



# BEZMÎÂLEM science

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**POSTER PRESENTATIONS**

**Guest Editor**

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PP-1

## Evaluation of Perspective of Patients with Kidney Disease About COVID-19 Vaccines During the Pandemic Period

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**Introduction:** Coronavirus disease-2019 (COVID-19) vaccination is of great importance for patients with kidney diseases who have high mortality rate associated with this infection. Here, we investigated the attitudes of patients with kidney disease toward vaccines.

**Method:** In this survey study, patients followed up in the nephrology outpatient clinic were applied a questionnaire. Attitude towards vaccination and factors associated with vaccination rate were analyzed. SPSS Statistics 21.0 program was used for statistical analysis.

**Results:** 249 patients were included. The mean age was  $58.08 \pm 16.29$  years and the mean duration of kidney disease was  $6.30 \pm 8.16$  years. Eighty-eight patients (38.9%) were  $\geq 65$  years of age. 208 patients (90.4%) were vaccinated. 138 patients (63%) decided to get vaccinated with their own choice, 61 patients (27.9%) followed the advice of health staff. Social media is the most common source for COVID-19 vaccine information (n=95, 45%), healthcare workers were in the second order (n=82, 38.9%). Most patients (n=196, 86.3%) think that pandemic will slow down with vaccination and 163 patients (69.7%) think that vaccine should be mandatory. Twenty-seven patients (11.6%) canceled/delayed their own or relatives' vaccination with fear of side effects. Gender, educational level, occupation, presence of comorbidities did not affect the vaccination rate. Vaccination was more frequent among non-smokers ( $p=0.002$ ), older patients ( $p=0.045$ ), and those who received information from physicians ( $p=0.014$ ). The vaccination rate was lower among patients thinking that vaccine side effects might be serious (n=23, 63.8%), those who think social distancing as the most effective method of protection from COVID-19 ( $p=0.001$ ), patients who omitted/delayed vaccination of themselves/relatives due to worries about side effects ( $p=0.003$ ) and in those thinking that supplementary products were more effective for protection ( $p<0.001$ ).

**Conclusion:** Sufficient information from a proper source about the effectiveness, potential side effects and the benefits of widespread vaccination would increase the vaccination rate.

**Key words:** Kidney disease, COVID-19, vaccine

## The Prevalance of COVID -19 Positivity in Asymptomatic Patients Who Investigated Routinely Before the Endoscopic Procedures and Surgical Operation During the Pandemic

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**Introduction:** The coronavirus disease-2019 (COVID-19) outbreak, caused the decision of routinely screening patients for COVID-19 before endoscopic procedures and surgical operations, due to the presence of asymptomatic carriers. Our study found a positivity rate in routine pre-procedural COVID-19 nasopharyngeal swab tests (RPNST) before endoscopic procedures and surgical operation and COVID-19 positivity rate in the healthcare workers (HCW) in endoscopy unit. Additionally we have interrogated the risk factors in these confirmed cases.

**Method:** Patients who received RPNST in the Bezmialem Vakıf Hospital between June 2020-April 2021 were included in our study. Positive patients and infected HCWs are questioned in terms of COVID-19 risk factors.

**Results:** There were 20,694 patients who received RPNST in the Bezmialem Vakıf University Hospital between June 2020-April 2021. Gender distribution was (0.47F/0.53M). Mean age was 50 and SD was 18. Only 52 of patients have positive results 11 of patient's results were unknown. 52 Positive patient's gender distribution was equal. Mean age was 43 and SD was 27. Most patients with positive test results (51.9%) claimed that they had no symptoms. The symptomatic ones mostly reported fatigue. Travel history was positive 9.6% of patients. Close contact was positive 11.5% of participants. There were 25 HCWs in endoscopy unit. The gender distribution was almost equal. Mean age was 40.5 and SD was 10. Five of HCWs infected with COVID-19. One personel was asymptomatic. Others reported cough, fever, myalgia, headache, and sore throat.

**Conclusion:** Consequently positivity rate in RPNST found as 0.25%. Most patients were asymptomatic. Positivity rate in HCWs found as 0.2. Most HCWs were symptomatic.

**Key words:** COVID-19, healthcare worker, surgical operation, endoscopic procedure

## PP-3

## Investigation of Metabolic Syndrome Awareness Levels of Medical Faculty Students

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**Introduction:** Metabolic syndrome (MS) is serious health problem at least three of symptoms are increased waist circumference, high triglyceride level, low High-density lipoprotein level, high blood pressure, impaired fasting blood sugar. MS usually occurs due to irregular lifestyle, can be prevented if early precautions are taken. This can be achieved by creating social awareness, particularly by healthcare professionals. Our aim is to quantitatively determine MS awareness levels of medical school students.

**Method:** Study was conducted with sociodemographic data and questionnaire inquiries asked with JAMRISC scale. One hundred and sixty-four students were divided into two groups, preclinical (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> grades) and postclinical (4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> grades). Groups are analyzed in several subsections, female/male, smokers/alcohol consumers, with/without family history, sport/nonsport.

**Results:** MS awareness level of students included in the study didn't show statistically significant according to demographic characteristics, gender, age, height, weight, waist circumference, smoking, alcohol consumption ( $p>0.05$ ). MS awareness levels were found statistically significant between pre-clinical/post-clinical status of students ( $p=0.022$ ). MS, is public health problem, can be prevented by raising awareness in early period and regulating lifestyle. Biggest task in this regard is healthcare professionals, on the fields that they are role models. In the study, in which awareness of physicians, who constitute the core of this group, was examined, it was shown that awareness of students about MS increased as a result of increase clinical courses and direct contact with patients.

**Conclusion:** Awareness of MS, which can be prevented by taking early precautions, increases direct proportion to clinical experience of medical school students. This has shown that increased empathy level of population that is in directly contact with patients. Conducting similar studies with different diseases and large volunteers will strengthen our results.

**Key words:** Awareness level, medical faculty students, metabolic syndrome, survey study

## PP-4

## The Adaptation of COVID-19 Patients on Treatments

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**Introduction:** Coronavirus disease-2019 (COVID-19), which causes serious respiratory illness such as pneumonia and lung failure, was first reported in Wuhan, China. The etiological agent of COVID-19 has been confirmed as a novel coronavirus, now known as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Within a few months of the first report, SARS-CoV-2 had spread across China and worldwide, reaching a pandemic level. Currently, there is not any specific approved antiviral treatment for COVID-19. Some pharmacological agents were used worldwide including chloroquine, hydroxychloroquine, favipiravir and remdesivir. These drugs have some side effects like all chemicals. That makes people anxious about treatments. Nowadays, some patients with COVID-19 are refusing their treatment. In this study, our aim is to evaluate people's knowledge levels and hesitation about both COVID-19 treatments and vaccination.

**Method:** A survey was conducted for people who had home isolation during their COVID-19 infection between March 2020-May 2021. The survey was conducted online via google form platform. Percentage calculations and Fisher Freeman Halton test were used in data analysis.

**Results:** One hundred forty-seven COVID-19 patients participated in the study. 43% of the patients did not use the medications given for COVID-19. There was no significant difference in treatment hesitation during COVID-19 periods ( $p>0.05$ ). The patients who have severe weakness ( $p=0.02$ ) and severe muscle pain ( $p=0.01$ ) symptoms were more likely to use their medications regularly. Weakness (84%), headache (70%) and muscle pain (67%) were the most common symptoms in these patients. A close relation was found between vaccination and medication hesitancy ( $p<0.001$ ). 18% of the patients still refuse the vaccination.

**Conclusion:** After 18 months of a pandemic, there are still reliance problems about both medication and vaccinations that we must get over to end it.

**Key words:** COVID-19 treatments, vaccination, medication hesitancy

PP-5

## Effects of Ketogenic Diet on Rat Model of Sporadic Alzheimer's Disease

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**Introduction:** In this study, we investigated the time-dependent effect of ketogenic diet on cognitive functions in STZ-induced Alzheimer's Disease (AD) model of rats considering the epigenetic effects of feeding on AD.

**Method:** *Sprague-Dawley* male rats were randomly divided into 6 experimental groups: prophylactic (fed with ketogenic diet for 4 months), therapeutic (fed with ketogenic diet for 2 months after icv-STZ injection), positive drug (donepezil), STZ-group (3 mg/kg), Sham control and control groups weekly weights were monitored throughout the experiment and at the end of the 4<sup>th</sup> month the animals were subjected to the behavioral tests (open field, passive avoidance, rotarod and Morris water maze) and euthanized for blood collection and molecular analysis.

