



Roundtable Europaediatrics
Zagreb Croatia 7-9 October 2021



Changes in practice of
primary paediatric care
during the COVID pandemic

Challenges to maintain essential paediatric health services

Gottfried Huss
General Secretary ECPCP

RESILIENCE



1. What collateral effects did we observe in PPC during the pandemic?

Disruption of services -> unintended consequences observed

Delayed care for severe conditions

Changes in infectious and non- infectious disease epidemiology

Unexpected benefit

2. The future of the pandemic and its importance for paediatricians

3. Learning lessons: Resilience - maintenance – improvement in the primary paediatric care context– ho can we do better next time?

Changes in PPC during the pandemic

- The pandemic caused
 - **Disruptions** and **discontinuity** of care-seeking and preventive interventions in the majority of European countries.
 - **Loss of primary care capacity** in some countries (US, Canada, poor countries?).
 - **Private sector** more affected than public sector.

Gottfried Huss, MD¹, Christine Magendie, MD¹, Massimo Pettoello-Mantovani, MD, PhD², and Elke Jaeger-Roman, MD¹
Implications of the COVID-19 Pandemic for Pediatric Primary Care Practice in Europe- Editorial THE JOURNAL OF PEDIATRICS www.jpeds.com 2021
Patricia Houston et al. AI Covid 19 and primary care in six countries, BJGP Open 2020

The measures in primary care are similar in European and US

- **Screen for symptoms of COVID-19** before arrival and on arrival at the facility
- **Require cloth face covering - ensure adherence to respiratory hygiene, cough etiquette, and hand hygiene ...**
- **Separate sick from well patients by time and spatial separation.**
- **Reduce crowding in waiting rooms.**
- **Offer more phone calls and telemedicine visits for visits that do not require an in-person physical examination...**
- **Outreach Nursing**

Measures Used to Increase Uptake of Recommended Vaccines in Children in **Kaiser Permanente** PSC During the COVID-19 Pandemic from Pediatric Vaccination During the COVID-19 Pandemic Bradley K. Ackerson, MD,^a Lina S. Sy, MPH,^a Sungching C. Glenn, MS,^a Lei Qian, PhD,^a Claire H. Park, MPH,^a Robert J. Riewerts, MD,^b Steven J. Jacobsen, MD, PhD^a PEDIATRICS Volume 148, number 1, July 2021:e2020047092

Collateral effects- delayed care for severe conditions

Changes applied to routine practice because of the pandemic **and fearful attitudes by parents caused unintended and sometimes negative consequences:**

- **Patients with minor illnesses were discouraged to come to doctor's offices.**
 - Did the capacity of parents improve?
- Vaccinations and well child visits were postponed and delayed.
- **Restricted access to PC and emergency services-**→ in Europe this affected all clinical aspects- especially **diabetic ketoacidosis** and others-

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More perforated appendicitis

Increased Incidence of Perforated Appendicitis in Children During COVID-19 Pandemic in a Bavarian Multi-Center Study

Frank-Mattias Schäfer¹, Johannes Meyer², Stephan Kellnar², Jakob Warmbrunn³, Tobias Schuster⁴, Stefanie Simon⁵, Thomas Meyer⁶, Julia Platzer², Jochen Hubertus⁶, Sigurd T. Seitz², Christian Knorr¹⁰ and Maximilian Stehr¹

