Stilovi privrženosti i seksualnost: doprinos roda, dobi i statusa partnerske veze

/ Attachment Styles and Sexuality: the Contribution of Gender, Age and Relationship Status

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Cilj ovog istraživanja bio je utvrditi pojedinačni i zajednički doprinos roda, dobi i statusa veze razlikama u stilovima privrženosti i aspektima seksualnosti (seksualno samopoštovanje i seksualno zadovoljstvo). U istraživanju su sudjelovali članovi opće populacije (N=632). Za ispitivanje stilova privrženosti i aspekata seksualnosti korišteni su sljedeći upitnici: Modificirani inventar iskustava u bliskim odnosima, Ljestvica seksualnosti i Nova ljestvica seksualnog zadovoljstva. Utvrđene rodne razlike ukazuju na izraženiju anksioznu privrženost i niže seksualno samopoštovanje žena u odnosu na muškarce, bez obzira na status veze. Dob je negativno povezana sa seksualnim zadovoljstvom. Osobe koje u vrijeme ispitivanja nisu bile u vezi imale su više stupnjeve izbjegavajuće privrženosti, osobito u najmlađoj i najstarijoj dobnoj skupini. Samci su također imali niže seksualno samopoštovanje i seksualno zadovoljstvo u odnosu na sudionike koji su u vezi. Autorice zaključuju da rod, dob i status veze pojedinačno i zajednički doprinose individualnim razlikama u stilovima privrženosti i seksualnom samopoštovanju.

/ **Objective.** *The aim of this study was to determine the separate and combined contribution of gender, age and relationship status to the differences in attachment styles and aspects of sexuality (sexual self-esteem and sexual satisfaction).* **Methods.** *The sample included members of the general population (N=632). The following measures were used to examine attachment styles and aspects of sexuality: Modified Inventory of Experiences in Close Relationships, The Sexuality Scale and The New Sexual Satisfaction Scale.* **Results.** *Gender differences were established, indicating more pronounced anxious attachment and lower sexual self-esteem in women compared with men, regardless of relationship status. Age was negatively associated with sexual satisfaction. Single participants had higher levels of avoidant attachment especially in the youngest and the oldest age group. They also had lower sexual self-esteem and sexual satisfaction compared with coupled participants.* **Conclusion.** *Gender age and relationship status contributed individually and jointly to individual differences in attachment styles and sexual self-esteem.*

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UVOD

Stilovi privrženosti utječu i na očekivanja i ciljeve u partnerskim vezama, pa tako i seksualnosti, kao važnog aspekta partnerskih veza (1,2). Ranija istraživanja su pokazala da osobe s višim stupnjevima anksiozne privrženosti češće pristaju na neželjeni seks, rjeđe koriste kontracepciju te su češće preokupirane seksom u odnosu na osobe sa sigurnim stilom privrženosti (3,4). Pomoću takvih ponašanja oni nastoje održati sigurnost koju im pruža intimnost s partnerom. S druge strane, osobe s višim stupnjevima izbjegavajuće privrženosti odabiru neformalne seksualne odnose bez emocionalnog vezivanja, češće se upuštaju u seksualne odnose s nepoznatim osobama, seksualni život započinju u kasnijoj dobi te češće masturbiraju u odnosu na sigurno privržene osobe. Njihov glavni cilj je zadržati emocionalnu udaljenost i osjećaj kontrole u partnerskim odnosima (3,4). U oba slučaja (anksiozno i izbjegavajuće privrženih osoba) ishodi su lošije seksualno funkcioniranje (5) i manje seksualno zadovoljstvo (2,6). Iako su, prema izvornoj teoriji privrženosti, rodne i dobne razlike u privrženosti male (7), u velikom je broju istraživanja utvrđeno postojanje rodnih razlika u seksualnosti (8) te promjene u seksualnim ponašanjima/zadovoljstvo u funkciji dobi (9). Stoga je u studiji ispitivan doprinos roda, dobi i statusa veze razlikama u stupnjevima privrženosti.

Rodne razlike u privrženosti i seksualnosti

U brojnim je istraživanjima pronađeno da žene postižu više rezultate na ljestvicama anksiozne privrženosti, dok muškarci postižu više rezultate na ljestvicama izbjegavajuće privrženosti (10-16). Jedno od postojećih objašnjenja postojanja rodnih razlika u privrženosti i seksualnosti naglašava značenje postojanja emocionalno-interpersonalne seksualne orijentacije žena, dok muškarci razvijaju rekreacijsku orijentaciju

INTRODUCTION

Attachment styles affect expectations and objectives in partner relationships, including sexuality, as important aspects of partner relationships (1,2). Previous research have found that people high on attachment anxiety more often accept unwanted sex, have earlier initiation of sexual intercourse, less frequent use of contraception, and are also more often preoccupied with sex compared with securely attached people (3,4). By such sexual behaviours, they try to maintain security that permits intimacy with their partner. On the other hand, people high on attachment avoidance prefer casual sex without emotional involvement, participation in informal sexual activities with strangers, have later initiation of sexual intercourse and more often use masturbation compared with securely attached people. Their main attachment-related goal is to maintain emotional distance and control in partner relationships. In both cases (anxiety and avoidance), the outcomes are poorer sexual functioning (5) and lower sexual satisfaction (2,6). However, according to the original attachment theory, the age and gender differences in attachment are small (7), and many studies have shown that there are general gender differences in sexuality (8) as well as that sexual behaviours/satisfaction may vary as a function of age (9). Therefore, in the present study, the contribution of gender, age and relationship status to the differences in attachment styles were investigated.

Gender differences in attachment and sexuality

Numerous studies have indicated that women generally score higher on anxiety and men generally score higher on avoidance (10-16). One of the current explanations of gender specifities in attachment and sexuality emphasizes the existence of the emotional-interpersonal

prema seksualnosti, više pažnje poklanjaju izražavanju svojih seksualnih potreba (17). Istraživanja rodnih razlika u seksualnom samopoštovanju i seksualnom zadovoljstvu rijetka su i nejednoznačna. Neki istraživački nalazi ukazuju na više seksualno samopoštovanje (18-20) i seksualno zadovoljstvo (8,21) muškaraca u odnosu na žene pri čemu žene izražavaju više negativnih osjećaja spram seksualnosti u odnosu na muškarce (22). Rodne razlike u seksualnom samopoštovanju nisu potvrđene u drugim istraživanjima (23,24). Temeljem ovih nalaza, u ovom istraživanju se očekuje izraženija anksiozna privrženost žena i izraženija izbjegavajuća privrženost muškaraca. Također se očekuje utvrđivanje višeg seksualnog samopoštovanja i seksualnog zadovoljstva muškaraca u odnosu na žene.

Dobne razlike u privrženosti i seksualnosti

Fluktuacije u postojanosti stilova privrženosti mogu se pojaviti za vrijeme odrasle dobi što ukazuje na mogući utjecaj osobnih i okolinskih čimbenika (25). U prijašnjim istraživanjima nije pridavana dovoljna pozornost ispitivanju privrženosti iz cjeloživotne perspektive koja uključuje srednju i stariju životnu dob (26). Neki istraživački dokazi ukazuju na postojanje dobnih razlika u privrženosti pri čemu su stupnjevi anksiozne privrženosti u mlađoj odrasloj dobi općenito viši u odnosu na stariju odraslu dob (27-30). U drugim istraživanjima su utvrđeni viši stupnjevi izbjegavajuće privrženosti u srednjim dobnim skupinama u odnosu na mlađe i starije dobne skupine (30,31). U većem broju istraživanja pronađena je negativna povezanost između dobi i seksualnog zadovoljstva kao rezultat manje učestalosti seksualnih aktivnosti koja nastupa sa starenjem (32), manje učestalosti seksualnih fantazija (33) i povećanja seksualnih disfunkcija (34-36). U skladu s navedenim pregledom postojećih istraživačkih nalaza, u ovom istraživanju očekujemo smanjenje seksualnog zadovoljstva u funkciji povećanja dobi.

sexual orientation of women, while men more often develop a recreational orientation toward sexuality and afford greater attention to the expression of their sexual needs (17). Studies on gender differences in sexual self-esteem and sexual satisfaction are few in number and lack uniformity. Some research findings indicate that men have higher sexual self-esteem (18-20) and sexual satisfaction (8,21) than women, whereas women report more negative affect related to their sexuality than men (22). Gender differences in sexual self-esteem were not confirmed in other studies (23,24). Based on these findings, this study was expected to show more pronounced anxious attachment in women and more pronounced avoidant attachment in men. We also expected greater sexual self-esteem and greater sexual satisfaction in men compared with women.

Age differences in attachment and sexuality

The fluctuation in stability of attachment styles may appear during adulthood, indicating that change is possible in later years given certain personal and environmental influences (25). Previous research has been paid little attention to attachment processes from a life span perspective – one that includes middle and older adulthood (26). There is some evidence for age-related differences in attachment orientation, particularly in early adulthood, in that that anxiety is generally higher in younger compared with older adults (27-30) and, in some studies, avoidance is higher in middle-aged compared with younger and older adults (30,31). A large number of studies have also found a negative association between age and sexual satisfaction as a result of less frequent sexual activity (32), lower frequency of sexual thoughts (33) and increased sexual dysfunction (34-36). Accordingly, we anticipated a decline in sexual satisfaction from younger to older age categories.

Privrženost, seksualnost i status veze u različitim životnim razdobljima

U posljednjem desetljeću postoji povećani istraživački interes prema istraživanju povezanosti između statusa veze i privrženosti. Postojeća istraživanja ukazuju na značenje partnerske veze za održavanje sigurne privrženosti (30). Fraley i suradnici (37) pronalaze da su razine sigurne privrženosti u odrasloj dobi više kod osoba koje se nalaze u dužim partnerskim vezama. U stupnjevima sigurne privrženosti nisu utvrđene razlike između samaca i osoba koje su u vezi, iako su samci iskazivali više razine seksualnog nezadovoljstva (38). Ovi nalazi ukazuju da osobe u partnerskim vezama mogu imati niže razine anksiozne i izbjegavajuće privrženosti u odnosu na samce (38,39), dok je povezanost između dobi i sigurne privrženosti u različitim dobnim kategorijama još uvijek otvoreno pitanje (30). U ovom istraživanju očekujemo utvrđivanje prediktivnog značenja statusa veze na anksioznu i izbjegavajuću privrženost. Samci će imati više razine nesigurne (anksiozne i izbjegavajuće) privrženosti.

CILJ ISTRAŽIVANJA

Cilj istraživanja je utvrditi pojedinačni i zajednički doprinos rodnih i dobnih obilježja te statusa veze na razlike u stilovima privrženosti i u aspektima seksualnosti (seksualno samopoštovanje i seksualno zadovoljstvo).

METODOLOGIJA

Sudionici i postupak

Istraživanjem su obuhvaćeni članovi opće populacije na sljedeći način: početni uzorak sačinjavalo je 139 studenata oba roda (Nm=69; Nž=70). Nakon primjene, studenti su zamoljeni da pronađu po 4 osobe različitog roda

Attachment, sexuality and relationship status at different points in the life span

In recent years, increased research interest focused towards examining links between relationship status and attachment orientation. Previous research supports the claim that relationships serve a security-enhancing function (30). Fraley et al. (37) found that the overall levels of stability in adult attachment were higher among people who had been involved with their partners for a longer period of time. Somewhat different results were obtained in another study wherein single participants were as likely as coupled ones to exhibit attachment security and rely on attachment figures; they reported higher levels of sexual dissatisfaction (38). These findings suggest that coupled individuals have lower levels of attachment anxiety and avoidance (38,39), but the association between age and security at different points in the life span is still an open question (30). Based on the above empirical evidence, we expected that relationship status will be predictive of both attachment dimensions (anxious and avoidant). Single persons will have higher levels of anxious and avoidant attachment.

AIM

The aim of this study was to determine the separate and combined contribution of gender, age and relationship status to the differences in attachment styles and aspects of sexuality (sexual self-esteem and sexual satisfaction).

METHOD

Participants and Procedure

The study sample included members of the general population, as follows: the initial sample consisted of 139 students of both sex-

među svojim poznanicima u dobnom rasponu 25-65 godina života koje bi pristale sudjelovati u istraživanju. Također su zamoljeni da na taj način odabrane osobe navedu nekoliko svojih poznanika, u istim dobnim rasponima, koji bi bili voljni sudjelovati u istraživanju. Proces je nastavljan sve dok više nije bilo novih veza. Konačni broj sudionika sakupljenih na taj način iznosio je N = 632 (323 žene i 309 muškaraca). Prosječna dob sudionika iznosila je 34,1±10,68 za žene i 35,4±10,47 za muškarce, u rasponu od 20 do 65 godina. U svrhu odgovaranja na istraživački cilj sudionici su podijeljeni u tri dobne kategorije (najmlađa 20-26 godina, srednja 27-39 godina i najstarija 40-65 godina). Većina sudionika bila je u vezi (n=512), dok su ostali bili samci (n=120). Najveći broj sudionika u vezama bili su u bračnim vezama (48,1 %), dok je 32,9 % sudionika bilo u izvanbračnim zajednicama. Prosječna dužina trajanja veze iznosila je 11,2±9,29 godina, s trajanjem od 6 mjeseci do 45 godina. Nisu utvrđene statistički značajne razlike u trajanju veze između muškaraca i žena (t=0,14; p>0,05). Većina sudionika imala je završeno srednjoškolsko obrazovanje (54 %) ili su bili studenti (22 %), dok je 22 % imalo završenu visoku stručnu spremu. Ovo istraživanje odobreno je od Etičkog povjerenstva Odsjeka za psihologiju Filozofskog fakulteta u Zagrebu.

Mjerni instrumenti

Modificirani inventar iskustava u bliskim odnosima (40) korišten je za mjerenje stilova odnosno dimenzija privrženosti. To je hrvatski oblik izvorne ljestvice *Experiences in Close Relationships* (ECR) (14). Ljestvica sadrži 18 čestica (9 čestica za ispitivanje anksiozne privrženosti (primjerice: „Mnogo brinem zbog svoje partnerske veze“), a 9 čestica za ispitivanje izbjegavajuće privrženosti (primjerice: „Pokušavam izbjeći preveliko zbližavanjem s partnerom/partnericom“). Rezultati sudionika su iskazani sumom odgovora na podljestvicama anksiozne i izbjegavajuće privrženosti. Sudionici su odgo-

es (Nm=69, Nw=70). After the instruments were applied to students, they were asked to find four more persons of different sexes among their acquaintances between 25 and 65 years of age who would agree to participate in the study. The persons chosen in this way were then asked to find several of their acquaintances of the same age who would be willing to participate in the study. The process continued until there were no more new connections. The final number of participants chosen in this way was 632 (323 women; 309 men). Participant mean age was 34.1±10.68 for women and 35.4±10.47 for men, ranging from 20-65 years. In keeping with the research aim, participants were divided into three age categories (younger age 20-26 years, middle age 27-39 years and older age 40-65 years). The majority of the participants were in a relationship (n=512) and the others were single (*n*=120). Most of the coupled participants were in a marriage (48.1%), while 32.9% were in non-marital relationships. The average duration of the relationships was 11.2±9.29 years, ranging from 6 months to 45 years. Statistically significant differences between the results of men and women in a relationship were not found for the average duration of the relationships ($t_{(630)=}$0.14; p>0.05). Most participants had completed secondary and post-secondary education (54%) or were students (22%), and 22% had a university degree.

The present study was approved by the Ethics Committee of the Department of Psychology in the Faculty of Humanities and Social Sciences at the University of Zagreb.

Instruments

Modified Inventory of Close Relationships (40): This is the Croatian form of the original Experiences in Close Relationships (ECR) (14). The scale consists of 18 items: 9 items

varali na samoprocjenskoj ljestvici od 7 stupnjeva (od 1 - u potpunosti se ne slažem do 7 - u potpunosti se slažem). Viši rezultat ukazuje na viši stupanj anksiozne odnosno izbjegavajuće privrženosti. Pouzdanost ljestvice anksiozne privrženosti iznosi α=0,82, dok za ljestvicu izbjegavajuće privrženosti ona iznosi α=0,81.

Ljestvica seksualnosti (41) namijenjena je mjerenju seksualnoga samopoimanja. Za potrebe ovog istraživanja preuzet je izvorni oblik ljestvice na engleskom jeziku koja je metodom povratnog prijevoda prevedena na hrvatski jezik. Ova se ljestvica sastoji od 30 čestica i sadrži tri podljestvice: seksualno samopoštovanje, seksualna depresija i preokupiranost seksom. Ljestvica sadrži 30 čestica. Seksualno samopoštovanje određeno je kao pozitivno mišljenje i samoučinkovitost u seksualnim iskustvima (primjerice: „Razmišljam o sebi kao o vrlo dobrom seksualnom partneru“ (41). Svaka čestica se procjenjuje na ljestvici Likertovog tipa od 5 stupnjeva, od 1 - u potpunosti se slažem, do 5 - u potpunosti se ne slažem. Više pozitivne vrijednosti na svakoj podljestvici ukazuju na viši stupanj seksualnog samopoštovanja, seksualne depresije ili preokupiranosti seksom. Analizom pouzdanosti utvrđeni su sljedeći koeficijenti pouzdanosti: seksualno samopoštovanje α =0,84; seksualna depresija α =0,83 i seksualna preokupiranost α = 0,84

Nova ljestvica seksualnoga zadovoljstva (Štulhofer i Buško, 2008) instrument je za procjenu seksualnog zadovoljstva. Sastoji se od 20 čestica koje mjere različite aspekte seksualnog zadovoljstva: seksualne osjete i doživljaje, seksualnu razmjenu, seksualnu usredotočenost, emocionalnu povezanost i raznolikost, te učestalost i trajanje seksualnih aktivnosti. U ovom istraživanju je korištena kraća verzija ljestvice (12 čestica) čija pouzdanost iznosi α=0,85. Sudionici su odgovarali na ljestvici od 5 stupnjeva pri čemu 1 znači nimalo zadovoljan/na, a 5 potpuno zadovoljan/na. Stupanj seksualnog zadovoljstva određivan je ukupnim rezultatom

for investigating anxious attachment (e.g., *"I worry a lot about my relationships")* and 9 for investigating avoidant attachment (e.g., *"I try to avoid getting too close to my partner"*). The results for the participants are expressed as the sum of the responses on subscales of anxious and avoidant attachment. The participants responded on a self-evaluation scale of 7 (from 1: "I disagree completely" to 7: "I agree completely"). Higher results indicate a higher degree of anxious or avoidant attachment. The reliability of the scale of anxious attachment was α=0.82 and α=0.81 for the scale of avoidant attachment.

The Sexuality Scale (41) is intended to measure sexual self-concept. For the purposes of this study, the original English scale was translated into Croatian using a back-translation method. This 30-item measure includes three subscales: sexual self-esteem, sexual depression and sexual preoccupation. Sexual self-esteem is defined as a positive opinion and self-efficacy in sexual experiences (e.g. *"I think of myself as a very good sexual partner"*) (41). Each item is evaluated on a Likert-type scale of 5, from 1: "I agree completely" to 5: "I disagree completely." Higher positive values indicate a higher level of sexual self-esteem. Using reliability analysis, the reliability coefficient of the subscale was α =0.84.

The New Sexual Satisfaction Scale (42): This instrument is used for measuring sexual satisfaction. It consists of 20 items that assess various aspects of sexual satisfaction: sexual sensations and experiences, sexual exchange, sexual focus, emotional closeness and diversity and the frequency and duration of sexual activities. In this study, the short version of the scale (12 items) was used, which had a reliability of α=0.85. The participants responded on a scale of 5, on which 1 means "not at all satisfied" and 5 means "completely satisfied." A higher score indicates a higher degree of sexual satisfaction.

na ljestvici. Viši rezultat upućuje na viši stupanj seksualnoga zadovoljstva.

Upitnik općih podataka sadržavao je pitanja o dobi, rodu, stupnju obrazovanja, seksualnoj orijentaciji i zdravstvenom stanju. Upitnik je sadržavao i pitanja o tome je li sudionik/ca sada u partnerskoj vezi i, ako jest, koliko dugo traje ta veza, te kakve je vrste (bračna, izvanbračna).

REZULTATI

Opada li seksualno zadovoljstvo starenjem? Rezultati ovog istraživanja upućuju na potvrdan odgovor ⌈r(630)= - 0.1; p<0,01⌋, iako je povezanost niska. Odnos između starenja i seksualnog zadovoljstva dodatno je ispitan analizom varijance, pri čemu su razlike između pojedinih dobnih kategorija ispitivane Scheffeovim testom (tablica 1).

Utvrđen je značajan doprinos dobi F⌈2, 629)=3,84; p<0,05⌋ seksualnom zadovoljstvu. Scheffeov test pokazuje da sudionici u srednjoj (27 do 39 godina) (p=0,01) i najmlađoj (20-26 godina) (p<0,05) imaju značajno više seksualno zadovoljstvo, u odnosu na sudionike u najstarijoj dobnoj kategoriji (40-65 godina). Između najmlađe (20-36 godina) i srednje (27 do 39 godina) dobne kategorije nema značajne razlike (p>0,05) (tablica 1).

Osim dobi, i partnerski status doprinosi stilovima privrženosti, seksualnom samopoimanju i seksualnom zadovoljstvu. S obzirom da je skupina sudionika koji su u vezi značajno starija od skupine koja nije u vezi ⌈t(630)=6,99, p<0,01⌋

A general information questionnaire contained questions on age, gender, educational level, sexual orientation and health. The questionnaire also contained questions about whether the participant was currently in a relationship and, if yes, what type (marital, non-marital).

RESULTS

Does sexual satisfaction decline with age? The results of this study suggested an affirmative answer (r(630)=-0.1; p<0.01), although the correlation was low. The relationship between aging and sexual satisfaction was further studied by ANOVA, in which the differences among age categories were investigated using Scheffe's test (see Table 1).

A significant contribution by age (F(2,629)=3.84; p<0.05) to the degree of sexual satisfaction was established. Scheffe's test showed that the participants in the middle age category (27-39 years) (p=0.01) and the youngest age category (20-26 years) (p<0.05) had significantly greater sexual satisfaction in comparison with the participants in the oldest age category (40-65 years). Between the youngest (20-36 years) and middle (27-39 years) age categories, the difference was not significant (p>0.05) (Table 1).

In addition to age, relationship status also contributed to attachment dimensions, sexual self-esteem and sexual satisfaction. Since the group of coupled participants was significantly older than the group of

TABLE 1. Differences in sexual satisfaction within age categories

Criteria: sexual satisfaction					
Age category (in years)	**M**	**F**	**p**	**Scheffe**	**p**
20–26 (n=211)	47.6	3.84	0.021	20–26 vs. 27–39	0.891
27–39 (n=210)	48			20–26 vs. 40–65	0.042*
40–65 (n=211)	44.8			27–39 vs. 40–65	0.01*

razlike su ispitane analizom kovarijance, uz kontrolu dobi (tablica 2).

Rezultati ukazuju na porast seksualne depresivnosti u funkciji dobi ⌈F(1, 629)=10,82, p=0,001⌋, te na opadanje seksualnoga zadovoljstva ⌈F(1,629)=14,65, p<0,001⌋ u funkciji dobi. Međutim, bez obzira kojoj dobnoj kategoriji pripadaju, samci imaju izraženiju izbjegavajuću privrženost ⌈F(1,629)=38,58, p<0,001⌋, manje seksualno samopoštovanje ⌈F(1,629)=5,48, p<0,05⌋, veću seksualnu depresivnost ⌈F(1, 629)=36,1, p<0,001⌋ i manje seksualno zadovoljstvo ⌈F(1,629)=23,88, p<0,001⌋, u odnosu na osobe koje su u partnerskoj vezi (tablica 2).

Pojedinačni i zajednički doprinos rodnih i dobnih razlika te statusa veze na seksualno samopoimanje i seksualno zadovoljstvo provjeren je dvosmjernim ANOVA-ma na sljedeći način: rod, dob i sadašnja veza korištene su kao nezavisne, a aspekti privrženosti i seksualnosti kao zavisne varijable. Kao *post-hoc* test (za dob, jer ima više od dvije kategorije) korišten je Scheffeov test (tablica 3).

Muškarci imaju višu izbjegavajuću privrženost ⌈F(1,626)=23,68; p<0,001⌋, više seksualno samopoštovanje ⌈F=(1,626)=7,96; p<0,05⌋ i više su preokupirani seksom ⌈F(1,626)=115,07; p<0,001⌋ u odnosu na žene. Žene imaju višu anksioznu privrženost u odnosu na muškarce ⌈F(1,626)=6,48; p=0,011⌋. Seksualno zadovoljstvo opada u funkciji dobi ⌈F(2,626)=3,54; p<0,05⌋. Osobe koje su u vezi općenito imaju manju izbjegavajuću privrže-

singles (t(630)=6.99, p<0.01), differences were investigated through analysis of covariance, with control for age (Table 2). The results indicated decrease in sexual satisfaction (F(1,629)=14.65, p<0.001) as a function of age. However, whatever age category singles belonged to, they had markedly more pronounced avoidant attachment (F(1,629)=38.58, p<0.001), lower sexual self-esteem (F(1,629)=5.48, p<0.05) and lower sexual satisfaction (F(1,629)=23.88, p<0.001), in comparison with individuals in a partner relationship (Table 2).

Separate and combined contributions of gender, age and relationship status on attachment, sexual self-esteem and sexual satisfaction were confirmed by a two-way analysis of variance (ANOVA) in the following manner: gender, age and relationship status were used as independent variables, and aspects of attachment and sexuality as dependent variables (Table 3).

Men had higher avoidant sexual attachment (F(1,626)=23.68; p<0.001) and higher sexual self-esteem (F=(1,626)=7.96; p<0.05) in comparison with women. Women had greater anxious attachment in comparison with men (F(1,626)=6.48; p=0.011). Sexual satisfaction declined as a function of age (F(2,626)=3.54; p<0.05). Coupled people generally had lower avoidant attachment (F(1,626)=40.42; p<0.001), higher sexual satisfaction (F(1,626)=20.17; p<0.001) and

TABLE 2. The effects of age and current relationship status (with control for age) on attachment dimensions, sexual self-esteem and sexual satisfaction in single (n=121) and coupled (n=511) participants

Attachment styles and aspects of sexuality	Age and partner status	*F*	*p*
Anxious Attachment	Age	0.01	0.922
	Partner status	1.29	0.256
Avoidant Attachment	Age	2.39	0.123
	Partner status	38.58	<0.001*
Sexual Self-Esteem	Age	1.86	0.173
	Partner status	5.48	0.020*
Sexual Satisfaction	Age	14.65	<0.001*
	Partner status	23.88	<0.001*

nost ⌈F(1,626)=40,42; p<0,001⌋, manju seksualnu depresiju ⌈F(1,626)=28,45; p<0,001⌋, veće seksualno zadovoljstvo ⌈F(1,626)=20,17; p<0,001⌋ i granično veće seksualno samopoštovanje ⌈F(1,626)=3,6; p=0,058⌋ u odnosu na osobe koje nisu u vezi (tablica 3).

Ova analiza pruža i zanimljive podatke o zajedničkom doprinosu roda, dobi i statusa veze na izbjegavajuću privrženost, te na seksualno samopoštovanje. Na taj je način dobivena značajna interakcija dobi i statusa partnerske veze na izbjegavajuću privrženost ⌈F(2,626)=5,29; p<0,01⌋ (slika 1).

marginally higher sexual self-esteem in comparison with persons who were not in a relationship (Table 3). This analysis also provides information on the combined contributions of gender, age and relationship status to avoidant attachment and sexual self-esteem. In this manner, significant interaction was obtained between age and relationship status in avoidant attachment ($F(2,626)=5.29$; $p<0.01$) (see Figure 1). Furthermore, single people had a significantly higher level of avoidant attachment than coupled people in the youngest ($p<0.001$) and oldest ($p<0.001$)

TABLE 3. Results of a complex ANOVA on the differences in attachment dimensions, sexual self-esteem and sexual satisfaction, with regard to gender, relationship status and age

Dependent variables	Independent variables		M±SD	*F*	*P*
Anxious attachment	Gender	males	24.7±10.77	6.48	0.011*
		females	26.9±11.49		
	Currently in a relationship	Yes	25.6±11.38	1.05	0.306
		No	26.9±10.35		
	Age (in categories)	20–26	47.6	0.69	0.502
		27–39	48		
		40–65	44.8		
	Gender*Currently in a relationship			1.87	0.172
	Gender*Age			0.49	0.615
	Currently in a relationship*Age			0.23	0.797
Avoidant attachment	Gender	M	26.5±11	23.68	<0.001*
		F	22.6±9.96		
	Currently in a relationship	Yes	23.3±10.13	40.42	<0.001*
		No	29.6±11.3		
	Age (in categories)	20–26	47.6	2.06	0.128
		27–39	48		
		40–65	44.8		
	Gender*Currently in a relationship			2.69	0.102
	Gender*Age			0.31	0.738
	Currently in a relationship*Age			5.29	0.005*
Sexual self-esteem	Gender	M	38.4±7.13	7.96	0.005*
		F	36.8±7.00		
	Currently in a relationship	Yes	37.9±7,08	3.60	0.058
		No	36.4±7.1		
	Age (in categories)	20–26	47.6	0.31	0.731
		27–39	48		
		40–65	44.8		
	Gender*Currently in a relationship			8.9	0.003*
	Gender*Age			0.07	0.931
	Currently in a relationship*Age			0.22	0.799
Sexual satisfaction	Gender	M	47.4±8.64	0.61	0.436
		F	46.9±9.35		
	Currently in a relationship	Yes	47.8±9.0	20.17	<0.001*
		No	44.2±8.41		
	Age (in categories)	20–26	47.6	3.54	0.030*
		27–39	48		
		40–65	44.8		
	Gender*Currently in a relationship			1.20	0.274
	Gender*Age			0.11	0.898
	Currently in a relationship*Age			0.47	0.624

Na što ovaj nalaz zapravo ukazuje? Osobe u vezi imaju podjednaku, relativno nisku razinu izbjegavajuće privrženosti u svim dobnim skupinama. Situacija je značajno drugačija kod samaca. Kod njih je izbjegavajuća privrženost najviša u najstarijoj dobnoj skupini (40 i više godina), nešto je manja u najmlađoj (do 26 godina), dok oni u srednjoj kategoriji (27-39 godina) imaju najnižu izbjegavajuću privrženost. Nadalje, samci imaju značajno viši stupanj izbjegavajuće privrženosti nego osobe u vezi u najmlađoj (p<0,001) i najstarijoj dobnoj kategoriji (p<0,001), dok u srednjoj dobnoj kategoriji nije utvrđena značajna razlika između samaca i osoba u vezi (p>0,05). Ovaj nalaz ukazuje da, iako samci imaju izraženiju izbjegavajuću privrženost u svim dobnim skupinama, stupanj njezine izraženosti je u različitim dobnim kategorijama različit.

Zajednički učinak roda i sadašnje veze na seksualno samopoštovanje ⌈F(1,624)=8,9; p<0,01) prikazan je na slici 2.

Nalaz upućuje na drugačije čimbenike koji determiniraju seksualno samopoštovanje muškaraca i žena. Naime, seksualno samopoštovanje žena ne ovisi o tome imaju li ili nemaju partnera, dok se ono kod muškaraca mijenja u ovisnosti o sadašnjem partnerskom statusu. Žene u

age categories, while no significant difference between single and coupled people was found in the middle age category (p>0.05). This finding indicates that, although single people had more pronounced avoidant attachment in all age groups, the degree varied across different age categories.

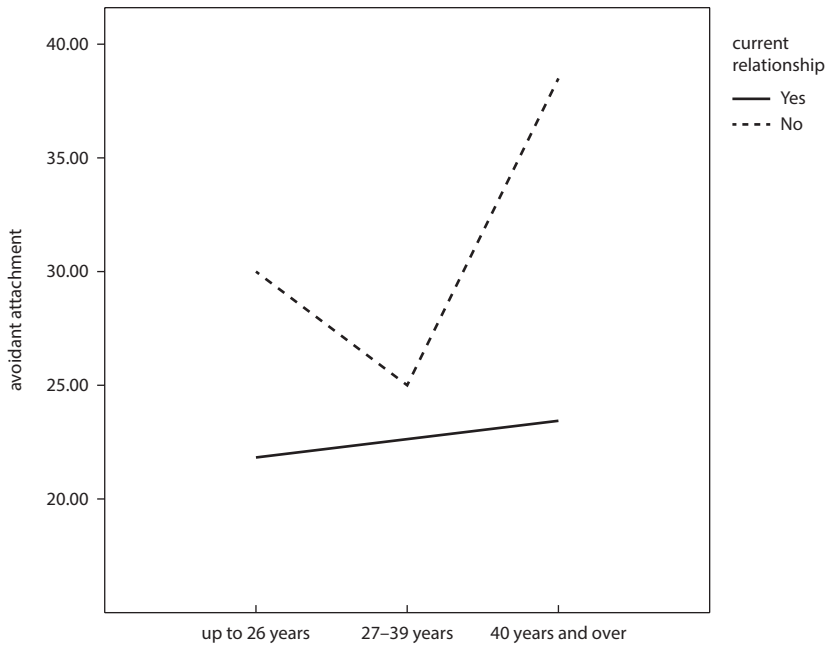
The combined effects of gender and current relationship status on sexual self-esteem (F(1,624)=8.9; p<0.01) are presented in Figure 2.

The sexual self-esteem of women did not depend on whether or not they had a partner. In men, the sexual self-esteem was different in singles and coupled persons. Women in a relationship had lower sexual self-esteem than men in a relationship. However, the sexual self-esteem of single men was very low and was becoming even lower than the sexual self-esteem of women.

DISCUSSION

In the present study, the separate and combined contributions of gender, age and relationship status on attachment dimensions,

FIGURE 1. Combined contribution of age and relationship status to avoidant attachment



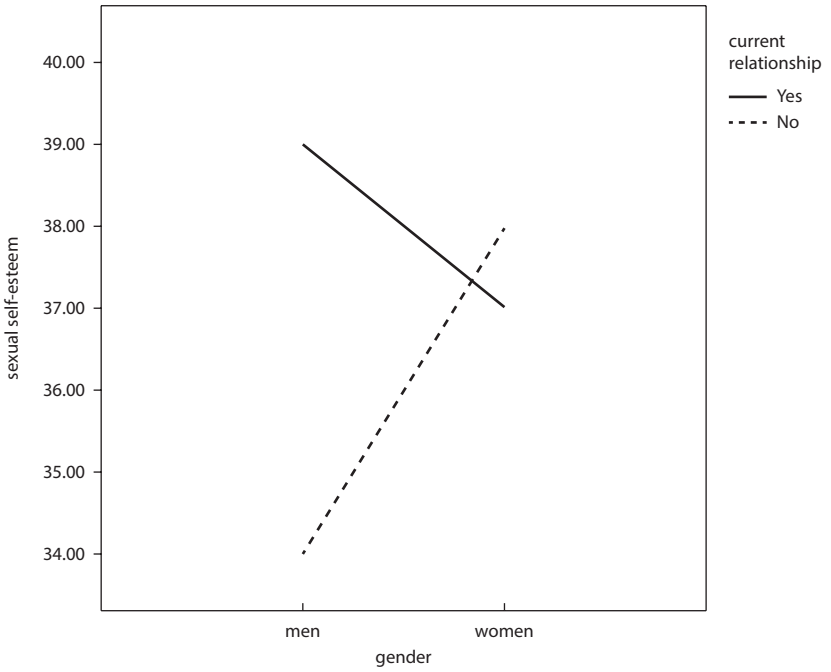


FIGURE 2. The combined contribution of gender and current relationship status to sexual self-esteem

vezi imaju niže seksualno samopoštovanje od muškaraca u vezi. Međutim, seksualno samopoštovanje muških samaca vrlo je nisko, te postaje čak i niže od seksualnog samopoštovanja žena.

RASPRAVA

U ovom istraživanju utvrđeni su posebni i zajednički doprinosi roda, dobi i statusa veze na stilove privrženosti, aspekte seksualnosti i seksualno zadovoljstvo. Većim dijelom su potvrđena ranija saznanja o rodnim osobitostima stilova privrženosti u smislu veće anksiozne privrženosti žena, te veće izbjegavajuće privrženosti muškaraca. Muškarci imaju više seksualno samopoštovanje i više su preokupirani seksom na kognitivnom i ponašajnom planu od žena. Međutim, ukazano je na značenje sadašnjeg partnerskog statusa na seksualno samopoštovanje muškaraca, koje je više kod muškaraca u vezi, dok je kod žena seksualno samopoštovanje podjednako bez obzira na status veze. U skladu s očekivanjima, samci imaju viši stupanj izbjegavajuće privrženosti, lošiju sliku o vlastitoj seksualnosti i manje seksualno zadovoljstvo od osoba u vezi. Kao što se očekivalo, seksualno zadovoljstvo smanjuje se

sexual self-esteem and sexual satisfaction were investigated. For the most part, both previous findings and the study hypothesis were confirmed on the gender characteristics of attachment dimensions in terms of higher anxious attachment in women and higher avoidant attachment in men. Men also had higher sexual-self-esteem than women. However, it was shown that the significance of current partner status on the sexual self-esteem of men was higher in men in a relationship, while sexual self-esteem was the same in women regardless of relationship status. According to the expectations, single people had a higher degree of avoidant attachment, a lower sexual self-esteem and lower sexual satisfaction than coupled people.

As has been predicted, sexual satisfaction declined as a function of age. The possible reasons for the decline in sexual satisfaction were studied from the perspective of the combined influences of biological (hypogonadism, deteriorating health), psychological (depression, attitudes about sexuality in old age, negative perception of one's own sexual attractiveness, declining quality of

u funkciji dobi. Razlozi za opadanje seksualnog zadovoljstva proučavani su iz perspektive zajedničkog utjecaja bioloških (hipogonadizam, narušeno zdravstveno stanje), psiholoških (depresija, stavovi o seksualnosti u starijoj dobi, negativna percepcija vlastite seksualne privlačnosti, opadanje kvalitete veze) i socijalnih čimbenika (narušene socijalne interakcije, dostupnost partnera, stereotipi o seksualnosti) (43-45). U drugim istraživanjima nije utvrđeno opadanje seksualnog zadovoljstva s dobi (46,47). Neujednačenost istraživačkih nalaza vjerojatno je rezultat širokoga određenja pojma seksualnog zadovoljstva o kojima ovisi i odabir primijenjene metodologije u različitim istraživanjima. Kao i u ovom istraživanju, izraženiji izbjegavajući stil privrženosti kod muškaraca i izraženija anksiozna privrženost žena pronađeni su i u drugim istraživanjima (12-16,30,48). DelGuidice (49) u objašnjenje rodnih razlika u izbjegavajućoj privrženosti uključuje i čimbenike vezane uz životnu povijest, rane stresove, obiteljske utjecaje i hormonsku aktivnost. Međutim, istraživanja rodnih razlika u privrženosti nisu do kraja jednoznačna. One nisu pronađene u Oceaniji, Africi i zemljama Istočne Azije (50), što djelomično potvrđuje i njihovu kulturološku uvjetovanost. Male rodne razlike (osobito povećanje izbjegavajuće privrženosti kod žena), pronađene su i u zemljama s visokim razinama smrtnosti, visokim natalitetom i nesigurnijim životnim uvjetima. Uočeno smanjenje rodnih razlika pripisuje se utjecajima okolinskog stresa pri čemu se kod oba roda izbjegavajuća privrženost povećava (16). Rodne razlike u seksualnom zadovoljstvu nisu utvrđene u ovom istraživanju. Raniji nalazi u ovom istraživačkom području su proturječni pri čemu neki autori pronalaze, a neki ne pronalaze rodne razlike u seksualnom zadovoljstvu (8,51, 52). Ovakva neujednačenost je objašnjena korištenjem nedovoljno pouzdanih samoprocjenskih mjera za utvrđivanje seksualnog zadovoljstva (36).

Osim roda i dobi u ovom su istraživanju utvrđeni i doprinosi partnerskoga statusa na privrženost, seksualno samopoštovanje i seksualno

relationships) and social factors (disturbed social interaction, partner availability, stereotypes about sexuality) (43-45). In other studies, a decline in sexual satisfaction with age was not established (46,47). The disparity among the research findings is likely due to the wide range of definitions of the concept of sexual satisfaction, upon which the selection of the methodologies used in various studies depends. As in this study, the majority of previous studies also found a more pronounced avoidant attachment style in men and a more pronounced anxious attachment style in women (12-16,30,48). Due to gender specifities in attachment styles, Del Guidice (49) includes factors related to life history, early stresses, family influences and hormonal activity, which together contribute to gender differences in attachment. However, such differences were not found in Oceania, Africa and the countries of East Asia (50), thereby partially confirming their cultural conditionality. Small gender differences (especially higher avoidant attachment in women) were also found in countries with high mortality rates, high birth rates and unsafe living conditions. These differences were attributed to the influences of environmental stress, whereby avoidant attachment increases in both genders (16). Gender differences in sexual satisfaction were not established in this study. Previous findings on gender considering sexual satisfaction are contradictory (8,51,52). A possible explanation for the differences between men and women reported by some studies may be the use of self-reports that include predictor items of sexual satisfaction (36).

In addition to gender and age, the contributions of relationship status to attachment, sexual self-esteem and sexual satisfaction were established in this study. In that sense, single people had a higher degrees of avoidant attachment, a lower sexual self-esteem and a

zadovoljstvo. Samci u ovom istraživanju imaju viši stupanj izbjegavajuće privrženosti, niže seksualno samopoštovanje i manje seksualno zadovoljstvo od osoba u vezi. Slični rezultati su pronađeni i u drugim istraživanjima što je objašnjeno utjecajem zaštitnih čimbenika kao što su učestaliji seksualni odnosi (45), uživanje veće socijalne podrške (53) i niže razine izbjegavajuće privrženosti (30) ljudi u partnerskim vezama, u usporedbi sa samcima.

