

During the first wave of COVID-19 pandemic, the most affected area in Italy was the southeast part of the Lombardy region. The University of Brescia is one of the largest in Northern Italy. The aim of this study is to investigate the psychological and somatic symptoms driven by lifestyle changes due to the lockdown among the students of the University of Brescia. 15261 University students were enrolled through institutional email; 14302 were Master's and Bachelor's Degree students, 724 were Residents and 235 doctorates. 3553 students (23.28% of total), aged on average 22 years, completed the survey. Physical health, dietary and sleep habits, physical activities, economic and social issues were investigated through an anonymous, online ad hoc form, available until July 2020 and approved by the local Ethic Committee. Five psychosomatic outcomes were assessed: digestive disorders, headache, panic-anxiety crises, depression-sadness, fear of COVID-19. Factor analysis was applied to reduce the number of variables while logistic and ordinal logistic regression models were used to test the association between the latent variables and each outcome. Female gender, medium-intensive use of telephone, worsening of sleep quality, mnemonic difficulties and performance reduction were associated with all the outcomes. Low physical activity, increased time spent watching television and the worsening of dietary habits represented a significant risk factor for at least three of the outcomes. Despite the relatively low compliance, the survey clearly identified few priorities of intervention to prevent psychological and somatic effects of pandemic in the next future: circadian rhythm, nutritional habits, physical activity, use of media, gender issues. The results of this study show the psychosomatic effects of social isolation and the pandemic on a population at risk of young adults and can promote interventions to minimize the occurrence of psychosomatic consequences on young adults.

**Key messages:**

- Analysis of the main risk and protection factors in a population of young adults in the development of psychophysical symptoms during the period of isolation due to the covid-19 pandemic.
- Support the need to implement public health services also to reduce health costs with possible methods of intervention, in harmony with the findings.

**COVID-19, Mental health and intervention-priorities among Northern Italian University students**

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