



**5. HRVATSKI KONGRES MEDICINE RADA
s me unarodnim sudjelovanjem
ZDRAVLJE, RAD i ZAJEDNICA**

**5th CROATIAN CONGRESS ON OCCUPATIONAL HEALTH
with International Participation
HEALTH, WORK AND COMMUNITY**

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KNJIGA SAŽETAKA

BOOK OF ABSTRACTS



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RESULTS: The results have shown that there were no statistically significant differences between the state and private employees, for SPS-6 $p=0.363$, for RPS-6 $p=0.535$ and for RAS $p=0.317$, $p>0.05$. Private sub-contractors have shown slightly higher results in all three tests, in RAS-6 test higher result means less absenteeism. Both groups had medium presenteeism according to SPS-6 scale, the state employed workers in "3.maj" had high presenteeism according to RPS-6 scale and privately sub-contracted employees a very high presenteeism. Both groups showed low absenteeism.

CONCLUSION: The results indicated that the workers were hardworking and motivated. Nevertheless, the medium presenteeism, according to SPS-6 scale, does not represent a good result. It points to the need for increasing the level of health protection in co-operation with the shipyard management regarding the shortening of long working weeks and cutting down on overtime. Neither the state nor the private employer proved to be advantageous. To stay healthy the worker must be provided with safe working conditions respecting working hours regardless of being state or privately employed.

2.3 PREKOMJERNO PIJENJE ALKOHOLA I RADNA SPOSOBNOST MUŠKARACAZAPOSLENIH NA RADNIM MJESTIMA S POSEBNIM UVJETIMA RADA

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UVOD: U programima zaštite i unaprjeđenja zdravlja sve se više pozornosti obrađuju poremećaji koje izaziva pijenje alkoholnih pića. Taj je problem u mnogim zemljama na trećem mjestu među svim drugim zdravstvenim teškoćama, a po broju i težini za zdravlje pojedinaca, njihovih obitelji i društva jedva da im je ravan bilo koji drugi problem u suvremenoj zdravstvenoj i socijalnoj zaštiti radnika.

CILJ: Cilj rada je procjena utjecaja pijenja alkoholnih pića na radnu sposobnost radnika zaposlenih na radnim mjestima s posebnim uvjetima rada.

ISPITANICI I METODE: Istraživanje je provedeno u razdoblju od studenog do kraja prosinca 2009. godine. Uključeni su svi radnici u dobi između 18 i 65 godina koji su sudjelovali na redovnom periodičnom pregledu. Ukupno je obrađeno 214 ispitanika. U ispitivanju pijenja alkohola korištena je kombinacija upitnika CAGE i AUDIT s kvantifikacijom uestalosti pijenja pojedinih vrsta alkoholnih pića u odnosu na radni tjedan, vrijeme nakon posla, te vikende. Sociodemografska pitanja u upitniku su obuhvaćala dob, spol, radno mjesto, bračno stanje, edukaciju, zanimanje, radni staž, smjenski rad, rad vikendom i prekovremeni rad. Kvantifikacija pojedinih vrsta popijenih alkoholnih pića napravljena je na način da su uzete u obzir količine popijenog alkohola koje odgovaraju 1 standardnoj mjeri alkohola (10 g): 10 g istog alkohola odgovara sljedećim mjerama: 0,33 L pive, 0,2 L vina ili 0,033 L rakije (= standardno piće). Ispitanicima je u upitniku ponuđeno navesti koliko pojedinih vrsta pića piju za vrijeme radnog vremena, nakon radnog vremena (tijekom radnog tjedna) i tijekom vikenda. Za procjenu radne sposobnosti korišten je Upitnik za procjenu radne sposobnosti (eng. *Work Ability Index* - WAI) Finskog Instituta za medicinu rada. Sve WAI vrijednosti manje od 37 upućuju na smanjenu radnu sposobnost.

REZULTATI: Značajne razlike u količinama popijenih pića između ispitanika koji imaju dobru i lošu radnu sposobnost zabilježene su u pijenju alkohola izvan posla ($P=0,002$, gotovo dvostruko više piju ispitanici sa slabijom radnom sposobnošću), ukupno popijenom alkoholom u zadnjih tjedan dana ($P=0,012$), ukupnom zbroju AUDIT ($P=0,002$) i CAGE ($P=0,001$).



ZAKLJUČAK: Rizik nije skupina za konzumaciju alkohola imala je lošiju radnu sposobnost. Iako razlika u pijenju alkohola na poslu nije bila značajna, glavna mogućnost za djelovanje i izradu intervencijskog plana je u prevenciji pijenja izvan posla, ali tijekom radnog tjedna.

