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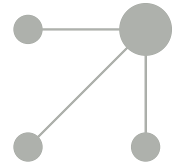

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SCIENTIFIC LETTER

Child and adolescent depression and other mental health issues during lockdown and SARS-CoV-2/COVID-19 pandemic: A survey in school setting☆

Depresión infantojuvenil y otros aspectos de salud mental durante el confinamiento y la pandemia por SARS-CoV-2/COVID-19: encuesta en contexto escolar

Dear editor:

On March 14, 2020 the Spanish authorities declared a countrywide state of alert on account of the coronavirus disease 2019 (COVID-19) health crisis, which raised concerns in families, educators and health professionals regarding the potential impact of the situation on the mental health of the paediatric population, and underscoring the need to monitor and investigate this subject.[1,2] A survey conducted in the cities of Wuhan and Huangshi in China identified indicators of depression and anxiety in as much as 20% of the child and adolescent population, with less favourable scores in the geographical epicentre of the pandemic.[3]

We carried out a descriptive study with the aim of identifying children and adolescents at risk of interpersonal problems and depression by means of an instrument applied to a broad bracket of the population (school-aged individuals). To this end, we developed an anonymous data collection form aimed at children and adolescents aged 8−18 years and their caregivers (designed for online completion due to the pandemic, and distributed through electronic email with the help of collaborating schools). The questionnaire comprised 2 parts: the first, to be completed by the adult caregiver, was for collection of demographic data and to obtain informed consent to the minor's completion of the second part, and the second, to be completed by the dependent, included the items of the Spanish version of Kovacs' Children's Depression Inventory (CDI),[4] additional questions for the assessment of peer relations based on items from the Cambridge Friendship Questionnaire (CFQ)[5] adapted to remote interactions through information and communication technologies (ICTs) and one last section that explored individual and family dynamics during the lockdown. We recruited children and adolescents attending 10 primary and secondary education schools in Catalonia and the Valencian Community between May 11 and June 20, 2020. The study was approved by the Research Ethics Committee of the Hospital Vall d'Hebron in Barcelona.

We obtained a total of 409 responses, of which 97.1% included informed consent to participation by the minors. Overall, 19.2% of minors scored above the threshold established for the likelihood of depression, with a mean score that was consistent with previous data in the Spanish school-age population.[4] We found a higher proportion of participants above the threshold in girls, a difference that was statistically significant (23.6% vs 13.0%; $P = .009$) and also in the group aged 12 or more years (21.7% vs 10.9% in the group under 12 years; $P = .018$). The results were similar in the subset of participants that lived with a single caregiver during the lockdown (26.0% compared to 16.3% of children with 2 or more caregivers; $P = .05$). In this context, we ought to highlight that 50.6% of participants reported being worried about pain and disease often or always.

A vast majority of respondents did not identify substantial changes in the quality of peer relationships maintained through ICTs (mean score in the different items, 86.1%; standard deviation, 5). When it came to routines during the lockdown, the salient findings were that 60.7% reported a decrease in physical activity and a substantial proportion (85.9%) reported an increase in screen time compared to previous habits. The main concerns reported by participants were worrying that they or someone close to them could become sick (70.3% of respondents) and not being able to see friends and family (61.5%). Table 1 summarises the characteristics of the sample, and Fig. 1 presents a selection of the most relevant responses.

In conclusion, the data on depression indicators obtained through the questionnaire did not seem to differ substantially from previously published data in similar populations, despite the complex social and public health situation. The quality of peer relations and other relevant variables did not seem to have deteriorated for respondents during the lockdown. Despite these encouraging data and, since there is still evidence of a subset of the population that is particularly vulnerable to emotional suffering in general and depressive symptoms in particular, even from a very young age,[6] we still ought to underscore the need of having a solid and adaptable child and adolescent mental health network.

We ought to highlight that these results have been obtained early in a situation that has turned out to be

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Table 1 Sociodemographic characteristics and data of the sample of students and their families.

