

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

#### Abstracts

of protein metabolism was confirmed(by urea excretion carbamide)in 42.1% of children, leukopenia was recorded in 17.5% of children and lymphopenia in 7%.In Table 1, we have reflected the distribution of age groups according to the level of their physical development. Children of the age 3 or elder(28 children) underwent impedance measurements, which confirmed the deficit of lean mass in 89%(25)children, fat mass in 89%(25).Visceral protein:hypoalbuminemia in 12.3%, deficiency of protein metabolism was confirmed(by urea excretion carbamide)in 42.1% of children, leukopenia was recorded in 17.5% of children and lymphopenia in 7%.Comprehensive examination revealed iron deficiency anemia:low haemoglobin levels in 12.3% of people, serum iron in 8.8% of them.Vit.D deficiency was diagnosed in 22.8% of children, with a critically low level-in 7%;more often in overweight children(Spearman(Sp.) r=-0.329;p<0.01) **Conclusion:** Stagnation PD was found in 64.9%(37)children, young children were more pronounced(Sp. r=-0,513,p<0,01).Lymphopenia was detected in children with growth retardation more often(Sp. r=0.260,p<0.05).Body weight deficiency-in 63.2%(36)young children were more pronounced(Sp. r=-0,660;p<0,01).Malnutrition was in 47.4% of children, low values of the visceral protein pool in 12.3%.Impedance analysis confirmed the deficiency of both protein and fat metabolism in 89% of children, thus confirming it to be a more accurate method for assessing NS. Vit.D deficiency was diagnosed in 22.8% of children, more often in overweight children(Sp. r=-0.329;p<0.01). The most allergenic proteins in children of Russia are cows milk protein in 40% of cases,gluten in 35%,chicken eggs in 25%,fish and seafood in 18%; fructose intolerance in 12% and lactose in 2% Disclosure of Interest: None declared.

### P084

# IMPACT OF COVID-19 PANDEMIC ON EATING HABIT AND MENTAL BEHAVIOR IN NON-PROFESSIONAL RUNNER VS. HEALTHY VOLUNTEERS

E. Scarpellini<sup>\*,1</sup>, M. Basilico<sup>2</sup>, S. Tiberi<sup>3</sup>, N. Giostra<sup>4</sup>, A. AVIS<sup>5</sup>, P. Santori<sup>1</sup>, C. Rasetti<sup>1</sup>. <sup>1</sup> Internal Medicine Unit, Italy; <sup>2</sup> Ospedale Madonna del Soccorso, San Benedetto del Tronto, Italy; <sup>3</sup> Neurology Outpatient Clinic, Italy; <sup>4</sup> Diabetology, Ospedale Madonna del Soccorso, San Benedetto del Tronto, Italy; <sup>5</sup> Italian Blood Donors Association, Regione Marche, Pagliare del Tronto, Italy

**Rationale:** SARS-COV 2 pandemic has hit on our lives since early 2020. Several reports from literature showed an increase of anxiety and disordered eating habits (EA) among heterogeneous populations in study. Professional and non-professional athletes usually observe a regular EA regimen.

Thus, we wanted to compare EA, mental behaviors of non-professional runners with healthy volunteers (HV), matched for sex and age, during COVID-19 pandemic.

**Methods:** we consecutively enrolled non-professional runners (NR) vs. HV via flyer advertisement. The subjects had to fulfill online EA and Scl-90 questionnaires, independently evaluated by our outpatient Nutrition Unit and Neurology Clinic specialists, respectively, of San Benedetto General Hospital. **Results:** We consecutively enrolled 18 non-professional runners (12 females, mean age  $35.5\pm1.7$  years, BMI  $24.5\pm0.7$  Kg/m<sup>2</sup>)), and 14 healthy controls (9 females, mean age  $35.4\pm1.4$  years, BMI  $23.4\pm0.8$  Kg/m<sup>2</sup>) on early 2021.

Over- and irregular (binge) eaters were significantly represented among NR vs. healthy volunteers (p<0.05).

NR had higher scores for obsessive-compulsive disorder, depression and sleep disturbances occurrence vs. HV (all, p<0.05). These findings were correlated with over- and irregular EA.

