnom ili srednjom školom (M_{raz} = 0,625, p <,05).

Što se tiče stavova prema osobama sa psihičkom bolešću u cijelom uzorku, t-test je pokazao statistički značajne razlike između ispitanika sa psihijatrijskim hereditetom i bez psihijatrijskog herediteta u odnosu na jedan od aspekata stava. Prema našim ispitanicima bez psihijatrijskog herediteta osobe sa psihičkom bolesti zaslužuju više poštovanja i suosjećanja, u usporedbi s ispitanicima s pozitivnim psihijatrijskim hereditetom [(t (213) = -2,985, p <,01)]. Slični nalazi dobiveni su kod žena [(t (143) = -2,743, p <,01)], što je dovelo do istog zaključka. Razlike s obzirom na psihijatrijski heredi-tet nisu bile statistički značajne ni u cijelom uzorku ni kod žena za ostale aspekte stigme. S druge strane, nijedna od razlika za pojedine aspekte stigme nije bila statistički značajna kod muškaraca.

elementary / secondary school in men). In women, a statistically significant difference was found only when participants with an undergraduate grade were compared with those with elementary or secondary school (M_{diff} = 0.625, p<.05).

Regarding the attitudes towards people with psychiatric disease(s) in the whole sample, the t-test showed statistically significant differences between participants with and without psychiatric heredity in their families, with respect to one of the attitude aspects. According to the responses of participants without psychiatric heredity, people with psychiatric disease(s) deserve more respect and compassion, compared with the responses of participants who had such heredity (*t* (213) = -2.985, p<.01). Similar findings were obtained in women (*t* (143) = -2.743, *p*<.01), leading to the same conclusion. The differences in psychiatric heredity were not statistically significant neither in total participants nor in women. On the other hand, none of the differences was statistically significant in men.

TABLICA 8. Razlike u znanju i stavovima o psihičkim bolesnicima kod ispitanika s različitim psihijatrijskim hereditetom
TABLE 8. Differences in knowledge and attitudes about psychiatric patients among participants with different psychiatric heredity

Faktori/aspekti stigme / Factors/ aspects for the stigma	Psihijatrijski hereditet / Psychiatric heredity	Svi ispitanici / All participants			Muškarci / Men			Žene / Women		
		M	SD	t-test (df=213)	M	SD	t-test (df=67)	M	SD	t-test (df=143)
Sposobni za rad i sudjelovanje u društvu / Able to work and participate in social activities	da / yes	0,011	1,033	0,085	0,499	1,120	1,531	-0,187	0,941	-0,811
	ne / no	-0,003	0,996		0,059	0,947		-0,032	1,026	
Zavrjeđuju uvažavanje i suosjećanje / Deserve respect and compassion	da / yes	-0,308	0,786	**-2,985****	-0,012	0,877	-0,378	-0,428	0,725	**-2,743****
	ne / no	0,099	1,045		0,093	0,968		0,101	1,090	
Ne zaslužuju negativan odnos niti izbjegavanje / Do not deserve a negative attitude and avoidance	da / yes	0,142	0,999	1,112	-0,203	1,217	-1,279	0,281	0,876	1,875
	ne / no	-0,035	0,995		0,097	0,654		-0,101	1,128	
Poželjni u neposrednom kontaktu / Desirable in direct contact	da / yes	-0,050	1,078	-0,445	-0,273	0,757	-1,258	0,040	1,181	,265
	ne / no	0,021	0,978		0,063	0,952		-0,013	0,990	
Znanje o osobama sa psihičkom bolesti / Knowledge about people with psychiatric diseases	da / yes	8,793	1,433	0,389	8,400	1,844	-1,100	8,947	1,229	1,240
	ne / no	8,707	1,307		8,833	1,224		8,642	1,352	

Legenda / Legend: * p <,05; ** p <,01

RASPRAVA

Rezultati istraživanja pokazali su da nezavisne varijable obrazovanja i vrste zanimanja razlikuju ispitanike u aspektima znanja i stavova o psihički bolesnim osobama koji mogu utjecati na njihovu stigmatizaciju.

U pogledu znanja o karakteristikama mentalno oboljelih pojedinaca, liječenju te o nastanku mentalnih bolesti, rezultati su očekivano pokazali da psihijatrijsko osoblje ima veće znanje od zdravstvenog i nezdravstvenog osoblja, a kod muškaraca veće od nezdravstvenog osoblja.

U pogledu stavova prema psihički bolesnim osobama nalazi odgovaraju rezultatima prethodno navedenih stranih istraživanja koji upozoravaju na problem i važnost istraživanja i stavova zdravstvenog odnosno psihijatrijskog osoblja. Rezultati upućuju da nezdravstveno i opće zdravstveno osoblje u većoj mjeri od psihijatrijskog osoblja smatra da su sa psihički bolesnim osobama poželjni neposredni kontakti. Premda bi takav rezultat dijelom mogao odražavati stav o nužnoj profesionalnoj distanci, sadržaj tvrdnji koje čine taj faktor (zaposlio bih psihičkog bolesnika u svojoj firmi; sa psihičkim bolesnikom bih samoinicijativno stupio u kontakt; ugodno se osjećam u društvu psihičkih bolesnika) ukazuje na određenu zadršku, veću nego kod nezdravstvenog i općeg zdravstvenog osoblja, što u jednoj mjeri podupire nalaze srodnih istraživanja o nepodržavajućim stavovima dijela zdravstvenog i psihijatrijskog osoblja.

Obrazovaniji ispitanici očekivano imaju veće znanje o psihički bolesnim osobama. U pogledu stavova rezultati nisu jednoznačni. Obrazovaniji ispitanici u većoj mjeri smatraju da su psihički bolesne osobe sposobne za rad i sudjelovanje u društvu (faktor koji uključuje jednako pravo i mogućnost rada, potomstva te općenito mišljenje da psihički bolesne osobe imaju pra-

DISCUSSION

The results of our study have shown that the independent variables of education and profession differentiate respondents in aspects of knowledge and attitudes on individuals with mental illness that may affect their stigmatization.

With regard to knowledge about the characteristics of individuals with mental illness, their treatment, and the development of mental illness, the results have shown, as expected, that psychiatric personnel had greater knowledge than health and non-health personnel, and the level of knowledge was higher in men than in non-health personnel.

Regarding attitudes towards individuals with mental illness, the findings correspond to the results of the aforementioned international studies that indicated the problem and importance of research and attitudes of health, i.e. psychiatric personnel. The results suggest that the non-health and general health professionals, to a greater extent than psychiatric personnel, feel that direct contact with the individuals with mental illness is desirable. Although such a result may partly reflect the attitude towards necessary professional distance, the content of the claims that make up that factor ("I would hire an individual with mental illness in my company", "I feel comfortable in the company of individuals with mental illness", "I would initiate a contact with an individual with mental illness") show certain restraint, higher than that of non-health and general health professionals, which in some measure supports the findings of similar studies on the non-supporting attitudes on part of health and psychiatric personnel.

More educated respondents were expected to have greater knowledge of individuals with mental illness. In terms of attitudes, the results are not unambiguous. More educated respondents are more likely to think that individuals with mental illness are capable of working and participating in society (a factor that includes equal rights and opportunities for work, offspring, and the general belief that individuals with men-

vo i mogućnost društvenog života i društvenih odnosa kao i svi drugi) i taj se rezultat dosljedno javlja kako kod svih ispitanika, tako i u skupini žena i muškaraca. Obrazovaniji ispitanici u većoj mjeri iskazuju da su psihički bolesnici poželjni u društvu od manje obrazovanih ispitanika. U isto vrijeme manje obrazovani ispitanici u većoj mjeri vjeruju da psihički bolesnici zaslužuju uvažavanje i suosjećanje društvenog okruženja.

Premda je uzorak na kojem je provedeno istraživanje pristran te nije reprezentativan za cijelu Hrvatsku, a korištena Ljestvica znanja obuhvaća uzak opseg znanja i niže je pouzdanosti, istraživanje je dalo korisne smjernice za ovo područje interesa, o kojem je u Hrvatskoj razmjerno malo istraživanja. Pozivajući se na empirijski potvrđene probleme koje psihički bolesnici trpe zbog stigmatizirajućih stavova, rezultati ovog rada ukazuju da u populaciji i nezdravstvenih i zdravstvenih djelatnika, uključujući i psihijatrijsko osoblje, kao i kod ljudi različitih razina obrazovanja, postoji potreba za osvještavanjem postojećih oblika i štetnih učinaka stigmatizacije, te za osmišljavanjem i sustavnim provođenjem procesa destigmatizacije psihički bolesnih osoba (edukacije, unaprjeđivanje komunikacije, programi socijalnog uključivanja, medijske aktivnosti), posebno za osobe koje rade sa psihičkim bolesnicima i s njima dolaze u kontakt tijekom liječenja, kao i u svakodnevnom životu.

U budućim bi istraživanjima, koja bi se zbog važnosti ove teme trebala nastaviti, trebalo osigurati manje pristrane i reprezentativne uzorke, unaprijeđene instrumente komparabilne s rezultatima stranih istraživanja, kao i druge varijable relevantne za problematiku stigme, kako s aspekta potencijalno stigmatizirajućih, tako i s aspekta stigmatiziranih osoba, s ciljem unaprjeđivanja stavova i znanja o stigmi, kao i programa njenog prevenira-nja.

tal illness should have the same rights and opportunities for social life and social relationships as everyone else), and this result consistently appears in all respondents as well as in the group of women and men. Respondents who were more educated express to a greater extent the belief that individuals with mental illness are preferable in society than respondents of lower educational status. At the same time, respondents of lower educational status largely believed that individuals with mental illness deserve respect and compassion from the social environment.

Although the survey sample was biased and is not representative for Croatia as a whole, and the knowledge scale used covers a narrow range of knowledge and is of lower reliability, the present study has provided useful guidelines in this field, on which there is relatively little research in Croatia. Given the empirically-confirmed problems that individuals with mental illness are suffering due to stigmatizing attitudes, the results of this study indicate that there is a need to explore the existing phenomena and adverse effects of stigmatization among both non-health and health professionals, including psychiatric personnel, as well as in people of different levels of education, and for development and systematic implementation of the process of destigmatization of individuals with mental illness (education, promotion of communication, social inclusion programs, media activities), especially for people working with mentally ill individuals who are in contact with them in the treatment process as well as in everyday life.

Future research, which should continue due to the importance of this topic, should ensure the use less biased and more representative samples, improved instruments that would make the results more easily comparable other international studies, as well as address other variables relevant to the problem of stigma, both from the perspective of potentially stigmatizing individuals and from the perspective of stigmatized individuals, with the aim of improving the attitudes and knowledge on stigma as well as the programs for its prevention.

ZAKLJUČAK

Rezultati su pokazali da nezavisne varijable obrazovanja i vrste zanimanja razlikuju ispitanike u aspektima znanja i stavova o stigmatizaciji psihičkih bolesnika, većinom u očekivanom smjeru.

U pogledu znanja, rezultati su očekivano pokazali da psihijatrijsko osoblje, osobito u usporedbi s nezdravstvenim osobljem, kao i obrazovanije osobe u usporedbi s manje obrazovanim osobama, imaju veće znanje o psihički bolesnim osobama.

U pogledu stavova nezdravstveno i zdravstveno osoblje u većoj mjeri od psihijatrijskog osoblja smatra da su sa psihički bolesnim osobama poželjni neposredni kontakti. Obrazovaniji ispitanici u većoj mjeri smatraju da su psihički bolesne osobe sposobne za rad i sudjelovanje u društvu te da su s njima poželjni neposredni kontakti, ali u manjoj mjeri od niže obrazovanih ispitanika vjeruju da psihički bolesne osobe zavrjeđuju uvažavanje i suosjećanje društvenog okruženja.

Navedeni su rezultati potkrijepili bojazan da pojedini stavovi prisutni, kako kod nezdravstvenih djelatnika, tako i kod zdravstvenog i psihijatrijskog osoblja, mogu biti stigmatizirajući i kao takvi štetiti socijalizaciji i liječenju psihički bolesnih osoba. Rezultati ukazuju na potrebu osmišljavanja procesa destigmatizacije psihički bolesnih osoba u populacijama ljudi različitih razina obrazovanja, kao i zdravstvenih i nezdravstvenih djelatnika, posebno onih koji izravno rade sa psihičkim bolesnicima ili s njima dolaze u kontakt tijekom i nakon hospitalizacije i liječenja.

Rezultati pružaju okvirne smjernice potrebne za oblikovanje procesa destigmatizacije psihičkih bolesnika u populaciji zdravstvenih i nezdravstvenih stručnjaka, kao i osobama različitog stupnja obrazovanja, posebno onima koji rade s mentalno oboljelim pacijentima ili stupaju u kontakt s njima nakon hospitalizacije.

CONCLUSION

The results of our study have shown that education and type occupation were independent variables that differentiated respondents in aspects of knowledge and attitudes that affect the stigmatization of psychiatric patients, mostly in the expected direction.

Our results have shown that the independent variables of education and profession differentiate respondents in aspects of knowledge and attitudes about individuals with mental illness.

With regard to knowledge about individuals with mental illness, our results have shown, as expected, that psychiatric personnel, especially compared with non-health personnel, as well as more educated individuals compared with individuals with lower educational status, have greater knowledge about individuals with mental illness.

In terms of attitudes, non-health and health professionals, to a greater extent than psychiatric personnel, feel that direct contacts with individuals with mental illness are desirable. More educated respondents were more likely to think that individuals with mental illness were capable of working and participating in society and that direct contact with them was desirable, but believed that individuals with mental illness deserve respect and compassion from the social environment to a lesser extent than respondents of lower educational status.

These results have shown the fear that certain attitudes represent in non-health professionals, as well as in health and psychiatric personnel, may be stigmatizing and as such hurt the socialization and treatment of individuals with mental illness. The results point to the need to devise a process of destigmatization of individuals with mental illness in the populations of people of different levels of education, as well as health and non-health professionals, especially those who work directly with individuals with mental illness or come into contact with them during and after hospitalization and treatment.

Doprinos pojedinih autora

Ana Pavelić Tremac, Dražen Kovačević i Joško Sindik osmislili su nacrt istraživanja i prikupili podatke.

Narcisa Manojlović i Joško Sindik izradili su statističke analize.

Svi autori sudjelovali su u istraživanju literature, interpretaciji podataka i pisanju rukopisa.

Sukoba interesa nema.

Contribution of individual authors

Ana Pavelić Tremac, Dražen Kovačević, and Joško Sindik performed the design of the study and collection of data.

Joško Sindik and Narcisa Manojlović performed statistical analyses.

All authors participated in literature research, interpretation of data, and writing of the manuscript.

Conflict of interest:

None to declare.

LITERATURA / *REFERENCES*

1. World Health Organization: Outline of the World Health Report. Geneva: WHO, 2001.
2. World Health Organization: Data and statistics: Prevalence of Mental Disorders. 2017. Dostupno na: http://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/data-and-statistics
3. Kessler RC, Aguilar-Gaxiola S, Alonso J, Chatterji S, Lee S, Ustün TB. The WHO world mental health (WMH) surveys. Psychiatrie (Stuttg) 2009; 6: 5-9. PMID:21132091
4. Verhaeghe M, Bracke P. Associative stigma among mental health professionals: implications for professional and service user well-being. J Health Soc Behav 2012; 53(1): 17-32. DOI:10.1177/0022146512439453
5. Schulze B, Angermeyer MC. Subjective experiences of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals. Soc Sci Med 2003; 56: 299-312. https://doi.org/10.1016/s0277-9536(02)00028-x
6. Rüsch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. Eur Psychiatry 2005; 20: 529-39. https://doi.org/10.1016/j.eurpsy.2005.04.004
7. Corrigan P, Thompson V, Lambert D, Sangster Y, Noel JG, Campbell J. Perceptions of discrimination among persons with serious mental illness. Psychiatr Serv 2003; 54: 1105-10. https://doi.org/10.1176/appi.ps.54.8.1105
8. Link BG, Phelan JC, Bresnahan M, Stueve A, Pescosolido BA. Public conceptions of mental illness: labels, causes, dangerousness, and social distance. Am J Public Health 1999; 89: 1328-33. https://dx.doi.org/10.2105%2Fajph.89.9.1328
9. Penn DL, Kohlmaier JR, Corrigan PW. Interpersonal factors contributing to the stigma of schizophrenia: social skills, perceived attractiveness, and symptoms. Schizophr Res. 2000; 29; 45: 37-45. https://doi.org/10.1016/s0920-9964(99)00213-3
10. Thornicroft G, Brohan E, Rose D, Sartorius N, Leese M, INDIGO Study Group. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. Lancet. 2009; 373: 408-15. https://doi.org/10.1016/s0140-6736(08)61817-6
11. Chan S, Yu IW. Quality of life of clients with schizophrenia. J Adv Nurs 2004; 45: 72-83. https://doi.org/10.1046/j.1365-2648.2003.02863.x
12. Graf J, Lauber C, Nordt C, Rüesch P, Meyer PC, Rössler W. Perceived stigmatization of mentally ill people and its consequences for the quality of life in a swiss population. J Nerv Ment Dis 2004; 192: 542-47. doi: 10.1097/01.nmd.0000135493.71192.3a
13. Hudson TJ, Owen RR, Thrush CR, Han X, Pyne JM, Thapa P *et al*. A pilot study of barriers to medication adherence in schizophrenia. J Clin Psychiatry 2004; 65: 211-6. https://doi.org/10.4088/jcp.v65n0211
14. Vukušić Rukavina T. Razvoj mjernog instrumenta za procjenu stigmatizacije duševnih smetnji u tiskanim medijima. Doktorska disertacija. Zagreb: Medicinski fakultet Sveučilišta u Zagrebu, 2011.
15. Eagles JM, Carson D P, Begg A, Naji SA. Suicide prevention: a study of patients' views. Br J Psychiatry 2003; 182: 261-5. doi:10.1192/bjp.182.3.261
16. Al-Atram A. Physicians' knowledge and attitude towards mental health in Saudi Arabia. Ethiop J Health Sci 2018; 28(6): 771-8. doi: 10.4314/ejhs.v28i6.12.
17. Rivera-Segarra E, Varas-Díaz N, Santos-Figueroa A. "That's all fake": Health professionals stigma and physical healthcare of people living with serious mental illness. PLoS ONE 2019; 14(12): e0226401. https://doi.org/10.1371/journal.pone.0226401
18. Economou M, Peppou LE, Kontoangelos K, Palli A, Tsaliagkou I, Legaki EM *et al*. Mental health professionals' attitudes to severe mental illness and its correlates in psychiatric hospitals of Attica: The role of workers' empathy. Community Ment Health J 2020; 56(4): 614-25. doi: 10.1007/s10597-019-00521-6.

