



Editorial

Child and adolescent psychiatry in the context of disease prevention

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Psychiatry stands out as the only medical specialty, other than paediatrics, where over 50% of cases originate before the age of 18. The average onset age for all disorders in our field is notably 14.5 years.¹ Despite this, child and adolescent psychiatry have traditionally received inadequate attention within the broader field, raising concerns in the context of a crucial paradigm shift towards disease prevention and health promotion.^{2,3}

This Journal issue features several compelling papers addressing key priorities in child and adolescent mental health. Among them is the escalating concern of adolescent suicide, with rising numbers observed globally in younger adolescents over recent decades. Suicide has become the leading cause of death among adolescents in certain Western countries, resulting in significant years of life lost due to premature death. Fonseca-Pedrero et al delve into the psychological network structure of suicidal behavior, examining risk and protective factors in adolescence.⁴ Despite limitations in sampling and a lack of longitudinal or biomarker data, the study reveals that nodes with the highest strength in the network include depressive symptomatology, positive affect, and empathic concern, with the most influential nodes linked to emotional intelligence abilities. Employing network analysis in large populations can aid in identifying dynamic areas for intervention in preventive approaches to suicide. Similarly, childhood adversities, a well-established risk factor for future mental disorders, emerge as a clear target for suicide prevention, as emphasized by Navarro-Mateu.⁵ Accumulating evidence supports the declaration of childhood adversities as a public health priority.

Selective primary prevention, centered on identifiable risk factors, is crucial for identifying very high-risk subgroups in very young population. Few medical risk factors predict a disorder's lifetime incidence above 50%. It is noteworthy that despite the awareness that 50 to 70% of extremely preterm newborns will develop a neurodevelopmental disorder, there is a lack of effective early prevention strategies. Collaborative studies, such as PeriSTRESS-PremTEA presented in this journal, offer insights into

early detection through biomarkers for high-risk groups of neurodevelopmental disorders in newborns.⁶

Advanced parental age at conception is a well-established risk factor for neurodevelopmental disorders, including autism spectrum disorders. García-Alcón et al⁷ explore in an elegant study the correlation between autistic traits in parents and parental age at conception. Their study investigates whether delayed father/motherhood results from autistic traits or if advanced age contributes to a higher rate of de novo mutations. The findings reveal a connection between autistic traits and advanced age at conception only in mothers, where parental age correlates with an Asperger Syndrome (AS) diagnosis. Polygenic Risk Scores are associated with autistic traits in mothers of subjects with AS, indicating a higher polygenic maternal contribution as a risk factor for an Asperger phenotype in offspring.

The necessity for multidisciplinary perinatal mental health programs is underscored in Roca-Lecumberri's paper, describing the first 150 mother-baby dyads attended to in their program in Barcelona.⁸ Notably, over 30% required psychiatric inpatient admission, with almost half diagnosed with a major depressive episode, accompanied by other psychiatric comorbidities. These programs mitigate the need to separate mother and baby during psychiatric hospitalization, enabling the observation of mother-baby interaction and early positive parenting training.

Continuing the focus on identifying high-risk groups, Buesa et al highlight threatened preterm labor (TPL) as a risk factor for postpartum depression, an underdiagnosed condition impacting mother-infant interaction and increasing the risk of neurodevelopmental disorders in offspring.⁹ The study reveals that factors such as higher maternal age, lower educational level, history of trauma, and higher trait anxiety scores predict postpartum depression after TPL.

As numerous papers in this issue emphasize, there is a pressing need to invest in very early primary prevention in mental health. Many well-established risk and protective factors for mental disorders are potentially modifiable through cost-effective preventive interventions.¹⁰ The question remains: What are we waiting for?

Conflicts of Interest

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References

1. Solmi M, Radua J, Olivola M, Croce E, Soardo L, Salazar de Pablo G, Il Shin J, Kirkbride JB, Jones P, Kim JH, Kim JY, Carvalho AF, Seeman MV, Correll CU, Fusar-Poli P. Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Mol Psychiatry*. 2022;27:281–295.
2. Arango C, Díaz-Caneja CM, McGorry PD, Rapoport J, Sommer IE, Vorstman JA, McDaid D, Marín O, Serrano-Drozdowskyj E, Freedman R, Carpenter W. Preventive strategies for mental health. *Lancet Psychiatry*. 2018;5: 591–604.
3. Wasserman D, Arango C, Fiorillo A, Levin S, Peters A, Rao P, Sanchez-Villanueva T, Sylla A. Improving mental health through fostering healthy lifestyles in young people: one of the targets in the WPA Action Plan 2023–2026. *World Psychiatry*. 2023;22:488–489.
4. Fonseca-Pedrero E, Díez-Gómez A, de la Barrera U, et al. Suicidal behaviour in adolescents: A network analysis. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:3–10, <http://dx.doi.org/10.1016/j.rpsm.2020.04.007>.
5. Navarro-Mateu F, Salmerón D, Vilagut G, et al. Childhood adversities and suicidal behavior in the general population. The cross-sectional PEGASUS-Murcia Project. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:11–18, <http://dx.doi.org/10.1016/j.rpsm.2020.10.002>.
6. Navalón P, Merchan-Naranjo J, Ghosn F, et al. Study of the pathophysiological mechanisms associated with the onset and course of neurodevelopmental disorders in preterm infants (the PeriSTRESS-PremTEA study): Rationale, objectives, design and sample description. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:19–27, <http://dx.doi.org/10.1016/j.rpsm.2021.02.002>.
7. García-Alcón A, González-Penas J, Penzol MJ, et al. An exploratory analysis of parental autism traits, age at conception and polygenic background in Autism Spectrum Disorders. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:28–34, <http://dx.doi.org/10.1016/j.rpsm.2021.12.001>.
8. Roca-Lecumberri A, Torres A, Andrés S, et al. New units for perinatal mental health disorders: Description of the first 150 dyads attended at Mother Baby Day Hospital CLINIC-BCN. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:41–45, <http://dx.doi.org/10.1016/j.rpsm.2022.06.004>.
9. Buesa J, Campos-Berga L, Lizaran M, et al. Predictors of postpartum depression in threatened preterm labour: Importance of psychosocial factors. *Spanish Journal of Psychiatry and Mental Health*. 2024;17:51–54, <http://dx.doi.org/10.1016/j.sjpmh.2023.06.004>.
10. Arango C, Fusar-Poli P. Primary prevention in psychiatry is not science fiction. *Eur Neuropsychopharmacol*. 2022;65:30–32.