

# Proposta di un nuovo metodo per individuare negli adolescenti croati il rischio di abuso di sostanze

---

**Tatolović Vorkapić, Sanja; Dadić-Hero, Elizabeta; Ružić, Klementina; Rončević, Dobrica; Knez, Rajna**

*Source / Izvornik:* **Annali dell'Istituto Superiore di Sanità, 2011, 47, 316 - 320**

**Journal article, Published version**

**Rad u časopisu, Objavljena verzija rada (izdavačev PDF)**

*Permanent link / Trajna poveznica:* <https://um.nsk.hr/um:nbn:hr:184:273531>

*Rights / Prava:* [Attribution-NonCommercial-NoDerivatives 4.0 International/Imenovanje-Nekomercijalno-Bez prerada 4.0 međunarodna](#)

*Download date / Datum preuzimanja:* **2025-01-14**



*Repository / Repozitorij:*

[Repository of the University of Rijeka, Faculty of Medicine - FMRI Repository](#)



# Proposal for a new detection method of substance abuse risk in Croatian adolescents

Sanja Tatalovic Vorkapic<sup>(a)</sup>, Elizabeta Dadic-Hero<sup>(b)</sup>, Klementina Ruzic<sup>(b)</sup>, Dobrica Roncevic<sup>(c)</sup> and Rajna Knez<sup>(d)</sup>

<sup>(a)</sup>Faculty of Teacher Education; <sup>(b)</sup>School of Medicine, University of Rijeka, Croatia

<sup>(c)</sup>Department of Epidemiology, Educational Institute for Public Health, Croatia

<sup>(d)</sup>Department of Psychiatry, University Hospital Centre Rijeka, Croatia

**Summary.** One of the most important factors of successful substance abuse treatment is the early start of the same treatment. Recent selection method for identification of Croatian adolescents in the substance abuse risk that has been using drug tests from urine samples, has been simple and exact on the one hand, but on the other, has been very rare and usually guided by the pressure of parents or the court. Besides, such method presented the source of legal and ethical questions. So, the proposal of application of standardized psychological tests during systematic medical exams of Croatian adolescents at the age range of 15-22 years could help with the early detection of those adolescents who were in the substance abuse risk or already had the developed addiction problem.

*Key words:* adolescents, substance abuse, new detection method, psychological tests.

**Riassunto** (*Proposta di un nuovo metodo per individuare negli adolescenti croati il rischio di abuso di sostanze*). La tempestività di avvio è tra i fattori più importanti per il buon esito del trattamento nell'abuso di sostanze. Il drug test su campioni urinari è il metodo di recente scelta in Croazia per identificare adolescenti a rischio di abuso di sostanze. Tale metodo è semplice e preciso da un lato, ma dall'altro è stato applicato molto di rado, generalmente su richiesta dei genitori o del tribunale; è inoltre fonte di una serie di questioni etiche e legali. Di conseguenza, l'impiego di test psicologici standardizzati nell'ambito di esami medici cui sistematicamente vengono sottoposti gli adolescenti croati di età compresa tra i 15 ed i 22 anni potrebbe aiutare ad identificare precocemente gli adolescenti che sono a rischio di abuso di sostanze o che già hanno sviluppato problemi di dipendenza.

*Parole chiave:* adolescenti, abuso di sostanze, nuovo metodo di identificazione, test psicologici.

## INTRODUCTION

The increase of drug abuse in Croatia in the last twenty years has been alarmingly showing the need for dealing with this problem on all community levels. The Report of the Croatian Institute for Public Health about treated drug abusers in the year 2006 [1] determined that most of the treated opiate addicts were 20-34 years old ( $n = 4107$  or 70.8%). Also, in the year 2008 the mean age of their first treatment admission was 26 years old. The sex ratio of treated opiate addicts was 4.7:1 in favour to men, and the female adolescents has been significantly earlier admitted to the treatment than the male adolescents [2].

Early start of substance abuse treatment is a crucial factor in improving successful treatment, in reduction of psychological, physical and social consequences with beneficial effect on primary prevention in community [3-6]. So, creating the adequate detection method for identification of adolescents who are in the substance abuse risk or already have been

using illegal psychoactive drugs presents one of the most important tasks for the society [7].

This article discusses about disadvantages of recently used methods for identification of adolescents who are in the substance abuse risk in Croatia regarding the external pressure that has been imposed on those adolescents. Also, these disadvantages have been analysed from legal and ethical standpoints. On the other hand, an alternative detection method has been proposed as a new and qualitative way for identification of adolescents who are in the substance abuse risk. This new method would primary use standardized psychological tests during annual systematic medical examination for high school and university students. Also, it would contribute to early detection of any kind of psychological disorder or psychopathology which favoured substance abuse or presented direct outcome of drug abuse, that could be treated by psychotherapy or counselling and on that way prevent creating a much worse psychological state.

