SARS-COV-2 pandemic and child abuse☆

La pandemia por SARS-CoV-2 y el maltrato infantil

Dear Editor:

With the advent of coronavirus disease 2019 (COVID-19), countries had to make drastic and unexpected decisions for their populations. The Spanish government declared the state of alarm (14/03/2020–21/06/2020) and imposed strict measures (home confinement, remote working, closure of businesses, childcare centres, schools and universities) so that adults and children had to stay home for a long period of time.

Families experienced additional stress due to the fear of contagion,[1] contracting the disease, the uncertainty surrounding the new virus, the death of loved ones and economic or job losses.[2] Economic crises, infectious disease epidemics and significant disruption in the everyday life of the population affect mental health[3] and increase the frequency of child abuse. The home environment worsens in small or crowded households, especially in unstructured situations, so the confinement to the home of these at-risk children, with no social contact beyond their family, deprived of the external support of teachers, paediatricians or other professionals, results in an increase in the cases of child abuse,[4] although some studies suggest that more cases may go undetected when restrictions are in place, especially mild cases.[5,6]

Child abuse comprehends any action or omission that impinges on the rights or wellbeing of minors or threatens or interferes with their physical, mental or social development, independently of the form it takes or the medium in which it unfolds, including abuse committed through information technology, such as online abuse. There are four types of abuse: physical abuse, neglect, sexual abuse and emotional abuse. When the state of alarm was lifted and restrictive measures de-escalated, we started to notice an increase in the number of visits related to child abuse in our paediatric emergency department. Given the absence of a specific child abuse register and previous data to use as reference, we decided to investigate whether there was a significant increasing trend in its incidence and whether there had been changes in the characteristics of child abuse cases relative to the same time period the year prior as a result of the confinement. If our impression were confirmed, we thought it would be an aspect of wellbeing sufficiently important to reach out to the scientific community and share the knowledge obtained on the subject with the ultimate purpose of developing early detection and prevention strategies.

Table 1 Description of the characteristics of child abuse cases overall.

Characteristics of all the instances of child abuse (n = 74)	
Pre-confinement (February 2019-March 14, 2020)	36 (48.64%)
Post-confinement (March 15, 2020-February 2021)	38 (51.35%)
Median	1 year (1—11)
Sex	
Male	36 (48.64%)
Female	38 (51.35%)
Sexual abuse	13 (17.56%)
Neglect	1 (1.35%)
Physical abuse	60 (81.08%)
Hospital admission	11 (14.86%)

We conducted a retrospective descriptive and inferential study through the review of the health records of patients aged 0 to 18 years who received care for complaints related to child abuse in our department over a 24-month period. We compared the characteristics of the patients before the confinement (February 2019–March 14, 2020) and post confinement (March 15, 2020–February 2021), including the strict confinement period, during which there were no detected or suspected cases (14/03/2020–05/06/2020). There were no changes in the child abuse protocol applied during each of the periods (injury report form, consultation with social work services and police report, and involvement of a pathologist in cases of severe physical abuse and every case of sexual abuse). Table 1 summarises the characteristics of all the cases, and Table 2 the characteristics of the cases in each period and by type of abuse. During the post-confinement period, we found a change in the profile of the perpetrator, which used to be used to be someone outside the family before the confinement and someone in the household after the confinement, with an increase in the violence perpetrated by mothers and a decrease in the violence perpetrated by fathers, and a greater proportion of cases requiring hospital admission, differences that were statistically significant. When we analysed these same variables based on the type of abuse, we only found differences in the profile of the perpetrator in physical abuse, probably due to the sample size. Home confinement seems to increase the frequency of physical and sexual aggressions against children at the hand of family members, in addition to the severity of the assaults and the number that require hospitalization. Minors are vulnerable to crises and, while the impact of SARS-CoV-2 terms of the morbidity and mortality caused by the infection is lesser in this population, the consequences of the pandemic and confinement could have deleterious consequences on them and result in lifelong sequelae.[3] The pandemic has highlighted the absence of a multidisciplinary public health approach, and the lack of early detection programmes, the lack of access to these services (leading to the underdetection of neglect) and the lack of preventive interventions in social and psychiatric care. Furthermore, given the observed increase in incidence, it