19. AlSalem M, Alamri R, Hejazi S. Non psychiatric healthcare professionals' attitudes toward patients with mental illnesses in Makkah City, Saudi Arabia: A cross-sectional study. Neuropsychiatr Dis Treat 2020; 16: 341-8. https://doi.org/10.2147/NDT.S236148
20. Bagley C, King M. Exploration of three stigma scales in 83 users of mental health services: Implications for campaigns to reduce stigma. J Ment Health 2005; 14(4): 343-55. DOI:10.1080/09638230500195270
21. Ertuğrul A, Uluğ B. Perception of stigma among patients with schizophrenia. Soc Psychiatry Psychiatr Epidemiol 2004; 39: 73-7. https://doi.org/10.1007/s00127-004-0697-9
22. Link BG, Struening EL, Rahav M, Phelan J, Nuttbrock L. On stigma and its consequences: evidence from a longitudinal study of men with dual diagnosis of mental illness and substance abuse. J Health Soc Behav 1997; 38: 177-90. PMID:9212538
23. Jorm AF, Korten AE, Jacomb PA, Christensen H, Henderson S. Attitudes towards people with a mental disorder: a survey of the Australian public and health professionals. Aust N Z J Psychiatry 1999; 33: 77-83. https://doi.org/10.1046/j.1440-1614.1999.00513.x
24. Tal A, Roe D, Corrigan PW. Mental illness stigma in the Israeli context: deliberations and suggestions. Int J Soc Psychiatry 2007; 53: 547-63. https://doi.org/10.1177%2F0020764007082346
25. Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. Healthc Manage Forum 2017; 30(2): 111-116. doi: 10.1177/0840470416679413.
26. Henderson C, Noblett J, Parke H, Clement S, Caffrey A, Gale-Granz O *et al*. Mental health-related stigma in healthcare and mental health-care settings. Lancet Psychiatry 2014;1(6):467-82. https://doi.org/10.1016/s2215-0366(14)00023-6
27. Ross C, Goldner E. Stigma, negative attitudes and discrimination towards mental illness within the nursing profession: a review of the literature. J Psychiatr Ment Health Nurs 2009; 16(6): 558-67. https://doi.org/10.1111/j.1365-2850.2009.01399.x
28. Schulze B. Stigma and mental health professionals: a review of the evidence on an intricate relationship. Int Rev Psychiatry 2007; 19(2): 137-55. DOI:10.1080/09540260701278929
29. Corrigan P, Druss B, Perlick D. The impact of mental illness stigma on seeking and participating in mental health care. Psychol Sci Public Interest 2014; 15(2): 37-70. doi:10.1177/1529100614531398.
30. Jones S, Howard L, Thornicroft G. 'Diagnostic overshadowing:' worse physical care for people with mental illness. Acta Psychiatr Scand 2008; 118(3): 169-171. https://doi.org/10.1111/j.1600-0447.2008.01211.x
31. Byrne P. Psychiatric stigma: past, passing and to come. J R Soc Med 1997; 90(11): 618-21. DOI:10.1177/014107689709001107
32. Giorgianni SE. Media images and messages about stigma: The good, the bad and the ugly. Pfizer J 2004; 5(1): 26-9.
33. Thornicroft G, Rose D, Kassam A, Sartorius N. Stigma: ignorance, prejudice or discrimination? Br J Psychiatry 2007b;190 (3): 192-3. DOI:10.1192/bjp.bp.106.025791
34. Link BG, Phelan JC. Stigma and its public health implications. Lancet 2006; 367(9509): 528-9. DOI:10.1016/S0140-6736(06)68184-1
35. SANE Australia: The SANE Guide to Reducing Stigma: A guide to reducing stigma against mental illness and suicide in the media; 2014.
36. Mental Health Council of Australia: Consumer and career experiences of stigma from mental health and other health professionals. Canberra: MHCA, 2011.
37. Östman M, Kjellin L. Stigma by association. Psychological factors in psychological factors in relatives of people with mental illness. Br J Psychiatry 2002; 181: 494-8. https://doi.org/10.1192/bjp.181.6.494
38. Angermeyer MC, Schulze B, Dietrich S. Courtesy stigma. A focus group study of relatives of schizophrenia patients. Soc Psychiatry Psychiatr Epidemiol 2003; 38: 593-602. https://doi.org/10.1007/s00127-003-0680-x
39. Lauber C, Anthony M, Ajdacic-Gross V, Rössler W. What about psychiatrists' attitude to mentally ill people? Eur Psychiatry 2004; 19: 423-.https://doi.org/10.1016/j.eurpsy.2004.06.019
40. Persaud R. Psychiatrists suffer from stigma too. Psychiatr Bull 2000; 24: 284-85. https://doi.org/10.1192/pb.24.8.284
41. Lauber C, Nordt C, Braunschweig C, Rössler W. Do mental health professionals stigmatize their patients? Acta Psychiatr Scand Suppl 2006; (429): 51-9. https://doi.org/10.1111/j.1600-0447.2005.00718.x
42. Thornicroft G, Rose D, Kassam A. Discrimination in health care against people with mental illness. Int Rev Psychiatry 2007a; 19(2): 113-122. DOI:10.1080/09540260701278937
43. Oliver MI, Pearson N, Coe N, Gunnell D. Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. Br J Psychiatry 2005; 186(4): 297-301. DOI:10.1192/bjp.186.4.297
44. Choudhry FR, Mani V, Ming LC, Khan TM. Beliefs and perception about mental health issues: a meta-synthesis. Neuropsychiatr Dis Treat 2016; 12: 2807-18. https://doi.org/10.2147/NDT.S111543
45. Thornicroft G, Brohan E, Kassam A, Lewis-Holmes E. Reducing stigma and discrimination: Candidate interventions. Int J Ment Health Syst 2008; 2(1): 3. DOI:10.1186/1752-4458-2-3
46. Corrigan P. How stigma interferes with mental health care. Am Psychol 2004; 59(7): 614. DOI: 10.1037/0003-066X.59.7.614
47. Nordt C, Rössler W, Lauber C. Attitudes of mental health professionals toward people with schizophrenia and major depression. Schizophr Bull 2006; 32(4): 709-714. DOI:10.1093/schbul/sbj065
48. Ahmedani BK. Mental health stigma: Society, individuals, and the profession. J Soc Work Values Ethics 2011; 8(2): 4-1-4-16. https://www.ncbi.nlm.nih.gov/pubmed/22211117
49. Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. World Psychiatry 2002; 1(1): 16-20. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1489832/
50. Gray AJ. Stigma in psychiatry. J R Soc Med 2002; 95(2): 72-6. doi:10.1258/jrsm.95.2.72

51. Vučina I, Musa S, Dizdarević A. Istraživanje stavova javnosti o osobama sa mentalnim poremećajima: Finalni izvještaj za Federaciju Bosne i Hercegovine. Sarajevo: Federalno ministarstvo zdravstva i Zavod za javno zdravstvo Federacije BiH, 2012.
52. Jokić-Begić N, Kamenov Ž, Lauri Korajlija A. Kvalitativno i kvantitativno ispitivanje sadržaja stigme prema psihičkim bolesnicima. Soc psihijat 2005; 33(1): 10-19.
53. Arbanas G. Adolescents'attitudes toward schizophrenia, depression, and PTSD. J Psychosoc Nurs Ment Health Serv 2008; 46(3): 45-51. DOI:10.3928/02793695-20080301-01
54. Filipčić I, Pavičić D, Filipčić A, Hotujac Lj, Begić D, Grubišin J *et al*. Attitudes of medical staff towards the psychiatric label ˝schizophrenic patient˝ tested by an anti-stigma questionare. Coll Antropol 2003; 27(1): 301-7. PMID:12974160
55. Čarija M. Stigma zdravstvenog osoblja prema psihičkim bolesnicima. Diplomski rad (neobjavljeno). Zagreb: Odsjek za psihologiju Filozofskog fakulteta u Zagrebu, 2008.

Zdravstvena pismenost u području mentalnog zdravlja / *Mental Health Literacy*

Ljiljana Muslić, Diana Jovičić Burić, Martina Markelić, Sanja Musić Milanović

Hrvatski zavod za javno zdravstvo, Zagreb, Hrvatska
/ Croatian Institute of Public Health, Zagreb, Croatia

ORCID https://orcid.org/0000-0002-1748-7914

Zdravstvena pismenost u području mentalnog zdravlja (engl. *Mental Health Literacy*) pokazala se jednom od značajnih odrednica mentalnog zdravlja koja ima potencijal za poboljšanje kako zdravlja pojedinca tako i populacije. Navedeni istraživački konstrukt prvi je puta opisan 1997. godine te podrazumijeva znanja i vjerovanja pojedinca o mentalnom zdravlju odnosno mentalnim poremećajima koja pomažu u njihovom prepoznavanju, upravljanju ili prevenciji (Jorm i sur. 1997). Istraživanja u različitim zemljama, provedena različitim metodološkim pristupima, ukazuju na nedostatno znanje na razini opće populacije i specifičnih dobnih skupina o tome kako prevenirati poteškoće mentalnog zdravlja i mentalne poremećaje, kako ih prepoznati, koji su oblici pomoći dostupni i korisni te kako pružiti prvu podršku osobama koje manifestiraju poteškoće. Cilj ovog rada je prikaz razvoja i razumijevanja konstrukta zdravstvene pismenosti u području mentalnog zdravlja te povećanje istraživačkog interesa u području mentalnozdravstvene pismenosti. U radu se daje kratak prikaz razvoja navedenog područja istraživanja, istraživačke metodologije i dobivenih spoznaja kao i njihovih implikacija kada je u pitanju očuvanje mentalnog zdravlja pojedinaca i populacije kao i prevencije mentalnih poremećaja.

/ Mental health literacy has been recognized as one of the most important mental health determinants with a potential to improve the mental health of both individuals and the population. This concept was first described in 1997, mostly defined as the knowledge and beliefs about mental health and mental disorders which help the recognition, management, and prevention of mental health problems or disorders (Jorm et al. 1997). Studies from different countries conducted with different methodologies have suggested a lack of knowledge at both public and specific age-group levels about how to prevent and recognize mental health problems and mental disorders, how to provide first support to people manifesting mental health problems, and about the available and useful forms of help. By giving an overview of the development of mental health literacy as a research construct, this paper aims to contribute to the knowledge, understanding, and expansion of research interest in this field, its methodology and results, as well as their implications for the prevention of mental disorders and preservation of mental health.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*
Diana Jovičić Burić, dr. med.
Služba za promicanje zdravlja
Hrvatski zavod za javno zdravstvo
Rockefellerova 7
10 000 Zagreb, Hrvatska
Telefon: 01 4863 357
E-pošta: diana.jovicic@hzjz.hr

KLJUČNE RIJEČI / *KEY WORDS:*
Mentalno zdravlje / *Mental Health*
Mentalnozdravstvena pismenost / *Mental Health Literacy*
Vinjetno istraživanje / *Vignette Studies*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2020.324

UVOD

Prema shvaćanju zdravlja u definiciji Svjetske zdravstvene organizacije, mentalno zdravlje je neizostavan i neizmjerno važan dio sveukupnog zdravlja jer "Zdravlje je stanje potpunog fizičkog, psihičkog i socijalnog blagostanja, a ne samo odsustvo bolesti i nemoći" (1). Svjetska zdravstvena organizacija definira mentalno zdravlje kao stanje blagostanja u kojem svaki pojedinac ostvaruje svoj puni potencijal, može se nositi s normalnim stresnim životnim situacijama, može produktivno raditi i doprinosi svojoj zajednici (2).

Mentalno zdravlje i mentalna bolest često se opisuju kao dvije točke jednog kontinuuma. Međutim, suvremeni dvojni ili dualni model kontinuuma mentalnog zdravlja i mentalne bolesti pokazuje da je sveukupno mentalno zdravlje više od samog odsustva mentalnih bolesti i poremećaja. Prema ovom modelu mentalno zdravlje i mentalna bolest su dva nezavisna kontinuuma, koji se međusobno isprepliću. Jedan obuhvaća postojanje odnosno nepostojanje bolesti, a drugi slabu odnosno izraženu osobnu dobrobit (emocionalnu, psihičku, društvenu, tjelesnu i duhovnu). Tako osoba koja pati od mentalne bolesti (s izraženim psihopatološkim simptomima) može istodobno imati visoku osobnu dobrobit (dobro mentalno zdravlje), što znači da osoba koja ima mentalnu bolest može biti produktivna za sebe, svoju obitelj, društvo i zajednicu kao i osoba s niskom razinom ili bez psihopatoloških simptoma (mentalnom bolesti) (3). Dvojni ili dualni model također zagovara važnost prevencije i ulaganja u osobnu dobrobit, odnosno dobro mentalno zdravlje. To je u skladu s mišljenjem da u mentalno zdravlje, kao i zdravlje općenito, moramo neprestano i aktivno ulagati i paziti na njegovo očuvanje kako bismo spriječili razvoj mentalne bolesti. Ovaj pristup pruža najbolji uvid u sveukupno mentalno zdravlje pojedinca uključujući i funkcionalnost i procjenu težine stanja (4-6). Kada je kod osobe prisutno odstupanje od uobičajenog doživljava-

INTRODUCTION

According to the definition of the World Health Organization, mental health is the indispensable and immensely important part of overall health, as "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (1). The World Health Organization defines mental health as a state of well-being in which every individual realizes their full potential, can cope with normal life stress situations, can be productive, and contributes to their community (2).

Mental health and mental illness are often described as two ends of the same continuum. However, the contemporary dual model of the continuum of mental health and illness indicate that the overall mental health is more than just the absence of mental illnesses and disorders. According to this model, mental health and illness are two independent continuums that intertwine. One continuum is the presence or absence of mental illness and the other is weak or strong personal wellbeing (emotional, psychic, social, physical, and spiritual). Therefore, a person with mental illness (or high psychopathology symptoms) can have high personal wellbeing (good mental health) at the same time, which means that the person with mental illness can be as productive with regard to themselves, their family, society and the community as a person with low or no psychopathology symptoms (mental illness) (3). This dual model also supports to the importance of prevention and investment in personal wellbeing and mental health. This is in line with the view that we must continually and actively invest and take care of our mental health, as well as health in general, to maintain it and to prevent the development of mental illness. This approach gives us the best insight into overall mental health of an individual and thus into their functionality and the assessment of the seriousness of the condition (4-6). Deviation from ordinary perception or behavior in a per-

nja ili ponašanja to se može kategorizirati kao psihički simptom, poremećaj ili bolest (7), ali ne nužno kao loše mentalno zdravlje. Mentalne bolesti odnosno poremećaji mogu biti prepreka ostvarivanju punih potencijala pojedinca i onemogućiti njegovo optimalno funkcioniranje. Mentalni poremećaj podrazumijeva odstupanje u jednoj ili u manjem broju psihičkih funkcija te manje oštećuje ukupno funkcioniranje osobe, a povezan je isključivo s funkcionalnim promjenama. Za razliku od bolesti većinom traje kraće, ne ostavlja (dugo)trajne posljedice te je povoljnije prognoze. Mentalna bolest je dulje i jače odstupanje u više psihičkih funkcija i cjelokupnom funkcioniranju osobe, a može biti povezana i sa strukturnim promjenama mozga (7). Ipak, često se pojmovi mentalne bolesti i poremećaja ne razgraničavaju u stručnoj literaturi, odnosno upotrebljavaju se kao istoznačnice.

Iako i loše mentalno zdravlje može uključivati teškoće u svakodnevnom funkcioniranju osobe, mentalne bolesti i poremećaji su okarakterizirani sveobuhvatnom psihološkom i biološkom disfunkcijom, odnosno disfunkcijom u ponašanju pojedinca. One uključuju čitav niz smetnji od poremećaja afekta, opažanja, mišljenja, inteligencije, pažnje, nagona i volje do poremećaja svijesti kao i njihove kombinacije koje čine određenu kliničku sliku (8). Mentalne bolesti i poremećaji često su kroničnog tijeka, s početkom u adolescenciji i mlađoj odrasloj dobi, te je njihova prevalencija relativno visoka i u stalnom porastu. Poznato je da se oko 75 % mentalnih poremećaja može dijagnosticirati prije 25. godine života (9).

Mentalne bolesti i poremećaji donose veliku subjektivnu patnju za oboljelog, narušavajući kvalitetu njegova života te, osim opterećenja samog pojedinca, donose i veliko opterećenje za njegovu okolinu i širu zajednicu (10). Prema Studiji globalnog opterećenja bolešću iz 2017, uzimajući kao pokazatelj opterećenja samo godine života u punom zdravlju izgubljene zbog onesposobljenosti, odnosno zbog oštećenja

son can be categorized as a mental symptom, disorder, or illness (7) but not necessarily as poor mental health or lack thereof.

Mental illnesses and disorders can be an obstacle to achieving the full potential of an individual and prevent their optimal functioning. Mental disorder is deviation in one or several mental functions, and a person with a mental disorder has less severely damaged overall health. Unlike mental illness, a disorder has a shorter duration, does not leave (long) lasting consequence, and has better prognosis. Mental illness is a longer and stronger deviation in more mental functions and in overall health and can also be related to structural brain changes, while a disorder is exclusively related to functional changes (7). However, the terms mental illness and mental disorder are not differentiated in many literature references, but are instead used as synonym.

Although poor mental health can include difficulties in functioning and daily activities, mental illnesses and disorders are characterized by psychological and biological dysfunction, i.e. dysfunction in the behavior of an individual. They include a variety of disturbances, from affective, perception, thought, intelligence, attention, instinct, and volition disorders to consciousness disorders as well as their combinations, all of which form a specific clinical picture (8). Mental illnesses and disorders often have chronic progression after starting in adolescence and at a young adult age, and their prevalence is relatively high and constantly increasing. It is well-known that 70% of mental disorders can be recognized before the age of 25 (9).

Mental illnesses and disorders are a significant source of subjective pain for a patient, decreasing the quality of their life, and, apart from being a burden to the patient itself, they bring a large burden for their environment and wider community as well (10). According to the 2017 Global Burden of Disease Study, only considering lost years because of disability, i.e. lost

(zdravlja) koje je uzrokovano bolešću (engl. *years lived with disability*, YLDs), među 10 najčešćih uzroka u svijetu dva su iz skupine mentalnih bolesti i poremećaja (veliki depresivni poremećaj na trećem mjestu i anksiozni poremećaji na osmom mjestu) (11). Navedena studija donosi podatke i za svaku zemlju pojedinačno, pa se tako u 10 najčešćih uzroka onesposobljenosti prema YLD-u u Republici Hrvatskoj depresivni poremećaji nalaze na šestom mjestu (12).

Posebno važan bihevioralni čimbenik, kada je u pitanju očuvanje mentalnog zdravlja, prevencija, rano prepoznavanje, liječenje kao i oporavak od mentalnih bolesti i poremećaja, je traženje pomoći stručnjaka u području mentalnog zdravlja i bolesti (13). Istraživanje Svjetske zdravstvene organizacije o mentalnom zdravlju provedeno 2007. godine u petnaest zemalja svijeta pokazalo je da je razdoblje od prve pojave simptoma do početka liječenja prilično dugo. Medijan odgode među onima koji su dobili pomoć u nekom trenutku je u rasponu od 1 do 14 godina za poremećaje raspoloženja, od 3 do 30 godina za anksiozne poremećaje i od 6 do 18 godina za poremećaje uzrokovane upotrebom psihoaktivnih tvari (14). U nekim istraživanjima se procjenjuje da samo jedna četvrtina odraslih osoba s visokom razinom psihičkih tegoba i jedna trećina odraslih s mentalnim poremećajem potraži stručnu pomoć. Europsko istraživanje o dostupnosti usluga zaštite mentalnog zdravlja provedenom u šest zemalja od 2001. do 2003. godine pokazalo je kako je najmanje vjerojatno da će mladi u dobi od 18 do 24 godine dobiti potrebnu skrb vezanu za probleme mentalnog zdravlja (15).

Stigmatizacija, koja uključuje negativne stavove, predrasude i diskriminaciju osoba s problemima mentalnog zdravlja te mentalnim bolestima i poremećajima, stvara probleme i čini prepreku kada je u pitanju traženje pomoći. Prema podatcima istraživanja provedenog u Ujedinjenom Kraljevstvu u sklopu jedne antidiskriminirajuće kampanje gotovo 9 od 10 osoba koje pate od mentalnih poremećaja

years because of (health) damage caused by illness (years lived with disability, YLDs) as the indicator of a burden, two entries in the group of mental illnesses and disorders are among 10 most common causes of disease burden in the world: major depressive disorder in third place and anxiety disorders in eighth place (11). The same study provides data for each country individually, and depressive disorders in Croatia are at the sixth place among the 10 most common causes of disability based on YLD (12).