Variable	Total of 409 responses, 397 with consent to participation by the minor (97.1%) n (%)
[3.0]Sex	Female: 216 (54.5%) Male: 178 (44.8%) Prefer not to say: 2 (0.5%) Non-binary categories: 1 (0.2%)
[2.0]Age group	8—11 years: 101 (25.4%) 12—15 years: 208 (52.4%) 16 or more years: 88 (22.2%)
[2.0]Educational stage	Primary: 123 (31%) Compulsory secondary: 208 (52.4%) Baccalaureate or vocational: 66 (16.6%)
[1.0]Type of school	Public: 184 (45.0%) Charter: 225 (55.0%)
[1.0]Autonomous community	Catalonia: 364 (91.7%) Valencian Community: 33 (8.3%)
[3.0]Employment status in household (multiple answer)	At least one caregiver continued in-person work: 104 (25.4%) At least one caregiver worked remotely: 222 (54.3%) At least one caregiver was a health care worker/employed at a hospital: 20 (4.9%) Other situations or a combination of the above: 130 (31.8%)
[1.0]Separation of minor from main caregiver due to illness or hospitalization due to COVID-19	Yes: 15 (3.7%) No: 394 (96.3%)
[2.0]Family structure/main caregiver	Single parent (father/mother): 106 (26%) Two parents (all possible combinations): 299 (73%) Grandparent as main caregiver: 4 (1%)
[1.0]Number of caregivers	Single caregiver: 101 (24.7%) More than 1 caregiver: 308 (75.3%)
[4.0]Quality of academic support perceived by caregiver	Non-existent or inadequate: 61 (14.9%) Very basic with difficult access/contact with school: 56 (13.7%) Quality of instruction comparable to in-person instruction: 191 (46.7%) Excessive academic demands, caregiver able to provide academic support: 90 (22%) Excessive academic demands, caregiver not able to provide academic support: 11 (2.7%)
[4.0]Perception of home environment by caregiver	Good, same as before: 268 (65.5%) Good, better than before: 81 (19.8%) Poor, same as before: 11 (2.7%) Poor, worse than before: 24 (5.9%) Prefer not to say: 25 (6.1%)
Global score in CDI, Spanish version	Mean: 12.25 points. Standard deviation: 6.20 points.

CDI: Children's Depression Inventory.

long-lasting. Therefore, we believe that it is key that paediatricians, teachers and mental health professionals collaborate in the early detection and treatment of mental health disorders that may be related to these exceptional circumstances, or neglected or exacerbated because of them, while also taking the opportunity to learn from this unprecedented and unforeseen situation.

Acknowledgments

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I am not worried by disease or pain
I worry from time to time
I always worry

I get sad from time to time
I get sad often
I'm always or almost always sad

Normally, I do not feel guilty for the bad things that happen
Many bad things that happen are my fault
Everything bad that happens is my fault

I like myself
I sometimes do not like myself
I hate myself

Sometimes I think bad things may happen to me
I am worried that bad things may happen to me
I am sure terrible things will happen to me

I have exercised more than before
Same screen time as before the lockdown
More screen time than before

Less than half hour a day of physical activity
Between half and one hour a day
One hour or more a day of physical activity

Less screen time than before
Same screen time as before the lockdown
More screen time than before

Daily screen time of 2 hours or less
Daily screen time of 2-6 hours
Daily screen time of more than 6 hours

Perceived usefulness in terms of wellbeing during confinement:

Very useful

Not useful or not used

Social networks

Reading/seeing the news

Playing videogames

Physical activity

Online school

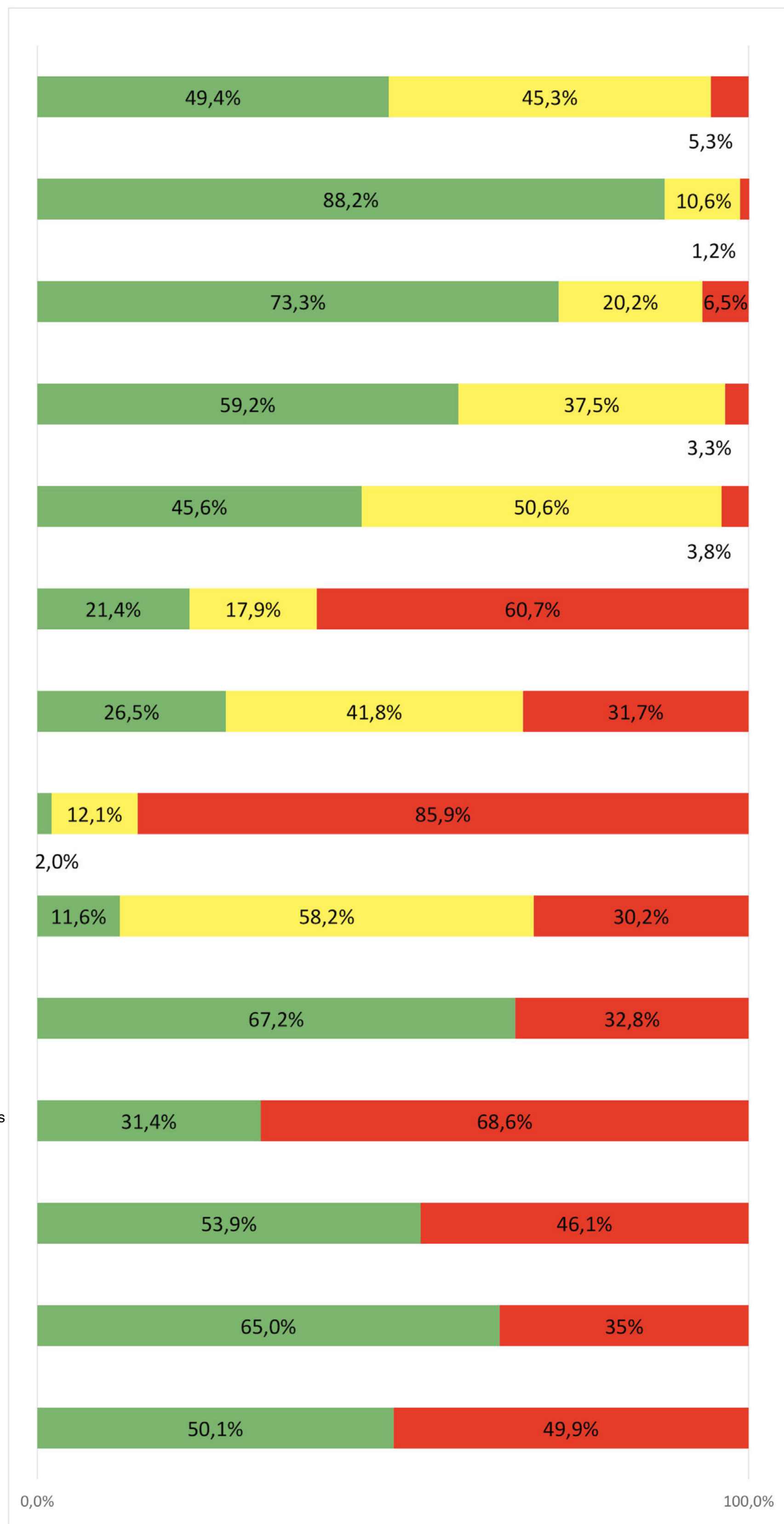

Figure 1 Salient responses in the questionnaire.

