

SELECTED ABSTRACTS FROM PUBMED

1. Kuburović NB, Dedić V, Djuricić S, Kuburović V. Determinants of job satisfaction of healthcare professionals in public hospitals in Belgrade, Serbia--Cross-sectional analysis. *Srp Arh Celok Lek.* 2016 Mar-Apr;144(3-4):165-73.

ABSTRACT

Introduction: The quality of health care significantly depends on the satisfaction of the employees.

Objective: The objective of this study was to establish the level of professional satisfaction of healthcare professionals in state hospitals in Belgrade, Serbia, and to determine and to rank the factors which impact on their satisfaction or dissatisfaction.

Method: Professional satisfaction survey was designed and conducted as a cross-sectional study in 2008. Completed questionnaires were returned by 6,595 healthcare professionals from Belgrade's hospitals. Statistical analysis was performed using the Student's t-test, χ^2 test and ANOVA. Factor analysis was applied in order to define determinants of professional satisfaction, i.e. dissatisfaction.

Results: This study showed that the degree of professional satisfaction of Serbian healthcare professionals was low. The main causes of professionals' dissatisfaction were wages, equipment, the possibility of continuous medical education/training and the opportunities for professional development. Healthcare professionals with university education were more satisfied with all the individual aspects of job satisfaction than those with secondary school and college education.

Conclusion: There were significantly more healthcare professionals satisfied with their job among males, older than 60 years, in the age group 50-59 years, with managerial function, and with 30 or more years of service. Development strategy of human resources in the Serbian health care system would significantly improve the professional satisfaction and quality of the provided health care.

2. Riaz H, Godman B, Bashir S, Hussain S, Mahmood S, Waseem D, Malik F, Raza SA. Evaluation of drug use indicators for non-communicable diseases in Pakistan. *Acta Pol Pharm.* 2016 May-Jun;73(3):787-94.

ABSTRACT

Irrational drug use practices are a burden to healthcare facilities. Poor prescribing practices affect the overall management and cost of treatment of non-communicable diseases that are the major cause of mortality and morbidity worldwide. In an effort to improve prescribing practices, this study was designed to assess prescribing, consultation and facility indicators in healthcare facilities of Punjab and Sindh provinces of Pakistan from December 2012 to December 2013. In this cross-sectional study, random and convenient sampling were used to collect data from both private and public healthcare facilities. Quantitative data were collected using structured questionnaire, observations and prescription analysis, whereas qualitative information on factors influencing prescribing practices was obtained by interviewing medical practitioners. A total of 13693 prescriptions were obtained from 500 patient-prescriber encounters. Results show that history taking, physical examination and diagnoses were adequate

while generic prescribing was four-fold less than drugs prescribed by brands. Average number of drugs prescribed was 4.63 with more prescribing tendency in private facilities. 45.07% prescription costs were less than Rs. 150. Sulfonylureas, statins and ACE inhibitors were highly prescribed drugs for diabetes, hyperlipidemia and hypertension. Prescribing practices were dominantly influenced by severity of disease (73% Punjab; 81% Sindh), patient age (75% Punjab; 68% Sindh) and availability of drugs (62% Punjab; 56% Sindh) whereby 91% practitioners in Sindh and 52% in Punjab rely on medical representatives as the source of drug information. Moreover, the pharmacy and therapeutic committees in all facilities were non-functional along with non-availability of essential drug list in 87% health facilities. Thus, there are considerable opportunities to improve the rational use of medicines in Pakistan including low prices for generics, physician education, prescribing guidelines and formularies.

3. Holloway R, Domack A, Treat R, Roo KD. Results of Student-Generated 'Unique Characteristics' on the Medical Student Performance Evaluation. *WMJ*. 2016 Jun;115(3):129-33.

ABSTRACT

Importance: The Medical Student Performance Evaluation (MSPE)--formerly called the dean's letter--is an important tool for residency program directors to use in assessing student qualifications for both invitation to interview and construction of their rank order list. Many institutions are now allowing students to construct their own Unique Characteristics (UC) section for the MSPE. This study

addresses the results of allowing students to construct their own UC.

Objectives: The goal of this study was to allow students to voice their thoughts regarding their participation in the construction of the UC section of the MSPE. The survey evaluated student attitude toward, value of, and support for the UC section.

Method: We conducted a cross-sectional survey of all fourth-year medical students at the Medical College of Wisconsin during the 2014-2015 academic year. Responses were received from 66% of students (133 out of 199). We developed a question bank to cover the aims of the study--to assess student perceived value, experience writing, and support for the UC section.

