

Toplum Kökenli Pnömoni Epidemiyolojisi ve COVID-19 Etkisi

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Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Kliniği
Başakşehir Çam ve Sakura Şehir Hastanesi SUAM

Pnömoni- Tanım (ATS/IDSA)

01

Göğüs röntgeni
veya bilgisayarlı
tomografide (BT)
pulmoner
infiltrasyon



02

Öksürük/anormal
ateş/lökositoz veya
lökopeni (en az biri)



03

Daha uygun bir
alternatif tanının
olmaması

Toplum Kökenli Pnömoni (TKP)

Tanım olarak TKP, hastane ortamı dışında edinilen pnömonidir

<https://www.cdc.gov/pneumonia-2023>

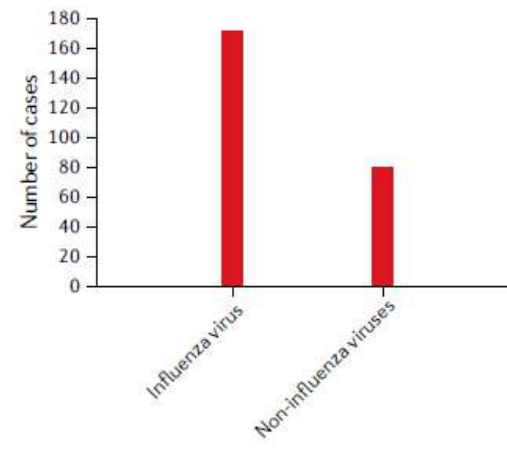
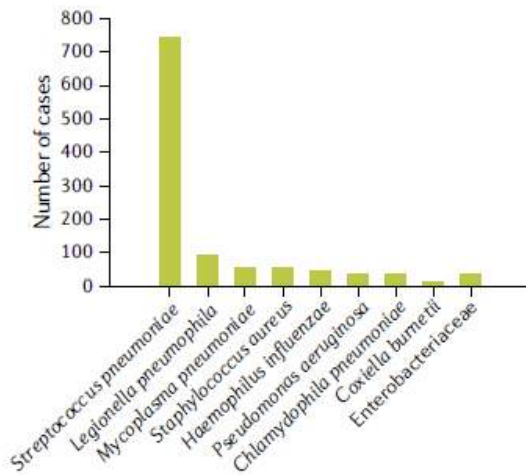
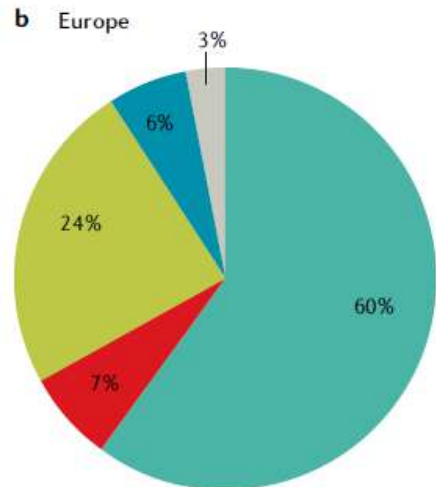
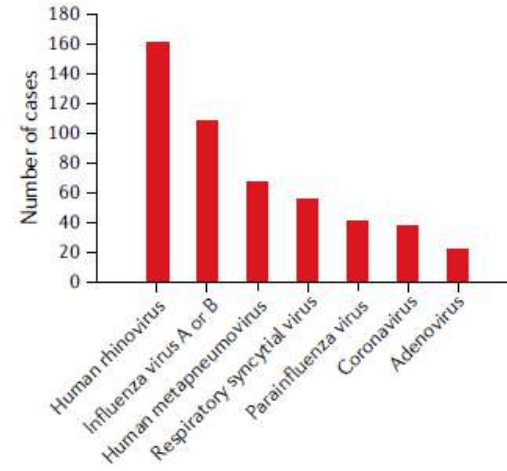
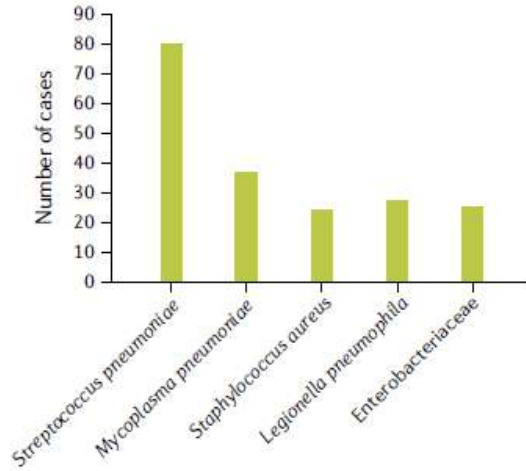
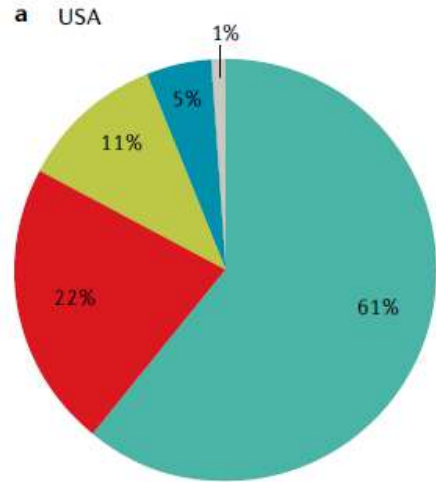
IDSA/ATS 2019



