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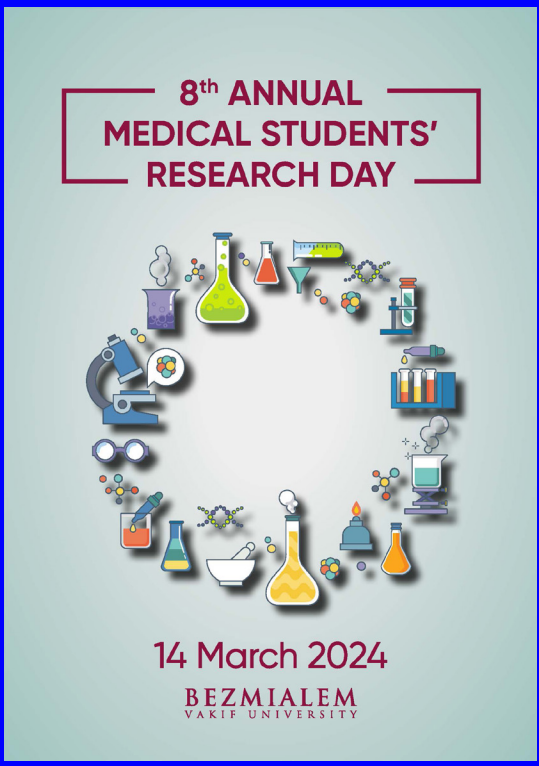


## 8th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

## 14 MARCH 2024

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**Guest Editor**

**Pınar Soysal**

Bezmialem Vakıf University,
Faculty of Medicine,
Department of Internal Medicine

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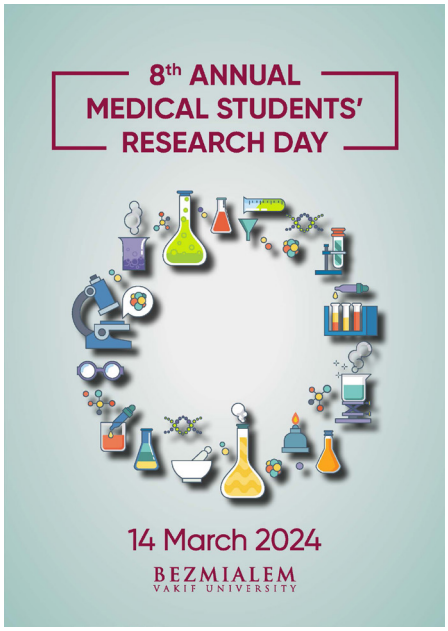


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## Acknowledgements

Bezmialem Vakıf University thanks everyone for their contribution and assistance in organizing this event.

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# PREFACE

Training as a physician demands meticulous attention not only to knowledge and patient care but also to the pursuit of lifelong learning and scholarly endeavors, which are essential facets that characterize the skillset of a physician.

The mission of Bezmailem Vakıf University (BVU) is to equip health professionals and scientists with innovative educational models that harness modern science and technology within the framework of our cultural values. Our commitment extends to conducting impactful research that translates into tangible products and services while concurrently providing high-quality, accessible healthcare services aimed at elevating the overall health standards of our society.

To this end, in 2014, BVU and Johns Hopkins University (JHU) entered into a collaborative agreement focused on curriculum development, which includes the integration of JHU's Scientific Concentration Module. This collaboration serves not only as a significant milestone but also as a potential blueprint for enhancing medical curricula worldwide.

The overarching goals and objectives of our program, comprising six modules, closely mirror those of the esteemed Johns Hopkins program. Commencing in September of the program's inaugural year, which corresponds to the fourth year of Bezmialem medical students, students engage in a mandatory orientation course that provides a comprehensive overview of the program's objectives and processes. During this phase, students are encouraged to begin contemplating their academic interests, thus laying the groundwork for their scholarly pursuits.

Throughout the duration of the program, from the first to the sixth module, students are guided through the process of selecting a mentor, formulating a research question, conducting literature reviews, seeking ethics committee approval, collecting and analyzing data, drafting abstracts, and ultimately presenting their projects before the BVU scientific committee. The culmination of this journey occurs at the end of two years, when each student presents their scholarly project at the prestigious Medical Student Research Symposium held in March.

The Bezmialem Science Supplement showcases selected presentations endorsed by the faculty of the Academic Concentration Module for oral or poster presentations. Each abstract has undergone rigorous peer review by both the BVU and JHU faculty, reaffirming our commitment to academic excellence and scholarly rigor.

I extend my sincere gratitude to our collaborators at JHU, the dedicated faculty at BVU, and, above all, to our students the future trailblazers of scientific inquiry. Together, we are all proud to have successfully completed the eighth course, a testament to our collective commitment to excellence and innovation in medical education.

**Pınar Soysal**
**Bezmialem Vakıf University,**
**Faculty of Medicine, Department of Internal Medicine**

SCHOLARLY CONCENTRATIONS PROGRAM
Johns Hopkins School of Medicine

# RESEARCH DAY

## 14 March 2024

**09.00-09.10:** Introduction

**09.10-10.05:** Podium I (Oral Presentation)

**10.05-10.15:** Coffee Break

**10.15-11.10:** Podium II (Oral Presentation)

**11.10-11.20:** Coffee Break

**11.20-12.00:** Poster Presentation

**12.00-13.30:** Lunch

**13.30-14.40** Short Oral Presentation

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# CONTENTS

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# 8th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

## 14 MARCH 2024

## ORAL PRESENTATIONS

**Guest Editor**
Pınar Soysal
Bezmialem Vakıf University, Faculty of Medicine,
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OP-1

# Investigation of the Anti-inflammatory Effect of *Liquidambar orientalis* Leaf Extract on RAW 264.7 Macrophage Cells

**Hümeyra ŞAHİN[1], Zeynep ÖZMAN[2], Abdurrahim KOÇYİĞİT[2]**

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**Introduction:** *Liquidambar orientalis*, or the "Anatolian Sweetgum Tree", native to the southwestern coastal regions of Turkey, has shown antioxidant, antimicrobial, antiulcerogenic, and hepatoprotective effects in various studies. However, its anti-inflammatory effects have not been fully elucidated. This study aimed to demonstrate the anti-inflammatory effect of *L. orientalis* leaf extract (LOLE) in lipopolysaccharide (LPS)-Stimulated RAW 264.7 macrophages.

**Method:** *L. orientalis* leaves were dried in 40 ºC incubator overnight and extracted using 80% ethanol. The total phenolic and flavonoid contents were assessed using colorimetric methods. Western blot (WB) method was used to determine nuclear factor-kappa B (NF-κB) and nitric oxide synthase (iNOS) levels in LPS-induced RAW 264.7 macrophage cells. ELISA was employed to analyze tumor necrosis factor alpha (TNF-α), interleukin-1 beta (IL-1β), and IL-6 cytokine levels. The cytokine levels of the extract were compared with those of methotrexate.

**Results:** Total phenolic and flavonoid contents in LOLE were measured as 618.04±6.71 mgGAE/g and 42.81±3.95 mgQE/g, respectively. WB results demonstrated that LOLE suppressed the expression of inflammation-related proteins iNOS and NF-κB in LPS (1 µg/mL) induced RAW 264.7 cells in a dose-dependent manner ($p<0.05$). The ELISA results revealed optimal suppression of IL-1β and TNF-α levels in LPS-induced cell culture at a 0.5 mg/mL LOLE dose, whereas IL-6 was best suppressed at 1 mg/mL ($p<0.001$). When 0.5 mg/mL LOLE was compared with 50 µM methotrexate in LPS-induced cell culture, LOLE showed a greater decrease in IL-1β levels ($p<0.001$).

**Conclusion:** LOLE decreased inflammatory cytokines IL-1β, IL-6, and TNF-α by regulating the iNOS and NF-κB pathways, suggesting its potential as an alternative anti-inflammatory treatment.

**Key words:** Anatolian sweetgum tree, Raw 264.7 macrophages, anti-inflammatory effect, methotrexat

OP-2

# Investigation of Biomarkers Associated with Intestinal Barrier Permeability in Patients with Migraine

**Oğuz Alp KUCUR[1], Aslı YAMAN KULA[2], Şahabettin SELEK[3], Metin DEMİREL[3], Fatmanur GÖKTAŞOĞLU[3]**

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**Introduction:** Migraine is a common neurological disorder with no exact pathophysiology. In recent years, studies from the perspective of "Gut-Brain Axis" hypothesis have shown a strong connection between how the Gut and the Brain affect each other in different types of mechanisms such as but not limited to hormones, metabolites, and neuroendocrine factors. From that perspective, there are no studies examining migraine's connection to gut permeability. To examine the aforementioned permeability, two proteins (lipopolysaccharide binding protein and zonulin) were selected.

**Method:** In this particular study, migraine patients (n=52) blood samples were collected at the Neurology Clinic at Bezmialem Vakıf University. The patient group was categorized according to aura history, visual analogue scale (VAS) value, migraine attack frequency per month, onset time, photophobia, sonophobia, pain duration per attack, and nausea and vomiting symptoms. Samples were studied with ELISA Kits at the Biochemistry Laboratory located in Bezmialem University. Their results were compared to healthy controls (n=30) later.

**Results:** There were no significant differences detected between migraine and healthy control groups in the mean serum zonulin and LPBP levels ($p>0.05$). However, we found a moderately significant correlation between VAS values for both our parameters ($p=0.03$ for zonulin and $p=0.02$ for LPBP).

**Conclusion:** Our group could not show a significant connection between migraine and gut permeability directly; however, as our results suggest a moderate significance between pain intensity and zonulin and LPBP levels, further studies are needed to elaborate the subject.

**Key words:** Migraine, gut permeability, zonulin, LPBP

OP-3

# Immunotherapeutic Effects of Purple Mulberry (*Morus rubra*) Extract in Colorectal Cancer: Efficacy *in vitro*

**Rukiye GÜRLEYEN[1], Ezgi DURMUŞ[2], Abdürrahim KOÇYİĞİT[2]**

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**Introduction:** In this study, we aimed to evaluate the cytotoxic effects of purple mulberry, a red fruit, on colorectal adenocarcinoma cells, to investigate the effect of purple mulberry extract on the expression level of PD-1 protein, and to show how the T cell-mediated cytotoxic effect on colorectal cancer cell lines co-cultured with T cells changed after purple mulberry administration.

**Method:** In line with these objectives, 80% ethanolic purple mulberry extract was prepared from the purple mulberry fruit. Content analysis of this extract, total phenol, total flavonoid, and total antioxidant determination were measured. The proliferation of colon cancer cell lines (HT-29 and Jurkat-T cells) was evaluated using MTT and WST-1 cell viability assays. ELISA tests were performed according to the user instructions, and cytokine levels in T cell supernatants were measured.

**Results:** Total phenol, flavone, and antioxidant activities were measured at 125 ug GAEeq/mg, 50 ug QUEeq/mg, and 25% ABTS scavenging capacity, respectively. By MTT cell viability assays, the 48-h 50% cell killing value (IC50) of *Morus rubra* extract at different concentrations (25-2,500 ug/mL) on HT-29 colon cancer was found to be 2,000 UG/mL. The proliferative effect of *Morus rubra* extract on Jurkat T cells was measured by the WST-1 cell viability assay, and the 48-h 50% cell killing value was found to be >3,000 ug/mL, whereas an increase in cell proliferation was observed in the dose range of 1,000-1,500 ug/mL compared with the control. A significant increase in cytokine levels was observed, especially at doses (1,000-2,000 ug/mL) where T cells proliferated.

**Conclusion:** It was shown that the ethanolic extract of purple mulberry fruit has high phenolic properties and that *Morus rubra* can affect the T cell response as well as its cytotoxic effect against colon cancer cells.

**Key words:** *Morus rubra,* colon cancer, immunomodulation

OP-4

# Effect of Denosumab on MCF-7 Human Breast Cancer Cell Culture

**Emre BERİ[1], Vildan Betül YENİGÜN[2], Ahmet Gökhan AKKAN[3], Özlem TOLUK[4]**

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**Introduction:** One common condition encountered in patients receiving hormonal therapy for metastatic breast cancers and breast cancer is bone density loss. Denosumab is one of the bone resorption inhibitors used to prevent these adverse effects. In this study, we investigated the anticancer effects of denosumab on MCF-7 human breast cancer cell culture.

**Method:** ER+ breast cancer cells (MCF-7) were used in this study to investigate the combination effect of progesterone and denosumab. The MTT cell viability test was used to calculate the half-maximal inhibitory concentrations (IC50) of both drugs and to observe cell viability after they were co-administered. To examine the cell growth rates and progression toward apoptosis, apoptosis analysis acridine orange/ethidium bromide (AO/EB), cell cycle analysis, and Ki-67 staining will be performed.

**Results:** Cell viability results revealed that low doses of progesterone induced the proliferation of MCF-7 cells, while inducing cytotoxicity at higher doses (starting from 40 µM with an IC50 value of 82.4 µM, $p<0.001$). In addition, approximately 20 µM of denosumab caused half of the cells to die ($p<0.001$). When the non-toxic dose of progesterone (40 µM) was applied to the cells with several doses of denosumab, we did not observe any statistical difference in cell death. Two weeks following the initial test, at the second MTT test, cytotoxicity had decreased to 18%. When denosumab was administered alone, it caused nearly 25% of the MCF-7 cells to undergo apoptosis in the AO/EB analysis, whereas when administered together with progesterone, this rate decreased to 15%.

**Conclusion:** The results showed that progesterone could counteract the cytotoxic and apoptotic effects of denosumab in MCF-7 cells, but more research is needed to confirm this result.

**Key words:** Denosumab, RANK-RANKL, progesterone, breast cancer, MCF-7

OP-5

# Assessment of PGT-A Outcomes Based on Indications for IVF Treatment

**Ege YAĞIBASAN[1], Pınar ÖZCAN[2], Hikmet Tunç TİMUR[3], Fatma Başak TANOĞLU[4], Özge PASİN[5]**

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**Introduction:** There are multiple reasons to consider preimplantation genetic testing for aneuploidy (PGT-A) for women undergoing *in vitro* fertilization (IVF) treatment. Different indications are anticipated to identify a greater number of aneuploidies than others. Our objective was to assess PGT-A results according to indications regarding the likelihood of identifying aneuploidy.

**Method:** This retrospective cohort study in a single center was conducted at the IVF center of Bezmialem University Hospital. We analyzed PGT-A results of 446 blasts that underwent PGT-A due to the following indications: advanced maternal age, history of recurrent spontaneous abortion, history of recurrent implantation failure, serious male factor, poor embryo quality, or a combination of two or more of these factors. Next-generation sequencing was used for the PGT-A analysis.

**Results:** Two thousand and four hundred seven oocytes were retrieved, resulting in the fertilization of 1,300 oocytes. Subsequently, 446 embryos underwent biopsy for PGT-A. The mean ages of the women and men were 34.47±5.83 and 36.5±6.31 respectively. The most common indication for PGT-A was patients with advanced maternal age, accounting for 23.1% of cases; the other indications were as follows: recurrent spontaneous abortion, 20.2%; poor embryo quality, 19.7%; recurrent implantation failure, 15.8%; mixed, 12.3%; and severe male factor, 8.9%. PGT-A analysis indicated that 237 embryos were euploid, while chaotic and aneuploid embryos were 141 and 114 respectively. The rates of euploidy within the indications for PGT-A were 51.1% for advanced maternal age, 82.9% for recurrent spontaneous abortion, 93.8% for recurrent implantation failure, 94.4% for severe male factor, 72.5% for poor embryo quality, and 32% for mixed.

**Conclusion:** PGT-A results reveal that the ratio of euploidy is lower in advanced maternal age than in other indications. Patients who underwent mixed PGT-A had the lowest rate of euploidy.

**Key words:** PGT-A, euploidy, aneuploidy, IVF

OP-6

# Comparative Effects of Vitamin C, Curcumin, and *Sambucus nigra* Extract on Cell Viability and Cytokine Levels in Cigarette-exposed Lung Epithelium Cell Cultures

**Abdullah Eren ÖZKAYA[1], Hanife Sevgi VARLI[2], Nelisa Laçin TÜRKOĞLU[2], Ayşegül YABACI TAK[3], Fatmanur KARAKÖSE OKYALTIRIK[4]**

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**Introduction:** Cigarettes contain harmful chemicals leading to diseases such as lung cancer and coronary artery diseases, causing deaths globally. Smoking depletes antioxidants crucial for immune function. Inflammation involving cytokines is a natural defensemechanism. Antioxidants such as *Sambucus nigra*, curcumin, and vitamin C reduce oxidative stress. However, higher doses of antioxidants may have a potential pro-inflammatory aspect, revealing a complex relationship between antioxidants and inflammation.

**Method:** Human lung epithelium (BEAS-2b) cells were cultured in T25 flasks until 90% confluence at 37 °C. Cigarette smoke extract (CSE) was prepared. Tumor necrosis factor alpha (TNF-α) and interleukin-6 (IL-6) cytokine levels from CSE-stimulated cells were measured using ELISA kits. The effects of vitamin C, *Sambucus nigra*, and curcumin were tested through MTT analysis at varying concentrations. CSE-treated cells were supplemented with antioxidants, and cytokine levels were assessed using ELISA kits.