Results: There was agreement among students that their participation will positively affect their candidacy for interview selection and success in the match. Overall significance of regression model $P = .001$, $R^2 = .60$. Additionally, students believed they had an advantage over applicants at other schools without the opportunity to draft their UC. Other findings included that men found the task more challenging, psychiatry applicants were least satisfied with the character count, and emergency medicine applicants voiced the lowest value for the UC section.

Conclusions: The present study supports, in general terms, the utility and value of students drafting their own UC section of the MSPE. Future investigations should focus on expanding to other schools, comparing public to private institutions, and refining the interspecialty comparisons.

4. Xie Y, Huang S, He T, Su Y. Coffee consumption and risk of gastric cancer: an updated meta-analysis. *Asia Pac J Clin*

Nutr. 2016;25(3):578-88. doi:
10.6133/apjcn.092015.07.

ABSTRACT

Background and Objectives: Coffee is one of the most widely consumed beverages worldwide, and many studies have investigated the association between coffee consumption and gastric cancer. However, the results are inconsistent. We conducted a systematic analysis of relevant population studies to derive a more precise estimation.

Methods and Study Design: Cochrane library, PubMed and Embase databases were searched to identify studies that met predetermined inclusion criterion through July 2014. All epidemiologic studies regarding coffee consumption and gastric cancer risk were selected, and relative risks (RRs) with 95% confidence intervals (CIs) were calculated.

Results: Twenty two studies (9 cohort and 13 case-control studies) involving 7,631 cases and 1,019,693 controls were included. The summary RR of gastric cancer was 0.94 (95% CI: 0.80-1.10) for the highest category of coffee consumption compared with the lowest category, and 0.93 (95% CI: 0.88-0.99) for coffee drinkers compared with nondrinkers. We stratified the population by coffee consumption. The pooled RR for the population with <1 cup/day, 1-2 cups/day and 3-4 cups/day coffee consumption compared with nondrinkers were 0.95 (95% CI: 0.84-1.08), 0.92 (95% CI: 0.82-1.03) and 0.88 (95% CI: 0.76-1.02), respectively, indicating that an increase in coffee consumption was associated with a decreased risk of gastric cancer. Furthermore, we stratified the studies by design, sex, population and time. A significant association between coffee

intake and decreased gastric cancer risk was shown in case-control studies (RR=0.85, 95% CI: 0.77-0.95) and among the studies published over the last ten years (RR=0.88, 95% CI: 0.77-1.00).

Conclusions: Our meta-analysis suggested that coffee consumption might be associated with a decreased risk of gastric cancer.

5. Wei X, Peng R, Cao J, Kang Y, Qu P, Liu Y, Xiao X, Li T. Serum vitamin A status is associated with obesity and the metabolic syndrome among school-age children in Chongqing, China. *Asia Pac J Clin Nutr.* 2016;25(3):563-70. doi: 10.6133/apjcn.092015.03.

ABSTRACT

The aim of our study was to examine the association of vitamin A status with obesity and the metabolic syndrome (MS) in school-age children in Chongqing, China. A cross-sectional study was conducted of 1,928 children aged 7~11 years from 5 schools in Chongqing, China. Body height, weight, waist circumference (WC) and blood pressure were measured. Blood glucose, lipids and vitamin A were determined. Overall prevalences for overweight, obesity and MS were 10.1%, 6.7% and 3.5%, respectively. There were 274 (14.2%) marginally vitamin A deficient (MVAD) children and 53 (2.8%) vitamin A deficient (VAD) children, respectively. Serum vitamin A in the obese group was significantly lower than in the overweight and normal weight groups ($p<0.001$). Body mass index (BMI), WC, high density lipoprotein cholesterol (HDL-C) and glucose were strongly associated with vitamin A status ($p<0.05$). In a separate model adjusted for age and sex, compared with normal children, participants with obesity had a significantly higher risk of

having vitamin A insufficiency (≤ 1.05 $\mu\text{mol/L}$) (OR: 2.37; 95% CI: 1.59, 3.55) ($p < 0.001$), and participants with MS had a 1.99-fold (95% CI: 1.14, 3.47) greater risk of having vitamin A insufficiency ($p = 0.016$), while participants with VAD had significantly higher risk of having MS (OR: 3.82; 95% CI: 1.44, 10.2) ($p = 0.007$). Vitamin A insufficiency among Chongqing urban school-age children was found to be a severe health problem, significantly associated with obesity, hypertriglyceridemia and MS.