Također, u ovom je istraživanju pronađen zajednički doprinos dobi i statusa veze razini izbjegavajuće privrženosti što je originalan doprinos ovog istraživanja. Naime, izbjegavajuća privrženost kod samaca izraženija je u svim dobnim skupinama u odnosu na osobe u vezi. Slični su rezultati pronađeni i u istraživanju Chopika i sur. (30) koji ukazuju na više vrijednosti anksiozne i izbjegavajuće privrženosti u svim dobnim skupinama samaca u odnosu na osobe u vezi. Stupanj izbjegavajuće privrženosti samaca u ovom istraživanju najizraženiji je nakon 40. godine života, nešto niži do 26. godine, a najniži u dobnoj skupini od 27. do 39. godine života. Nešto drugačiji rezultati pronađeni su u istraživanju Chopika i sur. (30) koji ukazuju na viši stupanj izbjegavajuće privrženosti u srednjoj dobnoj skupini u odnosu na mlađe i najstarije sudionike te je ovaj obrazac najuočljiviji kod osoba u vezi, a razlika u izbjegavajućoj privrženosti je najveća među najmlađim sudionicima. Mogući razlog su maturacijski procesi svojstveni dobi: kod mlađih osoba postoji viši stupanj izbjegavajuće privrženosti zbog straha od vezivanja uvjetovanih nezrelošću, nedostatkom iskustva i samopouzdanja u partnerskim odnosima, nespremnošću za stupanje u vezu i sl. U prilog ovom tumačenju ide i podatak da promjene koje se odvijaju tijekom rane odrasle dobi mogu biti praćene višim razinama izbjegavajuće privrženosti (54). U srednjoj dobnoj skupini nešto niži stupanj izbjegavajuće privrženosti može ukazivati na veću psihološku spremnost izbjegavajuće privrženih osoba za zasnivanje partnerske veze zbog dobne zrelo-

lower sexual satisfaction than coupled people. Similar results were found in other studies, which were explained by the influence of protective factors such as more regular sexual activity (45), enjoying greater social support (53) and lower levels of avoidant attachment (30) in coupled people compared with their single counterparts. Moreover, in this study, avoidant attachment in single people was more pronounced in all age groups compared with coupled people. The similar results were found in the study of Chopik et al. (30) who determined that single people were higher in both attachment anxiety and avoidance in each age group compared with those who were coupled. In this study, the degree of avoidant attachment in single people was most pronounced in the oldest age group (after 40), somewhat lower in the youngest (up to 26 years of age) and lowest in the middle age group (from 27 to 39 years of age). Somewhat different results were obtained by Chopik et al. (30) who found that avoidance was higher among middle-aged adults compared with younger and older adults, that this pattern was most evident for coupled individuals and that the difference for avoidance was greatest among young adults. It is possible that, in young people, a higher level of avoidant attachment could be the result of fear of bonding due to immaturity, lack of experience, unwillingness to enter into a relationship, etc. However, literature on emerging adulthood suggests that changes during young adulthood could be accompanied by higher levels of attachment avoidance (54). Furthermore, among middle-aged singles in this study, the somewhat lower level of avoidant attachment could indicate the greater psychological readiness of avoidant-attached people to establish a partner relationship due to maturity and/or social expectations. This is not consistent neither with the Mickelson et al. (31), who found that avoidance was higher among middle-aged compared with young

sti i(ili) socijalnih očekivanja. Ovaj nalaz nije u skladu sa nalazima Mickelsona i sur. (31) koji pronalaze višu izbjegavajuću privrženost u srednjoj odrasloj dobi, ni s nalazom studije koja pronalazi pozitivnu povezanost između dobi i izbjegavajuće privrženosti (5). Međutim, osobe koje nakon 40. godine života nisu u partnerskoj vezi imaju najviši stupanj izbjegavajuće privrženosti. Ovaj nalaz moguće je sagledati u svjetlu smanjenih mogućnosti i(ili) motivacije za pronalaženjem partnera u zrelijoj životnoj dobi. Smanjena očekivanja izbjegavajuće privrženih samaca o mogućnosti zasnivanja veze smanjuju mogućnost njezinog zasnivanja, a time i manju učestalost seksualnih aktivnosti.

U ovom je istraživanju utvrđen zajednički doprinos statusa veze i roda na seksualno samopoštovanje sudionika. Ovaj je nalaz također originalan istraživački doprinos. Muškarci u partnerskoj vezi imaju pozitivniju sliku o vlastitoj seksualnosti od žena u vezi, dok je kod žena seksualno samopoštovanje podjednako bez obzira jesu li ili nisu u vezi. Ovaj nalaz navodi na zaključak da različiti uzroci određuju seksualno samopoštovanje muškaraca i žena. U ranijim istraživanjima pronađeno je da kod muškaraca slika o vlastitoj seksualnosti varira u ovisnosti o dostupnosti učestalijih seksualnih aktivnosti, što stalna veza omogućuje u većoj mjeri, u odnosu na život bez stalnog partnera (45,55). Navedenom objašnjenju ide u prilog nalaz Walsha (56) koji je utvrdio najveću razliku u razinama samopoštovanja između muškaraca koji nikada nisu imali seksualni odnos i onih koji su ga imali, dok se djevice i žene sa seksualnim iskustvima ne razlikuju u razini samopoštovanja. Nadalje, kod žena je slika tijela snažni prediktor samopoštovanja (57,58). Moguće je da se sniženo samopoštovanje, temeljeno na lošoj slici tijela (zbog nedostizanja socijalno nametnutih standarda o ženskom izgledu), proširuje i na sliku o vlastitoj seksualnosti (59).

Iako rezultati ovog istraživanja proširuju ranije spoznaje o štetnim učincima nesigurne

adults, nor with the results of another study that found avoidance was positively correlated with age (5). However, single people over 40 years in the present study had the highest degree of avoidant attachment. This finding can be viewed in the light of diminished opportunities and/or motivation to find a partner at a mature age. The diminished expectations reduce the possibility of establishing a relationship and, consequently, less frequent sexual activities.

In the present study, the combined contribution of relationship status and gender on sexual self-esteem was determined. Coupled men had a higher sexual self-esteem than coupled women, while for women sexual self-esteem was the same whether or not they were in a relationship. This finding suggests that different factors could determine the sexual self-esteem of men and women. In earlier studies, it was found that the sexual-self-image of men varied according to the frequency of sexual activities, which a steady relationship makes possible to a greater extent than life without a steady partner (45,55). This explanation is supported by the findings of Walsh (56), who noted the greatest difference in the levels of self-esteem between men who had never had sexual intercourse and those who had, while virgins and women with sexual experience did not differ in the level of sexual self-esteem. Moreover, for women body image is a strong predictor of self-esteem (57,58). It is possible that diminished self-esteem based on poor body image also extends to sexual self-esteem (59). The results of this study improve the understanding of the relationship between attachment and aspects of sexuality within different age groups of single and coupled people. There were also several limitations in this study regarding the methodology applied, which prevented the representativeness of the sample. The specific nature of sexual research (unwillingness of participants to report

privrženosti na seksualnost ljudi te uvodi nova saznanja o tim učincima u kontekstu statusa partnerskih veza, postoji i nekoliko ograničenja koja umanjuju mogućnost generalizacije rezultata. Osnovno ograničenje vezano je uz osobitost primijenjene metode koja onemogućuje reprezentativnost uzorka već je uzorak definiran karakteristikama početnog uzorka iz kojeg su generirani daljnji sudionici. Specifičnosti istraživanja seksualnosti sljedeći su izvor mogućih pristranosti vezanih uz (ne)spremnost sudionika da iskreno izvješćuju o svom seksualnom životu. Konačno, presječna studija koja je korištena u ovom istraživanju također ograničava mogućnost donošenja sigurnijih zaključaka o doprinosu dobi na privrženost i seksualnost.

ZAKLJUČAK

Rezultati u ovom istraživanju ukazuju na postojanje rodnih razlika u stilovima privrženosti i seksualnom samopoimanju pri čemu žene imaju izraženiju anksioznu privrženost i niže seksualno samopoštovanje od muškaraca, bez obzira na status veze. Dob je negativno povezana sa seksualnim zadovoljstvom. Samci imaju izraženiju izbjegavajuću privrženost, naročito u najmlađoj i najstarijoj dobnoj kategoriji. Stupanj izbjegavajuće privrženosti samaca je najizraženiji nakon 40-te godine, nešto niži do 26 –te godine i najniži u dobi od 27. do 39-te godine života. Samci također imaju niže razine seksualnog samopoštovanja i seksualnog zadovoljstva u odnosu na osobe koje su u vezi. Konačno, pozitivni učinak partnerskog statusa na seksualno samopoštovanje muškaraca izraženiji je kod muškaraca koji su u vezi, dok je kod žena taj učinak nepromijenjen bez obzira jesu li ili nisu u vezi.

honestly about their sex life) could be another source of potential bias. Finally, the cross-sectional study that was used in this research also limits the possibility of secure conclusions on the contribution of age to attachment and sexuality.

CONCLUSIONS

Gender differences were established in this study, indicating more pronounced anxious attachment and lower sexual self-esteem in women compared with men, regardless of relationship status. Age was negatively associated with sexual satisfaction. Single participants had higher levels of avoidant attachment, especially in the youngest and the oldest age group. They also had lower sexual self-esteem and sexual satisfaction compared with coupled participants. The degree of avoidant attachment of single people was most pronounced in the oldest age group (after 40), somewhat lower in the youngest (up to 26 years of age), and lowest in the middle age group (from 27 to 39 years of age). Finally, the significance of current partner status on sexual self-esteem in men was higher in men in a relationship, while sexual self-esteem was the same in women regardless of the relationship status.

LITERATURA/REFERENCES

1. Shaver PR, Brennan KA. Attachment Styles and the "Big Five" Personality Traits: Their Connections with Each Other and with Romantic Relationship Outcomes. Pers Soc Psychol Bull 1992; 18(5): 536-45.
2. Péloquin K, Bigras N, Brassard A, Godbout N. Perceiving that ones partner is supportive moderates the associations among attachment insecurity and psychosexual variables. Can J Hum Sex 2014; 23(3): 178-88.
3. Schachner DA, Shaver PR. Attachment dimensions and sexual motives. Pers Relatsh 2004; 11(2): 179-95.
4. Davis D, Shaver PR, Vernon ML. Attachment Style and Subjective Motivations for Sex. Pers Soc Psychol Bull 2004; 30(8): 1076-90.
5. Birnbaum GE. Attachment orientations, sexual functioning, and relationship satisfaction in a community sample of women. J Soc Pers Relat 2007; 24(1): 21-35.
6. Butzer B, Campbell L. Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. Pers Relatsh 2008; 15(1): 141-54.
7. Bowlby J. Attachment and loss: Attachment (Vol. 1). New York: Basic Books, 1969/1982.
8. Petersen JL, Hyde JS. A meta-analytic review of research on gender differences in sexuality, 1993–2007. Psychol Bull 2010; 136(1): 21-38.
9. Gray PB, Garcia JR. Aging and Human Sexual Behavior: Biocultural Perspectives - A Mini-Review. Gerontology 2012; 58(5): 446-52.
10. Giudice MD. Sex Differences in Romantic Attachment: A Meta-Analysis. Pers Soc Psychol Bull 2011; 37(2): 193-214.
11. Rozvadský Gugová G, Heretik A. Gender Differences in Attachment Styles Using Slovak Version of the Experiences in Close Relationships – Revised (ECR-R). Acta Technologica Dubnicae 2011; 1(2): 29-36.
12. Bartholomew K, Horowitz LM. Attachment styles among young adults: A test of a four-category model. J Pers Soc Psychol 1991; 61(2): 226-44.
13. Brassard A, Shaver PR, Lussier Y. Attachment, sexual experience, and sexual pressure in romantic relationships: A dyadic approach. Pers Relatsh 2007; 14(3): 475-93.
14. Brennan K A, Clark CL, Shaver PR. Self-report measurement of adult romantic attachment: An integrative overview. Attachment theory and close relationships, New York: Guilford Press, 1998, str. 46-76..
15. Picardi A, Vermigli P, Toni A, D'Amico R, Bitetti D, Pasquini P. Further evidence of the validity of the Italian version of the questionnaire "Experiences in Close Relationships" (ECR), a self-report instrument to assess adult attachment. Ital J Psychopathol 2002; 8: 282-94.
16. Schmitt DP. Evolutionary Perspectives on Romantic Attachment and Culture. Cross Cult Res 2008; 42(3): 220-47.
17. Buss DM, Schmitt DP. Sexual Strategies Theory: An evolutionary perspective on human mating. Psychol Rev 1993; 100(2): 204–32.
18. Brafford-Squires L. Sexual Self-Esteem and its Relationship to Demographics, Sexual History, Relationship Context, and Condom Use in College Students (Unpublished doctoral dissertation, University of Maryland, 1998). Dissertation. Abstracts International, 59(6-A), 19-30.
19. Snell WE, Fisher TD, Walters AS. The multidimensional sexuality questionnaire: An objective self-report measure of psychological tendencies associated with human sexuality. Ann Sex Res 1993; 6(1):27-55.
20. Hepper EG, Hogarth HA, Carnelley KB. Attachment orientation as a moderator of the association between sexual behaviour and sexual self-views. Poster presented at International Association for Relationship Research Conference, Crete, 2006.
21. Ziherl S, Masten R. Differences in predictors of sexual satisfaction and in sexual sexual satisfaction between female and male university students in Slovenia. Psychiatr Danub 2010; 22: 425-29.
22. Gentzler AL, Kerns KA. Associations between insecure attachment and sexual experiences. Pers Relatsh 2004; 11(2): 249-65.
23. Menard D, Offman A. The interrelationships between sexual self-esteem, sexual assertiveness and sexual satisfaction. Can J Hum Sex 2009; 18: 35-45.
24. Oattes M, Offman A. Global and sexual self-esteem as predictors of sexual communication in intimate relationships. Can J Hum Sex 2007; 16: 89-100.
25. Mc Connell M, Moss E. Attachment across the life span: Factors that contribute to stability and change. AJEDP 2011; 11: 60-77.
26. Magai C. Attachment in middle and later life. In: Cassidy J, Shaver PR (Eds.). Handbook of attachment: Theory, research,and clinical applications (2nd ed). NewYork: Guilford Press, 2008, p. 532-551.
27. Soto CJ, John OP, Gosling SD, Potter J. Age differences in personality traits from 10 to 65: Big Five domains and facets in a large cross-sectional sample. J Pers Soc Psychol 2011; 100(2): 330-48.
28. Klohnen EC, John OP. Working models of attachment: A theory-based prototype approach. In: Simpson JA, Rholes WS (eds.). Attachment theory and close relationships. New York: Guilford Press, 1998.
29. Diehl M, Elnick AB, Bourbeau LS, Labouvie-Vief G. Adult attachment styles: Their relations to family context and personality. J Pers Soc Psychol 1998; 74(6): 1656-69.
30. Chopik WJ, Edelstein RS, Fraley RC. From the Cradle to the Grave: Age Differences in Attachment From Early Adulthood to Old Age. J Pers 2013; 81(2): 171-83.

31. Mickelson KD, Kessler RC, Shaver PR. Adult attachment in a nationally representative sample. J Pers Soc Psychol 1997; 73(5): 1092-106.
32. Lindau ST, Gavrilova N. Sex, health, and years of sexually active life gained due to good health: evidence from two US population based cross sectional surveys of ageing. BMJ 2010; 340(2): c810-c810.
33. Moyano N, Sierra JC. Relationships between personality traits and positive/negative sexual cognitions. Int J Clin Health Psychol 2013; 13(3): 189-96.
34. Sierra JC, Vallejo-Medina P, Santos-Iglesias P, Fernández ML. Validación del Massachusetts General Hospital-Sexual Functioning Questionnaire (MGH-SFQ) en población española. Aten Primaria 2012; 44(9): 516-24.
35. Trompeter SE, Bettencourt R, Barrett-Connor E. Sexual Activity and Satisfaction in Healthy Community-dwelling Older Women. Am J Med 2012; 125(1):37-43.e1.
36. Sánchez-Fuentes M, Santos-Iglesias P, Sierra JC. A systematic review of sexual satisfaction. Int J Clin Health Psychol 2014; 14(1): 67-75.
37. Fraley RC, Vicary AM, Brumbaugh CC, Roisman GI. Patterns of stability in adult attachment: An empirical test of two models of continuity and change. J Pers Soc Psychol 2011; 101(5): 974-92.
38. Schachner DA, Shaver PR, Gillath O. Attachment style and long-term singlehood. Personal Relatsh 2008; 15(4): 479-91.
39. Pedersen W, Blekesaune M. Sexual Satisfaction in Young Adulthood. Acta Sociol 2003; 46(3): 179-93.
40. Kamenov Ž, Jelić M. Validacija instrumenta za mjerenje privrženosti u različitim vrstama bliskih odnosa: Modifikacija Brennova Inventara iskustava u bliskim vezama. Suv Psihol 2003; 6: 73-91.
41. Snell WE, Papini DR. The sexuality scale: An instrument to measure sexual-esteem, sexual-depression, and sexual-preoccupation. J Sex Res 1989; 26(2): 256-63.
42. Štulhofer A, Buško V. Evaluacija novog instrumenta za procjenu seksualnog zadovoljstva. Suvrem psihol 2008; 11(2): 287-312.
43. Morley JE. Sexuality and Aging. In: Pathy J, Sinclair AJ, Morley JE (eds.). Principles and Practice of Geriatric Medicine. John Wiley and Sons, Ltd, 2006.
44. Dundon CM, Rellini AH. More than Sexual Function: Predictors of Sexual Satisfaction in a Sample of Women Age 40–70. J Sex Med 2010; 7(2): 896-904.
45. Beutel, ME, Schumacher J, Weidner W, Brahler E. Sexual activity, sexual and partnership satisfaction in ageing men-results from a German representative community study. Andrologia 2002; 34(1): 22-8.
46. Young M, Denny G, Young T, Luquis R. Sexual Satisfaction among Married Women Age 50 and Older. Psychol Rep 2000; 86 (3):1107-22.
47. Štulhofer A, Zelenbrz J, Landripet I, Kuti S, Gregurović M, Tiljak H. Spol, starenje i seksualnost: struktura i dinamika seksualnoga zadovoljstva u heteroseksualnom uzorku urbanih žena i muškaraca. Druš Istraž 2004; 13: 1011-29.
48. Marušić I, Kamenov Ž, Jelić M. Personality And Attachment To Friends. Druš Istraž 2011; 20 (4) :1119-37.
49. Giudice MD. Sex, attachment, and the development of reproductive strategies. Behav Brain Scien 2009; 32(01): 1-21.
50. Li T, Kato K. Measuring adult attachment: validation of ECR in Chinese sample. Acta Psychol Sin 2006; 38: 399-406.
51. Rehman US, Rellini AH, Fallis E. The Importance of Sexual Self-Disclosure to Sexual Satisfaction and Functioning in Committed Relationships. J Sex Med 2011; 8(11): 3108-15.
52. Santos-Iglesias P, Sierra JC, García M, Martínez A, Sánchez A, Tapia MI Índice de Satisfacción Sexual (ISS): Un estudio sobre su fiabilidad y validez. Rev Int Psicol Ter Psicol 2009; 9: 259-73.
53. Gatzeva M, Paik A. Emotional and Physical Satisfaction in Noncohabiting, Cohabiting, and Marital Relationships: The Importance of Jealous Conflict. J Sex Res 2011; 48(1): 29-42.
54. Arnett JJ. Emerging adulthood: A theory of development from the late teens through the twenties. Am Psychol 2000; 55(5): 469-80.
55. Schwalbe ML, Staples CL. Gender Differences in Sources of Self-Esteem. Soc Psychol Quart 1991; 54(2): 158.
56. Walsh A. Self-esteem and sexual behavior: Exploring gender differences. Sex Roles 1991; 25(7-8): 441-50.
57. Young I. Predictors of Sexual Satisfaction: The Role of Body-Image and Fitness. Electronic J Hum Sex 2008: 11.
58. Gentile B, Grabe S, Dolan-Pascoe B, Twenge JM, Wells BE, Maitino A. Gender differences in domain-specific self-esteem: A meta-analysis. Rev Gen Psychol 2009; 13(1): 34-45.
59. Leopold JS. The direct and indirect effect of body image on sexual satisfaction (Unpublished doctoral dissertation, University Microfilms International, 2003). Dissertation Abstracts International: Section B: The Sciences & Engineering, 63, US: University Microfilms International 2003.

Obrambeni mehanizmi ovisnika

/ Defence Mechanisms in Addicts

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U radu je istraživana povezanost obrambenih mehanizama i drugih parametara ovisnosti (dob, spol, bračni i radni status, vrsta ovisnosti, te duljina i težina ovisnosti). Rezultati istraživanja su pokazali da su dominantni obrambeni mehanizmi kod ovisnika: apatično povlačenje, devaluacija, negacija, potiskivanje, projekcija, projektivna identifikacija i racionalizacija. Rezultati su također pokazali da postoje razlike u svim navedenim ispitivanim elementima. Kod žena se ovisnost razvija znatno rjeđe nego kod muškaraca, ali kada se ovisnost razvije tada ima teži oblik (češće prisutni nezreli obrambeni mehanizmi). Ovisnost o alkoholu i kockanju je više povezana s potiskivanjem, racionalizacijom, negacijom i projekcijom, a ovisnost o drogama i internetu s apatičnim povlačenjem, devaluacijom i projektivnom identifikacijom. Daljnja istraživanja obrambenih mehanizama ovisnika značajno će doprinijeti daljnjem napretku u dijagnostičkim i terapijskim postupcima.

/ This paper investigates the correlation between defence mechanisms and other parameters of addiction (age, gender, marital and work status, type of addiction, and length and severity of addiction). Research findings have shown that dominant defence mechanisms in addicts are apathetic withdrawal, devaluation, denial, repression, projection, project identification and rationalization. These results also showed that there are differences in all of the above-mentioned parameters. In women, addiction develops considerably less often than in men, but when addiction develops it has a heavier form (more often, immature defence mechanisms are present). Alcohol and gambling addictions are more associated with repression, rationalization, denial and projection, and addiction to drugs and the internet with apathetic withdrawal, devaluation and projective identification. Further research on defence mechanisms in addicts will significantly contribute to further progress in diagnostic and therapeutic procedures.

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UVOD

Značenje ovisnosti

Kada se govori o ovisnosti uglavnom se govori o ovisnosti kao novom fenomenu. Međutim, povijesni podatci pokazuju da je uzimanje psihoaktivnih tvari usko povezano sa svim, zajednicama od najstarijih vremena do danas (1). Dakle, problem ovisnosti nije nastao u novije vrijeme, ali je točno da je unazad 50-tak godina došlo do velike epidemije ovisnosti – „eksplozija ovisnosti“ (2). Epidemija se toliko raširila da je u zapadnoj civilizaciji 10 % populacije ovisno o alkoholu, drogama, kockanju i internetu, a tek se 10 % od ukupnog broja ovisnika liječi (3). Zbog toga već decenijima, ovisnost nije samo medicinski, samo psihijatrijski problem, nego i politički, socijalni, financijski, pravni, sigurnosni i sl.

Za ovakav težak problem, države i različite institucije pokušavaju naći rješenje. U stručnim krugovima je već dugo poznato da je liječenje ovisnika istovremeno i najbolji preventivni program. Ovisnici koji apstiniraju nisu više aktivni ponuđači psihoaktivnih tvari, te na taj način više ne regrutiraju nove ovisnike. Ali, kako liječiti ovisnike? Koncepte i ideje liječenja ovisnika nude svi: ovisnici, bivši ovisnici, članovi obitelji ovisnika, političari, pravnici, mediji. Zbog toga se liječenje ovisnika može nazvati i „ovisnički galimatijas“.

Kao i kod drugih psihičkih poremećaja u liječenju ovisnosti se mogu primjenjivati farmakoterapija, socioterapija i psihoterapija. Velika većina medicinskih i psihijatrijskih područja se vrlo brzo razvija. To se odnosi i na farmakoterapiju i socioterapiju ovisnika. Mišljenja smo da se psihoterapija ovisnika ipak razvija sporije, te da za to nema nikakvih razloga ni opravdanja.

Psihoanaliza i ovisnost

Već smo spomenuli da ovisnost postoji od kad postoji i čovjek. I u svim razdobljima i oko svih ovisnosti postojao je jedan osnovni koncept –

INTRODUCTION

Problem of addiction

When we talk about addiction, we usually talk about addiction as a new phenomenon. However, historical data show that taking psychoactive substances is closely related to all communities from the earliest age to the present (1). Thus, the problem of addiction has not manifested in recent times, but it is true that in the last 50 years there has been a major epidemic of addictions – an “explosion of addiction” (2). The epidemic is so widespread that 10% of the population in the West is dependent on alcohol, drugs, gambling or the internet, and only 10% of the total number of addicts is treated (3). Because of this, addiction has been not just a medical and psychiatric problem for decades, but also a political, social, financial, legal, security problem and so on.

The state and various institutions are trying to find a solution for such a difficult problem. In professional circles, it has long been known that treating addicts is at the same time the best preventive program. The addicts who abstain are no longer active psychoactive substance providers, and thus no longer recruit new addicts. How then to treat addiction? Concepts and ideas of addict treatment are offered by addicts, former addicts, family members of addicts, politicians, lawyers, media, etc. Because of this, the treatment of addicts can be called “addictive galimatias”.

As with other mental disorders in the treatment of addiction, pharmacotherapy, sociotherapy, and psychotherapy may be used. The vast majority of medical and psychiatric areas are developing very rapidly. This also applies to pharmacotherapy and sociotherapy of addicts. We think that psychotherapy treatment of addicts develops slower and that there is no reason or justification for it.

Psychoanalysis and addiction

We have stated above that addiction exists since the dawn of man. And throughout history and in all addictions, there is one basic concept – addic-

ovisnost je interakcija između središnjeg živčanog sustava i psihoaktivne tvari. Ovaj koncept je jednostavan, razumljiv, ali nažalost i pogrešan. Istinski koncept ovisnosti je taj da je ovisnost kombinacija kemijskog djelovanja tvari, ali i svjesnih i nesvjesnih fantazija o djelovanju te tvari. Zbog toga psihoanalitička znanja puno pomažu u ispravnom razumijevanju ovisnosti.

Psihoanaliza se odmah u početku beskompromisno suočila sa svim psihičkim smetnjama, pa i s ovisnosti. Tako se Freud već u ranim radovima (Hypnosis 1891, pismo Fliessu prosinac 1897.) (4,5) intenzivno bavio problemima ovisnosti. I drugi psihoanalitičari su često pokušavali razotkriti psihodinamiku ovisnosti: Abraham, Fenichel, Winnicott, Kernberg, Kohut, Wurmser, Stolorow, Dodes (6-8). Oni ovisnost opisuju kao: problem sa seksualnošću; homoseksualne pulzije; regresija na rane razine razvoja; „potapanje" superega; identifikacija s izgubljenim objektima; instinkt smrti; samodestrukcija; oštećenje desomatizacije, verbalizacije i diferencijacije; pokušaj „krpanja rupe u selfu"; kolaps grandioznog selfa; razvijanje nezrele omnipotencije i sl.

Obrambeni mehanizmi

Mehanizmi obrane su važan psihoanalitički koncept, te su kompleksni kao i drugi važni elementi psihoanalize. Kao i sve druge psihoanalitičke koncepte mehanizme obrane je prvi opisao (otkrio) S. Freud (9). Freud se intenzivno bavio potiskivanjem kao najvažnijim obrambenim mehanizmom, čak toliko da bismo mogli reći da je povijest potiskivanja kao obrambenog mehanizma ujedno i povijest psihoanalize. Ipak, pravu sistematizaciju obrambenih mehanizama čini drugi Freud, Anna. Godine 1936. Anna Freud objavljuje, na njemačkom jeziku rad „Ego i mehanizmi obrane" (10). U ovom radu, koji je brzo preveden na engleski, obrambeni mehanizmi su sistematizirani, te se taj rad ubraja u velika, klasična djela psihoanalitičke li-

tion is the interaction between the central nervous system and the psychoactive substance. This concept is easy and understandable but unfortunately incorrect. The true concept of addiction is that addiction is a combination of the chemical action of substance but also conscious and unconscious fantasies about the action of this substance. Therefore, psychoanalysis helps significantly in properly understanding addiction.

Psychoanalysis immediately uncompromisingly addressed all mental disorders including addictions. Thus Freud already in early works, Hypnosis 1891, Fliess's letter in December 1897 (4,5), intensively dealt with the problems of addiction. Other psychoanalysts also often tried to expose the psychodynamics of addiction: Abraham, Fenichel, Winnicott, Kernberg, Kohut, Wurmser, Stolorow, Dodes and others (6-8). They describe addiction as: a problem with sexuality; homosexual pulsions regression to early levels of development; "submerged" superego; identification with lost objects; death instinct; self-destruction; damage to desomatization, verbalization and differentiation; attempt to "patch holes in the self"; collapse of the grandiose self; developing immature omnipotence and the like.

Defence Mechanisms

Defence mechanisms are an important psychoanalytic concept and are as complex as other important elements of psychoanalysis. Like all other psychoanalytic concepts, defence mechanisms were described (discovered) by Sigmund Freud (9). Freud described repression as the most important defence mechanism, so much so that we could say that the history of repression as a defence mechanism is at the same time the history of psychoanalysis. However, the proper systematization of defence mechanisms was performed by Anna Freud. In 1936, Anna Freud published, in German, "The Ego and Defence Mechanisms" (10). In this paper, which was quickly translated into English, defence mechanisms were systematized, and this work is one of the major classical

terature. Anna Freud navodi deset obrambenih mehanizama: potiskivanje, regresija, reaktivna formacija, izolacija, poništenje, projekcija, introjekcija, okretanje protiv sebe, okretanje u suprotno i sublimacija ili premještanje.

Glavne značajke obrambenih mehanizama su:

- čuvaju (brane) osobu od jake anksioznosti
- operiraju uglavnom nesvjesno
- dio su normalnog psihičkog funkcioniranja
- mogu biti i patološki kada su prisutni u neskladu s dobi ili jačinom.

Nakon Anne Freud i drugi psihoanalitičari nastavljaju proučavati ovaj važan fenomen. Melanie Klein 1946. godine opisuje važan obrambeni mehanizam – projektivnu identifikaciju (11). Vaillant pravi podjelu obrambenih mehanizama na obrambene razine (12). On navodi: normalnu, neurotsku, nezrelu i patološku obrambenu razinu.

Prije smo naveli kako je mnogo psihoanalitičara pisalo o psihodinamici ovisnosti, ali malo je radova koji se bave odnosom ovisnosti i obrambenih mehanizama. Pinheiro (13) je istraživao obrambene mehanizme kod ovisnika o kokainu i našao da kod tih ovisnika dominira projektivna identifikacija, posebno u odnosu sina (ovisnika) i oca. Drugi autori (Spotts, Schontz, Bergeret, Leblanc) projektivnoj identifikaciji kao dominantnom mehanizmu kod ovisnika dodaju još i spliting (13).

Cilj ovog rada je da pokaže povezanost obrambenih mehanizama i različitih aspekata ovisnosti.

UZORAK I METODE

Uzorak

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works of psychoanalytic literature. Anna Freud cites ten defence mechanisms: repression, regression, reactive formation, isolation, rejection, projection, introjection, turning against one's own person, reversal into the opposite and sublimation or displacement.

The main features of defensive mechanisms are:

- keeping a person from strong anxiety
- they work mostly unconsciously
- they are part of normal mental functioning
- they can be pathological when they are in divergence with age or strength

After Anna Freud, other psychoanalysts continued to study this important phenomenon. In 1946 Melanie Klein described an important defence mechanism – projective identifications (11). In Vaillant's categorization, defences form a continuum related to their psychoanalytical developmental level (12). They are classified into pathological, immature, neurotic and "mature" defences.

We have noted that many psychoanalysts have been writing about the psychodynamics of addiction, but there are few papers that talk about the relationship between addiction and defence mechanisms. Pinheiro (13) has investigated defence mechanisms in cocaine addicts and found that projective identification, especially in relation to a son (addict) and father, predominates in these addicts. Other authors (Spotts, Schontz, Bergeret, Leblanc), also added splitting to projective identification as a dominant mechanism for addicts (13).

The aim of this paper was to show the connection between defence mechanisms and different aspects of addiction.

SAMPLE AND METHODS

Sample

The study included 100 patients of the Institute for Treatment of Addiction of the University Psychiatric Hospital Vrapče who had been

Kriteriji za uključivanje u istraživanje su: dijagnoza ovisnosti, adekvatna medicinska dokumentacija (jasno i ispravno zabilježeni obrambeni mehanizmi). Dakle, uključeni su pacijenti koji su kao prvu (dominantnu) dijagnozu imali: ovisnost o alkoholu, ovisnost o drogama, ovisnost o kockanju i ovisnost o internetu.

Isključujući kriteriji su: dijagnoza zloporabe, neadekvatna medicinska dokumentacija.

Metoda

Izabrano je 100 ispitanika koji su u povijesti bolesti imali zabilježene obrambene mehanizme u skladu s dijagnostičkim principima DSM-IV (14) (do sedam obrambenih mehanizama poredanih po hijerarhiji). Pacijenti kod kojih u medicinskoj dokumentaciji obrambeni mehanizmi nisu bili označeni na ovaj način, nisu uključeni u istraživanje. Dakle, podatci za istraživanje su dobiveni kliničkim intervjuom. U istraživanje je uključen samo prvi (dominantni) obrambeni mehanizam. Sedam se obrambenih mehanizama našlo na tom prvom mjestu (apatično povlačenje, devaluacija, negacija, potiskivanje, projekcija, projektivna identifikacija, racionalizacija). U tekstu su označeni kao dominantni obrambeni mehanizam.

Dva su načina procjene obrambenih mehanizama. Jedan je korištenjem psihometrijskih instrumenata (npr. DSQ - *Defense Style Questionnaire*). Međutim, kako su obrambeni mehanizmi pretežno nesvjesni procesi, klinička procjena u ovom slučaju ima prednost. S druge strane, jasan je nedostatak kliničke procjene u odnosu na istraživanje provedeno pomoću standardiziranih upitnika.

U odnosu na navedenih sedam dominantnih obrambenih mehanizama ispitivani su sljedeći parametri: dob, spol, bračno stanje, zaposlenost, vrsta ovisnosti, duljina ovisnosti i težina ovisnosti.

Težina ovisnosti je podijeljena na laku, umjerenu i tešku u skladu s principima DSM 5 (15).

in hospital and outpatient treatment during 2015 and 2016. Subjects were 21-68 years old.

The criteria for inclusion in the study were: diagnosis of addiction, adequate medical records (clear and properly recorded defence mechanisms). Thus, patients who had the first (dominant) diagnosis: alcohol addiction, drug addiction, gambling addiction and addiction to the internet were included.

The excluding criteria were: diagnosis of abuse, inadequate medical records.

Method

There were 100 subjects who had defence mechanisms listed in their medical documentation in accordance with diagnostic principles of DSM-IV (up to seven hierarchy-based defence mechanisms). Patients with a medical record in which defence mechanisms were not labelled in this way are not included in the study. The research data was obtained by a clinical interview. The study involved only the first (dominant) defence mechanism. Seven defence mechanisms were found to be dominant (apathetic withdrawal, devaluation, denial, repression, projection, projective identification, rationalization). In the text, they are marked as a dominant defence mechanism.

There are two ways of assessing defence mechanisms. One is using psychometric instruments (e.g. DSQ, Defense Style Questionnaire). However, as defence mechanisms are predominantly unconscious, the clinical assessment in this case takes precedence. On the other hand, there is a clear lack of objectivity in using clinical assessment compared with a survey conducted using standardized questionnaires.

In relation to the above mentioned seven dominant defence mechanisms, the following parameters were discussed: age, gender, marital status, employment, type of addiction, duration of addiction and severity of addiction.

Addiction severity is divided into light, moderate and severe according to DSM-V principles (15).

REZULTATI

Na tablici 1 prikazan je odnos dominantnih obrambenih mehanizama i dobi ispitanika.

U skupini ispitanika u dobi do 20 godina kao dominantni obrambeni mehanizam kod dva ispitanika utvrđena je projektivna identifikacija (66,7 %), a kod jednog projekcija (33,3 %). U idućoj dobnoj skupini (21-30 god.) najčešći korišteni mehanizmi obrane su projektivna identifikacija i devaluacija, oba s po šest ispitanika (25 %). Slijede ih projekcija, koja je utvrđena kod pet (20,8 %), negacija kod četiri (16,7 %), te racionalizacija kod tri ispitanika (12,5 %). U dobnoj skupini 31-40 godina racionalizacija se pokazala kao najčešći korišteni mehanizam obrane i utvrđena je u osam (30,8 %), devaluacija kod pet (19,2 %), negacija i projekcija kod četiri (15,4 %), potiskivanje i projekcija kod dva (7,7 %) i apatično povlačenje kod samo jednog ispitanika (3,8 %). Racionalizacija je najčešće korišteni mehanizam obrane i u dobnoj skupini od 41 do 50 godina, gdje je utvrđena kod 10 ispitanika (33,3 %). Ostali mehanizmi obrane koji su utvrđeni u ovoj dobnoj skupini su negacija kod šest (20 %), projekcija kod pet (16,7 %), potiskivanje kod četiri (13,4 %), projektivna identifikacija kod tri (10 %), devaluacija kod jednog (3,3 %) i apatično povlačenje kod jednog ispitanika (3,3 %). U zadnjoj dobnoj skupini koju čine ispitanici u dobi od 51 godine i više, najčešće korišteni mehanizam obrane je negacija koja je utvrđena kod šest

RESULTS

Table 1 shows the relationship between the dominant defence mechanisms and the age of the subjects.

In the age group under 20 years of age, the dominant defence mechanism was projective identification, which was found in two (66.7%) subjects, while we found projection as a dominant defence mechanism in one (33.3%) subject. In the next age group (21 to 30 years old), the most common defence mechanisms were projective identification and devaluation, both by six (25%) subjects. They are followed by projection with five (20.8%), denial with four (16.7%) and rationalization with three (12.5%) subjects. In the 31-40 age group, the most common defence mechanism was rationalization, which was found in eight (30.8%) subjects, followed by devaluation in five (19.2%), denial and projective identification in four (15.4%), repression and projection in two (7.7%) and apathetic withdrawal in only one subject (3.8%). Rationalization was the most commonly used defence mechanism in the 41-50 age group, where it was found in 10 (33.3%) subjects. Other defence mechanisms found in this age group were denial in six (20%), projections in five (16.7%), repression in four (13.4%), projective identification in three (10%) and devaluation and apathetic withdrawal in one (3.3%) subject. In the last age group of subjects aged 51

TABLE 1. Dominant defensive mechanisms in relation to the age of subjects

	Under 20 years old	%	21-30 years old	%	31-40 years old	%	41-50 years old	%	51 years old or older	%	Total
A	**0**	0	**0**	0	**1**	3.8	**1**	3.3	**2**	11.8	4
D	**0**	0	**6**	25	**5**	19.2	**1**	3.3	**0**	0	12
De	**0**	0	**4**	16.7	**4**	15.4	**6**	20	**6**	35.3	20
R	**0**	0	**0**	0	**2**	7.7	**4**	13.4	**2**	11.8	8
P	**1**	33.3	**5**	20.8	**2**	7.7	**5**	16.7	**1**	5.9	14
PI	**2**	66.7	**6**	25	**4**	15.4	**3**	10	**3**	17.6	18
Ra	**0**	0	**3**	12.5	**8**	30.8	**10**	33.3	**3**	17.6	24
Total	**3**	100	**24**	100	**26**	100	**30**	100	**17**	100	100

ispitanika (35,3 %), projektivna identifikacija i racionalizacija kod tri (17,6 %), apatično povlačenje i potiskivanje kod dva (11,8 %), a kod jednog ispitanika je utvrđena projekcija (5,9 %).

Na tablici 2 prikazan je odnos dominantnih obrambenih mehanizama i spola ispitanika.

Najčešći obrambeni mehanizam kod muškaraca je racionalizacija koja je utvrđena kod 21 ispitanika (26,3 %) slijedi negacija kod 17 (21,3 %), projektivna identifikacija kod 13 (16,3 %), te projekcija kod 11 ispitanika (13,7 %). Među rjeđe korištenim mehanizmima su potiskivanje i devaluacija koji su nađeni kod sedam (8,7 %) i apatično povlačenje kod četiri ispitanika (5 %).

Kod žena najčešće korišteni mehanizmi obrane su projektivna identifikacija i devaluacija koji su nađeni kod pet žena (25 %), slijede racionalizacija, projekcija i negacija kod triju (15 %), potiskivanje kod jedne ispitanice (5 %), dok apatično povlačenje nije nađeno.

Na tablici 3 prikazan je odnos između dominantnih obrambenih mehanizama i bračnog stanja ispitanika.

Rezultati pokazuju da je kod neoženjenih ispitanika najčešće korišteni obrambeni mehanizam racionalizacija koja je utvrđena kod devet ispitanika (24,4 %), slijede devaluacija koja je nađena kod osam (21,6 %), projektivna identifikacija kod sedam (18,9 %), negacija kod pet (13,5 %), projekcija kod četiri (10,8 %), dok su potiskivanje i apatija nađeni kod dva ispitanika (5,4 %).

TABLE 2. Dominant defensive mechanisms in relation to subject's gender

	M	%	F	%	Total.
A	**4**	5	**0**	0	4
D	**7**	8.7	**5**	25	12
De	**17**	21.3	**3**	15	20
R	**7**	8.7	**1**	5	8
P	**11**	13.7	**3**	15	14
PI	**13**	16.3	**5**	25	18
Ra	**21**	26.3	**3**	15	24
Total	**80**	100	**20**	100	100

and above, the most commonly used defence mechanisms were denial, found in six subjects (35.3%), projective identification and rationalization in three (17.6%), apathetic withdrawal and repression in two (11.8%) and projection in one subject (5.9%).

Table 2 shows the relationship of dominant defence mechanisms and subject gender.

The most common defence mechanism found in men was rationalization, which was found in 21 subjects (26.3%). The next most common was denial in 17 (21.3%), then projective identification with 13 (16.3%) and projection in 11 (13.7%) subjects. Among the less commonly used mechanisms were the repression and devaluation found in seven (8.7%) and apathetic withdrawal found in four (5%) subjects.

The most frequently used defence mechanisms in women were projective identification and devaluation found in five women (25%), followed by rationalization, projection and denial in three (15%), repression in one subject (5%) and apathetic withdrawal which was not found.

Table 3 shows the relationship between the dominant defence mechanisms and the marital status of the subjects.

The results show that the defensive mechanism of rationalization was the most common one found in unmarried subjects, with a total of nine (24.4%) subjects using it. Next most common were devaluation, which was found in eight (21.6%), projective identification in seven (18.9%), denial in five (13.5%) and projection in four (10.8%), while repression and apathetic withdrawal were found in only two subjects (5.4%).

In married subjects, results were different. The most common defence mechanisms found in married subjects were denial and rationalization, which were found in ten subjects (24.4%). They were followed by projection in eight (19.5%), projective identification in six

TABLE 3. The relationship between the dominant defence mechanisms and the marital status of the subjects

	Unmarried.	%	Married	%	Divorced	%	Rest	%	Total
A	**2**	5.4	**0**	0	**1**	5.9	**1**	20	4
D	**8**	21.6	**2**	4.9	**1**	5.9	**1**	20	12
De	**5**	13.5	**10**	24.4	**4**	23.5	**1**	20	20
R	**2**	5.4	**5**	12.2	**1**	5.9	**0**	0	8
P	**4**	10.8	**8**	19.5	**2**	11.8	**0**	0	14
PI	**7**	18.9	**6**	14.6	**3**	17.6	**2**	40	18
Ra	**9**	24.4	**10**	24.4	**5**	29.4	**0**	0	24
Total	**37**	100	**41**	100	**17**	100	**5**	100	100

Kod oženjenih ispitanika rezultati su drugačiji. Najčešći obrambeni mehanizmi kod oženjenih ispitanika su negacija i racionalizacija (deset ispitanika, 24,4 %), slijede: projekcija kod osam (19,5 %), projektivna identifikacija kod šest (14,6 %), potiskivanje kod pet (12,2 %), te devaluacija kod dva (4,9 %) ispitanika. U ovoj skupini nije bilo ispitanika s apatičnim povlačenjem.

