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current BMI for each trimester group was used as cut-off. Weight loss of more than 3 kg during the current pregnancy was significant in theme-specific regression and included in the final model. If a score of two or more is considered indicative of overall poor birth outcome in the eight-item tool, a sensitivity of 68.8%, specificity of 70.5%, positive predictive value of 58.1% and negative predictive value of 79.1% were observed.

Conclusion: This tool may identify pregnant women who are at increased risk for poor birth outcome. Validation in a similar sample is recommended.

Disclosure of Interest: None declared.

P095

HEALTHCARE COSTS OF POST-STROKE OROPHARYNGEAL DYSPHAGIA AND ITS MAIN COMPLICATIONS MALNUTRITION AND RESPIRATORY INFECTIONS

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Rationale: Healthcare costs of post-stroke oropharyngeal dysphagia (PS-OD) and its complications malnutrition (MN) and respiratory infections (RI) are not fully understood. We aimed to assess the hospitalization, 3 and 12-months costs of PS-OD and its complications.

Methods: A cost of illness study was performed on patients admitted to Mataró Hospital with acute stroke. OD, MN and RI costs were assessed at hospitalization, at 3 and 12-months follow-up from a hospital and healthcare system perspective, respectively. A multivariate analysis assessed the independent effect of OD, MN and RI on hospitalization and follow-up costs.

Results: 395 consecutive patients were included, 45.0% had PS-OD and 34.5% were at nutritional risk. Patients with PS-OD and those at risk of MN or malnourished presented higher costs during hospitalization (OD: p<0.0001; MN: p=0.004), at 3-months (OD: p<0.0001; MN: p=0.001) and at 12-months follow-up (OD: p<0.0001; MN: p=0.01). Patients with ≥1 episode of RI at 12-months follow-up (16% patients) had higher costs (p<0.0001) (Table 1). PS-OD was associated with significant and independent higher costs during hospitalization (789.68€; p=0.011); and at 3-months follow-up (873.5€; p=0.084). Nutritional impairment or RI caused a significant and independent cost increase during both follow-up points (MN: 1,277.4€ 3-months, p=0.004; and 2,303.4€ 12-months, p=0.001; RI: 3,792.6€ 3-months, p<0.001; and 3,034.1€ 12-months, p<0.011). Those patients with PS-OD, risk of MN and with ≥1 episode of RI had higher costs than those without OD at 12-months (19,817.6±13,724.8 vs. 7,242.8±7,402.6€, p<0.0004).

Table 1.

Cost for oropharyngeal dysphagia, malnutrition and respiratory infection over the study period.

	PS-OD	no PS-OD	p-value	MN/at risk	no MN	p-value	RI	no RI	p-value
Hospitalization (euros)	5,357.7±3,391.6	3,976.3±1,992.6	<0.0001	5,370.0±3,052.0	4,445.0±2,759.0	0.004			
3 months (euros)	8,242.0±5,376.0	5,320.0±4,053.0	<0.0001	8,145.0±5,868.0	5,320.0±4,053.0	<0.0001			
12 months (euros)	11,617.6±12,033.6	7,242.8±7,402.6	<0.0001	10,678.0±10,466.9	6,230.78±4,326.9	0.01	13,806.0±11,834.0	8,154.0±9,190.0	<0.0001

PS-OD: post-stroke oropharyngeal dysphagia; MN: risk of malnutrition or malnourished; RI: respiratory infections.

Conclusion: PS-OD is independently associated with higher costs after acute stroke that strongly increase with the development of MN and RI at one year follow-up.

Disclosure of Interest: None declared.

P096

LOCKDOWN IMPACT ON DIET, PHYSICAL ACTIVITY AND SERUM MARKERS

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Rationale: COVID-19-related total lockdown (L) caused behavioural changes in a very short time. We investigated changes in dietary habits, physical activity (PA) and serum markers during L in Slovenia.

Methods: Lean healthy adults with an interest in nutrition, who completed a measurement comprised of Food Frequency Questionnaire (FFQ), 3-day Food Diary, International PA Questionnaire (IPAQ), anthropometrics and blood sample in January and February 2020 (baseline) for a study interrupted by L, were invited to complete online questionnaire comprised of FFQ and questions about lifestyle changes 4 weeks after the start of L, and then to attend another measurement post-L in the beginning of June 2020. Healthy eating index (HEI)¹ was calculated from nutrition data. Statistical analyses were performed using IBM SPSS Statistics 26.0 (IBM, Armonk, NY, USA).

Results: 38 participants (24 female, BMI: 22.5 ± 2.7 kg/m², age: 20 – 60 years) completed all measurements. HEI dropped significantly during L (64.6 ± 15.8 to 61.1 ± 13.4, p = 0.008), so did energy intake (2300 ± 870 to 1890 ± 680 kcal, p = 0.004). Both returned almost to baseline post-L. The number of meals per day did not change. PA induced energy expenditure significantly dropped during L (13.9 ± 22.5 to 9.9 ± 13.6 MET, p = 0.035). Body mass remained stable. There were significant increases from baseline in post-L in serum glucose (4.9 ± 0.4 to 5.2 ± 0.7 mmol/L, p = 0.005), total cholesterol (5.5 ± 3.5 to 5.9 ± 3.4 mmol/L, p = 0.003) and LDL (3.9 ± 3.6 to 4.1 ± 3.6 mmol/L, p = 0.049). Serum glucose increased more in participants who were restrained close to home compared to those who had activities in nature, and those who had several risky contacts compared to those with less contacts.

Conclusion: Despite stable body mass, serum biomarkers for chronic noncommunicable diseases in healthy lean adults deteriorated during 3 months of L.