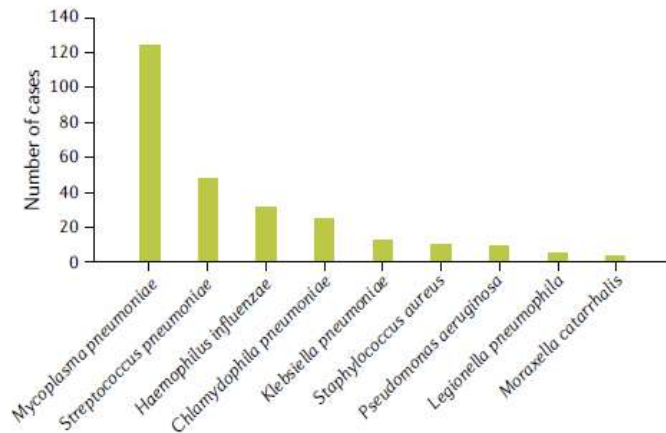
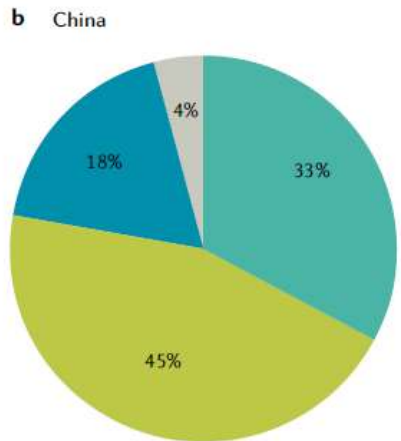
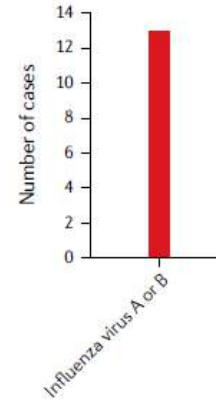
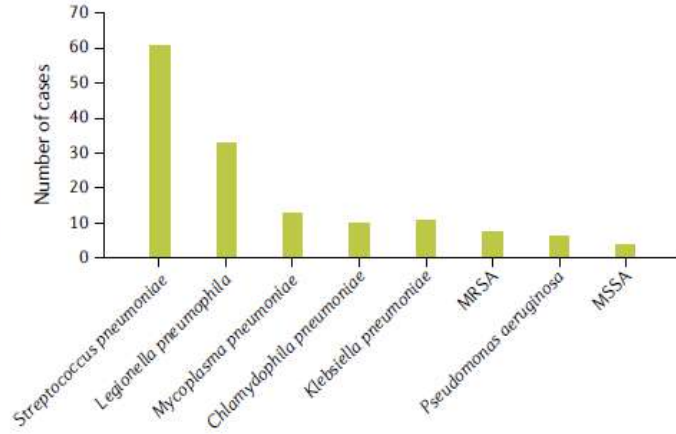
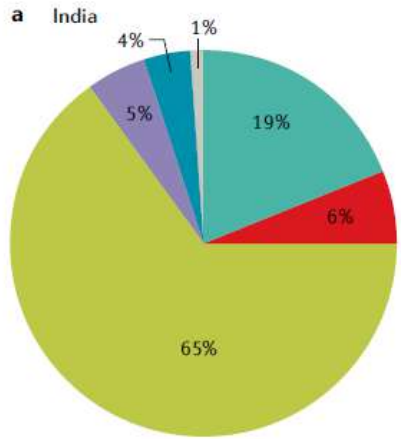
TKP-En sık görülen etkenler