So, the main problem of this brief note is to critically discuss about methods of early detection youth-in-risk for drug abuse that have been using in Croatia and to argumentatively propose a new method – the method of use of psychological tests during annual systematic medical examination for high school and university students.

### THE PROBLEM OF EARLY DETECTION

The majority of drug users are aware of the fact that using the illegal psychoactive substance has a direct implication of breaking the law and existing social norms, and that is bad for their health. Even though, very small number of them admits to the ambulatory or hospital treatment by themselves. Having that in mind, if the family has no ability or capacity to recognize the addiction problem, the health care system could help with the prevention programs aimed to the youth-in-risk.

In Croatia adolescents start with substance abuse approximately in age of 16 [1]. It is well-known that the period of adolescence is a time of questioning and self-exploration [7]. One of the main characteristics of adolescence is a very low level of criticism toward any kind of exploring that results with an exposure to different and dangerous risks [8]. One of those risks and negative consequences could be drug abuse or developed addiction problem. As it was mentioned earlier, the decision of voluntary admissions to any kind of substance abuse treatment is a very rare or very late motivated by their own problem perception [9]. Describing drugs as the fourth primary drive after hunger, thirst and sex in his book *Intoxication* [10], Ronald K. Siegal has explained why this drive has made drugs attractive throughout history. He also explained why the admission to any treatment presents a very hard decision. Even though the good prevention is the strongest tool in facing or escaping the drug problem, there are two ways for starting the substance abuse treatment: the use of one's own motivation for starting the substance abuse treatment, and/or the use of the health care system units which detect and direct drug abusers to the treatment.

Among opiate addicts, about  $\frac{1}{2}$  of them has been admitted to the substance abuse treatment on behalf of their families or they own, without any repressions from community mechanisms [1]. If they admit to the substance abuse treatment by themselves, their self-motivation has been still questionable, concerning the fact that getting the methadone therapy could be the main motivation for the admission [9]. In other words, a certain number of self-admitted drug users to the treatment think that getting the methadone therapy at the ambulance will enable them to continue legally to drug themselves. So, they have a little motivation or no motivation at all to change something about their drug problem, so any therapeutic interventions are failed from the start. This negatively affects the treatment outcomes, and

gives the poor prognosis about clients' life quality in the future. The drug abusers know which is the main method treatment in our country, since for more than two decades substitute therapy which mainly use the methadone has been the dominant way of medical treatment of opiate addiction within the health care system in Croatia. Also, the prove for their motivation in getting the methadone as the legal continue of drug abuse is the Police information, because methadone often presents the main subject of the confiscation within the criminal actions such as illegal possession and/or selling.

Furthermore, there are about  $\frac{1}{3}$  of non-opiate substance abusers registered within substance abuse treatment in Croatian health institutions [1]. Among them, there are the greatest number of cannabis consummates, and there are registered just 2% of synthetic drugs abusers: MDMA, amphetamines, LSD, etc. [1]. However, concerning the public police reports, the most spread drug consumption among young people is the one connected to the synthetic drugs or the so-called party-drugs, and the great number of scientific study alert about serious psychological, social and organic damages that those drugs evoked [11]. In other words, there are a great number of young people, who have consummated some synthetic drugs a few times in life, and because of that had severe social and/or psychological/psychiatric problems that have not been properly recognised in time and subsequently treated. So, the question remains concerning the significant number of drug abusers outside the health care system who are faced with different social and psychological/psychiatric difficulties, but their medical condition is not clearly connected with drug abuse. The proposed method for early detection could also help with this problem too.

The approximate length of period between the beginning of drug abuse and the moment of drug user's admission at a certain kind of substance abuse treatment in Croatia is about 4 years. Often in that period of time a great number of psychological, social and somatic pathological changes have already occurred [1, 7]. Longer consumption time leads to longer time and effort in treatment focused on eliminating the substance abuse consequences [7]. Besides, buying the illegal drugs for drug abusers presented a huge financial burden, so about  $\frac{1}{3}$  of addicts earn selling the drugs on street, what serves to the expansion of the number of drug consumers. The early start of drug abuse treatment definitely results in a more successful treatment that consequently produces the greater reduction of the number of "little dillers". Altogether, it results with a low drug availability and smaller number of people with criminal and socially negative behaviour patterns.

So, the earlier detection of drug abuse, the lower negative consequences would be determined. This is one more reason for proposing the new method of early detection of drug abuse.