**Conclusion:** unexpectedly, NR athletes were significantly affected by SARS-COV 2 pandemic vs. HV in terms of EA and mental behavior impairment. These findings can be explained by the reduced physical activity of NR during pandemic.

Disclosure of Interest: None declared.

## P085

## TURKISH POPULATION'S ADHERENCE TO THE MEDITERRANEAN DIET AND FEAR OF COVID-19 DURING COVID-19 PANDEMIC LOCKDOWNS

S. Sevim<sup>\*</sup>, G.G. Topal, D. Gumus, M. Kizil. Nutrition and Dietetics, Hacettepe University, Ankara, Turkey

**Rationale:** The Mediterranean diet is a dietery pattern that rich in antioxidant foods, and associated with a lowered risk in obesity, chronic diseases, cancer and all-causes mortality, therefore can be recommended as a healthy diet to follow during COVID-19. Thus, this study was carried out to examine the adherence to the Mediterranean diet and its association with the fear of COVID-19 in Turkey during the pandemic.

**Methods:** A cross-sectional online survey was conducted using a questionnaire to collect the data about demographics (Age, gender, employment, presence of any disease), diet and physical activity habits and lifestyle behaviors during COVID-19 pandemic lockdowns periods. The fear of COVID-19 levels of the participants were determined by using the fear of COVID-19 scale (FCV-19S). The Mediterranean diet adherence scale was used for the evaluation of participants' adherence to the diet. All statistical evaluations were carried out with the SPSS 23 program.

Results: A total number of 746 individuals, 201 men and 545 women, participated to the study from 59 of 81cities in Turkey. Additionally, 314 (42.1%) of the participants were found to live in a metropolis, 173 (23.2%) in a province, 234 (31.4%) in a county, and 25 (3.4%) in a town or village. The mean age of the participants was 35.5±12.5 years for men and 29.8±8.9 years for women. The mean BMI was found as 26.8±3.8 kg/m<sup>2</sup> for men and 23.3±4.4 kg/m<sup>2</sup> for women. FCV-19S were determined as  $15.2\pm5.3$  in men and  $17.5\pm5.6$ in women (p<0,001) and the Mediterranean diet adherence score was calculated as  $5.9\pm2.0$  in men and  $6.7\pm1.1$  in women (p<0,001). The Cronbach Alpha coefficient of the FCV-19S and Mediterranean diet adherence scale is respectively 0.852 and 0.420 which indicates that the scale is reliable. No statistically significant difference was found between individuals' FCV-19S and Mediterranean diet adherence score (p>0,05). Similarly no statistically significant difference was found between individuals' FCV-19S and Mediterranean diet adherence score according to the geographical segments or condition of having chronic disease. There is no significant difference mean of FCV-19S and Mediterranean diet adherence score according to the condition of having COVID-19 disease in men, but there is a significant difference individuals' BMI (p<0,01). For women, no statistically significant difference was found mean of FCV-19S, but there is a significant difference individuals' BMI and Mediterranean diet adherence score according to the condition of having COVID-19 disease (p<0,05).

**Conclusion:** Before COVID-19 pandemic, Pehlivanoglu et al. (2019) found the Mediterranean diet adherence score in Turkey as  $6.83\pm3.34$  while in this study, it was found as  $6.47\pm2.06$  during the COVID-19 lockdown. Bakioglu et al. (2020) found FCV-19S in Turkey as  $19.44\pm6.07$  when it was found as  $16.87\pm5.63$  in this study. However, as the COVID-19 pandemic is ongoing, our data need to be confirmed and investigated in future more extensive population studies.

### References:

1. Pehlivanoglu Ozkan EF. Balcioglu H. Unluoglu I. Turkish Validation and Reliability of Mediterranean Diet Adherence Screener, Osmangazi Journal of Medicine, 2020;42(2):160-164 Doi: 10.20515/otd. 504188

2. Bakioglu F. Korkmaz O. Ercan H. Fear of COVID-19 and Positivity: Mediating Role of Intolerance of Uncertainty, Depression, Anxiety, and Stress, International Journal of Mental Health and Addiction, 2020, https://doi.org/10.1007/s11469-020-00331-y

Disclosure of Interest: None declared.

