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**Aim:** The aim of this work is to analyze the advantages of the introduction and diversification of pedagogical strategies in Anatomy Education, as a comprehensive model of Medical Education.

**Introduction:** Medical Education has suffered a paradigmatic shift that led to curricular reforms. Due to scientific and technological development, Medical curriculum has been adopting a vertical integration model, in which basic and clinical sciences coexist during medical instruction. This context favours the introduction of new complementary technology-based pedagogical approaches. Thus, even traditional core fields of medical curriculum, like Anatomy, are refocusing their teaching/learning standards.

**Methods:** This work presents the main conclusions of a bibliographic review that reflected on Medical Education's current pedagogical trend, by analyzing the advantages of the introduction and diversification of pedagogical approaches in Anatomy Education.

**Results:** Anatomy Education's status quo is characterized by less available teaching time, increasing demands of 2D perspective of human anatomy from radiology and endoscopy imaging and other invasive and non-invasive medical techniques, increasing number of medical students and other logistical restraints. The traditional learning approach, mainly based in the cadaveric dissection, is drifting to complementary newer technologies as 3D models or 2D/3D digital imaging to examine the human anatomy. Also, knowledge transference is taking different channels, as learning management systems, social networks and computer-assisted learning and assessment are assuming relevant roles.

**Conclusion:** The future holds promising approaches for education models. Artificial Intelligence, Virtual Reality and Learning Analytics may provide analytic tools towards a real-time and personalized learning process.

A reflection on Anatomy Education, as a comprehensive model, allows us to understand Medical Education's complexity. Therefore, the present Medical Education context favours a blended learning approach, based on multi-modality pedagogical strategies.

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## PS174

### Human *Dirofilaria* (Nochtiella) *repens* infection in Serbia



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**Aim:** The aim of this study was to present and describe cases of *D. repens* infection in Serbia from 2013 to 2016. The cases were reported in National Reference Laboratory for Parasitic Zoonoses in Belgrade.

**Introduction:** Dirofilariasis is a vector-borne parasitic zoonosis caused by *Dirofilaria* genus which uses female mosquitoes as vectors. One of the important species is *Dirofilaria repens*. Dogs are main reservoir hosts for *D. repens*, whilst humans can be accidental

hosts. The most common site of infection is ocular region. Human dirofilariasis is a rare infection, however, the number of reported cases is increasing in Europe and Serbia.

**Methods:** Retrospective study was performed including data from National Reference Laboratory for Parasitic Zoonoses in Belgrade. The results were processed and selected parameters were described: sex and age of the patients, locality, location of the lesion, clinical signs and characteristics of parasites. Diagnostic and therapeutic procedures, previous diagnosis were also described.

**Results:** Seven cases were reported during selected period. The mean age of patients was 44.9 years. Six patients were females (85.7%) and five patients were from Belgrade (71.4%). The most frequent site of infection was ocular region in four patients – 57.5%, while the other sites were skin of abdomen and limbs. All patients had nonspecific clinical signs. The most common cause of the infection was immature female worm in five cases (71.4%).

**Conclusion:** The number of cases of human *D. repens* infection is increasing in Serbia, and the most common site of the infection is ocular region. Considering the fact that cases are mainly misdiagnosed, it is important to point out the significance of this infection in differential diagnosis of different diseases.<sup>1–4</sup>

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## PS104

### The multidimensional approach to suicide done through self-mutilation with an overview of wounds



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**Aim:** The aim of the study was to evaluate the methods and wounds of suicide done by self-injury.

**Introduction:** Hanging and drug overdose are the most common ways of suicide. However, there are also more painful methods of dying. This study considers: stabbing, cutting with a knife, ingestion of sharp foreign body, self-shooting, self-arson, crushing.

**Methods:** There were 65 recorded cases ( $M=56$ ,  $F=9$ , mean age:  $49.96 \pm 15.78$ ) of self-mutilation as a way of death in archives of the Department of Forensic Medicine of Jagiellonian University Medical College in Cracow in years 2011–2016. All of them were studied in terms of the method, trial and mortal wounds (number, area, type), condition of clothing, prior psychiatric treatment, prior suicide attempts. All calculations were done with the usage of Statistica software.

**Results:** The most common methods of suicide were self-shooting (38.46%), cutting (26.15%), stabbing (16.92%). There was 1 case of foreign body ingestion and 1 of head crushing in a blacksmith machine. There were 6 cases of self-arson. Trial wounds were observed in 29.23% cases, all of them were recorded in

cases of either stabbing or cutting. The places of mortal wounds: 43.4% head, 20.8% thorax, 18.9% upper limb, 9.4% neck, 3.8% lower limb, 1.9% abdomen, 1.9% digestive tract. The majority of patients (72.3%) had no previous mental treatment and prior suicide attempt (84.61%). In 57/65 cases the place of the wound was exposed.

**Conclusion:** People in their fifties commit suicide with self-injury. It happens most often with either a gun or a knife. The trial wounds were observed in cases of stabbing or cutting. 4 of 6 cases of self-arsony were accompanied by previous psychiatric treatment. Females commit suicides through self-mutilation more rarely than males.

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## PS160

### 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 lactamases (ESBL) and isolates 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, blaSHV, 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)-Ib 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)-Ib. 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.

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## 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.

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## 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.