# Mental health of nursing students at the Polytechnic Institute of Santarem during the COVID-19 pandemic

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## INTRODUCTION

- The coronavirus pandemic (COVID-19) has been considered a public health emergency of international concern, which has revealed a major challenge for mental health, as a result of its impact, in this 21st century (WHO, 2020).

- Public health acts such as quarantine, physical distancing are efficient to mitigate the pandemic, they may be detrimental to people's mental health (Nikopoulou et al., 2022).

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## INTRODUCTION

- The context of coronavirus in higher education caused upsetting consequences on students'lives (Torales, Higgins, Castaldelli-Maia & Ventriglio, 2020).

- The pandemic has reduced social mobility and, consequently, social interactions in periods of confinement, leading to stressful situations, with feelings of anxiety and depression, anguish and sleep problems (Chaudhary et al., 2020).

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## METHODOLOGY

Goals:

- Identify the levels of anxiety, depression and stress of the studied sample, using the Depression, Anxiety, Stress Scale (DASS-21);

- Identify the differences in these domains considering sociodemographic variables.

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## METHODOLOGY

Table 1 Characterization of participants

| Sociodemographic characterization | | n | % |
|---|---|---|---|
| **Gender** | Female | 148 | 80,9 |
| | Male | 35 | 19,1 |
| **Age group** | Até 20 anos | 79 | 43,2 |
| | 21-30 anos | 89 | 48,6 |
| | 31-40 anos | 8 | 4,4 |
| | 41 e + anos | 7 | 3,8 |
| **Marital status** | Single | 165 | 90,2 |
| | Married | 8 | 4,4 |
| | Divorced | 2 | 1,1 |
| | Consensual union | 8 | 4,4 |
| **Children** | Without children | 168 | 91,8 |
| | With children | 15 | 8,2 |
| **Residence District** | Leiria | 12 | 6.6 |
| | Santarem | 105 | 57,4 |
| | Lisbon | 50 | 27.3 |
| | Others | 16 | 8,7 |
| **Curricular year** | 2nd year | 80 | 43,7 |
| | 3rd year | 53 | 29,0 |
| | 4th year | 50 | 27,3 |

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## METHODOLOGY

- Quantitative, descriptive-correlational study, aiming to describe phenomena and subsequently identify and explore possible relationships between variables (Grove, Burns & Gray, 2013)

- Depression Anxiety, Stress Scale-21 (DASS-21 of Lovibond & Lovibond, 1995; in the Portuguese version EADS-21, by Pais-Ribeiro, Honrado & Leal, 2004).

- Instrument - DASS-21 consisting of 21 questions

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## METHODOLOGY

- DASS - 21 is organized into three scales: Depression, Anxiety, Stress, each of which includes seven items:

– **Anxiety:** Autonomic System Arousal + Musculoskeletal Effects + Situational Anxiety + Subjective Anxiety Experiences

– **Depression:** Dysphoria + Discouragement + Life Devaluation + Self-depreciation + Lack of Interest or Involvement + Anhedonia + Inertia

– **Stress:** Difficulty Relaxing + Nervous Excitement + Easily Agitated/Upset + Irritation/Overreaction + Impatience

## METHODOLOGY

- The rating is given by the sum of the results of the 7 items, obtaining a score for each subscale with a minimum result of 0 and a maximum of 21.

- Higher grades correspond to more negative affective states. (Pais-Ribeiro, Honrado & Leal, 2004).

- The data were analyzed using the IBM SPSS Statistics for Windows, version 27.0 software.