#### P086

# HOW DID THE PANDEMIA PROCESS AFFECT THE RATIOS OF NUTRITION TREATMENT?

Y. Ozturk<sup>1</sup>, P. Unsal<sup>\*,1</sup>, A. Dikmeer<sup>1</sup>, S. Burkuk<sup>1</sup>, M. Koca<sup>1</sup>, Y.N. Olmez<sup>2</sup>, F. Tamer<sup>2</sup>, S. Atac<sup>2</sup>, K. Akcay<sup>2</sup>, S.B. Akıncı<sup>3</sup>, A.T. Iskit<sup>3</sup>, M.G. Halil<sup>1</sup>. <sup>1</sup> Departmen of Intrenal Medicine, Division of Geriatric Medicine, Turkey; <sup>2</sup> Clinical Nutrition Department, Turkey; <sup>3</sup> Department of Internal Medicine, Intensive Care Division, Hacettepe University Faculty of Medicine, Ankara, Turkey

**Rationale:** The COVID-19 pandemic, influencing the whole world, affects the management of the nutritional status of patients and treatment methods due to both isolation and quarantine measures and economic difficulties experienced individually or socially. The aim of this study is to evaluate the effect of pandemic on nutrition therapy in a center designated as a pandemic hospital.

**Methods:** Patients consulted to the clinical nutrition unit in 2018-2019 and 2020 were included in the study. After the approval of the ethics committee, the data of the patients were evaluated retrospectively. SPSS-23 was used and p < 0.05 was considered significant.

**Results:** 604, 619 and 429 patients followed in 2018, 2019 and 2020, respectively, were included in the study. The median age (IQR) of the patients was 63 [51-73], 45.2% (n = 746) of them were women. When the usage rates of enteral (EN), parenteral (PN) or both were compared by years, there was no difference in surgical services and intensive care units, but a statistically significant difference was found in internal medicine services. Compared to 2018 and 2019, the rate of EN use in internal medicine services decreased while the rate of PN usage increased during the pandemic period (Table-1). Nasal, gastrostomy or jejunostomy selection rates for enteral route; peripheral or central route selection rates for parenteral route didn't change in pandemic.

unknown. The aim of the study was to assess the nutritional status, health status and associated socio-demographic factors among elderly in Cameroon.

**Methods:** A cross-sectional study of 599 elderly (aged >=60) was conducted in urban and rural areas. Several socio-demographic, sanitary, and anthropometric (weight, height, body mass index (BMI), Waist Circumference (WC), Mid-Upper Arm Circumference (MUAC)) data were collected. Nutritional status was defined according to WHO. Multinomial analysis was performed to identify factors associated with nutritional status. The threshold of statistical significance was 5%.

**Results:** The population, representative of the elderly, was aged  $68.9\pm7.2$  years, with sex ratio M/F=0.93, weight  $68.5\pm14.7$  kg, BMI 24.7 $\pm5.3$ , WC 90.1 $\pm12.8$  cm and MUAC 28.2 $\pm5.0$  cm. According to BMI, undernutrition was 19.7%, normal status 37.9%, overweight 24.9%, obesity 17.5%. The

#### Table-1:

## Nutritional therapy rates by years

Total n=1652			2018 (n=604) n (%)	2019 (n=619) n (%)	2020 (n=429) n (%)	P value
Department	Internal medicine	EN	133 (47.3)	124 (48.6)	48 (24.1)	<0.001
		PN	137 (48.8)	120 (47.1)	147 (73.9)	
		EN+PN	11 (3.9)	11 (4.3)	4(2)	
		TOTAL	281 (100)	255 (100)	199 (100)	
	Surgery	EN	22 (11.2)	27 (13.4)	12 (10.3)	0.588
		PN	170 (86.3)	165 (81.3)	99 (84.6)	
		EN+PN	5 (2.5)	10 (5)	6 (5.1)	
		TOTAL	197 (100)	202 (100)	117 (100)	
	Intensive care unit	EN	52 (41.3)	60 (37)	35 (31)	0.539
		PN	66 (52.4)	89 (54.9)	67 (59.3)	
		EN+PN	8 (6.3)	13 (8)	11 (9.7)	
		Total	126 (100)	162 (100)	113 (100)	
Access route	Enteral	Nasal	136 (58.9)	151 (61.6)	62 (53.4)	0.267
		Gastrostomi	85 (36.8)	81 (33.1)	43 (37.1)	
		Jejunostomy	10 (4.3)	13 (5.3)	11 (9.5)	
		Total	231 (100)	245 (100)	116 (100)	
	Parenteral	Peripheral	243 (61.5)	228 (55.7)	211 (63.2)	0.088
		Central	152 (38.5)	181 (44.3)	123 (36.8)	
		Total	395 (100)	409 (100)	334 (100)	