EXCESSIVE DRINKING ALCOHOL AND WORK ABILITY OF MEN EMPLOYED AT WORKPLACES WITH SPECIAL WORKING CONDITIONS

INTRODUCTION: The health protection programs and health promotion during recent years gave intensive attention to disorders caused by drinking alcoholic beverages. Excessive alcohol drinking in many countries is on the third place among all other health problems concerning public health. Regarding frequency and severity of the health disorders of individuals, their families and society, alcoholism is an important issue in contemporary health and social care of workers.

AIM: The aim of the presentation is to assess the influence of alcohol drinking on work ability of workers working at workplaces with special working conditions.

SUBJECTS AND METHODS: Study was conducted from November till end of December 2009. All subjects participating at regular medical examinations, aged between 18 and 65 years, were included. Total number of investigated subjects was 214. CAGE and AUDIT questionnaires in combination with quantification and frequencies of drinking particular drinks (wine, beer, spirit) were used to assess alcohol drinking related to working week, time after the work and weekends. Socio-demographic questions included age, gender, workplace, marriage, educational level, employment, working years, shift work, working on weekends and overtime work. Quantification of specific type of alcohol drinks was converted to standard alcohol units (10 g of alcohol): approximately 0.33 liter of beer, 0.2 liter of wine and 0.033 liter of spirit. Work Ability Index questionnaire (WAI) from the Finnish Institute of Occupational Health was used to assess work ability. All WAI values below 37 indicated low work ability.

RESULTS: Significant differences in amount of alcohol consumed between subjects who had low or good work ability were noted in drinking alcohol after the work time but during the working week ($P=0.002$, the subjects with low work ability drink nearly two times more); in total drunken alcohol in last 7 days ($P=0.012$), total AUDIT score ($P=0.002$) and total CAGE score ($P=0.001$).

CONCLUSION: The group who drink more alcohol have lower work ability. Although the difference in drinking of alcohol on the job was not significant, the main opportunity for action and development plan for intervention and drinking prevention was outside of work, but during the working week.

2.4 ALKOHOL KAO UZROK OZLJEDA NA RADU U REPUBLICI HRVATSKOJ

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UVOD: Alkoholizam u radnika je medicinski, socijalni i javno-zdravstveni problem, jer pijenje alkoholnih pića utječe na radnu sposobnost, smanjuje produktivnost, povećava mogućnost ozljeđivanja na radnom mjestu, uzrokuje odsutnost s posla i invaliditet radnika, a predstavlja i opasnost za javnu sigurnost.

CILJ: Cilj rada je analizirati sve priznate ozljeđene na radu u RH tijekom 2010.g. kod kojih je tijekom ozljeđivanja zabilježena alkoholiziranost radnika.

METODE: Hrvatski zavod za zaštitu zdravlja i sigurnost na radu dobiva prijave svih priznatih ozljeđena na radu te ih statistički obrađuje i predlaže mjere za njihovo sprječavanje.



Methods and Subjects: Two questionnaires were used: Occupational Stress Assessment Questionnaire for Hospital Health Care Workers, and Work Ability Index (WAI) Questionnaire. The participants were nurses and technicians employed in 5 hospitals in Zagreb. Regarding work position they were divided into three groups: nurses and technicians at surgical units, in nonsurgical units and in diagnostic departments. Participation in the study was anonymous. Linear regression analysis (univariate and multivariate) was performed with work ability index being the criterion variable and stress perception and demographic characteristics being predictors.

Out of 1353 participants 1132 (90%) were females and 121 (10%) males. Mean age was 38.9 (± 10.4) years. Analyzed data showed that all assessed stressors, female sex and age, were significantly negatively associated with work ability index. Results also showed that in the group of nurses at surgical units decreased work ability was associated with age, poor work organization, financial limitations, inadequate personal income, dangers and hazards at work, in addition to shift and night work. Our results also showed that work ability of nurses in non-surgical units was negatively associated with poor organization and financial limitations. In the group of technicians at diagnostic departments work ability was significantly negatively associated with age, interpersonal conflicts and poor interpersonal communication.

Our results suggest that nurses at surgical units, compared to nurses and technicians at other departments, are exposed to more stressors which affect work ability. Results also suggest that there is a need for hospital management to improve work organization and resources. Education about stress at work and coping strategies, as well as adjustment of work demands to individual ability, are also important targets to reduce stress at work among hospital nurses and technicians.