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## METHODOLOGY

The population - 367 students
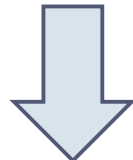
**Sample**

183 nursing students (both genders), aged between 18 and 55 years from the 2nd to the 4th year of daytime education

IPSantarem Ethics Committee' approval (112020Saúde), October 26, 2020

Authorization requested to the authors of the questionnaire validated for the Portuguese population

Link on the School' webpage for free filling by students, anonymously, via Microsoft Forms (with informed consent before the questionnaire starts)

Held in the period of 19 November till 4 December 2020

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## RESULTS

Table 2 – Summary of intercorrelations, means, and standard deviations for DASS21 (n=183)

| MEASURE | DASS Depression | DASS Anxiety | M | SD |
|---|---|---|---|---|
| DASS Depression | -- | | 5,29 | 4,43 |
| DASS Anxiety | ,665** | -- | 3,35 | 3,72 |
| DASS Stress | ,740** | ,743** | 6,68 | 4,84 |

Note:
DASS, Depression Anxiety Stress Scales (Pais-Ribeiro, Honrado e Leal, 2004).
**p <.001.

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## RESULTS

Table 3 - Severity of affective-emotional states of students (n=183)

| CLASSIFICATION | Stress Frequency % | | Depression Frequency % | | Anxiety Frequency % | |
|---|---|---|---|---|---|---|
| Normal | 172 | 94,0 | 151 | 82,5 | 161 | 88,0 |
| Light | 8 | 4,4 | 20 | 11,0 | 9 | 4,9 |
| Moderate | 3 | 1,6 | 11 | 6,0 | 10 | 5,5 |
| Severe | -- | -- | 1 | 0.5 | 3 | 1,6 |
| TOTAL | 183 | | | | | 00 |

Souce: Lovibond & Lovibond, 1995; Pais-Ribeiro, Honrado e Leal, 2004

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## RESULTS



Graph 2. Gender Differences in Levels of EADS

$p < 0.001$

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## CONCLUSIONS

- It was found that the COVID-19 pandemic harmed the mental health of students of nursing, being more noticeable in girls compared to boys.

- The findings suggest that higher education institutions should understand this experienced phenomenon and develop strategies to improve students' affective states (Hudson, Lawton & Hugh-Jones, 2020; Apóstolo, Figueiredo, Mendes & Rodrigues, 2011).

- Early identification of individuals at an early stage of development of psychological disorders allows for a more effective intervention and, in this way, minimizes long-term damage.

- The importance of a transdisciplinary approach is emphasized, and the involvement of all stakeholders is encouraged.

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## CONCLUSIONS

- The fact that the sample is of convenience is the biggest limitation of this study, and therefore it is not possible to extrapolate the results.

- Likewise, it cannot be assumed that the increased levels of anxiety, depression and stress are due only to the pandemic, but also to other factors.

- Nevertheless, this study is a starting point for future research in this area.

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## IMPLICATIONS FOR CLINICAL PRACTICE

It becomes increasingly important to work on positive mental health at earlier ages, in primary school, from a salutogenic and ecological perspective of health with programs centered on children, in the development of self-esteem, well-being, resilience and mental health literacy.

These will not only have impacts on individual children and their families, but the benefits can also be noticeable at the community and social scale, in the education and health sectors.

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## REFERENCES

Apóstolo, A., Figueiredo, M., Mendes, A., & Rodrigues, M.. (2011). Depression, anxiety and stress in primary health care users. Revista LatinoAmericana de Enfermagem, 19, 348 - 353. https://doi.org/10.1590/S0104-11692011000200017

Apóstolo, A., Mendes, A., Antunes, M., Rodrigues, M., Figueiredo, M., & Lopes, M. (2011). Perturbações afectivo-emocionais em contexto de cuidados de saúde primários. Revista de Enfermagem, 3, 67-74. https://www.redalyc.org/articulo.oa?id=388239962011

Chaudhary, A., Sonar, N., Jamuna, T., Banerjee, M., & Yadav, S. (2021). Impact of the COVID-19 pandemic on the mental health of college students in India: cross-sectional web-based study. *JMIR Medical Education*,2(3), e28158, 1-10. https://doi.org/10.2196/28158

Choi, E., Hui, B., & Wan, E. (2020). Depression and anxiety in Hong Kong during COVID-19. *Int J Environ Res Public Health*,17(10), 3740. https://doi.org/10.3390/ijerph17103740 .