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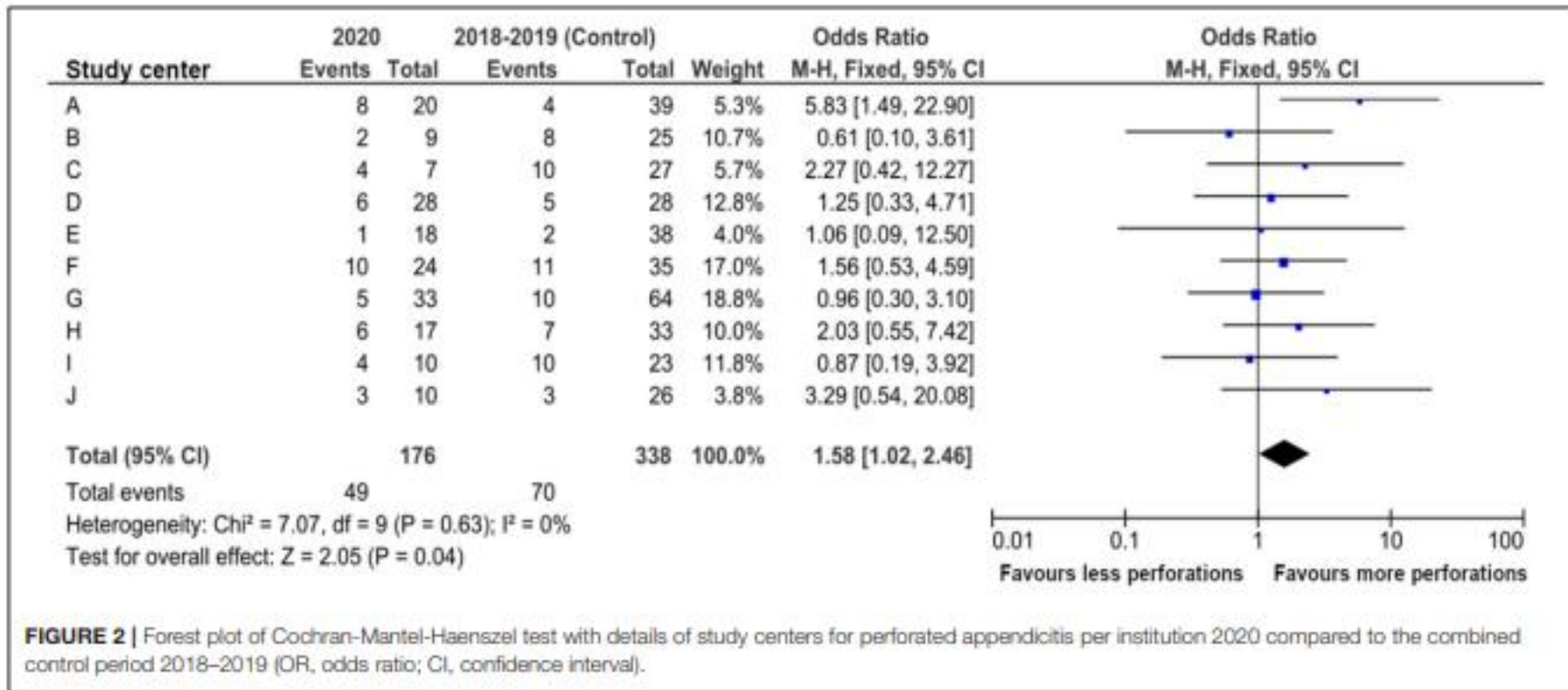


FIGURE 2 | Forest plot of Cochran-Mantel-Haenszel test with details of study centers for perforated appendicitis per institution 2020 compared to the combined control period 2018–2019 (OR, odds ratio; CI, confidence interval).

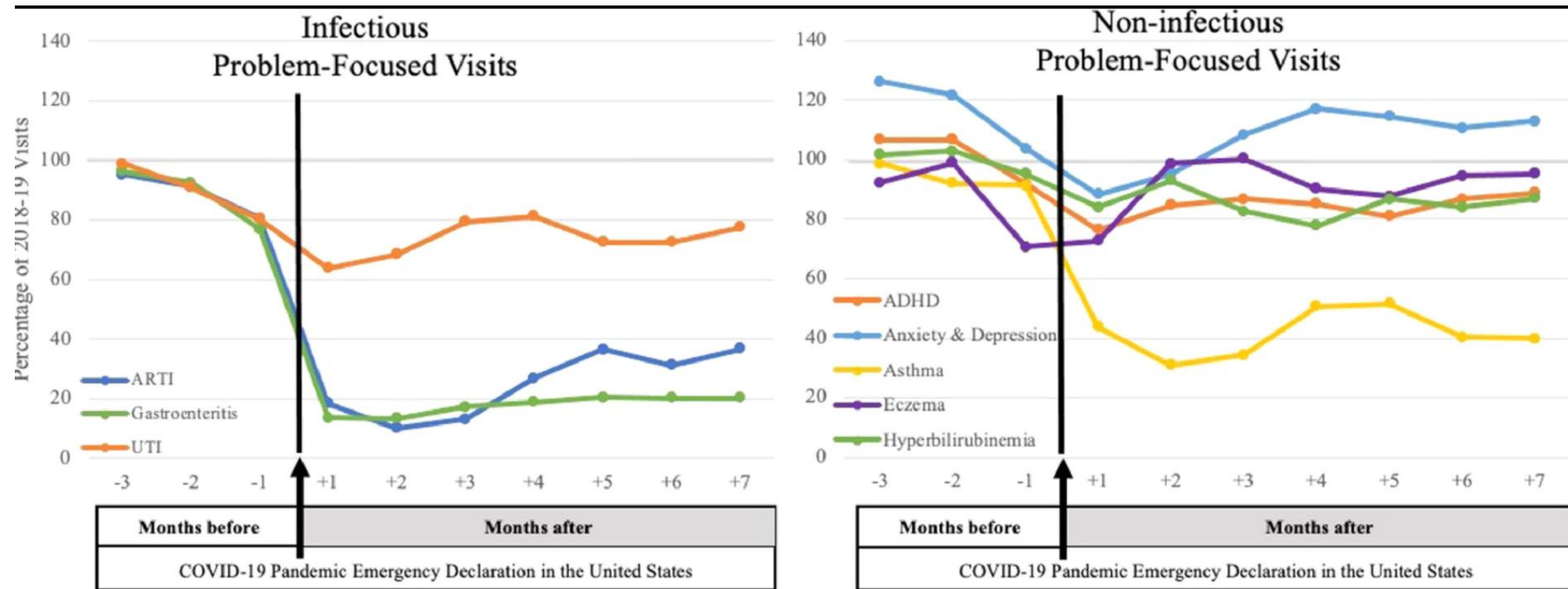
Is perforation a frequent event (depending on age) or a complication due to delay?