**Results:** After 24 h of incubation with various concentrations of CSE, the highest concentration (resulting in the lowest viability) was selected for subsequent stages. BEAS-2b cells stimulated with CSE for 24 h showed no IL-6 stimulation, and TNF-α measured positive at 6.06 ng. Antioxidant exposure for 24, 48, and 72 h yielded varying viability percentages, with higher viability rates observed in the vitamin C groups. Seven groups were selected for cytokine level analysis, and IL-6 or TNF-α stimulation was not measured.

**Conclusion:** The impact of substances on cells depends on dose and exposure duration. Higher vitamin C doses were correlated with lower cell viability, indicating potential pro-inflammatory effects. *Sambucus nigra* and curcumin consistently exhibited lower viability rates. Adjusting doses in future studies may clarify the healing effects. CSE uniquely increased TNF-α cytokine levels, revealing its inflammatory effects, whereas other substances suppressed inflammation, reducing cytokine levels.

**Key words:** Cigarette smoke, cell viability, cytokine, antioxidant

OP-7

# Gamma Knife Radiosurgery for Arteriovenous Malformations: Efficiency, Outcomes, and Possible Side Effects

**Mehmet Denizhan YURTLUK[1], Mehmet Hakan SEYİTHANOĞLU[2]**

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**Introduction:** Arteriovenous malformations (AVM) can present challenges in terms of obliteration and debilitating outcomes. Stereotactic radiosurgery (SRS), embolization, and microsurgical resection can be used, but the treatment strategy should be tailored to the patient. Our study aimed to examine the effectiveness of SRS on AVMs in a large population of patients in a large size range and evaluate obliteration rates and patient outcomes after SRS.

**Method:** A total of 115 (74 female) patients were included, and the median age was 38 years (range: 6-73 years) for all patients. The median AVM volume was 2.9 cc (range: 0.009-49.38 cc). One hundred and three patients underwent one fraction of SRS with a median marginal dose of 20 Gy (range: 14-25 Gy), 11 patients underwent two fractions of Gamma knife radiosurgery with a median marginal dose of 16 Gy (range: 15-22 Gy) and 1 patient underwent three fractions of SRS with a marginal dose of 18 Gy. The median total follow-up period was 25 months (range: 3-72 months). Patient outcomes were evaluated using the Modified Rankin Scale.

**Results:** In the end, thirty-four (19 female, 30.4%) patients achieved complete obliteration in a median time of 40 months (95% confidence interval: 36-49), and the median AVM volume was 1.91 cc (range: 0.11-45.5 cc). The obliteration rate was 41%, 70%, and 85% at 3, 4, and 5 years, respectively, after one fraction or two fraction volume-staged SRS. Patients presented with various complications, including hemorrhage, seizure, and neurological deficits.

**Conclusion:** SRS provides a noninvasive treatment method for AVMs. Although the preferred outcome is not achieved immediately, it is a relatively safer method for suitable patients.

**Key words:** Arteriovenous malformation, gamma knife radiosurgery, stereotactic radiosurgery

OP-8

# Role of Thrombospondin-2 in Refractory Epilepsy

**Serra SAĞLAM[1], Şahabettin SELEK[2], Türkan UYGUR ŞAHİN[3], Ufuk SARIKAYA[4]**

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**Introduction:** Epilepsy is a common chronic disease characterized by repetitive convulsions related to sudden, abnormal discharges of neurons that unfavorably influence neurobiological, cognitive, psychological, and social abilities. Although some treatment choices, including medical and surgical procedures, exist, there are refractory cases as well. Our aim was to explain the role of thrombospondin-2 (TSP), a glycoprotein produced by astrocytes in the central nervous system, in refractory epilepsy.

**Method:** In this prospective study, 82 children (<18 years old) -regardless of their sex- that attended Bezmialem Vakıf University Hospital between August 2023 and January 2024 were included and classified into three groups: an epilepsy group (n=34) whose convulsions were under control with 1 drug, a refractory epilepsy group (n=28) that still had convulsions despite using two or more drugs, and a healthy group (n=20) that had no chronic disease. Children who had any chronic disease other than epilepsy or any lesion detected in cranial MR were excluded. TSP-2 levels in serum samples were analyzed using a commercial ELISA kits and compared between each group using the Kruskal-Wallis H test.

**Results:** Mean age was 2.17±0.66 in epilepsy group, 2.02±0.80 in refractory epilepsy group and 2.15±0.43 in control group. There was no significant difference between the mean ages of the groups (p=0.55). The mean TSP-2 level was 2.73±0.75 in epilepsy group, 2.31±0.73 in refractory epilepsy group and 1.77±0.80 in control group. There was a statistically significant difference between the TSP-2 levels of the groups (p<0.001).

**Conclusion:** The TSP-2 levels of both epilepsy and refractory epilepsy patients were increased, whereas the mean TSP-2 levels of the epilepsy group were higher than those of the refractory epilepsy group. Further studies are essential to confirm our results.

**Key words:** Refractory, epilepsy, thrombospondin-2, convulsion

OP-9

# Impact of Nutritional Status, Loss of Weight or Appetite, Dysphagia, and Micronutrient Deficiencies on All-Cause Mortality in Older Patients

**Elifnur AYDIN[1], Pınar SOYSAL[2], Özge PASİN[3]**

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**Introduction:** This study aimed to evaluate the effect of different indicators of nutritional status, including undernutrition, risk of malnutrition, malnutrition, weight loss or loss of appetite, dysphagia, and deficiencies of vitamin B12, folate, and vitamin D, on mortality in older patients.

**Method:** This retrospective cohort study enrolled 1911 older outpatients (81.0±13.0, 70.8% female). Mini Nutritional Assessment, Eating Assessment Tool-10, and the Council on Nutrition Appetite Questionnaire were used to determine nutritional status, dysphagia, and loss of appetite, respectively. The patient or the caregiver was asked whether the patient had lost weight in the last 3 months. Vitamin B12 and folate deficiencies were defined as <200 pg/mL and <3 ng/mL, respectively.

**Results:** In terms of survival analyses, the results obtained from Cox regression analysis showed that the effects of folate and B12 vitamin deficiencies on the hazard ratio (HR) were not significant ($p<0.05$), but vitamin D deficiency was related to 1.57 times higher mortality ($p<0.001$). The HR value for individuals with undernutrition, risk of malnutrition, and malnutrition were 2.94, 2.19, and 4.46 times higher, respectively ($p<0.001$). Individuals with dysphagia have a 1.83-fold higher HR ($p<0.001$). Reduced appetite leads to a 1.63 times higher HR ($p<0.001$). For individuals with a weight loss of 3 or more, the hazard risk is 2.42 times higher ($p<0.001$).

**Conclusion:** The results of this study show that nutritional status, loss of weight or appetite, dysphagia, and micronutrient deficiencies are associated with all-cause mortality.

**Key words:** Elderly patient, malnutrition, mortality

OP-10

# Electrophysiology in the Early Diagnosis of Chemotherapy-Induced Distal Symmetric Polyneuropathy

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**Introduction:** Many drugs used in cancer treatment exert toxic effects on peripheral nerves, often resulting in distal symmetric sensory polyneuropathy (DSP). Early diagnosis of polyneuropathy is crucial for guiding treatment. This project establishes a new electrophysiological ratio for the early diagnosis of DSP.

**Method:** Sixteen patients with chemotherapy-induced DSP (34-78 years) and 23 healthy volunteers (35-78 years) were included in the study. The patient group comprised cancer patients referred to the electromyography (EMG) laboratory with a preliminary diagnosis of chemotherapy-induced polyneuropathy. EMG examination involved radial, median, ulnar, superficial peroneal, sural, medial femoral cutaneous, and mixed medial plantar sensory; as well as motor nerve conduction studies. Sensory amplitude ratios, including sural/radial (SRR), medial femoral cutaneous/radial (MFCRR), and medial plantar/radial (MPRR), were calculated.

**Results:** All patients reported burning or numbness of the feet or hands. Neurological examination revealed hypoalgesia/paresthesia in the distal lower extremities, loss of distal deep tendon reflexes, and decreased or absent vibration sensation in the distal lower extremities. The MNST-A scores had a median of 5, and the MNST-B scores had a median of 4.5. Medial plantar responses were bilaterally absent in 10 patients and unilaterally absent in one. SRR, MFCRR, and MPRR mean values were significantly lower in patients than in the control group ($p<0.001$). MPRR demonstrated the highest sensitivity (45%) and specificity (90%) in discriminating patients from normals.

**Conclusion:** In this study, it was observed that chemotherapy-induced neuropathy occurs most frequently in sensory nerves, with less impact on motor nerves. The most significant impact was observed in the distal medial plantar response, which was measured at the most distal point in the lower extremities. In mild cases, MPRR was found to be the most useful ratio for differentiating patients from volunteers.

**Key words:** Chemotherapy, medial plantar/radial amplitude ratio, polyneuropathy, nerve conduction studies

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# 8th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

## 14 MARCH 2024

## SHORT ORAL PRESENTATIONS

**Guest Editor**
Pınar Soysal
Bezmialem Vakıf University, Faculty of Medicine,
Department of Internal Medicine

SOP-1

# Evaluation of the Impact of Severe Endometriosis on Embryo Morphokinetics

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**Introduction:** Endometriosis is one of the leading causes of infertility and affects approximately one-third of women who apply for *in vitro* fertilization treatment. Controversial results have been reported regarding the effect of endometriozis on both morphological and dynamic characteristics of embryos. Thus, we investigated the impact of severe endometriosis (SE) on embryo morphokinetics.

**Method:** This was a retrospective comparative analysis including a total of 1280 embryos [SE: 729, tubal factor (control): 551] that were incubated at the Time-Lapse Monitoring System in Memorial Şişli Hospital, ART and Genetics Center between October 2011 and July 2023. Patients with ≥38 years, bosy mass index (BMI) >30 and partners having severe male factors were excluded from the study. Morphokinetic parameters of embryos were compared using Student's t-test with SPSS 28.0.

**Results:** There was a homogenous distribution in terms of female age, BMI, basal follicle stimulating hormone, anti-Mullerian hormone levels, and total and mature oocyte count between the study groups. Although all morphokinetic parameters were significantly delayed in the SE group compared with the control group ($p<0.05$), no statistical significance was obtained in terms of tSC and tEB ($p>0.05$). The duration of the first, second, and third embryo cell cycles (ECC1, ECC2, and ECC3), synchronization of cell divisions (S2: t4-t3) and cleavage patterns (S3: t8-t5) were also found to be statistically significant between the SE and control groups ($p<0.05$).

**Conclusion:** SE may have an effect on embryonic cell division and could change the morphokinetic parameters of *in vitro* developing embryos. Prospective studies with larger cohorts are needed to better understand the relationship between SE and embryo morphokinetics.

**Key words:** Severe endometriosis, morphokinetics, embryo, IVF, time-lapse monitoring

SOP-2

# Evaluation of the Effect of Diabetes on the Kyphosis Angle in Postmenopausal Osteoporosis Patients

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**Introduction:** Kyphosis, impacting 0.4% to 8.3% of the population, involves abnormal development and posture, potentially arising from congenital factors or diseases. The literature suggests a link between osteoporosis, characterized by decreased bone density and increased fragility, and kyphosis. Research indicates that osteoporosis may contribute to kyphosis formation. Studies on diabetes mellitus (DM) reveal reduced bone density due to its multifactorial impact on osteoblasts, heightening fracture risk. However, no existing study has explored the influence of DM on kyphosis. Our research aims to address this gap.

**Method:** In this retrospective study, postmenopausal osteoporosis patients who applied between March 2017 and May 2023 were examined, and Cobb angles were compared based on lateral thoracic radiographs. Descriptive statistics, including the mean (standard deviation) for continuous variables and percentages for categorical variables, will be used for group descriptions.

**Results:** Examining 72 females aged 54+, 37 had no DM and 35 had DM. No significant difference in Cobb angle was found between DM and non-DM patients ($p>0.05$). DEXA measurement and BMI values showed no significant differences ($p>0.05$). A significant inverse relationship was found between DEXA value and Cobb angle ($p<0.001$, $r=-0.680$). Age correlated significantly with Cobb angle ($p<0.002$, $r=0.355$), but not with DEXA ($p>0.05$). A significant negative correlation existed between Cobb angle and patient height ($p<0.005$, $r=-0.326$).

**Conclusion:** The results showed that many parameters other than DM affect the kyphosis angle. Only the effect of DM disease on the kyphosis angle could not be observed. It is believed that increasing the sample size in future studies will be beneficial to this issue.

**Key words:** Kyphosis, postmenoposal osteoporosis, diabetes mellitus, Cobb angle, DEXA

SOP-3

# Evaluation of the Moral Anger Scale in Bezmialem Vakıf University Faculty of Medicine Students

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**Introduction:** Anger is a reaction to goal-related obstacles. Moral anger assigns blame to a third-party for improper behavior or neglecting duties. It can also involve actively participating in actions to reduce disadvantages and showing responsibility to help disadvantaged individuals. Based on these ideas, this research explores how privileged individuals emotionally respond to the problems of disadvantaged groups.

**Method:** In our study, an online survey form, created using Google forms and consisting of nine questions, was administered to Bezmialem Vakıf University Faculty of Medicine students. The questionnaire, scored from 9 to 45 points, gauges moral anger-lower scores (9) indicate less, while higher scores (45) indicate more. Results are presented in median (±) format.

**Results:** The students of Bezmialem Vakıf University Faculty of Medicine were classified as basic science (1st-2nd-3rd year) and clinical science (4th-5th-6th year) students. According to this classification, scale sub-dimensions (emotional sub-dimension, cognitive sub-dimension) and total scale score averages were compared, and no statistically significant differences were found among them ($p=0.473$, $p=0.823$, $p=0.554$, respectively).

Scale sub-dimensions (emotional sub-dimension, cognitive sub-dimension) and total scale score averages were compared by gender, and only a significant difference was found in the emotional sub-dimension ($p=0.006$). There was no significant difference in the cognitive sub-dimension ($p=0.053$) and total scale score ($p=0.431$) averages. The average emotional subscale score of females was found to be significantly higher than that of males.

A statistically significant moderately negative relationship was found between emotional and cognitive sub-dimension scores ($p<0.001$, $r=-0.416$).

**Conclusion:** No significant difference was found between the two categorical groups, but the emotional sub-dimension scale scores of females were significantly higher than those of males.

**Key words:** Moral anger, medical faculty students, responsibility

SOP-4

# Evaluation of Thyroid Function Tests of Patients Before and After the COVID-19 Pandemic in the Development of Autoimmune Thyroiditis

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**Introduction:** Coronavirus disease-2019 (COVID-19) is a severe acute respiratory syndrome. While strong immune reactions play a role in the pathogenesis of COVID-19, autoantibodies, which are the distinguishing feature of autoimmune diseases, are also detected in COVID-19 patients. Many autoimmune diseases may develop after COVID-19 infection. We investigated the relationship between COVID-19 infection and thyroid autoimmunity markers and whether a significant change was observed after the virus infection.

**Method:** In our retrospectively planned study, patients who applied to Bezmialem Vakıf University between March 2017 and March 2023 and were tested for anti-thyroid peroxidase (anti-TPO), anti-thyroglobulin (anti-Tg), and thyroid-stimulating immunoglobulin (TSI) for the development of autoimmune thyroiditis were selected as the sample group. Sociodemographic characteristics of the patients, such as age group, gender, and T3, T4, thyroid stimulating hormone (TSH), anti-TPO, anti-Tg, and TSI laboratory findings were included in the study.

**Results:** Seven hundred eighty-eight people were examined. In 2023, the average age of patients was found to be significantly lower compared to 2018 ($p=0.010$). No significant difference was observed in terms of the gender distribution of patients between 2023 and 2018 ($p=0.936$). The average free T4 of patients in 2023 was significantly higher than that in 2018 ($p<0.001$). In terms of TSH averages, no significant difference was observed between 2023 and 2018 ($p=0.470$). During this period, the rate of autoimmune thyroiditis cases was found to be approximately 5 times higher based on the total number of hospital admissions.

**Conclusion:** The available data suggest that COVID-19 predisposes to autoimmune thyroid disease because of a decreasing age of disease onset. Further studies are needed to elucidate the pathways that may clarify the relationship between severe acute respiratory syndrome-coronavirus-2 and thyroid autoimmunity.

**Key words:** Autoimmune thyroiditis, COVID-19, anti-TPO, anti-Tg, TSH, T4

SOP-5

# Effect of Percutaneous Coronary Intervention on Sleep Measures

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**Introduction:** This study aimed to investigate the impact of interventional treatment for coronary artery disease (CAD) on sleep by assessing sleep quality and duration before and after the procedure in patients undergoing elective coronary angiography and percutaneous coronary intervention (PCI).