**Results:** According to the repeated measure ANOVA, ketone diet did not make any difference among groups in terms of body weight ( $p=0.281$ ). The ketone levels of the prophylactic group were significantly higher than other groups before STZ-injection and at the end of the experiment ( $p=0.03$ ). Parallel to ketone levels, glucose levels of the prophylactic group was significantly lower than other groups ( $p\leq 0.05$ ) before the STZ-injection. In the passive avoidance, as we expected, the STZ group showed worse performance than others ( $p<0.05$ ) and a significant improvement in the memory were noted in the prophylactic and therapeutic groups compared to the STZ group ( $p\leq 0.007$  and  $p\leq 0.009$ , respectively). In the Morris water maze, the STZ group performed lower performance than the control group ( $p\leq 0.022$ ), while the ketogenic diet in the prophylactic group had a positive effect on memory. No improvement was noted in the therapeutic group.

**Conclusion:** In this study, we observed that there was a prophylactic effect of ketogenic diet consumption on the memory performance of rats with STZ-induced neurodegeneration.

**Key words:** Alzheimer's disease, ketone diet, rat, prophylactic, therapeutic

## PP-6

## Cause of Meningitis in Neonates and Young Infants and the Evaluation of Laboratory Results

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**Introduction:** Meningitis is the acute inflammation of meninges, which results from infection. Different pathogens are responsible. Due to high mortality and serious disabilities the most common pathogens and laboratory results should be known for quick diagnosis. The purpose of our study is collect information about common microbial agent and evaluate laboratory results among infants under three months of age with bacterial meningitis in Turkey.

**Method:** In this study infants <90 days of age who undergo diagnostic lumbar puncture were divided two groups: suspected cases and proven cases of meningitis. Proven meningitis was defined as the detection of bacteria from cerebrospinal fluid (CSF) by culture. Suspected meningitis was defined by meeting the laboratory criteria. Data collected via the nucleus system, which is the electronic database contains patient's information in Bezmialem Vakıf University Medicine Faculty Hospital included demographics, laboratory and microbiologic results.

**Results:** There were 52 patients in the suspected meningitis group, and 20 patients in the proven meningitis group. The median neutrophil value and CSF protein value in the hemogram of cases with proven meningitis were found to be statistically significantly higher than that of cases of proven meningitis (in order of  $p=0.049$  and  $p=0.040$ ). Meanwhile, the median lymphocyte value and median CSF glucose value in the hemogram of cases with evident meningitis were found to be statistically significantly lower than that of cases of proven meningitis (in order of  $p=0.029$  and  $p=0.048$ ). The most common agents in CSF cultures of proven meningitis cases were staphylococcus hominis (30%) and staphylococcus epidermidis (15%).

**Conclusion:** The most common agents in CSF cultures were staphylococcus species. While blood neutrophil and CSF protein levels were found to be higher in microbiologically proven cases, blood lymphocyte and CSF glucose levels were higher in suspected meningitis cases.

**Key words:** Suspected meningitis, proven meningitis, neutrophil, lymphocyte, CSF protein, CSF glucose

PP-7

## Anatomic Variations in Coeliac Trunk and Distribution in the Turkish Population

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**Introduction:** Coeliac trunk arises at the Th12-L1 vertebrae and trifurcates into the left gastric, common hepatic and splenic artery. According to the recent studies, this trifurcation has numerous variations. The aim of this study is the determination of variations frequency in our population Turkey.

**Method:** Abdominal computed tomographic angiography (CTA) was used to collect data. All CTA was performed on a 128-row multidetector CT scanner. Michels and Uflaker's classifications were used to determine patients' variations. We analysed splenic, left gastric and common hepatic arteries' origins for Uflaker's classification and classified them into 8 groups. We also analysed right hepatic, left hepatic, accessory left hepatic and accessory right hepatic arteries' origins for Michels classification and classified them into 10 groups. These two classifications gave us all structures of celiac trunk's anatomy. The CTA images of 384 patients were accessed, and 77 patients who met the inclusion criteria were included in the study.

**Results:** Seventy-seven patients who were between 18 and 80 years old were analysed with CTA scan. 43 of 77 patients were male and mean age was 55.3117. Michels classification's results: type-1 64.9%, type-2 3.9%, type-3 9.1%, type-5 5.2%, type-6 6.5, type-7 3.9, type-9 6.5. Uflaker's classification results: type-1 89.6%, type-2 1.3%, type-5.7.8%, type-8 1.3%. In both classifications, type-4 variations were not observed. There were no statistically significant differences between gender and Uflaker or Michels' classification. Additionally, there was no correlation between age and anatomic variations in both Uflaker and Michels' classifications.

**Conclusion:** The result of this study show that there is no correlation between age and anatomic variations. Additionally, there is no significant differences between gender and anatomic variations.

**Key words:** Coeliac trunk, anatomic variations, Uflaker classification, Michels classification

PP-8

## Evaluating the Quality of Life of Diabetes Mellitus Patients of Bezmialem Vakıf University

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**Introduction:** Diabetes mellitus is one of the most common chronic diseases that causes considerable morbidity and mortality worldwide. Diabetes has acute and chronic complications. These are hypoglycemia, ketoacidosis, lactic acidosis, nephropathy, neuropathy, retinopathy, and cardiovascular diseases. These complications significantly affect the lives of patients. The research measures the quality of life of diabetes patients. Moreover, it is to identify modifiable factors to improve the quality of life of patients.

**Method:** A total of 100 patients (50 female and 50 male) between the ages of 40-80 applied to Bezmialem Vakıf University Hospital Family Medicine and Diabetes Polyclinic between January 2021 and January 2022. We used the 36-Item Short-Form Health Survey questionnaire in our study. The scale is more than 100 points and high scores on the scale indicate a high quality of life. Questionnaires were asked of the patients after their admission to the outpatient clinic.

**Results:** It was found that it is statistically significant that the quality of life decreases with increasing age in diabetes patients ( $p<0.05$ ). It was statistically significant that the increase in body mass index and the presence of additional diseases had a negative effect on the quality of life ( $p<0.05$ ). It was found that the quality of life of female patients was statistically significantly lower than that of men ( $p<0.05$ ). A statistically significant negative correlation was found between the duration of diabetes and the quality of life of patients ( $p<0.05$ ).

**Conclusion:** Diabetes mellitus affects the quality of life of patients. The quality of life can be improved by reducing the body mass index and ensuring the control with existing diseases.

**Key words:** Diabetes mellitus, quality of life, SF-36

## PP-9

## Determination of SUDEP Score of Patients Followed in Epilepsy Outpatient Clinic

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**Introduction:** Epilepsy is a central nervous system disorder that affects nerve activity in the brain and causes seizures. Sudden Unexpected Death in Epilepsy (SUDEP) is defined as the sudden and unexpected epilepsy patient death, unexplained for another reason. SUDEP is an underrated subject in Turkey. This study determines the SUDEP scores of epilepsy patients at the neurology outpatient clinic.

**Method:** This study analyzes the data for epilepsy patients who applied to the Neurology Outpatient Clinic between May 2019 and May 2020. This study uses the following data: demographic data, seizure type-frequency, onset age, used antiepileptic drugs, EEG-Cranial MRI findings. We categorize the patients as focal generalized and unclassifiable epilepsy and fill the SUDEP-7 inventory form. Those with a SUDEP-7 score of four or higher were considered high risk. The patients were divided into those with high and low SUDEP-7 scores, and the evaluated parameters were statistically studied in this respect.

**Results:** We analyze data for 224 patients, 114 (50.9%) were female. Fifty-nine patients were generalized, 122 focal, 43 unclassifiable. Forty-five patients were IGE, 78 were symptomatic focal, 97 were cryptogenic focal, 4 were acute symptomatic seizures. The mean SUDEP score was  $0.93 \pm 1.77$ . The SUDEP score was 0 in 151 (70%). SUDEP-7 score was high in 24 patients (10.7%). The SUDEP-7 score was significantly higher in patients whose neurological examination was pathological ( $p < 0.01$ ), seizures started before the age of 18 ( $p < 0.03$ ), had drug-resistant epilepsy ( $p < 0.01$ ), used multiple anti-seizure drugs ( $p < 0.01$ ). There was no significant difference in age ( $p = 0.6$ ), gender ( $p = 0.7$ ), the presence of additional disease ( $p = 0.053$ ).

**Conclusion:** In previous studies, no patient died from SUDEP during the study period. However, the probability of SUDEP was higher in patients whose neurological examination was pathological, seizures started before the age of 18, and seizures could not be controlled with two or more Automated external defibrillators, and this group comprised 10.7% of our epilepsy outpatient clinic.

**Key words:** Epilepsy, SUDEP, SUDEP-7 inventory

## Perspectives of Bezmialem Foundation University Faculty of Medicine Students on Distance Education in the Pandemic Process

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**Introduction:** Coronavirus disease (COVID) emerged in Wuhan in December 2019 and was declared a pandemic disease by World Health Organization on March 11, 2020. Due to pandemic restrictions, distance education has been implemented. In this study, we investigated the perspective of Bezmialem Vakıf University Faculty of Medicine on distance education in the COVID-19 pandemic.

