

Physical Activity, Nutritional Habits and Sleeping Behavior in Health Professions Students and Employees of a Swiss University of Applied Sciences During the COVID-19 Lockdown Period: a Questionnaire Survey Study



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BACKGROUND

- The new coronavirus SARS-CoV-2 led to the COVID-19 pandemic since January 2020.
- The Swiss Federal Council prescribed a lockdown of non-essential businesses [1].
- Students and employees of institutions for higher education had to install home-office and participate in online lectures (Fig. 2) [2].

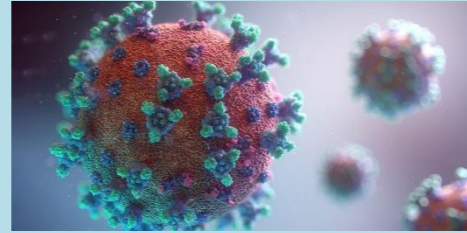
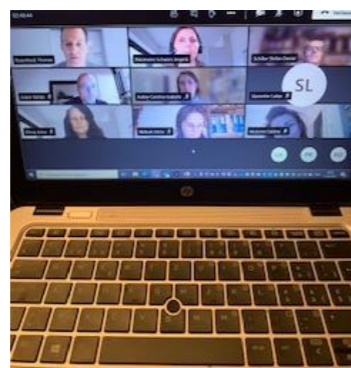


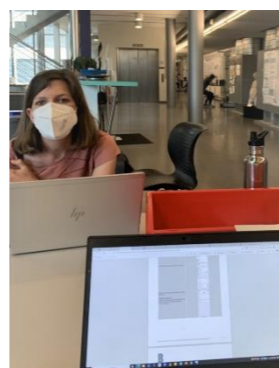
Fig 1. COVID-19 Virus (unibas.ch)



Fig 2a. empty classroom (©BFH)



2b: online meeting BFH (own pictures)



2c: at BFH (own pictures)

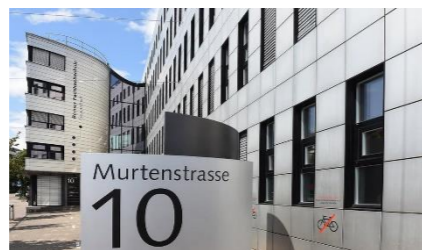


Fig 2d. empty place at main entrance (©BFH)

AIM

To evaluate lifestyle habits (physical activity (PA), sitting time (ST), nutritional and alcohol consumption habits & sleeping behavior) during a two months period of confinement and social distancing at the Bern University of Applied Sciences Department of Health Professions (BFH-DHP)

METHODS

- All students and employees from BFH-DHP (Nursing, Nutrition and Dietetics, Midwifery, Physiotherapy) were invited to complete an anonymous online survey during the COVID-19 confinement period
- Outcome variables: PA, ST, Median Mediterranean Diet Score (mMDS) as a proxy for nutritional habits, alcohol consumption habits, sleeping quality & duration.
- Frequency analyses and non-parametric statistical methods were used for data analyses. Significance was set at 5% level of alpha error.

RESULTS

- 821 participants (BSc students = 616, MSc students = 100, employees = 105) volunteered in this online survey

Outcome variables

- PA: prevalence of non-health-enhancing PA was 37.1%, with participants of the division of physiotherapy showing lowest prevalence (Fig. 3).