**Method:** The study was conducted in our cardiology clinic between May 1 and September 30, 2023. The sample comprised 56 patients who underwent coronary angiography. The "Pittsburgh Sleep Quality Index (PSQI)" was used to assess sleep quality. Data were collected through face-to-face interviews at the beginning and by phone interviews at the 3-month follow-up.

**Results:** The mean PSQI score of the study participants was 5.80±3.72. Approximately half of the patients (26 patients, 47.3%) had poor sleep quality. For the 18 patients who underwent coronary angiography and were eligible for medical treatment follow-up, no significant differences were observed in any of the PSQI components during the 3-month follow-up. In the case of the 38 patients who underwent coronary angiography and received PCI, the analysis revealed a significant improvement in sleep disturbance (PSQI component 5) ($p<0.01$), daytime dysfunction (PSQI component 7) ($p=0.001$), and the total PSQI score ($p=0.001$) during the follow-up. The overall analysis of 56 patients showed a significant improvement in sleep latency (PSQI component 2) ($p=0.02$), sleep disturbance (PSQI component 5) ($p<0.01$), daytime dysfunction (PSQI component 7) ($p=0.005$), and the total PSQI score ($p=0.001$) over a 3-month period. Only 2 out of 6 patients (33%) without CAD improved after angiography, whereas this rate in CAD patients was 68% (34/50 patients) ($p=0.04$).

**Conclusion:** The results of this study indicate that sleep quality is low in individuals with CAD, and PCI has a positive impact on sleep.

**Key words:** Percutaneous coronary intervention, sleep, Pittsburgh Sleep Quality Index

SOP-6

# Investigation of *Streptococcus* and EBV Infections in Children with Sore Throat who Apply to Bezmialem Vakıf University Faculty of Medicine Pediatric Polyclinics

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**Introduction:** The most common bacterial cause is *Streptococcus pyogenes* (GAS). Epstein-Barr virus (EBV) is one of the most common causes of sore throat in adolescents between the ages of 15 and 24. Both of these agents cause similar clinical findings.

**Method:** Patients who applied to Bezmialem Vakıf University with a complaint of sore throat and who were tested for GAS and/or EBV and were found to be positive for any of them were included in our retrospective study. The age group, gender, throat cultures, application date, and age at diagnosis of the patients were recorded. Line graphs were used to evaluate the incidence of the relevant disease by months, and the distribution of infections by age was evaluated.

**Results:** Of the 426 patients included in the study, 226 (53.1%) were male and 200 (46.9%) were female. No statistically significant difference was observed in terms of gender distribution (p=0.352). When the groups were compared in terms of average age by month, no significant difference was observed (p=0.773). A statistically significant difference was observed in terms of EBV and GAS positivity rates between months (p=0.034). EBV was detected most frequently in November, September, and March, and least frequently in April. GAS was detected most frequently in December, January, and April, and least frequently in August. GAS (54.2%) and EBV (48.4%) were most common in patients aged 5-10 years. In total, 85.5% of all patients were GAS positive and 14.5% were EBV positive.

**Conclusion:** While GAS was frequently observed in December, January, and April, EBV was observed frequently in November, September, and March. Both infections were detected more frequently in the 5-10 age group. No significant difference was found according to gender.

**Key words:** Sore throat, children, EBV, *Streptococcus pyogenes*

SOP-7

# Prevalence and Causes of Indirect Coombs Test Positivity in Multiparous Women

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**Introduction:** RhD blood group incompatibility between the mother and fetus can sometimes lead to maternal alloimmunization. Maternal alloimmunization can occur in 2 ways: (1) following inappropriate blood transfusion and (2) following fetomaternal hemorrhage between the mother and the incompatible fetus. Fetomaternal bleeding can occur during labor, pregnancy, or delivery. Several predisposing factors cause fetomaternal hemorrhage. Spontaneous or induced abortion, amniocentesis, abdominal trauma, abruptio placenta, fetal death, multiple pregnancy, manual removal of the placenta, and cesarean section. Anti-D resulting from maternal alloimmunization can cross the placenta and attack fetal erythrocytes, which in worse scenarios can cause fetal anemia and ultimately death. The aim of this study was to determine the prevalence and causes of alloimmunization.

**Method:** Between September 2022 and May 2023, multiparous and/or nulliparous pregnant women admitted to Bezmialem Vakıf University Hospital Obstetrics and Gynecology Outpatient Clinic were asked for indirect Coombs test (ICT) at the first antenatal visit. Age, blood type, gravida, parity, previous deliveries (normal spontaneous delivery and cesarean section), gestational week, singleton-twin status, previous abortion status, and history of blood transfusion were noted.

**Results:** Between September 2022 and May 2023, 377 patients underwent ICT. Six patients were excluded because they were not pregnant. Seventeen of 371 patients tested positive (4.3%). The majority of the reasons were Rh incompatibility, but one patient was alloimmunize during blood transfusion (0.0026%). Fetal distress during transfusion resulted in cesarean section, and the fetus died.

**Conclusion:** Maternal alloimmunization was mostly due to previous maternal blood transfusion. Sensitization may also occur during invasive procedures such as abortion, ectopic pregnancy, maternal trauma, and chorionic villus sampling. In our hospital, one patient was sensitized by blood transfusion.

**Key words:** Multiparous, indirect Coombs test (ICT), blood transfusion, alloimmunization

SOP-8

# Evaluation of Etiological Factors and Response to Treatment in Vertigo Patients

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**Introduction:** Vertigo is a type of dizziness caused by an imbalance in the vestibular system. There are many factors that trigger vertigo, such as trauma, stress, and infection. In particular, confusing the ear with a foreign body is one of the most important triggers. The aim of this study was to evaluate the triggering factors in patients with vertigo and to compare the effectiveness of medical treatment and maneuver therapy.

**Method:** The study was applied to 52 vertigo patients who applied to the neurology clinic via Google forms in the form of a questionnaire consisting of 39 questions. Variation in the frequency and severity of attacks of the patients according to the triggers and treatment responses were questioned.

**Results:** Of the 52 patients who participated in the survey, 73.1% were female and 26.9% were male. The average number of patients was 37. Excessive caffeine consumption triggered attacks in 61.5% of patients. Attacks are triggered by positional changes in 86.5% of patients. Attacks of 88.5% of patients are triggered during stressful periods. Of the patients, 48.1% received medical treatment and 34.6% received maneuver therapy. The number and severity of attacks decreased in 77.7% of patients who received maneuver therapy.

**Conclusion:** In conclusion, when we look at the patients' responses, the leading factors that trigger vertigo are stress and position change. Excessive caffeine consumption also follows these factors. In order to compare the effectiveness of medical treatment and maneuver therapy and to obtain clear information about other triggers, especially the mechanical ones, studies with more participants are needed.

**Key words:** Vertigo, triggers, maneuver therapy

SOP-9

# Analysing of Genotype-fenotype Correlation of Patients with Hereditary Cancer Syndrome with BRCA1 and BRCA2 Mutations

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**Introduction:** Approximately 10-15% of breast and ovarian cancers are caused by germline mutations in the *BRCA1* or *BRCA2* genes. The aim of this study was to establish a genotype-phenotype correlation for cancer patients with these mutations.

**Method:** Fifty-five patients with hereditary cancer syndrome who applied to the medical genetics polyclinic and those with *BRCA1* and *BRCA2* gene mutations were included in the study. Data such as the patient's gender, type of cancer, age at diagnosis, mutation detected in which gene, and cancer history in relatives will be obtained from the family history of patients.

**Results:** Fifty-five patients evaluated in the study, the average age at diagnosis was 46.8 years. Of the 39 breast cancer patients in the study, 13 carried the BRCA1 mutation and 26 carried the BRCA2 mutation; 10 of the 15 ovarian cancer patients carried the BRCA1 mutation and 5 carried the BRCA2 mutation. It was observed that whether the mutations seen in the patients were reported as pathogenic (27) or VUS (28) according to the literature record did not affect the age of diagnosis. When the exons were examined, most mutations were detected in exons 11 and 20. Both mutations resulted in a higher incidence of breast cancer. Three mutations were detected in different unrelated individuals. The cancer history of the patients' first, second and third-degree relatives was questioned, and a total of 117 relatives with cancer were found to have a history of 25.6% breast cancer, 12.8% lung cancer, and 11.1% ovarian cancer.

**Conclusion:** This study showed that the presence of a genetic mutation lowers the age of cancer diagnosis. Patients' close relatives should also be examined genetically and followed up clinically.

**Key words:** BRCA1, BRCA2, cancer, hereditary

SOP-10

# Evaluation of Responses of Kidney Healthcare Providers to Decision-making Processes of End-stage Kidney Disease Patients

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**Introduction:** In Turkey, one out of every 7 people has kidney disease, and the number of patients receiving kidney replacement therapy (KRT) is increasing. The thoughts of kidney healthcare providers (KHPs) play a significant role in the decision-making process in the patient's choice of dialysis modality. In this study, we evaluated the thoughts and attitudes of KHPs in Turkey regarding the dialysis modality.

**Method:** An online survey was conducted to investigate the demographic characteristics of KHPs and the variables influencing modality recommendations. The prepared survey was distributed to KHPs in every region of Turkey between March 15 and June 15, 2023. The distribution of the data was analyzed using the Shapiro-Wilk and Pearson chi-square tests.

**Results:** A total of 102 physicians and 42 nurses completed the survey (F: 82, M: 62, mean age 45+/- 8.6 years). The current patients of the respondents are predominantly treated with in-center hemodialysis (90.3%) and to a lower percentage (9.7%) with peritoneal dialysis. According to the participants, the major role in the decision of the dialysis modality belongs to the nephrologist (54.9%). The preference for referring patients to in-center hemodialysis was no caregiver (76.4%), low socio-economic status (69%), more than one chronic disease (57.6%), and low education level (56.3%). In the question "If you needed a dialysis modality, which method would you prefer?", the participants answered "Home hemodialysis" (45.8%), "Peritoneal dialysis" (43.8%) and "In-center hemodialysis" (10.4%). 66.8% of the respondents believed that they had insufficient knowledge about home hemodialysis.

**Conclusion:** The results indicate that KHPs prefer home hemodialysis, although most of their patients are treated with in-center hemodialysis. Most KHPs consider themselves incompetent in home hemodialysis. Education, training, and new regulations regarding dialysis modalities are needed.

**Key words:** Kidney healthcare providers, end-stage kidney disease, dialysis modalities

SOP-11

# Measuring the Clinical Proficiency Level of Anatomy Education in Bezmialem Vakıf University Faculty of Medicine 4th-5th and 6th Grade Students in 2023-2024

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**Introduction:** The evolution of undergraduate medical education practices in anatomy, along with innovative approaches to training and evaluating the next generation of healthcare professionals, can enhance efficiency.

**Method:** The study evaluates the correlation between anatomy education and clinical practice among 4th, 5th, and 6th-year students at Bezmialem Vakıf University Medical Faculty in the 2023-2024 academic year 2023-2024. It comprises three demographic questions and 23 queries regarding the retention of anatomy knowledge during the transition from theory to clinical rotations, aimed at identifying areas for improvement. Administered online via Google Forms to the study group.

**Results:** A total of 194 students participated in the survey. Of the students, 10% believed they had sufficient attendance in anatomy classes and trusted their knowledge levels. Of the students, 84% demanded an increase in the number of theoretical, laboratory, and cadaver classes, indicating that the current numbers were insufficient. While 95% of the students stated that they were satisfied with the faculty members of the anatomy department, 16% of the participants found the equipment for practical classes insufficient. It is noted that the highest rate, 23.5%, indicates issues regarding the memorability of the nervous system, and for all other systems, a 9.3% rate is recorded. 91.3% of the students stated that anatomy education is sufficiently integrated with clinical correlation. 95% of the participating students want radiological anatomy classes added, 94% believe topographical anatomy classes would be more beneficial in addition to systematic anatomy, and 88% want additional dissection courses to be added to cadaver classes.

**Conclusion:** As a result, students have demonstrated that theoretical education correlates well with clinical practice but can be further improved.

**Key words:** Clinical proficiency, anatomy education, faculty of medicine students

SOP-12

# Awareness and Knowledge Levels of Bezmialem Vakıf University Students about Human Papilloma Virus and Vaccination

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**Introduction:** Human papilloma virus (HPV) is a non-enveloped DNA virus that causes genital warts in men and women. There are many risk factors for HPV, which is one of the most common sexually transmitted infections in the world. These include polygamous sexual life at an early age (before the age of 18), the presence of other sexually transmitted diseases, smoking, malnutrition, and multiple births. The aim of this study was to investigate the level of knowledge and awareness of Bezmialem Vakıf University students about the human papilloma virus.

**Method:** Data were collected using a scale designed to measure students' level of knowledge about human papillomavirus and its vaccine. The scale, consisting of 33 items to measure the level of knowledge, was distributed to participants via the digital platform. Statistical analyses involved the use of the Spearman correlation coefficient, Mann-Whitney U test, and reliability testing with the Kruskal-Wallis test. A significance level of 0.05 was set, and SPSS (version 26) was used for calculations.

**Results:** A total of 130 people participated in the study. According to the results of the study, there was no significant difference between HPV knowledge level and gender ($p=0.976$). When we compared the students' levels of knowledge about HPV with the department they studied, a significant result was obtained ($p<0.001$). The department with the highest level of knowledge about HPV was the school of health professions (median: 112), followed by the faculty of dentistry (median: 111), faculty of medicine (median: 108) and faculty of pharmacy (median: 101), respectively.

**Conclusion:** Levels of knowledge about HPV vary among departments. It has been determined that more emphasis should be placed on issues related to the HPV and its vaccine in the education program of Bezmialem Vakıf University Faculty of Medicine.

**Key words:** HPV, vaccine, education

SOP-13

# Evaluation of the Effect of SGLT2 Inhibitors on Serum Uric Acid Levels in Patients with Diabetic Nephropathy

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**Introduction:** Diabetic nephropathy is one of the leading causes of end-stage renal failure and a primary contributor to morbidity and mortality in patients with diabetes mellitus. Hyperuricemia is commonly observed in diabetic patients and is a risk factor for renal diseases. Various clinical studies have demonstrated that SGLT-2 inhibitors reduce SUA levels. Therefore, reducing SUA levels in patients with type 2 diabetes may prevent morbidity and mortality.

**Method:** All data were analyzed using SPSS 25.0 software. Normality tests were performed for continuous variables. The mean/median values of the baseline and final values in the control and treatment groups were compared using the paired samples t-test and Wilcoxon test. The t-test and Mann-Whitney U tests were utilized to examine the mean/median change of parameters among the groups. Chi-square was used to evaluate the association between the categorical variables in groups. Statistical significance was defined as a p-value of 0.05.

**Results:** In patients receiving SGLT treatment, there was a significant difference in the average values of weight, BMI, Ca, Mg, Cl, P, urea, creatinine, and GFR before and after treatment. In the control group, there was no significant difference between the mean values of parameters before and after treatment. When comparing the changes in parameters between the treatment and control groups, there was a statistically significant difference in weight, Ca, Mg, P, creatinine, and GFR changes between the two groups.

**Conclusion:** There was a significant relationship between weight, Mg, P, and GFR changes in both the treatment and control groups. However, our study did not reveal statistically significant reductions in serum uric acid, proteinuria, albuminuria, HbA1c, and serum albumin levels. Conducting advanced studies with larger sample sizes and longer follow-up intervals may yield significant results.

**Key words:** Diabetic nephropathy, uric acid, SGLT2 inhibitors

SOP-14

# Evaluate HPV Vaccine Attitudes Among Nurses at Bezmialem Vakıf University School of Medicine Hospital

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**Introduction:** Human papilloma virus (HPV) is a sexually transmitted virus that usually causes genital warts. HPV types are responsible for various lesions, from anogenital warts to cancer. HPV types 6 and 11 are responsible for more than 90% of anogenital warts. HPV types 16 and 18 cause cancer in humans. Immunization with the HPV vaccine is very effective in protecting.

**Method:** Our study was conducted with nurses working at Bezmialem Medical Faculty Hospital in September-October 2023. In the research, 21 survey questions were created, including 5 questions containing socio-demographic information and 16 questions evaluating attitudes about the HPV vaccine. The Carolina HPV vaccination attitudes and beliefs scale was used in this survey. This scale was administered to the participants online via Google.

**Results:** No significant difference was detected between age, gender, length of employment in the profession, and educational status in terms of subgroup mean scores on the Carolina scale. We examined whether there was a significant difference between previous participation in vaccination-related training. A statistically significant difference was observed between the groups in terms of the average barriers score. The average score of those who did not participate in the training was found to be significantly higher than that of those who participated ($p<0.001$).

**Conclusion:** Age, gender, education level, and length of employment in the profession have no effect on attitudes about vaccination. Training received or individual research is effective in creating vaccine awareness.

**Key words:** Vaccine, immunization, cancer

SOP-15

# Evaluation of Opinions of Bezmialem Vakıf University Faculty of Medicine Graduates Regarding Scholarly Concentration

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**Introduction:** The scholarly concentration (SC) is a research program that begins with the fourth semester of the Bezmialem Vakıf University Faculty of Medicine program. The aim of the SC is to help Bezmialem Faculty of Medicine students gain research experience throughout their education and take their first steps academically. The purpose of this study was to evaluate the effects of SC on the academic lives of students who graduated from Bezmialem Vakıf University Faculty of Medicine.