EN:Enteral, PN:Parenteral

**Conclusion:** EN usage rate in internal medicine services decreased significantly during the pandemic period. The reason for this reduction may be due to the decrease in the nutritional assessment of patients and consultation with the nutritional team. Isolation and quarantine measures may have increased clinicians' tendency to parenteral nutrition. Multicenter, more comprehensive and prospective studies are needed on this subject.

### **References:**

Barazzoni R, Bischoff SC, Breda J, et al. ESPEN expert statements and practical guidance for nutritional management of individuals with SARS-CoV-2 infection. Clin Nutr. 2020; 39(6): 1631-8. **Disclosure of Interest**: None declared.

#### P087

### NUTRITIONAL STATUS AND ASSOCIATED FACTORS AMONG COMMUNITY-DWELLING ELDERLY: 1ST NATIONAL CROSS-SECTIONAL STUDY IN CAMEROON

G. Mabiama \*.<sup>1,2</sup>, D. Adiogo<sup>2</sup>, P.M. Preux<sup>1</sup>, J.-C. Desport<sup>1,3</sup>, P. Fayemendy<sup>1,3</sup>, P. Jésus<sup>1,3</sup>, <sup>1</sup>Inserm U1094, Univ. Limoges, CHU Limoges, IRD, U1094, Tropical Neuroepidemiology, Institute of Epidemiology and Tropical Neurology, GEIST, Limoges, France; <sup>2</sup>Microbiology, Immunology-Hematology and Morphologic Sciences Laboratory (LMIHSM), Doctoral Training Unit in Health Sciences (UFD-SCS), Doctoral School, University of Douala, Douala, Cameroon; <sup>3</sup>Health Network of the Nouvelle Aquitaine Regional Health Agency Limousin Nutrition (LINUT), Isle, France

**Rationale:** Although the ageing of the Cameroonian population is a public health issue in the coming years, the nutritional status of the elderly is

concordance for undernutrition between BMI and MUAC was weak (kappa=0.3). In multinomial analysis, only no tablets consumption was negatively associated with undernutrition (OR=0.3). Obesity was positively associated with the urban environment (OR=4.8) and inactivity (OR=2.9) and negatively associated with male gender (OR=0.4), widowed (OR=0.2), head of household (OR=0.4), no income (OR=0.3), one pathology (OR=0.4), no tablet consumption (OR=0.2), having normal diastolic pressure (OR=0.2).

**Conclusion:** Undernutrition and obesity (more frequent in women, and in urban area) affect 37.2% of the elderly. These nutritional disorders are a public health problem that cannot be ignored. **Disclosure of Interest**: None declared.

#### P088

## IODINE STATUS ASSESSMENT OF 3 TO 10 YEAR-OLD CHILDREN IN THE MUNICIPALITY OF SINTRA, PORTUGAL IN 2020

L. Oliveira Dias<sup>\*,1,2</sup>, A.R. Henriques<sup>2</sup>, I. Castanheira<sup>3</sup>, R. Ferreira<sup>1,4</sup>, L. Guerreiro<sup>1, 1</sup>Education, Youth and Sports Department, Municipal Council of Sintra, Sintra, Portugal; <sup>2</sup>Veterinary Medicine School, Universidade de Lisboa, Portugal; <sup>3</sup>Food and Nutrition Department, National Health Institute Doutor Ricardo Jorge, Portugal; <sup>4</sup>Lisbon School of Health Technology, Lisbon, Portugal

**Rationale:** Recent studies on the iodine status in Portuguese population groups have reported deficiency in school aged children and pregnant women. This work aimed to assess the iodine status of 3 to 10 year-old children in the municipality of Sintra, Portugal, through urine iodine concentration (UIC).