**Method:** Our research was carried out among the students of Bezmialem Vakıf University. A total of 200 (106 female and 94 male) students from all levels of the medical faculty were included. Dundee Current Educational Environment Rating Scale (DREEM-TR), consisting of 43 questions, was used as a scale. In the scale, there are questions in the dimension of students' perceptions of teaching, of their perceptions of educators, of their perceptions of their academic skills, of perceptions of learning climate, and of perceptions of the social environment. High scores indicate that individuals have a positive perception of their educational environment, while low scores indicate that this perception is negative.

**Results:** In the dimension of students' perceptions about teaching, in terms of gender and personal equipment, perceptions of the instructor and their academic skills in terms of personal equipment and their working environment, and in the dimension of perceptions regarding learning climate, it was found statistically significant in terms of personal equipment and gender ( $p < 0.05$ ). No statistically significant comparison was found in terms of social environment perceptions and students' periods ( $p > 0.05$ ).

**Conclusion:** The DREEM-TR scale is a suitable tool for evaluating the learning environment and important findings of the education program were obtained in the study. It will be very effective in creating new programs in faculties with intensive education programs such as medical faculties.

**Key words:** COVID-19, DREEM-TR, education, e-learning

PP-11

## The Association between Tobacco Smoking and Education/ Stress Levels: Causation or Correlation?

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**Introduction:** This study was designed to survey the effects of education and stress levels on tobacco smoking. Our aim was to evaluate the association between tobacco usage and education/stress levels; to determine whether they affect each other and if so, how. This information could be used for future studies and direct authorities to the right track for helping others cease smoking.

**Method:** A total of 216 participants (71 Male, 145 Female) were included in this study. There were 94 smokers (43.5%) and 122 non-smokers (56.5%). The mean of age was  $34.4 \pm 0.7$ . They were chosen randomly amongst Bezmialem Vakıf University students, faculty members and their acquaintances. A modified version of Fagerström Nicotine Addiction test and Perceived Stress Scale was used to measure the nicotine addiction of smokers, and stress levels of the participants. Statistical analysis was done on collected data using SPSS 25. The level of significance in the study was taken as  $p < 0.05$ .

**Results:** Smoking is found to be decreasing with increasing education levels to a certain degree (25.6% of the Graduates were smoker), then increasing afterward (63.6% of the Doctorates were smoker). Smoking is found to be less in healthcare workers (31.1%) than others (55.5%). A statistically significant difference was found when smoking and education levels, smoking and being a healthcare worker, being a healthcare worker and stress were compared (Respectively,  $p < 0.001$ ,  $p < 0.001$ ,  $p = 0.017$ ).

**Conclusion:** In previous studies smoking was associated with stress and poor education levels. In our study it's determined that smoking in fact decreases with education but increases again afterwards with higher levels of education. This result could be related to the stress that comes with higher education. Further research is needed.

**Key words:** Tobacco smoking, education, perceived stress

## Bezmialem Vakıf University Faculty of Medicine Students' Knowledge About Blood and Blood Products Transfusion's Evaluation

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**Introduction:** Blood transfusion is the process of delivering blood and blood products directly into a patient's circulatory system. There have been many studies on blood and blood product transfusions until today; Generally, the results of surveys conducted to measure the knowledge of transfusion medicine among physicians, residents, and undergraduate medical students have demonstrated the need for additional training in this field. With this study, we evaluated the achievement level of the targets in the transfusion medicine field and the factors affecting the achievement of the Medical Doctors who are about to graduate from Bezmialem Vakıf University Faculty of Medicine.

**Method:** The study was planned as a survey study with the participation of Bezmialem Vakıf University Faculty of Medicine students. 3 groups were selected as 4-5-6<sup>th</sup> grades. Our sample size is to be 25 students for each group ( $n_1=n_2=n_3=25$ ) making in 75 students. The sample has a 95% confidence level. IBM SPSS v.25 Was used for statistical analyses. Chi-square, Mann-Whitney U, and Kruskal-Wallis tests were used for parametric and nonparametric data, respectively.  $P<0.05$  was accepted as statistically significant.

**Results:** A statistically significant difference was found between 4<sup>th</sup> and 5<sup>th</sup> grades ( $p=0.001$ ), 5<sup>th</sup> and 6<sup>th</sup> grades ( $p=0.001$ ), and 4<sup>th</sup> and 6<sup>th</sup> grades ( $p<0.001$ ) in the 5<sup>th</sup> and 8<sup>th</sup> questions, which have a special importance for us in transfusion. According to the analysis results of our questionnaire, a significant difference was found between the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> grades ( $p<0.001$ ).

**Conclusion:** The result of our survey shows that from the 4<sup>th</sup> grade to the 6<sup>th</sup> grade, the knowledge of transfusion medicine increases significantly. This information supports that Bezmialem University is a competent and exemplary institution in this field.

**Key words:** Blood, blood products, transfusion, knowledge, medicine students

PP-13

## Evaluation of OSCE Applied in Internship Exams at Bezmialem Vakıf University with the Feedback Received from Students and Faculty Members

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**Introduction:** Feedback surveys from students and faculty members provide positive results for the evaluation of clinical education and program development. In the study, it is evaluated the “Objective Structured Clinical Examination” (OSCE) implemented in our faculty with the feedbacks and questionnaires received from the students and faculty members.

**Method:** Although the study was conducted in the 2020-2021 academic year, the experiences of the faculty members in the past years were also included. A total of 47 faculty members and 287 students participated in the survey. The questionnaire consists of ten questions questioning OSCE practices. Scoring was made according to the 5-point Likert system. The prepared questionnaires were applied digitally to all 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> grade students and medical faculty members.

**Results:** When the survey results were evaluated, it was determined that the OSCE created more stress on students than other exams ( $p=0.001$ ). It was also claimed that some of the simulated patients in all classes had problems ( $p=0.000$ ). While most faculty members think the OSCE is fair, every class thinks otherwise ( $p=0.000$ ). Additionally, faculty members find the time limit in OSCE sufficient, unlike students ( $p=0.000$ ). Likewise, faculty members think that students are given sufficient explanation before the OSCE exam, while students disagree. However, both parties are against only written/oral exams ( $p=0.000$ ). Instead, both sides think that OSCE supports learning by experience ( $p=0.015$ ).

**Conclusion:** Learning by doing and experiencing is the most important part of medical education. Although students may find the OSCE exams stressful, it is a preparation for their professional life. It has been stated by both students and faculty members that only oral and written exams are not sufficient in the evaluation stages in medical education.

**Key words:** Medical education, OSCE, medical students

## Relation Between Severity of Acute Pancreatitis and Steatohepatitis

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**Introduction:** Acute pancreatitis is a reversible inflammation of the pancreas and can occur due to many etiologies such as alcohol and trauma. Many factors are responsible for the progression to severe acute pancreatitis and one of them is fatty liver, which is an often finding in severe acute pancreatitis (AP) patients. Many scoring methods can be used to predict the progression of acute pancreatitis to severe acute pancreatitis. The severity of AP was defined as the following three degrees: mild AP, moderately severe AP, and severe the mild acute pancreatitis means that there is no local and systemic complications nor organ failure and most cases are in this category. In moderately severe pancreatitis, local complications or reversible organ failure and the last one is severe acute pancreatitis has permanent organ failure.

**Method:** One of the most common methods used to diagnose fatty liver is non-contrast computed tomographic (CT). Some research has shown that difference between liver and portal vein and Aorta HU ratio in contrast-enhanced CT can be useful to show fatty liver. Among 170 patients with acute pancreatitis, 92 patients were included in the study. Contrast-enhanced CT images taken in the first 24 h of these patients were examined.

**Results:** Stage C and D patients were evaluated as the first group, and stage E patients as the second group. According to the formula When the first and second group HU values were compared and no significant correlation was found between HU values ( $p=0.208$ ).

**Conclusion:** because of this study fatty liver can be demonstrated using contrast-enhanced CT, but the use of HU value as an indicator of necrosis was not significant.

**Key words:** Steatohepatitis, acute pancreatitis, fatty, liver, contrast-enhanced CT

PP-15

## Evaluation of Anxiety Caused by COVID-19 Among Medicine Students in Bezmialem University

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**Introduction:** The New Coronavirus Disease (COVID) is a virus that was first identified on January 13, 2020, because of research conducted in a group of patients who developed respiratory symptoms in Wuhan Province in late December. At the current stage, the epidemic brought not only the risk of death due to infection but also unbearable psychological pressure. This study investigates the effect of the COVID-19 pandemics on anxiety of the students of Bezmialem Vakıf University Medical School.

**Method:** Our research was carried out among the students of Bezmialem Vakıf University. A total of 110 (71 female and 39 male) students from all grades of the medical faculty were included. STAI I II (State-Trait Anxiety Inventory I II), consisting of 40 questions, was used as a scale. This inventory includes two self-report scales with 20 questions. The trait anxiety scale is used to describe how subjects generally feel (STAI-T), and the state anxiety scale reflects a response at a specific moment in time (STAI-S). The total score obtained from both scales varies between 20 and 80. High scores indicate high anxiety levels, low scores indicate low anxiety levels.

