Table 2. The Most Frequently Prescribed Psychotropic Polypharmacy Patterns Among Youths Treated With Psychotropic Polypharmacy[a]

Polypharmacy combinations	Weighted % (95% CI)
1999-2004	
Atd, Sti, Msb	17.8 (6.5-29.0)
Atd, Sti, Aag	15.1 (5.0-25.1)
Atp, Sti, Aag	11.8 (1.3-22.4)
Sti, Msb, Aag	9.7 (2.5-16.8)
2005-2010	
Atp, Atd, Sti	21.6 (12.9-30.2)
Atp, Sti, Aag	17.4 (7.7-17.0)
Atp, Sti, Msb	11.8 (5.8-17.8)
Atd, Sti, Aag	10.4 (3.9-16.9)
2011-2015	
Atp, Sti, Aag	21.8 (13.7-29.8)
Atp, Atd, Sti	16.7 (8.7-24.6)
Atd, Sti, Aag	13.9 (7.4-20.4)
Atp, Atd, Msb	9.9 (3.3-16.6)

Abbreviations: Aag, α-agonists; Atd, antidepressants; Atp, antipsychotics; Msb, mood stabilizers; Sti, stimulants.

[a] Only combinations reported in 10% or more of youths treated with psychotropic polypharmacy were presented.

macy. Stimulants were present in nearly all regimens, and antipsychotics became prominent in combinations after 2004.

Discussion | Attention-deficit/hyperactivity disorder is the predominant diagnosis among youths who received psychotropic polypharmacy. The findings suggest an increase in concurrent use of antipsychotics with other psychotropics. Use of mood stabilizers decreased possibly as more youths received antipsychotics for mood disorders. Evidence of the efficacy and safety is needed to guide psychotropic polypharmacy practice. A study limitation is that the definition of psychotropic polypharmacy may have obscured medication switching.

Chengchen Zhang, MPH
O'Mareen Spence, MPH, PhD
Gloria Reeves, MD
Susan dosReis, PhD

Author Affiliations: Department of Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, Baltimore (Zhang, Spence, dosReis); Division of Child and Adolescent Psychiatry, University of Maryland School of Medicine, Baltimore (Reeves).

Corresponding Author: Chengchen Zhang, MPH, Department of Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, 220 Arch St, 12th Floor, Baltimore, MD 21201 (chengchen_zhang@umaryland.edu).

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Concept and design: All authors.
Acquisition, analysis, or interpretation of data: Zhang, Spence, dosReis.
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Supervision: Reeves, dosReis.

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Prevalence of SARS-CoV-2 Infection in Children Without Symptoms of Coronavirus Disease 2019

During the coronavirus disease 2019 (COVID-19) pandemic, determination of prevalence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection among children without symptoms of COVID-19 is critical to guide infection control policy. While estimates have been reported in children undergoing emergency surgery[1] and oncologic care,[2] these small studies have limited generalizability to large populations of children without symptoms. When children's hospitals resumed elective medical and surgical care in April and May 2020, many implemented routine SARS-CoV-2 testing for children presenting for care not associated with suspicion of COVID-19. Here, we report the prevalence of positive SARS-CoV-2 test results in children without symptoms at 28 children's hospitals across the US.

Supplemental content

Methods | The prevalence of SARS-CoV-2 infection in children who are asymptomatic was reported by pediatric otolaryn-

