#### PS228

## Is more stressful to become a physician or a pharmacist? A study on medical and pharmacy students' psychological state



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**Aim:** The objective of this study was to evaluate stress, anxiety, depression and happiness in medical and pharmacy students and to explore similarities and differences between them.

**Introduction:** Higher levels of depression, anxiety and stress have been found in medical and pharmacy students when compared to general population, 1,2 varying across year in school and gender. Well-being during school years conversely may decrease depressive symptoms, boost happiness and life satisfaction, and contributes to resilience to stressful academic experiences. Students awareness of symptoms and consequences of distress may foster the search for psychoeducation and psychotherapy which offer effective strategies to improve mental health and academic performance. 3,4

**Methods:** A cross-sectional study included 420 students of Faculty of Medicine of the University of Porto (FMUP) and 200 students of Faculty of Pharmacy of the University of Porto (FFUP). Assessment included sociodemographic characterization, screening for anxiety and depressive symptoms - Hospital Anxiety and Depression Scale (HADS), stress - Perceived Stress Scale (PSS) and subjective wellbeing - Subjective Happiness Scale (SHS). One-way analysis of variance (ANOVA) and the independent paired t-test were applied to compare demographic and psychological characteristics from within each group.

**Results:** Statistically significantly higher number of anxiety and depressive symptoms were found in medical students (p < 0.001), and pharmacy students presented significantly higher PSS scores (p < 0.001). Interestingly, medical students showed statistically significantly higher SHS scores than pharmacy students. Female students revealed significantly higher levels of anxiety, depression and stress in pharmacy school, but in medical school female students presented uniquely higher stress levels.

**Conclusion:** Attending a faculty degree is a challenging experience which involves life changing experiences and poses different personal and academic problems according each specific school. These findings demonstrate the need to better understand the balance between students' stressful experiences and happiness to identify students at risk in both schools.

### References

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#### PS234

## The relationship between socio-economic determinants and incidence of most common types of cancer in Poland



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**Aim:** To establish the link between incidence rates of cancer and selected socio-economic variables.

**Introduction:** Geographical analysis of cancer incidence rates shows significant regional diversity and can be viewed as an approximation of the actual risk of particular types of cancer.

**Methods:** The absolute numbers of new registered cases of lung, breast and colon cancer in Poland in 2014 by voivodeships (Polish provinces) were obtained from the Polish National Cancer Registry. The situation in individual voivodeships in terms of social isolation, social capital, religious activity and poverty was assessed based on the results of the Polish Social Cohesion Survey for 2015. The Spearman's rank correlation coefficient (rS) was used to test the association between incidence rates of types of cancer (number of cases/100 inhabitants) and social variables. The significance level was set at p < 0.05 (2-tailed tests).

**Results:** Spearman's correlation analysis showed a statistically significant strong positive correlation between lung cancer risk and: social isolation (rS=0.73; p < 0.0013), living conditions poverty (rS=0.55; p = 0.028), poverty resulting from the lack of budget balance (rS=0.72; p = 0.0015), and low/no involvement in religious activity (rS=0.7; p = 0.003). Strong negative correlation with rS=-0.64 and p < 0.008 exists between lung cancer risk and high level of association-based social capital. In colon cancer, only negative correlation between colon cancer risk and high level of friend- and neighbour-based social capital (rS=-0.56; p = 0.020) was statistically significant. Breast cancer risk was statistically significant for strong negative correlation with high level of friend- and neighbour-based social capital (rS=-0.74; p = 0.0009) and for a fairly strong positive correlation with low/no involvement in religious activity (rS=0.53; p = 0.04).

**Conclusion:** Our findings provide important evidence for the link between social and economic environment and the risk of most common cancer sites in Poland, and highlight the need to address these determinants as part of national cancer preventive programs.

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### PS093

# Multimodal analgesia after total knee joint arthroplasty surgery: Intrathecal morphine vs. local infiltration with ropivacaine



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**Aim:** To assess and compare effectiveness and side effects of postoperative anesthesia methods, using intrathecal morphine and