**Results:** State and trait anxiety scale of preclinical and clinical students were found to be statistically significant when the scores were compared ( $p < 0.05$ ). Kruskal-Wallis test and Dunn-Bonferroni post hoc test was used for pairwise comparisons. Most of the questions related to gender, getting infected with COVID and anxiety did not show statistical significance ( $p > 0.05$ ).

**Conclusion:** According to the results, anxiety increased more in those who received practical training compared to the group that received theoretical training. The findings from this study can be used in universities and other institutions to plan interventions that improve students' mental health.

**Key words:** COVID-19, medical students, anxiety, STAI

PP-16

## The Prevalence and Possible Risk Factors of Cardiovascular Diseases in Patients with COPD

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**Introduction:** Chronic obstructive pulmonary disease (COPD) is one of the respiratory disorders. COPD is characterized by chronic airflow limitation and pathological changes in lungs. It is a common cause of deaths in the world with its comorbidities. The major comorbidity of COPD is cardiovascular diseases (CVD). This study aims to reveal the rates of CVD in individuals with COPD and to determine possible risk factors for CVD in patients with COPD.

**Method:** There was a questionnaire titled “Determination of CVD Rates and Possible Risk Factors for CVD in individuals with COPD” prepared by researchers. It consisted of a few questions prepared with a 3-point and a 5-point Likert Scale, and 20 questions with yes-no answers and demographic information. Questions were asked to 120 patients with COPD who applied to Çanakkale Çan Hürriyet Family Health Center (FHC). The resulting data analyzed with Ibm SPSS Statistics 22.0.

**Results:** There was a significant difference between being elderly and having COPD for years ( $p=0.001$ ). 46.7% of patients with COPD were between the ages of 61 and 70. Only 44 (36.7%) patients with COPD out of 120 people had normal weight and 106 (88.3%) of 120 patients were men. 77 (64.2%) patients were exposed to smoke in their lives. However, there was no significant difference between smoking and time to be diagnosed with COPD ( $p=0.141$ ). Seventy-six (63.3%) patients out of 120 worked in dusty environment. Big proportions of 120 patients with COPD had hypertension and diabetes as CVD. It was found that people who had previous lung infections were diagnosed with COPD at an earlier age ( $p=0.024$ ).

**Conclusion:** Being elderly, male gender, smoking, previous lung infections, dust in workplace are possible risk factors of CVD in patients with COPD who applied to FHC.

**Key words:** COPD, CVD, family health center

PP-17

## Comparison of the Effect of COVID-19 Pandemic on Psychological Adjustment, Vaccination Attitude and Sleep Quality of Medicine and Dentistry Students

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**Introduction:** The first coronavirus case in Turkey was seen on March 11, 2020. Since that day many people have been infected and some have died because of it. The epidemic brought not only the risk of death from infection but also psychological pressure. We investigate the psychological and sleep attitude of medical and dentistry students during the pandemic.

**Method:** This cross-sectional survey of college students was conducted in Bezmialem Vakıf University from 7 July to September 2, 2021. The survey was completed by 202 college students, 117 of whom were medicine students and 85 were dentistry students. Participants completed a self-administered anonymous web-based survey. We used Beck's Depression Inventory, Beck Anxiety Inventory, Pittsburgh Sleep Quality Index, Coronavirus Anxiety Scale and coronavirus disease (COVID-19) Vaccination Attitude Scale.

**Results:** Depression and anxiety symptom prevalence was 59.40% and 47.02%; 57.92% had poor sleep quality. According to the Pittsburg Index, a significant difference was found in sleep quality between medicine and dentistry students ( $p=0.002$ ). When compared according to gender, significant differences were found between women and men in anxiety and depression.  $P<0.001$  for Beck Anxiety Scale, the median of Beck Anxiety Scale found 13,48 for women and 7.62 for men;  $p=0.001$  for Beck Depression Scale, the median found 13 for women and 10 for men. The results of the COVID-19 anxiety scale were found to be higher in those diagnosed with COVID-19 infection ( $p<0.001$ ).

**Conclusion:** Our study revealed a high prevalence of sleep disorders, depression and anxiety levels in university students during the COVID-19 pandemic. Females, medical school students, those who were diagnosed with COVID-19 infection, those who did not get vaccinated were at high risk of mental illness and poor sleep quality.

**Key words:** COVID-19, coronavirus, anxiety, depression, sleep quality, vaccination attitude

## Retrospective Analysis: How Many Patients who Visit Urology Clinic with Flank Pain Have Actually Urologic Problems?

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**Introduction:** Flank pain is a feeling of agony located below the ribs and above the ilium. Acute flank pain is a common clinical problem that occurs due to many urinary or extra-urinary causes. In this study, we compare the frequency of causes of flank pain in patients who applied to urology clinic with flank pain and to show whether it can be used to make the distinction by examining parameters that often accompany flank pain.

**Method:** A retrospective study was undertaken of 947 patients who applied to Bezmialem Vakıf University Hospital Urology Outpatient Clinic with flank pain. The patients were divided into 2 main groups as urologic and non-urologic patients according to final diagnoses made by the hospital. Past medical history, laboratory findings, symptoms and signs were analyzed and compared between these groups.

**Results:** Frequency of the urologic causes of flank pain was 74%. Rates of kidney stone was 48%, ureter stone was 11%, urinary track infection was 7%, kidney, and ureter stone was 1% and other urologic causes was 7%. In the non-urologic group rates were listed as follows; orthopedic causes 7%, gynecologic causes 3%, gastrointestinal causes 2%, other unidentified causes 11%. Rates of urinary stone ( $p<0.001$ ), extracorporeal shock wave lithotripsy ( $p<0.001$ ), urological surgery ( $p=0.035$ ), abdominal surgery ( $p<0.001$ ) in past medical history were significantly higher in the urologic patient group. rates of dysuria ( $p<0.001$ ), macroscopic hematuria ( $p<0.001$ ), costovertebral angle tenderness ( $p<0.001$ ), microscopic hematuria ( $p<0.001$ ), pyuria ( $p<0.001$ ) and creatinine levels ( $p<0.001$ ) were significantly higher in urologic patients than in non-urologic patients.

**Conclusion:** It's been shown that notable number of patients who applied to urology clinic with flank pain was referred to wrong department, also some symptoms and findings can be used as guidance for managing these patients.

**Key words:** Flank pain, renal colic

PP-19

## Investigation of the Effect of COVID-19 Epidemic on Obsessive Compulsive Disorder Patients and Its Relationship with Cognitive Level

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**Introduction:** Obsessive-compulsive disorder (OCD) is a chronic illness diagnosed by the presence of repetitive, unwanted thoughts, impulses or images (obsessions) and repetitive behaviors (compulsions). OCD has different subtypes. Contamination obsessions and excessive cleaning compulsion are the most common. Coronavirus disease 2019 (COVID-19) pandemic first started in China in December 2019 and is still spreading worldwide. Social distancing, quarantine, avoiding contamination can trigger obsessive symptoms. Therefore, patients with OCD may be more susceptible to COVID-19 fears than others and may be at risk of relapse of OCD symptoms. Our study investigates the impact of the pandemic on OCD symptoms.

**Method:** In our study, an 18-question sociodemographic form, a 12-question Cognitive flexibility scale and 7-question Fear of COVID-19 Scale were filled in by 32 patients with a diagnosis of OCD. The 19-item Yale-Brown Obsession Compulsion scale was used to diagnose and assess the severity of the OCD symptoms. Additionally, 14-item Hamilton anxiety scale and 17-item Hamilton depression scale were evaluated while interviewing the patient for exclusion criteria.

**Results:** The study reveals a moderately positive significant relationship among the Fear of COVID-19 Scale and q18 ( $r=0.34$ ) ( $p=0.05$ ). Also, the result of the examination demonstrates moderately negative significant relationship among obsession and cognitive flexibility scale ( $r=-0.38$ ) ( $p=0.031$ ). However, this research shows no significant relation between YBOS and flow cytometry standard.

**Conclusion:** Our study was validated because patients who reported an increase in OCD symptoms had higher fear of COVID-19 than others. If the patients had been followed up with the YBOS scale before the pandemic, the change could have been seen more clearly. We will continue to collect data to get better results.

**Key words:** COVID-19, Obsessive-compulsive disorder (OCD), cognitive flexibility

# Investigation of Sleep Quality and Sleep Characteristics in Patients with Celiac Disease

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**Introduction:** Celiac disease (CD) is a chronic immune-mediated enteropathy caused by exposure to dietary gluten and related proteins in genetically predisposed individuals. CD is one of the most common autoimmune diseases. The clinical presentation of CD varies, and patients can present with a spectrum of intestinal and extraintestinal symptoms. Individuals with autoimmune disorders often experience disrupted sleep. Sleep deprivation causes several pro-inflammatory cytokines to increase. In people with autoimmune disorders, this dysregulated homeostatic cytokine production leads to sleep disturbances. However, sleep deprivation may involve a breakdown of immunological self-tolerance, which allows autoimmune disorders to develop. Chronotype and sleep disturbance are both considered risk factors for chronic autoimmune diseases. Although there have been studies that widely investigated the relationship between sleep disorders with both gastrointestinal and autoimmune diseases; we haven't found any study on the same relationship with celiac disease. Therefore, we investigated the chronotype and sleep quality in patients with CD.