Appropriate help-seeking behavior from an expert in the field of mental health and illness has been shown to be a particularly important behavioral determinant when it comes to maintaining mental health, prevention, early recognition, treatment, as well as recovery and rehabilitation from mental illnesses and disorders (13). The World Health Organization Mental Health Survey conducted in 2007 in fifteen countries showed that the period from the time when the first symptom appeared to the time when person started a treatment is quite long. Among those who received treatment at some point of time, the median postponement ranged from 1 to 14 years for mood disorders, 3 to 30 years for anxiety disorders, and 6 to 18 years for disorders caused by usage of psychoactive substances (14). Some studies estimate that only one quarter of adult people with a high level of mental difficulties and one third of adults with mental disorder seek professional help. The European Study of the Epidemiology of Mental Disorders conducted in six countries from 2001 to 2003 showed that young people between the age of 18 and 24 are least likely to receive necessary care related to mental health problems (15).

Stigmatization, which includes negative attitudes, prejudices, and discrimination of people with mental health problems, disorders, or illnesses, creates problems and presents an obstacle for help-seeking. According to the results of a survey conducted in the United Kingdom as part of an anti-discrimination campaign, al-

izjavilo je da su bili stigmatizirani i diskriminirani. Zbog stigmatizacije osobe često odgađaju traženje pomoći, a što kasnije potraže pomoć i podršku teži je i dulji njihov oporavak (8). Muškarci, mlade i starije osobe te pripadnici određenih nacionalnih skupina kao i pojedinci nižeg obrazovnog statusa s velikom epizodom depresije (engl. *major depression*) posebno su rizični kad je u pitanju netraženje pomoći (16). Pri pojavi blažih poteškoća u području mentalnoga zdravlja osobe su sklonije potražiti pomoć nestručnih izvora i laika, a mnogi pojedinci, posebno muškarci, uopće ju ne traže (17-19).

Među čimbenicima koji doprinose netraženju pomoći ističu se negativan stav prema stručnoj pomoći (uvjerenje da stručna pomoć nije korisna), vjerovanje da se sami trebaju nositi s problemima, manjak emocionalne kompetencije, nedostatno znanje o znakovima koji upućuju na mentalnu bolest ili poremećaj te strah od stigme (20). S druge strane, među čimbenicima koji potiču traženje pomoći su povećana osjetljivost na probleme vezane za mentalno zdravlje, pojačana percepcija težine mentalnog poremećaja, što uključuje i negativne posljedice te lakši pristup sustavu zaštite mentalnog zdravlja (21). Također, istraživanja ukazuju na to da čimbenici koji povećavaju vjerojatnost izbjegavanja liječenja, zakašnjelog dolaska na liječenje ili prekid liječenja uključuju: nedostatak znanja potrebnih za prepoznavanje obilježja moguće mentalne bolesti (znanja o obilježjima i tretmanu mentalnih poteškoća i poremećaja); neznanje o tome kako doći do stručne pomoći, procjene i liječenja; predrasude prema osobama koje imaju mentalnu bolest ili poremećaj te očekivanje da će i sami biti izloženi stigmi i diskriminaciji (13,21-25).

Korisni okvir za razumijevanje čimbenika koji mogu utjecati na ishode povezane s traženjem pomoći i zaštitu mentalnog zdravlja pojedinca pruža koncept zdravstvene pismenosti u području mentalnoga zdravlja ili mentalnozdravstvena pismenost (engl. *Mental Health Literacy*): višeznačan pojam, prvi je put opisan 1997. godine,

most 9 out of 10 people who suffer from mental disorders said they had been stigmatized and discriminated. People often postpone help-seeking due to stigmatization, and the later they look for help and support, the harder and longer their recovery is (8). Some surveys suggest that men, young and older people, and certain national group members as well as individuals with lower educational status and major depression are at risk when it comes to seeking help (16). If people have milder psychological (mental) distress or depressive symptoms, they are more prone to seek the help of non-professionals and lay persons, and many individuals, especially men, do not even seek help (17-19).

Negative attitudes toward professional help (e.g. beliefs such as that professional help is not useful or that it is better to cope with problems yourself), lack of emotional competence, and limited knowledge about signs which could indicate development of mental disorder or illness as well as fear of stigma are main obstacles when it comes professional help-seeking (20). On the other hand, factors that encourage help-seeking are increased sensitivity to mental health problems, increased perception of the severity of mental disorders, including negative consequences, and easier access to the mental health care system (21). Surveys also suggest that factors that increase the likelihood of avoiding treatment, seeking treatment too late, or terminating the treatment process include the lack of knowledge on recognizing characteristics of possible mental illness (knowledge about characteristics and treatments of mental health problems and mental disorders), ignorance about how to get a professional help, assessment and treatment, prejudice toward people with mental health problems or mental disorders, and the expectation that they themselves will be exposed to stigma and discrimination (13, 21-25).

A useful framework for understanding the factors that can affect outcomes regarding

podrazumijeva znanja i vjerovanja pojedinca o mentalnom zdravlju odnosno mentalnim poremećajima koja pomažu u prepoznavanju, upravljanju ili prevenciji (26). Mentalnozdravstvena pismenost je usmjerena na znanje i strategije za očuvanje ili postizanje i održavanje dobrog mentalnog zdravlja, osnovna znanja o mentalnim bolestima i poremećajima te njihovim tretmanima, strategijama za smanjenje stigme i poboljšanje učinkovitosti u traženju pomoći (27-29).

Cilj je ovog rada prikazati razvoj i opis pojma mentalnozdravstvene pismenosti, pregled istraživačke metodologije te primjene dosadašnjih znanstveno-istraživačkih spoznaja kada je u pitanju očuvanje mentalnog zdravlja pojedinca kao i traženje pomoći radi problema s mentalnim zdravljem.

RAZVOJ I OPIS KONCEPTA ZDRAVSTVENE PISMENOSTI U PODRUČJU MENTALNOG ZDRAVLJA

Pismenost se kao pojam u užem smislu definira kao sposobnost čitanja i pisanja. U novije doba s razvojem društva i tehnologija dolazi do širenja značenja ovog pojma i njegove interpretacije te se počinju prepoznavati različite vrste funkcionalne pismenosti (30).

Pojam zdravstvene pismenosti u znanstvenoj je literaturi poznat najmanje 30 godina. U Sjedinjenim Američkim Državama se ovaj pojam koristio za opisivanje i objašnjavanje odnosa između razine pismenosti pacijenata i njihove sposobnosti pridržavanja propisane terapije. Iz navedenog pristupa proizlazi shvaćanje da "adekvatna" funkcionalna zdravstvena pismenost znači da je osoba u stanju primijeniti vještine pismenosti na materijale vezane za zdravlje kao što su recepti, uputnice, upute o lijeku i savjete za kućnu zdravstvenu zaštitu (31). Međutim, zdravstvena pismenost obuhvaća i više od same sposobnosti pojedinca za

help-seeking and protecting an individual's mental health is provided by the concept of mental health literacy: a multidimensional construct, first time described in 1997, which implies having knowledge and beliefs about mental health problems or mental disorders that help to recognize, manage, or prevent them (26). Mental health literacy is focused on knowledge and strategies for maintaining or achieving and preserving good mental health, basic knowledge of mental disorders and illnesses and their treatments, and strategies for reducing stigma and improving effectiveness in help-seeking (27-29).

The aim of this paper was to present the development and describe the concept of mental health literacy and present an overview of the research methodology and application of current scientific findings for maintaining the mental health of an individual as well as seeking help for mental health problems.

DEVELOPMENT AND DESCRIPTION OF THE CONCEPT OF MENTAL HEALTH LITERACY

Literacy is defined in the narrow sense as the ability to read and write. In recent times, with the development of society and technology, the meaning of this term and its interpretation has expanded, and concepts of different functional literacies have been recognized (30).

The concept of health literacy has been present for at least 30 years in the clinical and scientific literature. In the United States of America, this concept was used to describe and explain the relationship between the patient's degree of literacy and their ability to comply with prescribed therapy. This approach concludes that "adequate" functional health literacy means actually being able to apply literacy skills to health-related materials such as prescriptions, referrals, instructions for medications, and

čitanje letaka i razumijevanje informacija. On obuhvaća skup kognitivnih i socijalnih vještina koje određuju motivaciju i sposobnost pojedinca da dođe do informacija, razumije ih i koristi radi unaprjeđenja i održavanja dobrog zdravlja. Omogućujući bolji pristup zdravstvenim informacijama i unaprjeđujući sposobnost pojedinca da ih učinkovito koristi, zdravstvena pismenost je ključna u osnaživanju pojedinaca da preuzmu kontrolu nad očuvanjem vlastitog zdravlja (32).

Analogno konceptu zdravstvene pismenosti, Anthony Jorm sa suradnicima sredinom 1990-tih u Australiji, istražujući znanja i vjerovanja o mentalnim poremećajima među općom populacijom i drugim specifičnim skupinama (primjerice djeca i mladi te njihovi roditelji), definira istraživački koncept mentalnozdravstvene pismenosti (26,27). Autori pritom naglašavaju da navedeni pojam ne podrazumijeva znanja koja uče zdravstveni radnici da bi bolje dijagnosticirali i liječili mentalne poremećaje/bolesti, nego se radi o znanju povezanom s ponašanjima koja doprinose vlastitom mentalnom zdravlju pojedinca, ali i mentalnom zdravlju drugih osoba. Prvotno ga autori opisuju kao koncept koji se sastoji od sedam dimenzija: 1) sposobnost prepoznavanja specifičnih poremećaja; 2) znanja o tome kako tražiti informacije o mentalnom zdravlju; 3) poznavanje rizičnih faktora i uzroka; 4) znanja o samoliječenju i o 5) dostupnosti stručne pomoći, te 6) stavovi koji promoviraju prepoznavanje i 7) traženje odgovarajuće pomoći (26).

Prvo istraživanje koje su Jorm i suradnici proveli kako bi procijenili razinu prepoznavanja mentalnih poremećaja i uvjerenja o učinkovitosti raznih tretmana odnosno zdravstvenu pismenost stanovništva u području mentalnog zdravlja provedeno je 1995. godine na reprezentativnom nacionalnom uzorku opće populacije kao dio redovite Ankete za praćenje populacije (engl. *Population Survey Monitor*) (26). Otada su u nekoliko navrata provedena slična istraživanja kako u općoj populaciji odraslih tako i u djece i mladih: 2003. – 2004. godine u sklopu kros-kul-

home health care advice (31). However, health literacy is more than being able to read a flyer and understand the information. It includes a group of cognitive and social skills that determine the individual's motivation and ability to acquire information, understand it, and use it to improve and maintain good health. By providing better access to health information and enhancing the individual's ability to use it effectively, health literacy is the key factor in empowering individuals to take control of maintaining their own health (32).

By analogy with the concept of health literacy, Anthony Jorm and his associates in the mid-1990s in Australia studied knowledge and beliefs about mental disorders among the general population and other specific groups (e.g. children and young people and their parents) and first defined the mental health literacy (MHL) research concept (26, 27). The authors of the concept emphasize that MHL does not imply knowledge that health practitioners learn to better diagnose and treat mental disorders, but refers to knowledge related to behavior that contribute to both an individual's own mental health and to mental health of others. It was originally described by the authors as a concept consisting of seven dimensions: 1) the ability to recognize specific disorder; 2) knowledge of how to seek mental health information; 3) basic knowledge of risk factors and causes; 4) basic knowledge of self-help and of 5) availability of professional help, and 6) attitudes that promote recognition and 7) seeking appropriate help (26).

The first assessment of the level of recognition of mental disorders and beliefs about effectiveness of various treatments, i.e. mental health literacy, was conducted by Jorm et al. in 1995 in a cross-sectional survey performed on a representative sample of the general population as a part of regular a Population Survey Monitor study (26). Since then, more surveys have been conducted, both in the general adult

turalnog istraživanja (engl. *Australia Japan Partnership Mental Health Survey*), 2006. godine ciljano istraživanje zdravstvene pismenosti u području mentalnog zdravlja na reprezentativnom uzorku djece i mladih u dobi od 12 do 15 godina starosti te jednog roditelja s kojim dijete koje je sudjelovalo živi (engl. *National Survey of Youth Mental Health Literacy*), dva istraživanja 2011. godine na općoj populaciji starijoj od 15 godina (engl. *Mental Health Literacy in Adults*) i na populaciji mladih od 15 do 25 godina (engl. *Mental Health Literacy in Young People*) (33). Rezultati navedenih istraživanja upućivali su na potrebu podizanja svjesnosti i znanja o standardnim tretmanima, budući da se pokazalo da su mišljenja o njima prilično negativna ili se utvrdilo njihovo nepoznavanje (26). Općenito, pokazalo se kako poboljšanje mentalnozdravstvene pismenosti doprinosi pravovremenom prepoznavanju i poboljšanju ishoda liječenja (34).

Posljednjih nekoliko godina koncept mentalnozdravstvene pismenosti širi svoj fokus i na očuvanje dobrog mentalnog zdravlja i zaštitne čimbenike, odnosno znanja i sposobnosti koje doprinose očuvanju mentalnog zdravlja, što uključuje komponentu razumijevanja kako postići i očuvati (održati) dobro mentalno zdravlje (27,28).

METODOLOGIJA ISTRAŽIVANJA ZDRAVSTVENE PISMENOSTI U PODRUČJU MENTALNOG ZDRAVLJA

U sklopu istraživanja zdravstvene pismenosti u području mentalnoga zdravlja u Australiji je razvijen jedan od najprimjenjivanijih mjernih instrumenata ovog područja: Upitnik zdravstvene pismenosti u području mentalnoga zdravlja (engl. *Mental Health Literacy Questionnaire*, MHLQ) (26). Primjena navedenog upitnika i prikupljanje podataka strukturiranim intervjuom omogućili su isprva mješoviti istraživački pristup u kojem su korišteni i kratki opisi doživljavanja i ponašanja osobe s određenim mentalnim poremećajem.

population as well as in children and youth in Australia: 2003-2004 as part of cross-cultural survey (Australia Japan Partnership Mental Health Survey), a 2006 targeted mental health literacy survey on a representative sample of children and youth between the age of 12 and 15 and one parent with whom they lived (National Survey of Youth Mental Health Literacy), two 2011 surveys – a general population survey with participants over 15 years of age (Mental Health Literacy in Adults) and a youth population survey with participants aged 15 to 25 (Mental Health Literacy in Young people) (33). The results of these studies indicated the need to raise awareness and knowledge about standard treatments, since opinions about them were found to be quite negative or they were perceived as unfamiliar (26). In general, improving mental health literacy has been shown to increase early detection of mental disorders and contribute to better treatment outcomes (34).

In recent years, the concept of mental health literacy has been expanding its focus to maintaining good health and protective factors, i.e. knowledge and abilities that contribute to mental health, which include the component of understanding how to achieve and maintain good mental health (27, 28).

MENTAL HEALTH LITERACY RESEARCH METHODOLOGY

As part of the mental health literacy surveys in Australia, one of the widely used instruments for measuring mental health literacy was developed: the Mental Health Literacy Questionnaire (MHLQ) (26). The application of this questionnaire and the data collected through a structured interview initially enabled mixed research approaches which used short descriptions of experiences and behaviors of a person with certain mental disorders (so-called vignettes), while pure quantitative measures

mećajem (tzv. vinjete), dok su čiste kvantitativne mjere (ljestvice) razvijene kasnije. Također, prvotno prikupljanje podataka je provedeno individualnim intervjuiranjem u kućanstvu (26), a kasnije individualnim telefonskim intervjuiranjem uz pomoć računala metodom CATI (engl. *Computer Assisted Telephone Interviews*) (35). Svaka osoba intervjuirana upitnikom MHLQ dobiva kratku priču (vinjetu) s prikazom osobe koja boluje od mentalnog poremećaja (spol i poremećaj osobe prikazane u vinjeti nasumično se dodjeljuju). Nakon što pročitaju vinjetu, ispitanici odgovaraju na niz pitanja otvorenog i/ili zatvorenog tipa (ponuđeni odgovori), primjerice "*Što biste rekli, ako išta, da nije u redu s…..?*", „*Što mislite kako bi se najbolje moglo pomoći ….?*", odnosno "*Koji je oblik stručne pomoći najprimjereniji?*" (26,36). MHLQ je prvotno uključivao pitanja vezana za prepoznavanje poremećaja u vinjeti, vjerovanja o osobama koje mogu pomoći, vjerovanja i osnovna znanja o tretmanima i njihovim ishodima (prognozi), poznavanje rizičnih čimbenika i uzroka pojedinih poremećaja, vjerovanja povezana sa stigmom i diskriminacijom, osobna iskustva s mentalnim poremećajima. Dodatno su u MHLQ uključena pitanja o vjerovanjima povezanima sa stigmom i diskriminacijom - procjena osobne i percipirane stigme, socijalna distanca, zatim vjerovanja o izvorima informacija o mentalnom zdravlju / mentalnim poremećajima, izloženost kampanjama i informacijama o mentalnom zdravlju iz medija (svijest o njihovom postojanju, dosjećanje), namjere i vjerovanja o pružanju prve pomoći u području mentalnog zdravlja te vjerovanja o prevenciji i traženju pomoći. Istraživanja mentalnozdravstvene pismenosti korištenjem vinjetne metodologije i MHL upitnika provedena su osim u Australiji i u nizu drugih zemalja (primjerice Japan, Portugal, Švedska, Irska, Sjedinjene Američke Države, Švicarska, Tajvan ...) te na različitim populacijama (srednjoškolci, adolescenti, roditelji, opća populacija) (36-42). Treba naglasiti da ova metodologija ne dopušta donošenje zaključaka na individualnoj razini, ali se pokazala korisnom u određivanju razine mental-

(scales) were developed later. Additionally, the initial data collection was conducted through individual household interviews (26) and later by individual telephone interviews using the Computer Assisted Telephone Interviews (CATI) method (35). Each person interviewed with the MHLQ receives a short story (vignette) describing a person suffering from a mental disorder (the gender and disorder of the person presented in the vignette are randomly assigned). After reading the vignette, respondents answer a series of open-ended and / or closed-ended questions (answers offered), such as "What would you say, if anything, that was wrong with…?", "What do you think could best be helped ….?", Or "What is the most appropriate form of professional assistance?" (26, 36). MHLQ initially included questions related to recognition of mental disorders in the presented vignette, beliefs about people who can help, beliefs and basic knowledge of treatments and their outcomes (prognosis), knowledge of risk factors and causes of mental disorders, beliefs related to stigma and discrimination, and personal experiences with mental disorders. More questions about beliefs related to stigma and discrimination were also included in the MHLQ – assessment of personal and perceived stigma and social distance. Additional questions were also added related to beliefs about sources of mental health information / mental disorders, exposure to campaigns and mental health information from the media (awareness of their existence, recall), intentions and beliefs about mental health first aid, and beliefs about prevention and seeking help. Mental health literacy studies using the vignette methodology and the MHLQ have been conducted in other countries as well (e.g. Japan, Portugal, Sweden, Ireland, United States, Switzerland, Taiwan, etc.) and adjusted for different survey populations (high school students, adolescents, parents, general population) (36-42). It should be emphasized that this methodology

nozdravstvene pismenosti populacije (44). Također, upitnici utemeljeni na vinjetnom pristupu, kojima se procjenjuje znanje pružajući detaljnije opise u odnosu na samo postavljanje pitanja o znanju o problemima mentalnoga zdravlja, predstavljaju hipotetičke slučajeve i stoga se dobiveni odgovori još uvijek mogu razlikovati od stvarnih situacija (42,45,46). Autori sustavnih pregleda napominju da postoje dodatna metodološka ograničenja u upotrebi upitnika MHLQ i interpretaciji rezultata. Nije uvijek moguće precizno i jasno procijeniti razinu znanja odvojeno od uvjerenja, stavova ili mišljenja, a kako bi se razumio jedinstveni doprinos svakog od tih čimbenika kao i njihov potencijalni međusobni učinak (47). Drugo ograničenje koje se spominje vezano je za razumijevanje problema mentalnog zdravlja odnosno mentalnih poremećaja koja su opisana u vinjetama, a koja čine polazište u odnosu na koje sudionici odgovaraju na preostala pitanja. Na primjer, sudionik na navedena pitanja može odgovarati pretpostavljajući da osoba opisana u vinjeti ima blagi stres umjesto depresije te će posljedično davati i različite odgovore (npr. kada je u pitanju potreba za kontaktom s psihijatrom) (44). Također, zbog obilježja pitanja otvorenog tipa koja su prisutna u MHLQ upitniku, posebice njihovih slabosti kada je u pitanju procjenjivanje, npr. stupnja izraženosti (učestalosti ili intenziteta) niza čimbenika, kasnije su razvijeni i alternativni anketni pristupi u korištenju vinjeta kojima je dodatno omogućeno bodovanje (44).