**Method:** A survey was used as a data collection tool. The survey consists of 23 questions, 8 of which are about demographic characteristics, and the remaining questions are about SC. The survey was shared online via Google Forms.

**Results:** The survey was sent online to 513 people, of whom 173 filled out the survey. According to the current results, 73.4% of the participants were women and 26.6% were men. 5.2% were specialists, 69.4% were assistants, 12.7% were practitioners, and 4% worked abroad. During the research period, 67.6% evaluated their communication with their mentors as good. 76.3% thought that SC created interest in scientific research. 70.5% thought that SC contributed to their working life. 41.6% stated that they did research after graduation. 67.6% recommended that SC continue. 63.6% thought that SC made no contribution in choosing a department. Because of SC, 19.1% were awarded a Johns Hopkins scholarshipand 95.7% were satisfied with their Johns Hopkins internship.

**Conclusion:** This study shows that SC creates interest in scientific studies and contributes to working life. Most of those who went to the Johns Hopkins internship liked it. Most participants suggest that SC must continue.

**Key words:** Scientificness, research, scholarly concentration

SOP-16

# Impact of Smartphone Use on Cognitive Functioning: Role of Attachment

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**Introduction:** Attachment styles were developed by psychologist John Bowlby and Mary Ainsworth and are shaped by the way children interact with their parents. According to John Bowlby, attachment has a great influence on a child's later development and helps them develop without fear. Bartholomew and Horowitz divided attachment into secure and insecure sub-styles. Our hypothesis was that the duration of smartphone use is higher in individuals with insecure attachment (IA) and that this relationship is mediated by an attention deficit.

**Method:** The intended target group for this study was university students. This study was assessed using a questionnaire that subjects could complete online. With a correlation coefficient of 0.20 between the scales, a minimum of 82 subjects were required for the study with 80% power at 95% confidence level.

**Results:** This questionnaire made it possible to ask about daily smartphone use, the secure attachment (SA) and IA of the individuals. The individuals were divided into two groups, and the self-assessment of the frequency of everyday mistakes encountered in the areas of perception, memory, and action regulation was evaluated. As smartphone addiction scale scores increase, cognitive failures scale (CFS) score also increase. Resistant attachment and CFS averages of smokers were significantly higher than those of non-smokers ($p=0.008$; $p=0.028$). No significant difference was observed between smokers and non-smokers in terms of SA, avoidant attachment, and smartphone averages ($p<0.05$). No statistically significant relationship was observed between CFS and SA ($p=0.157$). The mean CFS of alcohol users was significantly higher than that of non-users ($p=0.026$)

**Conclusion:** An individual's excessive smartphone use is not related to an individual's SA or IA.

**Key words:** Attachment, smartphone, cognitive function

SOP-17

# Comparison of Clinical Features of Diabetic Patients with Significant Coronary Artery Disease and Those with Non-critical Coronary Arteries

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**Introduction:** Diabetes mellitus (DM) is a general term that covers several metabolic disorders, the main feature of which is chronic hyperglycemia. Cardiovascular complications are the leading cause of morbidity and mortality in type 2 DM (T2DM) patients. On the other hand, in clinical practice, diabetic patients with non-critical arteries also present. In this study, we aimed to investigate the relationship between T2DM and coronary artery disease (CAD) by examining two groups of patients diagnosed with T2DM, those with and without critical CAD detected by coronary angiography (CAG), in terms of their demographic and clinical characteristics.

**Method:** Our retrospective study included 487 patients with T2DM who underwent CAG between 2022 and 2023. Demographic data and clinical characteristics of the patients were obtained from the hospital database.

**Results:** The sample consisted of 290 men (59.5%) and 197 women (40.5%), and the average age was 62.38±9.67 years. One hundred fifty-seven (32.2%) of the patients were included in group 1 (without CAD), and 330 (67.8%) were included in group 2 (with CAD). According to the statistical analysis of the data, a statistically significant (p=0.001) correlation was detected between the HbA1c level, which we chose as the primary parameter, and the development of CAD. In addition, other parameters we examined, such as CVA history, HDL, creatinine, glucose, CK-MB, EF, gender, BMI, and height, were also correlated with the development of CAD.

**Conclusion:** In this retrospective study, we found a significant relationship between "HbA1c level, CVA history, low EF, and low HDL levels and the development of CAD" in patients with T2DM. We believe that existing data should be supported by prospective and larger-scale studies.

**Key words:** Diabetes mellitus, cardiovascular disease, HbA1c

SOP-18

# Sleep Quality in Patients with Idiopathic Intracranial Hypertension

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**Introduction:** Idiopathic intracranial hypertension (IIH), also referred to as pseudotumor cerebri or benign intracranial hypertension, is a syndrome of increased intracranial pressure without hydrocephalus, mass lesion, or cerebrospinal fluid composition abnormality. It is a diagnosis of exclusion. The common symptoms related to increased intracranial pressure are headache, transient visual obscurations, tinnitus, and back pain. IIH can be accompanied by sleep apnea and other sleep disorders. The aims of this study were to evaluate the sleep quality of IIH patients and to determine whether there is any relationship between the signs and symptoms of the syndrome and the self-questionnaire scores and whether there is any difference in self-questionnaire scores between the patients and controls.

**Method:** Data were collected using self-questionnaires and medical records. Three self-questionnaires [Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), and Beck Depression Inventory (BDI)] were applied to 31 IIH patients and the same number of controls. PSQI, ESS, and BDI scores were calculated for each person, and the scores of the patients and controls were compared. Whether there is a relationship between the scores and signs and symptoms of IIH was investigated.

**Results:** In the patient group, a strong positive correlation was found between PSQI scores and BDI scores ($p<0.001$). Also, a statistically significant relationship was found between papilledema and PSQI scores ($p=0.016$). A statistically significant difference was found in PSQI scores of the two groups ($p=0.009$).

**Conclusion:** Sleep quality is impaired in patients with IIH.

**Key words:** Idiopathic intracranial hypertension, PSQI, ESS, BDI

SOP-19

# Knowledge Levels of Bezmialem Vakıf University Faculty of Medicine Students Regarding Medical Ethics

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**Introduction:** Medical ethics shapes individuals' behaviors, actions, and thought processes on a societal level. With technological advancements, medicine faces numerous ethical and legal challenges, including genetic studies, euthanasia, *in vitro* fertilization, gender selection, organ transplantation, and abortion. These changes have elevated the importance of ethical education, leading to increased integration into educational curricula. This study aimed to assess the perceptions of Bezmialem Vakıf University Faculty of Medicine students regarding medical ethics and their approaches to ethical issues.

**Method:** Data were collected through a survey designed to measure students' knowledge of medical ethics. The questionnaire included questions that assessed participants' current knowledge levels and understanding of relevant concepts. The survey was administered online to 153 students enrolled in Bezmialem Vakıf University Faculty of Medicine. Statistical analyses involved the use of Spearman's correlation coefficient, Mann-Whitney U test, and reliability testing with Cronbach's alpha. A significance level of 0.05 was set, and Statistical Package for the Social Sciences (version 26) was used for calculations.

**Results:** According to the research findings, gender did not significantly impact students' knowledge of medical ethics ($p=0.073$). When analyzed by class level, an increase in knowledge levels was observed from the 1st to the 6th semester specifically for subscale 1 ($r=0.211$, $p=0.009$). However, no significant changes in knowledge levels were detected for other subscales across different class levels ($p>0.05$). The results underscore the effectiveness of medical ethics education in enhancing students' knowledge, with gender playing a minimal role in shaping perceptions.

**Conclusion:** Knowledge levels have no relationship with class or gender. A study should be conducted so that Bezmialem Faculty of Medicine students can better learn about medical ethics.

**Key words:** Ethical issues, medical ethics, medical students

SOP-20

# Exploring the Impact of Clinical Factors on Methotrexate Treatment Efficacy in Ectopic Pregnancy: A 5-year Analysis of Patients at Our Clinic

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**Introduction:** Ectopic pregnancy is the implantation of a fertilized ovum in any tissue other than the endometrial cavity and occurs in 1% of all pregnancies. The approach to ectopic pregnancies may be follow-up, medical, or surgical. Age, last menstrual period, human chorionic gonadotropin (β-hCG) level, size and presence of ectopic pregnancy masses, fetal cardiac activity, and presence of hemoperitoneum are effective in determining the treatment method. In our study, we aimed to retrospectively analyze the treatment methods of ectopic pregnancy cases treated in our clinic in the last 5 years, to determine the success rate of medical methotrexate treatment, and to evaluate the clinical factors affecting this rate.

**Method:** To achieve our goal, the treatment responses of ectopic pregnancy cases who applied to the Department of Obstetrics and Gynecology of Bezmialem Vakıf University Faculty of Medicine between 2018 and 2023 will be retrospectively evaluated according to complaints, age, β-hCG value, risk factors, and gestational age.

**Results:** A total of 87 patients were included in this study. In the treatment approach, follow-up was performed in 10.3% of patients, methotrexate was used in 69%, and surgery was performed in 20.7%. The success rate of methotrexate is 96.7% ($p<0.01$). The most common risk factor among patients, encountered in 12.6%, was a history of previous ectopic pregnancy. There was no statistical significance between the success rate of methotrexate and risk factors ($p=0.582$).

**Conclusion:** Our study results indicate that methotrexate treatment is a significant and successful option for ectopic pregnancy. Further studies are needed to confirm and support the success rate of methotrexate treatment and the risk factors influencing this rate.

**Key words:** Ectopic pregnancy, methorexate, salpingectomy

SOP-21

# Bone Mineral Density Evaluation of Gynecological Cancer Patients who Received Pelvic Brachytherapy

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**Introduction:** Brachytherapy is a form of radiotherapy also called internal radiotherapy. One of the most common uses of brachytherapy is cavitary malignancies. There are no studies investigating the relationship between brachytherapy and its effects on bone mineral density, which is important for women of age as its decline is related to osteoporosis.

**Method:** In this study, L1-L4 bone mineral density of 42 female endometrial and cervical cancer patients (n=42), who received pelvic brachytherapy, was evaluated by T score. The time gap between the treatment and bone densitometry scan was at least one year for all patients.

**Results:** The mean age of the patients was 60.4. The mean value of the T score was -1.098. Evaluation of the body mass index (BMD) values showed no significant decrease (p=0.221). The mean value of the T score of patients younger than 56 years old (n=15) was -0.907.

**Conclusion:** Pelvic brachytherapy is not a major cause of decreased BMD. Further trials are needed to study larger sample groups and include different malignancy types.

**Key words:** Bone mineral density, pelvic brachytherapy, gynecological malignancies

SOP-22

# Exploring the Link Between Maternal Childhood Trauma, Adult Attachment Styles, and Autism Spectrum Disorders in Early Childhood

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**Introduction:** Research has suggested a link between early maternal influences and a higher likelihood of autism spectrum disorder (ASD) in children. It has been observed that women who have faced childhood abuse may have poor attachment styles compared with those who have not experienced such trauma. However, the potential association between a mother's history of abuse and her attachment style and the occurrence of ASD in her children remains unclear.

**Method:** The study included 62 children aged between 0 and 5 years, divided into two groups: a case group of 32 children diagnosed with ASD and a control group of 30 children without ASD. Mothers in both groups completed the Childhood Trauma Questionnaire and the Relationship Scales Questionnaire.

**Results:** Binary logistic regression revealed that mothers with preoccupied attachment were more likely to have a child with ASD (B=1.87, p=0.023) after controlling for maternal childhood trauma and socioeconomic status. Other attachment styles and maternal childhood trauma did not show significant associations with the occurrence of ASD.

**Conclusion:** This suggests that maternal preoccupied attachment styles are more likely to be observed in children with ASD. Therefore, clinicians treating children with ASD should be cognizant of the potential for preoccupied attachment in mothers, as this may impact treatment approaches and outcomes.

**Key words:** Maternal childhood trauma, attachment styles, autism spectrum disorders

SOP-23

# Evaluation of the Relationship Between the Stage of Dementia and Quality of Sleep in Patients

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**Introduction:** Dementia is a group of diseases that affect memory, thinking, and social skills. Chronic sleep disorders are important risk factors that lead to a decline in cognitive function. Dementia and sleep disorders are two risky conditions that can be either the cause or the result of each other.

During our research, we aimed to categorize dementia patients according to their dementia stages and compare them with their Pittsburgh Sleep Quality Scores (PSQI). We would like to demonstrate with this study that low or high sleep quality affects the dementia stage of patients. If meaningful results are obtained, a risk factor that affects the progression of dementia can be better controlled by providing better and more comprehensive information to patients on this subject.

**Method:** The PSQI was applied to patients with dementia. The patients' dementia stages, age, gender, and PSQI scores were evaluated. $P<0.05$ is considered statistically significant. One-way analysis of variance (ANOVA) was used to evaluate the results.

**Results:** Of the 74 patients evaluated, 30.4% were male, 26.2% were diagnosed with advanced dementia, and only 27.9% of them did not have bad sleep quality (PSQI score <5). The results were evaluated with one-way ANOVA (Kruskal-Wallis), which did not yield a statistically significant result because it is used as a non-parametric test to assess the relationship between the dementia stage as an independent variable and PSQI as a dependent variable ($p=0.827$). The same test was used for age and dementia stage, which was statistically significant ($p=0.028$).

**Conclusion:** We observed that the dementia stage did not affect the sleep quality of the patients. The study did not reach a meaningful result.

**Key words:** Dementia, SMMT, PSQI, sleep disorders

SOP-24

# Evaluation of Family Physicians' Awareness and Knowledge Levels of the Ministry of Health Care Screening Programs

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**Introduction:** The incidence of cancer is increasing day by day worldwide. Many methods are used for early diagnosis. In our country, screening tests are performed for three cancers as determined by the Ministry of Health. Family physicians also have a great responsibility in directing patients to screening tests and informing them about this subject. Our aim in this study was to measure the knowledge level of family physicians about the screening tests performed and, if deficiencies were observed, to raise awareness to produce solutions such as providing training to correct them.

**Method:** To achieve our aims, we used questionnaire titled "Evaluation of Family Physicians Awareness and Knowledge Levels of the Ministry of Health Care Screening Programs" prepared by researchers. It consisted of 20 questions about cancer screening programs and 7 questions about demographic information. The questionnaire will be distributed to family psychiatrists via Google Forms. The resulting data will be analyzed using Ibm SPSS Statics 15.0.

**Results:** The 162 family physicians who participated in our study gave more correct than incorrect answers to the questions about cancer screening programs, but only 89 physicians (54.9%) answered the question of the age of starting colorectal cancer screening, which has changed in recent years, and only 85 physicians (52.5%) answered the question of HPV vaccines available in our country correctly. In addition, there was a significant difference between the knowledge levels of physicians who received training on cancer screening programs after graduation and those who did not receive training ($p<0.006$).

**Conclusion:** Based on the results of our study, it was observed that providing training to family physicians on cancer screening programs had positive effects on their level of knowledge.

**Key words:** Cancer, screening, family physicians

SOP-25

# Evaluation of Geriatric Patients Presenting to the Emergency Department and Experiencing in-Hospital Adverse Events

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**Introduction:** Over the past 25 years, geriatric emergency medicine has evolved into a distinct sub-branch. In our country, geriatric patients are evaluated alongside other patients, leading to insufficient consideration of their specific needs and potentially lower quality of emergency care. Our aim is to identify the most appropriate approaches in geriatric patient care by analyzing the adverse events experienced by these patients within the hospital.

**Method:** The retrospective study was conducted between 01.09.2022 and 30.11.2022, focusing on patients over 65 years of age who visited the emergency department. Data were obtained from the hospital automation system. In-hospital adverse events were defined as mortality, surgical interventions, intensive care needs, angiography, and endoscopy. Demographic information, vital signs, comorbidities, laboratory values, and outcomes were recorded. Patients were divided into two groups: 75 years and over and 65-74 years.

**Results:** A total of 167 patients were retrospectively examined, revealing an average age of 78.11±3.55. Adverse events occurred in 32% of the patients, with 2.3% mortality. Notably, 55.6% of the patients were discharged from the emergency department. Four patients (2.3%) succumbed in the emergency department. Among the patients, 28.1% were admitted to regular wards, 12.5% to intensive care units, and 3.8% declined treatment. Surgical intervention was required in 18.5% of cases, and interventional procedures such as angiography and endoscopy were performed in 13.7% of cases. The average duration of stay in the emergency department was 177.8±122 minutes for those aged 65-74 and 286±127 minutes for those aged 75 years and older (p=0.003).

**Conclusion:** Geriatric patients often seek emergency care because of age-related physiological changes and comorbidities. A comprehensive and multidisciplinary approach is essential when facing in-hospital medical events to ensure optimal outcomes for these vulnerable individuals.