**Method:** Sixty-five patients with CD and 65 healthy people were prospectively enrolled in the study. Chronotype and sleep quality were assessed using the Horne-Östberg Morningness Eveningness Questionnaire and Pittsburg Sleep Quality Index. Scores and the results were compared to healthy controls.

**Results:** A total of 130 people were included in the study. Of these people, 65 were patients with CD and 65 were healthy controls. Morningness were more common in patients with CD compared to controls. (35.4%, 21.5%,  $p=0.027$ ). However, there was no difference in terms of sleep quality.

**Conclusion:** Morningness was more common in patients with CD compared to controls. Nonetheless, we haven't determined any difference in sleep quality.

**Key words:** Celiac disease, sleep quality, sleep characteristics

PP-21

## Retrospective Analysis: The Effect of the Seasonal Changes on the Frequency of Urinary System Stone Operations

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**Introduction:** Urinary stone is a common disease in the population, global prevalence is between 5% and 13%. In the pathogenesis of the urinary stone formation, numerous factors, including race, sex, obesity, fluid intake, diet and temperature are responsible. In the literature, there are many studies for climate-based changes of the urinary stones' frequency, but it is still not enough for the seasonal effect. The main goal of this study is to compare the numbers of the urinary stone operation cases in different seasons.

**Method:** According to seasons, 841 urinary stone operations and as a control group 509 transurethral resection of the prostate (TUR-P) operations between January 1, 2018 and December 31, 2020 were categorized into seasonal groups (spring, summer, autumn and winter). Statistical analysis was performed using IBM SPSS Statistics Version 22.0. Categorical variables were analyzed using chi-square test. The value of  $p < 0.05$  was considered statistically significant.

**Results:** A total of 841 urinary stone operations were analyzed. The seasonal distribution of urinary stone operations was 19.3% (n=162) in spring, 27.8% (n=234) in summer, 26.3% (n=221) in autumn, 26.6% (n=224) in winter and in the control group TUR-P, there were 509 patients: 15.9% (n=81) in spring, 22.2% (n=113) in summer, 29.7% (n=151) in autumn and 32.2% (n=164) in winter (chi-square:10.64,  $p=0.014$ ). The urinary stone operation rate was significantly higher in summer compared to spring (27.8% vs. 19.3%,  $p < 0.05$ ) and in summer compared to TUR-P operations in summer (27.8% vs. 22.2%  $p < 0.05$ ).

**Conclusion:** There is a positive correlation between the temperature and the number of urinary stone operations, which is significantly higher in summer. Healthcare services should be prepared for the increase in the number of operations in the summer.

**Key words:** Urinary stone, season, temperature

## Attitudes Toward Vaccination: A Cross-Sectional Survey of Medical Students at Bezmialem Vakıf University

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**Introduction:** Coronavirus disease-2019 (COVID-19) is caused by severe acute respiratory syndrome COVID. In addition to providing direct immunity and preventing disease among vaccinated individuals, vaccines reduce infections, even among unvaccinated individuals, if a sufficient portion of the population is immunized. We evaluated the intention to vaccinate against COVID-19 among national medical student representatives in Turkey. To target future efforts to encourage vaccine uptake, we wanted to identify the determinants of intention to accept or refuse the vaccine

**Method:** A web based cross-sectional study designed to the attitudes toward COVID-19 vaccination among medical students in 5<sup>th</sup> and 6<sup>th</sup> grade at Bezmialem Vakıf University. Study tool will be a questionnaire including the socio-demographic factors, and questions related to vaccine such as attitudes and intentions toward COVID-19 vaccine, underlying the knowledge of vaccine immunity, history of vaccination. The sample size will be 138 participants, using a margin error  $\pm 7\%$ , a confidence level of 90%.

**Results:** One hundred thirty-nine medical students participated in our study. Our data strongly suggest that acceptance of COVID-19 vaccine among medical students is significantly high in the students who lost a relative due to COVID-19 ( $p < 0.05$ ). 10% of the participants have been infected with COVID. 77.9% of the participants answered yes that at least one of their relatives have been infected with COVID. 20.7% of the participants answered "yes" that they have lost a relative of their's.

**Conclusion:** Acceptance of COVID-19 vaccine among medical students were significantly high among the students who lost their relatives due to COVID-19. However, four students refused to get vaccinated due to their worries about possible sideeffects.

**Key words:** COVID-19, coronavirus, COVID vaccine, SARS-CoV-2

PP-23

## Acute Poisoning in Children Admitted to the Pediatric Emergency Department

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**Introduction:** Poisoning is explained as the exposure of a person to a substance that could cause symptoms and signs of organ dysfunction leading to injury or demise. Acute childhood poisoning is critical because it is a cause of morbidity and mortality which can be undoubtedly and adequately controlled by preventive and educational measures. Epidemiological data of acute childhood poisoning are very crucial not only for effective preventive planning but also for therapeutic approaches in emergency department. We want to contribute to epidemiological data of our own region.

**Method:** This retrospective descriptive study was conducted during the period from April 2020 to March 2021. SPSS was used for analyses, and a p-value of less than 0.05 was considered statistically significant.

**Results:** In our study 176 children were admitted to our emergency department. Among those children 86 of them (48.9%) were girls and 90 of them (51.1%) were boys. In nearly all cases (90.3%) the route of exposure was oral route. The two substances that partake a role in poisoning the most were drugs and cleaning products with the percentages of 47.2 and 42.6 respectively. By looking at gender and route of exposure we see a significant relation in Pearson chi-square test ( $p=0.032$ ). In the relation between gender and intent of poisoning we found a significant relation in Pearson chi-square test ( $p=0.07$ ). When we analyzed age from Mann-Whitney U test we saw that there were three significant relation that were with gender ( $p=0.045$ ), substance ( $p=0.00$ ) and passed time ( $p=0.040$ ) that was also a positive correlation.

**Conclusion:** Even though we have obtained useful data with our study, a prospective study should be organized for the epidemiological data of acute poisoning in children in our region.

**Key words:** Poisoning, emergency, epidemiological data

## Evaluation of Knowledge and Attitudes Regarding Vaccinations Among Medical Students

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**Introduction:** Vaccination is an important health strategy in childhood diseases. Despite this, public health authorities are facing a growing reluctance from parents to vaccinate their children. Previous studies show that knowledge and attitude of physicians, correlate with the vaccination rates. This study aimed to evaluate the knowledge and attitudes towards vaccinations among medical students from different grades. There are several studies in literature on this case.

**Method:** The online questionnaire, which consists of 44 questions, is applied to 122 medical students at Bezmialem Vakıf University and categorized into two groups by their grades: group 1 (1<sup>st</sup> grade students who didn't receive a lecture about vaccinations, n=60) and group 2 (4<sup>th</sup> and 5<sup>th</sup> grade students who received the lecture, n=62). The relation of knowledge level and attitudes toward vaccines with the grade, was evaluated using the Pearson chi-square test and Fisher-Freeman test.

**Results:** It is revealed that group 2 has significantly higher mean knowledge scores than group 1 ( $p<0.05$ ). Group 2 is more confident about their vaccination knowledge and has more correct answers than group 1 on questions about vaccines for babies and health-care workers ( $p<0.001$ ), contraindications for the second dose of vaccines ( $p<0.05$ ). Group 2 trusts the safety of vaccines more than group 1 ( $p<0.001$ ). Most both groups think that they would inform parents about vaccines better if they had their training in earlier years of medical school (73,3%, 59,7%).

**Conclusion:** 4<sup>th</sup> and 5<sup>th</sup> grade medical students who received several lectures about vaccinations, have a higher level of knowledge and positive attitude than 1<sup>st</sup> grade medical students. Training for vaccination in the earlier years of medical school affects students' attitude, so their positive approaches to the parents may reduce the vaccine hesitancy.

**Key words:** Vaccination, medical students, vaccine hesitancy

PP-25

## Awareness and Knowledge of Diabetes Among Medical Students

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**Introduction:** Diabetes is one of the most leading causes for increased mortality and morbidity in worldwide. It is estimated that 425 million adults struggle with disease. Diabetes can be defined as a metabolic disorder with deficit in insulin secretion or lack of the specific receptors for responding insulin causing hyperglycemia. As diabetes is extremely common and has an important impact on our country, this study aims to survey the awareness and knowledge of diabetes among medical students.