References:

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P097

EFFECTS OF COVID-19 CONFINEMENT ON PORTUGUESE ADULTS' NUTRITION, PHYSICAL ACTIVITY AND SLEEP

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Rationale: The global pandemic caused by the coronavirus-disease (COVID-19) has made profound changes in people's daily lives, especially during the confinement period. Therefore, the aim of this study was to characterize nutritional status, food habits, physical activity and sleep of Portuguese adults during the first COVID-19 confinement and to analyze its association with changes in the aforementioned factors.

Methods: An online survey during the first COVID-19 wave in Portugal was applied (through the Survey Legend) to 5479 Portuguese adults (48.4±14.2 years old; 25.9±5.1kg/m²). It collected data from several areas of the individual's life, but only a small part and more related to nutrition was used for this purpose, such as: sociodemographic, confinement characteristics, nutrition (using a semi-quantitative food frequency questionnaire), physical activity (intensity and frequency), sleep duration and sleep latency on weekdays and weekends, and sleep quality. Nutrition included daily meals and scores for the recommended intake frequencies were calculated (Paiva et al., 2021). Data were analysed using SPSS, version 25.0. The significance level was 5% ($P<0.05$).

Results: Participants were on average 41.1±26.9 days in lockdown, consumed 3.6±0.7 daily meals and reported 1.7±1.7 of morbidities. The majority lived in a city (66.3%) and was physically inactive (73.9%). The physical activity practiced was mainly of light and moderate intensities (23% and 27%, respectively).

Significant differences were observed between pre- and during confinement caused by the pandemic ($P<0.01$) as follows: a decrease of the number of meals, physical activity, sleep duration on weekdays and weekends and sleep quality and an increase of weight, body mass index, alcohol consumption, sleep latency and awakenings on weekdays and weekends. In addition, the intake of processed and pre-confectioned foods, deserts, chocolates, cakes and biscuits, gums and candies, and soft drinks was significantly higher than the recommendations; however, the consumption of healthy foods such as fruits, vegetables, milk and milk products, meat/fish/chicken, eggs and bread/potatoes/rice/pasta was significantly lower than the recommended.

Conclusion: The COVID-19 pandemic and consequently, the confinement negatively affected Portuguese adults with consequences upon to their nutritional status, physical activity, food habits and sleep. Therefore, it is important to promote the awareness about the importance of a healthy lifestyle through a good nutrition with adequate meals and food choices, practice physical exercise and sleep well.

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P098

ULTRA-PROCESSED FOOD CONSUMPTION IS ASSOCIATED WITH RENAL FUNCTION DECLINE IN OLDER ADULTS: A PROSPECTIVE COHORT STUDY

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Rationale: Ultra-processed food (UPF) consumption has been associated with increased risk of cardiovascular risk factors and mortality. However, little is known on the UPF effect on renal function. The aim of this study is to assess prospectively the association between consumption of UPF and renal function decline.

Methods: This is a prospective cohort study of 1312 community-dwelling individuals aged 60 and older recruited during 2008–2010 and followed up to December 2015. At baseline, a validated dietary history was obtained. UPF was identified according to NOVA classification. At baseline and at follow-up, serum creatinine (SCr) and estimated glomerular filtration rate (eGFR) levels were ascertained and changes were calculated. A combined end-point of renal decline was considered: SCr increase or eGFR decreased beyond that expected for age. Logistic regression with adjustment for potential confounders was performed.

Results: During follow-up, 183 cases of renal function decline occurred. The fully adjusted odds ratios (95% CI) of renal function decline across tertiles of percentage of total energy intake from UPF were 1.56 (1.02–2.38) for the second tertile, and 1.74 (1.14–2.66) for the highest tertile; p -trend was 0.026.

Conclusion: High UPF consumption is independently associated with an increase higher than 50% in the risk of renal function decline in Spanish older adults.

Disclosure of Interest: None declared.

P099

GEOGRAPHIC EVOLUTION OF PEDIATRIC INTESTINAL FAILURE (PIF) MANAGEMENT IN THE UNITED STATES (US)

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Rationale: Intestinal failure (IF) in children is the inability to maintain growth and development without parenteral support (PS). In the US there is no clear picture of the extent of pIF nationally. This study utilizes a large database to outline distribution of pIF and its geographic evolution over time.

Methods: The Symphony Integrated DataVerse (IDV) is a de-identified national claims database with longitudinal coverage of >290 million unique patients from 2012–20. It contains inpatient and outpatient medical, surgical and pharmacy information. We included patients <18 years who received [≥] 2 PS prescriptions in 6 consecutive months and had relevant surgical diagnoses. Zipcode data (Zip3) was used to create prevalence “heatmaps”.

Results: 2155 children met inclusion criteria, with an initial geographic distribution mirroring the general population. Location of first PS prescription followed a similar geographic pattern with slight coalescence to larger population centers. Following subjects longitudinally the number of children requiring ongoing PN at 1 year was 777 (36% of original), dropping to 508 (24%), 383 (18%) and 277 (13%) at years 2–4 respectively. The geographic distribution simplified and generally located to centers with established pediatric intestinal rehabilitation programs over time.

Conclusion: We estimate almost 3000 new cases of pIF in the US over the 8-year period of the study, and 75% of children no longer require PS after 2 years, increasing to 87% after 4 years. Over this time the location of PS providers appears to coalesce around major centers specializing in the care of pIF suggesting patient care is being transferred, although perhaps not as early as it might be. Given the improvement in outcomes associated with care in specialized centers, this represents an area for potential improvement nationally.

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