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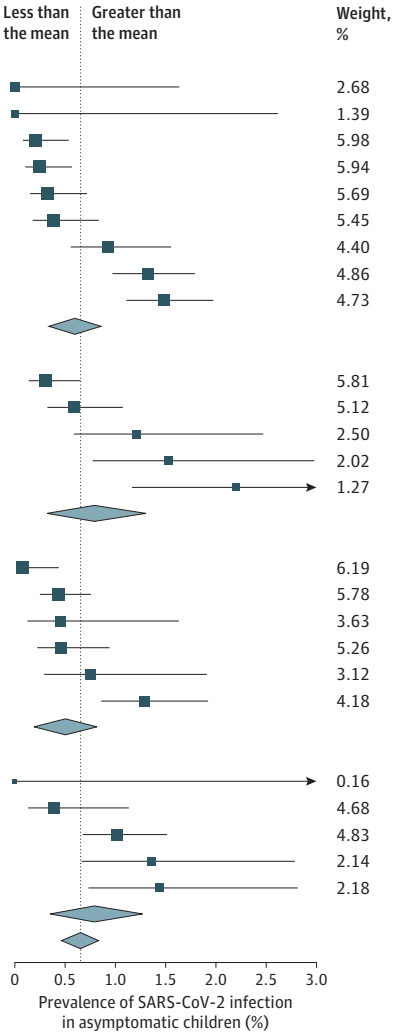
gologists as part of a quality improvement project through May 29, 2020. Reverse transcription–polymerase chain reaction tests for SARS-CoV-2 RNA were performed before surgery, clinic visits, or hospital admissions. In some instances, children may have had symptoms associated with their primary condition that overlapped with symptoms of COVID-19, but testing was not done out of suspicion of SARS-CoV-2 as the primary causative mechanism of illness. Because this was an analysis of deidentified data only, the study was deemed exempt, with a waiver of consent, by the University of California, San Francisco institutional review board.

The mean weekly incidence of COVID-19 for the entire population of the combined statistical area (CSA) for each hospital was calculated from the Johns Hopkins University confirmed cases database for the indicated periods[3,4] and compared with asymptomatic prevalence. All *P* values less than .05 were considered statistically significant. Statistical analyses were performed using Stata version 15.1 (StataCorp). Analyses are detailed in the eMethods in the Supplement.

Results | Overall, 250 of 33 041 children (age range, 0-18 years) without symptoms who were tested at 28 hospitals were positive for SARS-CoV-2 through May 29, 2020. Across the 25 CSAs represented by these children's hospitals, prevalence varied from 0% to 2.2%, with a pooled prevalence of 0.65% (95% CI, 0.47%-0.83%, with significant heterogeneity; **Figure 1**). Asymptomatic pediatric prevalence was sig-

Figure 1. Prevalence of Asymptomatic Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children

Region/ CSA	No./ total No.	Testing indication	Testing site	Calculation period	Prevalence, % (95% CI)	Weight, %
West						
1	0/231	Preop	NP	June 1-June 30	0.00 (0.00-1.64)	2.68
2	0/143	Preop OHNS	NP	June 1-June 23	0.00 (0.00-2.62)	1.39
3	4/1919	Preop	NP	May 29-June 30	0.21 (0.08-0.53)	5.98
4	5/2058	Preop/clinic	MT	NA	0.24 (0.10-0.57)	5.94
5	6/1821	Preop	NP	NA	0.33 (0.15-0.72)	5.69
6	6/1562	Preop/clinic	NP	June 5-June 22	0.38 (0.18-0.84)	5.45
7	14/1506	Preop	NP	May 29-July 8	0.93 (0.55-1.55)	4.40
8	40/3032	Preop	NP	May 29-July 9	1.32 (0.97-1.79)	4.86
9	45/3039	Preop	NP	NA	1.48 (1.11-1.98)	4.73
West (all) I^2 = 85.5% (*P* <.001)	120/15 311				0.59 (0.28-0.90)	
Midwest						
10	6/2000	Preop	NP	May 29-July 8	0.30 (0.14-0.65)	5.81
11	10/1704	Preop	NP	NA	0.59 (0.32-1.08)	5.12
12	7/580	Preop	NP	NA	1.21 (0.59-2.47)	2.50
13	8/525	All ASX	NP	NA	1.52 (0.77-2.98)	2.02
14	9/408	Preop OHNS	NP	NA	2.21 (1.16-4.14)	1.27
Midwest (all) I^2 = 72.4% (*P* =.006)	40/5217				0.87 (0.37-1.37)	
South						
15	1/1293	All asx	NP	June 4-July 7	0.08 (0.01-0.44)	6.19
16	12/2767	Preop	NP	NA	0.43 (0.25-0.76)	5.78
17	2/443	All ASX	NP	NA	0.45 (0.12-1.63)	3.63
18	7/1528	Preop	NP	NA	0.46 (0.22-0.94)	5.26
19	4/534	Preop	NP	NA	0.75 (0.29-1.91)	3.12
20	23/1789	All ASX	NP	NA	1.29 (0.86-1.92)	4.18
South (all) I^2 = 80.4% (*P* <.001)	49/8354				0.52 (0.20-0.84)	
Northeast						
21	0/42	Preop	NP/MT	NA	0.00 (0.00-8.38)	0.16
22	3/774	Preop	MT	June 1-June 23	0.39 (0.13-1.13)	4.68
23	23/2273	All ASX	OP	June 1-June 23	1.01 (0.68-1.51)	4.83
24	7/514	Preop	NP	NA	1.36 (0.66-2.78)	2.14
25	8/556	Preop	NP	May 29-June 29	1.44 (0.73-2.81)	2.18
Northeast (all) I^2 = 45.5% (*P* =.12)	41/4159				0.90 (0.45-1.35)	
Overall I^2 = 79.4% (*P* <.001)	250/33 041				0.65 (0.47-0.83)	