Nikopoulou, V., Holeva, V., Parlapani, E., Karamouzi, P., Voitsidis, P., Porfyri, G., Blekas, A., Papigkioti, K., Patsiala, S., & Diakogiannis, I. (2022). Mental health screening for COVID-19: a proposed cutoff score for the Greek version of the Fear of COVID-19 Scale (FCV-19S). *International Journal of Mental Health and Addiction*, 20, 907–920. https://doi.org/10.1007/s11469-020-00414-w

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## REFERENCES

Galeazzi, A. (2017). Avaliação de ansiedade, depressão e estresse em universitários de ensino superior privado com EADS-21. Maringá. Universidade Cesumar. http://rdu.unicesumar.edu.br/handle/123456789/34

Maia, B & Dias, P. (2020). Ansiedade, depressão e estresse em estudantes universitários: o impacto da COVID-19. Estudos de psicologia. (Campinas) 37, e200067. Epub . https://doi.org/10.1590/1982-0275202037e200067

Monteiro, S., Tavares, J., & Pereira, A. (2012). Adaptação portuguesa da Escala de Medida de Manifestação de Bem-estar Psicológico com estudantes universitários – EMMBEP. Psicologia, Saúde & Doenças, 13(1), 66-77. http://www.scielo.mec.pt/pdf/psd/v13n1/v13n1a06.pdf

Morales-Rodríguez, F. M., Martínez-Ramón, J. P., Méndez, I., & Ruiz-Esteban, C. (2021). Stress, Coping, and Resilience Before and After COVID19: A Predictive Model Based on Artificial Intelligence in the University Environment, Frontiers in Psychology, 647964(12), 1-15. https://doi.org/10.3389/fpsyg.2021.647964

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## REFERENCES

Pais-Ribeiro, J. L., Honrado, A., & Leal, I. (2004). Contribuição para o estudo da adaptação portuguesa das Escalas de Ansiedade, Depressão e Stress (EADS) de 21 itens de Lovibond e Lovibond. *Psicologia, Saúde & Doenças, 5*(2), 229-239. http://www.scielo.mec.pt/pdf/_psd/v5n2/v5n2a07.pdf

Rocha, A. (2018). Depressão e ansiedade no ensino superior: estudo comparativo entre estudantes universitários. Dissertação de mestrado. Universidade do Porto. https://hdl.handle.net/10216/116747

Son, C., Hegde, S., Smith, A., Wang, X., Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, *22*(9), e21279, 1-15. https://doi.org/10.2196/21279

Sun, Y., Lin, S., Chung, K. (2020). University Students' Perceived Peer Support and Experienced Depressive Symptoms during the COVID-19 Pandemic: The Mediating Role of Emotional Well-Being. *International Journal of Environmental Research and Public Health*, *17*(24), 9308, 1-13. https://doi.org/10.3390/ijerph17249308 .

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## REFERENCES

Teixeira, S., Ferré-Grau, C., Sequeira, C., Pires, R., Carvalho, J., Ribeiro, I., Sequeira, C., Rodrigues, Sampaio, F., Costa, T., & Canut, M. (2022). Positive Mental Health in University Students and its Relations with Psychological Vulnerability, Mental Health Literacy, and Sociodemographic Characteristics: A Descriptive Correlational Study. *International Journal of Environmental Research and Public Health*, *19* (6), 3185 https://doi.org/10.3390/ijerph19063185

Torales, J., Higgins, M. O., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of Covid-19 coronavirus and its impact on global mental health. International Journal of Social Psychiatry. https://doi.org/10.1177/0020764020915212

Wang, C., Horby, P.W., Hayden, F.G., & Gao, G.F. (2020). A novel coronavirus outbreak of global health concern. Lancet, 470–473. https://doi.org/10.1016/s0140-6736(20)30185-9

World Health Organization ( 2020, março,18 ). Mental health and psychosocial considerations during the Covid-19 outbreak. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af10

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