Intestinal colonization of residents of long-term care facilities and nursing homes in Braga area with Multidrug-resistant Gram-negatives

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**Aim:** The aim of our work was the detection of Enterobacteriaceae isolates producing extended-spectrum beta lactamasases (ESBL) and with reduced susceptibility to carbapenems, in the intestinal flora of institutionalized-residents in extra-hospital-health-care facilities in Braga region.

**Introduction:** Care of aging population has been a growing challenge to public-health and health-care providers. Due to the disabilities of older people, there is a growing need for long-term care facilities (LTCF) and nursing homes (NH). This brings a new paradigm for the spread of bacteria showing multidrug-resistance (MDR) to antibiotics.

**Methods:** Fecal samples of 27 residents of these institutions were collected (September-to-December, 2016). One gram of each sample was suspended in 10 mL of saline and 100 L of the suspension was spread on MacConkey agar with ampicillin (100 mg/L)/cefotaxime (2 mg/L)/meropenem (1 mg/L). Susceptibility to antibiotics was determined by disk-diffusion methods, according to CLSI. ESBL-producers were detected by the double-disk-synergy-test and/or clavulanic-acid addition and PCR was performed for detection of blaTEM, blaOXA, blaCTX-M–group-1, blaCTX-M–group-2, blaCTX-M–group-8, blaCTX-M–group-9, blaCTX-M–group-25, tetA, tetB, aac(3)-II, sul1, aac(6)-lb and qnrB genes.

**Results:** The study revealed 6 ESBL-producing Enterobacteriaceae colonizing 2 residents in LTCF (2-Escherichia coli/1-Klebsiella, Enterobacter, Serratia and Citrobacter (KESCgroup)) and 3 residents in NH (2-Escherichia coli/1-KESCgroup). Isolates showed positive for blaCTX-M–group-1, blaCTX-M–group-9, blaTEM, blaSHV, blaOXA, tetA, tetB, aac(3)-II, sul1 and aac(6)-lb. These isolates showed resistance to non-beta-lactam antibiotics, namely to tetracycline, ciprofloxacin, trimethoprim-sulfamethoxazole, gentamicin and amikacin. We detected 6 MDR-bacteria isolates and 1 isolate with reduced susceptibility to carbapenems.

**Conclusion:** Our results show the dissemination of ESBL-producing Enterobacteriaceae in intestinal colonization of LTCF/NH patients, who may act as vehicles of MDR-bacteria within the health-care-facilities and community.

http://dx.doi.org/10.1016/j.pbj.2017.07.134

PS202

Social desirability in medical school admission: Differences between students from regular contingent and graduate admission

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**Aim:** Our work targeted the degree of social desirable answers among two different contingents with the objective of providing useful statistically insight about how this variable may be responsible for the differences among both groups. With the new evidence found in this study we hope to provide useful insight to help improving the selection process of the applicants.

**Introduction:** The relation between social desirability and medical school applicants may be of interest when analyzing the results of questionnaires in medical school admission. Our study analyzes the difference in social desirability between graduates admitted to a medical school, and students enrolling in the school by the regular admission process.

**Methods:** We used a resumed version of the Marlow-Crowne Desirability Scale to compare the social desirability between students from the regular and graduate admission. After collecting 181 questionnaires between 2005 and 2006, all the data was analyzed using R software. The sample was described by performing t-test between regular and graduate admission in the following variables: gender, marital status, childbearing, working status, previous residence and age.

**Results:** Statistically significant differences were found in marital and working status as well as within. The main outcome – social desirability – was also statistically different among both groups, indicating that students with graduate admission had given more desirable answers. A analysis of subgroups according to marital and working status was made, being the results also significant.

**Conclusion:** Our study suggests that graduate admission students have more social desirability than regular students. However, more research is needed in order to find in what way other factors, as age or working status, for example, might have influenced these results.

**Acknowledgements:** Milton Severo.

http://dx.doi.org/10.1016/j.pbj.2017.07.136

PS105

Headache among medical students in Bukovina Region of Ukraine

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**Aim:** To study the prevalence of headache among medical students in Bukovina region of Ukraine.

<http://dx.doi.org/10.1016/j.pbj.2017.07.135>
Introduction: Headaches are the most prevalent neurological disorder and among the most frequent symptoms among medical students. Headache disorder is a major public health issue and is a great burden for a person, health care system, and a society. Identifying of headache risk factors is necessary for treatment and effective prevention.