Forest plot of asymptomatic prevalence in 25 combined statistical area (CSAs) is shown. The size of each square is relative to its random-effects model weight, and 95% CIs are represented as horizontal lines. The width of each diamond represents the 95% CI of pooled prevalence estimates for regional subgroups and the entire US. Testing indications included hospital-wide preoperative or preclinic testing (preop/clinic), preoperative testing for pediatric patients in otolaryngology–head and neck surgery only (preop OHNS), or testing for all children who were asymptomatic (undifferentiated by testing indication; ASX). Testing sites for reverse transcription–polymerase chain reaction sample collection were nasopharynx (NP), middle turbinate or nasal cavity (MT), or oropharynx (OP). Calculation period: for 11 CSAs with additional later data, the periods over which calculated and actual prevalence rates in asymptomatic pediatric populations were compared in Figure 2B are shown. NA indicates not available.

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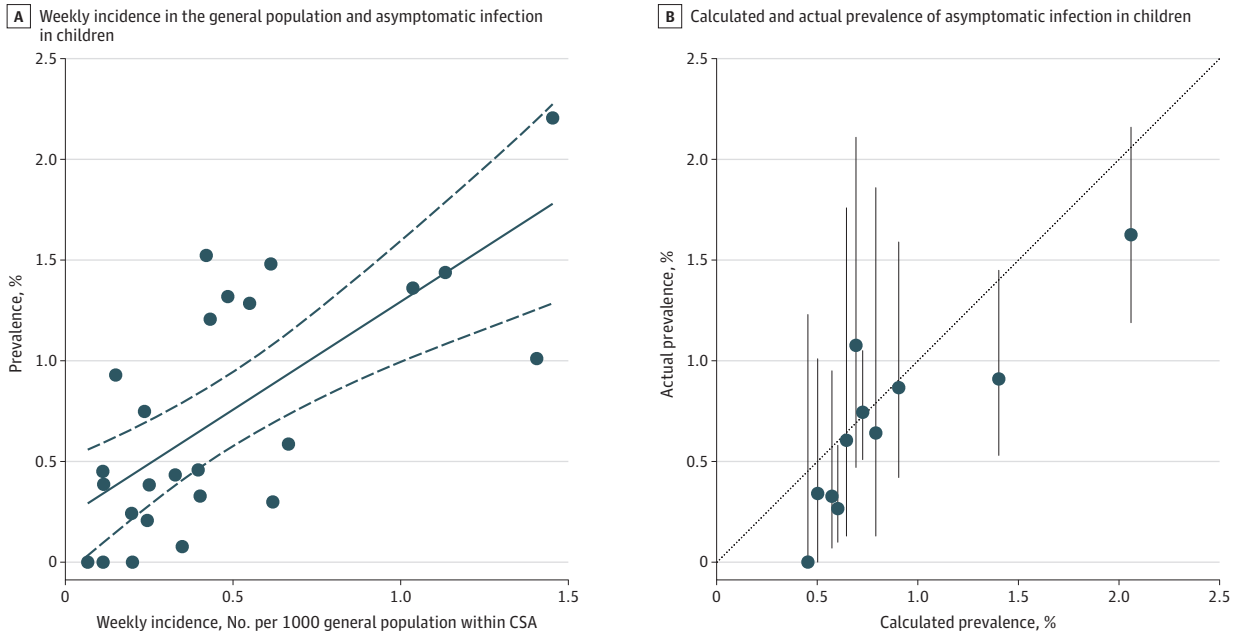
Figure 2. Association of Severe Acute Respiratory Syndrome Coronavirus 2 Prevalence in Children Without Symptoms With Weekly Incidence of Coronavirus Disease 2019 in General Populations