- *Streptococcus pneumoniae*
- *Haemophilus influenzae*
- *Moraxella catarrhalis*
- *Chlamydophila pneumoniae*
- *Legionella species*
- *Mycoplasma pneumoniae*
- Virüsler: SARS-CoV-2, influenza A, RSV, parainfluenza, adenovirus, human metapneumovirus, rhinovirus

TKP'nin Mikrobiyal Dağılımı-ABD ve Avrupa (2003-2014)



TKP'nin Mikrobiyal Dağılımı-Hindistan ve Çin (2003-2014)



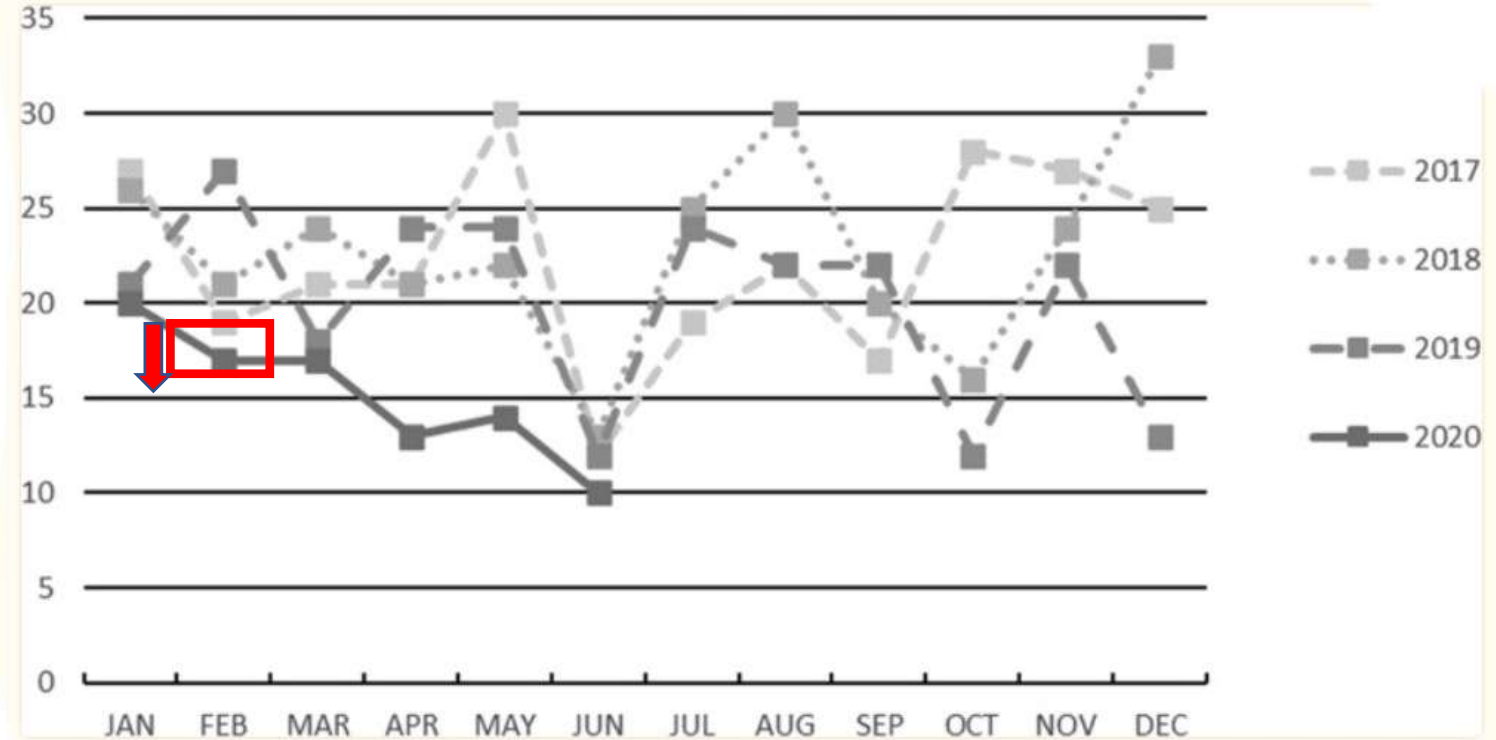
COVID-19 pandemic and the incidence of community-acquired pneumonia in elderly people