6. Bokeriya OL, Akhobekov AA, Shvarts VA, Glushko LA, Le TG. Meta-analysis of clinical studies on the use of statins for prevention of atrial fibrillation soon after coronary bypass surgery. *Klin Med (Mosk)*. 2016;94(2):85-92.

ABSTRACT

Background: Atrial fibrillation (AF) develops in the early postoperative period in each third patient undergoing coronary bypass surgery (CBPS). Multifactorial pathogenesis of postoperative AF is unclear. The concept of postoperative inflammation as a potential basic mechanism of this condition has been implied in many studies. Pre- and postoperative treatment with antiinflammatory statins proved beneficial as a means for reducing the frequency of AF.

Materials and Methods: The meta-analysis is based on the results of 15 clinical studies carried out in the last 15 years. They included 9369 patients of whom 5598 (59.75%) used statins and 3771 (49.25%) did not receive them. The following endpoints were evaluated in the early postoperative periods: frequency of AF, overall lethality, frequency of cerebral

circulation disorders and myocardial infarction. Odds ratio (OR) and 95% CI were calculated, levels of inflammation markers before and after surgery and duration of hospitalization were determined.

Results: Statins decreased the frequency of AF soon after CBPS (OR 0,481 at 95% CI 0,345-0,672; $p = 0,000$), they did not influence overall lethality (OR 0,837 at 95% CI 0,501-1,399; $p = 0,497$) and frequency of myocardial infarction (OR 1,001 at 95% CI 0,702-1,426; $p = 0,997$), but decreased frequency of cerebral circulation disorders (OR 0,067 at 95% CI 0,037- 0,121; $p = 0,000$). Also, they reduced duration of hospitalization and serum levels of inflammation markers.

Conclusion: Results of clinical studies available to date leave no doubt that statins produce anti-inflammatory and anti-arrhythmic effects. Meta-analysis of relevant studies confirmed on the whole the positive role of statin therapy prior to CBPS.

7. Vasyhchenko DS, Desyateryk VI, Sheyko SO, Zverevych TI. Prophylaxis of complications of laparoscopic cholecystectomy in patients with the ischemic heart disease. *Klin Khir*. 2016 Mar;(3):23-5.

ABSTRACT

Results of examination and surgical treatment of 56 patients, suffering chronic calculus Cholecystitis with concomitant ischemic heart disease, were analyzed. In all the patients a laparoscopic cholecystectomy was performed. Monitoring of cardiovascular complications was estimated with the help of a Holter recording of EGG intra-operatively and in the early postoperative period. Depending on a kind

of preoperative preparation done, the patients were divided on two groups: those, to whom cardio protection using a Vasopro preparation was conducted, and those without cardio protection. Depending on the intraoperative pneumo-peritoneum regime used in every group two subgroups were delineated: in intra-abdominal pressure 5-7.9 mm Hg and 8-10 mm Hg. In the patients, to whom cardio protection was conducted and operative intervention in a carboxy-peritoneum regime performed while intra-abdominal pressure 5-7.9 mm Hg, a frequency of cardiovascular complications was lesser than in a control group.

8. Guteta S, Yadeta D, Azazh A, Mekonnen D. Cardiac surgery for valvular heart disease at a referral hospital in Ethiopia: a review of cases operated in the last 30 years. *Ethiop Med J.* 2016 Apr;54(2):49-55.

ABSTRACT

Background: Valvular heart disease has been a significant cause of heart disease worldwide. In Ethiopia, it particularly affects young individuals and constitutes the major cause of cardiovascular disease. Factors associated with choice of treatment for advanced valvular heart disease are variable. The objective of this study is to review surgery done for Ethiopian patients with valvular heart disease.

Methods: We analyzed data on patients who had valve surgery and follow-up at the Tikur Anbessa Specialized Hospital cardiology unit. We collected data on sociodemographic characteristics, the pre-operative status of effected valves and comorbidities, and assessed their associations with patient management options.

Results: A total of 157 valve surgeries were done from 1983 to 2013. Mean age at time of surgery was 26.7 years and females constituted 66% of the cases. Patients with rheumatic heart disease were younger, more likely to be female and have atrial fibrillation, but less likely to have impaired left ventricular systolic function when compared to patients with non-rheumatic heart disease. More than 75% of the surgical procedures done were mechanical valve replacement. Mechanical valves, compared with bioprosthetic valves, were more likely to be used in patients with rheumatic heart disease. The median age of those receiving mechanical valves, 24 (IQR 22-28) years, was lower than those receiving bioprosthetic valves, 31.5 (IQR 29.9-37.9) years. Mechanical valve replacement was significantly higher in those under the age of 20 years (Adjusted Odds Ratio 41.0, 95% CI: 3.0-557.2) and in those between 20 and 29 years of age (Adjusted Odds Ratio 14.3, 95% CI: 2.3-88.6).

