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.

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Results: Fifty-eight patients (90%) considered at least one of the proposed foods as IBS trigger. Each patient made multiple choices of food (median: 7), and then was counted in more than one category. Amine-rich foods were chosen by 77%, lectin-rich foods by 70%, incomplete absorbed carbohydrates (IACs) by 48%, and capsaicin by 37% of patients. Overweight significantly associated with amine-rich foods ($p=0.015$), age >45 years ($p=0.001$) and non-smoking condition ($p=0.033$) with lectin-rich foods, male gender ($p=0.005$) and overweight ($p=0.027$) with capsaicin-containing foods. A positive VSI score was found in 59% of patients, independently associated with non-smoking ($p=0.009$). No factors were associated with a positive HADS score, shown by 80% of patients. Severe IBS was shown by 63% of patients, being amine-rich foods ($p=0.024$), overweight ($p=0.020$), and female gender ($p=0.029$) independent risk factors while marriage/cohabiting a protective one ($p=0.038$). IBS subgroups did not affect the results.

Conclusions: In our series, most of IBS patients considered at least one food as IBS trigger (90%) while were affected by psychological distress (80%). Amine-rich foods, overweight, and female gender were independent risk factors for severe IBS while marriage/cohabiting a protective one. Clinicians should pay more attention for dietary advice and psychological distress in IBS management.

AF.77

IRRITABLE BOWEL SYNDROME AND WORK ABILITY IN HEALTH WORKERS EXPOSED TO OCCUPATIONAL STRESS

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Background and aim: Occupational stress is often related to different diseases. The role of occupational stress in Irritable Bowel Syndrome (IBS) needs to be clarified. The aim of this study was to investigate the prevalence of IBS among health workers and its possible correlation with work-related stress levels and work ability.

Materials and methods: From November 2018 to December 2019 653 health workers (238 M; 18–65 years), undergoing periodical health surveillance at the Occupational Health Department of a University Hospital in central Italy, were consecutively recruited and screened for an IBS diagnosis, according to the Roma IV criteria. The IBS-SSS, DCSQ and WAI rating scales were used to assess IBS severity, occupational stress and work ability levels, respectively. Clinical information on sleep quality, anxiety and depression were collected from electronic health records of participants regarding the previous year.

Results: IBS prevalence was 16.8% (86 F, 24 M; $p<0.001$). No significant differences were found for IBS prevalence according to participants' jobs (313 nurses, 191 doctors, 83 health operators, 59 health technicians, 7 psychologists). Participants suffering from IBS (IBS+) had an increased prevalence of anxiety or depression compared to those not suffering from IBS (IBS-) (9.9% vs 4.4%; $p<0.04$). IBS+ with anxiety or depression showed higher IBS-SSS scores compared to those without anxiety or depression (median IBS-SSS score: 265 vs 175; $p<0.03$). The prevalence of sleep disturbances among IBS+ was higher than among IBS- (15.3% vs 4.6%; $p<0.001$). IBS+ showed lower work ability levels, lower social support and control at work and higher levels of job demands when compared to IBS-. IBS symptom severity correlated negatively with work ability ($p<0.001$) and positively with levels of job demands ($p<0.001$).

	IBS+ (n = 110)	IBS- (n = 543)	p value
Age [median (IQR)]	43 (17)	44 (17)	0.54
Females, n (%)	86 (78%)	328 (60.4%)	<0.001
BMI [median (IQR)]	22.5 (4.2)	23.7 (4.8)	0.02 (Z = 2.29)
Psychiatric diagnosis, n (%)	11 (9.9%)	24 (4.4%)	0.03 ($\chi^2 = 4.48$)
- Anxiety disorders	6 (54.5%)	11 (41.6%)	
- Mood disorders	5 (45.5%)	13 (58.4%)	
Sleep disturbances, n (%)	17 (15.3%)	25 (4.6%)	< 0.001 ($\chi^2 = 15.82$)
WAI [median (IQR)]	40 (8)	44 (6)	< 0.001 (Z = -5.34)
DCSQ D subscale score [median (IQR)]	16 (2)	16 (3)	0.3
DCSQ C subscale score [median (IQR)]	17 (4)	18 (4)	0.02 (Z = -2.40)
DCSQ S subscale score [median (IQR)]	17 (4)	18 (5)	< 0.001 (Z = -3.58)