**Method:** In this study, a questionnaire consists of 20 multiple-choice questions about recognising significant features, etiology, complications, causes, treatments of diabetes was performed by medical students from Bezmialem Medical University. The participants were divided into two groups according to their grades as preclinic (1-3) and clinic (4-6). P value was set valuable for being  $<0.05$ . The sample was determined as  $n_1=n_2=65$   $n=130$  for 80% power and 0.05 significance in 95% confidence level. The relation of knowledge level was evaluated using the Pearson chi-square test.

**Results:** According to study clinical students were considered more successful due to their knowledge of identifying diabetes (clinic 84.6%, preclinic 38.5%  $p<0.001$ ), recognizing its etiology (preclinic 36.9% clinic 93.8%  $p<0.001$ ) and the treatment (mean 44% preclinic, clinic 90%  $p<0.001$ ). Also, having a family member with diabetes had no contribution to knowledge ( $p=0.219$ ). Additionally, the study showed each group failed to recognize lipodystrophy as an acute complication (preclinic 9.2%, clinic 15.4%  $p=0.286$ ).

**Conclusion:** The study showed clinic group is more successful than preclinic predominantly based on their knowledge about diabetes, which proves the glory of our education system at faculty over the years. On the other hand, improvements in education especially complications of diabetes can be suggested.

**Key words:** Diabetes, preclinic, clinic

## PP-26

## Evaluation of the Relationship Between Inflammatory Markers and Post-Treatment Period in Stroke Patients

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**Introduction:** Stroke is a life-threatening medical condition. Intravenous thrombolytics (IVTi) and thrombectomy (IVTe) are the treatment options for stroke. The purpose of this study is to analyze the relationship between inflammatory markers and outcome of patients with ischemic stroke after treatment.

**Method:** This study is a retrospective, cross-sectional study. Approximately 2018-2020, patients admitted to Bezmialem Vakıf University Hospital with acute ischemic stroke were determined. Patients' demographic and neurologic data are recorded. Patients' first biochemical tests, National Institutes of Health Stroke Scale (NIHSS) scores, C-reactive protein (CRP), vitamin D-B12, uric acid levels, neutrophil/lymphocyte (N/L), monocyte/high-density lipoprotein (M/HDL) and platelet/lymphocyte (P/L) ratios evaluated.

**Results:** Fifty-five patients who had acute treatment were included in study. There were 22 female (40%) and average age was  $66.18 \pm 13.74$ . The distribution of infarcts was as follows: 39 anterior, 5 posterior and 4 both circulations. Although there was a neurological deficit, there was no acute imaging finding in 7 patients. Average onset-to-door time was  $139.9 \pm 141.42$  min. 37 patients had IVTi, 12 patients went under IVTe and 6 had both treatments. Average NIHSS score in admission was  $7.7 \pm 7.3$  and was  $4.35 \pm 7.6$  after treatment. 13 patients were completely recovered after treatment. In acute treatments, there was a significant difference in admission NIHSS scores ( $p=0.02$ ) and rate of full recovery ( $p=0.01$ ). However, there was no significant difference in NIHSS scores after treatment, prognosis, N/L, M/HDL, P/L, uric acid and vitamin B12-D. There was no significant difference in patients who had both treatments compared to others. There was no significant difference in fully recovered patients but the NIHSS score in admission was significantly low in this group.

**Conclusion:** We hypothesized that there is a relationship between the acute treatment of stroke and inflammatory findings, based on the literature. However, we did not obtain meaningful data to support this hypothesis in our study. Studies based on prospective data with a larger number of patients are needed.

**Key words:** Stroke, intravenous thrombolytic, thrombectomy, inflammatory markers

PP-27

## The Impact of COVID-19 Pandemic on Medical Students' Choice of Future Specialty

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**Introduction:** At the beginning of the coronavirus disease 2019 (COVID-19) pandemic, many medical schools initiated a temporary online education until the students are allowed to go back to the school. Thus, the students' education and their plans for the future have been greatly affected. This study finds out if the ongoing COVID-19 pandemic has caused a difference in specialties medical students plan to choose in the future.

**Method:** A web based cross-sectional study designed to assess the impact of COVID-19 on the choice of future specialty among 5<sup>th</sup> and 6<sup>th</sup> year medical students at Bezmi Alem Vakıf University. The data were collected using a semi-structured and self-administered questionnaire.

**Results:** Out of 134 students completed the questionnaire, more than half (56.0%) were females, unmarried (97.0%), had scholarship (64.9%) with mean age of 23.6 ( $\pm 1.14$  years) and ranged 22–28 years. About one-fifth (21.9%) of students have been infected with COVID-19. However, most of them (86.6%) reported that the pandemic had no effect on their choices. Before and during COVID-19 pandemic, many students wanted dermatology (77.8%), psychiatry (55.0%), ophthalmology (60.0%), physical therapy and rehabilitation (60.0%) as their specialty. Only 36.8% want special directions like emergency medicine and general surgery. About two-third (65.0%) of the students spent time studying while they were away from the hospital.

**Conclusion:** According to the results, it can be concluded that most students' choices have not been impacted by the pandemic, and that they plan to continue with their choice of specialty.

**Key words:** COVID-19, lockdown, student, future specialty, BVU, Turkey

## Antibiotic Resistance Awareness in Medical Students

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**Introduction:** Antibiotics are medicines used to treat and prevent bacterial infections in humans and other animals. The age of antibiotics began in 1928 with the discovery of penicillin by Alexander Fleming. Alexander Fleming, speech while receiving the Nobel Prize in 1945 for his discovery of penicillin and its curative effect in infectious diseases, said that if microorganisms are exposed to penicillin at doses that are not enough to kill them, after a certain period they acquire penicillin resistance. The lack of adequate training on antibiotic prescribing and unnecessary use during medical education should also be addressed as it has a major impact on the development of resistance. This research aims to question how much this knowledge, consciousness and behavior has developed in medical students. For the reasons stated above, we believe that our study will contribute to the literature.

**Method:** This research is a cross-sectional, questionnaire-based study conducted at Bezmialem University. The participating students were divided into two groups according to their grades. The first group has no prior training on antibiotics and the second group consists of trained students. The link for the questions was distributed to all participants through social media. Responses were collected on Google Sheets.

**Results:** Results of the survey shows that there was significant difference ( $p < 0.05$ ) between preclinic and postclinic groups regarding general antibiotic knowledge. However, preclinic students were more confident in their ability to prescribe antibiotics accordingly.

**Conclusion:** The results reveal that even though post clinic students had a more general knowledge about proper antibiotic usage, they weren't confident about prescribing them to patients correctly. This shows that vertical integration in the curriculum could be improved.

**Key words:** Antibiotic resistance, medical students, preclinic, clinic, antibiotics, prescription

PP-29

## Blood Glucose-Pain Correlation in Diabetic Foot Patients

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**Introduction:** Diabetes is a chronic blood glucose disorder that affects about 415 million people worldwide and has a prevalence of 9.3%. This chronic metabolic disorder modifies the characteristics of low-density lipoprotein molecules, raises the level of reactive oxygen species and impairs tissue perfusion eventually. Diabetic foot ulcers are one of these complications and may need foot amputations. This study aims to determine the correlation between blood glucose levels and pain.

**Method:** The study is a questionnaire-based study conducted at Bezmialem Vakıf University Faculty of Medicine, Department of Plastic and Reconstructive Surgery. The participating patients were asked about their pain preoperatively and postoperatively and their blood glucose levels were noted, respectively. The postoperative phase consisted of early (1-3-7 days) and late (10 or more days) phases. Patients were asked to state their pain from 0 (minimum) to 10 (maximum). 60 patients participated in this study and Spearman nonparametric correlation test was used to determine the relationship between the variables.

**Results:** All three variables including preoperative, early and late postoperative pain had a positive correlation between higher blood glucose levels. The preoperative pain levels had the most correlation ( $r=0.46$ ,  $p<0.001$ ), followed by late ( $r=0.316$ ,  $p=0.014$ ) and early postoperative ( $r=0.316$ ,  $p=0.041$ ) pain.

**Conclusion:** The results of this study suggest that higher blood glucose levels will likely lead to a higher degree of pain preoperatively and postoperatively. As the correlations are not strong enough, our results need to be confirmed with further clinical studies.

**Key words:** Diabetes, pain, blood glucose

PP-30

## Depression in Bodybuilders

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**Introduction:** Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. It affects how person feel, think and behave. It may lead to a variety of emotional and physical problems. We study the frequency of people who have been bodybuilding regularly for at least 3 years with our surveys.

**Method:** Survey has contact with the people who have been in bodybuilding for at least 3 years. In this experimental study there is a lot of health and depression scales. 5Q-5D3L Quality of Life Scale (Cronbach's alpha 0.73) - SF36 Quality of Life Scale (Cronbach's alpha between 0.73 and 0.76) - Beck Depression Criteria (Cronbach's alpha between 0.74 and 0.84). Eighty-two volunteers were asked to fill out these criteria.

**Results:** Our data strongly shows that 9 percent of the volunteers who participated in our survey was severely depressed and 20 percent moderately depressed. The mean age of the participants were 25. Twenty of them were male.