**Key words:** Geriatric patients, emergency, adverse events

SOP-26

# Evaluation of Anaphylaxis Patients Applying to the Emergency Department

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**Introduction:** Anaphylaxis is a potentially life-threatening systemic hypersensitivity reaction requiring prompt treatment. Our study evaluated anaphylaxis cases in the emergency department to raise awareness and guide management.

**Method:** Our study was conducted at Bezmialem Vakıf University, Faculty of Medicine Hospital from January 01, 2018, to December 31, 2022. The study focused on patients aged 18 years and above. Anaphylaxis diagnosis followed the National Institute of Allergy and Infectious Disease 2021 guidelines. The initial treatment involved intramuscular adrenaline, with infusion therapy for unresponsive cases. Patient data were recorded for demographics, comorbidities, consciousness, and examination findings.

**Results:** In a total of 77 evaluated patients, 54.4% were female and 45.6% were male. Reasons for adrenaline administration included unknown causes (51.5% intramuscular, 44.4% infusion). Overall, 49.4% had unknown triggers and 15.6% attributed reactions to medication. Food and insect stings were followed in sequence ($p=0.03$). Dermatological complaints were noted in 13% ($p<0.001$). Comorbidities were present in 36.8% (intramuscular) and 88.9% (infusion), totaling 42.9% ($p=0.004$). Epinephrine was administered within the first hour in 76.5% (intramuscular) and 55.6% (infusion), totaling 74% ($p=0.01$). Bifasic reactions occurred in 8.8% (intramuscular, $p=0.004$). Eight patients (10.4%) required intensive care, with 66.7% in the infusion group ($p<0.01$). One patient died, resulting in a 1.3% mortality rate.

**Conclusion:** If initial intramuscular injections are insufficient, initiating infusion therapy is recommended for a more stable response, particularly in patients with neurological symptoms. Monitoring comorbidities is crucial because of their increased anaphylaxis risk. The absence of biphasic reactions in patients receiving infusion therapy is important for disease monitoring.

**Key words:** Anaphylaxis, adrenaline, emergency

SOP-27

# Investigation of Risk Factors for Acute Coronary Syndrome in Geriatric Patients

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**Introduction:** Acute coronary syndrome may present with symptoms such as chest pain, shortness of breath, and sweating. In this study, we investigated the effects of risk factors on mortality in geriatric patients diagnosed with acute coronary syndrome.

**Method:** This study was conducted retrospectively in accordance with the Helsinki criteria with approval from the ethics committee dated 03.05.2023 and numbered 09. The study was conducted in the emergency department of Bezmialem Vakıf University, Faculty of Medicine Hospital between 01.01.2022 and 31.12.2022 by examining patients aged 65 years and over. GRACE scores of the patients were calculated, and comorbidities and the outcome of the patients were compared.

**Results:** Data of 326 patients (71.9±5.40 years), 230 males (70.5%), and 96 females (29.5%) were included in the study. Troponin values (169±280), hospital admission complaints, GRACE score (159±13.7), gender, comorbid diseases, and smoking were analyzed to investigate the effects of these factors on mortality. Patients were divided into two groups: those with a GRACE score below 140 (277, 85%) and those with a GRACE score of 140 and above (49, 15%). The GRACE score was found to be a statistically significant variable on mortality (p=0.005). Patients' typical/atypical complaints were also found to be statistically significant on mortality (p=0.01). The effect of smoking on mortality was found to be very close to statistical significance (p=0.07).

**Conclusion:** According to the results of the study, statistically significant factors in mortality prognosis are: GRACE score and patient's presentation with typical/atypical symptoms. The effect of patient smoking on mortality was statistically more effective than the presence of comorbid diseases.

**Key words:** Geriatric patients, acute coronary syndrome, risk factors

SOP-28

# Exploring the Mediating Role of Sleep Disturbances in Association Between ADHD and Self-harm

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**Introduction:** While previous research has established a link between attention deficit hyperactivity disorder (ADHD) and self-harm, the underlying mechanisms remain insufficiently understood. This study explored the mediating role of sleep disturbances in the association between ADHD diagnosis and self-harm behaviors.

**Method:** The study included 90 youth aged between 12 and 19 years, divided into two groups: a case group of 45 youth diagnosed with ADHD and a control group of 45 youth without ADHD. Both groups completed the inventory of statements about self-injury and the sleep disturbance scale.

**Results:** Findings revealed a significant positive association between ADHD and sleep disturbances (B=0.39, p<0.001) and between sleep disturbances and self-harm (B=0.53, p=0.002). ADHD directly predicted self-harm (B=0.41, p=0.007). The indirect effect of ADHD on self-harm through sleep disturbances was significant (B=0.22, p=0.002), similar to the total effect (B=0.62, p=0.002). The analysis included gender, youth education, family income, maternal education, and overall anxiety and depression scores of the youth.

**Conclusion:** There is a significant gap in the literature regarding the combined role of ADHD, sleep difficulties, and self-harm. While prior research has delved into the intricate causes of self-injurious behaviors in ADHD populations, none have specifically addressed how sleep difficulties might mediate the ADHD-self-harm association. The current study aims to fill this gap by illuminating the significant role of sleep difficulties in this relationship. Our findings suggest a direct link between ADHD and self-harm and reveal a notable indirect effect through sleep disturbances. Prioritizing the effective management of ADHD and sleep disturbances is crucial for minimizing self-harm risk in this population. This insight has significant clinical implications for managing self-harm risk in adolescents with ADHD.

**Key words:** ADHD, sleep, self-harm

SOP-29

# Prevalence of Overactive Bladder Symptoms in Bezmialem Vakıf University Medical Students

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**Introduction:** Overactive bladder (OAB) involves a sudden urge to urinate, possibly with incontinence. OAB is difficult to diagnose and often confused with other conditions, and lacks a definitive cure. This study aimed to assess OAB prevalence among Bezmialem Vakıf University medical students and increase their awareness.

**Method:** This study, designed for Bezmialem Vakıf University, Faculty of Medicine students, utilizes a survey as a cross-sectional research tool. The survey will be distributed online, with participation based on voluntariness. It will first gather demographic information such as age, gender, chronic illnesses, regular medication, and tobacco and alcohol use. Then, the Overactive Bladder Assessment Form (OAB-V8), a validated, easy-to-understand questionnaire, will be used, containing 8 questions scoring symptoms severity from 0 to 5.

**Results:** Eighty eight students participated in this research. If the score is 8 or above, the participants are accepted as OAB positive. Of the 88 participants, 30 were OAB positive (34%); 13 were female (14.7%), and 17 were male (19.3%). While the mean age of all participants is 21.7±1.8, the mean age of those who tested positive for OAB is 21.5±1.8. Of the 29 individuals who smoke, 11 were OAB positive (37.9%). Forty two individuals reported alcohol use. Among them, 15 were OAB positive (35.7%). While 8 individuals had chronic illnesses, 4 of them were OAB-positive (50%). In this study, no significant relationship was found between OAB and gender ($p=0.173$), chronic illness ($p=0.319$), tobacco ($p=0.594$) and alcohol use ($p=0.759$).

**Conclusion:** Of the 88 participants, 30 were OAB positive (34%). In this study, no significant relationship was found between OAB and gender, chronic illness, tobacco, and alcohol use.

**Key words:** Overactive bladder, OAB, medical students, OAB-V8

SOP-30

# Evaluation of Attitudes toward Scientific Research Among Medical Faculty Residents: A Cross-Sectional Study

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**Introduction:** In recent years, medical practice has shifted from an "experience-based" to an "evidence-based" approach, defined as systematically using contemporary research findings for clinical decisions. All well-designed studies contribute to evidence-based medicine. This study aimed to assess scientific research awareness among resident doctors, predicting that those who publish during residency will develop valuable skills for their future careers.

**Method:** To achieve our aims, we used a questionnaire titled "The Evaluation of the Attitude Towards Scientific Research Among the Medical Faculty Residents" prepared by the researchers. It consisted of 15 questions with a mix of yes-no answers and multiple choice answers, and 5 questions about demographic information. The questionnaire was distributed to the residents via Google Forms. The resulting data were analyzed using Ibm SPSS Statistics 22.0.

**Results:** Of 110 participating resident doctors, 51.8% were in non-surgical, 44.5% in surgical, and 3.6% in basic medical science specialties. 70% had prior involvement in scientific research, with 48% participating in only one study. The main research types were retrospective clinical studies (64.6%) and surveys (43%). Significant barriers to research included a lack of knowledge of research methodology (68.3%), absence of mentorship (61%), and insufficient time (56.1%). Residents with heavy clinical workloads had significantly lower research participation ($p=0.017$). Those with inadequate English proficiency showed lower rates of past research involvement and a decreased desire for an academic career in the future ($p=0.041$ and $p=0.034$, respectively).

**Conclusion:** The fact that 70% of the residents participating in our study had previously been involved in at least one research project is promising. However, our study highlights the need for more education and guidance on research methodology and dedicated time for research among residents.

**Key words:** Attitude, research, residency

SOP-31

# Evaluation of Hepatitis B Serology After Primary Immunization in Babies of Hepatitis B Carrier Mothers

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**Introduction:** Hepatitis is an inflammatory condition of the liver caused by hepatitis B virus. In our country, infants of hepatitis B carrier mothers are vaccinated and administered immunoglobulin at birth. In addition, the infants are vaccinated again when they are 1 and 6 months old. In serologic evaluations, HBsAg positivity indicates carriage. Hepatitis B antibodies in IgG and IgM structures show immunization. In Turkey, after the vaccines are administered, immunization is evaluated with hepatitis B antibody when the infants are 9 and 15 months old.

In studies evaluating hepatitis B serology, gestational week, gender, duration of breastfeeding, type of delivery, and birth weight are rarely considered. We contribute to the elucidation of the effect of these characteristics in our study.

**Method:** Infants of hepatitis B carrier mothers who presented to Bezmialem Vakıf University Medical Faculty Hospital Pediatrics and Obstetrics & Gynecology Polyclinics were included in the study. The data, including the infants' immunization status, gender, gestational weeks, type of birth, birth weight, and duration of breast milk intake, were collected from the hospital database of previously followed-up patients in the presence of a physician. The effect of these criteria on immune response formation was evaluated.

**Results:** Of the 166 patients evaluated, 50.6% were male (group 1), 27.7% preterm (group 2), 7.8% had low birth weight (group 3), 40% were a cesarean delivery baby (group 4), 26.5% breastfed for less than 6 months (group 5), and these characteristics did not affect immune response (p values were group 1, p=0.680; group 2, p=1; group 3, p=1; group 4, p=0.234; group 5, p=1).

**Conclusion:** Infant gender, gestational week, birth weight, mode of delivery, and duration of breastfeeding did not affect immunity developed by the hepatitis B vaccine.

**Key words:** Hepatitis B, infant of a carrier mother, primary immunization

SOP-32

# Effect of Social Media on Plastic Surgery

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**Introduction:** Social media is a platform used by more than half of the world's population, and the appearance of people on social media is essential. The aim of this study was to evaluate if there is a significant relationship between patients' social media usage and their desire to undergo plastic surgery and how they find suitable surgeons.

**Method:** In this study, a survey consisting of 20 multiple-choice questions was administered to patients between the ages of 18 and 65 years who applied to the Bezmialem Vakıf Hospital Clinics. The questionnaire consisted of questions about demographics, preferred social media platforms, average daily screen time, and whether it is possible that social media had an impact on their decision to undergo plastic surgery.

**Results:** A total of 74 patients participated, and the most used social media platform was Instagram. There was a significant difference found between the people who trust the surgeons who share their patient satisfaction on social media and the people who want to find surgeons from social media or from friends ($p<0.05$). So that means patients have more trust in you if you share your patient satisfaction on social media but still they prefer to go to surgeons who are known by their close social environment. There wasn't a statistically significant relationship between the people who spent 5+ hours on social media and those who found surgeons from social media ($p>0.05$). So social media may advertise the surgeons, but at the end of the day, it is not enough to make them trust you, wether they use social media a lot or not.

**Conclusion:** According to this study, there is significant difference found between the social media advertising and advice from their social environment. People may like if a surgeon is well known on social media but still they want to go the surgeons recommended by their friends.

**Key words:** Social media, plastic surgery, surgeon

SOP-33

# Effect of Particulate Matter on Lung Diseases in People Living at Different Air Quality Index Ratios: A Retrospective Study

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**Introduction:** Particulate matter (PM), a foreign substance that negatively affects air pollution, is a mixture of solid particles and liquid droplets suspended in the atmosphere. These particles can cause aggravated asthma, reduced lung function, bronchitis, and increased respiratory symptoms, such as coughing or difficulty breathing.

**Method:** In our study, 1-year air quality data of Istanbul Metropolitan Municipality will be used, and patients diagnosed with asthma and chronic obstructive pulmonary disease (COPD) who applied to Bezmialem Vakıf University, Faculty of Medicine Hospital Chest Diseases Polyclinic in 2023 will be included in our study. Access to the data will be provided on the website havakalitesi.ibb.gov.tr. Our study will be based on patients residing in 5 air quality measurement stations around our hospital in Istanbul (Aksaray, Alibeyköy, Bağcılar, Esenler and Yenibosna) and surrounding districts, applying to our hospital, and the air quality report will be examined according to where they live. Because of the comparison of air quality levels, the effect of these values on diseases will be evaluated based on the number of patients admitted. The minimum sample number to be used for our study was calculated as 150 when the correlation coefficient was taken as 0.308 for 80% power at 95% confidence level with reference to previous studies. The statistical significance level will be taken as $p<0.05$. Based on the statistical data, at least 150 patients will be included in the study.

**Results:** When regions with significant differences in air quality were compared, a correlation was found between places with higher air quality and the higher number of applications.

**Conclusion:** Air quality based on PM is associated with asthma and COPD.

**Key words:** Asthma, COPD, particulate matter, air quality

SOP-34

# Association of Third Trimester 2D and Doppler Ultrasound Exposure with Left-handedness

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**Introduction:** Left-handedness is a condition whose etiology is unknown. Because cerebral cortex development continues until the 32nd week, it is thought that ultrasound exposure during this period may affect lateralization. The hypothesis we intend to examine in this study is that the frequency of left-handedness increases in children of pregnant women with higher exposure to 2D and Doppler ultrasound than in other groups.

**Method:** Lateralization will be questioned by the Edinburgh Questionnaire to be conducted among pregnant women who were exposed to ultrasound during routine ultrasound examinations and among the children of pregnant women whose ultrasound exposure was higher than others who applied to Bezmialem Vakıf University, Faculty of Medicine, Department of Obstetrics and Gynecology Polyclinic between 2020 and 2023. The questionnaire will be administered online using Google Forms.

**Results:** The total number of participants who met the conditions for participation was 43. While the number of participants who had ultrasonography (USG) exposure for less than 1 hour during the 3rd trimester was 23 (53.48%), according to the inventory, the number of left-handers among these participants was 4 (17.39%), while the number of participants with a total USG exposure of 1 hour or more during the 3rd trimester was observed as 20 (46.42%), and according to the inventory, the number of left-handed participants was 3 (15%).

**Conclusion:** In this retrospective cohort study, depending on the duration of USG exposure, a group with a history of USG exposure of less than 1 hour in the 3rd trimester was compared with a group with a history of ultrasound exposure of 1 hour or more. Prenatal USG exposure did not create a statistically significant difference in left-handedness ($p>0.375$). Our results need to be confirmed by further survey studies.

**Key words:** Left-handedness, 2D and Doppler, brain development

SOP-35

# Correlation between Body Mass Index and Laboratory Data of Patients Referred to Family Medicine in the Last Year

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**Introduction:** Obesity and malnutrition correlate with each other. They both concluded massive health problems for individuals. These health problems cause changes in laboratory values. Vitamin D and B12 are two essential vitamins. This study includes the relationship of these two values with many parameters and their averages.

**Method:** The research examined 10 different parameters that are related to body mass index (BMI) and age. These are responsible for diabetes mellitus, kidney disease, and hematological problems. These ten parameters include vitamin D, vitamin B12, estimated glomerular filtration rate (eGFR), red cell distribution width-coefficient of variation, glucose, hemoglobin, HbA1c, homeostatic model assessment for insulin resistance, lipase, and sedimentation. This research mainly observed vitamin D and B12, and then looked at their relationship with BMI and age. Fifty-two parameters were obtained by analyzing patients applying to family doctors in Bezmialem Vakıf University Hospital.

**Results:** A total of 294 patients, 26 extremely obese (8.9%), 60 obese (20.4%), 105 overweight (35.7%), 85 normal (28.9%), and 18 underweight (6.12%) were included. The average BMI is 28.07, which is considered overweight according to numerous health societies. Vitamin D has a correlation with age, blood urea nitrogen, eGFR, HbA1c, creatinine, and urea levels. These results are likely to occur because of kidney disease. Vitamin B12 correlates with aspartate aminotransferase and protein levels. These values are also related to malnutrition and eating habits.

**Conclusion:** The correlation of vitamin D with other parameters was considered, and within these values, alkaline phosphatase, eGFR, gamma-glutamyl transferase, and HbA1c were inversely proportional with an average of 23.04 ng/mL. The correlation of B12 with other parameters was researched, and according to the comparison of parameters, both were directly proportional with an average of 405.29 pg/mL, indicating that both parameters were borderline high.