A, The weekly incidence of coronavirus disease 2019 infection in the general population and asymptomatic pediatric prevalence for 25 combined statistical areas (CSAs) is plotted here. The line of best fit (black solid line) and 95% CIs (dashed lines) are shown. Linear regression resulted in an unstandardized coefficient (B) of 1.07 (95% CI, 0.60-1.54; $P < .001$). Of the variation in the data, 49% was explained by the model. Equation of best-fit line: asymptomatic pediatric prevalence was equal to 1.07 × (Johns Hopkins University weekly incidence) + 0.23. B, For 11 CSAs (n = 15 612 children), prevalence values in asymptomatic pediatric populations were available for defined periods in June and July 2020 (as specified in Figure 1). Using the regression model generated in Figure 2A, we calculated prevalence values in asymptomatic pediatric populations from the Johns Hopkins University weekly incidence for each of the CSAs over those periods and compared them with the actual measured asymptomatic pediatric prevalence values. The gray dashed line indicates a perfect match between calculated and actual prevalence values. Error bars indicate the 95% CIs surrounding the actual measured prevalence values by binomial exact calculation.

nificantly associated with weekly incidence of COVID-19 in the general population during the 6-week period over which most testing of individuals without symptoms occurred (unstandardized coefficient B = 1.07 [95% CI, 0.60-1.54]; $P < .001$; **Figure 2**A). No other factor (CSA population, number of tests performed, region, testing indication, or sample collection site) demonstrated a significant association with prevalence in individuals without symptoms. Later data from 15 612 children from 11 CSAs were compared with prevalence in an asymptomatic pediatric population calculated from contemporaneous Johns Hopkins University weekly incidence using the best-fit equation derived from this association, and this demonstrated that the association persisted at this later time (unstandardized coefficient B, 0.86 [95% CI, 0.60-1.54]; $P = .001$; Figure 2B).

Discussion | These findings suggest a low pooled prevalence of positive SARS-CoV-2 test results among children who were asymptomatic and presenting for surgical or medical care. Heterogeneity of the pooled prevalence estimates suggests that site-specific prevalence data have greater utility than regional pooled prevalence for local decision-making. However, sufficiently powered prevalence data on the local asymptomatic pediatric population are difficult to obtain for most individual institutions.

The strong association between prevalence of SARS-CoV-2 in children who are asymptomatic and contemporaneous weekly incidence of COVID-19 in the general population (quantified by the best-fit equation in Figure 2A) provides a simple means for institutions to estimate local pediatric asymptomatic prevalence from the publicly available Johns Hopkins University database.[3] This prevalence can be used to guide policy on institutional settings for children within that community and estimate pretest probability for SARS-CoV-2 screening. Ongoing estimates of the prevalence of asymptomatic SARS-CoV-2 infection in children may be updated as the COVID-19 pandemic evolves (Figure 2B).