DOI of refers to article: https://doi.org/10.1016/j.anpedi.2023.06.004

☆ Previous meeting: The study was presented an oral communication at the as II Online Congress of the Asociación Española de Pediatría, June 3–5, 2021, with the title *Cambios en las características del maltrato infantil durante la pandemia por SARS-Cov2* and signed by Maite Bayón Cabanes, Blanca Cano Sánchez De Tembleque, Elena Oyaga De Frutos, Ruth Púa Torrejón, María Jesús Ceñal González Fierro, Sara Chinchilla Langeber.

Table 2 Description of the characteristics of child abuse cases in the pre-confinement and post-confinement periods.

	Pre-confinement (February 2019–March 14, 2020) (*n* = 36)	Post-confinement (March 15, 2020–February 2021) (*n* = 38)	*P*
Age in years[a]	13 (6—14.25)	10.50 (7—15.2)	.59
Sex			0.90
Male	17 (44.7%)	21 (55.3%)	
Female	19 (50.0%)	17 (44.7%)	
Country of origin of victim			.66
Spain	29 (80.55%)	30 (78.9%)	
Morocco	2 (5.55%)	3 (7.89%)	
Venezuela	1 (2.77%)	3 (7.89%)	
USA	1 (2.77%)	0 (0%)	
Dominican Republic	1 (2.77%)	0 (0%)	
China	1 (2.77%)	0 (0%)	
Guinea	1 (2.77%)	0 (0%)	
Ukraine	0 (0%)	1 (2.6%)	
Unknown	0 (0%)	1 (2.6%)	
Country of origin of parents			.05
Unknown	19 (52.77%)	10 (26.32%)	
Spain	13 (36.11%)	19 (50%)	
Venezuela	1 (2.7%)	4 (10.52%)	
Morocco	2 (5.5%)	2 (5.26%)	
Guinea	1 (2.7%)	1 (2.6%)	
Ecuador	0 (0%)	1 (2.6%)	
Bolivia	0 (0%)	1 (2.6%)	
Perpetrator			<.001
Unrelated	23 (63.88%)	21 (55.26%)	
Family environment	8 (22.22%)	15 (39.47%)	
Mother	3 (37.5%)	7 (46.66%)	
Father	4 (50%)	2 (20%)	
Sibling	1 (12.5%)	2 (13.33%)	
Partner of parent	0 (0%)	2 (13.33%)	
Grandparent	0 (0%)	1 (6.66%)	
Own partner	0 (0%)	2 (13.33%)	
Several	0 (0%)	1 (6.66%)	
Unknown	5 (13.88%)	0 (0%)	
Hospital admission	2 (5.55%)	9 (23.68%)	.02
Physical abuse	29 (80.55%)	31 (81.57%)	
Age in years[a]	13 (6—14.75)	10.50 (7—15.2)	.38
Sex			.62
Male	15 (51.7%)	20 (64.51%)	
Female	14 (48.27%)	11 (35.48%)	
Country of origin of victim			.27
Spain	25 (86.20%)	26 (83.87%)	
Venezuela	1 (3.44%)	1 (3.22%)	
Morocco	0 (0%)	0 (0%)	
China	1 (3.44%)	0 (0%)	
USA	1 (3.44%)	0 (0%)	
Ecuador	0 (0%)	0 (0%)	
Dominican Republic	1 (3.44%)	0 (0%)	
Ukraine	0 (0%)	1 (3.22%)	
No data	0 (0%)	1 (3.22%)	
Country of origin of parents			.32
Spain	9 (31.03%)	17 (54.83%)	
Venezuela	1 (3.44%)	0 (0%)	
Morocco	0 (0%)	0 (0%)	
China	0 (0%)	0 (0%)	
USA	0 (0%)	0 (0%)	

Table 2 (*Continued*)