I u trećoj skupini ispitanika, skupini razvedenih, nalazimo da je najčešći korišteni obrambeni mehanizam racionalizacija kod pet ispitanika (29,4 %), slijedi negacija kod četiri (23,5 %), projektivna identifikacija kod tri (17,6 %), projekcija kod dva (11,8 %), te potiskivanje, devaluacija i apatično povlačenje kod jednog ispitanika (5,9 %).

Na tablici 4. prikazan je odnos obrambenih mehanizama i zaposlenosti ispitanika.

Najčešće korišteni obrambeni mehanizam kod zaposlenih ispitanika je racionalizacija koja je (14.6%), repression in five (12.2%) and devaluation in two (4.9%) subjects. There were no subjects with apathetic withdrawal in this group.

In the third group of subjects, the group of divorced subjects, we found that the most commonly used defensive mechanism was rationalization, which was found in five subjects (29.4%). The next most commonly found was denial in four (23.5%), projective identification in three (17.6%), projection in two (11.8%) and repression, devaluation and apathetic withdrawal in one subject (5.9%).

Table 4 shows the relationship between the defence mechanisms and the employment of the subjects.

The most commonly used defence mechanism in the employed group was rationalization, which was found in 11 (33.3%) subjects, followed by denial in seven (21.2%), then re-

TABLE 4. Dominant defensive mechanisms in relation to the employment of subjects

	Employed	%	Unemployed	%	In education	%	Rest	%	Total
A	**0**	0	**3**	7	**0**	0	**1**	9	4
D	**1**	3	**9**	20.9	**1**	7.7	**1**	9	12
De	**7**	21.2	**8**	18.6	**5**	38.5	**0**	0	20
R	**5**	15.2	**1**	2.3	**0**	0	**2**	18.2	8
P	**4**	12.1	**6**	14	**2**	15.4	**2**	18.2	14
PI	**5**	15.2	**9**	20.9	**4**	30.7	**0**	0	18
Ra	**11**	33.3	**7**	16.3	**1**	7.7	**5**	45.6	24
Total.	**33**	100	**43**	100	**13**	100	**11**	100	100

utvrđena kod 11 ispitanika (33,3 %), slijedi negacija kod sedam (21,2 %), zatim potiskivanje i projektivna identifikacija kod pet (15,2 %), projekcija kod četiri (12,1 %) i devaluacija kod jednog ispitanika (3 %).

Kod nezaposlenih najčešći obrambeni mehanizmi su devaluacija i projektivna identifikacija kod devet ispitanika (20,9 %), slijedi negacija kod osam (18,6 %), racionalizacija kod sedam (16,3 %), projekcija kod šest (14 %), apatično povlačenje kod tri (7 %) i potiskivanje kod jednog ispitanika (2,3 %).

Ispitanici u edukacijskom sustavu najčešće koriste negaciju (pet ispitanika, 38,5 %), zatim projektivnu identifikaciju (četiri ispitanika, 30,7 %), projekciju (dva ispitanika, 15,4 %), te devaluaciju i projekciju (jedan ispitanik, 7,7 %).

Na tablici 5 prikazan je odnos vrste ovisnosti i obrambenih mehanizama.

Kod ovisnika o alkoholu najčešći obrambeni mehanizam je racionalizacija koja je utvrđena kod 15 ispitanika (25,4 %), slijedi negacija kod 13 (22 %), projekcija kod 10 (17 %), projektivna identifikacija i potiskivanje kod sedam (11,9 %), devaluacija kod pet (8,5 %) i apatično povlačenje kod dva ispitanika (3,3 %). Kod ovisnika o drogama najčešći mehanizam obrane je projektivna identifikacija, kod osam ispitanika (29,7 %), slijede devaluacija kod šest (22,2 %), racionalizacija kod pet (18,5 %), negacija kod tri (11,1 %) i apatično povlačenje kod dva ispitanika (7,4 %).

pression and projective identification in five (15.2%), projections in four (12.1 %) and devaluation in one subject (3.%).

For the unemployed, most common defence mechanisms were devaluation and projective identification found in nine subjects (20.9%). The next most common one was denial found in eight (18.6%), then rationalization in seven (16.3%), projection in six (14%), apathetic withdrawal in three (7%) and repression in one subject (2.3%).

Subjects in the education system most often used denial: five subjects (38.5%), then projective identification: four subjects (30.7%), projection: two subjects (15.4%) and devaluation and projection: one subject each (7.7%).

Table 5 shows the relationship between the type of addictions and defence mechanisms.

In alcohol addicts, the most frequently used defensive mechanism was rationalization, which was found in 15 subjects (25.4%) and was followed by denial which was found in 13 subjects (22%), projection in 10 (17%), projective identification and repression in seven (11, 9%), devaluation in five (8.5%) and apathetic withdrawal in two subjects (3.3%). In drug addicts, the most common defence mechanism was projective identification in eight (29.7%), followed by devaluation in six (22.2%), rationalization in five (18.5%), denial in three (11.1%) and apathetic withdrawal in two subjects (7.4%). In

TABLE 5. Dominant defensive mechanisms in relation to the type of addiction

	Alcohol	%	Drug	%	Gambling	%	Internet	%	Total
A	**2**	3.3	**2**	7.4	**0**	0	**0**	0	4
D	**5**	8.5	**6**	22.2	**0**	0	**1**	25	12
De	**13**	22	**3**	11.1	**3**	30	**1**	25	20
R	**7**	11.9	**0**	0	**1**	10	**0**	0	8
P	**10**	17	**3**	11.1	**1**	10	**0**	0	14
PI	**7**	11.9	**8**	29.7	**1**	10	**2**	50	18
Ra	**15**	25.4	**5**	18.5	**4**	40	**0**	0	24
Total	**59**	100	**27**	100	**10**	100	**4**	100	100

pitanika (7,4 %). Kod ovisnika o kockanju najčešći mehanizam obrane je racionalizacija koja je utvrđena kod četiri ispitanika (40 %), slijedi negacija kod tri (30 %), potiskivanje, projekcija i projektivna identifikacija kod jednog ispitanika (10 %). Najčešći obrambeni mehanizam kod ovisnika o internetu je projektivna identifikacija koja je utvrđena kod dva ispitanika (50 %), dok su devaluacija i negacija utvrđeni kod jednog ispitanika (25 %).

Na tablici 6 prikazan je odnos duljine trajanja ovisnosti i obrambenih mehanizama.

Kod ispitanika kod kojih duljina trajanja ovisnosti iznosi do jedne godine najčešći mehanizam obrane je negacija koji je prisutan kod šest ispitanika (46,2 %), zatim slijede potiskivanje kod četiri (30,8 %), racionalizacija kod dva (15,3 %) i projekcija kod jednog ispitanika (7,7 %). U skupini ispitanika čija duljina trajanja ovisnosti iznosi 1-3 godine negacija je i dalje najčešći obrambeni mehanizam i utvrđen je kod šest ispitanika (30 %), druga po učestalosti je racionalizacija kod četiri (20 %), zatim projekcija i projektivna identifikacija kod tri (15 %), potiskivanje kod dva (10 %) i apatično povlačenje i devaluacija kod jednog ispitanika (5 %). U idućoj skupini ispitanika dominira racionalizacija kao najčešći obrambeni mehanizam. Utvrđena je kod gotovo polovice ispitanika u toj skupini (43,3 %). Idući najčešći mehanizam obrane u toj dobnoj skupini je negacija koja je prisutna kod pet ispitanika (16,7 %), zatim slijede pro-

gambling addicts, the most common defence mechanism was rationalization which was reported in four (40%) subjects, followed by the denial in three (30%) and repression, projection and projective identification in one (10%) subject. The most common defence mechanism for internet addicts was projective identification found in two subjects (50%), while devaluation and denial were found in one subject (25%).

Table 6 shows the relationship between the length of addiction and defensive mechanisms.

In the group of subjects with a duration of addiction of less than a year, the most common defence mechanism was denial, present in six (46.2%) subjects, followed by repression found in four (30.8%), rationalization in two (15.3%) and projection in one (7.7%) subject. In the group of subjects with the length of addiction between 1-3 years, denial remained the most common defence mechanism and was found in six (30%) subjects, while the second most common defence mechanism was rationalization, which was found in four (20%) subjects, followed by projection and projective identification in three (15%), repression in two (10%) and apathetic withdrawal and devaluation in one (5%) subject. In the next group of subjects (length of addiction between 4-6 years) rationalization dominated as the most common defence mechanism. It was found in almost half of the subjects in this group (43.3%). The

TABLE 6. Dominant defensive mechanisms in relation to the length of addiction

	Less than 1 year	%	1-3 years	%	4-6 years	%	7-10 years	%	10 years and more	%	Total
A	**0**	0	**1**	5	**0**	0	**1**	4.8	**2**	12.5	4
D	**0**	0	**1**	5	**3**	10	**6**	28.6	**2**	12.5	12
De	**6**	46.2	**6**	30	**5**	16.7	**2**	9.5	**1**	6.3	20
R	**4**	30.8	**2**	10	**2**	6.7	**0**	0	**0**	0	8
P	**1**	7.7	**3**	15	**3**	10	**4**	19	**3**	18.7	14
PI	**0**	0	**3**	15	**4**	13.3	**5**	23.8	**6**	37.5	18
Ra	**2**	15.3	**4**	20	**13**	43.3	**3**	14.3	**2**	12.5	24
Total	**13**	100	**20**	100	**30**	100	**21**	100	**16**	100	100

jektivna identifikacija sa četi (13,3 %), projekcija i devaluacija kod tri (10 %) i potiskivanje kod dva ispitanika (6,7 %). Dominantni obrambeni mehanizmi u prethodnim skupinama ispitanika bili su negacija i racionalizacija, no u dobnoj skupini ispitanika čija duljina trajanja ovisnosti iznosi od 7 do 10 godina dominantni obrambeni mehanizmi su devaluacija kod šest (28,6 %) i projektivna identifikacija kod pet ispitanika (23,8 %). Još su utvrđeni mehanizmi u ovoj skupini ispitanika projekcija kod četiri (19 %), racionalizacija kod tri (14,3 %), negacija kod dva (9,5 %) i apatično povlačenje kod jednog ispitanika (4,8 %). U dobnoj skupini ispitanika čija duljina trajanja ovisnosti iznosi 10 godina i više najčešći korišteni mehanizam obrane je projektivna identifikacija kod šest ispitanika (37,5 %), slijede ju projekcija kod tri (18,7 %), racionalizacija, devaluacija i apatično povlačenje kod dva (12,5%) i negacija koja je utvrđena kod jednog ispitanika (6,3 %).

Na tablici 7 prikazan je odnos obrambenih mehanizama i težine ovisnosti.

Kod ispitanika kod kojih je dijagnosticirana blaga razina ovisnosti najčešći obrambeni mehanizmi su potiskivanje i racionalizacija (pet ispitanika, 27,8 %), slijedi negacija kod četiri ispitanika (22,2 %), projekcija kod tri (16,6 %) i projektivna identifikacija kod jednog ispitanika (5,6 %). Na ovoj razini nema ispitanika s dominantnim mehanizmom devaluacije ni apatičnog povlačenja.

next most common defence mechanism in that age group was denial, present in five subjects (16.7%), followed by projective identification in four (13.3%), projection and devaluation in three (10%) and repression in two (6.7%) subjects. The predominant defence mechanisms in these groups of subjects were denial and rationalization, but in the age group of subjects whose length of addiction was between 7-10 years, the most common defence mechanisms were devaluation found in six (28.6%) and projective identification in five (23.8%) subjects. Other mechanisms found in this group of subjects were projection in four (19%), rationalization in three (14.3%), denial in two (9.5%) and apathetic withdrawal in one (4.8%) subject. In the group of subjects whose length of addiction was over 10 years, the most commonly found defence mechanism was projective identification in six (37.5%) subjects, followed by projection in three (18.7%), rationalization, devaluation and apathetic withdrawal in two (12.5%) and denial in one (6.3%) subject.

Table 7 shows the relationship between defence mechanisms and the severity of addiction.

In subjects diagnosed with a mild degree of addiction, the most common defence mechanisms were repression and rationalization (five subjects 27.8%). Next was denial, found in four subjects (22.2%), projection in three (16.6%) and projective identification in one (5.6%) subject. At this level of severity, there were no

TABLE 7. Dominant defensive mechanisms in relation to the severity of addiction

	Mild	%	Moderate	%	Severe	%	Total.
A	**0**	0	**1**	2.3	**3**	7.9	4
D	**0**	0	**4**	9.1	**8**	21.1	12
De	**4**	22.2	**11**	25	**5**	13.1	20
R	**5**	27.8	**3**	6.8	**0**	0	8
P	**3**	16.6	**6**	13.6	**5**	13,1	14
PI	**1**	5.6	**5**	11.4	**12**	31.6	18
Ra	**5**	27.8	**14**	31.8	**5**	13.2	24
Total	**18**	100	**44**	100	**38**	100	100

Ispitanici kod kojih je ovisnost izražena na umjerenoj razini pokazuju drugačije rezultate. Najčešća je racionalizacija (14 ispitanika, 31,8 %), zatim negacija (11 ispitanika, 25 %), projekcija (šest ispitanika, 13,6 %), projektivna identifikacija (pet ispitanika, 11,4 %), devaluacija (četiri ispitanika, 9,1 %), potiskivanje (tri ispitanika, 6,8 %), te na kraju apatično povlačenje (jedan ispitanik, 2,3 %).

I teška razina pokazuje različite rezultate. Najčešći obrambeni mehanizam ove razine je projektivna identifikacija (12 ispitanika, 31,6 %), zatim devaluacija (osam ispitanika, 21,1 %), negacija projekcija i racionalizacija (pet ispitanika,13,1 %), te apatično povlačenje (tri ispitanika, 7,9 %). U ovoj skupini nema ispitanika s potiskivanjem.

RASPRAVA

U provedenom istraživanju ispitivali smo povezanost obrambenih mehanizama ovisnika s drugim važnim elementima njihove ovisnosti. Dobili smo rezultate koji pokazuju da su sedam mehanizama obrane (apatično povlačenje, devaluacija, negacija, potiskivanje, projekcija, projektivna identifikacija i racionalizacija) dominantni mehanizmi obrane kod ovisnika (prvi po hijerarhiji u označavanju).

Iako je obrambeni mehanizam apatično povlačenje čest kod ovisnika, zbog svojih karakteristika rijetko je označen kao prvi (najvažniji). Ipak, u našem je istraživanju kod četiri ispitanika dominantni obrambeni mehanizam apatično povlačenje. Devaluaciju, kao dominantni obrambeni mehanizam, ima 12 ispitanika. Devaluacija je tipičan obrambeni mehanizam ovisnika, koji je posebno važan zbog toga jer otežava ili potpuno onemogućava uspostavljanje početnog pozitivnog transfera tijekom liječenja.

Negacija, kao dominantni obrambeni mehanizam, utvrđena je kod 20 ispitanika. I negacija je

subjects with a dominant mechanism of devaluation or apathetic withdrawal.

Subjects diagnosed with a moderate level of severity had different results. The most commonly found defence mechanism was rationalization (14 subjects, 31.8%), followed by denial (11 subjects, 25%), projection (six subjects, 13.6%), projective identification (five subjects, 11.4%), devaluation (four subjects, 9.1%), repression (three subjects, 6.8%) and finally apathetic withdrawal (one subject, 2.3%).

The group of subjects diagnosed with severe addiction also had different results. The most common defence mechanism in this group was projective identification (12 subjects, 31.6%), followed by devaluation (eight subjects, 21.1%), projection, denial and rationalization (five subjects, 13.1%) and apathetic withdrawal (three subjects, 7.9%). There were no subjects who used repression in this group.

DISCUSSION

In the present study, we examined the correlation of the defensive mechanisms of addicts with other important elements of their addiction. We obtained results that demonstrate that the seven defence mechanisms (apathetic withdrawal, devaluation, denial, repression, projection, projective identification, and rationalization) were dominant in addicts (first in the hierarchy in the labeling).

Although apathetic withdrawal is commonly found in addicts, it is rarely labelled as the first (most important) because of its characteristics. Nevertheless, apathetic withdrawal was the dominant defence mechanism in four subjects in our study. Devaluation as the dominant defensive mechanism was found in 12 subjects. Devaluation is a typical defensive mechanism of addicts, which is particularly important because it makes it difficult or completely impossible to establish initial positive transfer during treatment.

tipičan obrambeni mehanizam ovisnika („Alle Suchtkranke luegen“ – svi ovisnici lažu). Ali zadaća terapeuta nije „policijsko“ razotkrivanje laži. Esencijalno je uspostavljanje pozitivnog transfera, te su terapijske interpretacije i konfrontacije učinkovite samo unutar transfera. Slično navodi i Schalast (2006.): „Motivacijski koncept dominantno temeljen na konfrontaciji s negativnim posljedicama ovisnosti danas je opsoletan (budući da samo pojačava obrambeno postavljanje). Bitni elementi za motivaciju su - s terapijom povezana nadanja i jačanje samopouzdanja kao temelj za vlastite napore kojima će se postići promjena ponašanja i zadovoljavajuća životna situacija“ (16).

Samo kod osam ispitanika potiskivanje je dominantni mehanizam obrane. Ovakav rezultat potvrđuje teorijske postavke koje ovisnost opisuju kao duboko regresivno stanje, daleko dublje i više patološko u odnosu na neurozu kod koje je potiskivanje glavni obrambeni mehanizam (Kohut 1997., Dodes 1990.) (6,8).

Kod 18 ispitanika dominantan obrambeni mehanizam je projektivna identifikacija. Rezultati ovog istraživanja pokazuju da je i projektivna identifikacija tipična za ovisnike. Kernberg (1984) i Meissner (1984) smatraju da je projektivna identifikacija neuspješna projekcija, jer se projicirani materijal vraća subjektu u procesu u kojem se self neuspješno pokušava osloboditi nepodnošljivih impulsa. Oni dalje navode da je ovaj neuspjeh rezultat nerazvijene granice između selfa i objekta (17,18). Sve ovo je vrlo tipično za ovisnike. Ovisnici se projektivnom identifikacijom oslobađaju nepoželjnog i zastrašujućeg dijela selfa, ali zbog svoje nezrelosti i dalje moraju ostati u kontaktu s tim projiciranim dijelom. Projektivnom identifikacijom ovisnici uspostavljaju takav oblik objektnih odnosa u kojem je objekt samo parcijalno separiran. Ovisnici ne projiciraju samo loše dijelove selfa (barem privremeno rasterećenje), nego i zrele dijelove selfa (izbjegavanje separacije). Razumije se da će ih

Denial as the dominant defensive mechanism was found in 20 subjects. Denial is a typical defensive mechanism of addicts (“Alle Suchtkranke luegen” – all addicts lie). But the therapist’s task is not one of “policing”, i.e. to point out the lies. It is essential to establish a positive transfer, and the therapeutic interpretation and confrontation are only effective within it. Similarly, Schalast (2006) states: “The motivational concept predominantly based on the adverse effects of addiction is today obsolete (since it only enhances defensive setting). Essential elements of motivation are – hopes and strengthening self-confidence connected with therapy as the basis for their own efforts to achieve a change of behaviour and a satisfying living situation” (16).

Repression was the dominant defence mechanism in only eight respondents. This result confirms the theoretical assumptions that addiction is a deep regressive state, far deeper and more pathological than neurosis, where the main defense mechanism is repression (Kohut 1997, Dodes 1990) (6,8).

Projective identification was the dominant defence mechanism in 18 subjects. The results of this study also demonstrate that projective identification is typical for addicts. Kernberg (1984) and Meissner (1984) consider that projective identification is an unsuccessful projection because the projected material is returned to the subject in a process in which the self, unsuccessfully, attempts to release intolerable impulses. They further state that this failure is the result of an underdeveloped boundary between the self and the object (17,18). All this is very typical of addicts. Addicts use projective identification to release the unwanted and intimidating part of the self, but because of their immaturity, they must remain in contact with this projected part. By projective identification, addicts establish such a form of object relations in which the object is only partially separated. The addicts do not project only bad parts of the self (at least temporarily relieve) but also

ovakva projekcija dodatno emocionalno osiromašiti i iscrpiti.

Važno je istaknuti da je projektivna identifikacija i prilika za ovisnika u terapijskom procesu. Neprihvatljivi dio selfa se projicira, pod utjecajem terapeuta se promijeni, te se reinternalizacijom vraća u projektora (ovisnika). Važno je da terapeut ima kapacitet za primanje i obradu projiciranog materijala koji je kod ovisnika često primitivan, regresivan, pa čak i maligan. Uzimajući ove činjenice u obzir jasno je zbog čega je terapija ovisnika često neuspješna.

Projekcija, kao dominantan mehanizam obrane, utvrđena je kod 14 ispitanika. Iako je projekcija nezreli obrambeni mehanizam, u odnosu na projektivnu identifikaciju je ipak zreliji. Prema Kernbergu (19) projektivna identifikacija se ne može naći kod neurotske organizacije ličnosti osim u ekstremno regresivnim stanjima. Kod neurotičara projekcija zauzima mjesto projektivne identifikacije. Tako kod projekcije kao progresivnijeg mehanizma self uspješno projicira nepovoljne elemente u objekt, prekida veze s tim elementima, ne pokazuje empatiju prema njima i oslobađa ih se. Projekcija je povezana s potiskivanjem, a projektivna identifikacija sa splitingom. Napominjemo da se rijetko susreću čisti oblici projekcije i projektivne identifikacije. Obično postoje manja ili veća preklapanja.

Kod 24 ispitanika, kao dominantan obrambeni mehanizam, utvrđena je racionalizacija. Racionalizacija je kao i potiskivanje tipičan neurotski obrambeni mehanizam. Ipak naši rezultati pokazuju da je racionalizacija kod ovisnika mnogo češća od potiskivanja. Kada ovisnici budu uspješno konfrontirani s negacijom („ne pijem uopće“), tada obično brzo zauzimaju prostor racionalizacije („pijem, ali piju i svi drugi“).

Rezultati istraživanja o povezanosti obrambenih mehanizama i dobi ispitanika pokazali su interesantne rezultate. Kod mlađih ispitanika dominiraju devaluacija i projektivna identifikacija, a kod starijih racionalizacija i potiskiva-

the mature parts of self (avoiding separation). Of course, such projection will further exhaust and impoverish them emotionally.

At this point, it is important to point out that projective identification is also an opportunity for addicts in the therapeutic process. The unacceptable part of the self is projected, is changed under the influence of the therapist and reinternalized in the projector (addict). It is important that the therapist has the capacity to receive and process the projected material that is often primitive, regressive and even malignant in addicts. Taking these facts into account, it is clear why addiction therapy is often unsuccessful.

Projection as the dominant defence mechanism was found in 14 subjects. Although projection is an immature defence mechanism in comparison with projective identification, it is still more mature. According to Kernberg (19), projective identification cannot be found in a neurotic personality organization, except in extremely regressive states. In neurotic patients, projection takes the place of projective identification. Thus, in projection as a more progressive mechanism, the self projects unfavourable elements in the object, interrupts the connection with these elements, does not show empathy towards them and is free from them. Projection is associated with repression and projective identification with splitting. Please note that it is rare to see pure forms of projection and projective identification. There are usually smaller or bigger overlaps.

Rationalization was found in 24 subjects as a dominant defensive mechanism. Rationalization, as well as repression, is a typical neurotic defensive mechanism. Yet our results show that rationalization in addicts was much more frequent than repression. When addicts are successfully confronted with denial (“I do not drink at all”), they usually quickly take up rationalization as a defence mechanism (“I drink, but everyone else does it”).

The results of the study on the correlation between defence mechanisms and the age of

nje. Projekcija i negacija su približno jednako zastupljene i u mlađim i u starijim dobnim skupinama. Apatično povlačenje se nalazi kod starijih ovisnika što je i logičan rezultat (apatija na kraju puta). Slične rezultate navodi i Kreuzer (20). Mlađe ovisnike označava kao „fiksere" (karakteristike kao što su: rani početak uzimanja, izražena je ovisnička supkultura, nekritičan je, sklon riziku, sklon kriminalu, motivacija za liječenje je slaba). Pravi ovisnici su: odrasle osobe, bolje integrirane u društvo, uzimaju jednu psihoaktivnu tvar, prognoza je povoljna.

Zanimljivi su rezultati istraživanja koji pokazuju odnos obrambenih mehanizama i spola ispitanika. U ovom istraživanju žene čine 20 % ispitanika što odgovara epidemiološkim podatcima. Međutim, rezultati ovog istraživanja pokazuju da su kod žena dominantni mehanizmi devaluacija i projektivna identifikacija. Kod muškaraca su pak dominantni mehanizmi racionalizacija i negacija. Potvrđuje li naš rezultat postavku da je broj žena ovisnica manji u odnosu na broj muškaraca ovisnika, ali da su žene ovisnice regresivnije u odnosu na muškarce ovisnike?

Iznenađujući su rezultati s obzirom na razinu eksternalizacija-internalizacija. Prema originalnoj Freudovoj teoriji (9), a koju su dalje potvrđivali i razvijali i drugi psihoanalitičari, muškarci bi više koristili obrambene mehanizme eksternalizacije (poglavito projekciju), dok bi žene više koristile obrambene mehanizme internalizacije (uglavnom negaciju). Naši rezultati su suprotni navedenim postavkama. U našem istraživanju žene jednako koriste oba obrambena mehanizma (po tri ispitanice), dok muškarci češće koriste negaciju (17 ispitanika) od projekcije (11 ispitanika). Moguće objašnjenje naših rezultata je da ovisnost destruira sva važna područja života ovisnika, pa tako i socijalno funkcioniranje. Ovisnici tako napuštaju uobičajene socijalne norme, pa i uobičajene obrambene mehanizme. Ipak i Dufton (2004.) ima rezultate koji su slični našima. On navodi

subjects yielded interesting results. In younger subjects, devaluation and projective identification dominated, and rationalization and repression in older subjects. Projection and denial were approximately equally represented in both younger and older age groups. Apathetic withdrawal occurred with older addicts, which is a logical result (apathy at the end of the path). Similar results are also reported by Kreuzer (20). Younger addicts are referred to as "fixers" (characteristics such as: early onset of substance abuse, expressing addictive subculture, uncritical, prone to risk, prone to crime, a weak motivation for treatment). True addicts are: adults, better integrated into society, take one psychoactive substance, the prognosis is favourable.

Another interesting result of the present study was the relationship between defence mechanisms and the sex of the subjects. In this study, 20% of subjects are women, and that is in accordance with epidemiological data. But the results of this study demonstrate that dominant mechanisms in women were devaluation and projective identification. Dominant defence mechanisms in men were rationalization and denial. Do our results indicate that the number of female addicts is lower than the number of male addicts, but that addicted women are more regressive than addicted men?

The level of externalization-internalization also yielded surprising results. According to the original theory by Freud (9), which has been further confirmed and developed by other psychoanalysts, men would be predicted to use externalization more (particularly projection), while women would use internalization more (mainly denial). Our results were contrary to the above postulates. In our study, women use both defence mechanisms equally (three subjects), while men more often used denial (17 subjects) than projections (11 subjects). The possible explanation of our results is that addiction destroys all important areas of the life of addicts, which includes social functioning. The addicts are thus abandoning the usual social norms and the usual defensive

da je jedan od glavnih trendova kod ovisnosti smanjivanje razlika između muških i ženskih konzumenata (21).

I rezultati istraživanja o povezanosti obrambenih mehanizama i bračnog statusa jasno dijele ispitanike na dvije skupine. Neoženjeni i razvedeni ispitanici koriste uglavnom devaluaciju, projektivnu identifikaciju i apatično povlačenje, dok oženjeni ispitanici više koriste negaciju, potiskivanje i racionalizaciju kao dominantni obrambeni mehanizam. Slični su i rezultati istraživanja o povezanosti obrambenih mehanizama i zaposlenosti ispitanika. Ispitanici s dominantnim obrambenim mehanizmom potiskivanjem i racionalizacijom imaju razinu zaposlenosti znatno veću od 50 %, ispitanici s projekcijom i negacijom oko 50 %, dok ispitanici s devaluacijom i projektivnom identifikacijom imaju razinu zaposlenosti daleko ispod 50 %.

Možda su najinteresantniji rezultati istraživanja koji se odnose na povezanost dominantnog obrambenog mehanizma i vrste ovisnosti. I dok kod ovisnika o alkoholu i kockanju prevladavaju potiskivanje, racionalizacija i negacija, kod ovisnika o drogama dominiraju projektivna identifikacija i devaluacija. Je li ovaj rezultat još jedan dokaz da je ovisnost o drogama najteža i najopasnija, „prava ovisnost"? Iako je broj ispitanika ovisnika o internetu malen (četiri), ipak u odnosu na dominantne obrambene mehanizme ovisnici o internetu su sličniji ovisnicima o drogama nego ovisnicima o alkoholu i kockanju. Je li ovisnost o internetu mnogo opasnija nego što danas mislimo?

Zanimljivi su i rezultati istraživanja koji se odnose na povezanost dominantnog obrambenog mehanizma i duljine trajanja ovisnosti. Istraživanjem smo dobili i odgovor mijenjaju li se dominantni obrambeni mehanizmi ovisnika tijekom njihovog života. Devaluacija nije prisutna u ovisnika kod kojih ovisnost traje do godinu dana, a samo dva ispitanika iz skupine s najdužim ovisničkim stažem (deset

mechanisms. Yet Dufton (2004) reported results that are similar to ours. He argues that one of the main trends in addiction is reducing the difference between male and female consumers (21).

The results of the research on the correlation of defence mechanisms and marital status clearly divide the subjects into two groups. Unmarried and divorced subjects use devaluation, projective identification, and apathetic withdrawal while married subjects use denial, repression and rationalization as a dominant defence mechanism. The results of research on the correlation between defence mechanisms and the employment of subjects are similar. Subjects with the dominant defence mechanism of repression and rationalization have a level of employment significantly higher than 50%. Subjects who use denial and projection have about 50% employment, while subjects who use devaluation and projective identification have a level of employment far below 50%.

Perhaps the most interesting research results are related to the link between the dominant defence mechanism and the type of addiction. While repression, rationalization and denial prevailed in alcohol and gambling addicts, in drug addicts the dominant defence mechanisms were projective identification and devaluation. Are these results another piece of evidence that drug addiction is the most difficult and most dangerous "true addiction"? Although the number of internet addicts in this study was small (four), looking at their dominant defence mechanisms they are more similar to drug addicts than alcohol addicts and gamblers. Is internet addiction much more dangerous than we think?

We also found interesting results related to the relationship between the dominant defence mechanism and the duration of addiction. The study has also given us the answer as to whether the dominant defensive mechanisms of addicts is changeable during their lifetime. Devaluation was not present in addicts whose addiction lasts up to one year, and only two respondents

godina i dulje) imaju ovaj obrambeni mehanizam. Mišljenja smo da se u prvoj skupini devaluacija još nije toliko razvila da bi postala dominantan obrambeni mehanizam. Ovisnici tijekom godina razvijaju i široko koriste ovaj obrambeni mehanizam, te po ovom mehanizmu bivaju označavani i prepoznati u društvu. Međutim, ovisnici koji prežive dovoljno dugo, razviju druge obrambene mehanizme. Slično je i s racionalizacijom (po dva ispitanika u najkraćoj i najduljoj skupini, a 13 ispitanika u skupini 4-6 godina). Dakle, u početku ovisnosti je „rano" za racionalizaciju, nešto kasnije postaje glavni ovisnički obrambeni mehanizam, a nakon više godina racionalizacija iscrpi svoje mogućnosti, te ovisnici koriste druge obrambene mehanizme.

Negacija i potiskivanje imaju sasvim drugačiji vremenski tijek. U prvoj godini (šest i četiri ispitanika) ovo su glavni mehanizmi da bi vremenom progresivno opadali te u najstarijoj skupini (preko deset godina) pali na razinu od jedan i nula ispitanika. Ovaj rezultat pokazuje da je pravo vrijeme za terapiju u prvim godinama ovisnosti.

Suprotan smjer imaju projekcija i projektivna identifikacija. U ranoj fazi ovisnosti su rijetko prisutni (jedan i nula ispitanika u kategoriji – ovisnost do jedne godine), te vremenom rastu. U najstarijoj kategoriji (ovisnost preko deset godina) su najviše izraženi (tri i šest ispitanika).

Posebno su važni rezultati istraživanja koji se odnose na povezanost obrambenih mehanizama i težine poremećaja. Potiskivanje je jedini mehanizam kod kojeg više ispitanika ima blagu (pet) od teške (nula) razine poremećaja. Racionalizacija je nađena kod istog broja ispitanika i na blagoj i na teškoj razini (pet). Slični su rezultati za negaciju (četiri i pet ispitanika) i projekciju (tri i pet ispitanika). Sasvim su različiti rezultati za projektivnu identifikaciju (jedan blaga, 12 teška razina), devaluaciju (nula blaga, osam teška razina), te apatično povlačenje (nula blaga, tri teška razina).

in the group with the longest addiction period (ten years and older) had this defensive mechanism. We hypothesize that in the first group devaluation had not developed as much as to become a dominant defensive mechanism. Over the years, addicts develop and use this defensive mechanism widely and are identified and recognized in society by it. However, addicts who survive long enough develop other defence mechanisms. Results were similar on rationalization (two subjects in the shortest and longest duration group, and 13 subjects in the 4-6 years group). Therefore, initially in addiction it is "too early" for rationalization, but it later becomes the main addictive defensive mechanism; after years of rationalization it exhausts its capabilities and addicts use other defence mechanisms.

Denial and repression had a completely different timeframe. In the first year (six and four subjects), these were the main mechanisms which progressively declined in time, and in the oldest group (over ten years) they fell to the level of one and zero. This result shows that the first years of addiction are the right time for therapy.

Projection and projective identification had the opposite direction. They were seldom present at early stages of addictions (one and zero subjects in the up to one year group), but they became more common over time. In the oldest category (addiction over ten years), they were the most pronounced (three and six subjects).

Especially important results were those related to the correlation of defence mechanisms and the severity of the disorder. Repression is the only mechanism for which more subjects have mild (five) than severe (zero) level of the disorder. Rationalization was found in the same number of respondents at both the mild and severe level (five). Similar results were found for denial (four and five subjects) and projection (three and five subjects). The results were quite different for projective identification (one mild, 12 severe), devaluation (zero mild, eight severe), and apathetic withdrawal (zero mild, three severe).

ZAKLJUČCI

Ovisnost je vrlo značajan psihijatrijski i javnozdravstveni problem, a njegova psihodinamska komponenta je zanemarena i u dijagnostičkom i u terapijskom smislu.

Značenje obrambenih mehanizama kod ovisnika je slabo istraženo, ili točnije rečeno sasvim neistraženo.

U našem smo istraživanju našli da su dominantni obrambeni mehanizmi kod ovisnika: apatično povlačenje, devaluacija, negacija, potiskivanje, projekcija, projektivna identifikacija i racionalizacija.

Mlađi ovisnici koriste nezrelije obrambene mehanizme.

Žene ovisnice pokazuju nezrelije obrambene mehanizme u odnosu na muškarce.

Očekivano, neoženjeni i nezaposleni ovisnici koriste nezrelije obrambene mehanizme.

Obrambeni mehanizmi ovisnika se vremenom mijenjaju.

Ovisnici o alkoholu i kockanju pokazuju zrelije mehanizme obrane u odnosu na ovisnike o drogama i internetu.

CONCLUSIONS

Addiction is a very important psychiatric and public health problem, and its psychodynamic component is neglected in both diagnostic and therapeutic terms.

The importance of defensive mechanisms in addicts is poorly explored, or more precisely, completely unexplored.

In the present study, we found that dominant defence mechanisms in addicts were: apathetic withdrawal, devaluation, denial, repression, projection, projective identification, and rationalization.

Younger addicts use more immature defence mechanisms.

Female addicts presented with more immature defence mechanisms than men.

As expected, unmarried and unemployed addicts used more immature defence mechanisms.

Defensive mechanisms of addicts change over time.

Alcohol and gambling addicts present with more mature defence mechanisms than drug and internet addicts.

LITERATURA/REFERENCES

1. Sneader W. Drug Discovery: A History. West Sussex: John Wiley and Sons, Ltd, 2005.
2. Bagarić A, Goreta M. Psihijatrijsko vještačenje ovisnika o drogama i kockanju. Zagreb: Medicinska naklada, Klinika za psihijatriju Vrapče; 2012.
3. Merikangas KR, McClair VL. Epidemiology of Substance Use Disorders. Hum Genet 2012; 131(6): 779-89.
4. Freud S. Hypnosis. In: Strachey J. The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume I (1886-1899): Pre-Psycho-Analytic Publications and Unpublished rafts, 1-411. London: The Hogarth Press and the Institute of Psychoanalysis, 1966,103-114.
5. Freud S. The complete letters of Sigmund Freud to Wilhelm Fliess, 1887-1904. (Jeffrey M. Masson Ed. and Trans.). Cambridge, MA, London: Belknap/Harvard University Press; 1986.
6. Dodes LM. Addiction, helplessness, and narcissistic rage. Psychoanal Q. 1990; 59(3): 398-419.
7. Wurmser L. Psychoanalytic considerations of the etiology of compulsive drug use. J Amer Psychoanal Assn 1974; 22(4): 820-43.
8. Kohut H. The Restoration of the Self. New York: International Universities Press, 1977.
9. Brenner C. An Elementary Textbook of Psychoanalysis. New York: Anchor books, A Division of a Random House Inc; 1954.
10. Freud A. The ego and the mechanisms of defence. London: Hogarth Press, 1948.
11. Klein M. Note on some schizoid mechanisms In: Developments in Psychoanalysis, ed. M Klein. London: Hogarth; 1946.
12. Vaillant GE, Bond M, Vaillant CO. An empirically validated hierarchy of defence mechanisms. Arch Gen Psychiatry 1986; 43(8): 786–94.

13. Pinheiro RT, Sousa PL, Da Silva RA, Horta BL, De Souza RM, Fleming M. Cocaine addicts and their families. An empirical study of the processes of identification. Int J Psychoanal. 2001; 82(Pt 2): 347-60.
14. Diagnostic and statistical manual of mental disorders: DSM-IV. Washington, DC: American Psychiatric Association, 1994.
15. Diagnostic and statistical manual of mental disorders: DSM-5. Arlington, VA: American Psychiatric Association, 2013.
16. Schalast N. Suchtgkranke Rechtsbrecher. In: Kröber HL, Dölling D, Leygraf N, Sass H, hrsg. Handbuch der Forensischen Psychiatrie, Band 3, Psychiatrische Kriminalprognose und Kriminaltherapie. Darmstadt: Steinkopff; 2006.
17. Kernberg O. The Influence of Projective Identification on Counter-Transference. Presentation at the First Conference of the Sigmund Freud Center of the Hebrew University of Jerusalem. Projection, Identification and Projective Identification. 27-29 May. Jerusalem, Israel, 1984.
18. Meissner WW. Projection and Projective Identification. Presentation at the First Conference of the Sigmund Freud Center of the Hebrew University of Jerusalem. Projection, Identification and Projective Identification. 27-29 May, Jerusalem, Israel, 1984.
19. Kernberg O, Selzer MA, Koenigsberg HA, Carr AC, Appelbaum AH. Psychodynamic Psychotherapy of Borderline Patients. New York: Basic Books; 1989.
20. Kreuzer A. Kriminologische Grundlagen der Drogendelinquenz. In: Kröber HL, Dölling D, Leygraf N, Sass H, hrsg. Handbuch der Forensischen Psychiatrie, Band 2: Psychopathologische Grundlagen und Praxis der Forensischen Psychiatrie im Strafrecht. Berlin-Heidelberg: Springer Verlag, 2010.
21. Dufton JH, Marshall RE. Substance misuse. In: Bailey S, Dolan M, eds. Adolescent forensic psychiatry. London: Arnold, 2004,164-178.

Korištenje društvenog marketinga i modernih tehnologija u pristupu internaliziranim problemima

/ The Use of Social Marketing and Modern Technology in the Approach to Internalized Problems

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Rapidni razvoj medija i komunikacijske tehnologije nezaustavljivo mijenja način života, ophođenja i navike ljudi. Uz navedeno, ima i izniman utjecaj na njihovo mentalno zdravlje. Cilj ovog rada je pregledom literature razmotriti potencijale društvenog marketinga i modernih tehnologija u prevenciji i ranom tretmanu internaliziranih problema. Istraživanja internaliziranih problema ukazuju na njihovu stabilnost i tendenciju umnožavanja s porastom dobi. Također, depresivne i anksiozne smetnje povećavaju rizik od suicida, somatskih smetnji i razvoja raznih fizičkih bolesti. Literatura naglašava mogućnosti korištenja društvenog marketinga za prevenciju javnozdravstvenih problema ističući da se društveni marketing dobro poklapa s generalnim principima prevencije te načelima promocije mentalnog zdravlja. Muñoz, jedan od vodećih znanstvenika u području tehnologija i mentalnog zdravlja, korištenje tehnologije u odgovoru na emocionalne, ponašajne i mentalne probleme smatra imperativom našeg vremena: sve je više dokaza da je *on-line* pristup potencijalno učinkovit, s mogućnosti širokog obuhvata populacije, te štedi brojne ljudske i materijalne resurse. Moderno doba zahtijeva programe i aktivnosti koje će biti dostupne posebno ako lokalni sustav brige i skrbi nije dovoljno razvijen te ne postoji dovoljno resursa za znanstveno utemeljene intervencije, a na taj izazov mogu odgovoriti razne medijske kampanje te internet intervencije. Rad predstavlja i izbor kampanji te primjere *on-line* intervencija za internalizirane probleme.

/ Rapid development of media and communication technologies is unstoppably changing our way of life, habits and means of communication. In addition, it has an enormous effect on our mental health. The aim of this paper was to explore the potentials of social marketing and modern technologies in prevention and early treatment of internalized disorders through the review of literature. Research on internalized problems shows their stability and tendency to exacerbate during the period of maturation. Additionally, depression and anxiety symptoms contribute to the risk of suicide, somatic complaints and physical illness. The literature stressed the possibilities of social marketing in prevention of public health problems. One of the leading researchers of technology and mental health issues, Muñoz, perceives the use of technology as the imperative of our time; more and more evidence shows the online approach to be potentially effective for a wide population and cost-effective regarding material and human resources. Modern times require programmes and activities available to the public when the local system of care is not developed and no evidence-based intervention is available. This paper presents the selection of good practices, campaigns and online interventions for internalized problems.