P 4.7 PRETKAZATELJI SMANJENE RADNE SPOSOBNOSTI ZAPOSLENIKA U HITNOJ MEDICINI – STANJE U HRVATSKOJ

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UVOD: Svjetska istraživanja su pokazala da zaposlenici u hitnoj medicini, a posebice osoblje u vozilima, pate od simptoma povezanih s traumatskim događajima i imaju u svom radu više kroničnih stresora nego radnici u drugim ustanovama zdravstvene službe. Za razliku od drugih zemalja u kojima su se provele slične studije, u Hrvatskoj ne postoji specijalizacija hitne medicine.

CILJ: Cilj rada bio je utvrditi moguće pretkazatelje smanjene radne sposobnosti uključujući i profesionalni stres i kvalitetu života zaposlenika u hitnoj medicini.

METODE: Od svibnja do srpnja 2010. u Hitnoj medicinskoj pomoći u Gradu Zagrebu provedena je presječna studija. Upitnici su podijeljeni svim zaposlenicima i sakupljen je uzorak od 125 ispitanika (39 liječnika, 38 medicinskih sestara/tehničara i 48 vozača). Podaci su prikupljeni uporabom socio-demografskih pitanja uz pomoć ovih upitnika: Occupational Stress Assessment (OSA), Work Ability Index (WAI) i WHO (World Health Organisation) Quality of Life (WHO-BREF).

REZULTATI: Liječnici hitne medicine bili su znatno izloženiji javnom kritiziranju ($p=0,008$), a vozači su bili izloženiji opasnostima na radnom mjestu ($p=0,001$) u odnosu na druge skupine zaposlenika. Binarni logistički regresijski model pokazao je dva značajna pretkazatelja smanjene radne sposobnosti (zbroj bodova WAI <37): niži fizički zahtjevi u području WHO-BREF (OR=0,78; 95%CI: 0,68-0,89; $p=0,001$) i profesionalni i intelektualni zahtjevi (OR=1,09; 95%: 1,01-1,19; $p=0,043$).



ZAKLJUČAK: U cilju povećanja ukupne radne sposobnosti zaposlenika u hitnoj medicini i bolje strukturne organizacije trebalo bi smanjiti napornu fizičku aktivnost i uvesti stažiranje u hitnoj medicini što bi značajno poboljšalo ukupnu radnu sposobnost liječnika u hitnoj medicini.

LOWER WORK ABILITY PREDICTORS AMONG EMERGENCY MEDICINE EMPLOYEES: THE CROATIAN STORY

INTRODUCTION: Worldwide research has indicated that emergency medicine employees and particularly ambulance personnel suffer from symptoms related to traumatic events and experience more chronic stressors in their work than workers in other health service settings. Unlike in other countries which conducted similar studies, no specialty branch in emergency medicine exists in Croatia.

AIM: To identify possible predictors of low work ability, including occupational stress and quality of life, among emergency medicine employees.

METHODS: A cross-sectional study was conducted from May 2010 till July 2010 in Institute of Emergency Medicine the City of Zagreb. Questionnaires were distributed to all employees with gathered total sample of 125 subjects (39 physicians, 38 medical nurses/technicians and 48 drivers). Data were collected using socio-demographic questions, Occupational Stress Assessment (OSA), Work Ability Index (WAI) and WHO (World Health Organisation) Quality of Life (WHO-BREF) questionnaires.

RESULTS: Emergency physicians were significantly more exposed to public criticism ($p=0.008$) but drivers had more exposure to hazards at workplace ($p=0.001$) compared to other employee groups. Binary logistic regression model showed two significant predictors of lower work ability (WAI score <37): lower physical WHO-BREF domain (OR=0.78; 95%CI: 0.68-0.89; $p<0.001$) and the Professional and intellectual demands (OR=1.09; 95%CI: 1.01-1.19; $p=0.043$).

CONCLUSION: Strenuous physical activity should be reduced in order to increase the overall work ability of the emergency medicine employees and better structural organization and introduction of a residency in emergency medicine should significantly improve total work ability among emergency physicians.

P 4.9 HEALTH STATUS OF MEDICAL PROFESSIONALS IN AN INTERVENTIONAL CARDIOLOGY UNIT FROM TIMISOARA

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AIM OF STUDY: There is consistent evidence that exposure to ionizing radiation may result in adverse health effects on medical personnel handling X rays. Hematological tests are one of the usual investigations, not expensive, but very useful in health monitoring.

METHODS: In 2006-2011, 25 persons were analyzed, smokers and nonsmokers from interventional cardiology departments from Timisoara Heart Institute. They were chronically exposed to low doses. We analyzed the professional activity. Annual clinical examination, spirometric and hematological tests were performed. The micronucleus assay was performed using 72 hours lymphocyte culture.

RESULTS: Physical dosimetry has noted overexposure in three cases from interventional cardiology department. The mean age of health professionals was 38 years. Symptoms at workplace were headache and low back pain (especially nurses). Clinical examination