

# **European Journal of Public Health Studies**

ISSN: 2668 - 1056 ISSN-L:2668 - 1056

Available on-line at: www.oapub.org/hlt

DOI: 10.46827/ejphs.v3i1.65

Volume 3 | Issue 1 | 2020

# CLINICAL EVALUATION OF DEPRESSION ON UNIVERSITY STUDENTS DURING QUARANTINE DUE TO COVID-19 PANDEMIC

# Georgia Konstantopoulou<sup>1</sup>, Natassa Raikou<sup>2</sup>i

<sup>1</sup>Special Office for Health Consulting Services and Faculty of Education and Social Work, School of Humanities and Social Sciences, University of Patras, University of Patras Rion Campus, Rion Patras, 26504 Patras, Greece

<sup>2</sup>Department of Educational Sciences and Early Childhood Education, School of Humanities and Social Sciences, University of Patras, University of Patras, Rion Campus, Rion Patras, 26504 Patras, Greece

#### **Abstract:**

The present study was conducted during quarantine which was caused due to the pandemic of COVID-19 virus in Greece. We try to detect the immediate psychological effects of crisis conditions on university students, focusing on the symptoms of depression. The main goal is to evaluate the clinical depression that students present due to quarantine. The study participants were 570 students of the University of Patras, who completed an electronic questionnaire that includes demographic data and the BECK (BDI) depression scale, which measures the severity of depression. The results show that a significant percentage of participating students at the University of Patras reported increased symptoms of depression. Students' mental health seems to be significantly affected when situations of social constraint arise and, consequently, require attention and help. Critical, therefore, the role of the University is emerging in providing students adequate psychological services in order to strengthen and support them.

**Keywords:** students, depression, quarantine, COVID-19, Beck Depression Inventory (BDI)

i Correspondence: email araikou@upatras.gr

#### 1. Introduction

The emergence of the new corona (COVID-19) creates significant anxiety and fear, while anxiety and uncertainty greatly affect public behavior. The psychological and physical health issues that accompany the pandemic burden public health (Torales et al., 2020). During a pandemic, timely and accurate information plays a crucial role in controlling the spread of disease and managing fear and uncertainty, as severe symptoms of depression and anxiety are reported (Wang et al., 2020).

For students, who are a population with increased levels of psychological distress (American College Health Association, 2019; Bayram & Bilgel, 2008), quarantine time and changing their education may exacerbate anxiety and stress. Especially during the first weeks of quarantine with the parallel discontinuation of their studies, a first detective study showed that students' stress levels were too high (Karalis & Raikou, 2020). These rates decreased during the restart of the educational process, with the start of distance education, however, this reduction was not universal: they remained to manage the quarantine but also a major change in their usual way of education, while the absence of social contact in general but also particularly in the academic context, was the biggest shortcoming for them (Kamarianos, Adamopoulou, Lampropoulos, & Stamelos, 2020; Karalis & Raikou, 2020).

In each case, they have seized it, despite obstacles we can scarcely imagine. University students are going through a period of transition (Bayram & Bilgel, 2008) which, according to the American psychologist Arnett (2000), is called emerging adulthood. This period is associated with developmental challenges, difficult in some cases, but with great heterogeneity per context, mainly due to socio-cultural differences. It occurs mainly in developed modern societies, which provide the opportunity to explore different alternative routes in their lives (Galanaki & Leontopoulou, 2017 - Galanaki & Sideridis, 2018 - Leontopoulou, Mavridis, & Giotsa, 2016 - Petrogiannis, 2011). It becomes clear, therefore, that the university, as a social context in which the student lives and works, plays a decisive role, especially in Greece, where the majority of young people study in higher education (Raikou, 2019). The university framework is an intermediate stage between the family and the wider social context, contributing to the transition from family dependence to adulthood autonomy. In our country it is the beginning of a new life for almost all children entering adolescence and when it is one of the biggest goals of life, it often produces symptoms of anxiety and depression.