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UVOD: TEHNOLOGIJA U SLUŽBI PREVENCIJE

U suvremenoj kulturnoj i tehnološkoj revoluciji proizvodnja i distribucija raznih sadržaja posredovane su pametnim telefonima, računalima, tabletima, igraćim konzolama i drugim pametnim uređajima koji su povezani internetom. Rapidni razvoj medija i komunikacijske tehnologije nezaustavljivo mijenja način života, ophođenja i navike ljudi. Uz navedeno ima i izniman utjecaj na njihovo mentalno zdravlje (1,2). Ott i Mack navode da su nam gotovo sve spoznaje koje imamo posredovane sredstvima masovnih komunikacija te u masovne medije ubrajaju ne samo radio i televiziju nego i samu poruku, pojedinca, knjige, časopise, video igre, računala te sve druge medije koje pojedinac može koristiti (2). Novi zahtjevi i sve inovativnija rješenja više nisu prisutna samo u području informiranja, zabave i slobodnog vremena već su sve češća i u obrazovanju i u znanosti (3). Razne se discipline koriste *on-line* prikupljanjem podataka, razvijaju se aplikacije za mobitele kojima se dolazi do povratnih informacija nekoliko tisuća ljudi a popularne web stranice poput Amazona i njegovog projekta *Mechanical Turk* (https://www.mturk.com/) sve češće postavljaju platforme „građanin znanstvenik" putem kojih se dizajniraju ogromne studije (3).

Uz tehnološki napredak mijenja se i slika mentalnog zdravlja: brojevi pokazuju da je 38,2 % ukupne populacije u zemljama Europske unije imalo jedan mentalni poremećaj u proteklih dvanaest mjeseci (4), dok je u istraživanju 2005. godine taj broj iznosio 27,4 %. Pritom valja spomenuti da su u Europskoj uniji uz ovisnost o alkoholu i drogi, najčešći anksiozni poremećaji, nesanica i depresija (4). Podatci Svjetske zdravstvene organizacije iz 2014. ukazuju na činjenicu da se u zemljama niskog i srednjeg ekonomskog statusa poput Hrvatske na mentalno zdravlje troši manje od dva dolara po pojedinom stanovniku (5,6).

INTRODUCTION: TECHNOLOGY IN THE SERVICE OF PREVENTION

In the contemporary cultural and technological revolution, the production and distribution of different content is mediated by smartphones, computers, tablets, gaming consoles and other smart devices which are all connected via the internet. Rapid media and communication technology development is unstoppably changing the way people live and relate to each other as well as their habits. This also has an extraordinary impact on mental health (1,2). Ott and Mack state that currently almost all of our knowledge is mediated through the means of mass communication, which they define as not only radio and television but also the message itself, the individual, books, magazines, video games, computers and all other media that can used by the individual (2). Increasingly innovative solutions are no longer requirements just for the areas of communicating information, entertainment and leisure but are getting more and more present in education and science as well (3). Various disciplines use online data collection and develop mobile applications used to retrieve feedback of several thousands of people, while high-traffic websites such as Amazon with its *Mechanical Turk* (https://mturk.com/) project set up more and more "citizen scientist" platforms used to design large studies (3).

Along with technological progress, the picture of mental health is also changing: figures show that in the last twelve months 38.2 percent of the total EU population had one mental health disorder (4), while in a 2005 study this number amounted to 27.4 percent. At this point it should be mentioned that the most common disorders recorded in the EU along with alcohol and drugs addiction are anxiety disorders, insomnia and depression (4). World Health Organization data from 2014 show that in low- and middle-income countries like Croatia less than two dollars per person are being spent on mental health (5,6). For the most part, these funds are aimed to-

Glavnina tih sredstava usmjerava se na brigu za pacijente i psihijatrijske klinike dok samo 41 % zemalja članica ima jedan do dva programa promocije mentalnog zdravlja ili pak preventivna programa (5). Kako su u manje razvijenim zemljama gdje mentalno zdravlje nije javno prepoznata tema ulaganja ograničena ili pak nepostojeća, raskorak između potreba i dostupnih usluga je velik (6). Posljedice takve situacije pogađaju ne samo pojedinca i njegovu obitelj već i poslodavce i vlade zbog smanjene produktivnosti na poslu, izdataka za zdravstvo i socijalnu skrb (6). Globalni troškovi depresivnih i anksioznih smetnji procjenjuju se na milijun američkih dolara godišnje (6).

Iako zdravstveni sustav može pružiti podršku, između 20 % do 30% ljudi nije uključeno ni u kakav tretman (5,1). Razlozi za to su brojni: u manje razvijenim područjima nedostaje usluga, primjerice savjetovališta ili pak educiranog osoblja, usluge su manje dostupne a sustav je najčešće opterećen tretmanom (1). Sva se ova ograničenja ne mogu riješiti samo rastom postojećeg zdravstvenog sustava (1,7); rješenja trebaju biti inovativna i u skladu s duhom vremena kako bi se obuhvatio što veći broj ljudi te umnožili načini provedbe raznolikih intervencija (1,6,8). Inovacije uključuju moderne informacijske i komunikacijske tehnologije te digitalizaciju usluga u brizi za mentalno zdravlje. Razne studije pokazuju da moderne tehnologije u području mentalnog zdravlja mogu doprinijeti prevenciji, ranoj intervenciji, tretmanu i očuvanju dobrobiti (1,6,8,9).

Kako u Hrvatskoj područje politike za mentalno zdravlje nije dostatno razvijeno, posebno područje prevencije i ranih intervencija (10), cilj ovog rada je pregledom literature razmotriti potencijale inovativnih pristupa u području mentalnog zdravlja. Da bi se obuhvatili svi netradicionalni pristupi, bit će prikazan pregled područja e-mentalnog zdravlja, društvenog marketinga i medijskih kampanji te ozbiljnih

wards patient care in psychiatric clinics, while only 41 percent of member countries have one to two preventative or mental health promotion programs (5). In economically underdeveloped countries where mental health is not a publicly recognized issue, investments are limited or even non-existent, and a high discrepancy has been found between needs and services accessible (6). Due to lesser work productivity and increased costs for healthcare and social welfare, the consequences of this situation are felt not only by individuals and their families but also by their employers and governments (6). Global expenditure for depression and anxiety difficulties is estimated at a trillion American dollars per year.

Although the healthcare system can provide support, between 20 and 30 percent of people receive no treatment at all (1,5). Many reasons contribute to this predicament: less developed areas have insufficient services, e.g. not enough counselling centres or educated staff and they are less accessible and the system is overburdened (1). Neither of these limitations can be dealt with solely through the growth of the existing healthcare system (1,7); instead, solutions need to be innovative and aligned with the spirit of the times in order to include the largest possible number of people and multiply the implementation methods of different interventions (1,6,8). Innovations include modern information and communication technologies as well as digitalised services in the care for mental health. Various studies show that modern technologies in the area of mental healthcare can contribute to the prevention, early intervention, treatment and protection of wellbeing (1,6,8,9).

Since mental health policy in Croatia is underdeveloped, with that being the case especially for prevention and early intervention (10), the aim of this paper was to provide a literature overview and consider the potentials of an innovative approach in the support of mental health. In order to include all the non-traditional approaches, an overview will be presented of the field of e-men-

igara. Iako je područje novo, rapidno se širi pa pregled svih dostupnih informacija prelazi opseg jednog rada. Kako je područje znanstvenog i stručnog djelovanja autorica prevencija, u fokusu rada su kampanje i intervencije namijenjene internaliziranim problemima. Eksternalizirani problemi također su tema modernih pristupa, no nešto češće je fokus na već postojećoj problematici i njegovom tretmanu, primjerice kod pijenja ili pušenja.

E-MENTALNO ZDRAVLJE

E-mentalno zdravlje se može definirati kao generički termin koji opisuje korištenje informacijskih i komunikacijskih tehnologija, posebice interneta, za osnaživanje mentalnog zdravlja. Taj termin obuhvaća korištenje digitalne tehnologije i novih medija za trijažu, promociju, prevenciju, ranu intervenciju i tretman, no označava i profesionalnu obuku stručnjaka koji se bave mentalnim zdravljem te *on-line* istraživanja u tom području. Najčešća tema intervencija na internetu je depresija kao jedan od primarnih javnozdravstvenih problema, a slijede je teme pijenja, pušenja te anksiozne smetnje (10). Muñoz (11), jedan od vodećih znanstvenika u tom području, korištenje tehnologije u odgovoru na emocionalne, ponašajne i mentalne probleme smatra imperativom našeg vremena: sve je više dokaza da je *on-line* pristup potencijalno učinkovit, s mogućnosti širokog obuhvata populacije, te štedi brojne ljudske i materijalne resurse. Kako bi se utjecalo na zdravstvene nejednakosti, moderno doba zahtijeva intervencije koje će biti dostupne ljudima ako lokalni sustav brige i skrbi nije dovoljno razvijen i ako ne postoji dovoljno resursa za znanstveno utemeljene intervencije, a na taj izazov mogu odgovoriti internet intervencije bilo da su osmišljene kao promocija mentalnog zdravlja ili pak preveniraju ili smanjuju probleme. Jednom napravljen *on-line* program ili pak jednostavna web

tal health, social marketing and media campaigns and serious games. Although this area of research is quite new, its development is rapid, so one paper will not be able to provide the overview of all available data. Since the authors' area of expertise and research is that of prevention, the focus of this paper will be on campaigns and interventions aimed at internalized problems. Modern approaches have dealt with externalized problems as well but have in this respect been more frequently concerned with the treatment, such as drinking or smoking.

E-MENTAL HEALTH

E-mental health can be defined as a generic term describing the use of information and communication technologies, especially internet, to encourage mental health. This term includes the use of digital technology and new media for triage, promotion, prevention, early intervention and treatment, but also denotes professional training of mental health experts and online research in this area. Depression as one of the primary public health concerns is the most often addressed topic of internet interventions, followed by drinking, smoking and anxiety problems (10). Muñoz (11), one of the leading experts in the area, considers the use of technology in response to emotional, behavioural and mental problems as the imperative of our time: there is more and more evidence in favour of potential effectiveness of an online approach which has the ability to reach a wide spectrum of the population and save a lot of human and material resources. In order to influence health inequalities, modern times demand interventions that can be available even when the local healthcare and welfare system is not sufficiently developed or when resources for scientifically proven interventions are lacking. Internet interventions can rise to this challenge, whether they are formulated as mental health promotion or used to prevent or reduce problems. Once de-

stranica dostupna je širokoj populaciji te su ulaganja puno manja nego kod intervencija licem u lice. Kod *on-line* intervencija postoji mogućnost jednostavnog širenja, čak i među raznim zemljama, uz simultano korištenje, a da se išta oduzima originalno zamišljenoj ciljnoj skupini (11). Takav pristup može biti pogodan za one osobe koje preferiraju *on-line* pristup tretmana i intervencija naspram pristupa licem u lice (12). Što se tiče djece i mladih, *on-line* intervencije mogu biti dobar način pristupanju toj populaciji jer se oni za računalom osjećaju osnaženo u radu na sebi s obzirom na anonimnost koju im internet daje, a neki podatci upućuju na to kako jedan dio populacije preferira isključivo takav pristup. Internet intervencije mogu se koristiti i kao ekstenzija raznih servisa u zajednici te njihova svrha nikako nije zamjena ljudskih kapaciteta i osobnog kontakta već nadopuna postojećih i povećanje kvalitete. Moderne tehnologije ustvari pružaju barem neku mogućnost osiguravanja učinkovitih programa onoj populaciji koja nije obuhvaćena tradicionalnim pristupom i upravo je taj dio ključan za osiguravanje bolje kvalitete života i mentalnog zdravlja cijele populacije (11). Uz navedeno, internet intervencije mogu se koristiti kada su ljudi uključeni u neku listu čekanja za intervenciju, kada nema mjesta u nekom grupnom programu ili pak kao dodatak programu u koji su uključeni, ali i nakon završenog programa kako bi se prevenirao povratak simptoma. Internet i računalo mogu biti dobra rješenja i za onu populaciju koja nema velikih problema, ali ima neke smetnje, no ne žele se javiti za pomoć zbog straha od stigme (12,13).

Razne studije i meta-analize pokazuju da internet i kompjuterske intervencije mogu biti učinkovite, i u preventivnom i u tretmanskom smislu (13). Nedavna meta-analiza pokazala je kako su i intervencije učinkovite u tretiranju anksioznih i depresivnih simptoma (14). Van Straten, Cuijpers i Smits (15)

signed, an online programme or even a simple widely-accessible website requires much less investment than face-to-face interventions. Online interventions can be easily disseminated, even across countries, and used simultaneously in different areas without anything being taken away from the originally intended target group (11). They can be appropriate for those individuals who prefer online treatment and intervention instead of the face-to-face approach (12). As far as children and young people are concerned, online interventions could serve as a good way to reach this population, because due to the anonymity of internet they provide a feeling of empowerment while tackling self-development issues. Some data show that a part of population opts exclusively for this approach. Internet interventions can be used as an extension of different community assistance programmes as their purpose is by no means to replace human capacities and personal contact but rather to complement and enhance them.

In fact, modern technologies provide at least some sort of effective opportunity to that segment of population which is left out of traditional approaches, and it is this very aspect that is crucial for ensuring better quality of life and mental health of the entire population (11). Internet interventions can also be used during the wait-list periods, when group programmes are overfilled, as an addition to the programme people already participate in or after the completion of the programme in order to prevent the remission of the symptoms. Internet and computers could be useful sources of support for that segment of population which does not experience great difficulties but instead has some mild disturbances and avoids asking for help due to the fear of stigma (12,13).

Various studies and meta-analyses have shown that internet and computer interventions could be effective both as preventative and treatment measures (13). A recent meta-analysis has found online interventions to be effective in

opisuju učinke *on-line* programa za samopomoć koji su koristili sudionici sa simptomima depresije, anksioznosti i stresa povezanog s poslom te demonstriraju klinički i statistički značajne učinke na smanjenje simptoma. Spek i suradnici (14) proveli su meta-analize internet intervencija za tretman poremećaja raspoloženja i anksioznosti te dokazali da se veličine učinka kreću od 0,32 do 0,96. Osim interneta, veliki potencijal za brigu o mentalnom zdravlju i promociju mentalnog zdravlja imaju i mobilni telefoni. Novije studije Morrisa i suradnika (16) donose dokaze da su mobilni telefoni učinkovit alat u praćenju emocionalnih stanja i obrazaca kod stresa, povećavanju samo-regulacije, dok je druga studija prezentirala učinkovitost u prikupljanju podataka i monitoriranju stanja kod depresivnih (16).

DRUŠTVENI MARKETING

Među najčešće citiranim autorima u literaturi o društvenom marketingu su Kotler i Zaltman koji su 1971. godine objavili članak pod nazivom *„Social marketing: an approach to planned social change"* u časopisu *„Journal of Marketing"*. Noviji pristupi društveni marketing definiraju kao granu marketinga koja se fokusira na modifikaciju ponašanja ljudi kako bi unaprijedila i promicala individualnu i opću dobrobit društva koristeći principe komercijalnog marketinga. Dok je fokus komercijalnog marketinga prodavanje dobara i usluga uz postizanje financijske dobiti, društveni marketing potiče poželjno ponašanje nastojeći utjecati na trenutno ponašanje ciljne populacije (17,18). Društveni marketing pred sobom ima mnogo zahtjevniji i izazovniji zadatak, jer često ciljanoj populaciji promovira mijenjanje uobičajenog i ugodnog načina života, odricanje ponašanja poput pušenja ili pak promiče odolijevanje vršnjačkom pritisku, izlaganje neugodnim situacijama poput davanja krvi, usthe treatment of anxiety and depression symptoms (14). Van Straten, Cuijpers and Smits (15) outlined the impact of online self-help programs used by participants battling depression, anxiety and work-related stress and have demonstrated clinically and statistically significant results in the reduction of these symptoms. Speck et al. (14) conducted meta-analyses of internet interventions for the treatment of mood disorders and anxiety and proved the effect size to range between 0.32 and 0.96. Along with internet, mobile phones also hold great potential for mental healthcare and the promotion of mental health. Newer studies by Morris et al. (16) show mobile phones to be an effective tool in monitoring emotional states and stress patterns, as well as aiding self-regulation, while another study has shown their effectiveness in data collection and monitoring of the mood of those affected by depression (16).

SOCIAL MARKETING

In 1971, Kotler and Zaltman, who must be among the most cited authors in literature on social marketing, published a paper titled "Social Marketing: An Approach to Planned Social Change" in *The Journal of Marketing*. Newer approaches define social marketing as a marketing branch focused on behaviour modification in order to promote and encourage individual and collective well-being through the use of commercial marketing principles. And while commercial marketing is focused on selling goods and services in order to achieve financial gains, social marketing stimulates desired behaviour by striving to influence the existing behaviour of the target population (17,18). The task of social marketing is much more demanding and challenging because it often includes promotion of quitting habitual and pleasant behaviour such as smoking or resisting peer pressure, promotion of unpleasant situations such as blood donation, establishing healthy habits such as

postavljanje zdravih navika kao što je redovita tjelovježba ili pak trošenje većih financijskih sredstava za kvalitetnije namirnice (19). Kao i kod komercijalnog marketinga, društveni marketing podrazumijeva razmjenu. Kod komercijalnog marketinga osoba daje financijska sredstva kako bi kupila određeni proizvod ili uslugu koja će zadovoljiti njene potrebe, dok kod društvenog marketinga proces razmjene treba kompleksnije razumijevati, jer populaciji treba ponuditi nešto atraktivno kako bi ona modificirala, odbacila ili usvojila određena ponašanja. Primjerice, traži se da populacija manje gleda televiziju i više se kreće, u zamjenu za poboljšano zdravlje (20).

Wallack (21) naglašava mogućnosti korištenja društvenog marketinga za prevenciju javnozdravstvenih problema ističući da se društveni marketing ustvari dobro poklapa s generalnim principima prevencije ponašajnih i mentalnih problema te načelima promocije mentalnog zdravlja. Strategijskim pristupom društveni marketing može podržati smanjivanje incidencije nekih problema, usvajanje te održavanje zdravijih stilova života. Društveni marketing i javnozdravstveni pristup imaju isti cilj, oba se bave okruženjem te nastoje utjecati na čimbenike iz okruženja kako bi osnažili ciljanu skupinu. Isti autor istodobno kritizira načela zdravstvene politike i načela marketinga upozoravajući na problem da najveći naglasak stavljaju na individualne rizične čimbenike i slobodni izbor pojedinca što zanemaruje utjecaj socijalnih determinanti i uronjenost individue u okruženje. Poziva na odgovornije sagledavanje socijalnog, ekonomskog i političkog konteksta kako bi se razumjelo ponašanje te smatra da je pojednostavljeno i individualističko poimanje zdravstvenih problema lišeno političkih i ekonomskih ograničenja i utjecaja (21).

Upravo zbog toga je bitno u spajanju društvenog marketinga i područja promocije zdravlja imati na umu važnost višerazinskog strategijskog pristupa te utjecaja okruženja, zajednice i

regular exercise or allocating more money to higher-quality groceries (19). Similar to commercial marketing, social marketing also implies transaction. In commercial marketing one gives money to buy a specific product or service that would satisfy their needs, while social marketing transaction is more complex because people need to be offered something attractive in order for them to modify and abandon old or adopt new behaviours. For example, one of the aims of social marketing is to make people spend less time in front of their TV sets and do more exercise, in return for improved health (20).

Wallack (21) stresses the opportunities of social marketing use in the prevention of public health issues, emphasizing that social marketing fits well with the general principles of prevention of behavioural and mental problems as well as with the concepts of mental health promotion. With strategic approach, social marketing can support a decrease in incidence of some problems as well as adoption and sustainment of healthier lifestyles. Social marketing and public health services share the same goal, deal with environmental circumstances and try to influence them in order to empower their target groups. However, this author criticises the principles of both public health policy and marketing principles, warning that most of their emphasis is put on individual risk factors as well as individuals' free choices which disregards the influence of social determinants and individuals' immersion in their environment. He calls for a more responsible examination of the social, economic and political context in order to gain better understanding of the behaviours, and believes the over-simplified and individualistic understanding of health problems to be lacking in political and economic dimensions of limitations and influences (21).

For this exact reason, when connecting social marketing and health promotion it is important to keep in mind the influence of the environment, community and society in general

društva općenito. Spektar primjene društvenog marketinga ide od javnog zdravstva (pušenje cigareta, pretilost, HIV/AIDS, itd.), prevencije mentalnih poremećaja (suicidi, anksioznost, depresija, ovisnosti), prevencije ozljeda (vožnja u pijanom stanju, ozljede glave, uporaba sigurnosnog pojasa tijekom vožnje, itd.), zaštite okoliša (smanjenje opasnog otpada, zagađenje zraka, požari, itd.) do mobilizacije zajednice (donacija organa, glasanje, udomljavanje napuštenih životinja, itd.) (18,19).

PRIMIJENJENE IGRE: OZBILJNE IGRE I GEJMIFIKACIJA U MENTALNOM ZDRAVLJU

Kada se govori o kompjuterskim igricama i mentalnom zdravlju, u literaturi se zamjećuju dva glavna smjera tzv. primijenjenih igara: jedan koji se bavi tzv. „ozbiljnim igrama" koje koriste igru kao centralni medij te drugi pristup, engl. *gamification*, u daljnjem tekstu gejmifikacija, koji koristi samo elemente igara (22). Ozbiljne igre su igre čija primarna namjena nije zabava, uživanje i upotpunjavanje slobodnog vremena već se usmjeravaju na obrazovanje, usvajanje vještina, promjenu ponašanja i unaprjeđenje zdravlja, a usputno pritom zabavljaju korisnike (22, 23). *Gejmifikacija* se odnosi na dodavanje elemenata igara u neki drugi kontekst. Taj tip intervencija možda ne funkcionira kao iskustvo igranja, ali ima neke elemente koji podsjećaju na kompjutorske igrice: bodove, nagrade unutar intervencije, neki tip zahtjeva ili pak potrage (22,23).

Na potencijale primijenjenih igara ukazuju sljedeći brojevi: u Sjedinjenim Američkim Državama 2015. godine više od 40 % ukupne populacije provodi u prosjeku 3 ili više sati/tjedan u igranju kompjuterskih igrica (22). Fleming i suradnici u svom preglednom radu pokazali su da primijenjene igre imaju različite ciljeve i namjenu, te variraju u stupnju kompleksnosti tehnologije i interakcije s korisnikom (22). Njihov

and how important it is to foster a multi-level strategic approach. Application of social marketing includes public health (cigarette smoking, obesity, HIV/AIDS, etc.), mental health disorders prevention (suicide, anxiety, depression, addiction), injury prevention (drunk driving, head injuries, using seat belt while driving, etc.), environment protection (decrease in hazardous waste, air pollution, fires, etc.) and social mobilization (organ donation, voting, adoption of abandoned pets, etc.) (18,19).

APPLIED GAMES: SERIOUS GAMES AND GAMIFICATION IN MENTAL HEALTH

Two main directions are being taken in the literature treatment of computer games and mental health when it comes to applied games: one dealing with so-called "serious games" which use the game as their central medium, and the other is that of gamification, which uses only some elements of game-playing (22). Serious games are games that are designed for a primary purpose other than entertainment, enjoyment and leisure and are aimed at education, skill development, behavioural changes and betterment of health, while entertaining their users at the same time (22,23). Gamification refers to application of game elements in other contexts. This type of intervention may not function as a gaming experience but has some elements evocative of computer games: point collection, rewards as part of intervention, some type of quest or search (22,23).

The following figures express the potential of applied games: in 2015 more than 40 percent of the general population of the USA spent on average three or more hours a week playing computer games (22). In their review paper Fleming et al. have shown various aims and purposes of applied games which differ in the degree of technological complexity and user interaction (22). Their review paper studied

hov pregledni rad bavio se igrama temeljenim na vježbanju, virtualnom stvarnošću, ozbiljnim igrama temeljenim na KBT-u, igrama integriranim s društvenim mrežama te *biofeedback*-om. Tri pregledna rada koja navode opisivala su šest tipova tj. konkretnih primijenjenih igara od kojih su gotovo svi usmjereni na prevenciju depresije a opisana je i virtualna stvarnost „*Virtual Iraq*" koji se bavi smanjivanjem traumatskih reakcija (22). Autori zaključuju da kvalitetne primijenjene igre u mentalnom zdravlju imaju značajne učinke na korisnike: povećavaju koncentraciju, unaprjeđuju sposobnost zadržavanja informacija, facilitiraju procese dubokog učenja te promoviraju promjene u ponašanju (22). Fleming i suradnici u svom preglednom radu pokazuju da bi se tradicionalni znanstveno-utemeljeni pristupi mogli prevesti u formate primijenjenih igara te da navedeno može dovesti i do širenja obuhvata populacije te potencijalno do njihove povećane motivacije (22). Na taj bi se način moglo osigurati korištenje višestrukih mehanizama za postizanje promjene: terapijski procesi udružuju se s privlačnošću igranja, željom za natjecanjem i zabavom.

APLIKACIJE ZA MOBITELE

Podatci za 2012. pokazuju da mobilne telefone koristi više od 91 % ukupne svjetske populacije, tj. 4,3 milijarde korisnika (24), dok je bežični internet signal dostupan 85 % svjetske populacije (25). U manje razvijenim zemljama, gdje je i manja vjerojatnost dostupnosti interneta, ekspanzija korištenja mobilnih telefona je zapanjujuća: od manje od milijuna ljudi 2002. do 40 milijuna 2011 godine (25). Prva mobilna aplikacija bila je dostupna za skidanje 2008. godine, a od tada svjedočimo rapidnom razvoju područja: procjene su da je do 2012. godine razvijeno više od milijun i pol aplikacija a da je oko 14000 raznih aplikacija usmjereno na zdravlje u širem smislu (24). Od 14.000 raznih aplikacija, 6 % usmjereno na mentalno zdravlje a 18 % na pu-

games based on exercise, virtual reality, serious CBT-based games, social network integrated games and biofeedback. The three review papers that they mention described six types of specific applied games, almost all of which aim at preventing depression. They also addressed one virtual reality "*Virtual Iraq*", which aims at reduction of traumatic reactions (22). The authors conclude that high-quality applied games have significant effects on the mental health of users: they increase concentration, improve information retention, facilitate deep learning processes and promote behavioural changes (22). Fleming et al. show that traditional scientifically-based approaches can be translated into applied game formats, which could lead to wider coverage and potentially increased motivation (22). This could be ensured through the use of multiple mechanisms to achieve change: therapeutic processes joined with the appeal of play, the desire to compete and have fun.

MOBILE PHONE APPLICATIONS

Data for 2012 show that over 91 percent of the entire world population uses mobile phones, which is 4.3 billion users (24), while wireless internet is accessible to 85 percent of world population (25). In less developed countries, where the availability of wireless signal is lower, the expansion of mobile phone use is astounding: from less than a million users in 2002 to 40 million in 2011 (25). The first mobile phone application was downloadable in 2008, and ever since we have witnessed rapid development of this area: it is estimated that more than a million and a half mobile applications were developed prior to 2012, out of which around 14,000 different applications are aimed at health in the broader sense of the word (24). Out of these 14,000 applications, 6 percent deal with mental health, and 18 percent with smoking, sleeping, stress and relaxation (24). That is why smartphone-provided mental health support has immense potential:

šenje, spavanje, stres i relaksaciju (24). Podrška mentalnom zdravlju putem pametnih mobilnih telefona stoga ima iznimne potencijale: aplikacije za pametne telefone su iznimno fleksibilne, omogućuju visoku dozu privatnosti, tajnosti te autonomije, uz već poznati medij i tehnologiju; mogu se koristiti u bilo kojem kontekstu te su uvijek pri ruci korisniku (24,25). Postaju novi oblici traženja podrške i pomoći za one s problemima s mentalnim zdravljem ali i za djelatnike; jer nude instant pristup informacijama, mogućnost podešavanja podsjetnika, višekratnu uporabu tokom dana i vježbu što dovodi do velike ekspanzije (24,25). Iako ništa ne može zamijeniti osobnu komunikaciju i podršku, posebice psihoterapiju, čini se nemogućim da će svi oni koji trebaju pomoć zaista dobiti i taj najadekvatniji oblik. Mobilne aplikacije mogle bi služiti kao podrška učinkovitijem radu, primjerice u razvijenijim zemljama je odnos broja mobitela i zaposlenih stručnjaka 8000 naprama jedan dok se brojke penju i na 30000 naprama jedan u najmanje razvijenim dijelovima svijeta (25). Istraživanja učinkovitosti mobilnih aplikacija u mentalnom zdravlju još su uvijek rijetka, bez obzira na veliku dostupnost. Programeri i razvojni timovi ponekad nisu zainteresirani za istraživanje i evaluaciju aplikacija. Čini se da učinci nekih aplikacija opadaju s vremenom, a objavljene studije ne navode jednoznačne rezultate (24,25), no bez obzira na navedeno, riječ je o velikom potencijalu za područje mentalnog zdravlja.

PRIMJENA MODERNIH TEHNOLOGIJA NA PODRUČJE INTERNALIZIRANIH PROBLEMA

Istraživanja internaliziranih problema ukazuju da njihova pojavnost negativno utječe na kvalitetu mentalnog zdravlja u budućnosti. Ako se jave ranije u životu, rezistentniji su na promjene, tijekom odrastanja nerijetko uz sebe vežu i rizična ponašanja, narušavaju suočavanje s

smartphone applications are extremely flexible, they offer a high degree of privacy, secrecy and autonomy, they are readily available to their users and due to familiar medium and technology can be used in virtually any context (24,25). Applications become new vehicles of support and help not just for everyone dealing with mental health issues but help providers as well because they enable instant access to information, the possibility of setting reminders, multiple uses throughout the day as well as opportunity for practice, which leads to great expansion (24,25). Even though nothing can replace personal communication and support, especially for psychotherapy, it seems impossible for everyone in need of help to receive this most adequate form of support. Mobile applications could serve as a support to design a more efficient approach, since in more developed countries the ratio of mobile phones to the number of active experts is 8,000 to one while these numbers reach as high as 30,000 in one in the least developed parts of the world (25). Research into the effectiveness of mobile applications in the area of mental health is still rare, in spite of their high availability. Programmers and development teams sometimes have no interest in research and evaluation of applications and it seems that some of the applications' effects decrease with time. Published studies do not report uniform results (24,25), but in spite of these shortcomings, this is still an area of tremendous potential for the mental health domain.

APPLICATION OF MODERN TECHNOLOGIES IN THE AREA OF INTERNALIZED PROBLEMS

Research into internalized problems suggests their negative influence on the future quality of mental health. When they develop early on, internalized problems are more resistant to change and frequently involve risky behaviour while growing-up, impaired problem solving,

problemima, smanjuju povezanost s drugima, a problematika postaje ozbiljnija s dobi (26-30). Kako bi se primijenile inovativne metode poput strategija društvenog marketinga ili pak kompjuteriziranih programa te primijenjenih igara, potrebno je razumjeti rizične čimbenike za razvoj internaliziranih problema (26-30). Neki od rizičnih čimbenika kao što su genetska predispozicija djeteta, neka obilježja temperamenta, obiteljska povijest te doživljeno traumatsko iskustvo teško su promjenjivi. U fokusu intervencija su dinamički čimbenici rizika koji se mogu mijenjati: primjerice neadekvatan odgoj, loši bračni odnosi, nedostatak socijalnih vještina, razvoj aktivnih strategija nošenja s problemom, razvoj podržavajućih odnosa te spiritualnosti (26-30).

PRIMJERI MEDIJSKIH KAMPANJI USMJERENIH NA INTERNALIZIRANE PROBLEME

Većina kampanji čiji su podatci dostupni na internetu isključivo su se fokusirale na podizanje svjesnosti o internaliziranim problemima djece i odraslih i to najčešće o depresivnosti. Ovim se radom nastoji dati prikaz svjetskih primjera kako bi se osvijetlio jedan od mogućih pristupa problematici i ponudili primjeri dobre prakse koji mogu biti zanimljivi i za domaću primjenu.

Beyondblue je neprofitna organizacija promocije mentalnog zdravlja, osnovana 2000. godine u Australiji kao dio petogodišnje nacionalne inicijative kao odgovor na problem depresije u australskom društvu (www.beyondblue.org.au). Riječ je o nacionalnoj inicijativi čiji je primarni cilj osvještavanje javnosti o problemu depresivnosti i anksioznosti te smanjivanje stigmatizacije informiranjem o simptomima, sustavu podrške i dostupnoj pomoći. Nakon prvih pet godina djelovanja organizacija je u Australiji zauzela središnju ulogu u rješavanju problema depresivnosti i u oblikovanju javnih politika i uvođenju novih programa za probleme depresivnosti, anksioznosti i suicida za sve

poor relationships, all of which become more serious with age (26-30). In order to apply innovative methods such as social marketing strategies or computerised programmes and applied games, it is necessary to understand risk factors for the development of internalized problems (26-30). Risk factors such as the genetic predisposition of the child, some temperament traits, family history and experiencing a traumatic event are hardly changeable. Interventions focus on those that can be influenced, such as: inadequate upbringing, bad marital relations in the family, lack of social skills, development of active strategies of dealing with problems, development of supportive relationships and spirituality (26-30).

EXAMPLES OF MEDIA CAMPAIGNS AIMED AT INTERNALIZED PROBLEMS

Most campaigns for which there is accessible online data were focused exclusively on raising awareness about internalized problems of children and grown-ups, primarily depression. This paper strives to provide global examples in order to shed some light on one of the possible approaches to these issues and present examples of good practice, which might be locally applicable as well.

Beyondblue is a non-profit promoting mental health project, established in Australia in 2000 as part of a five-year long national initiative undertaken in response to depression problem in Australian society (www.beyondblue.org.au). It is an example of a national initiative with the primary aim of raising awareness of depression and anxiety and decreasing stigmatization by informing the public about symptoms, the support system and available help. In the first five years of its operation, this organization assumed the leading role in addressing the problem of depression as well as in drafting public policies and introducing new programmes for

populacije. *Beyondblue* radi u suradnji s zdravstvom, školama, sveučilištima, medijskim organizacijama te u suradnji s osobama koje pate od depresivnosti i anksioznosti te s njihovim prijateljima i obiteljima. Njihova web stranica je iznimno informativan portal koji nudi mnogo poveznica, no prije svega služi kao servis na kojem su dostupne činjenice i informacije kome se obratiti za pomoć, o programima koji postoje, koje su to situacije u kojima se poteškoće mogu javiti pa čak i što reći stručnjaku. Isto tako nudi informacije i za stručnjake i za sustave kako bi se podrška što brže i kvalitetnije osigurala. Iz perspektive ovog rada iznimno je zanimljivo njihovo djelovanje spajanjem socijalnog marketinga, kampanji, prevencije i tretmana: portal sadrži mnogo kampanji koje prenose osobne priče, obraćaju se javnosti da bi ju senzibilizirale i smanjile diskriminaciju te adresiraju teme na vrlo intrigantan i blizak način (31). Primjerice, njihova *Brains can have a mind of their own* je kampanja nastala na temelju istraživanja koje je bilo dio kampanje *Beyondblue* te je pokazalo da dvoje od pet mladih osoba smatra kako njihovi vršnjaci ne bi potražili pomoć ako pate od depresivnih i anksioznih simptoma. Kampanja je usmjerena na mlade u dobi od 13 do 18 godina s naglaskom na one koji prvi put pate od depresivnih i anksioznih simptoma i koji još nisu potražili pomoć. Fokus je stavljen na mlade s obzirom da su istraživanja pokazala kako polovica slučajeva problema mentalnog zdravlja započinje oko 14. godine života. Sama kampanja je humorističnog karaktera gdje u reklamama i promotivnim videima animirani lik mozga kod mladih izaziva razne anksiozne i depresivne simptome, odnosno mozak je predstavljen kao eksterni prikaz depresivnosti i anksioznosti. Svrha ovakvog prikaza depresivnih i anksioznih simptoma i cilj same kampanje je ukloniti osjećaj krivnje zbog proživljavanja tih simptoma, jer on koči mlade osobe u traženju pomoći, odnosno cilj kampanje je potaknuti mlade da potraže pomoć u slučaju takvih iskustava. Humoristično pristup je korišten s

depression, anxiety and suicide problems in all populations. *Beyondblue* cooperates with the healthcare system, schools, universities, media organisations and persons afflicted with depression or anxiety as well as their friends and families. Their website serves as an extremely informative source of many links, but above all as a collection of facts and information on who to contact for help, on available programmes, on situations when difficulties are expected to occur and even on how to speak with experts. At the same time, it provides information for experts and organizations so that high-quality assistance could be administered as quickly as possible. From the perspective of this paper, their activities are very interesting because they connect social marketing, campaigns, prevention and treatment: the website contains many campaigns which report personal stories, address the public opinion in order to sensitize it to these issues and reduce discrimination and tackle these topics in an intriguing and relatable manner (31).

For example, their campaign *Brains can have a mind of their own* based on the research conducted as part of the *Beyondblue* campaign has shown that two out of five young people think their peers might not seek support if they suffered from symptoms of depression and anxiety. The campaign was aimed at 13 to 18 year olds, especially those who experienced depression and anxiety for the first time and who had previously not sought professional help. Young people were the focus of the campaign because research has suggested that half of mental health issues emerge by age 14. The campaign had a humorous tone, with ads and videos featuring an animated brain character that causes young people to experience various symptoms of depression or anxiety. In that way the brain character was made into an external representation of depression and anxiety and the purpose of such portrayal was to eliminate the sense of personal responsibility and shame which can

obzirom da istraživanja tržišta ukazuju kako je upravo takav pristup učinkovit kada se radi o mladima (31).

Dobar primjer korištenja komercijalnog sustava u društveno-marketinške svrhe je *Bell Let's Talk,* inicijativa vodeće kanadske kompanije *Bell* za telekomunikacije, koja se fokusira na promociju mentalnog zdravlja (http://letstalk.bell.ca/en/). Inicijativa je započela 2010. godine kao petogodišnja inicijativa, a 2015. godine joj je trajanje, odnosno financiranje produljeno na narednih pet godina. *Bell Let's talk* ima četiri cilja: destigmatizacija problema mentalnog zdravlja, povećanje dostupnosti usluga i servisa mentalnog zdravlja, promocija mentalnog zdravlja na radnim mjestima te istraživanje tretmana mentalnog zdravlja. U svrhu destigmatizacije *Bell let's Talk* inicijativa pokrenula je kampanju koja je nastojala podići svjesnost o problemima mentalnog zdravlja te je organiziran događaj pod nazivom *Bell Let's Talk Day* kada su se prikupljala financijska sredstva za kanadske programe vezane za mentalno zdravlje (32).

Time to change je program formiran 2007. godine od strane dobrotvornih ustanova *Mind* i *Rethink Mental Illness* koje se bave mentalnim zdravljem, a program je sufinanciran od Britanskog zavoda za javno zdravstvo (www.time-to-change.org.uk). Cilj programa je smanjiti stigmu i diskriminaciju kod narušenog mentalnog zdravlja. *It's time to talk* je kampanja koja je dio programa *Time to change* čiji je cilj bio otvaranje teme mentalnog zdravlja, odnosno poticanje razgovora o mentalnom zdravlju. Kampanja se sastojala od reklama, stripova i videa humorističnog karaktera, a provodila se tijekom 2011. i 2012. godine u suradnji s osobama narušenog mentalnog zdravlja. U kampanji se naglašavalo kako je ljudima nelagodno kada se radi o problemima mentalnog zdravlja te da se često boje o tome razgovarati. Reklamama, stripovima i ostalim proizvodima kampanje se na humoristican način prikazuje o čemu razmišljaju osobe kada oklijevaju pitati drugu osoprevent young people in asking for help when faced with such experiences. The campaign used a humorous approach since according to the results of marketing research it is the most effective way to engage young people (31).

A good example of the commercial system being used for the purpose of social marketing is *Bell Let's Talk*, an initiative focused on mental health promotion, undertaken by *Bell,* the leading Canadian telecommunications company (http://letstalk.bell.ca/en/). This five-year-long initiative was launched in 2010 and in 2015 its duration and funding were extended by another five years. *Bell Let's Talk* has four goals: reducing stigma around mental health issues, increasing access to mental health care and services, promoting mental health in the workplace and researching mental health treatments. In order to eliminate stigma, *Bell Let's Talk* initiative launched a campaign to increase awareness on mental health issues, and an event, *Bell Let's Talk Day*, was organized to help raise funds for Canadian programmes related to mental health (32).

Time to Change was a programme started in 2007 by the mental health charities *Mind* and *Rethink Mental Illness* and is co-funded by the British Department of Health (www.time-to-change.org.uk). The aim of the program is to eliminate stigma and discrimination. Their campaign *It's time to talk* was aimed at encouraging conversation on mental health. It consisted of adverts, comics and humorous videos and ran through 2011 and 2012, in cooperation with those affected by mental health issues. A lot of emphasis of the campaign was put on embarrassment people face in relation to their mental health problems and fears in talking about them. Ads, comics and other campaign outputs used humour to show what people think when they hesitate to ask someone experiencing a mental health problem how they feel and how their recovery is going. It was shown that nothing necessarily bad or embarrassing actually

bu koja pati od problema mentalnog zdravlja kako se osjeća i kako teče njen oporavak. Na kraju se prikazuje kako se zapravo ništa loše ni neugodno ne događa kada se razgovara o mentalnom zdravlju. Evaluacija je pokazala kako je reklamu kampanje vidjelo 81 % odraslih u Engleskoj te kako je web stranicu poslije prikaza reklama posjetilo 153 000 posjetitelja (33).

Američki je primjer *We Can Help Us*, kampanja čiji je cilj prevencija suicida mladih, a fokusira se na populaciju mladih od 13 do 17 godina koji su u riziku od počinjenja suicida, odnosno na one koji su depresivni i pod stresom (34). Kreatori kampanje su SAMHSA - Administracija za prevenciju ovisnosti i mentalno zdravlje, neprofitna organizacija *Ad Council* te *Inspire* - američka fondacija koja promovira mentalno zdravlje mladih. Kampanja polazi od ideje da svi mladi prolaze kroz slične teške situacije tijekom odrastanja te da ih treba podsjetiti kako postoje pozitivni i konstruktivni načini prevladavanja tih situacija nasuprot suicidu. Proizvodi kampanje su interaktivna web stranica, reklame te posteri koji su postavljeni po školama. Na web stranici prikazane su stvarne priče mladih osoba koje su se borile s teškim trenutcima i koje upućuju na to kako se nositi s problemima kako bi ohrabrile mlade te se nudi mogućnosti povezivanja s vršnjacima. Kampanjom su prikazani znakovi depresije te savjeti kako se nositi s problemima uz informacije i kontakte relevantnih institucija koje mogu pomoći mladima koji se bore s depresijom i razmišljaju o suicidu (34). Prije kreiranja kampanje provedeni su intervjui s mladima, odnosno istraživala se pozadina problema i perspektiva mladih o problemu. Na temelju intervjua s mladima došlo se do zaključaka kako je mladima s odraslima teško razgovarati o problemima. Blisko im je čuti priče vršnjaka o tome kako su se oni uspjeli nositi s problemima, skloni su anonimnom povezivanju s vršnjacima preko interneta te su naveli kako žele učiti o adekvatnim načinima nošenja s problemima i čuti autentične priče i poruke. Ključna poruka kampanje je kako je olakšanje bliže nego što se

happens when engaging in that conversation. Evaluation of the campaign has shown that the advert was seen by 81 percent of grownups in England and that the website received 153,000 hits after the ads were aired (33).