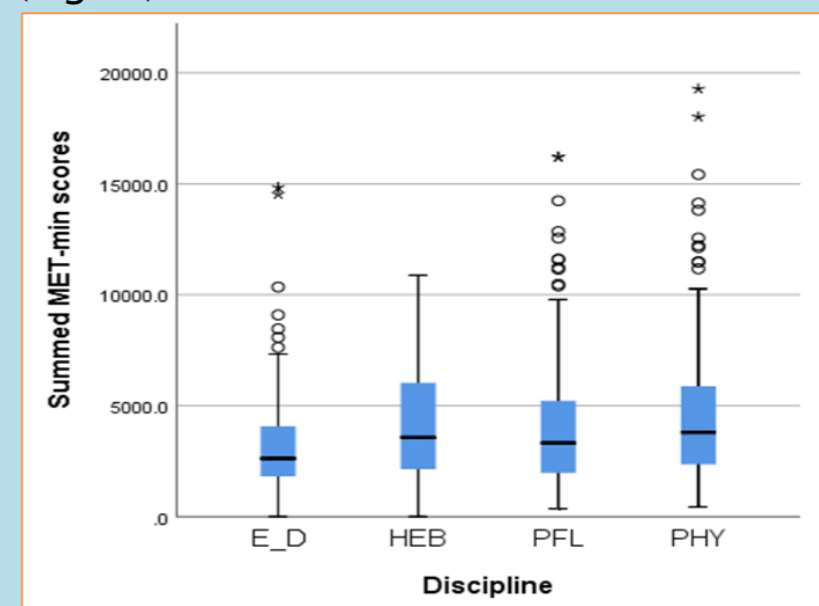


Fig 3: PA n=650 students and employees of BFH-DHP during COVID-19 lockdown. Physical activity scores (summed metabolic equivalent [MET] min/week scores) per health professions during the spring 2020 COVID-19 lockdown. Whiskers indicate 1.5 × IQR unless truncated at the lowest score. Asterisks and circles represent values outside this range. E_D: nutrition and dietetics; HEB: midwifery; PFL: nursing; PHY: physiotherapy

- ST: prevalence of long ST (> 8 hours.day⁻¹) was 36.1%.
- Median Mediterranean Diet Score (mMDS) was 9 on max. 15 with participants of the division of nutrition and dietetics being more adherent to a Mediterranean diet as compared to the other groups (Fig. 4).

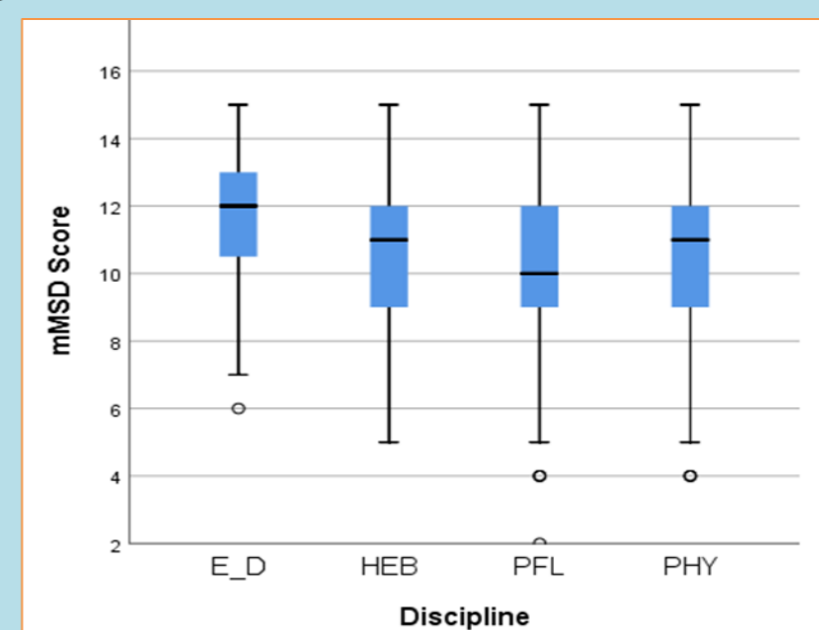


Fig 4: mMDS n=771 students and employees of BFH-DHP during COVID-19 lockdown. Whiskers indicate 1.5 × IQR unless truncated at the lowest score. Circles represent values outside this range. E_D: nutrition and dietetics; HEB: midwifery; PFL: nursing; PHY: physiotherapy.

- Prevalence of low sleeping quality was 44.7% while median sleeping duration was eight hours.

DISCUSSION & CONCLUSION

In the group analysis, differences in PA, sitting time and mMDS were observed between different divisions of health professions as well as between BSc and MSc students. Generalizability to other universities or faculties may be hampered.

Therefore, public health messages according regarding healthy lifestyle habits during home confinement at the BFH-DHP should be more group specific.

References

- [1] Council TFS. Ordinance Measures to Combat the Coronavirus (COVID-19). Bern, Switzerland: Federal Chancellery, Federal Palace; 2020.
 [2] Fachhochschule B. Coronavirus: Aktuelle Informationen. Bern: BFH; 2020 [cited 2020]; Available from: <https://www.bfh.ch/de/aktuell/corona/>.