With the advent of COVID-19, students faced not only changes in their daily lives, but also in the way they were educated, which may have made it difficult for them to reorganize and manage their work, set goals and prioritize, as well as they were influenced to some extent and in their mood. So, it is next to have a reduced motivation for the obligations of their studies (Wickens, 2011) and at the same time to experience pressures, to have a feeling of abandonment and loneliness due to the restrictive measures. Therefore, the experiencing stress is associated with increased concerns about

studies and their possible delay, the economic impact of the pandemic, and the impact on their daily lives (Cao et al., 2020).

Due to quarantine, pre-existing mental health problems and, in particular, severe symptoms of depression worsen (YoungMinds, 2020). Students are more vulnerable than they seem, especially with the current academic and economic situation, while social distance measures can lead to social isolation with possible deterioration of abuse during this economic period, uncertainty, stress and depression (Lee, 2020).

The psychological effects of quarantine include exhaustion, detachment from others, anxiety, irritability, insomnia, poor concentration and indecision, poor performance and reluctance to work or resign. Symptoms of post-traumatic stress disorder, severe discomfort and high depressive symptoms are also reported, even two years after quarantine. People who were quarantined due to an infectious disease reported fear, nervousness, sadness and guilt (Brooks, et al., 2020).

# 2. Method

The aim of this study is to evaluate the clinical depression of Patras university students during lockdown due to the COVID-19 virus. The main issue is the investigation of cognitive, behavioral and physical manifestations of depression in students during the crisis period of the pandemic, as well as the severity of the depression they may experience.

An online survey was conducted by the Department of Education and Social Work and the Department of Preschool Education and Training of the University of Patras from April 13 to May 2, 2020. The survey was approved by the Board of Education of the Department of Science and Social Work. An electronic questionnaire on demographic data and the BECK (BDI) depression scale used to measure depressive symptoms was used as a research tool.

BDI, Beck Depression Inventory (Beck et al., 1972), created by Aaron T. Beck, is a repository of multiple options and one of the most widely used psychometric tests to measure the severity of depression. The BDI measures the cognitive, behavioral and physical manifestations of one's depression (and the severity of depression) in the last week and includes 21 questions, ranging from 0-3 and depending on the overall score is interpreted as 1) minimal, 2) mild, 3) moderate and 4) severe depression.

#### 3. Results

During the survey, 570 people entered the survey site and agreed to answer the questionnaire. In terms of gender, of the total participants, the majority (73.2%) were women, while in terms of age, 34.2% were 22 years old. The age range of the participants is from 18 to 26 years and students from all Schools and almost all Departments of the University of Patras participated (30). Comparing the Departments of Student Origin, the Department of Education and Social Work holds the largest percentage of participants

(22%), followed by the Department of Education and Preschool Education (16.3%), while several students come from the Department of Medicine (8.9%).

According to the participants' responses, 28.2% and 32.3% of the participants reported mild and moderate symptoms of depression respectively, while 25.0% reported severe symptoms of depression, as indicated by their BDI scores. The majority of participants (80.2%) have symptoms of at least mild depression, while only 19.8% may be considered to have few or no symptoms of depression (see Figure 1).

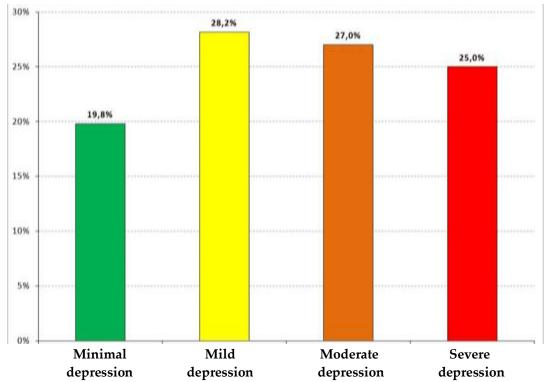


Figure 1: Beck Depression Inventory (BDI) - Participating Student Depression Scale

The highest frequency of symptoms of minimal depression is found at the age of 19 years, while the highest frequency of symptoms of severe depression is found at the age of 25 years. In other words, it seems that age may have some effect on the symptoms associated with depression. In terms of gender, it seems that this factor has a statistically significant effect on depression (p = 0.048 (<0.05) and r = 0.062).