An American example is the *We Can Help Us* campaign aimed at suicide prevention in the population of youth aged 13 to 17 who are at risk of committing suicide, i.e. those who are depressed and stressed-out (34). The campaign was created by SAMHSA – Substance Abuse and Mental Health Services Administration, the non-profit organisation *Ad Council* and *Inspire* – an American foundation promoting mental health of young people. The campaign goals stem from the notion that all young people go through similar difficulties during the process of growing up and that they should be reminded of positive and constructive ways of overcoming these difficulties instead of resorting to suicide. The outputs of the campaign were an interactive website, adverts and posters that were put up in schools. The website features real-life stories of teens who have experienced difficult moments. It suggests some encouraging approaches to handling problems and provides possibilities of connecting with peers. The campaign informed the public of the signs of depression and offered advice on how to deal with problems along with contacts and information on relevant institutions that could help teens struggling with depression and considering suicide (34). Prior to creating the campaign, teens were interviewed in an attempt to research the background of the problem and the youth's perspective on it. On the basis of these interviews, it was concluded that young people have trouble discussing their problems with adults. They can relate to their peers' stories on how they have managed to handle their problems, they tend to connect with them anonymously over the internet and have stated their interest in learning about adequate ways of dealing with their issues as well as hearing authentic stories and messages. The

čini, a ton samog naziva kampanje koji je utjelovio tu poruku je pozitivan. Naziv kampanje također upućuje na to kako mladi imaju kontrolu nad svojim životom i kako mogu prevladati probleme uz pomoć priča uspjeha vršnjaka (35).

PRIMJERI *ON-LINE* PROGRAMA USMJERENIH NA INTERNALIZIRANE PROBLEME

U tekstu koji slijedi izabrano je nekoliko uspješnih i znanstveno-dokazanih primjera programa čija je svrha ili prevencija ili tretman. Sva tri programa dijele slične principe: temelje se na potrebama djece i mladih, prilagođeni su ciljanoj populaciji te je korišten internet kao komunikacijski kanal prema djeci i mladima. Sva tri predstavljena programa dijele teorijsku podlogu kognitivno-bihevioralne terapije u poticanju promjena ciljane populacije, tj. znanstveno su i empirijski temeljeni.

MoodGYM je besplatan *on-line* program podrijetlom iz Australije kreiran od Centra za istraživanje mentalnog zdravlja (*National Institute for Mental Health Research, The Australian National University)* te je namijenjen mladima u dobi od 18 do 25 godina i odraslima u dobi od 26 do 55 godina u cilju prevencije i tretmana od blagih do umjerenih simptoma depresije i anksioznosti (www.moodgym.anu.edu.au). Program se sastoji od pet modula u trajanju 20-40 minuta, interaktivne igre, procjene anksioznosti i depresivnosti, relaksirajućeg audio materijala koji se može besplatno skinuti, *on-line* radne bilježnice gdje se bilježi napredak te od povratne informacije. Temelji se na principima kognitivno-bihevioralne terapije kao što su kognitivno restrukturiranje, povezanosti misli i osjećaja, bihevioralnih aktivnosti, tehnikama relaksacije i rješavanja problema te na principima interpersonalne terapije (36). Moduli su kreirani kako bi se prolazili u razdoblju od 6 tjedana i nose sljedeće nazive koji ujedno opisuju njihove teme i ciljeve: (1) Osjećaji

main message of the campaign, expressed in its name, is that support is closer than it seems. The name of the campaign also points to the idea that young people have control over their lives and can overcome their problems with the help of success stories from their peers (35).

EXAMPLES OF ONLINE PROGRAMMES AIMED AT INTERNALIZED PROBLEMS

Several successful and scientifically proven examples of programmes intended for prevention or treatment are presented below. All three of the presented programmes share similar principles: they are based on the needs of children and teens, tailored to the target population and use internet as a communication tool to reach children and teens. All three programmes share theoretical assumptions of cognitive-behavioural therapy in their approach to inducing change in target population, i.e. they are scientifically and empirically established.

MoodGYM is a free online program designed in Australia by the National Institute for Mental Health Research of The Australian National University, aimed at prevention and treatment of mild to moderate depression and anxiety symptoms in the youth population aged 18-25 and adults aged 26-55 (www.moodgym.anu.edu.au). This programme consists of five 20- to 40- minute interactive games, anxiety and depression assessments, a downloadable relaxation audio file, an online workbook to track progress and feedback assessment. It is based on the principles of cognitive-behavioural therapy such as cognitive restructuring, the relationship between thoughts and emotions, behavioural activation, relaxation techniques and problem solving as well as principles of interpersonal therapy (36). The modules have been designed to be completed over 6-week periods and have the following names which illustrate their topics and goals: (1) Feelings module –

- zašto se tako osjećaš, (2) Misli - mijenjanje načina razmišljanja, (3) Ispravljanje distorzija - mijenjanje iskrivljenih misli, (4) Smanjenje stresa-razumijevanje onog što te uzrujava, (5) Odnosi s drugima-kako funkcioniraju. Nakon svakog modula korisnici ispunjavaju upitnik koji mjeri stupanj depresivnosti i anksioznosti, dobivaju povratnu informaciju o sebi, formiraju ciljeve te se na početku svakog modula kratko ponavljaju ključne informacije iz prošlog (12). U program nisu uključeni djelatnici iz domene mentalnog zdravlja, iako program može biti dio stručnog tretmana. Za razliku od sličnih programa, *MoodGYM* daje prikaz životnih situacija koje su relevantne za mlade osobe te životopisnih ilustrativnih likova koji pomažu u usvajanju potrebnih vještina. Za vrijeme trajanja programa korisnike se potiče na prakticiranje naučenog u svakodnevnom životu (13). Evaluacija programa pokazala je kako *MoodGYM* doprinosi smanjenu depresivnih simptoma i disfunkcionalog razmišljanja kod odraslih i smanjenju anksioznih i depresivnih simptoma kod adolescenata (12).

Camp Cope-A-Lot: The Coping Cat dio je *Coping Cat* (www.cope-a-lot.com) programa za djecu od 7. do 13. godina s anksioznim simptomima, osmišljen od Philipa C. Kendalla i Muniye Khanne (37). Ciljevi su trojaki: naučiti djecu i mlade prepoznati anksiozne simptome i nositi se s njima, smanjiti razinu anksioznosti te pomoći djeci ovladati razvojno prikladnim, izazovnim zadaćama (38). Aktivnosti su temeljene na principima kognitivno-bihevioralne terapije te pomažu djeci prepoznati stanje anksioznosti i razviti strategije nošenja sa situacijama koje mogu izazvati takvo stanje. Program se fokusira na četiri povezane komponente: prepoznavanje tjeskobe i fizičkih reakcija na anksioznost, razjašnjavanje osjećaja u situacijama koje mogu izazvati anksioznost, razvijanje plana nošenja s takvim situacijama, evaluaciji učinka i programu samopotkrepljenja (39). *Camp Cope-A-Lot: The Coping Cat* namijenjen je djeci od 7 do 13 godina gdje je dijete uključeno u 6 individu-

why you feel the way you do, (2) Thoughts module – changing the way you think, (3) Unwarping module – changing dysfunctional thoughts, (4) De-stressing module – understanding what stresses you, (5) Relationship module – how relationships function. At the end of each module, users are asked to complete self-assessment instruments rating mood and anxiety, get feedback on their progress and are asked to set goals. The beginning of each module includes a short revision of key information from the previous module (12). Mental health experts are not included in this programme, although it can be used as part of expert treatment. Unlike similar programmes, *MoodGYM* introduces real-life situations relevant to young people using vivid illustrative characters helping users to acquire necessary skills. Throughout the duration of the programme, users are encouraged to apply what they learned in their everyday life (13). Programme evaluations tend to show that *MoodGYM* contributes to the alleviation of the symptoms of depression and dysfunctional thinking in adults and alleviation of anxiety and depression symptoms in adolescents (12).

Camp Cope-A-Lot: The Coping Cat is a part of the *Coping Cat* programme (www.cope-a-lot.com) designed for 7-13 year olds with anxiety symptoms, by Philip C. Kendall and Muniya Khanna (37). The goals of the programme are threefold: to teach children and adolescents how to recognize symptoms of anxiety and cope with them, how to reduce anxiety levels and how to help children approach developmentally appropriate, challenging tasks (38). Activities based on cognitive-behavioural therapy principles help children address their anxiety and develop coping strategies for anxiety-inducing situations. The programme is focused on four interrelated components: recognizing anxiety and physical reactions to anxiety, clarifying feelings in anxious situations, developing coping plans for such situations, evaluating performance and giving self-reinforcement (39). *Camp Cope-A-Lot: The Coping Cat* is intended for

alnih seansi kompjuterskog programa i još 6 susreta s terapeutom gdje ostatak programa prolaze zajedno u razdoblju od 12 tjedana, jer je cilj kombinirati prednosti osobnog pristupa s kompjuterskom tehnologijom (38). Terapeut pomaže djetetu da koristi naučeno u stvarnom životu na način da dijete izvršava razne zadatke u stvarnim situacijama uz prethodni dogovor s terapeutom koristeći naučeno (37). Kompjuterski program je zamišljen kao *on-line* kamp gdje animirana mačka *Charley* u simuliranim situacijama uči djecu kako se nositi sa situacijama koje pobuđuju anksioznost. Program se sastoji od 12 modula u trajanju od 35 minuta i od neobaveznih nagrađujućih video igrica. Ovaj program nije besplatan već ga je potrebno kupiti zajedno s pripadajućim priručnikom za terapeuta i ostalim materijalima (40). U istraživanju učinkovitosti programa uključili su tri skupine djece s generalnim anksioznim poremećajem; jedna je skupina prolazila *Camp Cope-A-Lot: The Coping Cat,* druga je bila u individualnoj kognitivno-bihevioralnoj terapiji, a treća je bila uključena u edukaciju i podršku uz pomoć računala. Rezultati su pokazali kako su prve dvije skupine djece postigle značajno veći napredak od one uključene u kompjutersku edukaciju i kako te dvije skupine nakon završetka više nisu zadovoljavale kriterije za generalizirani anksiozni poremećaj. U praćenju poslije programa, napredak se održao kod prve dvije skupine ispitanika, bez razlika (37).

Sparx je *on-line* preventivni program namijenjen za djecu i mlade od 12 do 19 godina s blagim do umjerenim depresivnim simptomima, a financiran je od strane vlade Novog Zelanda i besplatan je za njegove građane (www.sparx.org.nz). Autori programa su istraživači i kliničari sa Sveučilišta u Aucklandu, predvođeni Sally Merry te Karolinom Stasiak (41). Program izgleda kao 3D videoigrica gdje korisnik bira svoj lik, tj. alias koji spašava svijet od negativnosti i sumornosti. Igrom korisnik stječe vještine koje su mu potrebne kako bi postigao cilj igre, a radi se o vještinama temeljenim na prin-

7-13 year olds and involves 6 individual computer-assisted sessions as well as 6 live sessions with a therapist during a 12-week period, over which the advantages of personal approach are combined with computer technology (38). The therapist assists the child in applying learned strategies in real life through exposure tasks and problem solving in realistic situations (37). The computer programme has been designed as an online camp where Charley, the animated cat, teaches children how to cope with anxiety in simulated situations. The programme consists of twelve 35-minute modules and optional reward-based video games. It is not free of charge but sold with accompanying therapists' manual and other materials (40). Three groups of children with generalized anxiety disorder were included in the study of the efficacy of this programme; the first group took part in the *Camp Cope-A-Lot: The Coping Cat*, the second one underwent individual cognitive behavioural therapy sessions and the third group was involved in computer-facilitated education and support. The results have shown significantly more pronounced progress in the first two groups of children than in the group taking part in computerized education and support. These two groups no longer satisfied the diagnostic criteria for the generalized anxiety disorder, and their progress persisted throughout the follow-up after the programme (37).

Sparx is a preventative online programme intended for children and adolescents aged 12-19 with mild to moderate depression symptoms, funded by the New Zealand government and free for all New Zealand residents (www.sparx.org.nz). It has been created by researchers and clinical practitioners from the University of Auckland lead by Sally Merry and Karolina Stasiak (41). This programme is designed as a 3D videogame in which users pick their characters or aliases who save the world from negativity and gloom. By playing the game, the player acquires skills necessary to reach the goal, and these are the skills based on the principles of

cipima kognitivno-bihevioralne terapije koje su potrebne za prevladavanje stresa i upravljanje raspoloženjem u stvarnom životu. Program mlade podučava o pet elemenata koje su važni u smanjenju depresivnih simptoma: rješavanje problema, uključenost u aktivnosti, kultivacija pozitivnih misli, socijalne vještine i relaksacija. Rezultati evaluacije su pokazali da je Sparx jednako učinkovit kao individualni kognitivno-bihevioralni tretman za djecu od 12 do 19 godina koja pate od depresivnih simptoma, ali i za one s anksioznim simptomima (42).

cognitive behavioural therapy needed to overcome stress and regulate mood in everyday life. This program teaches young people five elements important in order to diminish symptoms of depression: problem solving, engaging in activities, cultivating positive thinking, social skills and relaxation. Evaluation results have shown Sparx to be equally effective as individual cognitive-behavioural treatment for kids aged 12-19 who are suffering from symptoms of depression as well as for those battling with anxiety symptoms (42).

ZAKLJUČNA RAZMATRANJA

Svjetski podatci jasno ukazuju na činjenicu da je depresija jedan od vodećih uzroka dizabiliteta, pa su prevencija i rani tretman prvih simptoma gorući zdravstveni prioritet. Ministarska konferencija o zdravlju koja se održala u Helsinkiju 2015. godine ističe da u odgovoru na ekonomsku krizu društvo treba učinkovitu promociju mentalnog zdravlja i prevenciju mentalnih poremećaja utjecajem na strukturne probleme (43). Kako bi se utjecalo na smanjenje internaliziranih problema na javnozdravstvenoj razini, inovativne mogućnosti pruža korištenje elemenata društvenog marketinga i medija te ponuda znanstveno-utemeljenih intervencija putem modernih tehnologija. Najviše dokaza o učinkovitosti inovativnih pristupa internaliziranim problemima dolazi od istraživanja odraslih korisnika (44,45). Robusna istraživanja internet intervencija pružaju čvrste dokaze da su *on-line* intervencije za depresivne i anksiozne simptome odraslih učinkovite te je veličina njihovog učinka d=0,88 (44). Istraživanja populacije djece i adolescenata manje su prisutna i te studije datiraju od 2009. nadalje no također su pokazale učinke od d=0,70 (22,23). Buntrock i suradnici ističu da iako studije govore o srednjim veličinama efekata navedeno ima veliki učinak za zemlje gdje nema nikakvih intervencija (45).

CONCLUDING REMARKS

According to global/world-wide data, depression is clearly one of the leading causes of disability, which is why prevention and early treatment of initial symptoms should be considered as an urgent healthcare priority. The ministerial conference on health held in Helsinki in 2015 stressed the need to address structural problems in order to achieve effective mental health promotion and mental disorders prevention in the conditions of economic crisis (43). In order to further the decline of internalized problems on the level of public health, the use of social marketing elements and media as well as scientifically proven interventions of modern technology could offer some innovative opportunities. Most evidence on the efficacy of an innovative approach to internalized problems stems from research of adult users (44,45). Robust research into internet interventions provides solid evidence supporting the efficacy of online interventions for depression and anxiety symptoms in adults, where the effect size was d=0.88 (44). There is less research into children and the adolescent population, and these studies date from 2009 onwards but they have also shown effect sizes of d=0.70 (22,23). Buntrock et al. point out that although studies demonstrate medium-scale effects these make a big difference in countries where no other interventions are present (45).

Dokazi ukazuju da korištenje medija i modernih tehnologija vrlo lako senzibilizira javnost, povećava informiranost i nudi jednostavno primjenjiv set aktivnosti koje poboljšavaju kvalitetu života ciljne populacije bez obzira na postojeći sustav. Jednom napravljen *on-line* program ili pak jednostavna web stranica dostupna je širokoj populaciji te su ulaganja puno manja nego kod intervencija licem u lice. Bez obzira na prigovore da tehnologija nikako ne može zamijeniti osobni kontakt, ako se želi mijenjati politiku za mentalno zdravlje i utjecati na kvalitetu života svih građana, javnosti apsolutno moraju biti dostupne informacije i neka prva, trijažna razina intervencija.

Ovim se radom nastoji motivirati domaću stručnu i znanstvenu javnost da odgovornije promišlja mogućnosti tehnologija i uči na primjerima dobre prakse iz svjetskih kampanji, intervencija i programa namijenjenih adresiranju internaliziranih problema i promociji mentalnog zdravlja.

Evidence suggests that using media and modern technologies can easily influence the public's attention to the problem, increase awareness and understanding and offer a set of easily applicable activities which can improve quality of life of the target population regardless of the current system. Once they are designed an online programme or a simple webpage, they become accessible to a wide audience and require much less investment than face-to-face interventions. If mental health policies are to be challenged and the quality of life of all citizens increased, then the public absolutely must have information and at least some triage level interventions, despite complaints that technology can by no means substitute for personal contact.

This paper strives to motivate the local expert and scientific community to reflect on the potential of technology and to learn from good practical examples of global campaigns, interventions and programmes intended for addressing internalized problems and mental health promotion.

LITERATURA/REFERENCES

1. Mandryk RL, Birk MV, van Rooij M, Granic I. Games for the assessment and treatment of mental health. In CHI PLAY'17 Extended Abstracts: Extended Abstracts Publication of the Annual Symposium on Computer-Human Interaction in Play 2017 (673-678).
2. Ott BL, Mack RL. Critical media studies: An introduction. John Wiley & Sons, 2010.
3. Gillan CM, Daw ND. Taking Psychiatry Research Online. Neuron 2016; 91(1): 19-23. PMID: 27387647.
4. Wittchen HU, Jacobi F, Rehm J, Gustavsson A, Svcensson M, Jönsson B *et al*. The size and burden of mental disorders and other disorders of the brain in Europe 2010. Eur Neuropsychopharmacol 2011; 21(9): 655-79.
5. Mental health atlas. World Health Organization. Dept. of Mental Health, and Substance Abuse, 2014.
6. Chisholm D, Sweeny K, Sheehan P *et al*. Scaling-up treatment of depression and anxiety: a global return on investment analysis. Lancet Psychiatry 2016; 3(5): 415-24.
7. Cuijpers P, Riper H, Andersson G. Internet-based treatment of depression. Current Opinion in Psychology 2015; 31;4:131-5.
8. Mandryk RL, Birk MV. Toward Game-Based Digital Mental Health Interventions: Player Habits and Preferences. J Med Internet Res 2017; 19(4): e128.
9. Riper H, Andersson G, Christensen H, Cuijpers P, Lange A, Eysenbach G. Theme issue on e-mental health – A growing field in Internet research. J Med Internet Res 2010; 12(5): 74, e74.
10. Novak M, Petek A. Mentalno zdravlje kao politički problem. Ljetopis socijalnog rada 2015; 22(2):191-221.
11. Muñoz RF. Using Evidence-Based Internet Interventions to Reduce Health Disparities Worldwide. Journal of Medical Internet Research 2010; 12(5): e60.
12. Eells TD, Wright JH, Barrett MS, Thase M. Computer-assisted cognitive–behavior therapy for depression. Psychotherapy 2014; 51(2): 191–197.
13. Sethi S. Treating youth depression and anxiety: a randomised controlled trial examining the efficacy of computerised versus face-to-face cognitive behaviour therapy. Australian Psychologist 2012: 48(4), 249-257.
14. Spek V, Cuijpers PIM., Nyklícek I, Riper H., Keyzer J, Pop V. Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: a meta-analysis. Psychological medicine 2007; 37(03): 319-328.

15. Van Straten A, Cuijpers P, Smits N. Effectiveness of a Web-Based Self-Help Intervention for Symptoms of Depression, Anxiety, and Stress: Randomized Controlled Trial. Journal of Media Internet Research 2008; 10(1):e7.
16. Morris ME, Kathawala Q, Leen TK, Gorenstein EE, Guilak F, DeLeeuw W, Labhard M. Mobile Therapy: Case Study Evaluations of a Cell Phone Application for Emotional Self-Awareness. Journal of Medical Internet Research 2010;12(2):e10.
17. Kotler P, Lee NR. Social marketing- Influencing behaviors for good. Los Angeles: Sage publications, 2008.
18. Andreasen AR. Social marketing in the 21st century. Thousand Oaks: Sage publications, 2006.
19. Academy for educational development. Social marketing: a practical resource for social change professionals, Washington: AED, 2008.
20. Social marketing national excellence collaborative. The basics of social marketing: how to use marketing to change behavior. Seattle: Turning Point, 2007.
21. Wallack L. Social Marketing As Prevention: Uncovering Some Critical Assumptions. Advances in Consumer Research 1984; 11: 682-687.
22. Fleming TM, Bavin L, Stasiak K , Hermansson Webb E, Merry SN, Cheek C *et al*. Serious games and gamification for mental health: current status and promising directions. Frontiers in Psychiatry 2017; 10 (7): 215.
23. Lau HM, Smit JH, Fleming TM, Riper H. Serious games for mental health: are they accessible, feasible, and effective? A systematic review and meta-analysis. Frontiers in Psychiatry 2017; 18 (7): 209.
24. Donker T, Petrie K, Proudfoot J, Clarke J, Birch M-R, Christensen H. Smartphones for Smarter Delivery of Mental Health Programs: A Systematic Review. J Med Internet Res 2013; 15(11): e247.
25. Jones SP, Patel V, Saxena S, Radcliffe N, Ali Al-Marri S, Darzi A. How Google's 'ten things we know to be true'could guide the development of mental health mobile apps. Health Affairs 2014; 33(9): 1603-11.
26. Brock RL, Lawrence E. Marital processes, neuroticism, and stress as risk factors for internalizing symptoms. Couple Family Psychol 2014; 3(1): 30-47.
27. Marakovitz SE, Wagmiller RL, Mian ND, Briggs-Gowan MJ, Carter AS. Lost toy? Monsters under the bed? Contributions of temperament and family factors to early internalizing problems in boys and girls. J Clin Child Adolesc Psychol 2011; 40(2): 233-44.
28. Cummings, EM, Cheung RYM, Davies PT. Prospective relations between parental depression, negative expressiveness, emotional insecurity, and children's internalizing symptoms. Child Psychiatry Human Development 2013; 44(6): 698-708.
29. Melchior M, Touchette E, Prokofyeva E, Chollet A, Fombonne E, Elidemir G *et al*. Negative childhood events predict trajectories of internalising symptoms up to young adulthood: an 18- year old longitudinal study. PLoS ONE 2014; 9(12): 1-13.
30. Yeung Thompson RS, Leadbeater BJ. Peer victimization and internalizing symptoms from adolescence into young adulthood: building strength through emotional support. J Res Adolesc 2012; 23(2): 290-303.
31. Beyondblue . About us, 2015. Dostupno na: https://www.beyondblue.org.au/
32. Bell Let's Talk. Our initiatives, 2015. Dostupno na: http://letstalk.bell.ca/en/our-initiatives/pillars/anti-stigma/
33. Time to change. About us, 2015. Dostupno na: http://www.time-to-change.org.uk/about-us
34. SAVE- Suicide Awareness voices of education. SAMHSA launches new suicide prevention campaign for teens, 2015. Dostupno na: http://www.save.org/index.cfm?fuseaction=home.viewPage&page_id=B6279AD5-D353-3C07-821274480AEC261D
35. Ayers N, Della Torre T, Keys S. Extending "We can help us" teen suicide prevention campaign into your community, 2010. Dostupno na: http://www.slideshare.net/SPRCST/we-can-help-us-webinar-slideshare-version-4659527
36. SAMHSA's National registry of evidence-based programs and practices. MoodGYM, 2015. Dostupno na: http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=319
37. Khanna MS, Kendall PC. Computer-assisted cognitive behavioral therapy for child anxiety: results of a randomized clinical trial. J Consult Clin Psychol 2010; 78(5): 737-45.
38. Sociometrics. Coping cat: cognitive-behavioral therapy for anxious children, 2015. Dostupno na: http://www.socio.com/ced06.php
39. Promising practices networks. Coping cat, 2015. Dostupno na: http://www.promisingpractices.net/program.asp?programid=153
40. Observer. A stay at Camp Cope-a-lot for anxious kids, 2015. Dostupno na: http://www.psychologicalscience.org/index.php/publications/observer/2014/september-14/a-stay-at-camp-cope-a-lot-for-anxious-kids.html
41. Merry SN, Stasiak K, Shepherd M, Frampton C, Fleming T, Lucassen MFG *et al*. The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: randomised controlled non-inferiority trial. BMJ 2012; 344: e2598.
42. Beehive- the official website of New Zealand goverment. SPARX, 2015. Dostupno na: http://www.beehive.govt.nz/sites/all/files/SPARX_one-pager.pdf>.
43. Join Action: Mental health and wellbeing. Publications, 2015. Dostupno na: http://www.mentalhealthandwellbeing.eu/publications
44. Andersson G, Cuijpers P. Pros and cons of online cognitive–behavioural therapy. Br J Psychiatry 2008; 193(4): 270-1.
45. Buntrock C, Ebert DD, Lehr D, Smit F, Riper H, Berking M, Cuijpers P *et al*. Effect of a web-based guided self-help intervention for prevention of major depression in adults with subthreshold depression: a randomized clinical trial. JAMA 2016; 315(17): 1854-63.

Motivacijski intervju s djecom i adolescentima: Razvojni pristup i prikaz bolesnika

/ Motivational Interviewing with Children and Adolescents: Developmental Perspective and a Case Report

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Motivacijski intervju (MI) je na dokazima temeljena, prema klijentu usmjerena, kolaborativna terapijska tehnika za povećanje motivacije za promjenu razrješenjem ambivalencije. MI je razvijen u području ovisnosti i prerastao je u široko korištenu bihevioralnu intervenciju. MI naglašava autonomiju, empatiju te uvažavanje vjerovanja i misli o promjeni pacijenta. Iako može biti samostalna intervencija, MI se koristi i za povećanje motivacije prije početka ili kod gubitka motivacije tijekom zdravstvenog tretmana. Istraživanja MI su primarno bila usmjerena na odraslu populaciju te studije učinkovitosti za mlađu populaciju fokusirane na adolescente i preadolescente, a ne djecu predškolske i školske dobi. Izostanak direktnih istraživanja na djeci mlađe dobi nastao je zbog zahtjeva za određenim stupnjem apstraktnog mišljenja za provođenje MI. Međutim, novija istraživanja pokazuju da je moguće prilagoditi MI teoriju i primjenu na jezik razumljiv i svrsishodan djeci. Korištenje MI materijala specifičnih za mlade s prikladnim i fleksibilnim adaptacijama aktivnosti omogućuje postizanje pozitivnih ishoda kod djece. Cilj je ovog rada prikazati glavne principe MI te suvremene spoznaje o razvojnoj primjerenosti i učinkovitosti MI u djece i adolescenata.

/ Motivational interviewing (MI) is an evidenced-based, client-centered collaborative therapeutic method of enhancing motivation for change through the resolution of ambivalence. MI was developed in the field of addictions and has grown into a widely applied behavioural intervention. While it can be a stand-alone intervention, MI may also be used as a springboard for motivation before starting health treatment or to address dips in motivation throughout treatment. MI research have primarily centered on the study of adults, with studies of its effectiveness for youth and children focusing on adolescent and pre-adolescent youth rather than preschool or elementary aged children. The lack of direct study with young children was due to the requirement for some degree of abstract reasoning to conduct MI. However, recent evidence shows that it is possible to translate MI theory and practice into childfriendly language which is understandable and meaningful to younger children. Using MI-based materials specifically aimed at young people and making appropriate and flexible adaptations to the activities help to enable positive outcomes for the children. The purpose of this paper was to provide core principles of MI and the current knowledge on its developmental appropriateness and effectiveness for children and adolescents.

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UVOD

Motivacijski intervju (MI) je na dokazima temeljena, prema klijentu usmjerena, suradna terapijska tehnika za povećanje motivacije za promjenu kroz razrješenje ambivalencije (1). Ambivalencija podrazumijeva nesigurnost ili nemogućnost donošenja odluke zbog istodobne ili promjenljive želje za ostvarenjem dviju suprotnih ili različitih aktivnosti. Ambivalencija često ima ključnu ulogu u psihološkim poteškoćama. Umjesto interpretiranja ambivalencije kao patološke ili kao naznake nečije moralne ili ponašajne slabosti MI tumači ambivalenciju kao rješiv problem koji jednom razrješen pokreće osobu prema promjeni (2).

MI je prvi opisao Miller koji je ujedinio i prilagodio elemente Rogerove prema klijentu usmjerene terapije (4), Festingerove teorije kognitivne disonancije (5) i Bemove teorije samo-percepcije (6). MI naglašava autonomiju, empatiju, uvažavanje pacijentovih vlastitih vjerovanja i misli o promjeni. Prisutan je također i direktivni element različitim izazivanjem i potkrepljenjem razgovora o promjeni (1).

Početni cilj MI je olakšati povećanje klijentove intrinzičke motivacije, opredjeljenja (Faza 1) i potom pripreme za promjenu (Faza 2) (8). Ponajprije, terapijski odnos je partnerstvo u kojem se poštuje pacijentova autonomija (8).

INTRODUCTION

Motivational interviewing (MI) is an evidenced-based, client-centred collaborative therapeutic method of enhancing motivation for change through the resolution of ambivalence (1). Ambivalence refers to an uncertainty or inability to make a choice because of the simultaneous or fluctuating desires to engage in two opposite or conflicting activities. Ambivalence frequently plays a key role in psychological difficulties. Rather than interpreting ambivalence as pathological or an indication of someone's moral or behavioural weakness, MI construes ambivalence as a resolvable issue that, once resolved, will move a person toward change (2).

MI was first described by Miller (3) who combined and adapted elements of Rogers' client-centred therapy (4), Festinger's (5) theory of cognitive dissonance and Bem's (6) self-perception theory. MI emphasises autonomy, empathy, and respect for the patient's own beliefs and thoughts about change. There is also a directive element guided by differentially eliciting and reinforcing change talk (1).

The initial goal of MI is to facilitate an increase in the client's intrinsic motivation, commitment (Phase 1) and then preparation for change (Phase 2) (8). Primarily, the therapeutic relationship is a partnership where the patient's autonomy is re-

Poticanje promjene se osniva na suptilnom, nježnom i osjetljivom vođenju, procesu koji je gotovo neprimjetan promatraču (1). U početku terapeut pomaže pacijentu razviti diskrepanciju između sadašnje situacije i njegovih željenih ciljeva. Suptilne metode koje se koriste kako bi pokrenule diskrepanciju su različite od otvoreno direktivnih i konfrontirajućih metoda koje su se ranije koristile. Poticanje samo-motivirajućeg govora (govora o promjeni) omogućuje pacijentu sagledati vlastite prednosti i nedostatke promjene. Iako može biti samostalna intervencija, MI se može također koristiti za poticanje motivacije prije početka zdravstvenog liječenja ili kako bi se poradilo na zastojima u motivaciji tijekom tretmana (9).

MI je prvotno razvijen za osobe sa zloporabom i ovisnostima. Tijekom godina MI je modificiran i prilagođen za korištenje u različitim kliničkim područjima, uključujući ovisnosti, mentalno zdravlje i zdravstvenu skrb (10). Većina istraživanja u posljednjih 30 godina ispitivala su korištenje MI u odraslih i veliki je broj pozitivnih rezultata. Atkinson i Woods (11) ističu potencijalnu korist MI u radu s djecom i mladima kod kojih je poticaj za upućivanje obično od treće strane.

Cilj je ovog rada prikazati osnovne principe MI i sadašnje spoznaje o razvojnoj primjerenosti za djecu školske dobi i adolescente. Posebno će biti prikazani kognitivni procesi u okviru neurorazvoja i kognitivnog razvoja djece i adolescenata uključeni u MI te implikacije za korištenje MI u djece i adolescenata od stane stručnjaka za mentalno zdravlje i preporuke za daljnja istraživanja.

MOTIVACIJSKI INTERVJU KAO INTERVENCIJA

Za podršku MI često je korišten je Transteorijski model (TTM) (12) koji se također naziva Model stadija promjene. Prema ovom modelu, koji je prikazan na sl. 1., osoba prolazi kroz

spected (8). The facilitation of change is based on subtle, gentle and responsive guiding, a process almost undetectable to an observer (1). Initially the therapist helps the patient develop discrepancy between their present situation and their desired goal. The subtle methods used to initiate the discrepancy are a far cry from the overtly directive and confrontational methods once employed. The evocation of self-motivating speech (change talk) allows the patient to develop their own advantages and disadvantages of change. While it can be a stand-alone intervention, MI may also be used as a springboard for motivation before starting health treatment or to address dips in motivation throughout treatment (9).

MI was originally developed for people with substance abuse disorders. Over the years, MI has been modified and adapted for use in many clinical areas, including addictive behaviours, mental health and medical management (10). The majority of research over the last 30 years has investigated the use of MI with adults and a considerable volume has yielded positive results. Atkinson and Woods (11) highlight its potential usefulness in work with children and young people, where the impetus for referral is typically from a third party.

The purpose of this paper was to provide core principles of MI and the current knowledge on its developmental appropriateness for school-aged children and adolescents. Specifically, we present cognitive processes involved in MI in terms of child and adolescent cognitive development and neurodevelopment, and implications for using MI with children and adolescents, considerations for school-based mental health professionals and suggestions for future research.

MOTIVATIONAL INTERVIEWING AS AN INTERVENTION

The framework frequently used to support MI has been the Transtheoretical Model (TTM) (12), also referred to as the Model of Stages

pet stadija promjene: prekontemplacija (još ne razmatra promjenu), kontemplacija (razmatra promjenu), priprema (planiranje i posvećenost promjeni), akcija (promjene u ponašanju) i održavanje (održavanje i podržavanje dugoročne promjene).

MI i TTM su se često koristili zajedno u kliničkim i obrazovnim ustanovama. Međutim, Miller i Rollnick u zadnje vrijeme jasno naglašavaju razliku između MI i TTM (13).

Miller i Rollnick (1,8) opisuju tri principa koji čine osnovu MI (suradnja, poticanje i autonomija) te četiri praktična principa koja određuju ulogu terapeuta (empatija, razvijanje diskrepancije, rad na otporu i podržavanje samo-učinkovitosti). Navedeni principi MI su prikazani u Prikazu 1 i 2.

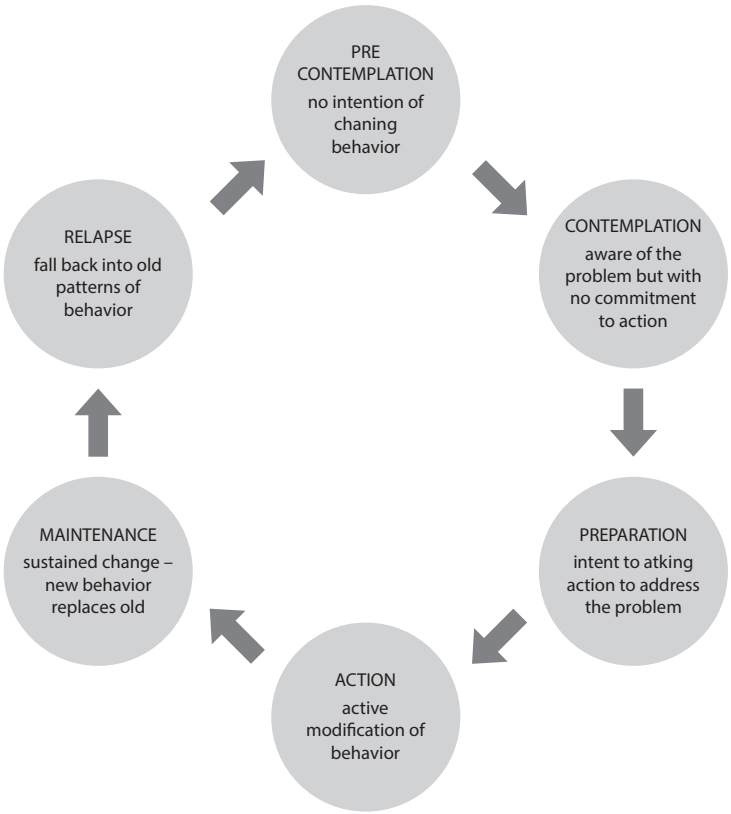
Pojam aktivno slušanje je temeljno za MI i karakterizira ga mnemonički izraz „OPRS“ koji označava otvorena pitanja, afirmacije, refleksije i sažetke (1,8).

of Change. In this model shown in Picture 1, it is posited that a person progresses through 5 stages of change: precontemplation (not yet considering change), contemplation (considering change), preparation (planning and committing to change), action (making the behaviour change) and maintenance (maintaining and sustaining long-term change).

MI and the TTM have frequently been used in conjunction in both clinical and educational settings. In recent times, Miller and Rollnick have increasingly distanced MI from TTM (13).

Miller and Rollnick (1,8) describe three fundamental principles that encapsulate the spirit of MI (collaboration, evocation and autonomy), and four practical principles defining the practitioner role (empathy, develop discrepancy, roll with resistance and support self-efficacy). These are paraphrased in Figures 1 and 2.

The notion of active listening is fundamental to MI and characterised by the mnemonic "*OARS*",



PICTURE 1. Transtheoretical Model of Stages of Change by DiClemente and Prochaska (12)

Prikaz 1. Osnovni postulati motivacijskog intervjua (Miller i Rollnick, 2002)

1. ***Suradnja*** podrazumijeva odnos između klijenta i terapeuta u kojem su obje strane aktivni sudionici u procesu rješavanja problema koji uključuje identificiranje problema, sakupljanje i analiziranje informacija vezanih uz problem, planiranje intervencija i evaluaciju ishoda.
2. ***Poticanje*** se osniva na činjenici da je želja za promjenom u klijentu. Terapeut djeluje kao voditelj koristeći klijentovo vlastito znanje, iskustva, vrijednosti i ciljeve kako bi poticao motivaciju za procjenu za razliku od edukacije ili pružanje znanja ili nagovora za promjenu.
3. ***Autonomija*** se odnosi na klijentovu slobodu za ili protiv promjene. Važno je da terapeut prepozna i prihvati klijentovu autonomiju. Terapeut potiče promjenu pomažući klijentu napraviti izbor temeljen na informacijama i prihvatiti odgovornost za svoj izbor. To je u suprotnosti s raspravljanjem ili davanjem savjeta koji izazivaju otpor što povećava vjerojatnost promjene ponašanja u smjeru suprotnom od onog kojem terapeut pokušava usmjeriti klijenta.

Prikaz 2. Principi motivacijskog intervjua (Miller i Rollnick, 2002)

1. ***Izražavanje empatije*** se odnosi na sposobnost terapeuta da pokaže klijentu da razumije njegove osjećaje i situaciju na neosuđujući način.
2. ***Razvijanje diskrepancije*** se osniva na pomaganju klijentu da uvidi diskrepanciju između sadašnjeg stanja i željenih ciljeva.
3. ***Rad na otporu*** se odnosi na činjenicu da se terapeut nikada ne smije prepirati s klijentom kako bi potaknuo klijenta na promjenu, jer to povećava otpor klijenta prema promjeni.
4. ***Podržavanje samo-učinkovitosti*** uključuje povećanje klijentovog vjerovanja u vlastitu sposobnost za promjenu.

Otvorena pitanja otvaraju mogućnost za pacijenta da govori nasuprot tzv. zatvorenim pitanjima koja izazivaju jednolične odgovore. Sveukupno pitanja trebaju biti ograničena (nikad više od tri u slijedu). Preporuča se koristiti refleksije umjesto pitanja.

Figure 1. The spirit of MI (Miller and Rollnick, 2002)

1. ***Collaboration*** refers to a relationship between the client and the counsellor in which both parties are active participants in the problem-solving process, which includes identifying the problem, gathering and analysing information related to the problem, designing interventions and evaluating outcomes.
2. ***Evocation*** is based on the notion that the desire to change is within the client. The therapist acts as a guide using the client's own knowledge, experiences, values and goals to elicit the motivation to change as opposed to educating or providing knowledge or incentives for change.
3. ***Autonomy*** refers to the client's freedom to change or not. It is important for the counsellor to recognize and accept the client's autonomy. The counsellor promotes change by helping the client make informed choices and accept responsibility for their choices. It is opposed to arguing and giving advice that can increase reactance, which has been shown to increase the likelihood of behaviour change in the direction opposite of that in which the therapist is attempting to steer the client.

Figure 2. The principles of MI (Miller and Rollnick, 2002)

1. ***Expressing empathy*** refers to the counsellor's ability to show the client that she understands the client's feelings and situation in a non-judgemental manner.
2. ***Developing discrepancy*** is based on helping the client develop discrepancy between the present state of affairs and their desired goal.
3. ***Rolling with resistance*** refers to the notion that the counsellor should never argue with the client in order to get the client to change because this increases the client's resistance to change.
4. ***Supporting self-efficacy*** involves enhancing the client's belief in their own ability to change.

which stands for Open-ended questions, Affirmations, Reflections and Summaries (1,8).

Open questions open the opportunity for the patient to speak as opposed to closed questions which elicit monosyllabic answers. Questions

Afirmacije. Terapeut ima suosjećajan stav prihvaćanja i reflektira snage i pozitivne pomake prema korisnijim ponašanjima.

Refleksije su implicitni znak slušanja koje mogu ohrabriti pacijenta da se zaustavi na misli, jer je u stanju čuti ono što on sam razmišlja. Ovo može voditi daljnjoj eleboraciji. Refleksije odražavaju empatiju. Komplekne refleksije pokreću konverzaciju i usmjeravaju je prema promjeni oslanjanjem na emocionalnu energiju, poticanjem samo-učinkovitosti i naglašavanjem učinkovitih strategija promjene. Koristi se nekoliko načina refleksije koje smanjuju otpor: na primjer, dvostrana refleksija suprotstavlja i približava razloge za i protiv promjene.