Trends of outpatient visits due to infections



Trends in Pediatric Primary Care Visits During the Coronavirus Disease of 2019 Pandemic

Kelsey Schweiberger MD, MS¹, Sadiq Y. Patel PhD, MS, MSW², Ateev Mehrotra MD, MPH^{2,3,4}, Kristin N. Ray MD, MS^{1,8}



“We also observed modest reductions in visits for conditions such as UTIs and hyperbilirubinemia, conditions for which we would not expect the pandemic or associated public health measures to have a substantial impact on incidence of disease. This suggests that other factors, such as changes in family care-seeking behaviors or clinician recommendations, may have contributed.”

2020 Trends in infections notified in Germany

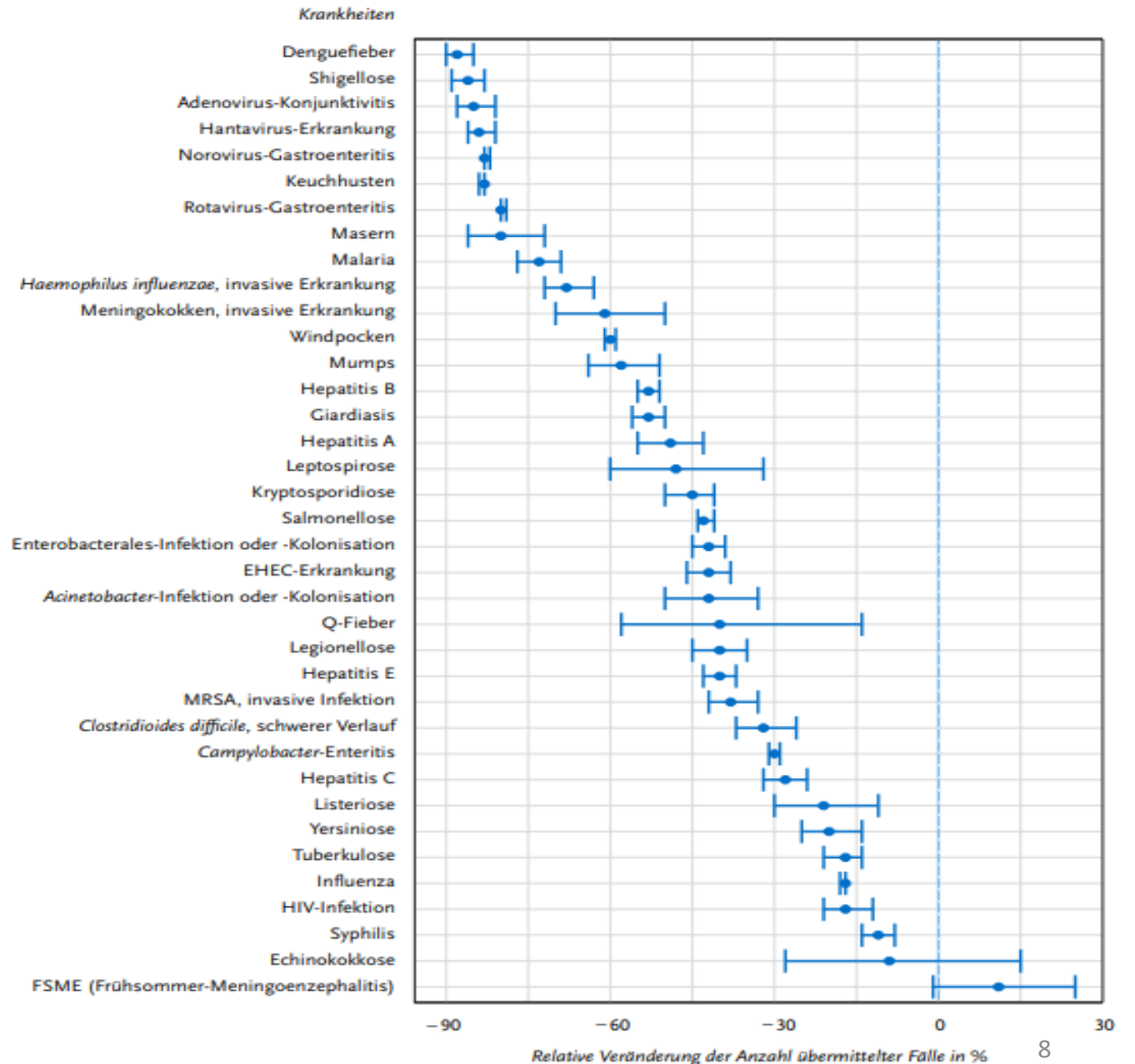
Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten für 2020
Robert Koch-Institut, Berlin, 2021