### **PROBLEMS OF CURRENTLY USED DETECTION METHOD FOR IDENTIFICATION OF ADOLESCENTS IN THE SUBSTANCE ABUSE RISK**

Concerning all described reasons, early detection of drug abuse and relevant personality traits of potential addict, imposed itself as one of the priority. Presently, it presents a very hard and sensitive task in the struggle with this giant biopsychosocial problem. Detection and treatment of addiction problems with motives of social solidarity for the youth-at-risk have social responsibility toward other members of society. This dual motivation of drug abuse procedures necessarily leads to arising many questions concerning rights, freedom and duties from the relationship between individual and society. Existing legal solutions and legal practice also reflect the sensitivity of those relations. Some other researchers from different countries have developed various screening tests that have showed satisfactory validity and reliability [12-15]. However, instead of trying to develop a new test or screening tool for drug abuse, this paper has proposed the use of the existing ones.

It has been assumed that the selection method for identification of adolescents in the substance abuse risk that has been using drug tests from urine samples has been simple and exact. But, besides it could be certain difficulties during its application, it could be the source of ethical dilemmas or distrust manifestation. Even the fact itself that a certain person has consumed drugs does not automatically lead to the misdemeanour or criminal liability of that person, legally it is possible to condition taking drug test or enrolment in drug abuse treatment for example with working rights in certain professions or education. Without conditioning obligated application of this method is not possible, except on the basis of imperative request of the parents, tutor or court. Any other method that lied on purely determination of drug abuse or consumption of illegal drugs would face the same problem.

### **THE PROPOSAL OF NEW DETECTION METHOD: PSYCHOLOGICAL TESTS AS AN EARLY DETECTION METHOD**

Psychological testing is a method often used for the diagnostic, clinical or research purposes. So, depending what kind of tests have been used, it enables detection of different psychopathological changes from the personality disorders to severe psychosis induced by substance abuse. Considering the high sensitivity and reliability of standardized psychological tests, it is possible to detect some psychopathological elements which could not be seen in usual social communication. Substance abuse exists very often in comorbidity with certain personality disorder [16-19]. Personality disorder could be the consequence but also the cause of drug abuse [5]. Therefore, psychological testing as an early detec-

tion method of substance abuse risk in adolescents could serve as a very useful tool for providing valuable information about personality characteristics and use them as the basis for structuring counsellor's interventions [13]. The proposed method of psychological testing that is focused on determining all those risk factors for drug abuse could be the applicator. Getting valuable information on the basis of self-evaluation partials by the factor of socially desirable answers that are controlled by standardized tests, could provide a qualitative insight in the consequences of adolescent behaviour and also in certain tendencies toward disorder or other kind of psychopathology which could be treated with adequate psychotherapy or counselling work. By that harder consequences could be prevented. All above-mentioned present very useful and adequate characteristics from the ethical and legally point of view but need scientific/expert institutions verification and empirical validation.

#### ***Which psychological tests?***

Using psychological tests it is possible to measure with a high level of validity and reliability:

- the level of life quality in the light of perception of adolescent interaction with his/her environment, their personality traits and cognitive functioning;
- the amount of given support in the process of psychosocial development of adolescent which is very important, and the level of adolescent self-esteem;
- the characteristics of family dynamic, social status, peer pressure, communication styles and parenting styles.

So, Cornell Index [20] and Eysenck's Personality Scales [21] could be used. Cornell Index is determined to measure a wide range of psychopathological tendencies. Also, besides basic personality traits, Eysenck's Personality Scales measure the individuals' tendencies toward pathological changes in personality and criminal and addiction tendencies. Furthermore, besides standardized Croatian version of Eysenck's Personality Questionnaire [21], the standardized version of Eysenck's Personality Questionnaire that measures impulsiveness, adventurousness and empathy [21] could be used. All mentioned scales have control subscales of the level of social desirability of given answers and attested high psychometric properties. After collecting data and evaluation of used method, it could be approached to the screening test of the high school students in Primorsko-goranska county who were at risk. Such interdisciplinary research would be conducted by the experts from different fields. Psychological testing could be carried on by psychologist during systematic medical exams. If approximately 50% of high school students get tested, it is possible to detect some adolescent in risk. After standardized scoring, all those students who were estimated as in high risk for drug abuse based on their behaviour or determined psychopathological tendencies, could and should be sent in Counsellor Centres concern-

ing the arrangement on the psychotherapeutic/counselling work on detected problem. This method could serve for catching the drug problem from the early beginning and consequently a smaller number of developed drug addictions and family problems, smaller rate of criminality and violations, and smaller financial costs for different kinds of treatments.

## CONCLUSION

When family and other close child protectors fails in trying to raise him in a self-aware young person who knows that drug using behaviour is the wrong one and that getting fast satisfaction/pleasure that could be elicited by drugs is not always a good so-

lution for him [6], a different screening method for early detecting adolescents in such risk is the second step. So, putting the effort in creating qualitative ways of techniques in preventing drug abuse is very valuable and useful. Considering this proposal, it is very likely that one needs a strong empirical verification.