Takashi Yamamoto,^a Kosaku Komiya,^{b,*} Naoko Fujita,^a Eiji Okabe,^a Kazufumi Hiramatsu,^b and Jun-ichi Kadota^b

Toplum kökenli pnömoni nedeniyle başvuran yaşlı hasta sayısı

Sonuç

COVID-19 enfeksiyon kontrolüne yönelik önlemler, genel viral enfeksiyonları ve ardından bakteriyel pnömoniye de önleyebilir

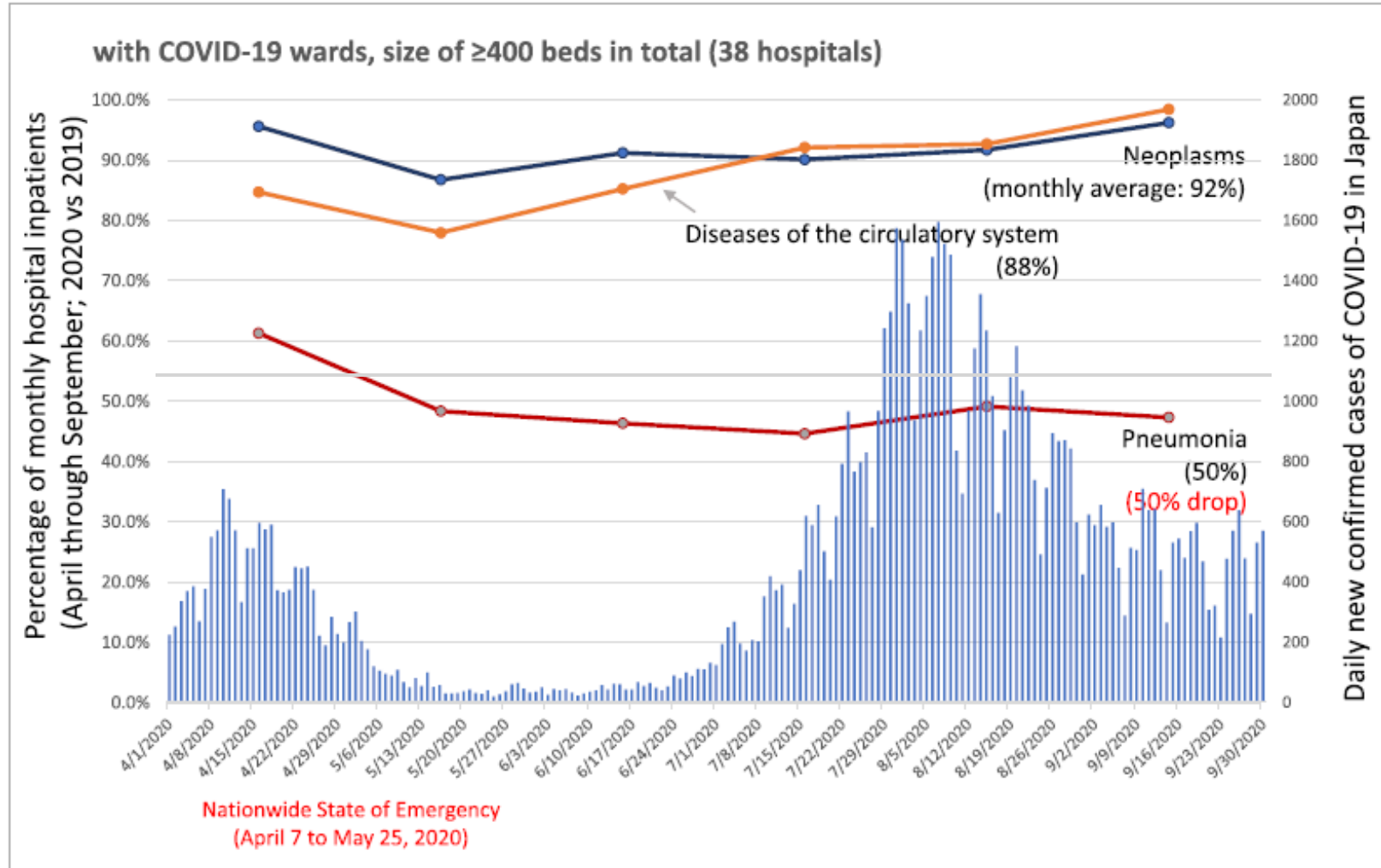




Note

Decreased number of inpatients with community-acquired pneumonia during the COVID-19 pandemic: A large multicenter study in Japan