	IBS-SSS
WAI score	-0.31 $p<0.001$
DCSQ D subscale score	0.18 $p<0.001$
DCSQ C subscale score	- 0.10 $p = 0.003$
DCSQ S subscale score	-0.24 $p<0.001$

Conclusions: This is the first time that IBS prevalence and its correlation with work ability have been evaluated among Italian health workers exposed to occupational stress. Compared to the estimated Italian general population, higher values of IBS prevalence were found among health workers. The present results suggest a correlation between occupational stress and IBS: IBS symptom severity was positively correlated with occupational stress and negatively with work ability. Our findings suggest a pressing need for preventive, organizational and management strategies in the workplace in order to protect the health and well-being, and also the productivity, of health workers with IBS.

AF.78

THE PARADOX OF COVID-19 PANDEMIC: EFFECT OF LOCKDOWN ON THE IMPROVEMENT OF IRRITABLE BOWEL SYNDROME SEVERITY

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Background and aim: Irritable bowel syndrome (IBS) is a multifactorial condition with intestinal, psychological, and environmental factors participating to symptoms onset. The enforced condition of isolation due to the coronavirus 2019 (COVID-19) pandemic led to radical changes in lifestyle, probably affecting quality of life (QoL) and mental health. Our aim was to investigate the influence of COVID-19 lockdown in a well-studied cohort of IBS patients.

Materials and methods: 41 IBS patients (28F, age range 18–65 ys) from the outpatients' clinic of the University Federico II of Naples were invited to join an online survey during the first and second lockdown (April - October 2020). The survey consisted of 5 sections assessing: i) anthropometric data, ii) IBS symptoms (IBS symptom severity scale, IBS-SSS and Bristol Stool Form Scale, BSFS), iii) life-style changes, iv) psychological data (Visceral Sensitivity Index, VSI, and Patient Health Questionnaire-15, PH15), v) QoL (Short Form 12, SF-12, including the physical and mental component summary;

PCS and MCS, respectively). Data from the first (T1) and second (T2) lockdown were compared with those collected in person before the pandemic (T0).

Results: All subjects completed the study. Compared to baseline, at T1 there was a significant improvement in IBS symptoms (257 ± 69 vs 222 ± 105), loose stools frequency (4 ± 1 vs 2 ± 2) and PCS (46 ± 7 vs 51 ± 7 ; all $p < 0.05$), whilst MCS remained unchanged (40 ± 10 vs 41 ± 10). These findings were associated with a radical change in lifestyle with 81% of the subjects working remotely from home. At T2, both BSFS and PCS (4 ± 1 vs 2 ± 2 and 46 ± 6 vs 50 ± 8 ; all $p < 0.05$) remained steadily improved; however, IBS-SSS scores returned to baseline (257 ± 69 vs 245 ± 93). This effect was not associated with a worsened mental status since the MCS (40 ± 10 vs 41 ± 10), VSI (55 ± 20 vs 56 ± 19) and PH15 scores (8 ± 4 vs 8 ± 4 ; all $p = ns$) were unchanged between T1 and T2. On the contrary, at T2 most patients resumed their routinely work (57% vs 19%, $p < 0.05$).

Conclusions: Our survey showed an unforeseen improvement of IBS symptoms during the first Italian lockdown without a negative impact on patients' QoL. However, during the second COVID-19 wave, we observed an inverted trend with a new clinical worsening associated with the return to patients' pre-pandemic routine. Symptoms improvement during the first lockdown is likely the result of the forced slow-down of patients' hectic lifestyle, underlying the importance of the routinely job-related stress on symptoms severity.