47.0% of respondents state that they feel sadness or melancholy most of the time and 36.9% feel that they have nothing good to expect from the future. 48.1% feel failed and 47.1% do not enjoy things as before. 41.3% report that they often felt bad or worthless and 43.5% felt that they were being punished or that they would be punished. 50.6% feel disappointed in themselves and 42.4% have thoughts of hurting themselves but would never do so. 38.9% report that they are constantly crying, and cannot stop it, while 39.6% report that they are bothered or irritated more than usual. 39.2% have not lost interest in other people while 52.5% answered that they are just as determined as ever. 63.3% said they did not feel worse than ever, while 50.6% did not do well at work. 42.4% answered that they wake up in the morning more tired than before while 46.7% now get tired more

easily than before. 38.9% report that the appetite for food is much worse now while 39.6% have lost more than 2 pounds. 39.2% answered that they do not care about their health more than before and 52.5% have not noticed any change in their interest in sex lately.

#### 4. Discussion

During the COVID-19 pandemic and the implementation of social distance and restraint measures, a significant percentage of students at the University of Patras who studied reported increased symptoms of depression. Students reported symptoms of pessimism, feelings of punishment and guilt, irritability and crying, easy fatigue, sleep disturbances, decreased productivity, loss of appetite and weight.

Social distance, quarantine, isolation as measures imposed by all scientists involved in the pandemic may, in combination with the continuing threat posed by the pandemic, provoke negative emotions. It is very common to have anxiety and fear about the disease and its transmission, about whether it will be transmitted from us to our loved ones, concern for our family.

Some may experience sleep problems or even daily activities. There may be an increase in alcohol consumption, an increase in smoking, or an abuse of psychoactive substances. Discontinuation of work and activities and reduced contact with other people disrupts our daily lives, and can lead to reduced mood, sadness and boredom. Also, isolation and quarantine, if understood as restriction of personal freedom and personal rights, create anger, tension and irritability. In some cases, one may also feel angry or disgusted with the principles that have provided either quarantine or isolation and think in vain and feel sadness, loneliness, monotony, boredom, abandonment, low self-esteem.

### 5. Conclusions

Students' mental health is significantly affected when dealing with public health issues or emergencies but also when their freedom is restricted. When such situations arise for young people, they require the attention, help and support of society as well as their families. In this case, 25.0% of the students of the University of Patras have experienced symptoms of severe depression due to the pandemic of COVID-19. If we combine this finding with the particular characteristics of young people of this age during their developmental course (Arnett, 2000), but also the already psychologically burdened phase of their lives (American College Health Association, 2019 - Bayram & Bilgel, 2008), we understand that the situation is becoming even more critical.

Of course, it is good to note that each person reacts differently to quarantine and isolation, however, in each case the university framework can play a key role in supporting its members and especially its students. As the literature points out, boosting self-esteem, combined with a secure way of communicating, protects young people from difficulties in socializing and possible depressive symptoms during adulthood (Germani, Delvecchio, Bin Li,). & Mazzeschi, 2020). Especially during the period of isolation, where,

as described above, the symptoms are more intense, and the conditions are particularly stressful for young people. The University is therefore called upon to provide high quality, crisis-oriented psychological services to students, because empowering students means securing future capable professionals and scientists.