	Pre-confinement (February 2019–March 14, 2020) (*n* = 36)	Post-confinement (March 15, 2020–February 2021) (*n* = 38)	*P*
Ecuador	0 (0%)	1 (3.20%)	
Dominican Republic	0 (0%)	0 (0%)	
Ukraine	0 (0%)	0 (0%)	
No data	19 (65.51%)	10 (32.25%)	
Perpetrator			<.001
Mother	2 (6.9%)	7 (22.58%)	
Father	4 (13.79%)	1 (3.22%)	
Own partner	0 (0%)	1 (3.22%)	
Partner of parent	0 (0%)	2 (6.45%)	
Grandparent	0 (0%)	1 (3.22%)	
Other	23 (79.3%)	19 (61.29%)	
Hospital admission	1 (2.7%)	7 (21.05%)	.55
Sexual abuse	6 (16.66%)	7 (18.42%)	
Age in years	5 (5—8)[a]	7.46 ± 3[b]	
Sex			.28
Male	1 (16.66%)	1 (14.28%)	
Female	5 (83.33%)	6 (85.71%)	
Country of origin of victim			1.00
Spain	4 (66.6%)	14 (57.14%)	
Morocco	1 (16.6%)	1 (14.28%)	
Equatorial Guinea	1 (16.6%)	0 (0%)	
Venezuela	0 (0%)	2 (28.57%)	
Country of origin of parents			.40
Spain	4 (66.6%)	2 (28.57%)	
Morocco	1 (16.6%)	1 (14.28%)	
Equatorial Guinea	1 (16.6%)	1 (14.28%)	
Venezuela	0 (0%)	2 (28.57%)	
Nigeria	0 (0%)	1 (14.28%)	
Perpetrator			1.00
Unknown	5 (83.33%)	0 (0%)	
Parent and grandparent	1 (16.66%)	0 (0%)	
Unrelated	0 (0%)	2 (28.57%)	
Sibling	0 (0%)	2 (28.57%)	
Parent	0 (0%)	1 (14.28%)	
Mother's partner	0 (0%)	1 (14.28%)	
Own partner	0 (0%)	1 (14.28%)	
Hospital admission	1 (16.66%)	2 (28.57%)	1.00
Neglect	1 (2.7%)	0 (0%)	

[a] Values expressed as median (interquartile range).
[b] Values expressed as mean (standard deviation).

is likely that we are now more aware of the problem and therefore reporting has increased. We believe that many of the variables analysed in this study would provide additional information and would be clinically relevant if child abuse registers were instituted in every care setting and level and studies of larger scope were conducted on the subject, so we take this opportunity to reach out and ask the scientific community to study these aspects.

References

1. Naito H, Nitta K, Kakiuchi Y. Risk factors of self-reported physical child abuse during the COVID-19 pandemic in Japan: work-related changes in men and fear of COVID-19 in women. PeerJ [Internet]. 2023;11:e15346. Available from: https://peerj.com/articles/15346
2. Lawson M, Piel MH, Simon M. Child Maltreatment during the COVID-19 Pandemic: Consequences of Parental Job Loss on Psychological and Physical Abuse Towards Children. Child Abuse Negl. 2020 Dec 1;110 Pt 2:104709.
3. Trucco EM, Fava NM, Villar MG, Kumar M, Sutherland MT. Social Isolation During the COVID-19 Pandemic Impacts the Link between Child Abuse and Adolescent Internalizing Problems. J Youth Adolesc. 2023 Jun 1;52:1313–24.
4. Seddighi H, Salmani I, Javadi MH, Seddighi S. Child Abuse in Natural Disasters and Conflicts: A Systematic Review. Trauma Violence Abuse. 2021 Jan;22:176–85, http://dx.doi.org/10.1177/1524838019835973. Epub 2019 Mar 13. PMID: 30866745.

5. Côté-Corriveau G, Luu TM, Lewin A, Brousseau É, Ayoub A, Blaser C, et al. Hospitalization for child maltreatment and other types of injury during the COVID-19 pandemic. Child Abuse Negl. 2023 Jun 1;140:106186.
6. Gilchrist SA, Stanfield J, Tan MAM, Hicks RC, Urevick A, Cabbage T, et al. Changes in Pediatric Non-accidental Trauma Emergency Department Visits During and Following the COVID-19 Lockdown. Am Surg. 2023. Online ahead of print.