Većina mjera koje se zasnivaju na kvantitativnom pristupu razvijena je za procjenu samo pojedinih aspekata zdravstvene pismenosti u području mentalnog zdravlja (25,44). Primjeri nekih takvih mjernih instrumenata su Ljestvica pismenosti o depresiji (engl. *Depression Literacy Scale,* DLS) (47), upitnici znanja o shizofreniji (engl. *Knowledge about Schizophrenia Questionnaire* i *Schizophrenia Knowledge Questionnaire,* KASQ i SKQ) (48,49), instrumenti za mjerenje stigme kao što su Ljestvica socijalne distance (engl. *Social Distance Scale;* SD) (50) i Stavovi za-

does not allow conclusions to be drawn at the individual level, but has been shown to be useful in determining the level of mental health literacy of the population (44). Furthermore, the vignette-based questionnaire, which assess knowledge by providing more detailed descriptions compared with just asking knowledge questions, represents hypothetical cases, and answers obtained might therefore still differ from real-life situations (42, 45, 46). The authors of the systematic reviews note that there are additional methodological limitations in the use of the MHLQ questionnaire and in the interpretation of the results. It is not always possible to accurately and clearly assess the level of knowledge separately from beliefs, attitudes, or opinions in order to understand the unique contribution of each of these factors as well as their potential interaction (47). Another limitation is related to understanding the mental health problems and mental disorders described in the vignettes, which create a baseline in relation to which participants answer the remaining questions. For example, the participant can answer these questions under the assumption that the person described in the vignette has mild stress instead of depression, which will consequently result in different answers (e.g. when it comes to the need to contact a psychiatrist) (44). Furthermore, due to the characteristics of the open-ended questions that are present in the MHLQ questionnaire, especially their weaknesses when it comes to assessing e.g. the degree (frequency or intensity) of a number of determinants, alternative survey approaches were later developed in the use of vignettes that further enabled scoring (44).

Most measures that are based on a quantitative approach have been developed to assess only particular aspects of mental health literacy (25, 44). Some examples of these instruments are the Depression Literacy Scale (DLS) (47), the Knowledge about Schizophrenia

jednice prema mentalnim bolestima (engl. *Community Attitudes towards Mental Illness;* CAMI, modificirana verzija OMI-a) (51). Nadalje, slične se jednodimenzionalne ljestvice koriste u procjeni ponašanja povezanih s traženjem pomoći, primjerice Ljestvica stavova prema traženju pomoći (engl. *Attitudes towards Help-Seeking Scale*), kasnije modificirana kao Ljestvica stavova prema traženju profesionalne psihološke pomoći (engl. *Attitudes toward Seeking Professional Psychological Help Scale; ATSPPH*) (52,53).

Zbog prepoznatog nedostatka instrumenata koji omogućuju sveobuhvatnije istraživanje mentalnozdravstvene pismenosti i pružaju metodološki jak i vremenski učinkovit pristup, nedavno su razvijene ljestvice za procjenu pismenosti u području mentalnog zdravlja, poput Ljestvica zdravstvene pismenosti u području mentalnoga zdravlja (MHLS) (54) ili Upitnik za mentalnozdravstvenu pismenost (MHLq) (55) i ljestvice razvijene za određene skupine, kao što su Ljestvica pismenosti za mentalno zdravlje za studente zdravstvene zaštite (MHLs_HS) (56). Ljestvice se sastoje od 32 do 35 čestica kojima se procjenjuju različiti aspekti mentalnozdravstvene pismenosti, većinom zasnovane na originalnom konceptu zdravstvene pismenosti u području mentalnog zdravlja, kao što je predložio Jorm (znanja i uvjerenja o mentalnom zdravlju općenito, a ne nekom određenom problemu mentalnog zdravlja, stavovi ili stigma prema ljudima s problemima mentalnog zdravlja ili mentalnim poremećajima, traženje pomoći i ponašanje/vještine pružanja prve pomoći te strategije samopomoći), ali neki od njih dodatno procjenjuju i znanja o održavanju pozitivnog mentalnog zdravlja. MHL ljestvice također su razvijene za upotrebu u evaluaciji obrazovnih programa i intervencija usmjerenih na poboljšanje pismenosti mentalnog zdravlja.

Wei i sur. u nizu preglednih radova analizirali su nedostatke i prednosti pojedinih instrumenata za mjerenje mentalnozdravstvene pismenosti, te su istaknuli pojedinačne preporuke za

Questionnaire (KASQ) and the Schizophrenia Knowledge Questionnaire (SKQ) (48, 49), instruments for measuring stigma such as Social Distance Scale (SD) (50), and the Community Attitudes Towards Mental Illness (CAMI, modified version of OMI) (51). Furthermore, similar one-dimensional scales are used in assessment of help-seeking behaviors such as the Attitudes toward Help-Seeking Scale, later modified into the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH) (52, 53).

Due to the recognized lack of scales that would allow more comprehensive exploration of mental health literacy and provide a methodologically strong and time-efficient approach, some scales for assessing mental health literacy have been recently developed, such as the Mental Health Literacy Scale (MHLS) (54) or Mental Health Literacy Questionnaire (MHLQ) (55), and scales have been developed for specific groups, such as the Mental Health Literacy Scale for Healthcare Students (MHLS_HS) (56). These scales consist of 32 to 35 items assessing different aspects of mental health literacy, mostly based on the original concept of mental health literacy as proposed by Jorm (knowledge and beliefs about mental health in general, not some particular mental health problem, attitudes or stigma toward people experiencing mental health problems or mental disorders, help-seeking and first aid behavior/skills, and self-help strategies), but some of them also assess knowledge of maintaining positive mental health. MHL scales have also been developed for use in evaluation of educational programs and interventions aimed to improve mental health literacy.

In a series of review papers, Wei et al. analyzed the shortcomings and strengths of different mental health literacy instruments and highlighted individual recommendations for their use (25, 57-59). In doing so, they emphasized

njihovo korištenje (25,57-59). Pritom naglašavaju kulturološka ograničenja te zaključuju da ne postoje instrumenti koji bi bili općenito primjenjivi za sve populacije.

U konačnici MHLQ, premda prema navedenim sustavnim pregledima ne pripada instrumentima koji nude dobre metrijske karakteristike, zaslužuje istraživačku pozornost zbog svoje sveobuhvatnosti i pružanja podataka o višestrukim dimenzijama mentalnozdravstvene pismenosti, što potvrđuje i njegova široka primjena. Mješovita (kvalitativna i kvantitativna) priroda MHLQ upitnika pruža dublji uvid u obilježja i razinu mentanozdravstvene pismenosti, što nedostaje većini drugih instrumenata.

Zdravstvena pismenost nije čest predmet istraživanja u Hrvatskoj, a zdravstvena pismenost u području mentalnog zdravlja još i manje. U Hrvatskoj je 2017. provedeno istraživanje mentalnozdravstvene pismenosti odgojno-obrazovnih djelatnika iz osnovnih i srednjih škola. Cilj istraživanja je bio dobiti uvid u osnovna znanja i vjerovanja odgojno-obrazovnih djelatnika u području mentalnog zdravlja djece i mladih s naglaskom na depresivne smetnje te razinu prepoznavanja problema i spremnost pružanja prve pomoći i podrške. Istraživanje je provedeno prema australskom modelu mentalnozdravstvene pismenosti te je za potrebe istraživanja MHLQ upitnik prilagođen cilju istraživanja i metodi prikupljanja podataka putem interneta (60).

PRAKTIČNA PRIMJENA REZULTATA ISTRAŽIVANJA ZDRAVSTVENE PISMENOSTI U PODRUČJU MENTALNOG ZDRAVLJA – RAZVOJ PROGRAMA I INTERVENCIJA

Istraživanja pokazuju da unaprjeđivanje zdravstvene pismenosti u području mentalnog zdravlja može doprinijeti boljem prepoznavanju ranih znakova problema mentalnog

cultural constraints and concluded that there are no instruments that would be generally applicable to all populations.

Finally, even though systematic reviews highlight that MHLQ is not among the instruments that offer good metric characteristics, it deserves attention for its comprehensiveness and the provision of data on multiple dimensions of mental health literacy, as evidenced by its widespread use. The combined qualitative and quantitative nature of MHLQ provides a deeper insight into the characteristics as well as level of mental health literacy, which most other instruments lack.

Health literacy is not a frequent research interest in Croatia, and mental health literacy even less so. A study assessing mental health literacy of educational staff from primary and secondary schools in Croatia was conducted in 2017. The aim of the study was to gain insight into the basic knowledge and beliefs of educational staff in the field of mental health of children and young people with an emphasis on depressive symptoms and the level of problem recognition and willingness to provide mental health first aid and support. The study was conducted according to the Australian mental health literacy model and, for that purpose, the MHLQ was adapted to the objectives and method of data collection via the Internet (60).

PRACTICAL IMPLICATIONS OF THE MENTAL HEALTH LITERACY SURVEY FINDINGS – DEVELOPMENT OF MHL PROGRAMS AND INTERVENTIONS

Studies show that improving mental health literacy can contribute to better recognition of early signs of mental health problems among non-professionals and improve attitudes towards seeking help (11). Furthermore, the

zdravlja među nestručnjacima te poboljšanju stavova prema traženju pomoći (11). Također, provedena istraživanja ukazuju na potrebu razvoja i provedbe programa za unaprjeđenje opće zdravstvene pismenosti u cilju ranog prepoznavanja problema mentalnoga zdravlja i mentalnih poremećaja te pružanja primjerene pomoći i emocionalne podrške (26, 33).

Pri osmišljavanju intervencija za unaprjeđenje zdravstvene pismenosti u području mentalnog zdravlja treba uzeti u obzir razlike koje su pronađene između dobnih skupina i pojedinih mentalnih poremećaja/bolesti. Primjerice, rezultati istraživanja Farrer i sur. su pokazali da su stariji odrasli (iznad 70 godina) s manjom točnošću od mlađih odraslih (18-24 godine) prepoznavali depresiju i shizofreniju, ali su mlađi češće zamijenili shizofreniju za depresiju. Razlike su utvrđene i u vjerovanju o korisnosti pomoći stručnjaka, medicinskih tretmana i životnih navika u liječenju shizofrenije i depresije, a stariji su u većoj mjeri smatrali da shizofrenija može biti uzrokovana slabošću karaktera (61). Posebnu pozornost treba usmjeriti na destigmatizaciju osoba narušenog mentalnog zdravlja ili s dijagnosticiranim mentalnim poremećajima / bolestima (62, 63).

Jedan od primjera programa unaprjeđivanja zdravstvene pismenosti u području mentalnog zdravlja utemeljen na rezultatima istraživanja provedenih od 1995. godine u Australiji je program Prva pomoć u području mentalnoga zdravlja (engl. *Mental Health First Aid,* MHFA*)* (64). Zbog sve većeg broja ljudi s problemima mentalnog zdravlja koji ne uključuju nužno patološke simptome već i lakše poteškoće u svakodnevnom funkcioniranju prepoznata je potreba da se javnost senzibilizira i educira i o tom bitnom aspektu sveukupnog zdravlja osobe - mentalnom zdravlju. Radi se o standardiziranoj psihoedukativnoj intervenciji za unaprjeđivanje znanja te promjenu stavova i ponašanja vezano za probleme mentalnoga zdravlja i mentalne poremećaje/bolesti opće populacije ili specifičnih dobnih skupina i okruženja kao i stručnjacima raznih profila (65). Svjetska federacija za mentalno zdravlje, u suradnji sa Svjetskom zdravstvenom organizacijom, istaknula je

results indicate that it is necessary to develop and implement programs for improving general mental health literacy in order to achieve early recognition of possible mental health problems or mental disorders and to provide appropriate assistance and emotional support (26, 33).

Differences in mental health literacy found between age groups and mental disorders should be taken into consideration when designing interventions to improve mental health literacy. For instance, Farrer et al. found that older adults (over 70 years of age) recognized depression and schizophrenia with less accuracy than younger adults (18-24 years), but younger participants confused schizophrenia and depression more often. Differences were also found in beliefs about the usefulness of professional help, medical treatments, and lifestyle habits in the treatment of schizophrenia and depression; older people also thought that schizophrenia could be caused by character weakness (61). Particular attention should be paid to the destigmatization of people with mental health problems or those diagnosed with a mental disorder or illness (62, 63).

The Mental Health First Aid (MHFA) program is an example of a mental health literacy program based on studies conducted since 1995 in Australia (64). Due to the increasing number of people with mental health problems that do not necessarily include pathological symptoms but rather also minor difficulties in their daily functioning, the need to sensitize and educate the public about this important aspect of a person's overall health and mental health has been recognized. It is a standardized psychoeducational intervention to advance knowledge and change attitudes and behaviors related to mental health problems and mental disorders / illnesses of the general population or specific age groups and environments as well as various professionals (65). The World Mental Health Federation, in collaboration with the World Health Organization, has highlighted

talno zdravlje je u suradnji sa Svjetskom zdravstvenom organizacijom 2016. istaknula program MHFA kao globalni primjer dobre prakse (66), a taj program je prepoznat i na europskoj razini kao učinkovita metoda javnozdravstvenog djelovanja u području prevencije depresije i samoubojstava (67). Program se ubrzo proširio na cijelo područje Australije (procjenjuje se da je program od 2001. odslušalo preko 2 % ukupne populacije odraslih u Australiji), a preko 25 država svijeta je licenciralo i prilagodilo navedeni program (68). U Europi se ovaj program provodi npr. u Danskoj, Engleskoj, Finskoj, Francuskoj, Irskoj, Malti, Nizozemskoj, Njemačkoj, Sjevernoj Irskoj, Škotskoj, Švedskoj, Švicarskoj i Walesu. Cilj je ovog programa osnaživanje javnosti da pruži pomoć osobama koje razvijaju probleme u području mentalnog zdravlja, doživljavaju pogoršavanje postojećih problema ili proživljavaju krizu. To je ono što zovemo još i psihološka prva pomoć. Ova se prva pomoć pruža dok se ne dobije odgovarajuća stručna pomoć ili dok se ne razriješi kriza. Navedena edukacija prve pomoći u području mentalnog zdravlja ne uči ljude kako se postavljaju dijagnoze ili radi tretman, što je područje profesionalnih edukacija, nego ih uči vještinama inicijalne podrške u zajednici.

Namjera programa MHFA je da svima u zajednici pruži vještine inicijalne podrške, a posebno je usmjeren na djelatnike koji se u svom svakodnevnom radu susreću s vulnerabilnim skupinama (djeca i mladi, starije osobe, kronično ili teže bolesne osobe i sl.). Tako su razvijeni i programi usmjereni na specifične skupine kao što su mladi (*Teen Mental Health First Aid*) ili odrasle osobe koje rade s djecom i mladima (*Youth Mental Health First Aid*) (69).

Dosadašnje evaluacije navedenog programa pokazuju pozitivne rezultate u više područja promjene javne svijesti o mentalnim poremećajima i bolestima. Nakon sudjelovanja u programu polaznici uspješnije prepoznaju znakove mentalnih poremećaja/bolesti u vinjetama koje opisuju osobe s primjerice simptomima depresije ili shizofrenije, izjavljuju o većem samopo-

the MHFA program as a global example of good practice in 2016 (66). It has also been recognized at European level as an effective method of public health practice for depression and suicide prevention (67). The program soon spread to the whole of Australia (it is estimated that over 2% of Australia's total adult population has finished the program since 2001) and over 25 countries have licensed and adopted the program globally (68). In Europe, this program is being implemented in Denmark, England, Finland, France, Ireland, Malta, the Netherlands, Germany, Northern Ireland, Scotland, Sweden, Switzerland, and Wales. The aim of this program is to empower the public to help people who develop mental health problems, experience exacerbation of existing problems, or experience a crisis. We can also call this psychological first aid. This first aid is provided until adequate professional assistance is obtained or until the crisis is resolved. Mental health first aid training does not teach people how to establish diagnoses or perform treatments, which is in the vocational training domain of professionals, but rather teaches them initial community support skills. The purpose of the MHFA program is to provide initial support skills to everyone in the community, and it is especially focused on employees who encounter vulnerable groups in their daily work (children and young people, the elderly, chronically or seriously ill people). Programs targeting specific groups such as children and youth, such as Teen Mental Health First Aid, or adults who work with children and youth, i.e. Youth and Youth Mental Health First Aid, have been developed (69).

Evaluations of MHFA have shown positive results in several areas of change in public awareness related to mental disorders and illnesses. After completing the training, participants are more successful in recognizing signs of mental disorders / illness in vignettes that describe people with, for instance, symptoms of depres-

uzdanju kad je u pitanju pružanje prve pomoći i podrške pokazuju manju socijalnu distancu i manje stigmatiziraju osobe koje boluju od depresije ili shizofrenije te uspješnije prepoznaju gdje potražiti pomoć kod problema mentalnoga zdravlja (61). Provedena je i meta-analiza 15 istraživanja s ciljem sistematizacije postojećih znanja o učinkovitosti provedbe programa MHFA (65). Utvrđene su najveće promjene u poboljšanju znanja sudionika, zatim u promjeni stava prema osobama s problemima mentalnog zdravlja odnosno mentalnim poremećajima/bolestima, a iako značajne, najmanje su promjene pronađene u ponašanju (65).

Posljednjih se godina naglašava potreba razvoja i evaluacije programa mentalnozdravstvene pismenosti kojima je glavni cilj stvaranje temelja za dobro mentalno zdravlje, blagostanje i produktivnu budućnost, posebice kada su u pitanju djeca i mladi (70).

ZAKLJUČAK

Istraživanja u području mentalnozdravstvene pismenosti posljednjih 20-ak godina doprinijela su razumijevanju navedenog istraživačkog konstrukta. Saznanja proizašla iz istraživanja dobar su putokaz u razvoju programa za poboljšanje zdravstvene pismenosti u području mentalnog zdravlja kako za opću populaciju tako i za specifične skupine i okruženja.

Istraživanje Altweck i sur. 2015. potvrdilo je postojanje kulturoloških razlika u vezi zdravstvene pismenosti u području mentalnoga zdravlja u segmentima znanja kao i vjerovanja o uzrocima mentalnih poremećaja i traženja pomoći. Navedeno istraživanje naglašava važnost razumijevanja uvjerenja o mentalnim poremećajima i bolestima u različitim kulturama u cilju razvoja učinkovitijeg, pristupačnijeg i kulturološki osjetljivog sustava usmjerenog na zaštitu mentalnog zdravlja pa tako i prilagođenih programa mentalnozdravstvene pismenosti (71).

sion or schizophrenia, express more confidence when it comes to providing first help and support, show less social distance and less stigmatization toward people who suffer from depression or schizophrenia, and more successfully identify where to seek help for mental health problems (61). A meta-analysis was conducted to systematize existing knowledge on the effectiveness of the MHFA program that included 15 studies (65). The greatest changes were found in improving participants' knowledge, then in changing attitudes towards people with mental health problems or mental disorders / illnesses, and, although significant, the smalles changes were found in behavior (65).

The need for the development and evaluation of mental health literacy programs has been emphasized over the past few years, with the main objective being to create a foundation for good mental health, well-being, and a productive future, especially when it comes to children and young people (70).