Limitations of this study exist. Children without symptoms presented for elective care at children's hospitals and may not represent the general pediatric population by age, health status, immunologic status, and demographic factors. Because of prolonged viral shedding,[5] polymerase chain reaction test positivity in children without symptoms may not reflect contemporaneous community incidence. Variations in symptom screening and testing protocol existed between sites and over time, contributing to heterogeneity. We are confident, however, that the strong correlation with the general incidence data provides external validation that the asymptomatic testing outcomes are broadly reliable.

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Ana Marija Sola, BS
Abel P. David, MD
Kristina W. Rosbe, MD
Atsuko Baba, MD
Lynn Ramirez-Avila, MD, MSc
Dylan K. Chan, MD, PhD

Author Affiliations: University of California, San Francisco School of Medicine, San Francisco, San Francisco (Sola); Department of Otolaryngology–Head and Neck Surgery, University of California, San Francisco, San Francisco (David); Division of Pediatric Otolaryngology, Department of Otolaryngology–Head and Neck Surgery, University of California, San Francisco, San Francisco (Rosbe, Chan); Division of Pediatric Anesthesiology, Department of Anesthesiology, University of California, San Francisco, San Francisco (Baba); Division of Pediatric Infectious Diseases and Global Health, Department of Pediatrics, University of California, San Francisco, San Francisco (Ramirez-Avila).

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Corresponding Author: Dylan K. Chan, MD, PhD, Division of Pediatric Otolaryngology, Department of Otolaryngology–Head and Neck Surgery, University of California, San Francisco, 2233 Post St, 3rd Floor, Box 1225, San Francisco, CA 94143 (dylan.chan@ucsf.edu).

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Correction: This article was corrected on October 5, 2020, to correct errors in Figure 1. The labels for 1.0 and 1.5 on the y-axis of the forest plot graph were reversed. Also, the square indicating the prevalence for site 14 was displaced from its true value, 2.21%, to approximately 2.75%; this square was also larger than it should have been. The errors have been corrected.

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Concept and design: David, Chan.
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: Sola, Chan.
Critical revision of the manuscript for important intellectual content: David, Rosbe, Baba, Ramirez-Avila, Chan.
Statistical analysis: Sola, Chan.
Administrative, technical, or material support: David, Baba.
Supervision: Rosbe, Chan.

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Early Formula Supplementation Trends by Race/Ethnicity Among US Children Born From 2009 to 2015

Breastfeeding is the best source of nutrition for most infants. It is associated with a reduction in the risk for some health conditions for both infants and mothers.[1,2] The American Academy of Pediatrics recommends that infants be fed only human milk for about the first 6 months of life, with continued breastfeeding along with complementary foods for at least 1 year.[3] Previous studies have indicated that early formula supplementation is associated with the exclusivity and duration of breastfeeding,[4] but, to our knowledge, trend analysis on formula supplementation among US children is lacking. This survey study examines the trends in early formula supplementation by race/ethnicity using data from the National Immunization Survey-Child (NIS-Child) of US children born from 2009 to 2015.

Methods | The NIS-Child is a national ongoing, random-digit-dialed telephone survey conducted by the Centers for Disease Control and Prevention.[5] Our study is based on data from mixed telephone sampling (landline and cellular) from January 1, 2011, through December 31, 2017, among a complex, stratified, multistage probability sample of US households with children aged 19 to 35 months at the time of the survey. Because each annual NIS sample includes children born in 3 calendar years, we analyzed the data by birth year from 2009 through 2015. The protocol under which data were collected by the NIS during the period from 2011 to 2017 was reviewed and approved by the National Center for Health Statistics' Research Ethics Review Board.

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