**Conclusion:** Although it is seen in minority, it concluded that sports done without a break may cause depression.

**Key words:** Depression, bodybuilders, prevalence

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## A New Evaluation for the 2020 TUBITAK Field-Based Competency Analysis of Universities

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**Introduction:** Since 2016, TUBITAK is publishing “Field-Based Competency Analysis of Universities” in order to make research comparative evaluation of universities performances, on the basis of their fields to provide. In the plotted graphics, the x-axis shows the score obtained from the quality indicators at values between 0 and 60; the y-axis shows the score obtained from the volume indicators at values between 0 and 40. This part of the study is the part where we can understand the competence of universities in the relevant field, but we found it necessary to make this part clearer. In this study, a coefficient is presented and universities in the field of internal medicine are ranked objectively.

**Method:** Within the scope of the current competency analysis study, for data related to publications and citations, 2014-2018; For the data on the projects, based on the period of 2014-2019; 160 universities were evaluated. Universities ranked in selected fields by using area calculations in the graphs.

**Results:** Universities were ranked in 10 sub-branches of internal medicine, with the help of the areas under the triangles formed, based on the competency data included in this study. While making the measurements, each score on the x (indicating quality) axis was taken as 1 cm as a scale. The mean values in the graphs are called X as a unit.

Internal Medicine (sample):

Lowest value: Kocatepe =  $0.22197X$  (13.05 point)

Mean value: X (58.79 point)

Highest value: Hacettepe =  $11.54226X$  (678.57 point)

**Conclusion:** Universities were listed comparatively in the department of internal medicine, forming a common unit.

**Key words:** Academic ranking, ranking of universities, university competency analysis

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## The Effect of Exam Stress on Eating Attitude in Medical and Dentistry Students at Bezmialem Vakıf University

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**Introduction:** Stress is a feeling of emotional or physical tension. Stress can be divided into acute and chronic. Acute stress is a person who feels stress in a short period. Chronic stress is a person who feels stress for a longer period. This stress is more challenging. Because it has damaging effects on your physical, mental, and emotional health. Eating attitudes are critical illnesses that can be difficult to treat. These attitudes can be characterized by disturbance in body image and eating behavior. This study investigated the effect of exam stress on eating attitudes in medical and dentistry students.

**Method:** The study included 98 medical students and 90 dentistry students from Bezmialem Vakıf University. Eating Attitudes Test-26 (EAT-26), Bulimic Investigatory Test Edinburgh (BITE), and Stress Coping Styles Scale (SCSS) are the scales used. The tests are given to the students as a questionnaire.

**Results:** 188 students were included in this study. Median of EAT-26 found 11,00 for medicine students and 22.00 for dentistry students. The median of BITE found 8.00 for medicine students and 11.00 for dentistry students. According to these results, dentistry students have more eating attitudes than medical students. But there is no statically significant difference was found in the rates of SCSS ( $p=0.240$ ) between medicine and dentistry students. A statistically significant difference was found in the rates of YTT-26 score ( $p<0.001$ ) and BITE score ( $p=0.018$ ).

**Conclusion:** The results of the study show dentistry students have more eating attitudes than medical students. But there is no difference found in stress levels in both groups.

**Key words:** Stress, eating attitude, students

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## Awareness and Knowledge of Palliative Care Among Bezmialem Vakıf University Students

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**Introduction:** Palliative care is a field of study that concentrates on improving the quality of life of patients and their families. Palliative care is teamwork. Although medical and nursing students must have palliative care courses during their college years, the inability to implement them in practice makes it forgettable. We expect that our study will help add information on this subject and determine the knowledge and awareness level of Bezmialem Vakıf University students.

**Method:** Our research was carried out among Bezmialem Vakıf University students. Four groups were chosen. Students from faculties of Medicine, Dentistry, Pharmacy, and Nursing were included. They were given a questionnaire consisting of 23 questions. We concluded the sample size to be in a total of 300 students, taking 75 students from each faculty. All statistical analyses were analyzed in the IBM SPSS statistics 21.0 program.

**Results:** The outcome showed that 86% of the students are aware of the concept of palliative care. The analysis of the knowledge questionnaire showed that students of the Dentistry faculty had less knowledge compared to their fellows in the faculties of Medicine ( $p<0.001$ ), Pharmacy ( $p=0.019$ ), and Nursing ( $p=0.001$ ). In terms of classes, year 2 students had less knowledge compared to year 3 ( $p=0.012$ ), 4 ( $p=0.001$ ), 5 ( $p<0.001$ ) and 6 ( $p<0.001$ ) students. No significant difference was found between genders ( $p=0.85$ ). The mean age of the students was  $22\pm 3$ . A correlation was found between the age and the total score of the participants ( $r_s=0.238$ ,  $p<0.001$ ).

**Conclusion:** Students of the university have an adequate level of knowledge and awareness about this topic. This level increases as years pass. Dentistry students lag behind their fellows in other faculties. Theoretical and practical sessions can be added to fill this gap.

**Key words:** Palliative care, awareness, knowledge, students

# The Impact of Lockdown and Physical Inactivity on the Eating Habits of Medical Students During the COVID-19 Pandemic

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**Introduction:** The quarantine process that applied against coronavirus disease 2019 (COVID-19) is an extremely important action prevent the widespread of the virus. However, this situation affects the eating habits and physical activity of our lives. This study aims to identify the change in eating habits and physical activity during pandemic among medical students.

**Method:** A web-based cross-sectional study was conducted among 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> year medical students at Bezmialem Vakif University. A universal sampling technique was recruited to collect the date from June to July 2021. The study tool was a self-administered questionnaire including the sociodemographic factors, questions related to eating habits, and physical activity.

**Results:** Out of 189 students completed the survey, 54.0% were females, and 41.3% in 4<sup>th</sup> academic year. The mean age of students was 22.58 ( $\pm 1.74$  years) and ranged between 20 and 30 years. Mean height (cm) of the females was  $1.66 \pm 0.05$  and  $1.78 \pm 0.06$  in males, mean body weight (kg) was determined as  $61.62 \pm 8.43$  in females and  $78.28 \pm 9.48$  in males. In this study, mean body mass index values ( $\text{kg}/\text{m}^2$ ) was found as  $22.26 \pm 2.74$  for females and  $24.66 \pm 2.38$  for males. The score of eating habits was stated poor (0.5%), medium (47.9%) and high (51.6%) healthy diet choices, respectively. Most of student experience low (34.9%) and moderate (56.1%) physical activity, respectively. Gender compared to physical activity was statistically significant ( $p < 0.032$ ), but Gender compared to eating habits was not statistically significant ( $p < 0.937$ ). As for the educational year compared to physical activity ( $p < 0.167$ ) and educational year compared to eating habit ( $p < 0.752$ ) were not statistically significant.

**Conclusions:** The COVID-19 related lockdown affect the eating habits of the students. Students' interests in healthy food increased with a significant decrease in physical activity.

**Key words:** COVID-19, students, medical, eating habits

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# The Relationship Between Swallowing Dysfunction and Oropharyngeal Muscle Function in Patients with Alzheimer's Disease

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**Introduction:** Alzheimer's disease (AD) causes swallowing dysfunction. Dysphagia in AD is due to neurodegeneration and swallowing apraxia and the sarcopenia. Our study aims to investigate the relationship between swallowing dysfunction and oropharyngeal muscle function in patients with AD classified according to their stages and to investigate the link between dysphagia and oropharyngeal muscle function in the patient group and control group.

**Method:** The complaints of dysphagia were evaluated with the eating assessment tool (EAT10) questionnaire. The oropharyngeal muscle function were evaluated using the orofacial myofunctional evaluation scale (OMES). The presence of dysphagia was determined by penetration-aspiration scale (PAS). The clinical dementia score (CDR) scale was used to evaluate the severity of dementia. The patient group consisted of Alzheimer's patients without swallowing difficulties due to another disease, and the control group consisted of patients who had dysphagia. Both groups consisted of people over the age of 65.

**Results:** A total of 65 people, including 32 in the patient group and 33 in the control group, were included in the study. Mean OMES in the patient group was 51.09 and 50.63 in the control group ( $p=0.909$ ). PAS mean of the patient group was 3.46 and the control group was 3.15 ( $p=0.32$ ). The mean EAT10 of the patient group was 5.78 and the control group was 12.81 ( $p=0.00$ ). No correlation could be established between the patients' CDR scores and OMES ( $p=0.472$ ), PAS ( $p=0.125$ ) and EAT10 ( $p=0.113$ ).

**Conclusion:** Dysphagia and orofacial muscle dysfunction in Alzheimer's patients were not significantly different from the control group. Even 97% of Alzheimer patient had dysphagia as severe as control group, Alzheimer patients didn't complaint of dysphagia. The severity of the dementia was not associated severity of dysphagia.