CONCLUSION

Mental health literacy studies over the last 20 years have contributed to the understanding of this research construct. The research findings have provided important guidelines for the development of programs aimed at improving mental health literacy among the general population and specific groups and environments.

The study by Altweck et al. 2015 confirmed the existence of cultural differences in mental health literacy related to knowledge as well as beliefs about the causes of mental disorders and about seeking help. This research highlights the importance of understanding the beliefs about mental disorders and illness in different cultures in order to develop a more efficient, accessible, and culturally sensitive mental health system and thus tailored mental health literacy programs (71).

Nakon gotovo 20 godina istraživačkog i stručnog iskustva u području mentalnozdravstvene pismenosti stručnjaci naglašavaju da zdravstvena pismenost populacije u području mentalnog zdravlja i njeno praćenje mora biti interes nacionalnih politika mentalnoga zdravlja (27). U razvoju programa i intervencija je posebice važno prilagoditi ih ciljanoj populaciji, uzeti u obzir spolne, dobne i kulturološke razlike kao i specifičnosti okruženja. Navedene su razlike važne i pri organizaciji i razvoju sustava mentalnog zdravlja da bi oni postali učinkovitiji, pristupačniji i kulturološki osjetljivi. Stoga je pri razvoju programa važno temeljiti specifične ciljeve i odabir sadržaja na znanstveno utemeljenim spoznajama, a upotreba istraživačke metode i odabir mjernih instrumenata mora se temeljiti na dosadašnjim spoznajama u tom području povezano sa specifičnom ciljanom populacijom i kulturološkim okruženjem.

Međutim, navedeni programi nisu niti jedini niti dostatni kada je u pitanju poboljšanje zdravstvene pismenosti o mentalnom zdravlju. Istraživanje provedeno u Južnoj Australiji o promjenama razine zdravstvene pismenosti u području mentalnog zdravlja povezano s depresijom 1998. - 2004. pokazalo je da je došlo do povećanja pismenosti, ali je potvrdilo da je malo vjerojatno da bi do tog poboljšanja došlo da nije bilo utjecaja i brojnih inicijativa u cilju osvještavanja javnosti o mentalnim poremećajima (72).

Važnost unaprjeđivanja mentalnozdravstvene pismenosti u zajednici možemo prepoznati u akcijskom programu *Mental Health Gap Action Programme* (mhGAP) Svjetske zdravstvene organizacije iz 2019. godine (73). Navedeni dokument donosi nekoliko aktivnosti i intervencija koje se mogu provesti na razini zajednice, a koje uključuju:

- razgovor o mentalnom zdravlju kako bi se podigla razina znanja i osviještenosti te smanjili stigma i diskriminacija, potom aktivnosti promicanja mentalnog zdravlja i prevencije koje podizanjem osviještenosti o

After almost 20 years of research and professional experience in the field of mental health literacy, experts emphasize that mental health literacy and its monitoring must be the focus of interest for national mental health policies (27). In the development of the programs and interventions, it is especially important to adapt them to the target population and take into consideration gender, age, and cultural differences as well as specific characteristics of the environment. These differences are also important in the organization and development of the mental health system in order to make them more efficient, accessible, and culturally sensitive. Therefore, when developing a program, it is important to identify specific goals and select content while considering science-based knowledge, and the use of research methods and selection of instruments should therefore be guided by current knowledge in this area related to the specific target population and cultural environment.

Of course, these programs are not the only ones, nor are they sufficient when it comes to mental health literacy improvement. A study conducted in South Australia on changes in mental health literacy related to depression between 1998 and 2004 found that literacy had increased, but also confirmed that it was unlikely that improvement would happen if not for the effect of many initiatives aimed at raising the public's awareness of mental disorders (72).

Ihe importance of enhancing community mental health literacy is also emphasized in the 2019 WHO Mental Health Gap Action Program (mhGAP) (73). The document outlines several community-based activities and interventions that include:

- Talking about mental health to raise knowledge and awareness and reduce stigma and discrimination, followed by mental health promotion and prevention activities that contribute to early seeking and receiv-

mentalnom zdravlju u zajednici doprinose ranijem traženju i dobivanju pomoći onima s problemom mentalnoga zdravlja

- aktivnosti usmjerene na pružanje podrške osobama s problemima mentalnog zdravlja što uključuje i osnaživanje pomagača u zajednici s ciljem ranog prepoznavanja i pravovremenog dobivanja primjerene pomoći
- aktivnosti i intervencije koje podržavaju oporavak i rehabilitaciju u zajednici osoba s mentalnim bolestima i poremećajima kako bi ostvarili što veću kvalitetu života (73).

Upravo navedene aktivnosti preporučene unutar mhGAP-a sadržane su u programima koji se temelje na konceptu zdravstvene pismenosti u području mentalnog zdravlja. S obzirom na činjenicu da je mentalnozdravstvena pismenost važan čimbenik očuvanja mentalnog zdravlja potrebno je provoditi intervencije kojima će se podići razina mentalnozdravstvene pismenosti. Te intervencije pri tome moraju biti utemeljene na istraživanjima i znanstvenim dokazima te sastavni dio sveobuhvatnog pristupa promicanja i unaprjeđivanja mentalnog zdravlja te prevencije poremećaja. Stručnjaci iz vodećih svjetskih zemalja u istraživanjima i praksi usmjerenoj na poboljšanje mentalnozdravstvene pismenosti ističu da je potrebno bolje razumijevanje mentalnozdravstvene pismenosti i da su potrebne nacionalne inicijative razvoja kontekstualno i razvojno primjerenih te evaluiranih intervencija u ovom području da bi se u budućnosti unaprijedilo mentalno zdravlje na razini pojedinaca i opće populacije (28, 74).

ing help among those with mental health problems.

- Activities aimed at supporting people with mental health problems, including the empowerment of community-based helpers, in order to ensure that the problems will be recognized and appropriate assistance received as early as possible.
- Activities and interventions that support recovery and rehabilitation of people with mental illnesses and disorders in the community in order to achieve the highest possible quality of life (67).

These activities recommended in mhGAP are fully covered by programs based on the mental health literacy concept. Given the fact that mental health literacy is an important factor in maintaining mental health, it is necessary to implement interventions that will increase mental health literacy. In doing so, these interventions must be based on research and scientific evidence and must be an integral part of a comprehensive approach to promoting and improving mental health and the prevention of disorders. Experts from countries that are world leaders in research and practice of improving mental health literacy highlight that enhanced understanding of MHL and national initiatives in developing contextually and developmentally appropriate as well as validated interventions are needed in order to help achieve improvements in both individual and population mental health outcomes in the future (28, 74).

LITERATURA / *REFERENCES*

1. Constitution of the World Health Organization. World Health Organization: Basic documents. 48th ed. [Internet]. Geneva: World Health Organization; 2014 [citirano 27 veljače 2018]. Dostupno na: http://apps.who.int/gb/bd/PDF/bd48/basic-documents-48th-edition-en.pdf#page=1
2. World Health Organization. Mental health: strengthening our response [Internet]. Geneva: World health Organization; 2017 [citirano u lipnju 2017]. Dostupno na: http://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response
3. Keyes Corey LM. The mental health continuum: From languishing to flourishing in life. J Health Soc Behav 2002; 43: 207-22.
4. Westerhof GJ, Keyes CLM. Mental Illness and Mental Health: The Two Continua Model Across the Lifespan. J Adult Dev [Internet]. Lipanj 2010 [citirano 20 ožujka 2018].; 17(2): 110–119. Dostupno na: http://doi.org/10.1007/s10804-009-9082-y

5. Keyes CL. Mental illness and/or mental health? Investigating axioms of the complete state model of health. J Consult Clin Psychol 2005; 73(3): 539-48.
6. Suldo SM, Shaffer EJ. Looking beyond psychopathology: the dual-factor model of mental health in youth. School Psychol Rev 2008; 37(1): 52-68.
7. Begić D. Psihopatologija. Zagreb: Medicinska naklada, 2014, str. 4-5.
8. Time to Change. Stigma Shout. 2008. [citirano 16. siječnja 2020] Dostupno na: http://www.time-to-change.org.uk/sites/default/files/Stigma%20Shout.pdf
9. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005; 62(6): 593-602.
10. Vorko Jovic A, Strnad M, Rudan I. Epidemiologija kroničnih nezaraznih bolesti. Zagreb: Medicinska naklada, 2010, str. 225.
11. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet 2018; 392: 1789–858. DOI: https://doi.org/10.1016/S0140-6736(18)32203-7
12. The Institute for Health Metrics and Evaluation (IHME). Global Burden of disease study 2017. Pristupljeno 13.11.2019. Dostupno na: http://www.healthdata.org/croatia
13. Gulliver A, Griffiths KM, Christensen H, Brewer JL. A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. BMC Psychiatry 2012; 12(1): 81.
14. Wang PS, Angermeyer M, Borges G, Bruffaerts R, Chiu WT, DE Girolamo G *et al*. Delay and failure in treatment seeking after first onset of mental disorders in the World Health Organization's World Mental Health Survey Initiative. World Psychiatry 2007; 6(3): 177-85.
15. Alonso J, Angermeyer MC, Bernert S, Bruffaerts R, Brugha TS, Bryson H *et al.* Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand 2004; 109(suppl.420): 21-7.
16. Magaard JL, Seeralan T, Schulz H, Brütt AL. Factors associated with help-seeking behaviour among individuals with major depression: A systematic review. PLoS One 2017; 12(5), e0176730.
17. Jorm AF, Griffiths KM, Christensen H, Parslow RA, Rogers B. Actions taken to cope with depression at different levels of severity: a community survey. Psychol Med 2004; 34(2): 293-9.
18. Oliver MI, Pearson N, Coe N, Gunnell D. Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. Br J Psychiatry 2005; 186(4): 297-301.
19. Berger JL, Addis ME, Green JD, Mackowiak C, Goldberg V. Men's reactions to mental health labels, forms of help-seeking, and sources of help-seeking advice. Psycho Men Masc 2013; 14(4): 433-43.
20. Vanheusden K, van der Ende J, Mulder CL, van Lenthe FJ, Verhulst FC, Mackenbach JP. Beliefs about mental health problems and help-seeking behavior in Dutch young adults. Soc Psychiatry Psychiatr Epidemiol 2009; 44(3): 239-46.
21. Henderson C, Evans-Lacko S, Thornicroft G. Mental illness stigma, help seeking, and public health programs. Am J Public Health 2013; 103(5): 777-80.
22. Rüsch N, Evans-Lacko SE, Henderson C, Flach C, Thornicroft G. Knowledge and attitudes as predictors of intentions to seek help for and disclose a mental illness. Psychiatr Serv 2011; 62(6): 675-8.
23. Evans-Lacko S, Henderson C, Thornicroft G. Public knowledge, attitudes and behaviour regarding people with mental illness in England 2009-2012. Br J Psychiatry 2013; 202(s55): s51-7.
24. Gulliver A, Griffiths KM, Christensen H, Brewer JL. A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. BMC Psychiatry 2012; 12(1): 81.
25. Wei Y, McGrath PJ, Hayden J, Kutcher S. Mental health literacy measures evaluating knowledge, attitudes and help-seeking: a scoping review. BMC Psychiatry 2015; 15(1): 291.
26. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. Mental health literacy. a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Med J Aust 1997; 166(4): 182-6.
27. Jorm AF. Mental health literacy: empowering the community to take action for better mental health. Am Psychol 2012; 67(3): 231-43.
28. Kutcher S, Wei Y, Coniglio C. Mental health literacy; past, present and future. Can J Psychiatry 2016; 61(3): 154-8.
29. Kutcher S, Bagnell A, Wei Y. Mental health literacy in secondary schools: a Canadian approach. Child Adolesc Psychiatr Clin N Am 2015; 24(2): 233–44.
30. Hrvatska enciklopedija [Croatian Encyclopaedia] [website]. Zagreb: The Miroslav Krleža Institute of Lexicography (in Croatian) (http://www.enciklopedija.hr/, accessed 7 Januray 2020).
31. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Promot Int 2000; 15(3): 259-27.
32. World Health Organization. Track 2: Health literacy and health bahaviour [Internet]. Geneva: World health Organization; [citirano u ožujku 2018]. Dostupno na: http://www.who.int/healthpromotion/conferences/7gchp/track2/en/
33. Reavley NJ, Jorm AF. National survey of mental health literacy and stigma [Internet]. Canberra: Department of Health and Ageing; 2011 [citirano 28 November 2018]. Dostupno na: https://pdfs.semanticscholar.org/d96a/e351a5b9ecfe6a519c8e4c2dd947873f426e.pdf
34. Rusch N, Evans-Lacko S, Henderson C, Flach C, Thornicroft G. Public knowledge and attitudes as predictors of help seeking and disclosure in mental illness. Psychiatr Serv. 2011; 62(6): 675-8. doi: 10.1176/ps.62.6.pss6206_0675.

35. Cotton SM, Wright A, Harris MG, Jorm AF, McGorry PD. Influence of gender on mental health literacy in young Australians. Australian & New Zealand Journal of Psychiatry 2006; 40(9): 790-6.
36. Jorm AF, Korten AE, Jacomb PA, Rodgerds B, Pollett P, Christensen P *et al*. Helpfulness of interventions for mental disorders: beliefs of health professionals compared with the general public. Br J Psychiatry 1997; 171(3): 233-7.
37. Yoshioka K, Reavley NJ, Hart LM, Jorm AF. Recognition of mental disorders and beliefs about treatment: results from a mental health literacy survey of Japanese high school students. Intern J Cult Ment Health 2015; 8(2): 207-22.
38. Loureiro LM, Jorm AF, Mendes AC, Santos JC, Ferreira RO, Pedreiro AT. Mental health literacy about depression: a survey of portuguese youth. BMC Psychiatry 2013; 13(1): 129.
39. Melas PA, Tartani E, Forsner T, Edhborg M, Forsell Y. Mental health literacy about depression and schizophrenia among adolescents in Sweden. Eur Psychiatry 2013; 28(7): 404-411.
40. O'Keeffe D, Turner N, Foley S, Lawor E, Kinsella A, O'Callaghan E *et al*. The relationship between mental health literacy regarding schizophrenia and psychiatric stigma in the Republic of Ireland. J Ment Health 2016; 25(2): 100-8.
41. Coles ME, Ravid A, Gibb B, George-Denn D, Bronstein LR, McLeod S. Adolescent mental health literacy: young people's knowledge of depression and social anxiety disorder. J Adolesc Health 2016; 58(1): 57-62.
42. Dey M, Marti L, Jorm AF. The Swiss Youth Mental Health Literacy and Stigma Survey: Study methodology, survey questions/vignettes, and lessons learned. Eur J Psychiatry 2019; 33(2): 72-82.
43. Green B, Jones K. Lyerla R. Dyar W, Skidmore M. Stigma and behavioral health literacy among individuals with proximity to mental health or substance use conditions. J Mental Health 2020; 1-7.
44. O'Connor M, Casey L, Clough B. Measuring mental health literacy–a review of scale-based measures. J Ment Health 2014; 23(4): 197-204.
45. Angermeyer MC, Schomerus G. State of the art of population-based attitude research on mental health: a systematic review. Epidemiol Psychiatr Sci 2017; 26(3): 252-64.
46. Yang LH, Link BG. Measurement of attitudes, beliefs and behaviors of mental health and mental illness. October 2015. Retrieved on November 10 (2015): 2016.
47. Griffiths KM, Christensen H, Jorm AF, Evans K, Groves C. Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatizing attitudes to depression: randomized controlled trial. Br J Psychiatry 2004; 185(4): 342-9.
48. Ascher-Svanum H. Development and validation of a measure of patients' knowledge about schizophrenia. Psychiatr Serv 1999; 50(4): 561-3.
49. Smith JV, Birchwood MJ. Specific and non-specific effects of educational intervention with families living with a schizophrenic relative. Br J Psychiatry 1987; 150(5): 645-52.
50. Bogardus E. Measuring social distance. J Appl Sociol 1925; 9: 299-308.
51. Taylor SM, Dear MJ. Scaling community attitudes toward the mentally ill. Schizophr Bull 1981; 7(2): 226-40.
52. Fischer EH, Turner JL. Orientations to seeking professional help: development and research utility of an attitude scale. J Consult Clin Psychol 1970; 35(1): 79-90.
53. Fischer EH, Farina A. Attitudes toward seeking professional psychological help: a shortened form and considerations for research. J Coll Stud Dev 1995; 36(4): 368-73.
54. O'Connor M, Casey L. The Mental Health Literacy Scale (MHLS): A new scale-based measure of mental health literacy. Psychiatry Res 2015; 229(1): 511-6.
55. Campos L, Dias P, Palha F, Duarte A, Veiga E. Development and psychometric properties of a new questionnaire for assessing Mental Health Literacy in young people. Universitas Psychologica 2016; 15(2): 61-72.
56. Chao HJ, Lien YJ, Kao YC, Tasi JC, Lin HS, Lien Yi. Mental Health Literacy in Healthcare Students: An Expansion of the Mental Health Literacy Scale. Int J Environ Res Public Health 2020; 17(3): 948.
57. Wei Y, McGrath PJ, Hayden J, Kutcher S. Measurement properties of tools measuring mental health knowledge: a systematic review. BMC Psychiatry 2016; 16(1): 297.
58. Wei Y, McGrath PJ, Hayden J, Kutcher S. Measurement properties of mental health literacy tools measuring help-seeking: a systematic review. J Ment Health 2017; 26(6): 543-55.
59. Wei Y, McGrath P, Hayden J, Kutcher S. The quality of mental health literacy measurement tools evaluating the stigma of mental illness: a systematic review. Epidemiol Psychiatr Sci 2017: 1-30.
60. Muslić Lj, Markelić M, Vulić-Prtorić A, Ivasović V, Jovičić Burić D. Zdravstvena pismenost odgojno-obrazovnih djelatnika u području mentalnoga zdravlja djece i mladih, Istraživanje prepoznavanja depresivnosti i spremnosti na pružanje podrške i pomoći. Zagreb: Hrvatski zavod za javno zdravstvo, 2018.
61. Farrer L, Leach L, Griffiths KM, Christensen H, Jorm AF. Age differences in mental health literacy. BMC Public Health 2008; 8 (1): 125.
62. Robles-García R, Fresán A, Berlanga C, Martínez N. Mental illness recognition and beliefs about adequate treatment of a patient with schizophrenia: association with gender and perception of aggressiveness-dangerousness in a community sample of Mexico City. Int J Soc Psychiatry 2013; 59(8): 811-18.
63. Rüsch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. Eur Psychiatry 2005; 20(8): 529-39.
64. Kitchener BA, Jorm AF. Mental health first aid training for the public: evaluation of effects on knowledge, attitudes and helping behavior. BMC Psychiatry 2002; 2(1): 10.