# References

- American College Health Association (2019). American College Health Association: National College health assessment II: Reference group executive summary spring 2019. Published online.

  https://www.acha.org/documents/ncha/NCHA-II SPRING 2019 US REFERENCE GROUP EXECUTIVE SUMMARY.pdf.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480.
- Beck, A. T. (1972). *Depression: Causes and Treatment*. Philadelphia: University of Pennsylvania Press. ISBN 0-8122-1032-8. doi:10.1007/s00115-016-0181-2.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, 395: 912–20. Published Online February 26, 2020. Department of Psychological Medicine, King's College London, London, UK. <a href="https://doi.org/10.1016/S0140-6736(20)30460-8">https://doi.org/10.1016/S0140-6736(20)30460-8</a>.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, Article 112984. <a href="https://doi.org/10.1016/j.psychres.2020.112934">https://doi.org/10.1016/j.psychres.2020.112934</a>.
- Galanaki, E., & Leontopoulou, S. (2017). Criteria for the transition to adulthood, developmental features of emerging adulthood, and views of the future among Greek studying youth. *Europe's Journal of Psychology*, 13. doi:10.5964/ejop.v13i3.1327.
- Galanaki, E., & Sideridis, G. (2018). Dimensions of emerging adulthood, criteria for adulthood, and identity development in Greek studying youth: A person-centered approach. *Emerging Adulthood*. Published online-first on May 22, 2018, 411-431. doi: 10.1177/2167696818777040.
- Germani, A., Delvecchio, E., Bin Li, J., & Mazzeschi, C. (2020). Protective factors for depressive symptoms in emerging adulthood. *Scandinavian Journal of Psychology*, 1-6. doi: 10.1111/sjop.12616.
- Grubic, N., Badovinac, S. & Johri, A. M. (2020). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry*, Published online first on May 2, 2020. doi: 10.1177/0020764020925108.
- Kamarianos, I., Adamopoulou, A., Lampropoulos, H, & Stamelos, G. (2020). Towards an understanding of university students' response in times of pandemic crisis

- (COVID-19). European Journal of Education Studies, 7(7), 20-40. doi: 10.46827/ejes.v7i7.3149.
- Karalis, T., & Raikou, N. (2020). Teaching at the times of COVID-19: Inferences and Implications for Higher Education Pedagogy. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 479–493.
- Lee, J. (2020). Mental health effects of school closures during COVID-19. *The Lancet, 4*. Published first online, April 14, 2020. <a href="https://doi.org/10.1016/S2352-4642(20)30109-7">https://doi.org/10.1016/S2352-4642(20)30109-7</a>.
- Leontopoulou, S., Mavridis, D. & Giotsa, A. (2016). Psychometric Properties of the Greek Inventory of the Dimensions of Emerging Adulthood (IDEA): University Student Perceptions of Developmental Features. *J Adult Dev,* 23, 226–244 doi: 10.1007/s10804-016-9239-4.
- Petrogiannis, K. (2011). Conceptions of the transition to adulthood in a sample of Greek higher education students. *International Journal of Psychology and Psychological Therapy*, 11(1), 121-137.
- Raikou, N. (2019). Teacher Education at the forefront: Long-term study through the prism of University Pedagogy and Transformative Learning theory. *European Journal of Education Studies*, 6(3), 88-102.
- Torales, J., Higgins, M. O., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 corona virus and its impact on global mental health. *International Journal of Social Psychiatry*. Advance online publication. https://doi.org/10.1177/0020764020915212.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), Article 1729. <a href="https://doi.org/10.3390/ijerph17051729">https://doi.org/10.3390/ijerph17051729</a>.
- Wickens, C. M. (2011). The academic and psychosocial impact of labor unions and strikes on university campuses. In M. E. Poulsen (Ed.), *Higher education: Teaching, internationalization and student issues* (pp. 107–133). New York: Nova Scotia Publishers.
- YoungMinds. (2020). Coronavirus: Impact on young people with mental health needs. Published online, March, 2020. <a href="https://youngminds.org.uk/media/3708/coronavirus-report\_march2020.pdf">https://youngminds.org.uk/media/3708/coronavirus-report\_march2020.pdf</a>.

#### Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Public Health Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).