## Conflict of interest statement

There are no potential conflicts of interest or any financial or personal relationship with other people or organizations that could inappropriately bias conduct and findings of this study

Received on 27 May 2011.

Accepted on 11 August 2011.

## References

- Katalinić D, Kuzman M, Mayer D, Pejak M. *Značajke liječenih zbog zlouporabe droga u Hrvatskoj u 2006. godini.* (The characteristics of treated drug abusers in Croatia in 2006.) Zagreb: HZZJZ; 2007.
- Katalinić D, Kuzman M, Pejak M. *Izješće o osobama liječenim zbog zlouporabe psihoaktivnih droga u Hrvatskoj u 2008. godini.* (The report about characteristics of treated drug abusers in Croatia in 2008.) Zagreb: HZZJZ & Ministarstvo zdravstva i socijalne skrbi RH; 2009.
- National Institute on Drug Abuse. *Toward a National Strategy for Primary Drug Abuse Prevention, Final Report, Delphi II,* 1975.
- Rhodes JE, Jason LA. *Preventing substance abuse among children and adolescents.* New York: Pergamon Press; 1988.
- Sakoman S. Zlouporaba droga u Hrvatskoj i pristup njezinu suzbijanju. In: Schwebel R (Ed.). *Reči NE nije dovoljno: kako odgajati djecu da razborito odlučuju o drogama i alkoholu.* (Saying NO is not enough: raising children who make wise decisions about drugs and alcohol) Zagreb: Sysprint; 1995. p. XI-LXXXVII.
- Sakoman S. Obitelj i prevencija ovisnosti. (The family and drug abuse prevention) Zagreb: Sysprint; 2002.
- Fields R. *Drugs in perspective.* The McGraw-Hill Companies; 1998.
- Sadock BJ, Sadock VA. Kaplan and Sadocks *Synopsis of psychiatry: Behavioral sciences/Clinical psychiatry* (10<sup>th</sup> ed.). Lippincott Williams & Wilkins; 2007.
- Torre R. *Droge: dugo putovanje kroz noć* (2<sup>nd</sup> ed.). (The drugs: The long journey through the night) Zagreb: Promotor zdravlja; 2003.
- Siegal RK. *Intoxication.* New York: Dutton; 1989.
- Yücel M, Lubman DI, Solowij N, Brewer WJ. Understanding drug addiction: A neuropsychological perspective. *Aust NZ J Psychiat* 2007;41(12):957-68.
- Okulicz-Kozarynk K, Sierosławski J. Validation of the "Problematic use of narcotics" (PUN) screening test for drug using adolescents. *Addict Behav* 2007;32(3):640-6.
- Pallanti S, Bernardi S, Quercioli L. The Shorter PROMIS questionnaire and the internet addiction scale in the assessment of multiple addictions in a high-school population: prevalence and related disability. *CNS Spectrums* 2006;11:966-74.
- Börjesson J, Armelius BA, Ostgård-Ybrandt H. The psychometric properties of the Swedish version of the adolescent drug abuse diagnosis (ADAD). *Nord J Psychiat* 2007;61(3):225-32.
- Yudko E, Lozhkina O, Fouts A. A comprehensive review of the psychometric properties of the Drug Abuse Screening Test. *J Subst Abuse Treat* 2007;32:189-98.
- Fields R, Vandenbelt R. *Understanding mood disorders and addiction.* Pamphlet published by Hazelden Educational Materials, Center City, Mn., 1992.
- Fields R, Vandenbelt R. *Understanding personality problems and addiction.* Pamphlet published by Hazelden Educational Materials, Center City, Mn., 1992.
- Tatalović Vorkapić S, Antičević V, Dadić-Hero E. Mjerenje ovisnosti i kriminaliteta kod opijatskih ovisnika primjenom EPQ/RA. (The application of EPQ/RA in measuring addiction and criminality of heroin drug abusers) *Kriminologija i socijalna integracija* 2010;18(1):1-11.
- Tatalović Vorkapić S, Dadić-Hero E, Ružić K. The relationship between personality traits and anxiety/depression levels in different types of substance abuse. *18. European Psychiatry Congress in München, February 27<sup>th</sup> – March 03<sup>rd</sup> 2010.* European Psychiatric Association (Ed.). *The Journal of the European Psychiatric Association*, CD-Rom, Vol. 25, Suppl. 1, 2010. München: Essex Pharma, Elsevier.
- Wieder A, Wolff HG, Brodman K, Mittelman B, Wechsler D. *Priručnik za Cornell Indeks (revidirani oblik).* (The Handbook of the Cornell Index – Revised). Jastrebarsko: Naklada Slap; 1997.
- Eysenck HJ, Eysenck SBG. *Priručnik za Eysenckove skale ličnosti: EPS-odrasli.* (The Handbook for use of Eysencks' personality scales: EPS-adults). Naklada Slap, Jastrebarsko; 1994.

