no effect on inpatient counseling and therapy compliance. These are the first data to demonstrate medical note comprehension and satisfaction among AYA patients in vulnerable clinical settings.

Although these initial results are promising, limitations were identified. Limitations included small sample size, single-site recruitment, and single−psychiatry provider participation. Continued research is necessary to ascertain the reproducibility of our results and the ramifications of note sharing in vulnerable youths.

Isabella Dohil, BS
Rusvelda Cruz, MPH
Hannah Sweet, MD
Jeannie S. Huang, MD, MPH

Accepted September 30, 2020.

Mss. Dohil, Cruz, Drs. Sweet and Huang are with the University of California, San Diego. Drs. Sweet and Huang are also with Rady Children's Hospital, San Diego, California.

The authors have reported no funding for this work.

Author Contributions
Conceptualization: Huang
Formal analysis: Dohil
Investigation: Dohil, Cruz, Sweet
Project administration: Cruz
Supervision: Huang
Writing — original draft: Dohil
Writing — review and editing: Cruz, Huang

ORCID
Isabella Dohil, BS: https://orcid.org/0000-0003-1384-8759
Rusvelda Cruz, MPH: https://orcid.org/0000-0002-2108-0770
Jeannie S. Huang, MD, MPH: https://orcid.org/0000-0002-2742-5557

Disclosure: Drs. Sweet and Huang and Mss. Dohil and Cruz have reported no biomedical financial interests or potential conflicts of interest.

Correspondence to Jeannie Huang, BS, 9500 Gilman Drive, MC 0984, La Jolla, CA 92093; e-mail: jshuang@ucsd.edu

https://doi.org/10.1016/j.jaac.2020.09.016

REFERENCES

1. OpenNotes. More than 40 million patients can access their clinicians' visit notes via secure portals at 200 health systems. OpenNotes website. Published July 2, 2019. Available at: https://www.opennotes.org/news/more-than-40-million-patients-can-access-their-clinicians-visit-notes-via-secure-portals-at-200-health-systems/. Accessed February 12, 2020.
2. Cromer R, Denneson LM, Pisciotta M, Williams H, Woods S, Dobscha SK. Trust in mental health clinicians among patients who access clinical notes online. Psychiatr Serv. 2017;68:520-523.
3. Huang JS, Yueh R, Ma S, Cruz R, Bauman L, Choi LJ. Adolescents' and young adults' satisfaction with and understanding of medical notes from a pediatric gastroenterology practice: a cross-sectional cohort study. J Pediatr. 2019;215:264-266.
4. Blease CR, O'Neill S, Walker J, Hägglund M, Torous J. Sharing notes with mental health patients: balancing risks with respect. Lancet Psychiatry. 2020;7:924-925.
5. Baker DW, Williams MV, Parker RM, Gazmararian JA, Nurss J. Development of a brief test to measure functional health literacy. Patient Educ Couns. 1999; 38:33-42.

Navigating in Troubled Waters: The Developmental Roots of Disruptive Mood Dysregulation Disorder

To the Editor:

Wiggins *et al.*[1] recently used data from 3 longitudinal studies spanning preschool and early school children to form an empirically derived framework for early childhood disruptive mood dysregulation disorder (EC-DMDD), ie, a theoretical entity based on all DMDD criteria except the age at onset. The authors showed that the presence of EC-DMDD strongly predicted irritability-related syndromes at early school-ages. The most striking result is that virtually all youths with DMDD had chronic irritability in preschool years (>99%), a finding that challenges the view that DMDD cannot be diagnosed before 6 years of age. In our opinion, the developmental view on DMDD adopted by the authors is particularly welcome to address some of the nosological issues encountered with this disorder.

Two other studies explored the course of normal anger/irritability in children using empirically-derived trajectories of subjects. In a study conducted by Liu *et al.* (2018),[2] 361 infants were followed up to the age of 7 years, with maternally reported symptoms of irritability. Wiggins *et al.* (2014)[3] conducted a latent class analysis of participants in the Fragile Families and Child Wellbeing study, which included 4,898 families. Symptoms of irritability were reported by parents on the basis of 3 items on the Child Behavioral Check-List scale at ages 3, 5, and 9. Findings from these studies are consistent with the assumption that children with chronically high levels of irritability did not experience the normative decrease in irritability in absolute terms that is observed during preschool years in the general population, although trajectories do exist.[4]

The onset of DMDD is therefore difficult to determine when considering that these patients have always experienced a certain form of anger reactivity since toddlerhood. It may be worth remembering that for neurodevelopmental disorders, the age at onset does not represent the first time that symptoms occurred but rather the moment when the level of social expectations about a specific developmental ability exceed a patient's individual skill. The main reasons for using a threshold of age 6 years for the diagnosis of DMDD is therefore related to the developmental course of irritability: The level of irritability tends to stabilize for most children in the general population after this age, whereas children with persisting irritability are unlikely to have spontaneous remission of symptoms after this time.[4]

Why have youths with DMDD never developed acquired effective emotional-regulation and anger-control skills? According to the translational model of irritability,[5] youths with chronic irritability are regarded as having a deficit in instrumental learning, ie, the process through which organisms learn associations between one's behaviors and their consequences in the environment. Such impairments could involve either the content or the process of instrumental learning. Poor parental skills, particularly unpredictable parental reactions for a youth's behavior, have been regarded as an important risk factor for DMDD because it may result in additional difficulties for the child to generalize behaviors based on trial-and-error learning.