Sažetci. Kratko ponavljanje koje sadrži srž rasprave, posebno ideja, namjera i ponašanja za promjenu, može koristiti u određenim intervalima kako bi pacijent mogao čuti što on/ona misli i govori.

Frey i sur. (14) opisuju važnost *govora o promjeni*, koji se događa nakon nakon što su definirani klijentovi motivi za promjenu (1). Potiče ga terapeut koji naglašava prednosti promjene i nedostatke sadašnje situacije zadržavajući ulogu „ne-eksperta“ što omogućava da klijent počinje odvagivati prednosti i nedostatke sadašnjeg i budućeg ponašanja.

MOTIVACIJSKI INTERVJU S DJECOM I ADOLESCENTIMA – RAZVOJNA PERSPEKTIVA

Istraživanja MI su primarno bila usmjerena na odrasle, a studije učinkovitosti za mlade bile su fokusirane na adolescente i preadolescente za razliku od djece predškolske i školske dobi. Lundahl i sur. (15) su objasnili nedostatak direktnih istraživanja na mlađoj djeci zahtjevom za određenim stupnjem apstraktnog mišljenja s obzirom da se MI provodi u kognitivnoj sferi

Affirmations. The therapist has a compassionate accepting stance and reflects upon strengths and positive moves towards more helpful behaviours.

Reflections are an implicit mark of listening, which may encourage the patient to pause for thought as they are able to hear what they themselves are thinking. This in turn may lead to further elaboration. Reflections convey empathy. Complex reflections move the conversation forward and direct it towards change by drawing upon emotional energy, enhancing self-efficacy, or emphasizing effective change strategies. Several forms of reflections are used to side step resistance: for example, a double sided reflection contrasts and joins reasons for and against change.

Summaries. Short précis that encapsulate the gist of the argument, particularly of the pro change ideas, intentions or behaviours, can be used at intervals to enable the patient to hear what he/she is thinking and saying.

Frey et al. (14) describe the importance of *change talk*, which occurs after the client's motives for change have been established (1). It is elicited by the practitioner, who highlights the advantages of the change and the disadvantages of the current situation, while retaining a "non-expert" role, which allows the client to begin to weigh up the advantages and disadvantages of current and future behaviour.

MI WITH CHILDREN AND ADOLESCENTS – DEVELOPMENTAL CONSIDERATIONS

MI investigations have primarily centred on the study of adults, with studies of its effectiveness for youth and children focusing on adolescent and pre-adolescent youth rather than preschool or elementary aged children. Lundahl et

(16). Stoga autori zaključuju da MI ne može biti od pomoći u mlađe djece.

Smatra se da učinkovitost MI ovisi o klijentovom odgovoru na ključna ponašanja terapeuta koja potiču osjećaj suradnje, samo-evaluaciju i razvoj osjećaja autonomije (1). Nadalje, pretpostavlja se da odgovor klijenta ovisi i o razvoju niza kognitivnih procesa (kontrola pažnje, moralno prosuđivanje, odlučivanje, osjećaj selfa, samoprocjena, samokontrola, planiranje, teorija uma i postavljanje ciljeva).

Istraživanja pokazuju da su funkcije uočavanja (pažnja i perceptualna sposobnost) i afektivnosti (moralna prosudba i emocionalno procesiranje držanja, vrijednosti i ponašanja vršnjaka i odraslih) u potpunosti razvijene do dobi od 12 godina (17,18). Razvoj kognitivnih regulatornih funkcija je dugotrajan tijekom djetinjstva i adolescencije (18). U adolescenciji dolazi do povećanja impulzivnog ponašanja što znači da adolescenti mogu imati probleme samokontrole kao rezultat odgođenog sazrijevanja prefrontalnog korteksa (19). Međutim, istraživanja izvršnog funkcioniranja (odlučivanje, planiranje, postavljanje ciljeva, samokontrola, osobno upravljanje, teorija uma, samosvjesnost i samoprocjena) pokazuju da su mnogi procesi povezani s kognitivnim regulatornim funkcijama relativno sazreli i funkcionalni do dobi od 12 godina (20). S obzirom da je većina kognitivnih procesa razvijena ili doseže punu maturaciju do dobi od 12 godina, opravdano je smatrati MI kao zdravstvenu intervenciju za preadolescente i adolescente (18).

Prve studije koje su uključivale predškolsku i osnovnoškolsku djecu su ukazivale da se MI može koristiti s roditeljima i učiteljima koji imaju značajnu ulogu u životu djeteta (21,22) te kontroliraju kućno i školsko okruženje. U kontekstu mentalnog zdravlja u školi, MI predstavlja način promjene ponašanja odraslih kao medijatora promjene ponašanja djeteta. Frey i sur. (14) tvrde da principi MI trebaju činiti

al. (15) explained the lack of direct study with young children with the requirement for some degree of abstract reasoning that should be present as MI is conducted within a cognitive medium (16); thus, he concluded that MI may not be helpful in preteen children.

The efficacy of MI is thought to be contingent on the client's responsiveness to key therapist behaviours that promote a sense of collaboration, evoke self-evaluative statements and develop a sense of autonomy (1). In addition, client responsiveness is hypothesized to be contingent on the development of an array of cognitive processes (e.g. attentional control, moral judgement, decision making, sense of self, self-appraisal, self-control, evaluation, planning, theory of mind and goal setting).

Research indicates that the detection function (basic attentional and perceptual capacity) and affective functions (moral judgement and emotional processing of peer and adult attitudes, values and behaviours) are fully developed by the age of 12 (17,18). Development of the cognitive regulatory functions is protracted throughout childhood and adolescence (18). There are increases in impulsive behaviour which means that adolescents may have difficulty in self-control as a result of the delay of prefrontal cortex maturation (19). However, research on executive (decision making, planning, goal setting, self-control, personal agency, theory of mind and self-awareness and self-appraisal) functioning indicates that many of the processes related to the cognitive regulatory functions are relatively mature and functional by the age of 12 (20). Given the vast majority of cognitive processes are developed or are reaching full maturation by the age of 12, it is reasonable to consider MI a potential health intervention for middle and high school students (18).

The first studies that involved preschool and elementary aged children suggested that MI can be used with parents and teachers, who play a significant role in the life of the child (21,22)

osnovu konverzacije s učenicima, roditeljima i nastavnicima.

Istraživanja MI u mlađe djece su tek u začetku. Vrlo je vjerojatno da se MI može koristiti s određenom učinkovitošću u mlađe djece (23). Daljnja istraživanja u ovom području pokazat će spektar potrebnih MI vještina koje su prikladne za određeni razvojni stupanj.

KORIŠTENJE TEHNIKA MOTIVACIJSKOG INTERVJUA S DJECOM I ADOLESCENTIMA

Istraživanja pokazuju da spremnost djece, mladih i obitelji za liječenje može utjecati na terapijski proces i uspjeh tretmana (24). Drugim riječima, važno je za klijente da se osjećaju spremnima za promjenu kako bi tretman u području mentalnog zdravlja bio učinkovit. Osim spremnosti za početak tretmana, posvećenost terapijskim ciljevima tijekom tretmana je imperativ za postizanje tih ciljeva. Stoga je ključno za terapeute uključiti i motivirati mlade i obitelji prije i tijekom tretmana kako bi se povećala učinkovitost (24). Izgradnja snažnog terapijskog saveza s mladima i obiteljima je prvi i najvažniji čimbenik u poticanju uključenosti i povećanju motivacije (25).

Po svojoj prirodi MI nije direktivan i autoritaran te je kao takav prikladan za mlade osobe koje zahtijevaju više suradnički i nekonfrontirajući pristup (8). MI može biti posebno privlačan djeci i mladima zbog svoje specifične karakteristike da ne pretpostavlja klijentovu spremnost za promjenu. Ovo je posebno važno kada osoba koja je zabrinuta nije dijete, jer dopušta razmatranje različitih čimbenika koji mogu uzrokovati da je dijete ambivalentno ili u otporu prema promjeni.

Većina istraživanja provedena na mladim osobama bila su usmjerena na ovisnosti uključujući puštenje (26), alkohol (27) i kanabis (28). U posljednje vrijeme tehnike MI su korištene za

and control home and school environments. In the context of school mental health, MI is promising as a vehicle to change adult behaviour, while mediating changes in the child's behaviour. Frey et al. (14) claim that MI principles should form the basis of conversations with students, parents and teachers.

The direct study of MI with young children is only just beginning. It may be plausible that MI could be utilized with young children with some effectiveness (23). More likely, continued research in this area could reveal a continuum of MI requisite skills that are appropriate for certain developmental levels.

THE USE OF MI TECHNIQUES WITH CHILDREN AND ADOLESCENTS

Research shows that the treatment readiness of children, youth and families can influence the therapeutic process and treatment success (24). In other words, it is important for clients to feel ready for change in order for mental health treatment to be effective. In addition to feeling ready at the start of treatment, staying committed to treatment goals throughout the course of treatment is imperative to reaching those goals. Consequently, it is crucial for practitioners to engage and motivate youth and families both before and throughout treatment to maximize its effectiveness (24). Building a strong working alliance with youth and families is thought to be the first and most important ingredient for enhancing engagement and fuelling motivation (25).

MI is by its nature not directive or authoritarian and, as such, it is suited for young people who require a more collaborative and non-confrontational approach (8). MI may be particularly appealing to children and youth because of its distinctive feature of not assuming client readiness for change. This is important when the concern holder is typically not the child, as it allows consideration of different factors which can cause the child to be ambivalent about, or even resistant to change.

mlade osobe s depresijom (29) i samoozljeđivanjem (30). Intervencije MI su poboljšale uzimanje antidepresiva i stabilizatora raspoloženja u adolescenata s depresijom (31). MI također pomaže uključivanju obitelji adolescenata s ADHD u tretman i poboljšava simptome i oštećenja (32). Istraživanja su pokazala pozitivne rezultate u mladih s poremećajima hranjenja, opsesivno-kompulzivnim poremećajem, HIV-om i drugim kroničnim somatskim stanjima (20), kao i poboljšanje akademskog uspjeha i ponašanja srednjoškolaca (33). Korištenje tehnika MI u pretile djece je pokazalo pozitivne kratkoročne rezultate (34,35), no potrebno je još ispitati i dugoročnu učinkovitost.

MI se koristi s mladima u obrazovnom sustavu s rastućim interesom i ohrabrujućim rezultatima (36,37). Frey i sur. (14) su istaknuli da će MI biti sve više korišten u obrazovanju zbog fleksibilnosti i utemeljenosti na dokazima. Woods, McArdle i Tabassum (38) u svom sistematskom pregledu literature o korištenju MI s djecom i mladima u školama ukazuju vjerojatnu učinkovitost prilagodbom dobi djece. Međutim, uporaba tehnika MI u osnovnoškolske djece je trenutno još uvijek slabo istraženo područje.

McNamara (37) navodi da su bihevioralne intervencije s mlađom djecom koja imaju socijalne, emocionalne i ponašajne probleme ograničene u svojoj mogućnosti promjene ponašanja, jer pretpostavljaju da se ponašanje mijenja ekstrinzički. Autor predlaže promjenu intervencija za mlađu djecu prema onima koje su usmjerene na misli, osjećaje, intrinzičku motivaciju i suradnju, što su sve principi uključeni u MI. McNamara (37) također predlaže da se teorija i praksa MI prevedu na jezik prihvatljiv za djecu koji im je razumljiv i smislen. Materijali MI koji su specifično usmjereni na mlade ljude te odgovarajuće i fleksibilne prilagodbe aktivnosti pomažu u ostvarivanju pozitivnih ishoda za mlađu djecu. Nedavne meta-analize primjene MI s mlađom djecom pokazuju da su

The majority of research with young people has focused on substance related behaviours, including smoking (26), drinking (27) and marijuana use (28).

More recently, MI techniques have been used to support young people suffering from depression (29) and self-injurious behaviour (30). MI intervention improved antidepressants and mood stabilizers adherence in adolescents with depression (31). MI helped engage families in treatment and improve the symptoms and impairments of adolescents with ADHD (32). Research has also shown positive results with youth with eating disorders, obsessive-compulsive disorder and HIV or other chronic medical conditions (20) as well as middle school students' academic performance and behaviour (33). The use of MI techniques with overweight children showed positive results in the short term (34,35), but long-term efficacy still needs to be evaluated.

MI has also been utilised with young people in the educational sectors with growing interest and encouraging results (36,37). Frey et al. (14) proposed that MI will be used increasingly within educational settings because of its flexibility and the encouraging evidence-base it is producing. Woods, McArdle and Tabassum (38) have undertaken a systematic review of literature relating to the use of MI with children and young people in schools and suggest its possible effectiveness through age-appropriate adaptations. However, the use of MI techniques with primary school children is currently an under-researched area.

McNamara (37) proposes that behavioural interventions for younger children with social, emotional and behavioural difficulties are limited in their capacity because they assume that behaviour is changed extrinsically. He proposes that interventions for younger children should be shifting towards those that focus on thoughts, feelings, intrinsic motivation and collaboration, which are properties incorporated in MI.

McNamara (37) suggests that MI theory and practice need to be translated into child-friend-

adaptacije tipične (39,40). Međutim, bitno je da intervencije sadrže osnovne postavke i principe MI.

PRIKAZ BOLESNIKA

Petar (star 9 godina) živi s majkom, očuhom i mlađim bratom (star 6 mjeseci). Dječak nikada nije upoznao biološkog oca. Upućen je dječjem psihijatru zbog značajnih promjena u ponašanju koje traju zadnjih 6 mjeseci. Školski psiholog je opisao ponašanje dječaka: izgleda umorno većinu dana, rijetko uspostavlja kontakt pogledom i smije se, uopće nije motiviran u razredu, treba mu dugo da započne i često ne završi zadatke, uznemiri se kada mu se postavi pitanje, ocjene su se značajno snizile, izbjegava drugu djecu tijekom odmora, sjedi sam u klupi.

Procjena multidisciplinskog tima (dječji psihijatar, klinički psiholog, logoped, EEG i neuropedijatar) pokazala je da su dječakove intelektualno sposobnosti prosječne te da su prisutni klinički značajni anksiozno-depresivni simptomi uz vjerojatnost da je rođenje brata i osjećaj gubitka ranije pozicije u obiteljskom okruženju doprinijelo gubitku školske i socijalne uključenosti. Preporučena je psihoterapija, no dječak se nije htio uključiti. Dječakovoj majci pružena je podrška da dovede dječaka na terapiju te je najprije primijenjen MI.

Provedene su četiri seanse MI, 45 minuta svaka. Tablica 1 prikazuje aktivnosti koje su se koristile i detalje svake seanse s dječakom. Specifične prilagodbe kako bi aktivnosti MI bile dostupne djetetu su uključivale crteže, radne listiće i flomastere, različite boje za različito ponašanje, igranje uloga za istraživanje ponašanja i osjećaja i potkrepljivače (nagrade) za izvršene aktivnosti (naljepnice u boji). Dječak je uživao u aktivnostima te je uspješno mogao razviti samosvijesnost tijekom praktičnih vježbi.

ly language which is understandable and meaningful to the child. MI-based materials specifically aimed at young people and making appropriate and flexible adaptations to the activities help enable positive outcomes for younger children. Recent meta-analyses of MI in younger children report adaptations to be typical (39,40). However, it is vital that the MI intervention embodies its spirit and principles.

CASE REPORT

Peter (aged 9) lived with his mother, stepfather and young brother (aged 6 months). He has never met his biological father. He was referred to child and adolescent psychiatrist for a significant change in his behaviour that has lasted for the past 6 months. Peter's school psychologist described his behaviours as: looks tired most days, rarely makes eye contact, smiles or laughs, generally unmotivated within the classroom, takes a long time to initiate a task and often does not finish his work, looks annoyed if asked a question, his grades had dropped significantly, withdraws from other children during schoolbreakes, sits by himself.

Multidisciplinary team assessment (child psychiatrist, clinical psychologist, speech therapist, EEG and neuropediatrician) showed that the boy's intellectual abilities were average and that clinically significant anxious-depressive symptoms were present with the possibility that his brother's birth and his resultant feelings of loss of his previous position within the family environment may have contributed to his lack of school and social engagement. Psychotherapy was recommended, but the boy was reluctant to engage. His mother was encouraged to bring him to the sessions and it was decided that MI will be done first.

Four sessions of MI, 45 minutes each, were conducted. Table 1 presents the activities used and details about each session with Peter. Specific adaptations to make the MI activities ac-

TABLE 1. Motivational Interviewing (MI) activities with an elementary school aged child

Session	Activities	Description
Session one	Words that describe me	Allows child to consider his skills and assets, but also his shortages
	My life	Helps child to develop an understanding of the different aspects of his life (family, school, friends, hobbies, etc.)
	Self-evaluation	Allows child to evaluate his satisfaction with different aspects of his life.
Session two	Me and my feelings	Addressing feeling fear, anxiety, sadness or worry because of the problematic behaviour
	Me and others	Helps child to understand how his problematic behaviour affects himself and others
	The good things and less good things about my behaviour	Helps child to understand advantages and disadvantages of his problematic behaviour
Session three	Weighing it up Thinking about change	Considers motivation and ability to change, reflects on the child's skills and how these might support change
	Looking into the future	Considers child's future life and helps child set goals for different aspects of his life and create a new self-image
Session four	Using my skills to change	Reflects on child's skills and how these might support change
	Get support	Finding people who can help with making the change
	New skills	Helps child to develop an understanding that some new skills (social skills, problem solving, self-control, assertiveness, good thinking) need to be learned and practiced to make the change and reach the goals
	More encouragement	Using reminders and cues that encourage positive behaviour

Petar se doimao uzbuđen govoriti o hobijima (igranje nogometa) i bio je spreman iznijeti detalje o tome. Ova tema je predstavljala pozitivan aspekt Petrovog života. Aktivnosti MI su tražile da Petar razmatra i ostale aspekte svog života koji nisu bili tako pozitivni. Aktivnosti su omogućavale da razmotri razloge zašto voli, odnosno ne voli neke aspekte škole, prijatelja, obiteljskog života, te svoje ponašanje koje je povezano s osjećajima. Daljnje MI aktivnosti su bile usmjerene na razgovor o budućim željama i povećanju unutarnje motivacije za ostvarenje ciljeva. Petar je uspio odrediti specifične buduće ciljeve, na primjer, obiteljske odnose (bolji odnos sa svojom majkom, zajedničke aktivnosti, pomaganje u kući), školska postignuća (redovito izvršavanje zadaće, 2 sata dnevno učenje, dodatna pomoć za teže predmete) i odnose s prijateljima (aktivnosti s dva najbolja prijatelja u školi i tijekom vikenda).

Pohvale i nagrade (naljepnice u boji) su povećavale motivaciju za sudjelovanje u MI aktivnostima tijekom seansi. U prve dvije seanse Petar je postavljao brojna pitanja i bila su potrebna pojašnjenja. Neke od aktivnosti su bile Petru zahtjevnije, na primjer, otvorena pitanja. Kada su povećani praktični i konkretni elementi u tehnikama, dječak je bolje razumio i mogao je

cessible to the child included using drawings, worksheets and coloured felt tip pens, different colours for opposite behaviours, role-plays to explore behaviours and emotions and reinforcement (rewards) for completed activities (coloured stickers). The boy enjoyed practical elements and was able to develop his self-awareness most effectively during the practical activities.

Peter appeared excited to speak about his hobbies (playing football) and he was eager to share details about it. This theme reflects a positive aspect of Peter's life. The MI activities required Peter to consider other aspects of his life that were not so positive. The activities allowed him to reflect on the reasons why he liked and did not like some aspects of school, friends and family life and on his behaviour related to his feelings. Further MI-based activities aimed to elicit conversations about future aspirations with a view to building internal motivation to achieve goals. Peter was able to consider specific future elements and goals, for example, family relationships (a better relationship with his mother, joint activities, helping in the household), school achievements (doing homework regularly, 2 hours of studying per day, extra help for difficult subjects), and engagement with friends (activities with 2 best friends in school and during weekends).

razmotriti kompleksnije misli. Radni listići i aktivnosti koje su se koristile u seansama MI omogućavale su da Petar raspravlja o različitim aspektima svoje osobe i poveća znanje i razumijevanje o svojoj trenutnoj situaciji, vještinama i sposobnostima. Ovo upućuje da korištenje MI pristupa na praktičan način može biti prikladno za školsku djecu. „Suradnja" kao osnovna postavka MI se pokazala vrlo važnom te je tijekom seansi dječak uspostavio suradnički odnos i poštivanje terapeuta. Dječakova se samostalnost povećala kako je dolazio na sve više seansi te se također povećalo i njegovo vjerovanje u vlastite sposobnosti i znanje o vlastitim vještinama. Petar je razvio razumijevanje da će u postizanju svojih ciljeva trebati podršku drugih te je također naučio nove vještine. Dječak je nastavio s kognitivno-bihevioralnom terapijom.

Ovaj prikaz bolesnika pruža primjer kako se tehnike MI mogu koristiti s djetetom osnovnoškolske dobi. Intervencija je bila adaptacija MI prilagođena djeci koja sadrži osnovne postavke i principe MI (1,8). Iako su rezultati pozitivni i u skladu s ranijim meta-analizama MI koje navode da su prilagodbe tipične (39, 40), potrebna su daljnja istraživanja i praksa kako bi se istražili dokazi za učinkovitost MI za mentalno zdravlje i ishode djece.

ZAKLJUČCI

Istraživanja su dokazala učinkovitost MI kod ovisnosti u adolescenata, i rastući broj istraživanja ukazuje na kliničku korisnost MI za poboljšanje mentalnog i tjelesnog zdravlja preadolescenata i adolescenata. Rezultati također pokazuju da prilagođene intervencije mogu imati značajan učinak na motivaciju i ponašanje mlađe djece. MI se može uključiti u kliničke intervencije za djecu i adolescente na različite načine, od samo kratkog MI do MI kao platforme nakon koje se mogu primijeniti druge terapijske intervencije.

Praise and reward (coloured stickers) increased motivation to engage in MI activities throughout sessions. In the first two sessions, Peter asked many questions and needed clarifications. Some aspects of the MI activities Peter found more challenging, for example, open-ended questions. When the practical and more concrete elements of the techniques were increased, Peter was better able to reflect and consider more complex thoughts. The work sheets and activities used in the MI sessions provided Peter with opportunities to discuss aspects of his self and increase knowledge and understanding of his current status, skills and abilities. This suggests that using MI approaches in a practical manner might appeal to school children. "Collaboration" from the MI spirit appeared to be important, and over the sessions Peter build up a collaborative and respectful relationship with the therapist. Peter's autonomy increased as he attended more MI sessions and his belief in his own ability and knowledge of his individual skills also increased. Peter also developed understanding that in reaching his goals he will need support from others and also to learn some new skills. He continued cognitive-behavioural treatment.

This case study provides an example of how MI techniques might be used with an elementary-school child. The intervention was a child-friendly adaptation of MI that embodied its spirit and principles (1,8). Although the results were positive and consistent with previous meta-analyses of MI which report the adaptations to be typical (39,40), further research and practice are needed to provide the evidence-base for the effectiveness of MI on mental health outcomes of children.

CONCLUSIONS

Research has shown the efficacy of MI in substance use in adolescents, and emerging research suggests the clinical utility of MI to improve mental and physical health in adolescents and pread-

Daljnja istraživanja mehanizama djelovanja MI i kako oni utječu na razvoj će povećati teorijsko i praktično znanje koje se može koristiti za poboljšanje motivacije i dobrobiti adolescenata i vjerojatno mlađe djece. Također, potrebna je provjera učinaka MI s djecom i adolescenata u grupnom radu i puna integracija MI u druge terapijske pristupe za adolescente. Konačno, istraživanje prepreka za intervencije MI je važno, npr. jezične poteškoće i kako intervencije MI mogu biti dostupne djeci s ovim teškoćama, bilo osnovnoškolske ili srednjoškolske dobi.

olescents. Results also indicate that an adapted intervention can have a significant impact on motivation and behaviour in younger children. MI can be included in clinical interventions for children and adolescents in several ways, ranging from MI in brief settings to using MI as a platform from which all other treatments are offered.

Further research on the mechanisms of action of MI and how these are impacted by development could yield significant practical and theoretical knowledge that can be used to improve the motivation and well-being of adolescents and, possibly, some pre-teens. Furthermore, testing the effects of MI in children and adolescent group settings and the full integration of MI into other adolescent treatment approaches is needed. Finally, exploring barriers to MI interventions is important i.e. language difficulties and how MI interventions might be made more accessible to pupils with these difficulties, whether of primary or secondary school age.

LITERATURA/REFERENCES

1. Miller WR, Rollnick. Motivational Interviewing: Helping People Change. 3. New York: Guilford Press, 2013.
2. Miller WR, Rose GS. Motivational interviewing and decisional balance: Contrasting resposnes to client ambivalence. Behav Cogn Psychother 2015; 43:129-41.
3. Miller WR. Motivational Interviewing with problem drinkers. Behav Psychoth 1983; 11: 147-72.
4. Rogers C. Client-Centered Therapy. Cambridge Massachusetts: The Riverside Press, 1951.
5. Festinger LA. A theory of cognitive dissonance. Stanford, CA: Stanford University Press, 1957.
6. Bem DJ. Self-perception: An alternative interpretation of cognitive dissonance phenomena. Psychol Rev 1967; 74: 183-200.
7. Arkowitz H, Westra HA, Miller WR, Rollnick S. Motivational Interviewing in the treatment of Psychological Problems. New York: Guildford Press, 2008.
8. Miller WR, Rollnick S. Motivation Interviewing: Preparing people to change addictive behaviour. New York, NY: Guilford Press, 1991.
9. Naar-King S. Motivational interviewing in adolescent treatment. Can J Psychiatry 2011; 56(11): 651.
10. Rollnick S, Miller WR, Butler CC. Motivational Interviewing in health care: Helping patients change behavior. New York, NY: Guilford Press, 2008.
11. Atkinson C, Woods K. Motivational Interviewing strategies for disaffected secondary school students: A case example. Educ Psychol in Pract 2003; 19: 49-64.
12. DiClemente C, Prochaska J. Transtheoretical Therapy: Toward a more integrative model of change. Psychotherapy: Theory Res Pract 1982; 19:276-88.
13. Miller WR, Rollnick S. Ten things that motivational interviewing is not. Behav Cogn Psychother 2009; 37:129-40.
14. Frey AJ, Cloud RN, Lee J, Small JW, Seeley JR, Feil EG, Golly A. The promise of motivational Interviewing in school mental health. School Ment Health, 2011; 3: 1-12.
15. Lundahl BW, Tollefson D, Kunz C, Brownell C, Burke BL. Meta-analysis of motivational interviewing: Twenty five years of research. Res Soc Work Pract 2010; 20: 137-60.
16. Piaget JP. Play, dreams, and imitation in childhood. New York: Norton, 1962.
17. Mondloch C, Maure D, Ahola S. Becoming a face expert. Psychol Sci 2006; 17: 930-934.
18. Nelson E, Leibenluft E, McClure EB, Pine DS. The social re-orientation of adolescence: A neuroscience perspective on the process and its relation to psychopathology. Psychol Med 2005; 35: 163-74.

19. Somerville LH, Jones RM, Casey BJ. A time of change: Behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. Brain Cogn 2010; 72: 124-33.
20. Naari-King S, Suarez M. Motivational interviewing with adolescents and young adults (1.izd.). New York: Guilford Press, 2011.
21. Freudenthal JJ. Motivational interviewing (Mi) as an intervention for early childhood caries risk-related behaviors. J Dent Hygiene 2008; 82, 67.
22. Freudenthal JJ, Bowen DM. Motivational interviewing to decrease parental risk-related behaviors for early childhood caries. J Dent Hygiene 2010; 84: 29-34.
23. Nage P. Motivational interviewing. In: Dulcan M. K. (Ed.), Dulcan's textbook of child and adolescent psychiatry. Washington, DC: American Psychiatric Publications, 2010.
24. Lewis CC, Simons AD, Silva SG, Rohde P, Small DM, Murakami L, March JS. The role of readiness to change in response to treatment of adolescent depression. J Consult Clin Psychol 2009; 77: 422.
25. Thompson SJ, Bender K, Lantry J, Flynn PM. Treatment engagement: Building therapeutic alliance in home-based treatment with adolescents and their families. Contemp Fam Ther 2007; 29: 39-55.
26. Colby S, Monti P, Barnett N, Rohsenow D, Weissman K, Spirito A, Woolard R. Brief motivational interviewing in a hospital setting for adolescent smoking: A preliminary study. J Consult Clin Psychol 1998; 66: 574-8.
27. Monti PM, Colby SM, Barnett NP, Spirito A, Rohsenow DJ, Myers M, Lewander W. Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. J Consult Clin Psychol 1999; 67: 989-94.
28. Stephens RS, Roffman RA, Curtin L. Comparison of extended versus brief treatments for marijuana use. J Consult Clin Psychol 2000; 68(5): 898–908.
29. Brody AE. Motivational interviewing with a depressed adolescent. J Clin Psychol 2009; 65: 1168-79.
30. Kamen D. Stop our children from hurting themselves? Stages of change, Motivational Interviewing, and exposure therapy applications for non-suicidal self-injury in children. J Behav Consult Ther 2009; 5: 106-23.
31. Hamrin V, Iennaco JD. Evaluation of Motivational Interviewing to Improve Psychotropic Medication Adherence in Adolescents. J Child Adolesc Psychopharmacol 2017; 27: 148-59.
32. Sibley MH, Graziano PA, Kuriyan AB *et al.* Parent-Teen Behavior Therapy + Motivational Interviewing for Adolescents with ADHD. J Consult Clin Psychol 2016; 84(8): 699-712.
33. Straita GG, McQuillina S, Smitha B, Englunda JA. Using motivational interviewing with children and adolescents: a cognitive and neurodevelopmental perspective. Adv School Ment Health Prom 2012; 5: 290-304.
34. Söderlund LL, Nordqvist C, Angbratt M, Nilsen P. Applying motivational interviewing to counselling overweight and obese children. Health Educ Res 2009; 24: 442-9.
35. Broccoli S, Davoli AM, Bonvicini L, Fabbri A, Ferrari E, Montagna G *et al*. Motivational Interviewing to Treat Overweight Children: 24-Month Follow-Up of a Randomized Controlled Trial. Pediatrics 2016;137(1).
36. Atkinson C, Ames, M. Using solution-focused approaches in Motivational Interviewing with young people. Pastoral Care Educ 2007; 25, 31-7.
37. McNamara E. Motivational Interviewing: Theory, practice and applications with children and young people. Ainsdale: Positive Behaviour Management, 2009.
38. Woods K, McArdle P, Tabassum N. Evaluating Motivational Interviewing as evidence-based practice using systematic literature review. In: McNamara E (Ed.), Motivational Interviewing: Further applications with children and young people. Ainsdale: Positive Behaviour Management, 2014.
39. Barnett E, Sussman S, Smith C, Rohrbach LA., Spruijt-Metz D. Motivational Interviewing for adolescent substance use: A review of the literature. Addictive Behav 2012; 37: 1325-34.
40. Burke BL, Arkowitz H, Menchola M. The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. J Consult Clin Psychol 2003; 71: 843-61.

Suicidalnost u shizofrenih bolesnika

/ Suicidality in Schizophrenic Patients

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Svrha rada je istražiti učestalost pojavnosti suicidalnosti u shizofrenih bolesnika hospitaliziranih na Klinici za psihijatriju KBC-a Osijek od 2010. do 2015. godine te utvrditi postoji li značajna povezanost između suicidalnosti i parametara prikupljenih u istraživanju. Ispitanike je činilo 380 shizofrenih bolesnika, hospitaliziranih na Klinici za psihijatriju KBC-a Osijek u razdoblju 2010. do 2015. godine. Podatci su prikupljeni iz povijesti bolesti ispitanika s dijagnozom shizofrenije za što je korišten upitnik sastavljen u svrhu ovog istraživanja sa sljedećim podatcima: dob, spol, radni status, bračni status, stručna sprema, broj djece, lijekovi korišteni za liječenje shizofrenije, postojanje pokušaja ili ponovljenog pokušaja suicida, način pokušaja suicida, komorbiditetne dijagnoze, dob početka liječenja, broj hospitalizacija te trajanje psihijatrijskog liječenja u godinama. Od ukupnog broja ispitanika, 12,6 % pokušalo je suicid, a 3,95 % ponovilo je pokušaj suicida. U promatranom razdoblju najviše pokušaja suicida bilo je 2011., a najmanje 2014. godine. Na temelju dobivenih rezultata utvrđena je veća pojavnost suicidalnosti u ispitanika koji nisu bili u braku, koji su u terapiji shizofrenije koristili više od 3 lijeka te nitrazepam, a rizičnim čimbenikom smatraju se i veći broj hospitalizacija te postojanje graničnog poremećaja ličnosti u ispitanika.

/ The aim of this study was to investigate the frequency of incidence of suicidality in patients diagnosed with schizophrenia, hospitalized at the Psychiatric Clinic of the Clinical Hospital Centre Osijek in the period from 2010 to 2015, as well as to determine whether there was a significant relationship between suicidality and parameters collected in the study. This study comprised 380 schizophrenic patients hospitalized at the Psychiatric Clinic of the Clinical Hospital Centre Osijek in the period between 2010 and 2015. Data were collected from the medical histories of participants diagnosed with schizophrenia by means of a questionnaire drafted for the purpose of this study. The questionnaire contained the following information: age, sex, employment status, marital status, qualifications, number of children, medications used to treat schizophrenia, existence of a suicide attempt or a repeated suicide attempt, method of a suicide attempt, comorbid diagnoses, age when the treatment started, number of hospitalizations and duration of psychiatric treatment in years. Out of total number of participants, 12.6% of them attempted to commit suicide and 3.95% of participants repeated a suicide attempt. In the observed period, the highest number of suicide attempts took place in 2011 and the lowest number in 2014. Based on the obtained results, it was determined that participants more likely to attempt suicide were unmarried participants and participants using more than three medications during their schizophrenia treatment, including nitrazepam. Other risk factors included a greater number of hospitalizations, as well as borderline personality disorder in participants.

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UVOD

Suicidalnost kao kompleksan entitet predmet je mnogih istraživanja u različitim područjima znanosti, a posebna se pažnja pridaje suicidalnom ponašanju u sklopu psihijatrijskih bolesti s obzirom da osobe u kojih postoji mentalni poremećaj počine oko 90 % ukupnog broja suicida, a suicid se smatra i glavnim uzrokom preuranjene smrti u psihijatrijskoj populaciji (1). Rizik je u stanjima poput poremećaja prehrane i velikog depresivnog poremećaja čak dvadesetak puta veći nego u općoj populaciji, a povećan rizik nalazimo i u shizofrenih bolesnika, anksioznom poremećaju, ovisnostima te demenciji (2-7). Prema dostupnim podatcima 20–40 % oboljelih od shizofrenije pokuša počiniti suicid, a otprilike 5 % oboljelih u tome i uspije pa je tako mortalitet shizofrenih bolesnika osam puta veći od mortaliteta opće populacije (8-10).

Kompleksnost fenomena suicidalnosti leži u multifaktorskoj etiologiji, a zbog nepostojanja jasne definicije i klasifikacije suicida danas se uglavnom nastoje izbjeći koncepti dihotomnosti suicidalnosti (1,11). Jedna od jednostavnijih definicija navodi kako je samoubojstvo ponašanje kojim se čovjek usmrtio, a pri tome ga je vodila težnja da se usmrti, dok je pokušaj suicida postojanje takve težnje, ali je ponašanje zaustavljeno (3). Danas je jasno da je suicidalno ponašanje toliko kompleksno da se kreće u spektru od manje do više ozbiljnih formi. Sažimanjem brojnih podataka napravljena je ''klasifikacija'' suicidalnosti: izvršeni suicid, pokušaj suicida, pripremne radnje u kojima se poduzimaju akcije za samoozljeđivanje, ali su suicidalne radnje prekinute samoinicijativno ili zaustavljene od strane drugih, suicidalne ideje (aktivne i pasivne), nesuicidalno samoozljeđivanje (npr. paljenje kože, rezanje, ubadanje) kojem je glavna motivacija samokažnjavanje, ali i zadobivanje pažnje te namjerno samoozljeđivanje (12).

Shizofrenija kao kronična duševna bolest u kojoj dolazi do specifičnog oštećenja mišlje-

INTRODUCTION

As a complex entity, suicidality is the subject of many studies in various areas of science. Special attention is given to suicidal behaviour within psychiatric disorders, given the fact that people with mental disorders commit about 90% of the total number of suicides and that suicide is considered to be the major cause of premature death in the psychiatric population (1). In conditions such as eating disorder and major depressive disorder, the risk of suicide is almost twenty times higher than in the general population. Increased risk is often related to schizophrenia, cases of anxiety disorders, addictions and dementia (2-7). Based on the available data, 20 to 40% of schizophrenic patients try to commit suicide and about 5% of them succeed, thus making the mortality rate of schizophrenic patients eight times higher than the mortality rate in the general population (8-10).

The complexity of phenomenon of suicidality is based on multifactorial aetiology. Due to a lack of a clear definition and suicide classification, the concept of dichotomy in suicidality is largely avoided today (1,11). One of simpler definitions states that suicide is a person's behaviour resulting in death, driven by his/her willingness to die, while in case of a suicide attempt, such willingness exists but the behaviour is stopped (3). Today, it is evident that suicidal behaviour is so complex that it ranges from less serious to more serious forms. By summarizing numerous data, the following suicide "classification" has been made: committed suicide, suicide attempt, preparatory actions taken for self-harm where suicidal actions were interrupted by oneself or by others, suicidal ideas (active and passive), non-suicidal self-harm (e.g., burning, cutting, stabbing) for which the main motive is self-punishment and gaining attention, and intentional self-harm (12).

Schizophrenia is a chronic mental disorder which results in specific impairment of thought, perception, emotions, behaviour, motivation, at-

nja, percepcije, emocija, ponašanja, motivacije i pažnje, a vrlo često i do propadanja ličnosti veliki je javnozdravstveni problem jer uvelike narušava kvalitetu života bolesnika, ali i njegove okoline. Pogađa 1,1 % svjetske populacije starije od 18 godina, a najčešće započinje u razdoblju kasne adolescencije i srednjih tridesetih godina s ranijom pojavom u muškaraca (prije 25. godine) nego u žena (između 25. i 35. godine) (13,14). Sama etiologija još uvijek nije u potpunosti razjašnjena, a navjerojatnije se radi o poligenski i multifaktorski uzrokovanom poremećaju (15,16). Rizični faktori za suicid u shizofrenih bolesnika ne razlikuju se značajno od onih u općoj populaciji, a najčešće se radi o mlađoj životnoj dobi, muškom spolu, nezaposlenosti ili nesposobnosti za rad, ali i višem stupnju obrazovanja. Nadalje spominje se i povećani rizik u shizofrenih bolesnika koji su proživjeli određene traume u djetinjstvu poput fizičkog, emocionalnog i seksualnog zlostavljanja (17). Među čimbenicima povezanima sa samom bolesti i liječenjem, rizičnima se smatraju: starija dob prigodom početka bolesti, postojanje afektivnih poremećaja kao komorbiditeta, depresivni te psihotični simptomi (12-20). Sumanute ideje najčešće nisu bile povezane sa suicidalnim rizikom, a halucinacije su povezane s niskim rizikom od suicida (21). I dalje ostaje nejasna veza između trajanja same bolesti i negativnih simptoma te suicidalnog ponašanja s obzirom da su istraživanjima dobiveni nekonzistentni podatci (12,17). Nasilne metode pokušaja suicida, poput skoka ili lijeganja pred objekt u pokretu te skoka s visokog mjesta, smatraju se češće korištenim u osoba sa shizofrenijom nego u općoj populaciji (22).

CILJEVI ISTRAŽIVANJA

Ovaj rad ima za cilj istražiti učestalost pojavnosti suicidalnih obrazaca ponašanja (pokušaja suicida i ponovljenih pokušaja suicida) u shizofre-

tention and very often in decay of personality. Schizophrenia represents a major public health problem because it greatly disturbs the quality of a patient's life and his/her environment. It affects 1.1% of the world's population over the age of 18 and in most cases it begins in the period of late adolescence and mid-thirties, with earlier occurrence in men (before 25 years of age) than in women (between 25 and 35 years of age) (13,14). The aetiology itself has still not been fully clarified, but schizophrenia is most likely a polygenic and multifactorial disorder (15,16). Risk factors for suicide in schizophrenic patients are not significantly different than risk factors in the general population. The following are the most common risk factors: young age, male sex, unemployment or inability to work and a higher degree of education. Furthermore, there is also increased risk in schizophrenic patients who experienced certain traumas in childhood, such as physical, emotional and sexual abuse (17). Among factors related to the disorder itself and its treatment, the following are considered to be risk-inducing: older age during the first occurrence of a disorder, existence of affective disorders as comorbidity and depressive and psychotic symptoms (12-20). Most often, delusional ideas were not associated with a suicide risk and hallucinations were associated with a low suicide risk (21). Still, relationship between duration of the disorder, negative symptoms and suicidal behaviour remains unclear, given that data obtained in research cases were inconsistent (12,17). Violent methods of suicide attempts, such as jumping or lying in front of a moving object or jumping from a high place, are more commonly used by people suffering from schizophrenia than by the general population (22).

RESEARCH OBJECTIVES

This research paper aimed to investigate the frequency of incidence of suicidal behaviour (suicide attempts and repeated suicide at-

nih bolesnika Klinike za psihijatriju KBC-a Osijek, koji su hospitalizirani u razdoblju od početka 2010. do kraja 2015. godine te pokušati objasniti razloge suicidalnog ponašanja. Ciljevi su također utvrditi točan broj pokušaja suicida i ponovljenih pokušaja suicida u skupini hospitalno liječenih shizofrenih bolesnika u navedenom razdoblju (2010. - 2015. godine) , zatim utvrditi sociodemografske karakteristike te karakteristike bolesti (duljina trajanja liječenja, dob u kojoj su ispitanici oboljeli, broj hospitalizacija, broj i vrstu lijekova korištenih u liječenju shizofrenije, broj i vrstu komorbiditetnih dijagnoza) u ispitanika s pokušajem suicida te ponovljenim pokušajem suicida, kao i utvrditi razliku u učestalosti pokušaja suicida i ponovljenih pokušaja suicida s obzirom na prije navedene parametre.

METODE I ISPITANICI

Istraživanje je provedeno kao retrospektivno kohortno istraživanje. Ukupan broj ispitanika bio je 380, a podatci su prikupljeni u razdoblju od 15. 2. 2016. do 1. 5. 2016.godine. Dob ispitanika bila je 21-80 godina. Kriteriji za uključivanje u studiju bili su: postavljena dijagnoza shizofrenije u ispitanika, životna dob >18 godina, bolničko liječenje na Klinici za psihijatriju KBC-a Osijek u razdoblju od 1. 1. 2010. do 31. 12. 2015. godine.