**Key words:** Body mass index, vitamin D, vitamin B12

SOP-36

# Comparison of Treatment Results of Rheumatoid Arthritis with Biological Agents and Disease-Modifying Anti-Rheumatic Drugs

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**Introduction:** Rheumatoid arthritis (RA) is a systemic, inflammatory, and autoimmune disease characterized by polyarthritis. Although its etiology is not fully known, genetic and environmental factors are emphasized. RA causes symmetric inflammatory synovitis in peripheral joints. In the later stages of the disease, inflammation is followed by cartilage damage, bone erosion, and deterioration in joint integrity. As the disease progresses, disability and shortened life span may occur.

**Method:** In our study, 28 patients between the ages of 18 and 65 years who were diagnosed with RA and received treatment for at least 6 months were included by retrospectively examining their files. Patients were divided into two groups. The first group consists of 39 people who use only disease-modifying antirheumatic drugs (DMARDs). The second group consisted of 39 people treated with biological agents. Laboratory results [erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), rheumatoid factor (RF)] of the patients at the first examination and 6$^{th}$ month follow-up were recorded from their files and analyzed to compare the effect of different drug groups on prognosis.

**Results:** The average age of patients using biological agents and using DMARDs are 50.27±7.9, respectively, and was calculated as 46.79±8.6. Treatment between groups among the parameters examined and a statistically significant difference was detected. The pre- and post-treatment parameters examined in both groups decreases, but this decrease does not occur with combined anti-tumor necrosis factor statistically higher in the group receiving treatment than in the DMARD group was found to be significant. At the 6$^{th}$ month follow-up between both groups, ESR, RF, and CRP values were examined and a statistically significant difference was detected ($p<0.001$).

**Conclusion:** Disease activity of biological agents compared with DMARDs was found to be statistically more effective in reducing disease activity.

**Key words:** Anti-TNF drugs, DMARDs, rheumatoid arthritis

SOP-37

# Effect of Increasing Triglyceride-Glucose Index on Blood Pressure and Heart Rate Recovery Values Examined in Exercise Stress Tests in Cardiovascular Disease Risk

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**Introduction:** The triglyceride-glucose index (TgG) was first used as an important biomarker of insulin resistance. ln[fasting triglyceride value x fasting glucose value/2] is the formula used to calculate TgG. The exercise stress test shows changes in heart rhythm and blood pressure at different stages. Heart rate recovery (HRR) is how quickly your heart returns to normal after you stop exercising. It is the difference between your heart rate at its maximum in the treadmill and heart rate at one or three minutes later while at rest. The aim of the study was to observe how an increase in TgG changes HRR and blood pressure values.

**Method:** The research project was a prospective study including 98 patients. The examined parameters in the exercise stress test and calculated TgG data were obtained from Bezmialem Vakıf University Hospital.

**Results:** Correlation coefficient of TgG with HRR at 1 min, at 3 min, peak systolic pressure, and peak diastolic pressure is (-0.32/-0.46/0.03/0.07) respectively. The mean values of HRR in 3 min were 55.9 and 61.3 in coronary artery disease (CAD) patients and non-CAD patients (p=0.046). In patients with CAD first (Q1), second (Q2), third (Q3) quartiles are (50/57/61.7) at HRR in 3 min, whereas the distinctly non-CAD patient quartiles are (54.2/61/68). The mean TgG value of CAD patients is 9.17 and 8.89 in non-CAD patients (p=0.05)

**Conclusion:** TgG and HRR are slightly inversely proportional to 1 min and moderately inversely proportional to 3 min. There was no significant correlation between TgG levels and blood pressure. CAD patients have greater mean TgG values, and their HRR values tend to be longer compared with non-CAD patients.

**Key words:** Triglyceride-glucose index, heart rate recovery, blood pressure, exercise stress test

SOP-38

# Investigation of the Incidence of CALR, MPL, and JAK2 Gene Mutations in Essential Thrombocytosis Cases with Laboratory Findings and Complications

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**Introduction:** Chronic myeloproliferative diseases are characterized by uncontrolled proliferation of clonal hematopoietic stem cells. One of the most common of these diseases is essential thrombocytosis. It is known that JAK2, CALR, and MPL gene mutations are the main causes of this disease. Our aim in this retrospective study was to investigate how effective these genes are in the diagnosis of essential thrombocytosis and its complications.

**Method:** A total of 146 patients were included in the study. The study was designed retroprospectively. In this study, the diagnoses of the patients were made using the clinical and laboratory parameters. Genetic reports of the patients were reviewed, *JAK2*, *MPL*, and *CALR* gene positivity or negativity and hemorrhagia were noted.

**Results:** Of the patients, 68.5% (n=100) were female and 31.5% (n=46) male aging from 19 to 90. No significant difference was found between the three mutation genes we examined gender, hepatomegaly, and hemorrhage. A significant difference was found between the absence of the JAK2 mutation gene and low hemoglobin and platelet counts over 1 million (p=0.012; p=0.05).Also the averag eage of those with mpl mutation was found to be significantly higher than that of those without this gene. Prefibrotic phase myelofibrosis transformation was noticed in 21 patients. Moreover, hypothyroidism was detected in 25 patients, and 52% of these patients were positive for the *JAK2* gene. In our study, we observed that hemorrhage and bruising complications developed in 25 patients. Seven female patients had a miscarriage.

**Conclusion:** The results of this study show that there is no co-relation between CALR, MPL, and clinical prognostic parameters. However, it has been shown that patients carrying the *JAK2* gene are at a higher risk for complications, and we confirmed its diagnostic importance. Our results should be confirmed by further clinical studies.

**Key words:** Essential thrombocytosis, JAK2, CALR, MPL

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## POSTER PRESENTATIONS

**Guest Editor**
Pınar Soysal
Bezmialem Vakıf University, Faculty of Medicine,
Department of Internal Medicine

PP-1

# Can Multiparametric Prostate MRI Diagnose Cases with a Gleason Score of 3+3 in Prostate Biopsy Upgrade Patients in Radical Resection Material?

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**Introduction:** Prostate cancer is the second most common cancer in men. The pathological grading of prostate cancer was performed using the Gleason scoring (GS) system. In our study, we aimed to identify cases with an elevated stage based on preoperative magnetic resonance (MR) findings in patients with a GS of 6 on transrectal ultrasound (TRUS) biopsy.

**Method:** The data of 22 prostate cancer patients with GS 3+3 were retrospectively examined. Patients were divided into two groups based on the final GS from radical prostatectomy material: GS 3+3 (group 1, n=6) and higher GS (group 2, n=16). Age, lesion size, prostate volume, prostate-specifc antigen (PSA) value, and PSA index were compared between the two groups. apparent diffusion coefficient (ADC) values were measured using a region of interest from diffusion-weighted images obtained with two different techniques (b values of 800 and 1500), and early arterial phase contrast enhancement features were recorded in dynamic contrast-enhanced examinations.

**Results:** At the end of this preliminary study, cancer progression was observed in 72% of patients. Group 1 (mean age 57±3.9) were younger and had smaller lesions compared with group 2, (p=0.009, p=0.045). There was no significant difference in MR-guided biopsy time and biopsy-surgery time between the two groups (p>0.05). No significant differences were found in prostate volume, PSA value, PSA index, and early arterial contrast enhancement pattern between the two groups (p>0.05). ADC values were significantly higher in group 1 (p=0.011, p=0.009).

**Conclusion:** In cases with GS 6 from TRUS biopsy, the detection of younger patients, smaller lesions, and higher ADC values may indicate that the final GS will not increase, suggesting a more conservative approach in these cases.

**Key words:** Gleason score, magnetic resonance imaging, prostate cancer

PP-2

# Identification of the Factors Affecting Anxiety and Confidence of Intensive Care Patient's Relatives and Analysis of these Factors

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**Introduction:** Advancements in medicine and technology have increased the average life expectancy, leading to a rise in patients requiring intensive care. Evaluating the satisfaction of patients' relatives has become crucial for assessing healthcare quality in intensive care units (ICU). This study aims to assess how the perception of patients' relatives changes during treatment in the unit and identify the factors influencing these changes.

**Method:** A working group will be formed consisting of relatives of patients who were referred to intensive care and hospitalized for at least 3 days. The same scales will be applied to each patient's relative. Our scale will be given at the beginning and end of the process, starting from the patient's admission to our ICU. Relatives of deceased patients will also be included in this group.

**Results:** Patient relatives in the sample that has not yet been completed. The average score was 41.25 on the doctor trust scale, 43 on the medical distrust scale, and finally, on our depression and anxiety scale, it was upper limit in 75% of the patients and borderline in the rest. Their perceptions of their patients' condition and the conditions in the ICU were consistently high. It revealed that there was no significant difference in the before and after satisfaction levels. These results indicate that the satisfaction levels of patient relatives in the ICU were high.

**Conclusion:** At ICU admission, factors indicating dissatisfaction risk in families are identifiable. Specific elements during the patient's ICU stay are strongly linked to overall dissatisfaction. These insights can inform evidence-based strategies to improve ICU satisfaction in the future.

**Key words:** Intensive care unit, family satisfaction, questionnaire

PP-3

# Evaluation of the Reflective Thinking Ability Levels of Bezmialem Vakıf University Medical Faculty Students

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**Introduction:** Reflective thinking, which is related to metacognitive skills such as critical thinking, is used in many areas. This study aimed to determine the level of reflective thinking skills, which have an important place in medical education and the profession of medicine, in our faculty students using a scale and to evaluate the results obtained.

**Method:** In this study, the Groningen Reflection Skill scale, which was adapted into Turkish, was collected via Google Forms and reached 200 participants. The scale consists of 19 items. A 5-point Likert scale was used for the items on the scale. The scale has a two-dimensional structure as "self-reflection" and "reflective communication". The scores that can be obtained from the scale range from 19 to 95.

**Results:** As a result of the statistical analysis, the reliability index of the self-reflection subscale was found to be 0.728, that of the reflective communication subscale was 0.712, and that of all items was 0.777. There was no significant difference between grade levels in terms of both parts of the scale ($p>0.05$). According to the results obtained from this scale, which was applied to students in grades 1-6 of our faculty, the mean scale score was 53.00 in the self-reflection section and 53.00 in the reflective communication section. The highest score that can be obtained from the scale is 95. In the group to which the scale was applied, it was determined to be 74.00.

**Conclusion:** It was determined that the reflection skills of the group to which the scale was applied were at a good level with a score of 74.00. However, it is necessary to raise awareness of this issue during medical education.

**Key words:** Reflective thinking, reflection, medical student

PP-4

# Examination of the Relationship between Attendance in Theoretical Courses and Academic Success of Bezmialem Vakıf University Faculty of Medicine Students

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**Introduction:** Academic success is the level of student performance in courses. Many factors such as class attendance affect academic success. The aim of this study was to evaluate the relationship between academic success of Bezmialem Vakıf University students and their attendance in classes.

**Method:** The study was conducted retrospectively on 597 students studying in the 1st, 2nd, 3rd, 4th, and 5th grades. We accessed course attendance data via a QR code from the training management system. The student success status was accessed from the student information system. Each student's score and attendance percentage are matched. The relationship between the data was examined using the Pearson correlation coefficient. Additionally, a survey was conducted to determine the reasons for absenteeism. One hundred thirty eight people participated in the survey.

**Results:** The r value was found to be 0.305, and the p value was <0.001 when a: 0.05. The r value indicates a positive correlation between success and absenteeism; the p value indicates high significance. Of the 138 students who participated in the survey, 63.2% were female and 36.8% were male. 32.47% had long breaks; 33.05% had a busy schedule; 35.19% had inefficiency; 37.5% had lost motivation; 33.73% had a negative instructor's approach; 31.54% responded that sleep problems caused them to be absent "occasionally". It has been observed that transportation, diseases, and weather cause absenteeism, albeit "rarely". Also, it was found that thinking that the department is not suitable for oneself, family pressure, and having to work do not "never" cause of absenteeism in most of the students.

**Conclusion:** Absenteeism affects success, but there are other factors that affect academic success, and these factors can also be investigated.

**Key words:** Absenteeism, academic success, attendance, student

PP-5

# Measurement of Footwear Suitability in Patients with Calcaneal Epin

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**Introduction:** Plantar heel pain is one of the most common musculoskeletal disorders affecting the foot. Heel spurs, formed by calcium deposits between the heel and arch of the foot, can result in discomfort. Stress from activities can compress the nerves of the plantar fascia, leading to the development of plantar fasciitis. Our aim was to investigate the appropriateness of shoes worn by patients with heel spurs who are referred to physical therapy, rehabilitation, and orthopedic departments.

**Method:** A study group will be formed by selecting patients presenting with heel spur complaints. Scoring will be conducted using the Shoe Evaluation Scale (SES). The mean difference was considered to be 0.9 with a standard deviation of 2.2. The sample size was determined to be at least 64 (n=64). The results will be analyzed and reported at a significance level of $\alpha$=0.05.

**Results:** Among the participants in our study, 58% were female (n=37) and 42% were male (n=27). It was evidenced that women experienced more foot deformities because of wearing inappropriate shoes. It was observed that 2.9% scored full marks, 19.1% scored 24 points, and 12.7% scored 22 points. Upon examining the scores obtained from the SES, it was observed that the highest score obtained was 24, while the lowest scores were 12 and 18. A significant difference in favor of men was determined ($p>0.05$).

**Conclusion:** In our study, it was found that men scored higher in terms of shoe appropriateness than women. It was determined that men wear more appropriate shoes and have better functional performance. It was observed that gender is an important factor in the evaluation of shoe appropriateness.

**Key words:** Plantar heel pain, calcaneal epin, shoe

PP-6

# Evaluation of Caffeine Consumption by Bezmialem Vakıf University Students

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**Introduction:** Caffeine is a part of our diet and is usually consumed in different types of food and beverages, such as coffee beans, tea leaves, cocoa beans, and other plants. Caffeine is considered a mild stimulant that is affordable and easily available worldwide. In the literature, it has been stated that caffeine can affect human health in both positive and negative ways. It has been reported that moderate caffeine intake can reduce fatigue through its stimulating effect. On the other hand, it has been reported that mood swings, sleep problems, and anxiety disorders may be observed because of the negative effects of caffeine; excessive caffeine consumption may disrupt the fluid electrolyte balance with its diuretic effect and may result in adverse health conditions such as cardiovascular problems, decreased bone density, and calcium accumulation.

**Method:** The aim of this study was to evaluate caffeine consumption in Bezmialem Vakıf University students. The questionnaire is planned to be administered to all undergraduate and associate degree students studying at Bezmialem University during the 2022-2023 academic year.

**Results:** A total of 230 people participated in the study. According to the analysis, the rate of caffeine intake was higher in men than in women: 58% ($p=0.04$). In the entire research group, caffeine intake was mostly from coffee (67.8%). No significant relationship was found between caffeine intake and increased sleep problems ($p=0.12$).

**Conclusion:** In summary, it was concluded that Bezmialem Vakıf University students prefer caffeine to feel more fit, energetic, and less sleepy, and most students use caffeinated products 2-3 times a day.

**Key words:** Caffeine, caffeine consumption, caffeine intake

PP-7

# Evaluation of the Pathology Results of Excisional Biopsies in Patients with Pre-diagnosis of Intraductal Papilloma

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**Introduction:** Intraductal papilloma (IDP) is the most common cause of pathological nipple discharge. Papillary lesions with atypia increase the patient's risk of developing breast cancer by 7.5-fold. Risk factors for IDP include contraceptive use, hormone replacement therapy, lifelong estrogen exposure, and family history. A definitive diagnosis is often made by core biopsy. When necessary, excisional biopsy is recommended to rule out malignancies.

**Method:** In our retrospective study, patients who were admitted to Bezmialem Vakıf University Hospital General Surgery Outpatient Clinic between October 2010 and February 2023 and underwent excisional biopsy after diagnosis of IDP by core biopsy were investigated. The Nucleus Database of the hospital was used to retrospectively analyze the data of patients regarding demographic features, complaints, radiology reports, trucut biopsy, and surgical excision results.

**Results:** Sixty three patients, with a mean age of 43.7 (range:13-79), had complaints of bloody nipple discharge (n=26), mass (n=20), pain (n=10), and serous nipple discharge (n=7). Thirty-seven patients underwent excisional biopsy, while 26 were followed up. The pathology of the excised lesions resulted in IDP in 32 cases (86.5%), IDP + atypical ductal hyperplasia (ADH) in 4 cases (10.8%), and ADH in 1 case (2.7%). Almost 13.5% of the lesions that were reported as IDP in core biopsy showed additional ADH after excision (mean age: 47.6).

**Conclusion:** Since ADH increases the risk of breast cancer, IDPs, especially those showing ADH in core biopsy, palpable and detectable as a mass on a mammogram, >1 cm in size, and those in patients aged 45-50 years should be evaluated carefully and considered for excisional biopsy.