Sara Chinchilla Langeber*, Maite Bayón Cabanes

Hospital Universitario de Móstoles, Madrid, Spain

* Corresponding author.
E-mail address: sara.chinchilla@salud.madrid.org
(S. Chinchilla Langeber).

16 April 2023 12 June 2023

https://doi.org/10.1016/j.anpede.2023.08.012
2341-2879/

Identification of the complex chronic patient: PedCom Scale validation and English translation

Identificación del paciente crónico complejo. Validación de la escala PedCom y traducción a lengua inglesa

Dear Editor:

The development of paediatrics as a medical speciality has achieved an increase in the survival of patients with complex chronic conditions (CCCs).[1] Within this group is the subset that we refer to as complex chronic paediatric patients (CCPPs), for which there is no consensus-based definition, characterised by a greater vulnerability and dependence. However, delivering adequate care to these patients requires that they be correctly identified.[2,3]

In 2022, our research group published a study presenting the first version of a scale (PedCom) developed to identify CCPPs.[2] After its publication, comprehension problems emerged for several items and the need to include new devices arose, so we decided to revise the scale to update and validate it. We also proposed translating it to English to facilitate its international diffusion.

The study was conducted in a tertiary care children's hospital that has a paediatric palliative care and complex chronic disease unit after obtaining approval from the provincial research ethics committee. We applied the inclusion and exclusion criteria used in the pilot study.[2] The scale was revised applying the guidelines for scale development proposed by Clark et al.[4]

To validate the resulting scale, we followed the same steps applied in the pilot study.[2] For the sample size, we estimated we needed a minimum of 5 patients per item included in the analysis. We calculated the content validity ratio (CVR > 0.58), the overall content validity index (CVI > 0.58), the internal consistency coefficient (Cronbach α, 0.7—0.9) and intrarater and inter-rater agreement coefficients, and established the cut-off point by means of the receiver operating characteristic (ROC) curve. We also compared the patients classified as having complex chronic disease by the scale with the diagnoses contemplated in the Pediatric Complex Condition Classification System version 2.[5]

Two accredited translators translated the scale independently and then produced a single version by consensus. This was followed by reverse translation.

After the first revision, we obtained a version with 11 sections and 47 items; this resulted in a loss of internal consistency, so certain items were rewritten and grouped, for instance, the items pertaining to ventilatory support devices, vesicostomy, ureterostomy and bladder catheterization, to peritoneal dialysis and haemodialysis or the type of school. Changes were made to the scoring of items such as ''hospital only'' and home medication, pacemaker, ileostomy/colostomy, dialysis or haemodialysis and life expectancy. The section concerning hospitalizations was also removed.

These modifications yielded a final version with 10 sections and 42 items with an overall CVI of 0.92. Table 1 presents the final validated scale. We calculated a minimum sample size of 210 patients, and the final sample included 350 participants.

We obtained a Cronbach α of 0.73. The intraclass correlation coefficient in the test-retest analysis by means of 2-way mixed-effect ANOVA was 0.997 (95% confidence interval [CI], 0.996—0.997). In the analysis of interrater agreement, we obtained an intraclass correlation coefficient of 0.995 (95% CI, 0.994—0.996) in the 2-way random effects model.

The threshold to consider a patient as a CCPP was established at 6.5 points. This threshold had a sensitivity of 96% and a specificity of 97% with a positive predictive value of 97% and a negative predictive value of 96%. The Cohen kappa coefficient was 0.966 ($P < 0.01$) in the analysis of test-retest reliability and 0.954 ($P < 0.01$) in the analysis of interrater agreement.

When we compared the patients identified as CCPPs by the scale to the diagnostic codes contemplated in the CCC classification system published by Feudtner et al.[5] we found that 247 of the 350 participants had at least one CCC (70.6%); of this total, only 171 (69.2%) met the criteria for classification as a CCPP.

The translation of the scale to English can be found in Table 2.

DOI of refers to article: https://doi.org/10.1016/j.anpedi.2023.06.007