LIVER

AF.79

EPIDEMIOLOGICAL TRENDS OF HEPATOCELLULAR CARCINOMA IN PATIENTS WITH METABOLIC-DYSFUNCTION-ASSOCIATED FATTY LIVER DISEASE (MAFLD) IN ITALY

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Background and aim: Metabolic-dysfunction-associated fatty liver disease (MAFLD) represents a new inclusive definition of the whole spectrum of liver diseases associated to metabolic disorders. The main objective of this study was to compare MAFLD and non-MAFLD patients with hepatocellular carcinoma (HCC) included in a nationally representative cohort.

Materials and methods: We analyzed 6,882 consecutive HCC patients enrolled from 2002 to 2019 by 23 Italian Liver Cancer centers. We compared epidemiological trends across biennials of the study period and explored future trends using a linear regression model in three subgroups: pure, single etiology, MAFLD (S-MAFLD); double etiology MAFLD (metabolic and others, D-MAFLD); and non-MAFLD HCC. MAFLD was diagnosed according to recent criteria, with minor modifications; subgroups were compared as to baseline characteristics, staging, treatment allocation and death risk using stabilized inverse probability weights and competing risk analyses.

Results: MAFLD was diagnosed in the majority of Italian HCC patients (68.4%). The proportion of both total MAFLD and S-MAFLD HCC significantly increased over time (from 50.4% and 3.6% in the first biennium, to 77.3% and 28.9% in the last one, respectively,

$p < 0.001$); in Italy S-MAFLD HCC should overcome D-MAFLD HCC in about six years. S-MAFLD HCC patients were older and more frequently male, had less frequently cirrhosis, clinically relevant portal hypertension and a surveillance-related diagnosis. They had more frequently large tumors and extra-hepatic metastases compared to the other groups. After weighting, and compared to non-MAFLD, S-MAFLD and D-MAFLD HCC patients showed a significantly lower overall ($p = 0.026$, $p = 0.004$) and HCC-related ($p < 0.001$, for both) risk of death. S-MAFLD HCC patients showed a significantly higher non-HCC-related ($p = 0.006$) risk of death.

Conclusions: The prevalence of MAFLD HCC in Italy is rapidly increasing and involves the majority of HCC patients. Despite a less favorable cancer stage at diagnosis, MAFLD HCC patients have a lower risk of HCC-related death, suggesting reduced cancer aggressiveness.

AF.80

COMPARISON BETWEEN FIBROSCAN AND POINT SHEAR WAVE ELASTOGRAPHY FOR ANALYSIS OF LIVER STIFFNESS: A PROSPECTIVE STUDY

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Background and aim: Liver stiffness measurement (LSM) by fibroscan is the most used non invasive method to assess the fibrosis of the liver. Recently, point shear wave elastography (pSWE) has been introduced as a simple alternative non invasive test. Therefore, we aimed to compare the results of these two techniques.

Materials and methods: Consecutive patients attending our ultrasound facility in our outpatient clinic in the period January-March 2021 were recruited. For each patient, LSM was performed by both Fibroscan (Echosens, Paris, France) and pSWE (EsaoteMylab Xpro80, Genova, Italy). At least 10 measurements were performed, and results were expressed as median with interquartile range. Staging of fibrosis was assigned according to Metavir classification. Statistical analysis was conducted by Pearson's test for correlation and linear regression.

Results: Nineteen patients (9 males, 10 females, mean age 52.9 ± 16.4) were recruited. LSM measurements of pSWE and Fibroscan showed an optimal correlation ($r = 0.64$, $p = 0.003$) and linear regression ($b = 0.87 \pm 0.09$, $p < 0.0001$). Overall, Fibroscan classified one patient as F4, one as F3, three as F1 and 13 as F0. Concordance with pSWE for F staging was observed in 16 (84.2%) patients. When compared to Fibroscan, pSWE underestimated LSM in one case (F0 instead of F1), while in two patients overestimated LSM (F1 instead of F0).

Conclusions: In most of cases, pSWE shows LSM estimation in agreement with Fibroscan. A slight trend of stiffness overestimation by pSWE was observed, despite only for mild, non significant fibrosis.

AF.81

NONINVASIVE ASSESSMENTS TO IDENTIFY PATIENTS WITH ADVANCED FIBROSIS DUE TO NASH: SCREENED POPULATION FROM THE REGENERATE TRIAL

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