**Key words:** intraductal papilloma, core biopsy, excisional biopsy, atypical ductal hyperplasia

PP-8

# Medical Malpractice Knowledge Level of Bezmialem Medical Faculty Students

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**Introduction:** Due to their workload, physicians are mainly interested in medical issues while practicing their profession after graduation from medical school and after specialization, and they do not have detailed information about the legal dimensions of medical practices. The aim of this study is to measure the knowledge level of Bezmialem Faculty of Medicine students about their professional, administrative, and legal responsibilities and to provide them with the necessary awareness.

**Method:** In this study, data were collected through a survey prepared to measure students' knowledge about medical malpractice. The survey was conducted on 160 students studying in the 1st, 2nd, 3rd, 4th, 5th, and 6th grades at Bezmialem Vakıf University, Faculty of Medicine. With this survey, the demographic information of the participants, their current self-defined knowledge level, and their level of knowledge about the concepts on the subject were measured.

**Results:** The total scores of the survey conducted on 62 male (38.8%) and 98 female (61.2%) students were compared according to gender, and the results were described using the independent sample t-test. According to this, the total scores obtained from the applied questions do not significantly differ according to gender. This shows that gender is not an effective factor on the scores ($p=0.968$). One-way analysis of variance was conducted to determine whether there was a difference in the scores according to grade level. The findings show that the results do not differ according to grade level ($p=0.093$).

**Conclusion:** Knowledge levels have no relationship with class or gender. The accuracy percentage was low in every group. A study should be conducted so that Bezmialem Vakıf University, Faculty of Medicine students can better learn about malpractise and legal responsibilities.

**Key words:** Malpractice, medical error, medical students

PP-9

# Evaluation of the Quality of Life of Asthma Patients with the SF-36 Questionnaire

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**Introduction:** Asthma is a very common disease worldwide. Chronic hyperresponsiveness with inflammation of the airway involving mast cells, eosinophils, and T-lymphocytes. General health questionnaires such as the Short Form Health Survey (SF-36) are used to provide an idea about the scale of restriction on the patient's life. The SF-36 questionnaire is rarely used to assess asthma patients' lives. In this study, we aimed to analyze the quality of life of asthma patients using the SF-36 questionnaire and the correlation between asthma severity and the SF-36 scale.

**Method:** Our study included a control group and a patient group. The subjects were above 18 years of age and they applied to Bezmialem Vakıf University Hospital Respiratory Diseases Polyclinic. Diagnosis was made according to the Global Initiative for Asthma criteria. Power analysis was performed by the Bezmialem Vakıf University, Faculty of Medicine, Statistics Department. At a 95% confidence level, 80% power, and importance attributed to the mean difference of 14 units between the groups, the study requires a minimum of 34 patients in each group. The patients presented with daily asthmatic symptoms and had no other respiratory diseases. The SF-36 is a self-assessment scale consisting of 8 sub-headings that assess the patients' general physical and mental health.

**Results:** Thirty five patients and 34 healthy people participated in the survey. There was a significant difference in terms of physical difficulties, physical condition, mental and general health perception, and social functioning ($p<0.001$) where asthma patients were in a worse state compared with healthy people. In contrast, there was no significant difference between patients and healthy people in terms of pain perception ($p=0.899$), emotional difficulty ($p=0.172$) and energy ($p=0.723$).

**Conclusion:** Asthma negatively affects the patient's quality of life. An apparent relationship between asthma and the SF-36 questionnaire was observed.

**Key words:** Asthma, health quality, respiratory diseases

PP-10

# Evaluation of *Bifidobacterium* and Anti-PD-1 Combination Therapy in a Mouse Intracerebral Melanoma Metastasis Model

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**Introduction:** The discovery of the relationship between immune checkpoint inhibitors (ICI) and gut microbiota has highlighted gut microbiota as a potential biomarker and therapeutic target for ICI treatment. In this study, the effectiveness of anti-PD-1 (programed cell death protein) treatment in brain tumor-bearing mice treated with antibiotics and *Bifidobacterium* will be examined.

**Method:** Mice in the antibiotic group were treated with broad-spectrum antibiotics before tumor implantation. Mice in the treatment group received 5 doses of anti-PD1 intraperitoneally. *Bifidobacterium* is administered to mice by oral gavage for 7 doses. Mice were monitored daily after tumor implantation and sacrificed when they met the euthanasia criteria.

**Results:** Antibiotic-treated mice (group 2) did not show a significant increase in survival rates when they received anti-PD1 (group 4) (mean survival days: Abx 15±0.6; Abx + anti-PD1 17±0.9). However, antibiotic-treated mice showed a significant increase in survival rates when they received both anti-PD1 and *Bifidobacterium* (group 5) when compared to only antibiotic-treated mice (group 2) (mean survival days: Abx 15±0.6; Abx + anti- PD1 + *bifido* 18±0.5, $p<0.005$ by t-test).

**Conclusion:** The effect of intestinal microbiota on anti-PD1 treatment response was examined for the first time in a melanoma brain metastasis model. The results of our study show that gut microbiota can influence immunotherapy response in melanoma brain metastasis.

**Key words:** Immunotheraphy, gut microbiome, melanoma, brain metastasis

**Table 1. Median survival for each group**

| Mice groups | Mean survival (days) |
|---|---|
| Group 1 (tumor control) | 14.4 |
| Group 2 (tumor + Abx) | 15 |
| Group 3 (tumor + Abx + *bifido*) | 16.3 |
| Group 4 (tumor + Abx + anti-PD1) | 17.2 |
| Group 5 (tumor + Abx + *bifido* + anti-PD1) | 18.1 |

PP-11

# Crush Syndrome Competence among 4th, 5th, and 6th Grade Students of Bezmialem Vakıf University School of Medicine

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**Introduction:** Earthquakes can be described as disasters due to changes in fault lines, which commonly happen in densely populated regions such as Turkey. Therefore, gaining qualifications for earthquake-related conditions should be important for future doctors who will work at places that are at risk of earthquakes. According to research, Crush syndrome is found to be the second most common reason of mortality after trauma injuries in earthquakes. Crush syndrome may be described as a condition that could have components such as electrolyte imbalances and acute kidney injury related to the release of myocyte components to circulation after prolonged injury. Because of fatal components, having the qualifications to diagnose Crush syndrome immediately and to apply therapeutic approaches such as early fluid resuscitation must be a priority for medical students. This research investigates Crush syndrome knowledge levels and to make suggestions according to the results from 4th, 5th, and 6th grade students.

**Method:** Seventy one medical students from 4th, 5th and 6th grade in 2023-2024 academic year were included in the study. The research consisted of a survey including demographic information and 20 questions based on the literature.

**Results:** The mean age of the medical student doctors was 22.84±3.72, and the interns was 23.25±0.79, 67.6% were female and 32.4% were male. Although the correct answer mean of interns 15.65±5.23 and it was 16±3.71 in medical student doctors, and these were statistically non-significant (p=0.340), there were significant differences in the question about causes of Crush syndrome (intern =27.69, medical doctors =37.06, p=0.045).

**Conclusion:** According to our preliminary results, we have not seen any significant difference except for the question about causes of Crush syndrome among medical student doctors and interns, contrary to our hypothesis. These findings warrant further investigation.

**Key words:** Crush syndrome, earthquake, surveys, medical student

PP-12

# Salivary and Urinary Metabolomics Study in Patients with IgA Nephropathy

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**Introduction:** Immunoglobulin A nephropathy (IgAN) is the most common form of glomerulonephritis worldwide with a strong autoimmune component. 40% of diagnosed cases end up with end-stage kidney disease within 20 years of diagnosis. IgAN also affects tissues that can produce mucosal secretions, such as the nasopharynx, and causes mucosal infections in patients with IgAN. Metabolomics analysis allows us to analyze the differentiation in metabolite levels in biofluids such as urine and serum. Our aim was to evaluate the disease from a different perspective, including saliva, and assess the metabolomic differences between healthy people and IgAN patients and evaluate the correlation between urinary and salivary metabolomics in IgAN patients.

**Method:** This study was based on two groups: healthy control and IgAN patients groups. Stimulated salivary and spot urine samples were collected from both groups. Collected samples were subjected to full metabolome analysis in a liquid chromatography-mass spectrometry (LC-MS/MS) device. In addition, general demographic information of subjects, serum urea, serum creatinine, urine creatinine, urine proteinuria, and estimated glomerular filtration rate (eGFR) levels of subjects were gathered for statistical analysis.

**Results:** Sixteen IgAN patients participated in the study. Four of 16 patients were male, and the mean age of the IgAN group was 45.31±6.65 years. Ten healthy controls participated in the study. Four of 10 controls were male, and the mean age of the healthy control group was 41.36±6.57 years. The IgAN patients had meaningfully increased serum creatinine and urine proteinuria levels compared with the healthy controls ($p=0.009$ and $p=0.006$). GFR levels were found to be significantly decreased in IgAN patients ($p=0.006$). However, there were no significant differences in serum urea and urine creatinine levels ($p=0.610$ and $p=0.111$).

**Conclusion:** These are the results of our preparatory work. Further analysis will be conducted.

**Key words:** Immunoglobulin A nephropathy, urinary metabolomics, salivary metabolomics, metabolomics

PP-13

# Examining the Knowledge and Awareness of Physicians in Different Specialties Regarding Vasectomy

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**Introduction:** Surgical sterilization is one of the most popular contraceptive methods. Surgical sterilization methods called tubal sterilization in women and vasectomy in men. Comparing the two procedures, vasectomy is safer, has a shorter recovery time, and is more cost-effective. Despite all these benefits, female sterilization is much more common, mainly because of social taboos and misconceptions about vasectomy.

**Method:** To collect data, we created an original questionnaire form for physicians working in different branches in Turkey. In addition to sociodemographic characteristics, the questionnaire includes questions that aim to measure the level of knowledge of physicians about the comparison of tubal ligation and vasectomy, which are permanent sterilization methods, and their perspectives toward vasectomy. All statistical analyses will be analyzed and reported in the IBM SPSS statistics 26.0 program at $\alpha$0.05 significance level.

**Results:** Of the 203 physicians who participated in our study, 115 (56.7%) stated that they did not recommend vasectomy. The most frequently cited reasons for not recommending vasectomy were that the patients presenting for permanent contraception were usually female (22.7%), it was not considered a common procedure (11.8%), prejudices against vasectomy (9.9%), and cultural/religious reasons (6.9%). The correct answers to all questions measuring the level of knowledge exceeded the incorrect answers. Regarding the questions analyzing the perspective, it was observed that vasectomy is not a procedure that affects men socially, but it affects their psychology personally (50.7%).

**Conclusion:** Although the level of knowledge of physicians about vasectomy is adequate, the rate of recommendation to patients is low because it is not a very common method.

**Key words:** Vasectomy, sterilization, knowledge, physicians

PP-14

# Development and Application of the Commitment to the Profession of Medicine Scale Using Classical Test Theory and Item Response Theory

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**Intoduction:** Medical dedication involves a deep commitment to excellence and compassionate care in healthcare. This study was conducted to assess the professional dedication of Bezmialem Vakıf University, Faculty of Medicine students.

**Method:** We conducted a study using a Google Forms survey with 9 questions for Bezmialem Vakıf University, Faculty of Medicine students, scoring from 9 to 45 points. Obtaining the maximum score (45) indicates a higher dedication to the medical profession, whereas obtaining the minimum score (9) indicates less dedication. The data are presented in median (Q1-Q3) format.

**Results:** Statistical analysis revealed no significant relationship between age and the total scale (p=0.072). However, when examining the total scale scores based on gender, a statistically significant difference was found (p=0.003). The total scale score for females with a median value of [34 (31-40)] is significantly lower than the median value for males, which is [30 (27-35)]. Furthermore, when looking at the total scale scores based on class, a statistically significant difference was observed (p=0.004). The total scale median value for the 1st group (1st, 2nd, and 3rd grades) is [35 (31-41)], which is significantly higher than the median value for the 2nd group (4th, 5th, and 6th grades), which is [31 (29-37)]. Therefore, dedication to the medical profession is higher in the first group than in the second group. A total of 104 participants participated in the study, with 48 individuals from the 1st group and 56 individuals from the 2nd group.

**Conclusion:** Therefore, the dedication to the medical profession is higher for first-year students than for fourth-year students, and for third-year students than for fourth- and fifth-year students.

**Key words:** Medical profession, dedication, medical faculty students

PP-15

# Effect of the Length of the Tissue Sample Taken in Prostate Biopsies on the Rate of Detection of Prostate Cancer

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**Introduction:** Prostate cancer is one of the most common cancers in men. Although prostate specific antigen (PSA) value, magnetic resonance imaging evaluation, and presence of clinical findings are used in diagnosis, a definitive diagnosis is made by biopsy. The aim of our study was to examine the effect of the length of the biopsy sample on the cancer detection rate.

**Method:** Patients who applied to the urology outpatient clinic of Bezmialem Vakıf University Faculty of Medicine Hospital between January 2018 and January 2023 and underwent prostate biopsy were included in our study. The patients' age, PSA level, prostate volume, prostate biopsy length, number of cores biopsied, and pathological diagnosis will be investigated. We will examine whether the cancer detection rate increases as the length of prostate biopsy samples increases.

**Results:** A statistically significant positive correlation at a low level was found between PSA and prostate volume (r=0.303; p=0.026). No significant relationship was found between the length of prostate biopsy samples and pathology diagnosis (p=0.456). No significant relationship was found between the biopsy core count and pathology diagnosis (p=0.082).

**Conclusion:** The results showed that biopsy specimen length and biopsy core count does not make a difference in the cancer detection rate. Increasing the sample size in future studies is believed to be beneficial.

**Key words:** Prostate cancer, prostate biopsy length, PSA level, prostate volume

PP-16

# Comparison of the Results of the rFSH and rFSH+Clomiphene Citrate in Stimulated Intrauterine Insemination Cycles: A Prospective Randomized Controlled Multi-centric Study

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**Introduction:** Approximately 10-15% of couples of reproductive age experience infertility problems. In this study, we divided the patients who will undergo intrauterine insemination (IUI) between 2022 and 2023 into two different groups in a prospective randomized controlled manner. We evaluated their effectiveness by administering recombinant follicle stimulating hormone (rFSH) to the first group and rFSH and clomiphene citrate to the second group.

**Method:** After the patient is evaluated on the 2nd or 3rd day of the cycle, they will be randomized into two groups. Group 1 (rFSH; n=80) 75 IU rFSH/day on cycles 2-3. It will be used starting on the day and until the human chorionic gonadotrophin (hCG) trigger. Group 2 (rFSH and clomiphene citrate: n=35) 100 mg/day clomiphene citrate will be used from the 3rd to the 7th day of the cycle, followed by 75 IU rFSH/day hCG until the trigger.

**Results:** There was no statistical significance in the groups for female age, male age, female body mass index, and duration of infertility. However, there was statistical significance for an indication for treatment (p=0.017). There were more patients with male infertility in group 1 than in group 2. When the total dosage of gonadotropins (p<0.001), duration of stimulation (p=0.035) and number of mature follicles (p=0.027) were compared, they were found to be statistically significant. Using a lower total dosage of gonadotropins in group 2 makes the treatment patient-friendly and cost-effective, which is important for this study. There was no statistical significance for the duration of infertility, infertility type, endometrial thickness on hCG day, or the number of progressive motile spermatozoa inseminated.

**Conclusion:** These are the results of our preparatory work. Further analysis will be conducted.

**Key words:** Stimulated intrauterine insemination, clomiphene citrate, unexplained infertility

PP-17

# Solution for AV Fistula Problems in Dialysis Patients: Surgical Reconstruction or Percutaneous Angioplasty?

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**Introduction:** According to research, hemodialysis remains the preferred treatment modality in approximately 90% of patients and continues to be the most commonly used therapeutic approach for kidney failure. The use of arteriovenous (AV) fistulas for hemodialysis has become a standard method. However, complications can arise over time in these created shunts. Two common methods are employed for treating AV fistula problems: surgical reconstruction and percutaneous transluminal balloon angioplasty (PTA).

**Method:** In this retrospective study, the impact of PTA and surgical reconstruction methods on the duration of AV fistula usage and prognosis was investigated. The pediatric patient group (under 15 years old), patients with a primary AV fistula patency duration of less than 1 month, and those requiring AV fistula revision due to complications such as seroma, pulmonary hypertension, hematoma, and pseudoaneurysm were excluded from the study.

**Results:** Our study included 52 patients, with 14 undergoing PTA and 38 undergoing surgical reconstruction for AV fistula revision. Demographic data of patients, primary AV fistula type, underlying primary disease necessitating dialysis, fistula maturation time, primary and secondary patency duration, complications requiring fistula revision, presence of a catheter at the time of fistula creation, location and type of fistula, fistula evaluation 1 week, 1 month, and 3 months after revision, and the method of AV fistula revision were assessed. The influence of comorbidities such as diabetes ($p=0.422$), hypertension ($p=0.548$), the type of primary AV fistula ($p=0.352$), and the complication necessitating fistula revision being stenosis ($p=0.247$) on the AV fistula revision method was statistically insignificant.

**Conclusion:** No statistically significant impact of the studied variables on the duration of AV fistula usage and prognosis was found.