65. Hadlaczky G, Hökby S, Mkrtchian A, Carli V, Wasserman D. Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. Int Rev Psychiatry 2014; 26(4): 467-75.
66. Van Ommeren M, Saxena S. Psychological first aid: preserving dignity in crisis response [Internet]. Geneva: World health Organisation; 2018 [citirano 3. svibnja 2017]. Dostupno na: http://www.who.int/mental_health/world-mental-health-day/paper_wfmh_2016.pdf?ua=1&ua=1
67. Purebl G, Petrea I, Shields L, Ditta Tóth M, Székely A, Kurimay T *et al*. Depression, Suicide Prevention and E-Health: Situational analysis and recommendation for action. Joint Action on Mental Health and Wellbeing Report; 2015 [citirano 3. svibnja 2017]. Dostupno na: http://www.mentalhealthandwellbeing.eu/assets/docs/publications/WP4%20Final.pdf .
68. Mental Health First Aid Australia. Our Global Impact. Our impact. [Citirano 12. svibnja 2020]. Dostupno na: https://mhfa.com.au/our-impact/our-global-impact
69. Jorm AF, Kitchener BA, Sawyer MG, Scales H, Cvetkovski S. Mental health first aid training for high school teachers: a cluster randomized trial. BMC Psychiatry 2010; 10(1): 51.
70. Bjørnsen HN, Ringdal R, Espnes GA, Moksnes UK. Positive mental health literacy: development and validation of a measure among Norwegian adolescents. BMC Public Health 2017; 17(1), 717.
71. Altweck L, Marshall TC, Ferenczi N, Lefringhausen K. Mental health literacy: a cross-cultural approach to knowledge and beliefs about depression, schizophrenia and generalized anxiety disorder. Front Psychol 2015; 6: 1272.
72. Goldney RB, Fisher LJ, DalGrande E, Taylor AW. Changes in mental health literacy about depression: South Australia, 1998 to 2004. Med J Aust 2005; 183(3): 134-7.
73. mhGAP community toolkit: field test version. [Internet]. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO. [citirano 13. studenog 2019]. Dostupno na: https://www.who.int/publications-detail/the-mhgap-community-toolkit-field-test-version
74. Tully LA, Hawes DJ, Doyle FL, Sawyer DG, Dadds MR. A national child mental health literacy initiative is needed to reduce childhood mental health disorders. Australian & New Zealand Journal of Psychiatry 2019; 53(4): 286-90.

Rijetki sindromi u dječjoj i adolescentnoj psihijatriji: prikaz triju slučajeva

/ Rare Syndromes in Child and Adolescent Psychiatry: Three Case Reports

Marina Bježančević[1], Ivana Groznica Hržić[1], Zlatna Andraković[1], Vlatka Kovač[1,2], Stanislav Rogulja[1], Katarina Dodig-Ćurković[1,2,3]

[1]Sveučilište Josipa Jurja Strossmayera u Osijeku, Fakultet za dentalnu medicinu i zdravstvo, Osijek; [2]Sveučilište Josipa Jurja Strossmayera u Osijeku, Medicinski fakultet, Osijek; [3]Klinički bolnički centar Osijek, Zavod za dječju i adolescentnu psihijatriju, Osijek; Hrvatska

/ [1]Josip Juraj Strossmayer University in Osijek,Faculty of Dental Medicine and Health; [2]Josip Juraj Strossmayer University in Osijek, Faculty of Medicine, Osijek; [3]Clinical Hospital Center Osijek, Department of Child and Adolescent Psychiatry, Osijek, Croatia

U razdoblju od samo nekoliko mjeseci više slučajeva iznimno rijetkih sindroma upućeno nam je na psihijatrijsku procjenu i liječenje. U radu ćemo opisati naša iskustva u liječenju bolesnika sa sindromom Cornelia de Lange, Neuhauserovim sindromom i sindromom Incontinentia pigmenti. U kliničkoj slici smo zamijetili niz preklapajućih popratnih psihičkih obilježja kojima smo pristupili na jedinstven i individualizirani način. Prva smetnja u fokusu terapije bila je nesanica, intervencijom smo uspješno poboljšali trajanje i kvalitetu sna. Prisutne smetnje pažnje i koncentracije su ublažene provođenjem *neurofeedback* tretmana, koji je ujedno imao blagotvoran učinak na smanjenje učestalosti samoozljeđivanja, agresije prema drugima i iritabilnosti. Zaključno, psihijatrijskim liječenjem djece s rijetkim sindromima nastupilo je poboljšanje kvalitete života djeteta i obitelji, a multidisciplinarni pristup omogućio je pružanje optimalne razine skrbi unutar bolničkog sustava.

/ Over a period of a few months, several cases of extremely rare childhood syndromes were referred to us for psychiatric evaluation and treatment. We report three clinical cases with multiple overlapping psychological features: Cornelia de Lange, Neuhauser, and Incontinentia pigmenti syndrome. Each child was approached in a unique and individual way. The first issue considered in therapy was insomnia, and our intervention was effective, leading to improvements in duration as well as quality of sleep. Attention and concentration difficulties that were present were alleviated by neurofeedback treatment. At the same time, the treatment had a positive effect on the decrease of self-injury behavior, aggression, and irritability. To conclude, psychiatric treatment of children with rare syndromes improved the quality of life of the child and family, and the multidisciplinary approach provided the optimum level of care within the healthcare system.

ADRESA ZA DOPISIVANJE / *CORRESPONDENCE:*

Marina Bježančević, dr. med.
Zavod za dječju i adolescentnu psihijatriju
Klinički bolnički centar Osijek
Huttlerova 4
31 000 Osijek, Hrvatska
E-pošta: katarina5dodig@gmail.com

KLJUČNE RIJEČI / *KEY WORDS:*

Rijetki sindromi / *Rare Syndromes*
Sindrom Cornelia de Lange / *Cornelia de Lange Syndrome*
Neuhauserov sindrom / *Neuhauser Syndrome*
Sindrom *Incontinentia pigmenti* / *Incontinentia pigmenti Syndrome*

TO LINK TO THIS ARTICLE: https://doi.org/10.24869/spsih.2020.344

SINDROM CORNELIA DE LANGE

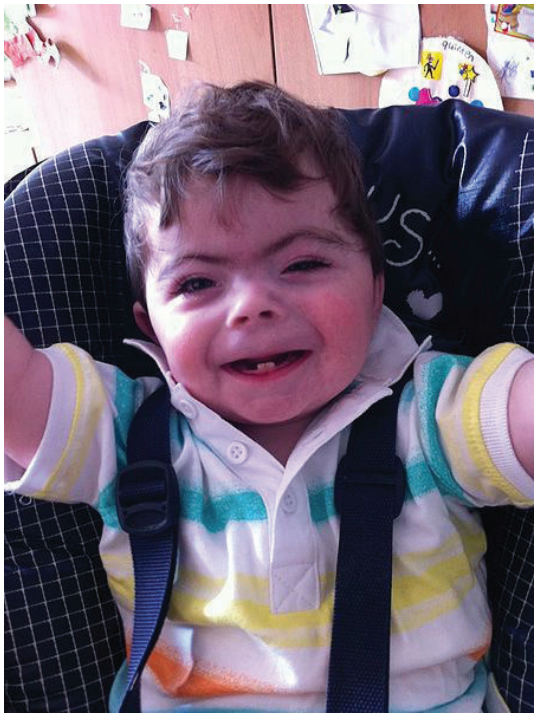
Cornelia de Lange je rijedak genetski poremećaj i kongenitalni sindrom koji je ime dobio po nizozemskoj pedijatrici Corneliji de Lange, a koja ga je prva opisala 1933. godine. Radi se o rijetkom sindromu, pojavljuje se u 1 na 10 000 djece, s jednakom učestalošću u oba spola i među svim rasama. Etiologija poremećaja je poznata. Godine 2004. otkrivena je mutacija gena NIPBL na 5. kromosomu (50 % slučajeva), zatim su otkrivene mutacije gena SMC1A, SMC3, HDAC8, RAD21 te je 2012. godine otkrivena mutacija gena HDAC8 na X kromosomu. Za rani probir koristi se ultrazvučni pregled u 18. tjednu trudnoće (promatra se dužina femura, nadlaktice i opseg glave) (1). Sindrom obuhvaća veliki raspon tjelesnih, kognitivnih, emocionalnih, psiholoških i razvojnih problema. Zajedničke tjelesne karakteristike novorođenčadi su: mala porođajna težina, mikrocefalija, spojene obrve, dugačke trepavice, mali nos, tanke usnice, pojačana dlakavost, kratke ruke i noge ili deformiteti ekstremiteta. Najčešći medicinski problemi s kojima se suočavaju ova djeca su: gastroezofagealni refluks, srčane mane, epilepsija, slabovidnost, nagluhost, deformiteti ekstremiteta, defekti građe nepca i zubi, kognitivne, ponašajne i govorne smetnje (2). Od psihičkih simptoma u literaturi se najčešće opisuju hiperaktivnost, anksioznost, depresija, problemi sa spavanjem, samoozljeđivanje i autoagresivno ponašanje (3). Prevalencija samoozljeđivanja kod ove djece je visokih 56 % i često je potaknuta gastrointestinalnim bolovima, bolnim zubom i sličnim bolnim stanjima. Kod ove djece pojavljuju se vrlo često problemi sa spavanjem i to od najranije dobi. Obično je riječ o smetnjama usnivanja te učestalim noćnim buđenjima. Prije psihijatrijskog liječenja poremećaja sna preporuča se isključivanje drugih mogućih somatskih i neuroloških uzroka. Apneja u snu je također česta pojava kod djece s Cornelia de Lange sindromom kada se savjetuje obrada otorinolaringologa, a ponekad i operacija krajnika (4,5).

CORNELIA DE LANGE

Cornelia de Lange is a rare genetic disorder and congenital syndrome named after the Dutch pediatrician Cornelia de Lange, who first described it in 1933. It is a rare syndrome, occurring in 1 out of 10 000 children, with equal frequency in both sexes and among all races. The etiology of the disorder is known. In 2004, a mutation of the NIPBL gene on the 5th chromosome was detected (in 50% of cases). In the following years, mutations of the SMC1A, SMC3, HDAC8, and RAD21 genes were detected. Lastly, the HDAC8 gene mutation on the X chromosome was detected in 2012. An ultrasound examination in the 18th week of pregnancy is used as early screening (femur length, upper arm and head circumference) (1). The syndrome consists of a wide range of physical, cognitive, emotional, psychological, and developmental issues. Some common physical characteristics of newborns are: low birth weight, microcephaly, eyebrows that meet in the middle, long lashes, a small nose, thin upper lip, hirsutism, short arms and legs, or limb deformities. The most common medical problems these children face include gastroesophageal reflux, heart defects, epilepsy, visual impairment, hearing loss, limb deformities, palate and teeth defects, and cognitive, behavioral, and speech difficulties (2). The most commonly reported psychiatric symptoms are hyperactivity, anxiety, depression, sleep problems, self-injury, and auto-aggressive behavior (3). Prevalence of self-injury behavior is at a high 56%, which is often triggered by gastrointestinal pain, toothache, and other pains. Sleep problems occur very often and from the earliest age. Usually, children have difficulties with falling asleep and/or frequent night waking. Before starting the psychiatric treatment, it is recommended to exclude other somatic and neurological causes of the present symptoms. Sleep apnea is also very common in children with Cornelia de Lange syndrome, and should be treated by an otolaryngologist (4,5).

Prikaz bolesnika

Dječak u dobi 8 godina dolazi prvi puta na pregled dječjem psihijatru u pratnji majke. Pohađa prvi razred po posebnom programu u specijalnoj školi, živi s roditeljima. U obiteljskoj anamnezi je negativan psihijatrijski hereditet. Dječak je rođen iz druge majčine trudnoće (prva trudnoća završila spontanim pobačajem). U 34. tjednu trudnoće zamijećen je zastoj u rastu ploda. Rođen je u terminu, prirodnim putem, Apgar skor 8/9. Odrasta kao jedino dijete u kompletnoj primarnoj obitelji. Rani psihomotorni razvoj je od rođenja bio usporen te je prohodao s 20 mjeseci, a prva riječ sa značenjem bila je u dobi od tri godine. U dojenačkoj dobi nakon kliničkog pregleda pedijatra i genetičke obrade postavljena je dijagnoza sindroma Cornelia de Lange. Govor nije u potpunosti uspostavljen, služi se pojedinačnim riječima i gestama. Nakon pete godine uspostavio je kontrolu stolice, a mokrenje i dalje ne kontrolira u potpunosti.



SLIKA 1. *Sindrom Cornelia de Lange* (Izvor: By Joris - Own work, CC BY-SA 3.0, dostupno na: https://commons.wikimedia.org/w/index.php?curid=30422316)
FIGURE 1. Cornelia de Lange syndrome (source: By Joris - Own work, CC BY-SA 3.0). Available at: https://commons.wikimedia.org/w/index.php?curid=30422316)

Case report

An 8-year-old boy was referred to a child and adolescent psychiatrist for an examination. He attended the first grade at a special school and lived with his parents. Family history was negative on psychiatric heredity. The boy was born from the mother's second pregnancy (her first pregnancy ended in miscarriage). In the 34th week of pregnancy, a stagnation in fetal growth was observed. He was a full-term baby, vaginaly delivered, with an Apgar score of 8 out of 9. He grew up as the only child, in a complete primary family. His early psychomotor development was delayed. He took his first steps at the age of 20 months, and spoke the first meaningful word at the age of three. After pediatric treatment and genetic screening, he was diagnosed with Cornelia de Lange syndrome. His speech is underdeveloped and he communicates using sounds, gestures, and single words. He achieved bowel control at the age of five, but has bladder control problems. He was vaccinated on the recommended schedule and did not have any of childhood communicable diseases. At the age of one, he had a heart surgery due to tetralogy of Fallot. He has autoimmune thrombocytopenia and leukopenia, hearing loss in both ears, gastroesophageal reflux, and *Helicobacter pylori* positive gastritis. At the age of five, he underwent an Achilles tendon surgery.

The boy was referred to us on the recommendation of his pediatrician. He had sleep difficulties since birth, struggled with falling asleep, and woke up frequently. His sleep intervals lasted one to two hours. His mother described him as hyperactive, with a short attention span of and sudden loss of interest, as well as poor eye contact. He communicated using gestures and a dozen words he knows (mom, dad, bye). He was dependent on continuous help, with assistance in daily self-care activities. He often presented auto-aggressive behavior when experiencing abdominal pain. He was well integrated into a special school, but occasionally wet his pants

Na tjelesnom planu redovito je cijepljen prema kalendaru cijepljenja, nije prebolio dječje zarazne bolesti. U dobi od godinu dana je imao operaciju srca zbog tetralogije Fallot. Zbog autoimune trombocitopenije i leukopenije prati ga hematolog, a zbog obostrane nagluhosti otorinolaringolog. U dobi od 5 godina je zbog deformiteta stopala i otežanog hoda operirao Ahilove tetive. U praćenju je i gastroenterologa zbog GERB-a i gastritisa (infekcija *Helicobacter pilory*), a operiran je i zbog impaktiranih zubi.

Dječak je upućen na pregled dječjem psihijatru po preporuci primarnog pedijatra zbog poteškoća sa spavanjem. Od rođenja jako teško zaspi, a kada spava budi se po nekoliko puta noću. San je u intervalima od sat do dva sata. Majka ga opisuje kao hiperaktivnog, vrlo brzo gubi interes, slabijeg je kontakta s okolinom, najviše voli šetati i motoričke aktivnosti. Komunicira pretežno gestama, koristi desetak riječi koje poznaje (mama, tata, baba, deda, papa...). Potreban mu je stalan nadzor u svim aktivnostima samozbrinjavanja. Često kada ima bolove u trbuhu pokazuje autoagresivno ponašanje. U specijalnoj školi se dobro uklopio, iako se povremeno u trenutcima protesta pomokri u gaćice. Tijekom pregleda dječak je bio vrlo uznemiren, kontakt se uspijevao uspostaviti kratkotrajno i površno, pažnja je bila lako otklonjiva, bio je nemiran, izlazio je van iz ambulante, majka ga je pokušavala smiriti fizičkim kontaktom. Kod dječaka su opservirane jasne karakteristične fizičke oznake sindroma Cornelia de Lange: mikrocefalija, spojene obrve, duge trepavice, nisko položene uške, nizak rast, pojačana dlakavost. Psihički simptomi bili su psihomotorni nemir, smetnje sa snom, agresivnost prema sebi i okolini, impulzivnost i nepredvidljivost u ponašanju. Nakon učinjenog psihijatrijskog intervjua, razgovora i savjetovanja s majkom preporučena je psihologijska procjena djeteta, tretman *neurofeedback* pod nadzorom dječjeg psihijatra i tretman radnog terapeuta. Od psihofarmakoterapije ordiniran je anksiolitik diazepam. Na kontrolnom pregledu koji je uslijedio nakon 2 tjedna opaženo je dis-

as a way of protesting. During the psychiatric examination, the boy was distressed, the eye contact was poor, he was easily distracted, and motorically very active, walking in and out of the room. His mother tried to calm him down using physical contact. Clear Cornelia de Lange syndrome characteristics could be observed: microcephaly, fused eyebrows, long lashes, delayed growth, increased hairiness. The psychiatric symptoms present were psychomotor agitation, sleep disorder, aggressive behavior, impulsiveness, and unpredictability in his actions. After the psychiatric interview, we counseled the mother and recommended a psychological assessment, neurofeedback treatment supervised by a child psychiatrist, and occupational therapy treatment. We also prescribed psychopharmacotherapy – an anxiolytic (diazepam). At 2-weeks follow-up, we observed some improvements: the patient was more calm, better at sleeping, and less auto-aggressive. Over the following month, the first results of neurofeedback therapy were noticed in the form of better concentration and attention. Involvement in occupational therapy resulted in reduction of daily frustrations, expanding the range of gestures and learning sign language.

NEUHAUSER SYNDROME

Neuhauser syndrome or megalocornea mental retardation (MMR) syndrome was first described in 1975 by the German neuropediatrician Gerhard Neuhäuser as a very rare congenital disorder characterized by megalocornea and neurological symptoms: intellectual disability, hypotonia, and epileptic seizures (6). Megalocornea is a bilateral, symmetric, non-progressive increase in horizontal corneal diameter greater than 12 mm in infants or greater than 13 mm in older children and adults, while ocular pressure remains normal. Apart from the increase, the corneas are of average thickness and do not have any histological changes. Af-

kretno poboljšanje u smislu da je psihomotorno mirniji, boljeg sna, manje autoagresivan prema sebi i okolini. U razdoblju od sljedećih mjesec i po dana počeli su se uočavati prvi rezultati *neurofeedback* terapije u smislu bolje koncentracije i pažnje te tretmana radnog terapeuta u obliku smanjivanja svakodnevnih frustracija povećavanjem opsega gesti i učenja znakovnog jezika.

NEUHAUSEROV SINDROM

Neuhauserov sindrom ili megalokorneja mentalna retardacija (MMR) sindrom je 1975. godine prvi puta opisao njemački neuropedijatar Gerhard Neuhäuser kao vrlo rijetki urođeni poremećaj karakteriziran megalokornejom i neurološkim simptomima - intelektualne teškoće, hipotonija i epileptički napadaji (6). Megalokorneja je bilateralno, simetrično, neprogresivno povećanje horizontalnog promjera rožnice većeg od 12 mm kod novorođenčeta ili većeg od 13 mm kod starije djece i odraslih, a očni tlak je normalan. Osim povećanja, rožnice su histološki neizmijenjene i prosječne debljine. Kod oboljele djece su prisutna dismorfična obilježja lica koja uključuju prominentno čelo, širok korijen nosa, epikantus, nisko položene uške, dugačak filtrum (7). U kliničkoj slici opisani su nerazvijen govor, stereotipni pokreti ruku, slab apetit, teškoće gutanja čvrste hrane. Do sada su opisana oko 37 bolesnika (prema podatcima NORD-a - Nacionalna organizacija za rijetke bolesti), više muških nego ženskih (8). Verloes i sur. su predložili kliničku klasifikaciju u podtipove (9). Etiologija nije u potpunosti razjašnjena, većina do sada opisanih slučajeva je konzistentna s autosomno recesivnim modelom nasljeđivanja ili *de novo* mutacijom. Fenotipska različitost upućuje na moguću genetičku heterogenost (10). Davidson i sur. su 2014. godine sekvencirali CHRDL1 gen i identificirali "*missense*" mutaciju kod X-vezane megalokorneje, no za ekstraokularne karakteristike nije nađena povezanost s istom mutacijom (11). Liječenje je multimodalno i usmjereno na specifične simptome koji su prisutni kod pojedinca.

