

so the financing becomes a major burden on state budgets and health insurances. There are many reasons in increased drug consumption during last years, such as aging of population, increased number of chronic patients, the introduction of new drugs, and widening of indications of existing drugs.

**Methods:** We analyzed the trend of drug costs of outpatients in Požega-Slavonia County during last nine years. The data used for this analysis was published at the web site of The Agency for medical products and medical devices of Republic of Croatia (HALMED).

**Results:** According to the available data on outpatient drug consumption for Požega-Slavonia County in period from 2009 – 2017, drugs which are classified by anatomical therapeutic chemical (ATC) classification into group of drugs for cardiovascular system, nervous system and alimentary tract and metabolism took more than 60% of the total costs for outpatient drugs, respectively. The relative share of costs for drugs classified into group for alimentary tract and metabolism showed an increasing tendency (from 14% in 2009 to 19% in 2017) as well as the relative share of costs for drugs for blood and blood forming organs (from 2% in 2009 to 4% in 2017). On the same time, the relative share for group of drugs for cardiovascular system (from 29% in 2009 to 24% in 2017) and drugs for systemic infections (from 7% in 2009 to 4% in 2017) showed a tendency of decreasing.

Comparison of the data showed a sudden drop in the absolute amount of costs of outpatient drug consumption in Požega-Slavonia County at the transition from 2014 to 2015. The total cost of outpatient drug spending in 2014 was 92.211.673,00 HRK, while in 2015 was 42.104.041,00 HRK. In the period from 2009 to 2014 the median of cost of outpatient drugs was 104.331.362,00 HRK, while median of outpatient drug cost from 2015 to 2017 was 42.674.757,00 HRK. Comparison of outpatient drug consumption trends for the same period in the Dubrovnik-Neretva County, Istra County, Međimurje County and in the City of Zagreb do not show the drop in the total cost of outpatient drugs, they show the increase of costs.

**Conclusion:** Data analysis showed that in Požega-Slavonia County there was a sharp drop in the costs of outpatient drug consumption in 2015 compared to 2014. The relative share of costs for a particular group of drugs according to ATC classification has not changed scientifically during last nine years. Compared to Požega-Slavonia County other four counties in Republic of Croatia recorded a slight increase in costs for outpatients during last nine years. Further research is needed to determine the possible cause of such a result in the Požega-Slavonia County.

**Keywords:** drug costs, outpatient care, health expenditure

## EMOCIONALNI PROBLEMI I PROBLEMI PONAŠANJA MEĐU ADOLESCENTIMA UPUĆENIH U SLUŽBE ZA ZAŠTITU MENTALNOG ZDRAVLJA DJECE I ADOLESCENATA U HRVATSKOJ

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### Sažetak

**Uvod:** Problemi mentalnog zdravlja su rastući problem u društvu. Uzimajući u obzir da se više od 50% psihijatrijskih bolesti u odrasloj životnoj dobi razvilo i progrediralo već u vrijeme adolescencije, poboljšanje zaštite mentalnog zdravlja među mladima je područje kojem je potrebno dati poseban fokus i značaj, posebice po pitanju prevencije i rane dijagnoze. Obiteljski liječnici su prvi koji imaju mogućnost prepoznati potencijalne probleme mentalnog zdravlja među mladima i uputiti ih službama za zaštitu mentalnog zdravlja ako je potrebno. Ova studija je provedena kako bismo dobili uvid u samoprocjenu mentalnog statusa adolescenata upućenih na liječenje te kako bismo u skladu s rezultatima prilagodili i planirali preventivne mjere u primarnoj praksi. Cilj istraživanja je bio odrediti najistaknutije emocionalne i ponašajne probleme među adolescentima i mjere koje mogu biti poduzete po pitanju prevencije i rane dijagnoze tih problema u primarnoj praksi.

**Metode:** Napravili smo presječno istraživanje ne-kliničkog i kliničkog (u trenutku prvog kontakta sa službom za mentalno zdravlje) uzorka od 334 adolescenta, muški spol N=147, ženski spol N=187, u dobi od 14 do 18 godina i usporedili podatke na ljestvicama sindroma između dva uzorka i razlike među spolovima u svakoj grupi. Koristili smo Skalu samoprocjene ponašanja mladih (Achenbach & Rescorla, 2001).

**Rezultati:** Ukupni rezultati su pokazali statistički značajan porast u rezultatima skala kliničke populacije u usporedbi s ne-kliničkom populacijom ( $F(1,330)=107,976$ ;  $p<,01$ ), s višim porastom među adolescenticama ( $F(1,330)=15,892$ ;  $p<,01$ ). Postoji značajan porast u kliničkoj populaciji u svim skalama: somatske tegobe, anksioznost/depresija, socijalni problemi, problem mišljenja, povlačenje, problemi s koncentracijom, delikventna ponašanja, agresivnost, internalizacija i eksternalizacija, sa značajnim interakcijama spola i skupine u nekim skalama.

**Zaključak:** Emocionalni i bihevioralni problem su učestali u adolescenata upućenih u institucije za zaštitu mentalno zdravlje. Obiteljski liječnici bi trebali aktivno surađivati sa stručnjacima za mentalno zdravlje kako bi razvili aktivnosti koje bi ohrabrile problematične adolescente da pristupe službama za mentalno zdravlje što ranije i na taj način doprinijeti ranoj dijagnozi i prevenciji progresije mentalnih poremećaja.

**Ključne riječi:** Mentalno zdravlje, problemi mentalnog zdravlja, mladi, prevencija

## EMOTIONAL AND BEHAVIORAL PROBLEMS AMONG ADOLESCENTS REFERRED TO CHILD AND ADOLESCENT MENTAL HEALTH SERVICES IN CROATIA

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### Abstract

**Introduction:** Mental health problems are an increasing issue in the society. Considering that over 50% of psychiatric diseases in adults have developed or progressed in time of adolescence, improvement of youth mental health care is a special area of focus, especially in terms of prevention and early diagnosis. GPs often have the opportunity to be the first to recognize a possible mental health problem and refer adolescents to Child and Adolescent Mental Health Services if needed. We conducted this study to gain insight in self-assessed mental status of referred adolescents in order to adjust and plan prevention measures in general practice accordingly. The aim was to determine

the most prominent emotional and behavioral problems among adolescents and measures that can be undertaken in terms of prevention and early diagnosis of such problems in general practice.

**Methods:** We performed a cross-sectional study of non-clinical and clinical (at the point of their first contact with mental health service) sample of 334 adolescents, males  $N=147$ , females  $N=187$ , aged 14-18, and compared the data on the syndrome scales between two samples and male and female adolescents in every group. We used Youth Self Report (Achenbach & Rescorla, 2001).

**Results:** There was a significant increase in findings in clinical population compared to non-clinical one in overall results ( $F(1,330)=107,976$ ;  $p<,01$ ), with higher results for females ( $F(1,330)=15,892$ ;  $p<,01$ ). There is a significant increase in clinical population in all scales: Somatic Complaints, Anxious/Depressed, Social problems, Thought Problems, Withdrawn, Attention Problems, Delinquent Behavior, Aggressive Behavior, Internalizing and Externalizing, with significant interactions of sex and group in some scales.

**Conclusion:** Emotional and behavioral problems are frequent in referred adolescents. GPs should actively collaborate with mental health professionals to develop activities which would encourage troubled adolescents to approach mental health services earlier and in that way contribute to early diagnosis and prevention of progression of mental disorders.

**Keywords:** mental health, mental health problems, youth, prevention