**Key words:** AV Fistula, hemodialysis, PTA

PP-18

# Assessment of the Level of Knowledge and Attitudes About AIDS Among Medical Faculty Students in Bezmialem Vakıf University

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**Introduction:** Since 1981, human immunodeficiency virus (HIV) has affected 80 million people worldwide, resulting in over 35 million deaths and emerging as a critical public health concern. This study aims to assess the knowledge and attitudes of Bezmialem Vakıf University Faculty of Medicine students (1st-6th graders) concerning acquired immunodeficiency syndrome (AIDS), along with identifying associated factors.

**Method:** A cross-sectional research design was employed, involving students who provided informed consent. Participants completed a 16-item demographic questionnaire, followed by a 21-item AIDS knowledge scale and a 17-item AIDS attitude scale.

**Results:** Analysis of AIDS knowledge scale scores based on HIV/AIDS testing status revealed significantly higher scores among those tested ($p=0.005$). Preclinical and clinical students exhibited a significant difference in knowledge levels ($p<0.001$) with clinical students showing higher knowledge. Students in clinical training also demonstrated significantly higher attitude scores ($p=0.039$).Those receiving sexual health education had notably higher knowledge scores ($p=0.003$). Age exhibited a significant positive relationship with AIDS knowledge scale scores ($r=0.338$; $p<0.001$) while the relationship between age and AIDS attitude scale scores was positive but low-level ($r=0.189$; $p=0.038$). The age of first sexual intercourse displayed a significant positive moderate-level relationship with AIDS attitude scale scores ($r=0.334$; $p=0.014$).

**Conclusion:** According to the data we obtained, medical education has proven to be beneficial in increasing awareness about AIDS, and post-clinical students have demonstrated a higher level of knowledge on the subject. However, along with the increase in knowledge, there has been a shift toward a negative attitude. This could pose a significant public health issue in the future, as the students surveyed will become healthcare professionals who will directly deal with such diseases. In medical education, efforts should be made not only to enhance knowledge but also to provide training that positively influences students' attitudes.

**Key words:** HIV, AIDS knowledge, AIDS attitude, faculty of medicine, students

PP-19

# Evaluation of Subclinical Atherosclerosis in Rosacea Patients by Carotid Intima Thickness and Serum Lipid Profile

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**Introduction:** Rosacea is a chronic inflammatory dermatosis that causes facial erythema, papules, and pustules in the centrofacial area. Rosacea may initiate dysfunction of the endothelial cells, which is an early predictor of atherosclerosis, by causing systemic inflammatory changes. In this study, we investigated the potential relationship between rosacea and subclinical atherosclerosis.

**Method:** Fourteen rosacea patients and 14 age- and gender-matched healthy volunteers were included in this study. Patients with known cardiovascular disease and pregnant women were excluded. Demographic data, alcohol consumption, smoking history, physical activity frequency, family history of cardiovascular disease, and anthropometric measurements were recorded. Systolic and diastolic blood pressures were measured, and total cholesterol, high-density lipoprotein, low-density lipoprotein, and triglyceride levels were assessed. The Framingham risk score for coronary heart disease was calculated for all participants. Carotid intima-media thickness and flow velocity measurements for both common carotid arteries (CCAs) were performed ultrasonographically by the same radiologist.

**Results:** Fourteen rosacea patients (11 females, 3 males; mean age 48.86) and fourteen controls (11 females, 3 males; mean age 41.64) were included. There was no significant difference in mean body mass index ($p>0.05$). Alcohol consumption was significantly more prevalent in the control group ($p=0.029$). Family history of cardiovascular disease was significantly more prevalent in rosacea patients ($p=0.008$). Rosacea patients had significantly higher triglyceride levels ($p=0.031$). The levels of systolic and diastolic blood pressure were significantly higher in rosacea patients ($p=0.039$). Blood flow velocities of the right CCA of patients with rosacea were significantly lower ($p=0.027$).

**Conclusion:** Our study showed that patients with rosacea have higher triglycerides, systolic and diastolic blood pressure levels, and lower right CCA blood flow velocity compared with the general population. A larger sample size is required to increase the precision of the results.

**Key words:** Rosacea, atherosclerosis, cardiovascular disease

PP-20

# Knowledge, Attitudes, and Behaviors of Medical School Students About HPV, HPV Vaccine, and Cervical Cancer

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**Introduction:** Human papillomavirus (HPV) ranks first among sexually transmitted diseases and is the main cause of cervical cancer. One of the most important ways to protect against HPV is vaccination. Doctors play a leading role in prevention. They are expected to have reached this awareness during their training and have started to undertake preventive medicine duties. In our study, we aimed to determine which factors are related to the knowledge levels of medical faculty students on these subjects and to determine what can be changed in this regard.

**Method:** Our cross-sectional and descriptive study was applied to Bezmialem Vakıf University, Faculty of Medicine students between June and October 2023. A two-stage online survey consisting of sociodemographic questions and the HPV knowledge scale was administered to 78 participants (n=78).

**Results:** The students' average score on the knowledge scale, which has 33 points, was 24.26. When HPV knowledge scale scores were compared, it was observed that the total scores of the 1st grade students were significantly lower than those of the 5th and 6th grade students and the 2nd, 3rd, and 4th grade students ($p<0.001$). It was found in the survey that there was a significant difference in terms of the grade and age of the students and their HPV knowledge scale scores ($p<0.05$).

**Conclusion:** Because it was observed that the knowledge levels of students who had just started medical school were lower than those in the upper grades, it was concluded that medical education contributedto this. Considering the average score obtained from the knowledge scale, the students' knowledge level about HPV, HPV vaccine, and cervical cancer is sufficient.

**Key words:** HPV vaccines, human papillomavirus, knowledge level, medical students

PP-21

# Tendency to Depression in Children and Adolescents Diagnosed with Attention Deficit Hyperactivity Disorder

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**Introduction:** Attention deficit and hyperactivity disorder (ADHD) is a treatable mental disorder of neurological origin that manifests itself in childhood as inattention and/or hyperactivity, forgetfulness, inability to control reactions, sudden and impulsive reactions, and easy turning to other things. In addition to reward sensitivity and emotional regulation disorders, particularly seen in individuals with ADHD, parenting/family factors and maternal depression have been determined to be important risk factors for the development of depression in the child age group with ADHD.

**Method:** The study was based on two groups with 72 adolescents aged 0-18 years. The first group (patient group) included 36 patients who applied to the Child and Adolescent Psychiatry Outpatient Clinic of Bezmialem Vakıf University, Faculty of Medicine Hospital, whereas the second group (control group) included 36 adolescents without any psychiatric disease. After obtaining voluntary consent from parents and youth and signing the consent forms, they were asked to fill out the self-report scales (Conners' Parents Rating Scale-Revised Short Version and Anxiety and Depression Scale in Children).

**Results:** The study was based on two groups with 72 adolescents, and there were 43 females and 29 males. The age mean was 13.36. No significant difference was observed between the patient and control groups in terms of the tendency to struggle with depression. A survey with parents revealed a moderately significant result that children with ADHD have a greater tendency to have depression ($r=0.431$; $p<0.001$). There was a weak relationship between age and the occurrence of depression ($r=0.282$; $p=0.016$) and it was also observed that girls have a greater tendency to have depression ($p=0.003$).

**Conclusion:** No significant difference was observed between the patient and control groups in terms of the tendency to have depression.

**Key words:** ADHD, depression, impulsivity

PP-22

# Evaluation of Perceived Stress, Social Support, and Emotional Eating in Bezmialem Faculty of Medicine Students: A Cross-sectional Study

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**Introduction:** A balanced diet is essential for overall health because it provides necessary nutrients. Eating disorders present medical and psychological risks that affect one's quality of life. Emotional eating can result from negative situations. Studies show that sadness has a greater impact on food consumption than happiness, leading to a 30-48% appetite fluctuation. Stress not only affects psychological health and influences food choices. Social support, typically from family and friends, provides both physical and psychological aid, addressing fundamental social needs and positively impacting overall well-being. Medical students facing intense stress during clinical courses are considered a risk group for emotional eating due to stressors.

**Method:** Our study was conducted with Bezmialem Vakıf University, Faculty of Medicine students. Data were collected using the Demographic form, Beck Anxiety Inventory, Beck Depression Inventory, Perceived Stress Scale, Social Support Scale, and Emotional Eating Scale. The resulting data were analyzed using IBM SPSS Statistics 22.0.

**Results:** Among the students participating in the study (n=70), 35.7% were male and 64.3% were female. A significant positive correlation was observed between Perceived Stress and Emotional Eating Scales ($r=0.246$; $p<0.05$). Additionally, there was a significant positive correlation between Beck Anxiety and Depression Inventory and the Emotional Eating Scale ($r=0.504$; $p<0.05$, $r=0.432$; $p<0.05$, respectively). Furthermore, a significant negative correlation was found between the Social Support Scale and the Emotional Eating Scale ($r=-0.272$; $p<0.05$).

**Conclusion:** The results of this study indicate that stressful lifestyles can have a real impact on the development of emotional eating problems among medical students. Medical schools should closely monitor the mental well-being of students and encourage them to develop healthy lifestyles, optimize coping styles, and establish sources of social support.

**Key words:** Emotional eating, stress, social support, student

PP-23

# Investigation of Vitamin D Levels in Children with Group a Beta Hemolytic Streptococcus Infection

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**Introduction:** Group A *Streptococcus*, also known as *Streptococcus pyogenes*, is the leading cause of bacterial tonsillopharyngitis. It is mostly seen in pediatric age groups, especially between ages 3 and 14. Scarlet fever causes fever, sore throat, and rash. There are no preventive vaccines available. It is transmitted via respiratory droplets. Twenty four hours after antibiotic therapy, the bacterial loses its transmission capacity. The aim of this study was to investigate the correlation between vitamin D levels and group A beta hemolytic *Streptococcus* infection in pediatric patients aged 5-15 years.

**Method:** A retrospective investigation of the data of pediatric patients who applied to Bezmialem Hospital between January 2018-June 2023. The inclusion criteria are being between the ages of 5-15 and a positive culture of *Streptococcus pyogenes*. Patient and control groups of 60 children were created, and the D vitamin levels were analyzed.

**Results:** For statistical analysis, the Mann-Whitney U test was used. The mean vitamin D level in the patient group was 30.42 ng/mL with a standard deviation of 9,426. Median of the patient group was 29 ng/mL. The mean vitamin D level in the control group was 32.58 ng/mL with a standard deviation of 11,116. The median of the control group was 32.50 ng/mL. There was no significant difference between the vitamin D levels of the patient and control groups (p=0.282).

**Conclusion:** According to our study, there was no relationship between group A beta hemolytic *Streptococcus* infection and vitamin D levels in pediatric patients.

**Key words:** Vitamin D, *Streptococcus pyogenes*, group A, pediatric patients

PP-24

# Effect of Surgeon Gender and Clothing on Sense of Confidence in Rhinoplasty Patients

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**Introduction:** Nowadays, physicians of both genders wear various styles. Previously shown that the attire of a physician affects patient reliance. Additionally, the appearance of the surgeon plays a big role in appearing more experienced in both genders. Therefore, these effects on gender preference in rhinoplasty patients, in having surgery desition.

**Method:** This study is a survey that consists of 16 questions that will be administered to rhinoplasty patients between 18 and 50 years of age who applied to Bezmialem Vakıf University Hospital Otorhinolaryngology Clinics. The survey contains demographic questions and 10 photographs of surgeons in both genders. There are five photographs of a man and woman surgeon. Patients will evaluate their confidence level according to a 5-point Likert scale from "never" to "completely, immensely". Finally, patients will be asked their preferences regarding the gender of the surgeon in their rhinoplasty surgery. The choices are "male", "female" and "it doesn't matter".

**Results:** A total of 207 patients participated in the survey. The most preferred and "extremely, immensely" trustworthy photographs were female surgeons wearing scrubs with white coat (34.3%), followed by male surgeons wearing scrubs with white coat (33.3%). However, In the "never" option, the most chosen photograph was a male surgeon wearing sports jeans (32.4%), followed by a female surgeon wearing sports jeans (28.5%). In the gender choice question, the most preferred answer was "it doesn't matter" (63.3%), followed by "male" (31.9%) and female 4.8%.

**Conclusion:** According to the study, most rhinoplasty patients do not matter with the gender of the surgeon. However, in both genders, the scrubs with white coats stand out.

**Key words:** Physician attire, surgeon gender, rhinoplasty patients

PP-25

# Measuring the Knowledge Levels of Bezmialem Vakıf University Medical Faculty Students on Oral and Dental Health

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**Introduction:** Health professionals' lack of basic knowledge about oral and dental health can lead to many medical problems. Our aim with this study is to determine the knowledge and awareness levels of Bezmialem Vakıf University, Faculty of Medicine students about oral and dental health and to determine the adequacy of our training program on oral and dental health according to the results obtained.

**Method:** The data collection tool of the research was the survey we prepared. This survey was conducted for Bezmialem Vakıf University, Faculty of Medicine, 1-6. It was planned to be applied to all students in the class. The survey we prepared using previous similar studies consists of two parts. In the first part, the sociodemographic characteristics of the participants are determined, and in the second part, the knowledge levels of the participants about oral and dental health are measured. The survey was administered online using Google Forms.

**Results:** A total of 165 people participated in the survey. Of the participants, 71 were men and 94 were women. In 7 questions measuring knowledge levels about oral and dental anatomy and physiology, incorrect answers vary between 4% and 49%, whereas correct answers vary between 51% and 96%. It was observed that the participants answered 11 different questions about oral and dental health incorrectly in the range of 12% to 61%, and gave correct answers in the range of 39% to 88%.

**Conclusion:** The results of this study indicate that medical students should have more knowledge about oral and dental health throughout their medical school life. Our results need to be confirmed by further survey studies.

**Key words:** Medical education, oral and dental health, medical student

PP-26

# Videoendoscopic Evaluation of the Efficacy of Rhinoplasty on the Internal Nasal Valve Angle and on Nasal Valve Areas

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**Introduction:** Rhinoplasty is an esthetic and functional surgery that reshapes the nose and improves breathing. The nasal valve area is the area with the maximum flow resistance in the nose. The borders of the internal nasal valve area are the lower end of the upper lateral cartilage, pyriform aperture, nasal septum, and anterior end of the inferior turbinate. External nasal valve is the area at the entrance of the nostrils. The aim of this study was to compare the changes in internal and external nasal valve area and internal nasal valve angles with videoendoscopic images of patients in a standardized position using a rigid endoscope, which was taken before the surgery using current rhinoplasty techniques and at least 3 months after the surgery.

**Method:** The changes in the cross sections of the valve regions of the 30 volunteer patients who will undergo primary rhinoplasty were analyzed using the ImageJ program. The effects of the current rhinoplasty techniques on the internal nasal valve angles and the dimensions of the nasal valve areas and VAS values were examined.

**Results:** Eleven patients who were able to return for postoperative follow-up were evaluated to compare the sections of the valve region before and after nasal surgery. Assessments show that while rhinoplasty shrinks the internal and external nasal valve areas and angles, breathing improves.

**Conclusion:** The results obtained from 11 patients show that current rhinoplasty techniques are effective for improving nasal valve areas and angles for better breathing. Patients reported that their breathing problems resolved and improved 2 points according to VAS analysis.

**Key words:** Rhinoplasty, videoendoscopy, nasal valve

PP-27

# Effects of Sodium Glucose Co-transporter 2 Inhibitors on Exercise Stress Test Parameters in Patients with Diabetes

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**Introduction:** This study aimed to evaluate the effects of sodium glucose co-transporter 2 inhibitors on exercise stress test parameters in patients with exaggerated blood pressure response (EBPR) during treadmill exercise stress tests.

**Method:** This was a single-center, cross-sectional, observational study. The study included patients who underwent treadmill exercise stress test with a suspicion of coronary artery disease. Hypertensive response in treadmill stress test: In accordance with the Framingham criteria, systolic blood pressure at peak exercise is defined as ≥210 mmHg for men and ≥190 mmHg for women. The study included 58 patients with EBPR and 36 patients with normal blood pressure response as a control group with a similar age and gender.

**Results:** Most of the patients were middle-aged (mean age 49.4±12.8 years) males (67 males, 68%). Of the patients, 54% had essential hypertension, 25 had coronary artery disease, and only 14% were diabetic. Patients with EBPR mostly had previously known essential hypertension (63%), coronary artery disease (58%), and smoking (53%). EBPR was most frequent in diabetics (85.7%) and was more common than in non-diabetics. Because only 4 of the diabetic patients used SGLT-2i, we could not evaluate the relationship between blood pressure response to exercise and SGLT-2i use in diabetic patients who underwent exercise stress testing.

**Conclusions:** As expected, EBPR was detected more frequently in diabetic patients. We could not evaluate whether the use of SGLT-2i, which has a blood pressure-correcting effect, reduces EBPR because of the limited number of patients. We believe that we can conclude on this issue by expanding our study with diabetic patients using SGLT-2i.

**Key words:** Sodium glucose co-transporter 2 inhibitors, exaggerated blood pressure response, hypertension