Herausgeber
Robert Koch-Institut
Nordufer 20
13353 Berlin

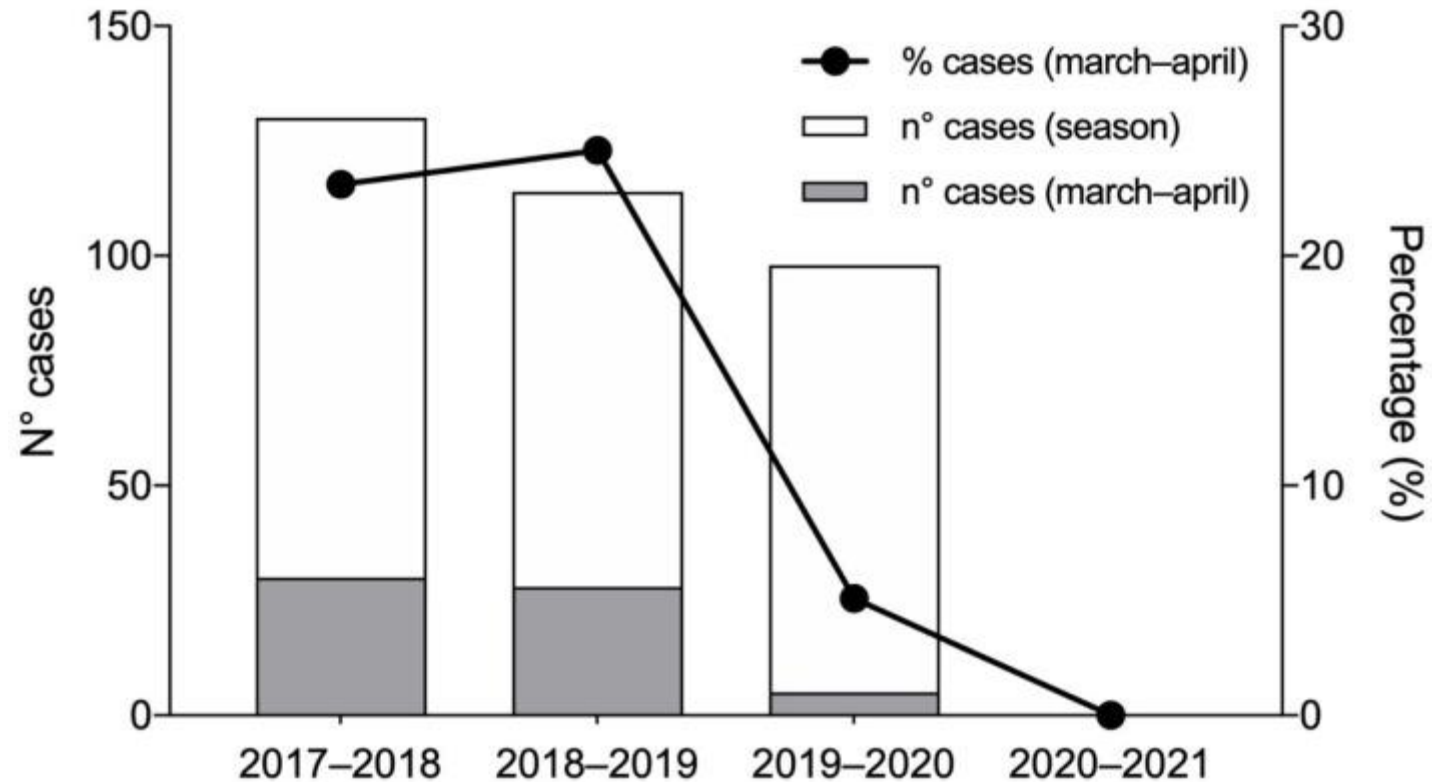
Biases:

- Notifying behavior
- Disease seeking behavior
- Mild winter

Abb. 4-4.1:
Relative Veränderungen der Anzahl übermittelter meldepflichtiger Krankheiten, Deutschland 2020, im Vergleich zur erwarteten Anzahl (Modellierung) basierend auf den Meldedaten der 5 Vorjahre, mit 95%-Konfidenzintervall



Severe drop in hospitalizations for RSV bronchiolitis

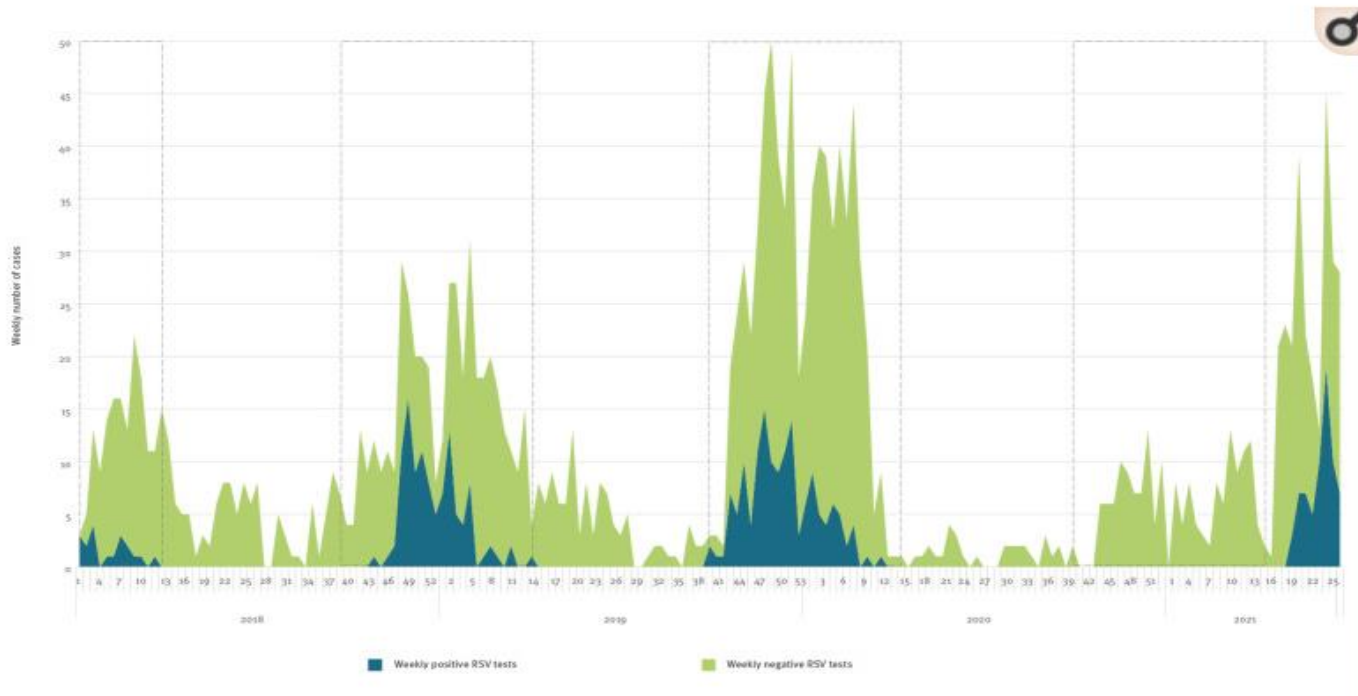


Severe drop in hospitalizations for bronchiolitis during March–April 2020 (5.1%, 5/98) as compared with 2019 (24.6%; 28/114) and 2018 (23.1%; 30/130), $p < 0.001$. No patients with bronchiolitis were hospitalized during the entire 2020–2021 epidemic season.