**Key words:** Alzheimer, dysphagia, OMES, EAT10

## Evaluation of the Vitamin B12 Deficiency and Anemia in 5–7 Months Infants

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**Introduction:** Vitamin B12 deficiency is a common health problem can lead to significant complications. In infants the most important cause is maternal vitamin-B12 deficiency. In infancy, vitamin B12 deficiency often occurs between 4 and 8 months and can lead to neurological symptoms. The current study determines the rate of vitamin-B12 deficiency and the factors affecting B12 levels in healthy infants aged 5-7 months.

**Method:** In this study, 77 infants aged 5-7 months were included. Epidemiological datas and laboratory results of the study group were analyzed retrospectively. Vitamin B12 threshold value was taken as 300 pg/mL, vitamin B12 levels were classified as severe, moderate deficiency and gray zone according to the ranges of 200-300 pg/mL, 160-200 pg/mL and below 160 pg/mL respectively. The relationships between vitamin B12 levels and the epidemiological and laboratory data of the cases were examined. SPSS statistical program was used to evaluate the data.

**Results:** The median level of vitamin B12 levels of 76 patients was found to be 272. In total, 60.5% of infant's vitamin B12 levels were found below the threshold. In exclusively breastfed infants; vitamin B12 levels were found lower; severe and moderate deficiency was detected in 10 and 11 infants and 16 infants in gray-zone ( $p=0.002$ ). The vitamin B12 values of 3 babies of vegetarian mothers were found severely low. No significant correlation was found between vitamin B12 values and blood parameters and epidemiological features.

**Conclusion:** In more than half of the asymptomatic infants, the level of vitamin B12 screened is below the threshold level. Our results suggested that it's essential to conduct studies and conduct a routine screening program in mothers and infants, on the evaluation of vitamin-B12 levels, which's important for neuromotor development and supply earlier.

**Key words:** Vitamin B12 level, infants

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## The Effects of COVID-19 Pandemic on Mental Health of Bezmialem Vakıf University Medical Students: A Cross-Sectional Study Using GAD-7 and PHQ-9 Questionnaires

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**Introduction:** Mental health problems are the main obstacle to academic life. Mental disease can affect social activities, motivation, and concentration, which are important factors for students who try achieving higher education. The Coronavirus disease 2019 (COVID-19) pandemic highlighted troubles that may change people's mental health. This proposal looks at how COVID-19 affect medical students' mental health in Turkey.

**Method:** A web based cross-sectional study designed to assess the impact of COVID-19 and the related mental health disorders on the medical students of 3<sup>rd</sup> and 4<sup>th</sup> grade at Bezmialem Vakıf University. The study tool will be a questionnaire including the socio-demographic factors and questions related to mental health of students (GAD-7 and PHQ-9) such as depression levels, sleep disorders and reduced interest to social activities.

**Results:** One hundred thirty-eight Bezmialem Vakıf University medical students have participated the questionnaire. The average PHQ-9 score was 11.64 (SD=6.22). Results indicate a positive significant relationship between PHQ-9 and people who had COVID-19 situations at home or loss of relatives and students who had psychological disorders before ( $p<0.05$ ). The average GAD-7 score was 9.09 (SD=6.4). Results indicate a positive relationship between GAD-7 and people who had COVID-19 situations at home or loss of relatives and class 3 students ( $p<0.05$ ).

**Conclusion:** Analysis demonstrated a higher prevalence of moderated and severe anxiety and depression symptoms among medical students during COVID-19 pandemic, significantly among medical students who had severe COVID-19 situations at home or loss of relatives because of it. Also, students had psychological disorders before have more health problems according to PHQ-9.

**Key words:** COVID-19, medical, student, mental health, GAD-7, PHQ-9

# The Accuracy of Breast Ultrasound with Subsequent Ultrasound-guided Breast Biopsy and to Evaluate Factors that Affect-Negative Predictive Value

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**Introduction:** Ultrasound (US) has played a critical role in breast cancer detection. BI-RADS is a widely used standard system for reporting breast pathology in radiology. BI-RADS categorization shows the radiological prediction of the selected lesion. While BI-RADS category 3 implies potential benign, BI-RADS 4 and 5 mean potential malignant or malignant, respectively. The aim of this study is the determine accuracy of breast ultrasound with subsequent ultrasound-guided breast biopsy and to evaluate factors that affect negative predictive value.

**Method:** Breast ultrasonography was used to collect the imaging data. BI-RADS category was used to classify lesions. BI-RADS category 4, 5 and some selected 3 lesions were included in the study. An ultrasound-guided tru-cut needle biopsy was performed on these lesions by applying local anesthesia to the breast. Biopsied lesions were sent to the pathology department. Pathological data were recorded by classifying them as benign or malignant. Breast ultrasound accuracy and factors that lead to affect negative predictive value were evaluated.

**Results:** Breast ultrasound imaging and histopathological results of 479 patients with BIRADS category 4, 5 and some selected 3 lesions that underwent ultrasound-guided tru-cut biopsy were compared. The difference between BI-RADS 3 and vs BI-RADS 4 and 5 was statistically significant ( $p < 0.01$ ). While 214 (98.2%) of 218 lesions with BIRADS category 3 were found to be benign, 4 (2.3%) of them were found to be malignant. Of those 123 lesions with BIRADS category 4, 88 (71.5%) were benign and 35 (28.5%) had malignant histopathological features. Of those 138 lesions with BIRADS category 5, 136 (98.5%) were malignant and 2 (1.5%) had benign histopathological features.

**Conclusion:** Our study results were found to be compatible with the literature.

**Key words:** BI-RADS® classification, breast cancer, ultrasound-guided tru-cut needle biopsy

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## Plasmacytomas in patients with Multiple Myeloma: Incidence, Localizations and Prognosis

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**Introduction:** Multiple myeloma (MM) is a malignancy characterized by uncontrolled proliferation of clonal plasma cells infiltrating the bone marrow. Plasmacytoma is local accumulation of monoclonal plasma cells. More than 50% of the patients who are diagnosed with plasmacytoma develop MM within 2 years. With this study, we will evaluate parameters such as incidence of developing plasmacytomas, localizations, demographic factors and some lab values. Our aim is to understand this topic further and hope to find meaningful relationships with these parameters.

**Method:** All patients diagnosed with MM who is followed up in the Hematology Department of Bezmialem Vakif University Hospital will be included in the study. The demographic data of the patients, the stages, myeloma subtype, plasma cell numbers, whether they were diagnosed with plasmacytoma and if deemed necessary, other parameters will be examined. These data will be analyzed and the frequency of plasmacytoma with myeloma diagnosis will be determined.

**Result:** 91 patients were included in this study. There were 52 female (57.7%) and 38 male (42.3%) patients. 28 of the patients (32.2%) developed plasmacytoma during the disease. In comparison between patients who developed plasmacytoma and patients who did not, there were statistically significant difference in the values of serum lambda, beta-2 microglobulin, serum creatinine, hemoglobin ( $p=0.005$ ;  $p=0.042$ ;  $p=0.050$ ,  $p=0.002$ ). There was no statistical significant difference in other parameters

**Conclusion:** In conclusion 32.2% of the patients developed plasmacytoma which can be considered high. This effect prognosis and survival of the disease. Some of the lab values were found statistically significant in this research. These might be used for predicting the probability of having plasmacytoma early on stage. More studies are needed on the relationship between myeloma and plasmacytoma because the incidence of plasmacytoma has been increased with new treatments and improved survival rates.

**Key words:** Multiple myeloma, plasmacytoma

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## Development of Addiction and Neurotoxicity Due to Long-Term Aspartame Consumption

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**Introduction:** This research clarifies the side effects of long-term aspartame consumption on central nervous system especially on cognitive functions and dopamine levels to determine it's addiction potential.

**Method:** In this study, *Wistar* rats were divided into three groups: low dose aspartame group (approximately 50 mg of aspartame/day in drinking water), high dose aspartame group (aproximately 250 mg of aspartame/day in drinking water) and a control group. After ten weeks aspartame consumption, various molecular analysis will be carried out to examine the changes occurring at the molecular level behavioral tests (Plus maze, Forced swim test and Morris water maze) were applied and cerebrospinal fluid and blood serum obtained for molecular analysis.

**Results:** According to repeated measure of ANOVA, there was a significant day effect in the bodyweight of rats during experiments ( $p=0.001$ ), with insignificant treatment effect ( $p=0.734$ ). Compared to the control group, the aspartame-consuming groups had lower blood glucose levels. Furthermore, in the Morris water maze, the memory performance of rats in the aspartame group was worse than that of rats in control groups. According to the results of the plus maze and forced swim test, the groups taking aspartame had higher levels of anxiety and depressive-like behavior. Low dose, aspartame-consuming rats exhibited substantially decreased dopamine levels in their cerebrospinal fluid, as well as significantly lower antioxidant levels in their serum.

**Conclusion:** This experiment showed that chronic aspartame consumption had some negative effects on several behavioral parameters and dopamine levels as well as antioxidant status.

**Key words:** Aspartame, neurotoxicity, addiction, dopamine, rat