The process of instrumental learning refers to the information-processing systems involved in operant-conditioning tasks. It involves the integrity of cognitive functions (eg, attention, memory) as well as many domains involved in the child's ability to develop a sense of contingency (perception, motor, and language functions). Of note, almost all developmental disorders can be associated with nonspecific difficulties that could affect the process of instrumental learning to some degree (eg, shared attention, extraction of invariant features, or reward prediction). The high rate of associated developmental impairments previously reported in DMDD patients[6] might not be regarded as incidental but rather as internal risk factors affecting the process of instrumental learning involved in the growth of emotional regulation skills. In other words, the presence of developmental impairments could decrease the child's learning curve of emotional regulation strategies via difficulties in performing parent-child contingent interactions.

The assumption that DMDD could not be strictly diagnosed before 6 years does not mean that the roots of the disorder should not be investigated earlier in childhood to understand why these children "miss the boat."[1] In particular, clinicians caring for children with DMDD would be well advised to carefully review internal factors (associated developmental impairments) and external factors (mainly parental skill, attachment patterns) involved in the growth of emotional regulation skill. A better insight into the relation between these difficulties could offer a valuable therapeutic chance for these patients. Let's not miss it.

Xavier Benarous, MD, PhD
David Cohen, MD, PhD
Vladimir Ferrafiat, MD, MSc
Jean-Marc Guilé, MD, PhD

Accepted December 4, 2020.

Drs. Benarous and Guilé are with Amiens University Hospital, Amiens, France. Prof. Cohen is with Pitié-Salpêtrière Hospital, Sorbonne University, Paris, France.

Dr. Ferrafiat is with Centre Hospitalier Universitaire Charles Nicolle, Rouen, France.

The authors have reported no funding for this work.

Author Contributions
Conceptualization: Benarous, Cohen, Guilé
Supervision: Benarous, Cohen, Guilé
Validation: Benarous, Cohen, Ferrafiat, Guilé
Visualization: Cohen, Ferrafiat
Writing — original draft: Benarous, Guilé
Writing — review and editing: Benarous, Cohen, Ferrafiat, Guilé

ORCID
Xavier Benarous, MD, MSc: https://orcid.org/0000-0003-1994-5779
Vladimir Ferrafiat, MD, MSc: https://orcid.org/0000-0002-9285-1034
Jean-Marc Guilé, MD, PhD: https://orcid.org/0000-0001-7779-0686

The authors thank Ms. Susan Orsoni, retired, for her careful and attentive rereading.

Disclosure: Dr. Benarous has received funding from the Mission Interministérielle de Lutte Contre les Drogues et les Conduites Addictives (Projet IRESP-15-Prevention-11) and has served as a consultant to the working group for the Société Française de Psychiatrie de l'Enfant et de l'Adolescent et Disciplines Associées. Prof. Cohen has received funding from the Agence Nationale de la Recherche iReCheck—Programme de Recherche Médico Economique e-GOI-LAH ECO and has served as a consultant to Janssen, Otsuka, Lundbeck, and Nestlé. Dr. Ferrafiat has received funding from the PRAZADO Programme Hospitalier de Recherche Clinique (PHRC) National 2019, PHRC-19-0067 FINESS 760780239. Prof. Guilé has received grants from the PHRC Securiplan, Appel d'Offres Local (AOL) Synchroprema, AOL Actihumeur, and Fondation de France AdoScreen.

Correspondence to Xavier Benarous, MD, MSc, Service de Psychopathologie de l'Enfant et de l'Adolescent, CHU Amiens-Picardie Site Sud, 1 rue du Professeur Christian Cabrol, 80000 Amiens, France; e-mail: benarous.xavier@chu-amiens.fr

https://doi.org/10.1016/j.jaac.2020.08.469

REFERENCES

1. Wiggins JL, Briggs-Gowan MJ, Brotman MA, Leibenluft E, Wakschlag LS. Don't miss the boat: towards a developmental nosology for disruptive mood dysregulation disorder in early childhood. J Am Acad Child Adolesc Psychiatry. Published online June. 2020;26.
2. Liu C, Moore GA, Beekman C, *et al*. Developmental patterns of anger from infancy to middle childhood predict problem behaviors at age 8. Dev Psychol. 2018;54:2090-2100.
3. Wiggins JL, Mitchell C, Stringaris A, Leibenluft E. Developmental trajectories of irritability and bidirectional associations with maternal depression. J Am Acad Child Adolesc Psychiatry. 2014;53:1191-1205. e1191-1194.
4. Wakschlag LS, Estabrook R, Petitclerc A, *et al*. Clinical implications of a dimensional approach: the normal:abnormal spectrum of early irritability. J Am Acad Child Adolesc Psychiatry. 2015;54:626-634.
5. Brotman MA, Kircanski K, Stringaris A, Pine DS, Leibenluft E. Irritability in youths: a translational model. Am J Psychiatry. 2017;174:520-532.
6. Benarous X, Iancu C, Guilé JM, Consoli A, Cohen D. Missing the forest for the trees? A high rate of motor and language impairments in Disruptive Mood Dysregulation Disorder in a chart review of inpatient adolescents. Eur Child Adolesc Psychiatry. 2020 Sep 12 [E-pub ahead of print].

Drs. Wiggins and Wakschlag Reply

We thank Benarous *et al.* for their recognition of the necessity of a developmental view on disruptive mood dysregulation disorder (DMDD) and for their thoughtful comments.[1] Indeed, a