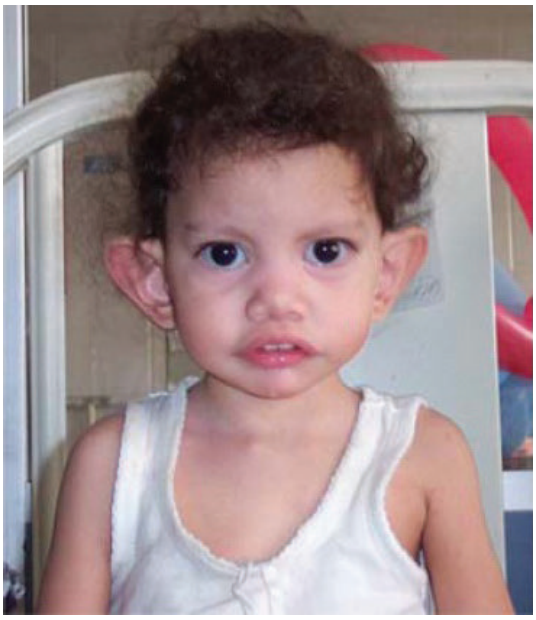
fected children have dysmorphic facial features: a prominent forehead, broad nose root, epicanthus, low-set ears, and long philtrum (7). Clinical presentation includes delayed speech, stereotypic hand movements, poor appetite, and difficulty swallowing solid food. According to NORD data (National Organization for Rare Disorders), about 37 patients have been described so far, of which more men than women (8). Verloes et al. suggested a clinical classification into subtypes (9). The etiology is still not fully understood, and most of the cases described so far are consistent with autosomal recessive inheritance model or *de novo* mutation. Phenotypic diversity indicates possible genetic heterogeneity (10). In the year 2014, Davidson et al. sequenced the CHRDL1 gene and identified a "missense" mutation in X-linked megalocornea, but the extraocular characteristics were not associated with the same mutation (11). Treatment is multimodal and focuses on the specific symptoms of every individual.

Case report

We report a case of a girl aged 10, who was attending a kindergarten group at a school for children with disabilities. She lived with her parents and sister and younger brother aged 9. The family had a positive psychiatric heredity. The father suffered from depression, post-traumatic stress disorder, and Type I diabetes mellitus. A younger brother aged 9 suffered from Neuhauser syndrome, while the sister has strabismus and the uncle has epilepsy. The patient was born from the mother's second twin pregnancy. In the 8th week of pregnancy, the mother was hospitalized for bleeding. The second fetus died at that time. She was treated with hormonal therapy. Before childbirth, an ultrasound examination showed growth failure. The child was born vaginally, and birth weight was low and the Apgar score was 7 out of 8. She was treated for perinatal infection. Ultrasound examination of the brain at 2 months showed

Prikaz bolesnika

Djevojčica u dobi od 10 godina, pohađa odgojno-obrazovnu skupinu u školi za djecu s posebnim teškoćama. Živi s roditeljima, sestrom i mlađim bratom u dobi od 9 godina. U obitelji je pozitivan psihijatrijski hereditet. Otac boluje od depresije, posttraumatskog stresnog poremećaja i od dijabetesa melitusa tip I. Mlađi brat u dobi od 9 godina boluje od Neuhauserova sindroma, sestra ima strabizam, ujak boluje od epilepsije. Djevojčica je rođena iz majčine druge blizanačke trudnoće, drugi plod je umro u 8. tjednu trudnoće. Tada je majka hospitalizirana zbog krvarenja i provođena je hormonska terapija. Neposredno prije poroda UZV pregledom ustanovljen je zastoj u rastu. Porod je bio u terminu prirodnim putem bez komplikacija, bovorođenče niske porođajne težine, Apgar 7/8. Zbog perinatalne infekcije zadržana je 2 tjedna na liječenju. UZV mozga u dobi od 2 mjeseca pokazao je asimetriju postraničnih komora. Zbog hipotonije provođene su vježbe medicinske gimnastike. Razvoj je bio usporen. Sjedila je u dobi od 1,5 godine, prohodala u dobi od 2 godine, kontrolu sfinktera uspostavila u dobi od 4 godine no još uvijek ima povremenu noćnu enurezu. Izgovarala je pojedinačne riječi, rečenice nije sklapala. Slabog apetita, sporije napredovala na tjelesnoj težini. Njene fenotipske karakteristike su normocefalična glava no dizmorfične stigme: hipertelorizam, epikantus, mongoloidno postavljeni očni rasporci, širi korijen nosa, naglašeni frontalni tuberi, otapostaza i mesnate uške, tanka gornja usna, šire razmaknuti zubi, hiperekstenzibilni zglobovi, promjer rožnica horizontalno 10 mm. U više navrata je hospitalizirana u specijalističkom centru za endokrinologiju i dijabetes gdje joj je postavljena dijagnoza. Iako djevojčica nema jedno od osnovnih obilježja sindroma - megalokorneju, ima prisutan niz drugih stigmi, a i bratu je ranije u istoj ustanovi dijagnosticiran Neuhauserov sindrom. U praćenju je neuropedijatra, logopeda, radnog terapeuta, oftalmolo-



SLIKA 2. Neuheuserov sindrom (Izvor: Avina-Fierro, JA i Hernandez-Avina, DA. Síndrome de Neuhauser: megalocórnea, retardo mental e hipotonía. Bol. Med. Hosp. Infant. Mex. 2008, vol.65, n.2, pp.135-137. dostupno na: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-11462008000200008

FIGURE 2. Neuhauser syndrome (Source: Avina-Fierro, JA i Hernandez-Avina, DA. Síndrome de Neuhauser: megalocórnea, retardo mental e hipotonía. Bol. Med. Hosp. Infant. Mex. 2008, vol.65, n.2, pp.135-137. Available: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-11462008000200008

asymmetry of lateral ventricles. She underwent physical therapy for hypotonia. Her development was delayed, and she started sitting at the age of 1.5 years, walking at the age of 2, and gained sphincter control at the age of 4, but with occasional night enuresis. She talked in single words instead of sentences, and had a poor appetite and low body weight. The patient presented following phenotypic characteristics: a normocephalic head, hypertelorism, epicanthus, eye positioning typical of Down syndrome, a broad nose root, accentuated frontal tubers, otapostasis and thick earlobes, a thin upper lip, broader spacing of teeth, hyperextensible joints, and a 10 mm horizontal corneal diameter. The patient was hospitalized on a number of occasions at a specialist center for endocrinology and diabetes where the diagnosis was established. Although the patient

ga. Zbog epileptičkih napadaja uzima terapiju uz koju nije imala napadaje već nekoliko godina. Na tjelesnom planu redovito je cijepljena prema kalendaru cijepljenja bez komplikacija, nije preboljela dječje zarazne bolesti.

Djevojčica dolazi na pregled dječjeg psihijatra po preporuci neuropedijatra zbog hiperaktivnosti, agresivnog ponašanja i nesanice. U odgojno-obrazovnoj skupini pretežito dobro funkcionira, a smetnje se javljaju unutar primarne obitelji te pri kontaktu izvan škole. U komunikaciji se služi gestama i izgovara nekoliko izoliranih riječi sa značenjem (mama, daj, pa-pa, am), odaziva se na svoje ime, izvršava jednostavne naloge, funkcionira na razini lake mentalne retardacije. Pokazuje interes za okolinu, prilazi drugim osobama i pokušava uspostaviti kontakt. Nesamostalna je u vještinama samozbrinjavanja. U trenutcima ljutnje i nezadovoljstva reagira heteroagresivno (udara, čupa, pljuje) te autoagresivno. Pri pregledu je bila motorički aktivna, nemirna, obilazila cijelu ambulantu. Opservirale su se povremene stereotipije u obliku pljeskanja. Kontakt se uspostavljao vrlo kratko i nedovoljno adekvatno za uspostavljanje komunikacije. Na prvu roditeljsku zabranu se počela rukama udarati po glavi i vrištati. Nakon iscrpnog intervjua, razgovora i savjetovanja preporučeno je uvođenje psihofarmakoterapije antipsihotikom risperidonom u niskoj dozi na koji dolazi do pomaka u smislu psihomotornog smirivanja, manje autoagresivnih i heteroagresivnih obrazaca u ponašanju, bolje dinamike sna. Preporučen je nastavak tretmana logopeda i radnog terapeuta te uključivanje u *neurofeedback* tretmane. Obitelj je suradljiva, no rehabilitacijski tretman je otežan zbog udaljenosti njihovog mjesta stanovanja.

SINDROM *INCONTINENTIA PIGMENTI*

Incontinentia pigmenti je vrlo rijetka, nasljedna i multisistemska bolest. Naziva se i Bloch-Sulzbergerov sindrom (Bloch 1926., Sulzberger

did not present one of the basic features of the syndrome – megalocornea – there were a number of other stigma present, and her brother was previously diagnosed with Neuhauser syndrome. She was received multidisciplinary treatment from the following specialists: a neuropediatrician, speech therapist, ophthalmologist, and occupational therapist. She regularly takes antiepileptics and has not had an epileptic seizure for several years now. She has been regularly immunized with vaccines without complications, and did not have any childhood communicable diseases.

The girl was referred to a psychiatric examination at the recommendation of a neuropediatrician because of symptoms that included hyperactivity, aggressive behavior, and insomnia. The patient functioned well in her school group, and most of her behavioral problems occurred at home and outside the school. She communicates with gestures and only speaks a few words with meaning ("mom, give, bye, yummy"), responds to her own name, executes simple orders, and functions at the level of mild intellectual disability. She shows interest in the environment, approaches other people, and tries to establish contact. She requires help with daily self-care activities. During periods of anger and dissatisfaction, the patient reacts aggressively (strikes, spits) and auto-aggressively. During the examination, she was motorically very active and restless. Occasional stereotypical movements in the form of applause were observed. Contact with the patient could only be established very briefly and insufficiently to establish communication. At the first instance of the parent forbidding something, she began hitting herself and screaming. After our interview and counseling, we recommended introduction of psychopharmacology – antipsychotic risperidone at a low dose for achieving psychomotor calming, less aggressive behavior, and better sleep. We recommended to continuing treatment with speech therapists

1925.). U znanstvenoj literaturi zabilježeno je između 900 i 1200 oboljelih. Kliničke manifestacije su vrlo varijabilne, no uvijek su udružene s promjenama kože. Prenosi se kao X-vezano dominantno svojstvo i javlja se gotovo isključivo kod djevojčica (u 95 % oboljelih). U većini slučajeva prenatalno je smrtonosna za mušku djecu. Etiologija je poznata, radi se o mutacijama IKBKG gena koji daje upute za izradu proteina koji pomaže regulirati nuklearni faktor-kappa-B (zaštita stanica od samouništenja) (12). Kod žena neke stanice proizvode normalnu količinu IKBKG proteina, a druge stanice ga ne proizvode, pa dobivena neravnoteža dovodi do znakova i simptoma ove bolesti. Kod muškaraca većina IKBKG mutacija dovodi do potpunog gubitka IKBKG proteina što se čini da je smrtonosno u ranom razvoju. Pogođeni muškarci koji prežive mogu imati IKBKG mutaciju s relativno blagim učincima, IKBKG mutaciju samo u nekim dijelovima tijela (mozaicizam) ili dodatnu kopiju X kromosoma u svakoj stanici. Neki ljudi s inkontinencijom pigmenta nasljeđuju IKBKG mutaciju od jednog pogođenog roditelja, dok su drugi slučajevi rezultat novih mutacija u genu i javljaju se kod osoba bez povijesti poremećaja u njihovoj obitelji. Bolest je obilježena pojavom malformacija i anomalija kože, kose, noktiju, zuba, očiju i središnjeg živčanog sustava. Klinička slika se manifestira tijekom ranog neonatalnog razdoblja i započinje upalnim promjenama epidermisa (eritem, bule) koje prolaze do 6. mjeseca života. Nakon te faze slijedi tzv. pigmentni stadij u obliku nastajanja prljavosmeđih nepravilnih hiperpigmentacija, obično glutealno i na bočnim dijelovima tijela i ekstremiteta. Kod 50 % slučajeva opisane su i anomalije središnjeg živčanog sustava, očiju, zubi i skeleta. Razlikujemo dva tipa: učestaliji klasični tip bolesti (IP tip 2 ili obiteljski tip), koji je smrtonosan za mušku djecu, te drugi mnogo rjeđi sporadičan tip (IP tip 1) u starijoj literaturi poznat kao hipomelanoza po Itu. IP tip 2 je uzrokovan mutacijom gena NEMO koji se nalazi na xq28, a IP1 kao posljedica *de novo* mutacije na xp11 regiji (13).

and occupational therapists as well as starting neurofeedback treatments. The family was collaborative, but rehabilitation treatment was difficult for them to maintain because of the long distance from their home.

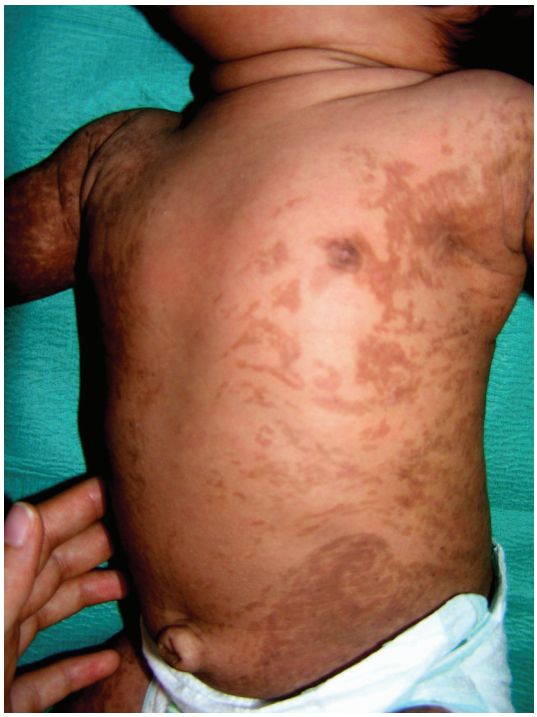
INCONTINENTIA PIGMENTI

Incontinentia pigmenti or Bloch-Sulzberger's syndrome (Bloch 1926, Sulzberger 1925) is a very rare, hereditary, and multisystem disease. There have been between 900 and 1200 patients reported in the scientific literature. Clinical manifestations are highly variable, but are always associated with skin changes. It is inherited as an X-related dominant feature and occurs almost exclusively in women (in 95% of patients). In most cases, the syndrome has a prenatal deadly outcome for male children. The etiology is known, and mutations have been found in the IKBKG gene, which provides instructions for build-up of the proteins that help regulate nuclear factor kappa-B (cell protection from self-destruction) (12). In women, some cells produce a normal amount of IKBKG protein while other cells do not produce any, so the resulting imbalance leads to the signs and symptoms of this syndrome. In men, most IKBKG mutations lead to complete loss of IKBKG protein, which seems to be deadly in the early development. Affected surviving men may have an IKBKG mutation with relatively mild effects, IKBKG mutation only in some parts of the body (mosaicism), or an additional copy of the X chromosome in each cell. Some people with incontinentia pigmenti inherit the IKBKG mutation from one affected parent, while other cases are the result of new mutations in the gene and occur in people with no history of the disorder in their family. The syndrome is characterized by malformations and anomalies of the skin, hair, nails, teeth, eyes, and the central nervous system. Clinical symptoms present themselves during the early neonatal

Prikaz bolesnice

Djevojčica u dobi od 4 godine i 8 mjeseci živi s obitelji. Rođena je u terminu, sekcijom, kao najmlađa od troje djece. Nije progovorila, nije prohodala niti uspostavila kontrolu sfinktera. U neuropedijatrijskom je liječenju zbog Bloch-Sulzbergerovog sindroma i zaostajanja u razvoju, dizmorfije glave i lica, malformacija središnjeg živčanog sustava, deformacija dijelova tijela, promjena kože, pretrpjela je i moždani inzult. Zbog epilepsije uzima antiepileptike. Kontinuirano je uključena u habilitacijski program.

Dolazi na pregled dječjeg psihijatra po preporuci neuropedijatra zbog smetnji u obliku iritabilnosti, povremene psihomotorne agitacije te povremenih teškoća usnivanja. Pri pregledu je uspostavila kontakt, smiješila se, bila živahna, nije govorila, vokalizirala je, nije bila pokretna nego



SLIKA 3. *Incontinentia pigmenti* (Izvor: Osório, F., Magina, S., Nogueira, A., & Azevedo, F. (2010). Incontinentia Pigmenti with vesicular stage. Dermatology Online Journal, 16(10). Dostupno na: https://escholarship.org/uc/item/9dz2p5bk
FIGURE 3. Incontinentia pigmenti (source: Osório, F., Magina, S., Nogueira, A., & Azevedo, F. (2010). Incontinentia Pigmenti with vesicular stage. Dermatology Online Journal, 16(10). Available at: https://escholarship.org/uc/item/9dz2p5bk

period, starting with inflammatory changes in the epidermis (erythema, bullae) that last up to 6 months of age. That phase is followed by the so-called pigment stage in the form of brown irregular hyperpigmentations, usually with gluteal and lateral localization on the body and extremities. In 50% of cases, anomalies of the central nervous system, eyes, teeth, and skeleton are also described. There are two types of the syndrome, a more common type (IP type 2 or the familial type) that is deadly for male fetuses and the other sporadic and rare type (IP type 1) – known as hypomelanosis of Ito in the older literature. IP type 2 is caused by mutation of the NEMO gene located at xq28, while IP1 is the result of *de novo* mutation in the xp11 region (13).

Case report

The patient was a girl aged 4 years and 8 months, living with her family. She was born in term and delivered via cesarean section, as the youngest of three children. Her development was delayed and she did not speak or walk and does not have sphincter control. From early on, she received treatment by a neuropediatrician due to a diagnosis of incontinentia pigmenti (Bloch-Sulzberger's syndrome). Some of her features and symptoms were: head and face dysmorphia, central nervous system malformations, deformation of some body parts, skin changes, and past cerebral insult. She is taking antiepileptics for epilepsy and is continuously involved in a habilitation program.

The patient was referred to an examination by a child psychiatrist at the recommendation of a neuropediatrician due to difficulties including irritability, occasional psychomotor agitation, and sleep problems. During the examination, eye contact could be made, the patient was smiling, and while she did not speak in words she communicated with vocalizations. The patient was in a wheelchair. We started with

u kolicima. Preporučen je *neurofeedback* tretman. Obitelj je suradljivo započela dolaženjem na tretmane više puta na tjedan. Nakon nekoliko mjeseci i dva provedena *neurofeedback* ciklusa djevojčica je ublažene iritabilnosti, smanjenog psihomotornog nemira, bolje regulacije sna.

KRATKA RASPRAVA I ZAKLJUČAK

Rijetki sindromi u dječjoj dobi, unatoč svojoj specifičnoj kliničkoj slici, često ostanu dugi niz godina neprepoznati. Rana dijagnoza je vrlo važna, kako bi se što ranije moglo započeti rehabilitacijom i kako bi se omogućilo da dijete dosegne svoj puni potencijal sa što manje deficita bilo koje vrste. U primjerima naša tri prikazana slučaja djeca su već više godina imala postavljenu dijagnozu sindroma, a obitelji su prihvatile bolest i njena ograničenja. Stoga naglasak ipak nije bio na prepoznavanju sindroma i upućivanju na pedijatrijsku obradu. Djeca su se javljala na dječju psihijatriju zbog popratnih psihičkih smetnji koje su relativno često prisutne, a javljaju se u različitom stupnju ovisno o pojedinom sindromu i njegovoj težini. Psihijatrijsko liječenje djece s rijetkim sindromima nije pravilo, a često nije niti praksa. U našim slučajevima imali smo iznimno dobru suradnju s pedijatrima. Jedno od prikazane djece nam je bilo upućeno od primarnog pedijatra, a dvoje od neuropedijatara, koji su prepoznali važnost multidisciplinskog pristupa i s kojima smo u tijeku daljnjeg liječenja zadržali dobru suradnju. Obitelji su bile iscrpljene dugotrajnošću tih smetnji. Zajedničke smetnje na psihičkom planu bile su: psihomotorni nemir, iritabilnost, impulzivnost, poremećaji spavanja, sniženi prag tolerancije na frustrativne podražaje, autoagresija i heteroagresija, deficiti pažnje, nizak intelektualni kapacitet, regresivno ponašanje, usporen razvoj govora ili potpuni izostanak govora. Roditelji su se u prvom redu žalili na poremećaje spavanja (otežano uspavljivanje, često noćno buđenje, nesanica), simptome koji imaju direktan utjecaj i na roditeljsko spavanje vodeći

a neurofeedback treatment. After several months and two neurofeedback cycles, irritability and psychomotor agitation were reduced and sleep was much better regulated.