Conclusions: Valve surgery for valvular heart diseases has been more common performed for young and female patients. A great majority of the replacements done have been with mechanical valves. As many of the patients have been younger and female, the choice of valve surgery and the need for anticoagulation impacts subsequent management of rheumatic heart disease and associated morbidities, lifestyle plans and pregnancy.

9. Sawamura A, Katabami K, Ishimori N, Singu Y, Nakayama N. The clinical condition and treatment of diseases associated with sudden death. *Hokkaido Igaku Zasshi.* 2016 May;91(1):27-30.

ABSTRACT

The Hokkaido Medical Society is a group of doctors and medical researchers in Hokkaido. Its purpose is to contribute to medicine and to the improvement of medical treatment. This symposium was carried out in order to inform citizens about the condition known as sudden death. We hypothesize that the incidence of sudden death tends to increase in line with the incidence of metabolic syndrome. Approximately four hundred patients were transported to our hospital by ambulance in a state of cardiopulmonary arrest (CPA) last year. The number of CPA patients who are treated in our hospital has increased in comparison to the previous decade. The theme of this year is "The clinical condition and treatment of diseases associated with sudden death" in view of the above mentioned situation. In 2015, it was reported that sudden death occurred in an American pilot and that the co-pilot was forced to make an emergency landing. Interestingly, sudden death can ever sometimes occur in pilots who undergo regular physical examinations. Numerous diseases and conditions are associated with sudden death, including: acute myocardial infarction, irregular pulse, cardiac insufficiency, cerebrovascular disease, aortic dissection and choking. We are of the opinion that the frequency of sudden death is very high in the fields of emergency medicine, cardiovascular medicine, cardiovascular surgery and neurosurgery. In this symposium, we presented and explained the condition that is known as sudden death and the current state of treatment of sudden death in emergency medicine, cardiovascular medicine, cardiovascular surgery and neurosurgery departments of the Hokkaido University

Graduate School of Medicine in October, 2015. We hope that the symposium will help the citizen audience to understand the condition and treatment of sudden death, and also to help prevent sudden death.

10. Bărboi OB, Prelipcean CC, Mihai C, Floria M, Chirilă I, Darie AM, Drug VL, Bălan G. Extra-digestive manifestations of gastro-esophageal reflux disease: demographic, clinical, biological and endoscopic features. *Rev Med Chir Soc Med Nat Iasi*. 2016 Apr-Jun;120(2):282-7.

ABSTRACT

Introduction: Gastro-Esophageal Reflux Disease (GERD) with extra-digestive manifestations is a disorder increasingly recognized both by gastroenterologists, pneumologists, otolaryngologists and cardiologists.

Aim: To evaluate the demographical, clinical, biological and endoscopic features of the patients with gastro-esophageal reflux disease and extra-digestive manifestations (chronic laryngitis, asthma, pseudoangina).

Material and Methods: Prospective case-control study, including 137 patients selected from patients referred to the Iasi Institute of Gastroenterology and Hepatology between July 2014-September 2015. In the presence of typical GERD symptoms (heartburn or regurgitation), the patients were assessed by upper digestive endoscopy for the detection or exclusion of esophagitis. Despite the absence of esophageal lesions, the patients were further assessed by impedance-pHmetry.

Results: Depending on the dominant extra-digestive manifestation, the patients were assigned into 3 groups: 94 chronic laryngitis patients, 24 asthma patients and 19

pseudoangina patients. Females were more frequent among pseudoangina patients (68.4%). Mean age of the male patients with dysphonia or asthma was lower ($p=0.002$), the majority (78.1%) living in urban areas. Obesity was predominant in pseudoangina group (52.6%), as compared to dysphonia group (16%) the differences being statistically significant ($p=0.002$). A share of 57.9% of pseudoangina patients were dyslipidemic, in contrast to dysphonia (24.5%) or asthma group (37.5%) ($p=0.013$). Esophagitis was also more frequent at pseudoangina group (84.2%), but with no

significant statistical difference between the study groups (79.8% and 75%, respectively) ($p=0.115$). It seems that *Helicobacter pylori* infection tends to be protective in patients with GERD and pseudoangina ($RR=0.61$), but it cannot be extrapolated to the general population ($p=0.459$).

Conclusion: GERD with extra-digestive manifestations is a prevalent and heterogeneous disease. There are demographic, clinical, biological and endoscopic differences between patients with extra-digestive GERD.