Kao izvor podataka korištene su povijesti bolesti ispitanika s dijagnozom shizofrenije, pohranjene u arhivu Klinike za psihijatriju KBC-a Osijek. Za prikupljanje podataka koristili smo upitnik sastavljen u svrhu ovog istraživanja. Navedeni upitnik prikupljao je sljedeće podatke o pacijentu: spol, dob, bračni status, radni status, stručnu spremu, broj djece, trajanje liječenja (u godinama), sveukupan broj hospitalizacija, dob ispitanika prigodom početka liječenja, postojanje pokušaja suicida, postojanje ponovljenog pokušaja suicida, način na koji je suicid pokušan, broj i vrsta lijekova koje ispitanik koristi za liječenje shizofrenije te broj i vrsta

tempts) in patients diagnosed with schizophrenia hospitalized at the Psychiatric Clinic of the Clinical Hospital Centre Osijek in the period from early 2010 to late 2015, as well as to explain the reasons for suicidal behaviour. It also attempted to determine the exact number of suicide attempts and repeated suicide attempts within the group of hospitalized schizophrenic patients in the above-mentioned period (2010-2015), to determine social and demographic characteristics, characteristics of the disorder (duration of treatment, age when participants started suffering from schizophrenia, number of hospitalizations, number and type of medications used to treat schizophrenia, number and type of comorbid diagnoses) in participants with a suicide attempt and repeated suicide attempt, as well as to determine the difference in frequency of suicide attempts and repeated suicide attempts with regard to the above-mentioned parameters.

METHODS AND PARTICIPANTS

This study was conducted as a retrospective cohort study. The total number of participants included in the study was 380 and the data were collected in the period from February 15, 2016 to May 1, 2016. Participants were between 21 and 80 years of age. The following criteria had to be met for inclusion in the study: participants had to be diagnosed with schizophrenia, they had to be older than 18 and they had to be hospitalized at the Psychiatric Clinic of the Clinical Hospital Centre Osijek in the period between January 1, 2010 and December 31, 2015.

Medical histories of participants diagnosed with schizophrenia stored in the archives of the Psychiatric Clinic of the Clinical Hospital Centre Osijek were used as a source of data. Data were collected by means of a questionnaire drafted for the purpose of this research. The above-mentioned questionnaire included the following information on the patient: sex, age, marital sta-

komorbiditetnih dijagnoza u ispitanika. Svi podatci bilježeni su tako da ne otkrivaju identitet pojedinog bolesnika, a u radu su predstavljeni zbirno nakon statističke obrade.

Za analizu podataka korištene su metode univarijatne i bivarijatne statističke analize. Kategorijski podatci predstavljeni su apsolutnim i relativnim frekvencijama. Numerički podatci opisani su aritmetičkom sredinom i standardnom devijacijom u slučaju normalne distribucije, a u slučajevima odstupanja od normalne distribucije medijanom i interkvartilnim rasponom. Normalnost raspodjele numeričkih varijabli testirana je Kolmogorov-Smirnovljevim testom. Razlike među kategorijskim varijablama ispitane su pomoću $\chi 2$ testa te Fisherovim egzaktnim testom u slučajevima izrazito male očekivane frekvencije. Razlike normalno raspodijeljenih numeričkih varijabli između dviju nezavisnih skupina testirane su Studentovim t testom, a u slučaju odstupanja od normalnosti Mann-Whitneyevim U testom. Za statističku analizu korišten je statistički program *SPSS* (inačica 16.0, SPSS Inc., Chicago, IL, SAD). Razina statističke značajnosti postavljena je na $\alpha = 0,05$.

REZULTATI

Od ukupnog broja ispitanika, 56,8 % bilo je muškog, a 43,2 % ženskoga spola, dok je medijan dobi bio 50 godina s IQR od 40 do 57 godina. Uspoređujući spolove pronađena je statistički značajna razlika u dobi te bračnom statusu, pri čemu su ispitanice bile starije od ispitanika (Mann-Whitneyev U test, $p < 0,001$) i češće su bile u braku ili razvedene, dok je veći postotak ispitanika pripadao skupini samaca (χ^2 test, $p < 0,001$). Najveći broj ispitanika bio je nezaposlen ili umirovljen (94,2 %) te ih je najviše bilo srednje stručne spreme (70 %); 61,1 % ispitanika nije imao djece.

Medijan duljine trajanja liječenja shizofrenije iznosio je 14 godina s IQR od 8 do 20 godina.

tus, employment status, qualifications, number of children, duration of treatment (in years), total number of hospitalizations, age when the treatment started, existence of a suicide attempt, existence of a repeated suicide attempt, method of the suicide attempt, number and type of medications used to treat schizophrenia, as well as number and type of comorbid diagnoses in participants. All data were recorded in a way which does not reveal the identity of a particular patient. They are presented collectively in this paper, after conducting the statistical analysis.

Data were analysed using methods of univariate and bivariate statistical analysis. Categorical data were presented as absolute and relative frequencies. Numerical data were described as arithmetic mean and standard deviation in case of normal distribution and as median and interquartile range in cases of deviation from normal distribution. Normality of distribution of quantitative variables was tested by the Kolmogorov-Smirnov test. Differences between categorical variables were tested by the $\chi 2$ test and Fisher's exact test in cases of extremely low expected frequency. Differences in normally distributed quantitative variables between two independent groups were tested by Student's t-test and Mann-Whitney U test in case of deviation from normality. The SPSS software package (version 16.0, SPSS Inc., Chicago, IL, USA) was used for statistical analysis. The level of statistical significance was set at $\alpha = 0.05$.

RESULTS

Out of the total number of participants, 56.8% were men and 43.2% were women, with the median age of 50 years of age and IQR from 40 to 57 years of age. Regarding the sexes, statistically significant differences in age and marital status were found. Female participants were older than male participants (Mann-Whitney U test, $p < 0.001$) and were more often married or divorced, while a higher percentage of

Medijan broja hospitalizacija zbog shizofrenije bio je 6 s IQR od 3 do 10, a medijan lijekova koje su ispitanici koristili u liječenju shizofrenije bio je 4 s IQR od 3 do 5. Medijan dobi u kojoj je započeto liječenje shizofrenije bio je 33 godine s IQR od 26 do 41 godina, a uspoređujući spolove pronađena je statistički značajna razlika u dobi u kojoj je liječenje započeto te duljini trajanja liječenja (tablica 1).

Ukupan broj lijekova za liječenje shizofrenije korišten u ispitanika iznosio je 21. U skupinu najprimjenjivanijih ubrajamo antipsihotike starije generacije, antiparkinsonike te anksiolitike. Pojedinačno, najčešće korišteni bili su: diazepam (72,4 %) i biperiden (64,2 %); 33,5 % bolesnika imalo je jednu, dvije ili tri komorbiditetne dijagnoze, a najčešće su bile iz skupine psihičkih poremećaja i poremećaja ponašanja (37,79 %). Usporedbom spolova pronađena je statistički značajna razlika u zastupljenosti pojedinih komorbiditetnih dijagnoza pri čemu su esencijalna hipertenzija, hipotireoza te akutna reakcija na stres bile češće u ispitanica dok su kronični gastritis i alkoholizam bili češći u ispitanika.

S obzirom na ukupan broj hospitaliziranih shizofrenih pacijenata u pojedinoj godini, najviše pokušaja suicida bilo je 2011. godine. Te godine 18,87 % ukupnog broja hospitaliziranih shizofrenih bolesnika pokušalo je počiniti suicid, dok je najmanje pokušaja s obzirom na broj hospitaliziranih shizofrenih bolesnika bilo 2014. godine (6,9 %).

Od ukupnog broja ispitanika 48 (12,6 %) pokušalo je suicid te je zabilježeno 7 različitih načina pokušaja suicida (tablica 2). Statističkim testo-

male participants was single (χ^2 test, $p < 0.001$). The highest number of participants was unemployed or retired (94.2%) and most of them acquired secondary school qualifications (70%). 61.1% of participants had no children.

The median duration of treatment of schizophrenia was 14 years with IQR from 8 to 20 years. The median number of hospitalizations due to schizophrenia was 6 with IQR from 3 to 10, and the median for medications used to treat schizophrenia was 4 with IQR from 3 to 5. Median related age when the treatment started was 33 years of age with IQR from 26 to 41 years of age. When comparing sexes, a statistically significant difference was found between the age when the treatment started and duration of treatment (Table 1).

The total number of medications used to treat schizophrenia in participants was 21. The most commonly used group included the following medications: first-generation antipsychotics, antiparkinson medications and anxiolytics. Specifically, the most commonly used medications were diazepam (72.4%) and biperiden (64.2%). 33.5% of patients had one, two or three comorbid diagnoses that belonged to a group of mental disorders and behavioural disorders (37.79%). A statistically significant difference in the prevalence of particular comorbid diagnoses was found between the sexes, with essential hypertension, hypothyroidism and acute stress reaction more common in female participants, while chronic gastritis and alcoholism were more common in male participants.

With regard to the total number of hospitalized schizophrenic patients in a specific year,

TABLE 1. Age when the treatment started and duration of treatment of schizophrenia with regard to the sexes

Parameter	Male n = 216	Female n = 164	p*
Duration of treatment (in years) †	13 (7-20)	15 (10-22)	**0.021**
Age when the treatment started†	31 (24-39)	36 (28-44)	**< 0.001**

† Median (interquartile range)

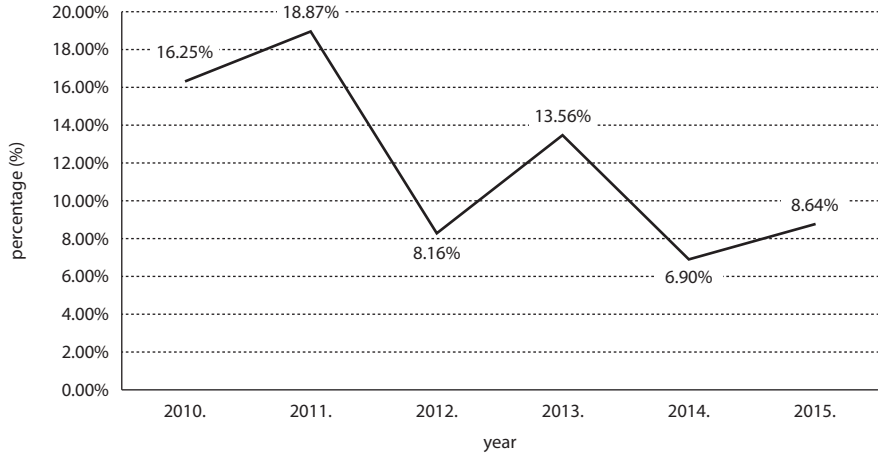

FIGURE 1. Percentage indicating the number of hospitalized schizophrenic patients who attempted to commit suicide in the period from 2010 to 2015

vima nije pronađena značajna razlika u načinu pokušaja suicida među spolovima (χ^2 test; p = 0.230).

Prosječna dob ispitanika koji su pokušali suicid iznosila je 49 godina sa standardnom devijacijom od 11 godina. Najviše ispitanika s pokušajem suicida bilo je neudano/neoženjeno (43,75 %), umirovljeno ili nezaposleno (93,75 %) te srednje stručne spreme (68,76 %), a najčešće nisu imali djece. Uspoređujući skupine s pokušajem suicida i bez pokušaja pronađena je statistički značajna razlika u bračnom statusu ispitanika, pri čemu je razvedenih više bilo u skupini ispitanika s pokušajem suicida

TABLE 2. Methods of suicide attempts in participants

Method of suicide attempt	Number of participants (%)
X61 (Intentional self-poisoning by psychotropic drugs)	29 (60.41)
X78 (Intentional self-harm by sharp object)	9 (18.75)
X70 (Intentional self-harm by hanging, strangulation and suffocation)	2 (4.17)
X80 (Intentional self-harm by jumping from a high place)	4 (8.33)
X83.0 (Intentional self-harm by other specified means – electricity)	1 (2.08)
X65 (Intentional self-poisoning and exposure to alcohol)	1 (2.08)
X81 (Intentional self-harm by jumping or lying in front of a moving object)	1 (2.08)

the highest number of suicide attempts took place in 2011. During that year, 18.87% of the total number of hospitalized schizophrenic patients attempted to commit suicide, while the lowest number of attempts with regard to the number of hospitalized schizophrenic patients took place in 2014 (6.9%).

Out of the total number of participants, 48 (12.6%) of them attempted to commit suicide and 7 different suicide methods were recorded (Table 2). By means of statistical tests, a statistically significant difference was not found in methods of suicide attempts with regard to sexes (χ^2 test; p = 0.230).

The average age of participants who attempted to commit suicide was 49 with a standard deviation of 11 years. The majority of participants who attempted suicide were unmarried (43.75%), retired or unemployed (93.75%) and had secondary school qualifications (68.76%). In most cases they had no children. When comparing groups with and without suicide attempts, a statistically significant difference in marital status of participants was found, with more divorced participants belonging to the group of participants with a suicide attempt and more married participants belonging to the group of participants without a suicide attempt. (χ^2 test, p = 0.020)

dok je udanih i oženjenih bilo više u skupini bez pokušaja suicida (χ^2 test; p = 0.020)

Najveći broj ispitanika s pokušajem suicida trošio je 4–6 lijekova u terapiji shizofrenije, a uspoređujući skupine s pokušajem suicida i bez pokušaja pronađena je statistički značajna razlika u broju korištenih lijekova za liječenje, pri čemu su ispitanici s pokušajem suicida u terapiji shizofrenije češće koristili >3 lijeka (χ^2 test; p = 0.013). Najčešće rabljeni lijekovi bili su: biperiden (72,92 %) i diazepam (66,67 %) te je pronađena statistički značajna razlika između ispitanika s pokušajem i onih bez pokušaja suicida u korištenju nitrazepama u terapiji shizofrenije, pri čemu je skupina s pokušajem suicida češće koristila nitrazepam (χ^2 test; p = 0.047). Najveći broj ispitanika u skupini onih koji su pokušali suicid (66,67 %) nije imao komorbiditetne dijagnoze, a preostali su imali jednu, dvije ili tri komorbiditetne dijagnoze, najčešće: akutno otrovanje alkoholom, alkoholizam, težak povratni depresivni poremećaj bez simptoma psihoze, bipolarni afektivni poremećaj, posttraumatski stresni poremećaj te granični poremećaj ličnosti. Granični poremećaj ličnosti (F 60.3) češće je bio prisutan u skupini shizofrenih bolesnika s pokušajem suicida (Mann-Whitneyev test; p = 0.016).

Ovi ispitanici najčešće su u vrijeme započinjanja liječenja shizofrenije imali između 21 i 35 godina, a ni jedan ispitanik liječenje nije započeo u dobi nakon 65. godine života. Devedeset posto ispitanika liječi shizofreniju duže od 10 godina što ih svrstava u skupinu kroničnih shizofrenih pacijenata. Uspoređujući skupine ispitanika s pokušajem i i bez pokušaja suicida pronađena je statistički značajna razlika u broju hospitalizacija dok u duljini trajanja liječenja te dobi u kojoj je započeto liječenje nije nađena statistički značajna razlika (tablica 3).

U istraživanju je posebno analizirano i 15 ispitanika koji su ponovili pokušaj suicida. 51,52 %

The majority of participants who attempted to commit suicide used 4 to 6 medications for treatment of schizophrenia. When comparing groups with and without a suicide attempt, a statistically significant difference was found in the number of medications used. Patients with a suicide attempt more often used more than 3 medications for treatment of schizophrenia (χ^2 test; p = 0.013). The most commonly used medications were biperiden (72.92%) and diazepam (66.67%). A statistically significant difference was found between participants with a suicide attempt and those without a suicide attempt regarding the use of nitrazepam in treating schizophrenia, where the group with a suicide attempt used nitrazepam (χ^2 test; p = 0.047) more often. The majority of participants in the group of patients with attempted suicide (66.67%) had no comorbid diagnoses, while the rest had one, two or three comorbid diagnoses, most commonly: acute alcohol poisoning, alcoholism, recurrent severe depressive disorder without psychotic features, bipolar affective disorder, posttraumatic stress disorder and borderline personality disorder. Borderline personality disorder (F 60.3) was more common in the group of schizophrenic patients with a suicide attempt (Mann-Whitney U test; p = 0.016).

At the time of beginning of schizophrenia treatment, participants were most often between 21 and 35 years of age. None of participants started treatment after 65 years of age. 90% of participants were treated for schizophrenia for more than 10 years, making them chronic schizophrenic patients. By comparing groups of participants with and without a suicide attempt, a statistically significant difference was found in the number of hospitalizations. There were no statistically significant differences in duration of treatment and the age when the treatment started (Table 3).

The study also analysed 15 participants who repeated a suicide attempt. 51.52% of them were men and the majority were not married (87.88%) and had no children. The average age

ih je bilo muškog spola, a najveći postotak nije bio u braku (87,88 %) te nije imao djece. Srednja dob ispitanika bila je 48 godina sa standardnom devijacijom 12. 53,33 % ispitanika imalo je dva pokušaja suicida, 20 % tri pokušaja, 13,33 % pet pokušaja i po jedan ispitanik 4 i 11 pokušaja suicida.

Najčešće korišten način suicida kod ponovljenog pokušaja suicida ponovno je bilo namjerno samootrovanje psihotropnim lijekovima (73,33 %), 13,33 % ispitanika koristilo je namjerno ozljeđivanje oštrim predmetom, dok je po jedan ispitanik koristio namjerno samoozljeđivanje skokom s visokog mjesta te namjerno samootrovanje alkoholom. Ostali načini suicida nisu korišteni. Usporedbom skupina ispitanika s jednim i više pokušaja suicida nisu pronađene statistički značajne razlike u načinu pokušaja suicida *(χ^2 test;* p = 0.600).

Medijan broja lijekova za liječenje shizofrenije korištenih u ispitanika s ponovljenim pokušajem suicida bio je 4 uz IQR od 4 do 5, a najčešće su koristili diazepam (80 %) te biperiden (66,67 %). 66,67 % ispitanika nije imalo komorbiditetnih dijagnoza, a ostali su imali jednu, dvije ili tri komorbiditetne dijagnoze, najčešće: bipolarni afektivni poremećaj, granični poremećaj ličnosti, posttraumatski stresni poremećaj i teški depresivni povratni poremećaj bez simptoma psihoze. Usporedbom dvaju skupina nisu pronađene statistički značajne razlike u navedenim parametrima.

U vrijeme početka liječenja 80 % ispitanika s ponovljenim pokušajem suicida imalo je između 21 i 50 godina, dok su ostali bili mlađi od

of participants was 48, with a standard deviation of 12. 53.33% of participants attempted to commit suicide 2 times, 20% of them three times, 13.33% of them five times and there were two patients with 4 and 11 suicide attempts.

The most commonly used method of suicide in a repeated suicide attempt was intentional self-poisoning by psychotropic drugs (73.33%). 13.33% of participants used intentional self-harm by sharp object, while one participant used intentional self-harm by jumping from a high place and another one used intentional self-poisoning by alcohol. Other methods of suicide were not used. By comparing a group of participants with one suicide attempt and a group of participants with multiple suicide attempts, statistically significant differences in the method of suicide attempts were not found (χ^2 test; p = 0.600).

The median medications for treatment of schizophrenia used by participants with a repeated suicide attempt was 4, with IQR from 4 to 5. Participants used diazepam (80%) and biperiden (66.67%) most often. 66.67% of participants had no comorbid diagnoses, while the rest had one, two or three comorbid diagnoses, most commonly: bipolar affective disorder, borderline personality disorder, posttraumatic stress disorder and recurrent severe depressive disorder without psychotic features. By comparing the two groups, statistically significant differences with regard to the above-mentioned parameters were not found.

At the time when the treatment started, 80% of participants with a repeated suicide attempt were between 21 and 50 years of age, while oth-

TABLE 3. Comparison of participants with and without a suicide attempt with regard to the age when the treatment started, duration of treatment and number of hospitalizations

Parameter	Patients who attempted suicide n = 48	Patients who did not attempt suicide n = 332	p *
Duration of treatment (in years) †	15 (11-22)	13 (8-20)	0.085
Number of hospitalization due to schizophrenia †	9 (5-13)	5 (3-10)	**< 0.001**
Age when the treatment started †	33 (27-35)	33 (2-41)	0.737

* Mann-Whitney U test; † median (interquartile range)

21 godinu. U prosjeku je liječenje shizofrenije trajalo 16 godina, a medijan broja hospitalizacija iznosio je 10 s IQR od 7 do 14. Usporedbom dviju skupina nisu pronađene statistički značajne razlike u navedenim parametrima (tablica 4).

RASPRAVA

Skupine muških i ženskih shizofrenih ispitanika u našem istraživanju značajno se razlikuju u bračnom statusu, broju djece i dobi. Od prije je poznato kako u shizofreniji postoji razlika među spolovima, a jedna od njih je i kasniji nastup bolesti u žena nego u muškaraca, što se upravo i može smatrati jednim od razloga češće zastupljenosti braka i djece u žena oboljelih od shizofrenije. Naime, kasnija pojava bolesti omogućuje ostvarenje u ulozi majke i supruge, što nije slučaj u muškaraca (23,24). Općenito gledajući shizofrenija se kao bolest najčešće javlja u dobi između kasne adolescencije i srednjih tridesetih godina, a u našem istraživanju liječenje je u muškaraca u prosjeku započinjalo s 32 godine, a u žena s 36 godina (13,14). Značajne razlike među spolovima postoje i u zastupljenosti pojedinih komorbiditetnih dijagnoza. Alkoholizam je tako češći u muškaraca (Fisherov test; p <0,001) što se uklapa u saznanja o većoj sklonosti muškaraca konzumaciji alkohola, posebice većih količina pa shodno tome i alkoholizmu (25), a akutna reakcija na stres kao komorbiditet u našem se istraživanju pokazala češće zastupljenom u žena (Fisherov test; p = 0,034).

ers were younger than 21 years of age. Average schizophrenia treatment lasted for 16 years and the median number of hospitalizations was 10, with interquartile range between 7 and 14. By comparing the two groups, statistically significant differences with regard to the above-mentioned parameters were not found (Table 4).

DISCUSSION

Groups of male and female participants suffering from schizophrenia in this study differed significantly in terms of marital status, number of children and age. It has been previously established that there is a difference between the sexes with regard to schizophrenia. One of the differences is a later occurrence of this disorder in women than in men, which can be considered one of the reasons for greater frequency of women suffering from schizophrenia, but these women being married with children. Later occurrence of this disorder makes it possible for women to become mothers and wives, which is not the case with men (23,24). Generally speaking, schizophrenia is a disorder occurring most commonly between the late adolescence and mid-thirties. This study analysed men whose treatment in average started at the age of 32 and women whose treatment started at the age of 36 (13,14). Significant differences between sexes were also present regarding the prevalence of specific comorbid diagnoses. Alcoholism is much more common in men (Fisher's test; p < 0.001), confirming the assumptions that men are more likely to consume alcohol, es-

TABLE 4. Comparison of participants with one suicide attempt and those with multiple suicide attempts with regard to the age when the treatment started, duration of treatment and number of hospitalizations

Parameter	One suicide attempt (n = 33)	Repeated suicide attempt (n = 15)	p
Duration of treatment (in years)	17 (7)	16 (7)	0.729*
Number of hospitalizations due to schizophrenia	8 (5-13)	10 (7-14)	0.124**
Age when the treatment started	34 (11)	32 (9)	0.516*

* T-test; ** Mann-Whitney U test

Od ukupnog broja promatranih ispitanika 12,6 % pokušalo je suicid, dok je 3,95 % ponovilo pokušaj suicida. Slični rezultati dobiveni su istraživanjem provedenim na 87 ispitanika oboljelih od shizofrenije u kojem je 23 % pokušalo suicid (10). U stručnoj literaturi podatci o učestalosti pokušaja suicida među shizofrenim bolesnicima različiti su, a procjenjuje se da suicid tijekom života pokuša čak oko 50 % shizofrenih bolesnika (10,26). Najčešće korišteni način pokušaja suicida u naših ispitanika bilo je samootrovanje psihotropnim lijekovima, kako u ispitanika s jednim, tako i onih s više pokušaja suicida, bez značajne razlike među navedenim skupinama što je u suprotnosti s podatcima dostupnima u literaturi u kojoj se navodi kako oboljeli od shizofrenije, za razliku od primjerice opće populacije i onih s poremećajima raspoloženja, najčešće koriste metode suicida poput skoka ili lijeganja pred objekt u pokretu te skoka s visokog mjesta (22). Mogući razlog ovog odstupanja može biti činjenica da u naše istraživanje nisu uvršteni ispitanici koji su uspjeli u pokušaju suicida već samo oni koji su ga pokušali što ne daje cjelovitu sliku o shizofrenoj populaciji i načinima suicida. U promatranom razdoblju od 6 godina, 2011. godina istakla se kao godina s najviše pokušaja suicida s obzirom na ukupan broj hospitaliziranih shizofrenih bolesnika, a 2014. godina kao godina s najmanje pokušaja suicida. Bez obzira na navedene razlike ne može se zaključiti kako se radi o kontinuirano silaznom ili uzlaznom trendu s obzirom da se postotak hospitaliziranih pacijenata oboljelih od shizofrenije koji su pokušali suicid nepredvidivo mijenja iz godine u godinu u promatranom razdoblju te bi svakako bilo potrebno provesti istraživanje na većem uzroku te u dužem vremenskom razdoblju kako bi se utvrdilo postoji li značajan trend pada ili rasta.

U našem istraživanju muški spol zastupljeniji je u ukupnom broju ispitanika s pokušajem suicida te ispitanici većinom pripadaju

pecially in larger amounts, as well as to indulge in alcoholism (25). This study showed that acute stress reaction as comorbidity is more common in women (Fisher's test, p = 0.034).

Out of the total number of observed participants, 12.6% of them attempted to commit suicide, while 3.95% of them repeated a suicide attempt. Similar results were obtained by means of a study carried out on 87 participants suffering from schizophrenia, 23% of which attempted to commit suicide (10). Data reported in specialized literature on the frequency of suicide attempts among schizophrenic patients vary, with some estimates that up to 50% of schizophrenic patients attempt to commit suicide during their lifetime (10,26). The method of a suicide attempt most commonly used by our participants was self-poisoning by psychotropic drugs, both in participants with one as well as in participants with multiple suicide attempts, without any significant difference between the above-mentioned groups. This is different from what is stated in the literature. These data indicate that, unlike the general population and patients with mood disorders, patients suffering from schizophrenia most often used suicide methods such as jumping or lying in front of a moving object or jumping from a high place (22). A possible reason for this deviation may be the fact that this study did not include participants whose suicide attempt was successful but only those participants who attempted to commit suicide, which does not provide a complete picture of schizophrenic population and suicide methods. During the observed period of 6 years, 2011 was the year with the highest number of suicide attempts with regard to the total number of hospitalized schizophrenic patients, while 2014 was the year with the least number of suicide attempts. Regardless of the above-mentioned differences, it cannot be concluded that this is a continuous downward or upward trend since the percentage of hospitalized patients suffering from schizophrenia who attempted to commit suicide unpredictably changed every year over the observed period. It

skupini nezaposlenih ili umirovljenih i imaju srednji stupanj obrazovanja, ali statističkim testovima nisu pronađene značajne razlike u navedenim varijablama između skupine ispitanika s pokušajem i bez pokušaja suicida. Međutim, dokazana je statistički značajna razlika u bračnom statusu između navedenih skupina ($\chi 2$ *test*, p = 0,020) pri čemu je razvedenih značajnije više u skupini s pokušajem suicida dok je onih u braku više u skupini bez pokušaja suicida pa je moguće samački život shvatiti kao rizični faktor za suicidalnost. Ovaj podatak može se objasniti i ranim poremećajem u socijalnom funkcioniranju koji se javlja najčešće prije 25. godine, a dokazan je u suicidalnih shizofrenih bolesnika, što potencijalno onesposobljava suicidalnu skupinu za uspostavljanje i održavanje dugotrajnih veza (27,28).

Ispitanici s pokušajem suicida koriste značajno veći broj lijekova što bi se moglo smatrati rizičnim čimbenikom za suicidalnost ($\chi 2$ test, p = 0,013) kao i korištenje nitrazepama u liječenju shizofrenije ($\chi 2$ test, p = 0,047). Rezultati velike studije provedene u Švedskoj, koja je za cilj imala usporediti stope suicida u shizofrenih bolesnika u ovisnosti o primjeni različite terapije pokazala je kako srednje velike i velike doze antipsihotika i antidepresiva primijenjene u liječenju shizofrenije pogoduju smanjenju smrtnosti, dok primjena čak i malih doza benzodiazepina, u čiju skupinu pripada gore spomenuti nitrazepam, povećava rizik od suicida za čak 70 % (29). Veći broj lijekova u suicidalnih ispitanika ne mora nužno označavati povećan rizik za suicidalnost već može biti povezan s težom kliničkom slikom same bolesti u pacijenata sklonih suicidalnosti, zbog čega je i bilo potrebno liječenje većim brojem lijekova, a slično objašnjenje moguće je ponuditi i za veći broj hospitalizacija koji je u našem istraživanju također proizašao kao faktor rizika s obzirom da smo uspoređujući ove dvije skupine pronašli statistički značajnu razliku u broju hospitalizacija, pri čemu je veći broj

would be necessary to conduct research which included a larger group of patients in a longer period in order to determine whether there is a significant trend of decline or growth.

In the present study, the male sex was more represented in the total number of participants with a suicide attempt. These participants mostly belonged to a group of unemployed or retired participants with secondary school qualifications, but there were no statistically significant differences with regard to the above-mentioned variables between the group of participants with and the group of participants without a suicide attempt. However, a statistically significant difference was found regarding marital status between the above-mentioned groups ($\chi 2$ test, p = 0.020). More divorced participants belonged to the group of participants with a suicide attempt, while more married participants belonged to the group of participants without a suicide attempt. Therefore, may be hypothesized that single living is a risk factor for suicidal behaviour. These data can also be explained by early disorder in social functioning that most often occurs before the age of 25 and is established in suicidal schizophrenic patients, which may make it difficult for a group of suicidal participants to establish and maintain long-term relationships (27,28).

Participants with a suicide attempt used a significantly higher number of medications, which could be considered as a risk factor for suicidal behaviour ($\chi 2$ test, p = 0.013), and were more likely to use nitrazepam in treatment of schizophrenia ($\chi 2$ test, p = 0.047). Results of a major study conducted in Sweden, which aimed to compare suicide rates in schizophrenic patients addicted to different therapies, showed that medium and large doses of antipsychotics and antidepressants used in treatment of schizophrenia help in reducing mortality rates. Usage of even small doses of benzodiazepine, which is in the group with the above-mentioned nitrazepam, increases the risk of suicide by almost 70% (29). A greater number of medications used by suicidal participants does not necessarily indicate an increased

bio prisutan u ispitanika s pokušajem suicida (Mann-Whitneyev U test; $p < 0.001$). Rizičnost većeg broja hospitalizacija za suicidalnost u shizofrenih kako mladih tako i starijih bolesnika spominje se i u brojnim drugim istraživanjima (26,30,31).

Između skupina shizofrenih bolesnika s pokušajem i bez pokušaja suicida uočena je i značajna razlika u prevalenciji graničnog poremećaja ličnosti (Fisherov test; $p = 0,016$) koji je bio češći u skupini ispitanika s pokušajem suicida. Rezultati većih studija provedenih diljem svijeta navode depresivni poremećaj te generalizirani anksiozni poremećaj kao značajne faktore rizika dok granični poremećaj ličnosti nije dovoljno istražen u smislu rizičnosti za suicidalnost shizofrenih bolesnika (32,33). Dugo se smatralo kako dijagnoze shizofrenije te bipolarnog afektivnog poremećaja uopće ne mogu koegzistirati zbog razlike u simptomatologiji, tj. češćeg pojavljivanja kvazipsihotičnih simptoma u graničnom poremećaju ličnosti u odnosu na češću pojavu psihotičnih simptoma u shizofrenih bolesnika, ali se novijim istraživanjima pokušava dokazati mogućnost koegzistiranja. Istraživanjem na 111 ispitanika objašnjena je mogućnost koegzistiranja, a poremećaji su se ponajviše preklapali u prisutnosti slušnih halucinacija, iako je donekle postojala razlika u učestalosti pojavljivanja (skupina shiozofrenih bolesnika imala je veću učestalost halucinacija). Daljnje interese svakako je bitno usmjeriti u smjeru proučavanja povezanosti ovih dviju dijagnoza, ali je neizbježno spomenuti još jednu od mogućih poveznica dvaju poremećaja, a to je samoozljeđujuće ponašanje (14,34). Karakterističnim za granični poremećaj ličnosti smatraju se upravo suicidalne geste i samoozljeđivanje, a smatra se i kako se 75 % bolesnika s graničnim poremećajem ličnosti samoozljeđuje, dok ih 10 % počini suicid. (35,36). Poremećaj ličnosti općenito se smatra četvrtim najvažnijim faktorom rizika za suicid nakon depresije, shizofrenije i alkoholizma što bi u slučaju koegzistiranja

risk of suicidal behaviour. It may be associated with a more severe medical history in patients prone to suicidal behaviour, which required treatment using a greater number of medications. A greater number of hospitalizations may also be explained in a similar way, as this study also defined it as a risk factor, given the fact that comparison of these two groups resulted in finding a statistically significant difference in number of hospitalizations, with a greater number of hospitalizations in cases of participants with a suicide attempt (Mann-Whitney U test, $p < 0.001$). Risk of multiple hospitalizations for suicidal behaviour of both young and old patients is mentioned in numerous studies (26,30,31).

A significant difference in prevalence of borderline personality disorder (Fisher's test, $p = 0.016$) was found between the groups of schizophrenic patients with and without a suicide attempt, with borderline personality disorder being more common in the group of participants with attempted suicide. Results of major studies conducted worldwide indicate that depressive disorder and generalized anxiety disorder are significant risk factors, while borderline personality disorder has not been sufficiently investigated in terms of risk for suicidal behaviour of schizophrenic patients (32,33). It was thought for a long time that diagnoses of schizophrenia and bipolar affective disorder cannot coexist due to differences in symptomatology, i.e. more frequent occurrence of quasi psychotic symptoms in case of borderline personality disorder compared with more frequent occurrence of psychotic symptoms in schizophrenic patients. Recent studies have been trying to prove the possibility of coexistence of the two. A study including 111 participants explained the possibility of coexistence, with disorders mostly overlapping in presence of auditory hallucinations; although there was a slight difference in incidence (a group of schizophrenic patients had a higher incidence of it). Further interests should most certainly be directed towards studying the correlation between these two diagnoses. But we must inevitably mention one of

dvaju poremećaja dodatno pridonosilo povećanju rizika za suicid te upućivalo na potrebu intenziviranja terapije u ovakvoj skupini bolesnika (37).

Istraživanje provedeno 2009. godine na shizofrenoj populaciji u Švedskoj, uvrstilo je kasniji početak bolesti (≥30 godina) u rizični faktor za pokušaj suicida, a druga pak istraživanja kao rizični faktor navode upravo suprotno uz postojanje i onih istraživanja koja nisu uspjela pronaći povezanost između tih dviju varijabli (38). Iako je u našem slučaju medijan dobi u kojoj je započeto liječenje shizofrenije u suicidalnih ispitanika 33 godine s interkvartilnim rasponom od 27 do 35 godina, značajna razlika u ovoj varijabli između skupine ispitanika s pokušajem i onih bez pokušaja suicida nije utvrđena (Mann-Whitneyev U test; p = 0.737), a značajnije razlike nema ni između skupina s jednostrukim i višestrukim pokušajem suicida (t test; p = 0,516). Meta-analizom 6 studija dobiveni su inkoherentni rezultati o povezanosti trajanja shizofrenije te suicidalnosti u bolesnika. Neke studije proglasile su kraće trajanje bolesti (< 5 godina) rizičnim faktorom, dok su rezultati drugih pokazali upravo suprotno (17). Statistički značajna razlika nije dokazana ni u našem istraživanju (Mann-Whitneyev test; p = 0.085).

ZAKLJUČCI

Na temelju provedenog istraživanja i dobivenih rezultata proizlaze zaključci da su shizofrene bolesnice sa suicidalnim pokušajima u dužem terapijskom tretmanu te sa češćim komorbiditetnim somatskim dijagnozama i dijagnozom akutne reakcije na stres, dok je u shizofrenih bolesnika muškog spola češći komorbiditet s kroničnim gastritisom i ovisnosti o alkoholu. U promatranom razdoblju najveći postotak pokušaja suicida shizofrenih bolesnika u odnosu na ukupan broj hospitaliziranih bolesnika bio je 2011., a najmanji

the possible connections between the two disorders – self-harmful behaviour (14,34). Suicidal gestures and self-harm are considered characteristic of borderline personality disorder. It is also considered that 75% of patients with borderline personality disorder indulge in self-harm, while 10% of patients commit suicide (35,36). Personality disorder is generally considered to be the fourth most important risk factor for suicide, after depression, schizophrenia and alcoholism, and would in case of the coexistence of the two disorders contribute to increased suicide risks and suggest the need for intensive therapy in such groups of patients (37).

A study conducted in 2009 on a schizophrenic population in Sweden included the later onset of disorder (≥ 30 years of age) as a risk factor for a suicide attempt, while other studies include the opposite as a risk factor, in addition to other studies which failed to find a connection between these two variables (38). Although in our case the median age when the treatment of schizophrenic suicidal patients started was 33, with an interquartile range between 27 and 35 years of age, a significant difference with regard to this variable was not found between the group of participants with a suicide attempt and the group of patients without a suicide attempt (Mann-Whitney U test; p = 0.737). There were no significant difference between groups with one and multiple suicide attempts (t-test; p = 0.516). In a meta-analysis of 6 studies, incoherent results on the association between duration of schizophrenia and suicidality in patients were obtained. Some studies have identified a shorter duration of illness (< 5 years) as a risk factor, while the results of other studies showed the opposite (17). A statistically significant difference was not established in our study (Mann-Whitney test, p = 0.085).

CONCLUSION

Based on the conducted study and obtained results, it was concluded that female schizophrenic patients with suicide attempts un-

2014. godine, ali nije zamijećen trend pada ni trend porasta s obzirom na to da se postotci mijenjaju iz godine u godinu. Najčešći način pokušaja suicida u ispitanika s pokušajem i ponovljenim pokušajem suicida bilo je namjerno samootrovanje psihotropnim lijekovima bez značajne razlike među skupinama. Ispitanici s pokušajem suicida češće su razvedeni i imaju značajnije veći broj hospitalizacija u odnosu na one bez pokušaja suicida. Također, ispitanici s pokušajem suicida koriste značajnije veći broj lijekova, češće koriste nitrazepam te češće imaju komorbiditetnu dijagnozu graničnog poremećaja ličnosti u odnosu na ispitanike bez pokušaja suicida. Provedeno istraživanje ima ograničenja s obzirom da u njega nisu uvršteni ispitanici koji su uspjeli u pokušaju suicida pa stoga ne pruža cjelovitu sliku o shizofrenoj populaciji i načinima suicida.

Kompleksnost ovog problema upućuje na potrebu daljnjih istraživanja područja suicidalnosti, kako one povezane sa shizofrenijom, tako i suicidalnosti uopće s obzirom da se radi o ''tihoj epidemiji'' te javnozdravstvenom problemu čije veličine društvo još uvijek nije svjesno, a također bi trebalo poboljšati načine registriranja te praćenja stope suicidalnosti (12).

dergo longer therapeutic treatment and are more often diagnosed with comorbid somatic illnesses and acute stress reaction. When it comes to male schizophrenic patients, comorbidity of chronic gastritis and alcohol addiction is more frequent. During the observed period, the highest percentage of suicide attempts among schizophrenic patients compared with the total number of hospitalized patients, was in 2011 and the lowest percentage in 2014. A downward or upward trend was not observed, since the percentages changed every year. The most common method of a suicide attempt in patients who attempted to commit suicide and those who repeated this attempt was intentional self-poisoning by psychotropic drugs, without significant differences between the groups. Patients who attempted to commit suicide were more likely to be divorced, with a significantly higher number of hospitalizations than those without suicide attempts. Furthermore, participants with a suicide attempt used a larger number of medications, most commonly nitrazepam, and they were more often diagnosed with comorbid borderline personality disorder, compared with the patients without a suicide attempt. The present study has some limitations as it did not include participants whose suicide attempt was successful and therefore it does not provide a complete picture of the schizophrenic population and suicide methods.

The complexity of this problem emphasizes the need for further research of the phenomenon of suicidality, its relation to schizophrenia and suicidality in general, given the fact that it can be seen as "a silent epidemic". It has become a major public health problem, at a scale of which society is still unaware. We should also improve the methods of registration and monitoring of suicide rates (12).