References

1. Golberstein E, Wen H, Miller BF. Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. JAMA Pediatr. 2020;174:819–20.
2. García Ron A, Cuéllar-Flores I. Impacto psicológico del confinamiento en la población infantil y como mitigar sus efectos: revisión rápida de la evidencia. An Pediatr (Barc). 2020;93:57–8.
3. Xie X, Xue Q, Zhou Y, Zhu K, Liu Q, Zhang J, et al. Mental health status among children in home confinement during the coronavirus disease 2019 outbreak in Hubei Province, China. JAMA Pediatr. 2020:e201619 [in press].
4. Del Barrio V, Moreno-Rosset C, López-Martínez R. El Children's Depression Inventory, (CDI; Kovacs, 1992), su aplicación en población española. Clin Salud. 1999;10:393–416.
5. Goodyer I, Wright C, Altham P. The friendships and recent life events of anxious and depressed school-age children. Br J Psychiatry. 1990;156:689–98.
6. Auerbach RP, Mortier P, Bruffaerts R, Alonso J, Benjet C, Cuijpers P, et al. WHO World Mental Health Surveys International College Student Project: prevalence and distribution of mental disorders. J Abnorm Psychol. 2018;127:623–38.

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Role of the pediatric emergency department during SARS-CoV-2 pandemic☆

Papel del pediatra de urgencias durante la pandemia por SARS-CoV-2

Dear Editor:

The impact of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on the paediatric population has been generally benign, contrary to the significant morbidity and mortality observed in the adult population that overwhelmed the Spanish health care system in Spring 2020[1,2]. During this first wave of the pandemic, the activity of paediatricians changed not only in terms of the care delivered to the paediatric population, but also in that they had to manage adult patients with illness of varying severity[3,4].

For this reason, the Working Group on Disasters and Multiple Casualty Incidents of the Sociedad Española de Urgencias Pediátricas (Spanish Society of Paediatric Emergency Medicine, SEUP) designed a study with the following objectives: (1) to describe the role of paediatric emergency physicians in the first wave of the coronavirus disease 2019 (COVID-19) pandemic, and (2) to define the new training needs of paediatricians to be ready for potential successive surges in cases.

The working group designed a prospective survey-based study focused on paediatricians with regular and/or on-call shifts in paediatric emergency departments (PEDs) of hospitals affiliated to the SEUP. We developed an anonymous questionnaire in Spanish to collect data on epidemiological characteristics of the participants (age, sex, years of experience in emergency department and infection by SARS-CoV-2), hospital characteristics (type and level of care), professional activity during the pandemic (work setting, schedule, type of patients and training needs) and subjective experience of the early months of the pandemic (dichotomous questions about the fear of falling sick and transmitting the virus to household members, anxiety, being overwhelmed, information overload).

In June and July 2020, we sent 3 electronic mails to the directors of 85 PEDs asking them to distribute the questionnaire to paediatricians in the permanent staff or covering on-call shifts in their department. The study was approved by the ethics committees of the 3 hospitals that employed the principal investigators.

We received 104 responses to the questionnaire corresponding to 25 PEDs (29.4% of the hospitals invited to participate), of which 80.8% (84) were submitted by female respondents. The median age of participants was 41.5 years (interquartile range [IQR], 34-49,2) and the median work experience in the paediatric emergency setting was 10 years (IQR, 4–15). Of all paediatricians, 57.7% (60) worked in general hospitals and 42.3% (44) in specialised children's hospitals, 59.6% (62) worked in third-level hospitals, 33.6% (35) in second-level hospitals and 6.7% (7) in first-level hospitals, and participating hospitals received a median of 40 000 visits a year (IQR, 29 500—55 000). Of all respondents, 16.3% (17) had SARS-CoV-2 infection (of who 1 required hospital admission) and 12.5% (13) had to isolate at home.

Forty-one paediatricians (39.4%) had to move to a different work setting and 48 (46.2%) managed adult patients for varying amounts of time: less than a week (11; 22.9%), 1–4 weeks (11, 22.9%), 4–8 weeks (25, 52.1%) and more than 8 weeks (1; 2%). When it came to disease severity in the adult patients managed by paediatricians, 15 (31.2%) managed stable, 25 (52.1%) managed moderately ill patients and 8 (16.7%) managed patients with severe or life-threatening disease.

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