SHORT DISCUSSION AND CONCLUSION

Rare childhood syndromes, despite their specific clinical presentation, often remain unidentified for many years. Early diagnosis is very important in order to begin with rehabilitation as early as possible, to help children reach their full potential and minimize deficits of any kind. In our three cases, the children had already been diagnosed several years ago, and their families have accepted the syndrome and its limitations. The emphasis was therefore not on recognizing the syndrome and referral to pediatric treatment. The children had been referred to child psychiatry because of the concomitant psychiatric symptoms that are relatively common and occur in a wide range and severity. Psychiatric treatment is not the rule and is often not the practice. In our cases, we had exceptionally good co-operation with pediatricians. One of the children was sent to us on the recommendation of the primary pediatrician, and two children on the recommendation of the neuropediatrician, who recognized the importance of the multidisciplinary approach. We maintained good co-operation in the course of treatment. The families were exhausted by the long-lasting nature of these symptoms: psychomotor agitation, irritability, impulsiveness, sleep disturbances, reduced tolerance to frustration, auto- and hetero-aggressive behavior, attention deficits, intellectual disability, regressive behavior, and delayed speech. The parents were primarily concerned about sleep issues (difficulty falling asleep, recurrent night waking, insomnia), which have a direct impact on parental sleep, leading to chronic exhaustion and reduction in the quality of life.

do kronične iscrpljenosti i slabljenja kvalitete života cijele obitelji. Tim popratnim psihičkim obilježjima pristupili smo na visoko individualizirani način proširivajući preporuke za tretman na dostupne stručne službe unutar našeg sustava. Primarna smetnja u sva tri slučaja bila je nesanica, koja se relativno brzo i uspješno uklonila, u dva slučaja farmakološkom intervencijom, a u trećem slučaju učinkom *neurofeedback* tretmana. U sva tri slučaja smo započeli zbog smetnji pažnje i koncentracije te iritabilnosti *neurofeedback* tretmanom. Uključivanje u *neurofeedback* tretmane ima za svrhu poboljšanje kognitivnih sposobnosti (pažnja), emocionalne kontrole (smanjenje anksioznosti) i psihofizičkog funkcioniranja (smanjivanje psihomotorne pobuđenosti). Roditelji su bili izrazito suradljivi, dovodili dijete na tretman 2 ili 3 puta tjedno, te je njihovim angažmanom *neurofeedback* mogao biti adekvatno provođen. Rezultati koji su uslijedili trajanjem tretmana nisu samo ublažili ciljane smetnje, već smo zamijetili i blagotvorno djelovanje na smanjenje autoagresije i agresivnog ponašanja općenito. U svrhu sveobuhvatnijeg liječenja proširili smo preporuke za tretman radnog terapeuta. Radnom terapijom se utječe na bolje savladavanje aktivnosti samozbrinjavanja što smanjuje potrebu za neprekidnom pomoći druge osobe. Kod zaostajanja govora (sva tri naša slučaja) uči se modificirani znakovni jezik, što povećava načine komunikacije i kod djeteta vodi do osjećaja bolje povezanosti i manje frustracija.

Zaključno, psihijatrijskim liječenjem djece s rijetkim sindromima nastupilo je poboljšanje kvalitete života djeteta i cijele obitelji, a multidisciplinski pristup doveo je do pružanja najbolje moguće razine liječenja unutar bolničkog sustava.

We approached the treatment of these psychological features in a highly individualized way, extending our treatment recommendations to other healthcare professionals within our department and hospital.

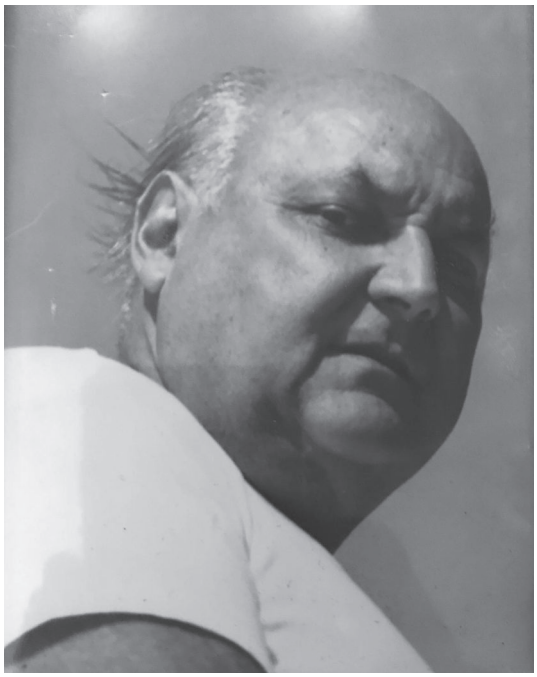
The first issue considered in therapy in all three cases was insomnia, which was relatively quickly and successfully eliminated, in two cases by pharmacological intervention and in the third case with the effect of neurofeedback treatment. Our intervention was effective, leading to improvements in duration as well as quality of sleep. Due to attention and concentration difficulties present in all three cases, we started with neurofeedback treatment. We aimed to improve cognitive abilities (attention), emotional control (anxiety reduction), and psychophysical functioning (reduction of psychomotor agitation). The treatment had a positive effect by alleviating those issues, and we also observed a decrease in self-injury behavior, aggression, and irritability. The parents were highly collaborative, bringing the child to treatment 2 or even 3 times a week. The children were also involved in occupational therapy, which has an effect on improving self-care skills and helping the children become less dependent on the help of other people and by teaching them sign language, expanding ways to communicate and to feel more connected and less frustrated.

In conclusion, psychiatric treatment of children with rare syndromes improved the quality of life of the children and their family, and the multidisciplinary approach provided the optimum level of care within the healthcare system.

LITERATURA / *REFERENCES*

1. Basile E, Villa L, Selicorni A, Molteni M. The behavioral phenotype of Cornelia de Lange Syndrome: a study of 56 individuals. J Intellect Disabil Res 2007; 51: 671-81.
2. Berney T, Ireland M, Burn J. Behavioral phenotype of Cornelia de Lange syndrome, Arch Dis Child 1999; 81(4): 333-6.
3. Hall SS, Arron K, Sloneem J, Oliver C. Health and sleep problems in Cornelia de Lange Syndrome: a case control study. J Intellect Disabil Res 2008; 52: 458-68.

4. Kline A. Clinical delineation of sleep disturbance in Cornelia de Lange syndrome. American Society of Human Genetics, Annual meeting, 2007.
5. web stranica: www.cdlsusa.org
6. Neuhauser G, Kaveggia EG, France TD, Opitz JM. Syndrome of mental retardation, seizures, hypotonic cerebral palsy and megalocorneae, recessively inherited. Ztschr Kinderheilkunde 1975; 120: 1-18.
7. Meire FM. Megalocornea. Clinical and genetic aspects. Documenta ophthalmologica. Advances in Ophthalmology 1994; 87: 1-121.
8. web stranica: www.rarediseases.org
9. Verloes A, Journel H, Elmer C, Messon JP, Le Merrer M, Kaplan J *et al*. Heterogeneity versus variability in megalocornea-mental retardation (MMR) syndromes: report of new cases and delineation of 4 probable types. Am J Med Genet 1993; 46(2): 132-7.
10. Gutierrez-Amavizca BE, Juarez-Vazquez CI, Orozco-Castellanos R, Arnaud L, Macias-Gomez NM, Barros Nunez P *et al*. Neuhauser syndrome: a rare association of megalocornea and mental retardation. Review of the literature and further phenotype delineation. Genet Couns 2013; 24: 185-91.
11. Davidson AE, Cheong S-S, Hysi PG, Venturini C, Plagnol V, Ruddle JB *et al*. Association of CHRDL1 Mutations and Variants with X-linked Megalocornea, Neuhauser Syndrome and Central Corneal Thickness, PLoS ONE 2014; 9(8): e104163.
12. Swinney CC, Dennis PH, Karth PA. Incontinentia Pigmenti: A Comprehensive Review and Update, Ophthalmic Surgery, Lasers & Imaging Retina 2015; 46(6): 650-7.
13. Scheuerle AE, Ursini MV. Incontinentia Pigmenti. 1999 Jun 8 [Updated 2017 Dec 21]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2018. Dostupno na: https://www.ncbi.nlm.nih.gov/books/NBK1472/



In memoriam

Borben Uglešić,

Nestor hrvatske psihijatrije
/ The Nestor of Croatian Psychiatry

6. studenog 1926. – 25. rujna 2020.
November 6, 1926 – September 25, 2020

Treba imati viziju, motivaciju i hrabrost da se ostvari zamišljeno. A zamisao Borbena Uglešića bila je ostvariti vlastitu osobnost i utrti vlastiti put kao liječnik u svome gradu i puno šire.

Rođen kao najmlađe od četvero djece u uglednoj obitelji splitskog odvjetnika, baštinio je kulturu i ambicije prethodnog naraštaja. U splitskom građanskom ozračju između dvaju svjetskih ratova ključalo je ozračje koje su stvarale kreativne pojave iz svijeta kiparstva, slikarstva, glazbe i pisane riječi, arhitekture i drugih umjetnosti, koje su u spoju s europskim središtima kulture bujale na suncu mediteranskih tradicija i temperamenata. Borben Uglešić izdanak je takvog Splita i dalmatinskih korijena kad se poslije Drugog svjetskog rata našao u Zagrebu kao student medicine. Taj spoj mediteranskog i srednje europskog u pogledima i načinima izdvajao ga je od mnogih drugih kolega po kreativnosti i načinima da inovativne ideje ostvaruje.

Afirmiran kao nestor hrvatske psihijatrije i jedno od prvih imena psihijatrijske znanosti u nas, otpočeo je svoju medicinsku karijeru kao liječnik u Brodograđevnoj industriji u Splitu.

Achieving what one has envisioned requires imagination, motivation, and courage. The vision of Borben Uglešić was to actualize his own personality and pave his own way as a physician in his city and beyond.

Born as the youngest of four children in a prominent family of a Split lawyer, he inherited the culture and ambitions of his forefathers. The civic environment of Split between the two World Wars was fermenting with an atmosphere that engendered creations in the domains of sculpture, painting, music and writing, architecture, and other arts, which, intermingled with other European cultural centers, bloomed in the sunlight of Mediterranean temperament and tradition. As he found himself in Zagreb as a student of medicine after the Second World War, Borben Uglešić was a scion of this era in Split's history and its Dalmatian roots. His merging of Mediterranean and Central European mentality and views distinguished him from many other colleagues both in his creativity and methods of achieving his innovative ideas.

He has been affirmed as the Nestor of Croatian psychiatry and one of the foremost names of

Nakon specijalizacije iz neurologije i psihijatrije daleke 1958. godine vraća se u Split kao neuropsihijatar. Posebnosti neurologije i psihijatrije u to doba još nisu bile dovoljno prepoznate te je i naš nestor djelovao kao neuropsihijatar. Prije 50-60 godina u Splitu su bila samo dva psihijatra.

Borben Uglešić izborio se da se u prizemlju „stare bolnice“ u središtu grada dobiju skromne prostorije za psihijatrijske bolesnike, a za neurološke bolesnike bilo je na raspolaganju nekoliko prostorija u prizemlju bolnice na Firulama. Intenzivno se baveći psihijatrijskim bolesnicima i problemima mentalnog zdravlja u Splitu i Dalmaciji postao je sinonimom za psihijatriju.Ta sinergija, uz ne samo organizaciju medicinskih službi nego i širu društvenu afirmaciju pomagala mu je u održavanju širokog kruga poznanstava i prijateljstava. Poznat kao ljubitelj umjetnosti, osoba živa duha, os kojoj su gravitirale mnogobrojne profesionalne i društvene silnice koje je i sam stvarao, rezultirale su na medicinskom polju uređenjem dvaju modernih odjela u novoj bolnici na Firulama, Odjelu za neurologiju i Odjelu za psihijatriju. On se opredijelio za psihijatriju jer to je bila njegova prirodna vokacija i tu je najbolje i na najpotpuniji način nalazio sebe.

Kao izvrstan organizator okupljao je dobre stručnjake i podigao službu psihijatrije na zavidnu razinu, ne samo u ondašnjim jugoslavenskim okvirima nego i međunarodnim povezivanjem. Nakon Domovinskog rata organizirao je u Splitu Prvi hrvatski psihijatrijski kongres i taj profesionalni događaj ostao je zapamćen kao izvanredan. Naš nestor psihijatrije činio je mnogobrojna istraživanja, a posebno je važno da je na osnovi tih istraživanja uspostavio Registar duševnih bolesnika 1970-tih godina, gdje se prvi put redovito vodila evidencija tih bolesnika.

Psihijatrija se u nas, kao i u svijetu, razvijala stimulirana promjenama u društvu. Uz tradici-

psychiatric science in Croatia, having begun his medical career as a physician in the Shipbuilding Industry in Split. After specialization in neurology and psychiatry in the now distant 1958, he returned to Split as a neuropsychiatrist. The specificities of neurology and psychiatry were not fully recognized at the time, so our Nestor also worked as a neuropsychiatrist. Fifty or sixty years ago, there were just two psychiatrists in Split.

Borben Uglešić managed to arrange modest rooms for psychiatric patients on the ground floor of the “old hospital” in the center of the city, and there were a few rooms on the ground floor of the Firule hospital that were available for neurological patients. His intensive work and efforts with psychiatric patients and mental health issues in Split and Dalmatia made him synonymous with psychiatry in the region. This synergy, along with not only his work in organizing medical services but also wider social affirmation, helped him maintain a wide circle of acquaintances and friends. He was known as an art lover, a person of vivacious spirit, and the axis towards which many professional and social vectors gravitated, some of which he had created himself, which, in the medical field, ultimately resulted in the organization and creation of two modern departments at the new Firule hospital, the Department of Neurology and the Department of Psychiatry. Borben Uglešić chose psychiatry because it was his natural vocation and where could be himself in the best and most complete way.

As an excellent organizer, he attracted competent experts and raised the level of care quality at the psychiatric department to an enviable level, not only within the framework of former Yugoslavia but in the context of international contacts as well. After the Homeland War, he organized the First Croatian Psychiatric Congress in Split, which is remembered as an outstanding professional event. Our Nestor of psychiatry conducted many studies, and it is especially important that he used those studies as a

onalni problem alkoholizma, 1980-tih godina pojavio se problem droga, odnosno ilegalnih psihoaktivnih supstancija. Prof. Uglešić pomagao je liječenje ovisnika i zastupao je mišljenje da takvi bolesnici ovisnici spadaju u posebne terapijske zajednice ili bolničke jedinice zbog karakteristika promjena ličnosti i ponašanja koje te ovisnosti stvaraju. Takvo stajalište pokazalo se opće prihvaćenim u kasnijem tijeku terapijskih pristupa ovisnicima.

U europskoj psihijatriji poslije Drugog svjetskog rata prevladavaju ideje socijalne psihijatrije, što je prof. Uglešić prigrlio. Tako je uz odjel za psihijatriju osnovao i dnevnu bolnicu, što je u to vrijeme bila vrlo napredna ideja. Želio je osnovati i klub liječenih duševnih bolesnika u gradu Splitu, ali nažalost gradski oci zato nisu ni do danas pokazali sluha, a takav je način pomaganja osobama s psihičkim poteškoćama u većini drugih europskih zemalja već dugo uobičajena praksa.

Naš je nestor kao neuropsihijatar uvijek više bio naklonjen psihofarmakoterapiji te je posjećivao mnogobrojne svjetske skupove i donosio novosti u području psihofarmakoloških otkrića i napredovanja. Volio je uvijek široke zamahe s obilnom socijalnom jekom.

Posebno duboku brazdu zaorao je u području forenzičke psihijatrije. Napisao je nejvjerojatan broj, više od 17.000 sudskih psihijatrijskih vještačenja.

Kad govorimo o znanstvenoj produkciji prof. Uglešića treba istaknuti da je napisao više od 220 stručnih radova od kojih su mnogi objavljeni i prevedeni na druge svjetske jezike. Velik interes za širenje profesionalnih znanja i iskustava očituje se i u njegovu bogatom nastavničkom iskustvu, i to od nastavnih aktivnosti u školama za sestrinstvo do implantacije medicinskog studija u Splitu Medicinskog fakulteta u Zagrebu, te osnivanja Katedre za psihijatriju na Medicinskom fakultetu u Splitu. Uz to treba istaknuti da je od početka aktivnosti Pravnog

basis to form the Registry of Mental Patients in the 1970s, where such patients were officially listed and documented for the first time.

Both globally and in Croatia, the development of psychiatry was stimulated by societal changes. In addition to the traditional issue of alcoholism, the 1980s saw the rise of drug abuse, i.e. abuse of illegal psychoactive substances. Prof. Uglešić took part in the treatment of addicts and held the opinion that such patients should be treated in special therapy communities or hospital units due to the characteristic personality and behavioral changes that these addictions create. This view became generally accepted in later therapeutic approaches to addicts.

European psychiatry after World War Two was dominated by ideas coming from social psychiatry, which were embraced by Prof. Uglešić. In addition to the Psychiatry Department, he therefore also founded a day hospital for psychiatric patients, which was a very advanced idea at the time. He also wanted to form a club for treated mental patients in the city of Split, but unfortunately the city authorities frowned on that approach and still do so today, despite it being long-standing standard practice in most other European countries.

As a neuropsychiatrist, our Nestor was always much more inclined towards psychopharmacological therapy and attended many international congresses, bringing back news on psychopharmacological discoveries and advancements. He always loved making wide moves with sweeping social impact.

He left an especially deep mark in the field of forensic psychiatry. He wrote an incredible number – over 17,000 – expert court opinions in forensic psychiatry.

Regarding Prof. Uglešić's scientific work, it must be emphasized that he published more than 220 professional articles, many of which have been published and translated to other languages. His great interest is sharing profes-

fakulteta u Splitu predavao i vodio kolegij sudske psihijatrije.

Prof. Uglešić, dugogodišnji istaknuti član Akademije medicinskih znanosti Hrvatske i Zbora liječnika Hrvatske te drugih profesionalnih organizacija, čovjek bogata duha i širokih pogleda, ne samo u profesionalnom nego i općenito u kulturnom smislu, bio je duhovita osoba, volio je šalu, ironiju, uvijek je bio spreman na duhovite primjedbe, pa i na svoj račun.

Sačuvat ćemo u trajnoj uspomeni njegovu osobnost, profesionalnost i kolegijalnost.

Slava mu!

Split, listopada 2020.

Ivan Urlić

sional knowledge and experience is also evident from his extensive teaching experience, ranging from lectures in nursing school to implanting the medical school in Split from the Zagreb Medical School, and forming the Psychiatry Department at the Split Medical School. It should also be noted that he taught and chaired the forensic psychiatry course since the foundation of the University of Split Faculty of Law.

Prof. Uglešić was a long-standing and distinguished member of the Croatian Academy of Medical Sciences and the Croatian Physicians Association as well as other professional organization, and was a man rich in spirit and broad in his views, not just in the professional but also in the cultural sense, a man of humor who loved jokes and irony, who was always ready for witty comments even at his own expense.

We will always remember his personality, his professionality, and his collegiality.

May he rest in peace!

Split, October 2020

Ivan Urlić

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 dio troškova 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.