LITERATURA/REFERENCES

1. Kozarić Kovačić D. Epidemiologija suicida u Hrvatskoj-neki svjetski epidemiološki pokazatelji suicida. Zbornik sažetaka I. hrvatskog kongresa o suicidalnom ponašanju. Zagreb: Marko M usluge, 2000.
2. Pompili M, Ruberto A, Girardi P, Tatarelli R. Suicide in schizophrenia. What are we going to do about it? Ann Ist Super Sanita 2004; 40(4): 463-73.
3. Hudolin V. Psihijatrija. 2 izd. Zagreb: Jugoslavenska medicinska naklada, 1981.
4. Baxter D, Appleby L. Case register study of suicide risk in mental disorders. Br J Psychiatry 1999; 175: 322-6.
5. Appleby L. Preventing suicides must remain a priority. BMJ 2001; 323: 808-9.
6. Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. Br J Psychiatry 1997; 170: 205-28.
7. Folnegović-Šmalc V, Kocijan-Hercigonja D, Barac B. Prevencija suicidalnosti. Zagreb: Multigraf, 2001.
8. Muesner KT, McGurk SR. Schizophrenia. Lancet 2004; 363: 2063-72.
9. Walker EF. Developmentally moderated expressions of the neuropathology underlying schizophrenia. Schizophr Bull 1994; 20: 453-80.
10. Taeyoung Y, Sung-Wan K, Seon-Young K, Ju-Yeon L, Hee-Ju K, Kuyung-Yeol B *et al.* Relationship between suicidality and low self-esteem in patients with schizophrenia. Clinical Psychopharmacology and Neuroscience 2015; 13(3): 296-301.
11. Marčinko D. Suicidologija. Zagreb: Medicinska naklada, 2011.
12. Brečić P. Suicidalnost u psihijatrijskim poremećajima. Medicus 2017; 26(2): 173-83.
13. Kneisl CR, Trigoboff E. Contemporary Psychiatric-Mental Health Nursing. 3.izd. New Jersey: Prentice Hall, 2012.
14. Filaković P i sur. Psihijatrija. Osijek: Medicinski fakultet Osijek, 2014.
15. Muačević V. Psihijatrija. Zagreb: Medicinska naklada, 1995.
16. Sawa A, Snyder SH. Schizophrenia: diverse approaches to a complex disease. Science 2002; 296(5568): 692-5.
17. Hor K, Taylor M. Suicide and schizophrenia: a systematic review of rates and risk factors. J Psychopharmacol 2010; 24(4): 81-90.
18. Roy A. Reported childhood trauma and suicide attempts in schizophrenic patients. Suicide Life Threat Behav 2005; 35(6): 690-3.
19. Read J, Agar K, Argyle N, Aderhold V. Sexual and physical abuse during childhood and adulthood as predictors of hallucinations, delusions and thought disorder. Psychology and Psychotherapy: Theory, Research and Practice 2003; 76(1): 1-22.
20. Fuller-Thomson E, Hollister B. Schizophrenia and suicide attempts: findings from a representative community-based canadian sample. Schizophrenia research and treatment vol. 2016, Article ID 3165243, 11 pages, 2016. doi:10.1155/2016/3165243
21. Brecic P. Utjecaj simptoma depresije na suicidalnost u oboljelih od shizofrenije. Doktorska disertacija. Osijek: Medicinski fakultet Sveučilišta u Osijeku, 2010.
22. Ishii T, Hashimoto E, Ukai W, Kakutani Y, Sasaki R, Saito T. Characteristics of Attempted Suicide by Patients with Schizophrenia Compared with Those with Mood Disorders: A Case-Controlled Study in Northern Japan. PLoS One 2014; 9(5): 1-6.
23. Canuso CM, Pandina G. Gender and schizophrenia. Psychopharmacol Bull 2007; 40(4): 178-90.
24. Deshmukh V, Bhagat A, Shah N, Sonavane S, Desousa AA. Factors affecting marriage in schizophrenia: A cross-sectional study. J Mental Health Human Behav 2016; 21(2): 122-4.
25. Wilsnack RW, Wilsnack SC, Kristjanson AF, Vogeltanz-Holm ND, Gmel G. Gender and alcohol consuption: patterns from the multinational genacis project. Addiction 2009; 104(9): 1487-1500.
26. Pompili M, Amador XF, Girardi P, Friedman JH, Harrow M, Kaplan K *et al*. Suicide risk in schizophrenia: learning from the past to change the future. Ann Gen Psychiatry. 2007; 6:10.
27. Sadock BJ, Sadock VA. Kaplan&Sadock's comprehensive textbook of psychiatry. 9. izd. Philadelphia: Lippincott Williams & Wilkins, 2009.
28. Modestin J. Three different types of clinical suicide. Eur Arch Psychiatry Neurol Sci 1986; 236:148-53.
29. Jennum P, Baandrup L, Iversen H K, Ibsen R, Kjellberg J. Mortality and use of psychotropic medication in patients with stroke: a population-wide, register-based study. BMJ open 2016; 6(3): 111-6.
30. De Hert M, McKenzie K, Peuskens J. Risk factors for suicide in young people suffering from schizophrenia: a long-term follow-up study. Schizophr Res 2001; 47(2-3): 127-34.
31. Cheng KK, Leung CM, Lo WH, Lam TH. Risk factors of suicide among schizophrenics. Acta Psychiatr Scand 1990; 81(3): 220-4.
32. Mulholland C, Cooper S. The symptom of depression in schizophrenia and its management. Adv Psychiatr Treat 2000; 6(3): 169-77.
33. McGirr A, Tousignant M, Routhier D, Pouliot L, Chawky N, Margolese HC *et al*. Risk factors for completed suicide in schizophrenia and other chronic psychotic disorders: a case-control study. Schizophr Res 2006; 84(1):132-43.
34. Kingdon DG, Ashcroft 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; 198(6): 399-403.
35. Lieb K, Zanarini MC, Schmahl C, Linehan MM, Bohus M. Borderline personality disorder. Lancet 2004; 364(9432): 453-61.
36. Gunderson J, Links PS. Borderline Personality Disorder: A Clinical Guide. Washington: American Psychiatric Publishing, 2008.
37. Black DW, Blum N, Pfohl B, Hale N. Risk factors for suicidal behavior in borderline personality disorder. J Personal Disord 1994; 151(9): 1316-23.
38. Reutfors J, Brandt L, Jönsson EG, Ekbom A, Sparén P, Osby U. Risk factors for suicide in schizophrenia: findings from a Swedish population-based case-control study. Schizophr Res 2009; 108(1-3): 231-7.

Vrijednost starih medicinskih knjiga

/ Value of Old Medical Books

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Ovim se člankom željelo ukazati na vrijednost starog knjižnog fonda. Vrijednost starih knjiga s područja medicine ne nalazi se zbog davne godine izdavanja već u tome što su one potrebne svima koji se bave proučavanjem povijesti medicine, psihijatrije, razvojem dijagnostike i svime što je vezano uz takva istraživanja. Knjige koje su dio fonda Stručne knjižnice Klinike za psihijatriju Vrapče i koje su kratko opisane nose u sebi znanja koja su nekada bila originalna i nova. Danas, iako su ta znanja zastarjela, ne smije ih se zaboraviti jer ona čine dio medicinske teorije. Briga o starom bibliotečnom fondu ne smatra se samo općom kulturom već je ona i osnovna zadaća svake biblioteke. Stare knjige potrebno je čuvati i doživljavati kao nasljeđe i svjedočanstvo gotovo stočetresetogodišnje povijesti Klinike za psihijatriju Vrapče.

/ The aim of this article is to bring attention to the older books of our library fund. The importance of old medical books does not lie merely in their original date of publishing but in their worth to all those interested in the history of medicine, psychiatry, development of diagnostics and everything related to such research. The old books that are part of the library collection of the Vrapče University Psychiatric Hospital, which will be briefly described, contain knowledge that was new at the time of their original publishing. Today, although the ideas in these books may seem old and dated, we must not forget that much of the knowledge they contain is part of current medical theories. Caring for the book collection of the library is not only a matter of general culture but also one of the basic tasks and duties of any library. Old copies of books and sometimes the library collection as a whole are part of a cultural legacy, because every book tells a story. Old books must be cared for and treated as part of the heritage and testimony of the one-hundred-forty-year-old history of our University Hospital.

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KLJUČNE RIJEČI / *KEY WORDS*:

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Bibliografija / *Bibliography*

Medicinske publikacije / *Medical publications*

Povijest / *History*

UVOD

U krugu Klinike za psihijatriju Vrapče (1) postoje dva muzeja: Muzej bolnice Vrapče, čiji je sadržaj vezan uz povijest Klinike i povijest psihijatrije, i Župićev muzej. Župićev muzej osnovan je 1954. godine i otvoren povodom 75. godišnjice Bolnice (2). Naime, još tridesetih godina prošlog stoljeća dr. Stanislav Župić (1897.-1973.) prepoznao je vrijednost likovnog stvaralaštva bolesnika i počeo prikupljati za muzej njihove radove koji su nastajali tijekom likovne terapije (3). Pored muzejske građe u mezaninu Muzeja nalazila se knjižna građa koja se može povezati s fondom nekadašnje *Liječničke knjižnice*. U trenutku kada se odlučilo renovirati Župićev muzej bilo je jasno da stare knjige i časopise treba premjestiti na drugu lokaciju za što je predviđen novi prostor arhiva koji se nalazi u glavnoj zgradi Klinike ispod Stručne knjižnice. Knjige koje smo počeli seliti u novi prostor dugi niz godina nitko nije uzeo u ruke i bile su načete zubom vremena. Premještajem tog dijela bibliotečnog fonda bio je dovršen samo prvi dio posla. Nakon što smo odvojili knjige od časopisa, imali smo bolji uvid u količinu publikacija. Okvirno je određen način slaganja knjiga po pravilima struke i po logici radoznalog razgledavača kojeg će stare publikacije zanimati (4). Odlučili smo prvo složiti rječnike, leksikone, enciklopedije - dakle referentnu literaturu, a zatim smo načinili podjelu knjiga u 44 područja. Cjelokupan rad popratili smo popisom u kojem smo zabilježili tematske cjeline. Na posljednjoj polici nalaze se stari njemački romani pisani goticom koje su davno poklonili Klinici njezini bolesnici. Romani su se nekada nalazili u *Posudbenoj knjižnici za bolesnike* u kojoj su bolesnici tijekom radne terapije provodili vrijeme i o njoj sami brinuli (5). U cjelokupnom radu sudjelovali su zajedno bolesnici i zaposlenici Klinike.

INTRODUCTION

There are two museums within the Vrapče Psychiatric Clinic (1): the Vrapče Hospital Museum, the contents of which are related to the history of the Clinic and history of psychiatry, and the Župić Museum. The Župić Museum was founded in 1954 and was opened on the occasion of the 75th anniversary of the Hospital (2). In the 1930s, Dr Stanislav Župić (1897-1973) recognized the value of patients' artistic works and began collecting the work they created in their art therapy sessions for the museum (3). Besides the museum artefacts, there was also a library in the mezzanine of the museum that can be connected with the fund of the former *Medical Library*. At the time when the renovation of the Župić Museum was decided upon, it was clear that old books and magazines should be moved to another location – and this is the new archive space, which is located in the main building of the Clinic beneath the Professional Library. The books that we started moving to the new space had not been touched for many years and were not ruined by time. By moving the library fund, only the first part of the job was completed. After we separated the books from the magazines, we had a better insight into the amount of publications. We defined how arrange books according to the rules of the profession and the logic of a curious viewer interested in old publications (4). First we decided to put together dictionaries, lexicons, encyclopaedia – that is, reference literature – and then we divided the books into 44 subdivisions. We completed the whole work by making a list in which we recorded thematic units. On the last shelf there are old German novels written in Gothic script, which were donated to the Clinic by their patients a long time ago. The novels used to belong to the *Library for Patients*, where patients used to spend time during their work therapy and were in charge of it themselves (5). Patients and employees of the Clinic participated in the overall work together.

O KATALOGU, NEKIM DJELIMA I AUTORIMA

U katalogu svaka je knjiga opisana imenom autora, naslovom, podnaslovom i godinom izdanja. Redni broj knjige u popisu ujedno označava i mjesto knjige na polici pa se u pronalaženju knjiga treba voditi rastućim brojem (*numerus currens*). Katalog sadrži popis 818 knjiga starog fonda Stručne knjižnice Klinike za psihijatriju Vrapče i obuhvaća razdoblje od 1866. do 1987. godine. Unutar kataloga istaknuta su djela prema njihovoj starosti, prema poznatom autoru, ali i po neobičnom naslovu. Najstarije djelo je „*Deutsch - griechisches Schulwörterbuch*" (Njemačko - grčki školski rječnik) iz 1867. koji je uredio dr. Karl Schenkl (1827.-1900.), a iz područja medicine knjiga na hrvatskom jeziku Ivana Dežmana (1841.-1873.) „Čovjek prema zdravlju i ljepoti: razložio Dr. Ivan Dežman u deset javnih predavanjih, namienjenih krasnomu spolu, a čitanih u velikoj dvorani Narodnoga doma u Zagrebu u godinah 1869, 1870, 1871." dr. Ivana Dežmana iz 1872. Na naslovnici Dežmanove knjige uz naslov istaknut je citat: „Liep biti, reći će zdrav biti. Nema tielesne ljepote bez duševne ljepote". Najstariji udžbenik iz psihijatrije je Krafft-Ebingov (1840.-1902.) „*Lehrbuch der Psychiatrie auf klinischer Grundlage für praktische Ärzte und Studierende*" (Udžbenik psihijatrije na kliničkoj osnovi za praktične liječnike i studente) iz 1888. godine. Najviše knjiga je na njemačkom jeziku, zatim slijede knjige na hrvatsko-srpskom (neke pisane ćirilicom), francuskom i ruskom jeziku. Najzastupljenije područje je, razumije se, psihijatrija, slijedi neurologija, a najmanje je knjiga iz fizikalne medicine, samo dvije. Iz popisa je vidljivo da su zastupljene i knjige iz nemedicinskih područja. Mnogi autori spadaju u začetnike neke medicinske grane, a iz područja psihijatrije, neurologije i psihologije prisutni su neki od najpoznatijih. Primjerice Jean Martin Charcot (1825.-1893.), Emil Kraepelin (1856.-1926.), prvi psiholog Wilhelm Wundt (1832.-1920.),

ABOUT THE CATALOGUE, SOME WORKS AND AUTHORS

In the catalogue, each book is listed by the author's name, title, subtitle and year of publication. The ordinal number of the book in the list also marks the place of the book on the shelf, so finding the book should be guided by the *numerus currens*. The catalogue contains a list of 818 books of the old fund of the Library of the Vrapče Psychiatric Clinic and covers the period from 1866 to 1987. The catalogue lists the works according to their age, the popularity of the author, but also according to unusual titles. The earliest work is the "Deutsch - griechisches Schulwörterbuch" (German: Greek School Dictionary) from 1867, edited by Dr Karl Schenkl (1827-1900), and a book by Dr Ivan Dežman (1841-1873) from the field of medicine in Croatian language "Man according to health and beauty: explained by Dr Ivan Dežman, in ten public lectures, devoted to the fairer sex and read in the Grand Hall of the National House in Zagreb in the years 1869, 1870, 1871" from 1872. On the cover of Dežman's book, a citation is also emphasized along with the title: "To be beautiful, means to be healthy. There is no physical beauty without mental beauty." The oldest psychiatric textbook is the one by Krafft-Ebing (1840-1902), from 1888, "Lehrbuch der Psychiatrie auf klinischer Grundlage für praktische Ärzte und Studierende" (Clinical Practice Psychiatry Textbook for Practical Doctors and Students). Most of the books are in German, followed by books in Serbo-Croatian (some written in Cyrillic), French and Russian. The most common area is, of course, psychiatry, followed by neurology, and the least represented are books from the field of physical medicine: only two. It is evident from the list that non-medical areas are also present. Many authors belong to the founders of some medical branch, and some of the most famous in the area of psychiatry, neurology and psychology are present. For example, Jean Martin Charcot (1825-1893), Emil Kraepelin (1856-1926), the first

Theodor Meynert (1833.-1892.), Josef Breuer (1842.-1925.), Sigmund Freud (1856.-1939.) i njegov psihoanalitički krug - Alfred Adler (1870.-1937.), Carl Gustav (1875.-1961.) Jung, Sándor Ferenczi (1873.-1933.), Jones Maxwell (1940.-2016.). Uz ostala poznata imena, ovdje smo izdvojili samo „najzvučnija".

Spomenuti najstariji udžbenik psihijatrije ima zanimljivog autora, punim imenom - Richard Fridolin Joseph Freiherr Krafft von Festenberg auf Frohnberg, zvan von Ebing (1840.-1902.). Specijalizirao je psihijatriju na Sveučilištu u Heidelbergu. Nakon rada u psihijatrijskim bolnicama karijeru nastavlja znanstvenim radom na području forenzike, naime istraživao je veze između psihijatrije i kaznenog prava. Objavljuje djela *„Lehrbuch der gerichtlichen Psychopathologie"* (Udžbenik sudske psihopatologije), 1875. i *„Grundzüge der Kriminalpsychologie für Juristen"* (Osnove kriminalne psihologije za pravnike), 1882. Objavljuje i sljedeće naslove: *„Die Melancholie: eine klinische Studie"* (Melankolija: klinička studija), 1874., „Die progressive allgemeine Paralyse" (Progresivna opća paraliza), 1894., *„Nervosität und neurasthenische Zustände"* (Nervoza i neurastenična stanja), 1895. Njegovo najpoznatije djelo je *„Psychopathia Sexualis: eine klinisch-forensische Studie"* (Seksualna psihopatija: kliničko-forenzička studija), 1886. god., koje je doživjelo mnogobrojna uvijek dopunjena izdanja i postalo standardnim udžbenikom seksualne patologije toga vremena. U kratkom razdoblju postao je svjetski poznat, dolazili su mu pacijenti iz mnogobrojnih zemalja. Njegov doprinos nalazimo i u znanstvenom proučavanju homoseksualnosti gdje izražava stav da se njome ne trebaju baviti sudovi već samo psihijatri i neurolozi.

Slijedeća zanimljiva i jedna od najstarijih publikacija, tiskana goticom je *„Vorträge über Irrenpflege: für Pfleger und Pflegerinnen, sowie für Gebildete jeden Standes"* (Predavanja o njezi umobolnih: za njegovatelje i njegovateljice, kao i obrazovane svih staleža), autora dr. med. Frie-

psychologist Wilhelm Wundt (1832-1920), Theodor Meynert (1833-1892), Josef Breuer (1842-1825), Sigmund Freud (1856-1939) and his psychoanalytic circle – Alfred Adler (1870-1937), Carl Gustav Jung (1875-1961), Sándor Ferenczi (1873-1933), Jones Maxwell (1940-2016). Here we have named only the "most famous".

The aforementioned oldest psychiatry textbook has an interesting author whose full name was: Richard Fridolin Joseph Freiherr Krafft von Festenberg auf Frohnberg, known as von Ebing (1840-1902). He specialized in psychiatry at the University of Heidelberg. After working in psychiatric hospitals, he continued his scientific career in the field of forensics, namely researching the links between psychiatry and criminal law. He published the works "Lehrbuch der gerichtlichen Psychopathologie'' (Textbook of Court Psychopathology) in 1875 and the "Grundzugge der Kriminalpsychologie für Juristen" (An Outline of Criminal Psychology for Lawyers) in 1882. He also published the following titles: "Die Melancholie: Eine klinische Studie" (Melancholy: Clinical study), 1874, "Die progressive allgemeine Paralyse"(Progressive General Paralysis), 1894, "Nervosität und neurasthenische Zustände" (Nervousness and Neuroasthenic Conditions), 1895. His most famous work is "Psychopathia Sexualis: eine klinisch-forensische Studie" (Psychopathia Sexualis: the Case Histories), 1886, which has had numerous and ever-supplemented editions and became a standard textbook of sexual pathology of that time. In a short time it became world-famous, and patients from many countries visited him. His contribution are also found in the scientific study of homosexuality, expressing the view that it is not for courts to deal with the matter, but only for psychiatrists and neurologists.

The next interesting work of the oldest publications, printed in Gothic, is the author of the "Vorträge über Irrenpflege: für Pfleger und Pflegerinnen, sowie für Gebildete jeden Standes" (Lectures on the nurturing of the minds: for

dricha Scholza (1853.-1932.) iz 1882. Svojim sadržajem daje osnovna znanja o njezi duševnih bolesnika. U predgovoru svoje knjige, napisanom godinu dana ranije, autor ističe kako ne manjka znanja o njezi bolesnika općenito, već ističe nedostatak pisanih djela i znanja o njezi duševnih bolesnika, posebno kod tadašnjih njegovatelja. Svoje djelo započinje uvodom o obilježjima umobolnosti, zatim piše o uzrocima umobolnosti, o raspoloženjima i temperamentima, slijede tekstovi o melankoliji, maniji i obmanama osjetila - halucinacijama. Iduća poglavlja obrađuju prepoznavanje duševnih poremećaja u njihovom početku, dovođenje bolesnih u ustanove za umobolne, a slijede poglavlja o postupanju s duševnim bolesnicima i dva poglavlja o posebnoj njezi. U jednom od poglavlja još piše o razlici između njege u ustanovi i njege u dvije vrste slobodnog smještaja izvan ustanove, a to su poljoprivredna kolonija i njega unutar obitelji. Friedrich Scholz isticao je kako osim stručnjaka i svi ostali trebaju uvažavati duševne bolesnike i odnositi se prema njima bez predrasuda.

Koliko se važnosti već tada pridavalo njezi bolesnika i koliko je bila i razvijena svijest o važnosti prehrane u liječenju, možemo zaključiti po publikacijama koje obrađuju temu dijetalne bolničke prehrane (6). Knjiga koju ćemo opisati je „Praktična dijetetika s preko 500 kuharskih recepata za dijetetsko liječenje za liječnike i bolesnike“. Autor knjige je tajni dvorski savjetnik dr. L. Roemheld (1871.-1938.), a knjiga je četvrto prošireno i prerađeno izdanje „Praktičnog dijetetskog kuhara“ dr. Curta Parisera (1843.-1910.). Slijedi citat iz predgovora prevoditelja (Plavšić, Č., Selenić, S.):

„Već odavno osjeća se među liječnicima i među bolesnicima potreba za jednom dijetetikom koja bi istovremeno zadovoljila i sve praktične potrebe. Da bi popunili tu prazninu u našoj stručnoj literaturi kao i zadovoljili potrebu, preveli smo ovo djelo koje potpuno odgovara postavljenim zahtjevima. Knjiga je pisana tako da se njome mogu služiti i liječnici i bolesnici.“ (7).

carers and nurses, as well as the educated of all classes) by Friedrich Scholz (1853-1932) from 1882. He provides basic knowledge about the care of mental patients. In the foreword of his book, written a year earlier, the author emphasizes that there is no lack of knowledge about patient care in general, but highlights the lack of written works and knowledge about the care of mental patients, especially for the caregivers at the time. His work begins with an introduction to the characteristics of mental illnesses and then speaks of the causes of mental illnesses, moods and temperaments, followed by texts on melancholy, mania and deception of the senses – hallucinations. The next chapters deal with the recognition of mental disorders at their inception, bringing the patients to hospital for mental illnesses, followed by chapters on the treatment of the mentally ill and two chapters on special care. In one of the chapters there is still a difference between institutional care and care in two types of free accommodation outside the institution, which are an agricultural colony and family care. Friedrich Scholz emphasized that both experts and everyone else should respect mental patients and treat them without prejudice.

How important the care for a patient was even then and how developed the awareness of the importance of nutrition in treatment was can be concluded from publications dealing with the subject of dietary nutrition (6). The book we will describe is “Practical Diets with Over 500 Culinary Recipes for Dietary Treatment for Doctors and Patients”. The author of the book is the Secret Court Counsellor Dr L. Roemheld (1871-1938), and the book is the fourth extended and revised edition of “A Practical Diet Cook” by Dr Curt Pariser (1843-1910). Here is a quote from the interpreter’s preface to the Croatian edition (Plavšić, Č., Selenić, S.):

“Doctors and patients have long been aware of the need for a single diet that would meet all the practical needs at the same time. To fill this gap in our professional literature as well as satisfy the need,

„Jedna od najstarijih i najvažnijih grana terapije bilo je oduvijek liječenje prikladnom dijetom. Dijetetička prehrana je najprirodniji način liječenja jer se razumije samo po sebi da svakodnevno davanje jela i pića pojedinim licima kad su zdrava i kad su bolesna mora biti različito.“ (8).

Zanimljivost - iako je autor u medicinu uveo „Roemheldov sindrom“ koji opisuje povezanost probavnih poteškoća sa srčanim tegobama, i sam je umro od iznenadnog zastoja rada srca. Inače, Roemhelda i Parisera povezuje jednaka posvećenost radu u lječilišnim ustanovama u kojima su provodili svoje dijetetske kure, na taj način doprinosili su liječenju te po tome postali i poznati. Curt Pariser, gastroenterolog i dijetetičar otvorio je u poznatom lječilišnom mjestu Bad Homburg lječilišnu kliniku koja se specijalizirala za liječenje bolesti želuca i crijeva i prehrambene i metaboličke poremećaje. Renomeu njegove kuće kao i samog grada Bad Homburga pridonijelo je to što se Curt Pariser proslavio kao suizumitelj „Homburške dijete“ koja je postala nadaleko poznata. Curt Pariser bio je izrazito povezan s frankfurtskim židovskim građanstvom, a početkom Prvog svjetskog rata Alfred Spreyer financirao je unutarnje uređenje „Bijele kuće“ kao „mjesta za njegu ranjenika u oporavku iz redova običnih vojnika njemačke vojske“. Spomenuta „Bijela kuća“ jedna je od zgrada lječilišnog kompleksa. Godine 1915. uselio se u Sanatorij dr. Parisera frankfurtski profesor dr. Paul Ehrlich, jedan od izumitelja kemoterapije i nobelovac. Međutim, njegov je boravak tragično završio kada je iste godine podlegao drugom moždanom udaru, što je bio veliki osobni gubitak za Curta Parisera, koji je u njemu izgubio i prijatelja. Zasluge Curta Parisera oko Bad Homburga izgubile su na značenju nakon njemačkog poraza u Prvom svjetskom ratu posebno zbog toga što se mržnja prema Židovima ponovo rasplamsala. Godine 1919. izabran je kao član lijevoliberalnog DDP-a (*Deutsche Demokratische Partei*) za gradskog poslanika Bad Homburga, no ubrzo je

we have translated this work that fully meets the requirements set. The book is written so that doctors and patients can both use it.” (7).

“One of the oldest and most important branches of therapy has always been treatment according to a suitable diet. Dietary nutrition is the most natural way of treatment, because it is self-understood that day-to-day delivery of food and drinks to individual persons when they are healthy and when they are sick must be different.” (8)

An interesting fact: although the author introduced the “Roemheld’s syndrome” into medicine, which describes the association of digestive problems with heart problems, he himself died of a sudden heart failure. Roemheld and Pariser are associated with the same dedication to work in health institutions where they carried out their dietary programs, thus contributing to the treatment and becoming famous. Curt Pariser, a gastroenterologist and dietician, opened a health sanatorium in Bad Homburg, a centre specializing in the treatment of stomach and bowel diseases and nutritional and metabolic disorders. What also contributed to the renown of his institution as well as the town of Bad Homburg was that Curt Pariser was the co-inventor of the “Homburg diet” which became widely known. Curt Pariser was strongly associated with Jewish citizens in Frankfurt, and at the beginning of the First World War Alfred Spreyer financed the interior design of the “White house” as a “place for the care of the recovery of the wounded ordinary soldiers of the German army”. This “White house” is one of the buildings of the health complex. In 1915, Dr Paul Ehrlich, a professor from Frankfurt, who was one of the inventors of chemotherapy and a Noble Prize Winner, moved to Pariser’s sanatorium. However, his stay tragically ended when he suffered from another stroke in the same year and died, which was a major personal loss for Curt Pariser, who also lost his friend. Curt Pariser’s contribution concerning Bad Homburg lost its meaning after the German defeat in the First World War, especially

FIGURE 1. Old publications

FIGURE 2. Arrangement on the shelves

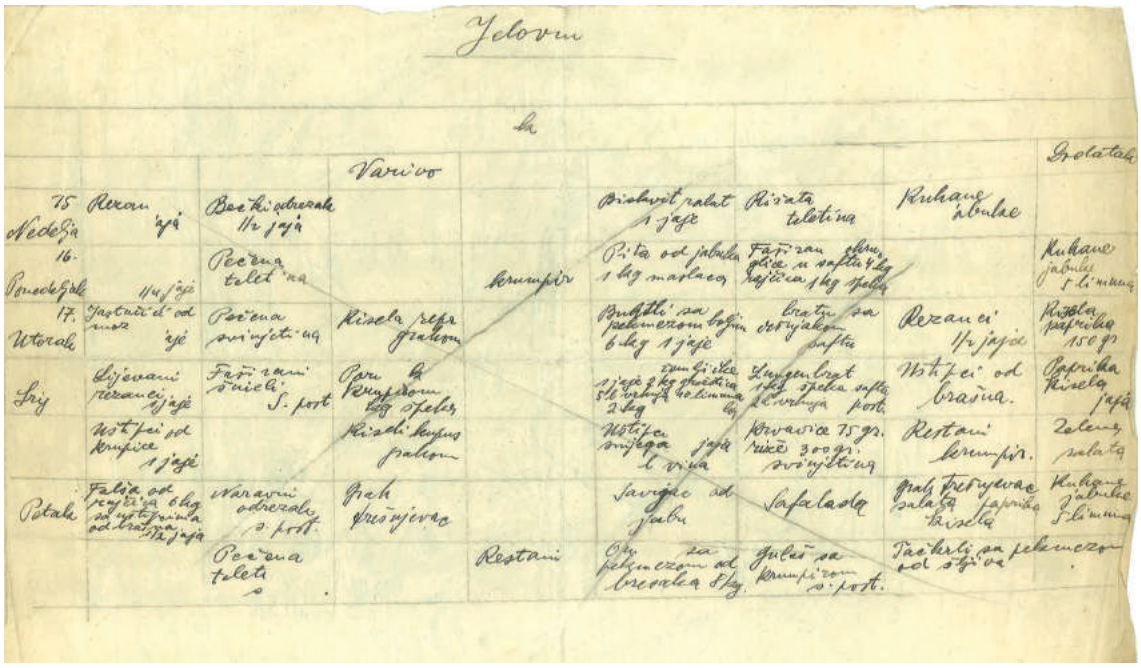

FIGURE 3. Menu of Hospital Vrapce, 15.12.1935.

dospio u neprilike jer je „Revolucionarno radničko vijeće“ zaplijenilo namirnice u njegovom Sanatoriju koje je on navodno pohranjivao za goste (misli se na bolesnike) lječilišta, a to se u ono vrijeme smatralo krijumčarenjem. Poratna inflacija zadala mu je i novčanih teškoća.

because the hatred towards the Jews rekindled again. In 1919 he was elected as a member of the left-liberals DDP (Deutsche Demokratische Partei) as the Bad Homburg town delegate, but soon got into trouble because the “Revolutionary Workers’ Council” seized food at his Sana-

Godine 1920. položio je svoj mandat, a u jesen zatvorio je svoje životno djelo - Sanatorij, kojemu je prijetio stečaj nakon čega je napustio Bad Homburg i postao vodećim liječnikom u sanatoriju Woltersdorfer Schleuse kod Berlina. Umro je 1931. u 78. godini u Berlinu. Mjesto njegova groba još uvijek je nepoznato. Sanatorij dr. Parisera preimenovan je 1979. u Kliniku Paula Ehrlicha i danas je rehabilitacijska ustanova na čijoj internetskoj početnoj stranici stoji:

„Liječnik, biolog i nobelovac Paul Ehrlich dao je ime našoj klinici. Njegovi visoki medicinski kriteriji i danas nas obvezuju.“ (9)

(Mala digresija i zanimljivost - ako se netko čitajući ovaj članak upita ima li kakve poveznice između imena dr. Parisera i istoimene vrlo poznate salame, to ipak za sada ostaje nepoznanicom jer nema pravog objašnjenja o nastanku imena spomenute salame, no sasvim je sigurno da ono nije vezano uz ime grada Pariza. Istražujući iz puke radoznalosti moguće poveznice pronašli smo podatak da postoji i ruska verzija te salame, a zove se Doktorska kobasica).

Uz opisane zanimljive naslove i poznate autore izdvojili bismo publikaciju starog bibliotečnog fonda, a to je *„Schizophrenie und Sprache. Zur Psychologie der Dichtung“* (Shizofrenija i jezik. O psihologiji pjesništva), 1966. autora Lea Navratila. Zanimljiva je zbog teme o književnom stvaralaštvu duševnih bolesnika. Leo Navratil je osim književnog stvaralaštva opisivao i likovno stvaralaštvo duševnih bolesnika, a naša je Klinika još davnih tridesetih godina u dio okupacijske terapije uključivala terapiju crtanjem i bojama (10). U knjizi u kojoj Navratil piše o tome što je shizofrenija, objašnjava pojmove i vezu između jezika i psihoze, u drugom djelu piše o shizofrenim pjesnicima, o lirskim i shizofrenim jezičnim fenomenima. Njemački tjednik Der Spiegel, 2006 g. objavljuje tekst o smrti dr. Lea Navratila u njegovoj 85. godini i piše:

torium which he allegedly stored for his guests (that is, patients), which was then regarded as smuggling. Post-war inflation also caused him financial difficulties. In 1920 he retired from his mandate and in autumn of the same year closed his life's work – the Sanatorium – which was threatened with bankrupcy, after which he left Bad Homburg and became a leading physician at the Woltersdorfer Schleuse Sanatorium in Berlin. He died in 1931 at the age of 78 in Berlin. The place of his grave is still unknown. Dr Pariser's sanatorium was renamed in 1979 into Paul Ehrlich Clinic and is today a rehabilitation institution whose internet home page states:

"Doctor, biologist, and Noble Prize Winner Paul Ehrlich gave the name to our clinic. His high medical criteria still bind us today." (9)

(A small digression and an interesting fact: if someone reading this article wonders if there is any connection between the name of Dr Pariser and the famous salami, this still remains unknown because there is no real explanation for the name of the salami, however, it is rather certain that it is not related to the name of the city of Paris. Researching the possible connection out of mere curiosity, we discovered that there is a Russian version of that salami, called Doctor's sausage.)

Along with the abovementioned interesting titles and well-known authors, we would also like to highlight a publication from the old library fund which is entitled "Schizophrenie und Sprache. Zur Psychologie der Dichtung" (Schizophrenia and Language, About the Psychology of Poetry), 1966, written by Leo Navratil. This book is interesting because of its topic – literary works of mental patients. In addition to literary works, Leo Navratil described the visual art of mental patients as well, and our Clinic included drawing and painting therapy (10) as part of Occupational Therapy as early as the 1930s. In the book that Navratil writes about schizophrenia, he explains the concepts and the link between language and psychosis, and

„... austrijski psihijatar Navratil krajem pedestih godina prilikom testiranja crtanjem svojih pacijenata u Zemaljskoj klinici za živčane bolesti Gugging, otkrio je da su shizofreni bolesnici umjetnici. Kasnije za najdarovitije od svojih pacijenata osniva stambenu zajednicu za umjetničku terapiju. Tamo su pacijenti oslikavali zidove, stropove i namještaj neobičnim magičnim likovima kao što su anđeli smrti i likovi nazvani Kopffüssler (Kopf= glava; Fuss= stopalo) i pisanim porukama iz „svijeta ludila". 1965. izlazi i Navratilova knjiga „Schizophrenie und Kunst". Ubrzo nakon toga uzdigli su se umjetnici kao Johann Hauser i Oswald Tschirtner do svjetskih zvijezda „sirove umjetnosti" - Art Bruta. No, Navratil ne želi idealizirati njihovu potpunu neovisnost o službenoj umjetnosti jer ona proizlazi iz izdvojenosti i nedostatka osjećaja stvarnosti. „Bin ein Idiot, weil dumm erschuf mich der liebe Gott" (Idiot sam jer me dragi Bog stvorio glupim) piše shizofreni bolesnik August Walla u oblačiću za tekst na autoportretu." (11).

Stav dr. Navratila jest da shizofreni bolesnici svojoj bolesti duguju svoj talent. Govorio je kako je ludilo upotrebljivo za to da se stvori nešto posebno, misleći pri tom na likovno i književno stvaralaštvo duševno bolesnih. Kada se djela duševnih bolesnika promatraju isključivo iz estetskog kuta gledanja, to ne smatra dobrim, jer ne smijemo zaboraviti da ljudi koji stvaraju ta djela - pate. S druge strane u svojoj knjizi *„Art Brut und Psychiatrie: Gugging 1946 -1986"* (Sirova umjetnost i psihijatrija: Gugging 1946-1986.) izjavljuje sljedeće:

„Ako su psihički hendikepirane i psihički bolesne osobe u stanju stvoriti novu vrstu umjetnosti, onda to mora promijeniti naš kut gledanja, onda ljudi koji žive u psihijatrijskim ustanovama nisu samo osobe koje trebaju skrb, nego su i aktivni članovi društva." (12).

Još jedan od zanimljivijih, ako ne i kontroverznih autora, je austrijski patolog Friedrich Kraus (1858.-1936.). Njegovo je najvažnije djelo *„Allgemeine und spezielle Pathologie der*

in the second part he writes about schizophrenic poets and lyrical and schizophrenic language phenomena. The German weekly magazine Der Spiegel, 2006, published a text on the death of Dr. Leo Navratil at the age of 85 that said:

.....the Austrian psychiatrist, Navratil, in the late 1950s, while testing his patients at the Gugging Clinic for Nervous Illnesses, discovered that schizophrenic patients were artists. Later, for the most talented of his patients, he founded a residential community for art therapy. There, the patients painted walls, ceilings and furniture with unusual magical characters such as death angels and characters named Kopffüssler (Kopf =head;Fuss=foot) and written messages from the "world of madness". In 1965, Navratil's book "Schizophrenie und Kunst" was released. Shortly thereafter, artists like Johann Hauser and Oswald Tschirtner became famous as the world's "raw art" stars – Art Brut. But, Navratil does not want to idealize their full independence from formal art because it stems from the separation and lack of sense of reality. "Bin ein Idiot, Weil dumm erschuf mich der liebe Gott" (I'm an idiot because God made me stupid) writes the schizophrenic patient August Walla in a self-portrait textbook." (11)

The point of Dr Navratil was that schizophrenic patients owe their talent to their illness. He said madness was useful for creating something special, thinking of the artistic and literary creation of the mentally ill. When the acts of mental patients are observed solely from the aesthetic perspective, this is not considered good because we must not forget that the people who create these acts are suffering. On the other hand, in his book "Art Brut und Psychiatrie: Gugging 1946-1986" (Art Brut and Psychiatry: Gugging 1946-1986) he states the following:

"If mentally handicapped and mentally ill people are able to create a new kind of art, then this has to change our perspective, then people who live in psychiatric institutions are not just people who need care but are also active members of society." (12).

Another interesting and controversial author is the Austrian pathologist Friedrich Kraus (1858-

Person. Klinische Syzygiologie" (Opća i specijalna patologija osobe. Klinička sizigiologija[1]), 1926. Krausov koncept temelji se na ideji živčanog sustava kao organizatora čitavog tijela i na temelju toga vrlo detaljno razlaže jedinstveni princip za nastanak bilo koje bolesti. Kraus je 1929. nominiran za Nobelovu nagradu na području fiziologije i medicine. U vremenu koje je slijedilo njegova istraživanja nisu odbačena, već su brzim razvojem molekularne biologije bila doslovno zaboravljena. U predgovoru svome glavnom djelu Kraus citira Clausa Bernarda navodeći:

„Uvjeren je da će doći vrijeme kad će fiziolozi, filozofi i pjesnici govoriti istim jezikom i razumjeti se."

ZAKLJUČAK

Ovim člankom žele se potaknuti razmišljanja o važnosti starog bibliotečnog fonda te pojasniti da njegova vrijednost nije sadržana samo u davnim godinama tiskanja. On je sasvim sigurno zanimljiv i potreban onima koji se bave proučavanjem povijesti medicine, povijesti psihijatrije, razvojem dijagnostike, načinima liječenja i svime što je vezano uz istraživački rad. Stare knjige koje čine dio fonda opisan u kratkim crtama u sebi nose znanja koja su nekada bila nova. Danas te ideje možemo smatrati zastarjelima, iako su mnoga od tih znanja utkana u nova istraživanja, dio su medicinske teorije pa ih se zbog toga ne smije zaboraviti. Čuvanje stare knjižnične građe stvar je opće kulture, ali i jedan od osnovnih zadataka svake knjižnice. Stari primjerci knjižnične građe, a katkad i cijele knjižnice, sastavni su dio kulturnoga naslijeđa određene ustanove, jer svaka knjiga priča svoju priču. S tom građom potrebno je postupati kao s kulturnom baštinom, jer je ona svjedočanstvo gotovo stopedestogodišnjeg edukativnog rada Klinike.

[1] Sizigija – grčki syzygía: sjedinjenje, par

1936). His most important work is "Allgemeine und spezielle Pathologie der Person. Klinische Syzygiologie" (General and Special Pathology of Persons, Clinical Syzygiology), 1926. The Kraus concept is based on the idea of the nervous system as the organizer of the whole body, and on this basis, it elaborates in detail the unique principle of the emergence of any disease. Kraus was nominated for the Nobel Prize in Physiology and Medicine in 1929. In the time that followed his research was not rejected, but with the rapid development of molecular biology it was literally forgotten. In the foreword to his main work Kraus quotes Claus Bernard saying:

"He is convinced that the time will come when physiologists, philosophers and poets will speak the same language and understand each other."

CONCLUSION

This article seeks to encourage reflection on the importance of the old library fund and clarify that its value is not only contained in the years of printed text. It is certainly interesting and necessary for those who are studying medical history, history of psychiatry, development of diagnostics, treatment methods and everything related to research work. The old books that form part of the fund briefly described here carry some knowledge that was once new. Today, these ideas can be regarded as outdated, although much of this knowledge has been implicated in new research, is part of medical theory and therefore must not be forgotten. The preservation of old library materials is a matter of general culture, but also one of the basic tasks of each library. Old samples of library material, and sometimes entire libraries, are an integral part of the cultural heritage of a particular institution because each book tells its own story. It is necessary to treat this material as cultural heritage, as it is testimony to the nearly one-hundred-fifty-year-old educational work of the Clinic.

LITERATURA/REFERENCES

1. Župić S. Proslava 75-godišnjice Bolnice Vrapče. Neuropsihijatrija 1954; 2: 185-98.
2. Gostl B. O osnutku prve psihijatrijske bolnice u Hrvatskoj. Saopćenja 1965; 4: 295-301.
3. Žirovčić I. Uspomene starog psihijatra. U: Psihijatrijska bolnica Vrapče 1879-1999. Zagreb, 1999, 61-63.
4. Adcock P, Varlamoff MT, Kremp V. IFLA-ina načela za skrb i rukovanje knjižničnom građom. Zagreb: Hrvatsko knjižničarsko društvo, 2003, 12-16.
5. Dojčinović M, Dupelj M, Feldman S, Gostl B, Korbar K, Stanetti F, ur. Rehabilitacija i terapija radom u psihijatriji. Zagreb: Psihijatrijska bolnica "Vrapče", 1966, 69-75.
6. Herceg R. Zavod za umobolne "Stenjevec" od 1879 do 1933. Zagreb, Stenjevec i Državna bolnica za duševne bolesti, 1933, 6-45.
7. Roemheld L. Praktična dijetetika s preko 500 kuharskih recepata za dijetetsko liječenje za liječnike i bolesnike. 4 izd. Zagreb, Beograd: Urania, 1935, 4-7.
8. Roemheld L. Praktična dijetetika s preko 500 kuharskih recepata za dijetetsko liječenje za liječnike i bolesnike. 4 izd. Zagreb, Beograd: Urania, 1935, 19-20.
9. Jüdische Orte der Kur – die Sanatorien Dr. Pariser, Dr. Rosenthal und Dr. Goldschmidt in Bad Homburg. Dostupno na http://www.juedische- pflegegeschichte.de/beitraege/institutionen/krankenpflege /juedische-orte-der-kur-bad-homburg/ (27.04.2017.)
10. Brečić P, Ostojić D, Stijačić D, Jukić V. Od radne terapije i rekreacije do psihosocijalnih metoda liječenja i rehabilitacije psihijatrijskih bolesnika u Bolnici "Vrapče". Soc psihijat 2013; 41: 174-81.
11. Gestorben: Leo Navratil. Der Spiegel 2006; Sep 25; 39.
12. Navratil L. Art brut und Psychiatrie: Gugging 1946-1986. Wien: Brandstätter, 1997, 9.