Delayed respiratory syncytial virus epidemic in children after relaxation of COVID-19 physical distancing measures, Ashdod, Israel, 2021

Moran Weinberger Opek¹, Yonatan Yeshayahu^{1 2}, Aharon Glatman-Freedman^{3 4},
Ian Kaufman³, Nadav Sorek⁵, Tal Brosh-Nissimov^{2 6}

Delayed RSV epidemic shifted to summer



Southern hemisphere
Australia: mirror- like shifting
from summer to winter

Conclusion: transmission-
infection probably influenced
by climate and public health
measures against COVID-19
common denominator=
social distancing

Weekly number of positive and negative respiratory syncytial virus tests, 1 January 2018–24 June 2021

Weekly positive RSV tests (blue area), with negative tests stacked on top (green area). The dashed rectangles mark the autumn/winter RSV seasons (calendar weeks 40–14). During 2021, no positive RSV cases were noted in autumn/winter but have appeared since week 19.

Effects on infant mortality, prematurity, SIDS ?

“There are concerns of a hidden impact of SARSCoV-2 on the health of newborns, infants and children.”

- True for rich countries
- We have no data from poor countries so far

“Changes in delivery of healthcare may affect chronic conditions many months later, and the economic impacts on socioeconomically disadvantaged children may take time to become apparent”

Child mortality in **England** during the COVID-19 pandemic Odd D, et al. Arch Dis Child 2021;0:1–7. doi:10.1136/archdischild-2020-320899

What is the endgame? Epidemiological future of the COVID- 19 pandemic 1

- Unexpected occurrence of new emerging highly contagious virus into a naïve population
- Ongoing distribution and immunity among populations -> age shift from older individuals with weak immune systems and comorbidities to younger age groups and infants, what we observe now
- Infants play a increasing role in the transmission of the COVID- 19 epidemic and COVID- 19 is going to be a childhood disease
- Immunity after SARS-CoV-2 infection and vaccination is waning

Future of the COVID- 19 pandemic 2

- Vaccination of entire populations or containment of the worldwide infection is not immediately successful.
- There will be a transition to endemicity and continuing circulation of the virus.
- Complete herd immunity or eradication is unlikely to occur.
- During the transition of CoV-2 infections to endemicity infection will hit always some older individuals for whom infection with higher morbidity and mortality.
- Possibly SARS Cov-2 will rank as a another mild common cold causing coronavirus.
- Paediatricians will an active role in the design of a public health strategy to integrate SARS-CoV-2 vaccination into standard childhood vaccination schedules- if this makes sense

Resilience of professionals and health systems in primary care

RESILIENCE



- Resilience' means the '**ability to bounce back from adversity**', but what is resilience in the primary care context?
- Resilience in primary care will be needed to maintain a **sustainable and robust primary care system** for the future.
- The community needs to recover from **social disparities** in health and education which the pandemic widened.
- 2018 Declaration of Astana recognized primary health care (PHC) as a means to achieve **universal health coverage (UHC)** and the health-related **Sustainable Development Goals (SDGs)**.

What did we learn?

- a. Is it enough go to same level as before?
- b. Make it better- improve the quality – take the opportunity to make an **upgrade** to be prepared better next time
- c. Be **better** prepared next time
 - a. We learned that public health and personal preventive measures are effective and have unexpected benefits.
 - b. Dont shut down essential services- guarantee universal health coverage in in bad and good times.
 - c. Strengthen **emergency preparedness- pandemic plans.**
 - d. Society and community learned solidarity?
 - e. What comes next? Another pandemic?

The role of paediatricians in the future of the pandemic

Continuously improve paediatric services - the maintenance of services:

- Acute care and emergencies: avoid delay – encourage patients to approach the health system in time
- Care for the chronic ill: improve access and continuity
- Mental problems: improve care
- Prevention: well child checks- catch up
- Vaccinations: catch up

Paediatricians are advocates for all children- especially the social disadvantaged.

Paediatricians always know how to deal with infections.