Methods: A cross-sectional study has been conducted in duration from 30th of January to the end of March 2017. 146 students of Bukovinian State Medical University aged 19–26 years were interviewed by using specially designed questionnaires. All students with a headache who completed questionnaires were examined by neurologist. The type of headache was determined according to the diagnostic criteria of the classification of the International Headache Society, 2003.

Results: Our study has found that headaches bother 121 (82.8%) students. Among respondents periodic headache was observed in 71.9% (105 students), 16 (10.1%) students experienced chronic headaches that bothered them more than 15 days a month. Among girls the prevalence of headache was significantly higher than among men – 62.1% and 38.9% respectively. Among the students the most frequent headache (58.7%) was tension headache, 9.1% of respondents had migraine headache, 32.2% had other types of headaches. According to the students’ responses the most prevalent causes of headache were stress – 36%, sleep disturbance – 20%, and weather changes – 14%. The other causes included skipping meals – 11%, tea or coffee overdrink – 8%, alcohol consumption – 6%, and menstrual cycle disturbances in 2% students.

Conclusion: By means of the research there was found a high prevalence of headaches among medical students. There was determined the prevalence of primary cephalgias, namely, migraine without aura and episodic tension-type headaches. There was shown a lack of awareness of students about the causes of headache reflected in inadequate symptomatic treatment in most cases.

http://dx.doi.org/10.1016/j.pbj.2017.07.137

PS194

New health problems: Assessment of nutritional and metabolic profile from indigenous citizens in the reserve park of Xingu

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Aim: To identify the prevalence of metabolic syndrome, dyslipidemia, systemic arterial hypertension and type 2 diabetes mellitus in the adult population.

Introduction: In the last 20 years, there have been many changes in the way of life of the Indians of the Xingu Indigenous Park (PIX), resulting from their contact with our society. Factors such as the increasing consumption of processed foods in substitution of the traditional diet based on natural products, the reduction of physical activity by the incorporation of technology and the monetarization of the economy have produced changes in the epidemiological profile of these populations. Previously non-existent diseases like type 2 diabetes mellitus, systemic arterial hypertension, obesity and dyslipidemias have been increasingly observed. In this work, preliminary results of data collected between February and March 2017 are presented.

Methods: Individuals over 18 years old of both sexes undergoing physical examination (clinical and anthropometric), bioimpedance test to evaluate the percentage of body fat and blood collection by digital puncture for lipid profile and fasting glucose of 8–12 h.

Results: The metabolic profile of 188 indigenous people of the Pavuru polo showed: High index of overweight and dyslipidemia in both populations; high central obesity in females; Increased number of hypertensive and fasting blood glucosalted among men; 25% have intermediate or high cardiovascular risk in the next 10 years among men, almost twice as many women.

Conclusion: Based on the data obtained, we can conclude that the process of socio-cultural transition to which the residents of the 4 villages studied are inserted has a direct impact on the their health, making it imperative to indetificate and delineate the magnitude of the problem, seeking to develop strategies for the primary and secondary prevention of diseases related to nutritional and metabolic alterations and their consequences among the people living in the PIX.1-5

References

http://dx.doi.org/10.1016/j.pbj.2017.07.138

PS149

Late diagnostics of Alzheimer’s disease and other dementias, retrospective research in Vilnius (Lithuania)

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Aim: To gain a deeper understanding around the prolonged diagnosis time for Alzheimer’s disease.

Introduction: The world population is getting older. Correspondingly the number of old age sicknesses (like Alzheimer’s disease (AD), dementias) is rising in the populations. These patients require custody, medicine and that takes a lot of money and resources from the country.

Methods: There were two multiple choice/short answer surveys done. One for doctors (psychiatrists, neurologists, general practitioners) and the other for the the patients care givers. The surveys were administered in the hospitals in Vilnius. The data were evaluated by SPSS program (α = 0.05).

Results: 50 doctors completed the surveys. Doctors emphasize that just about 14% of patients’ care givers are aware of the possibility for the genetic screening for AD and are interested in pursuing it. Moreover, according to the surveys, patients with cognitive disorders seek help when they are about 65–75 years old and 70% of