Yan Yan^a, Kiyohide Tomooka^b, Toshio Naito^{c,*}, Takeshi Tanigawa^b

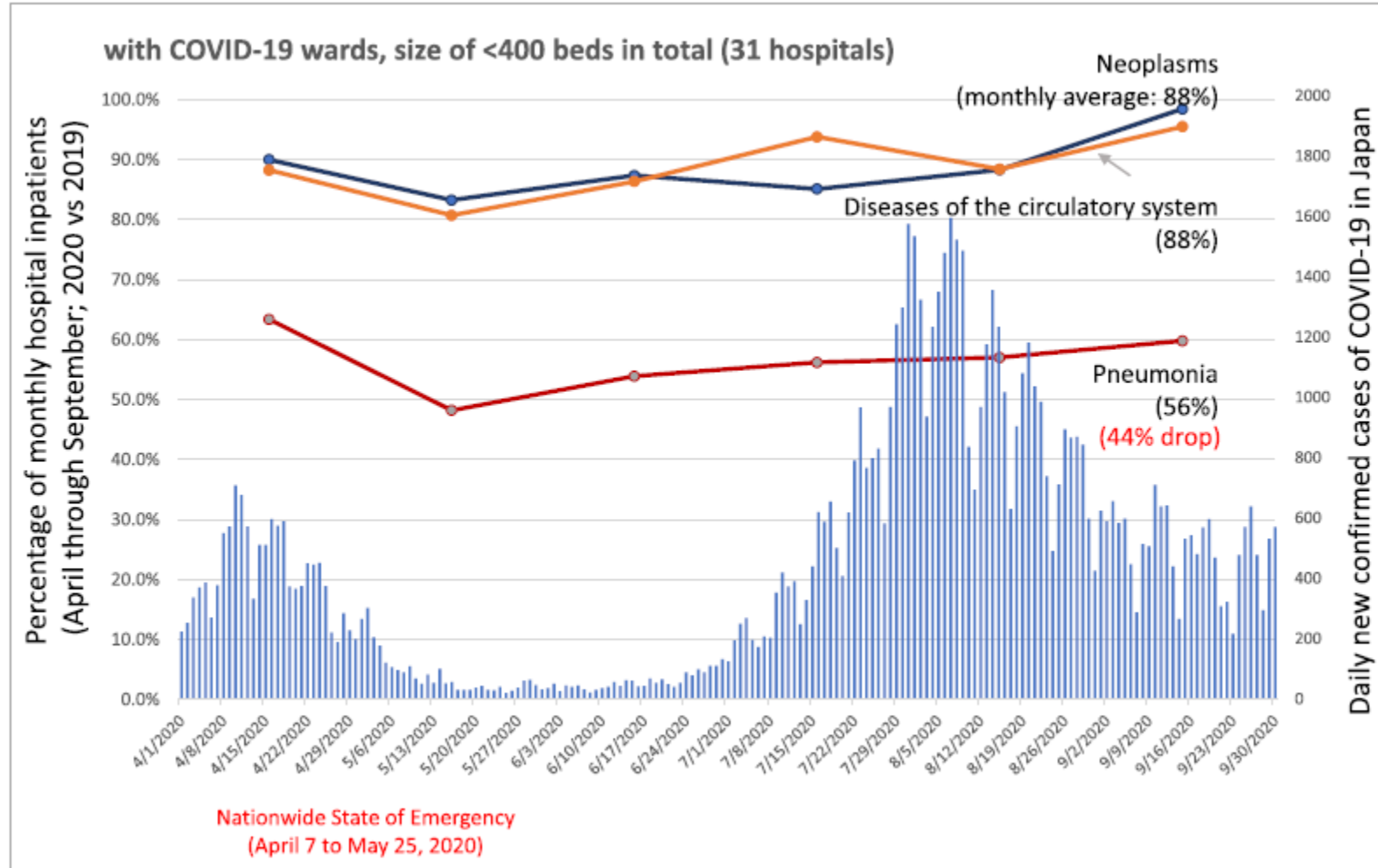




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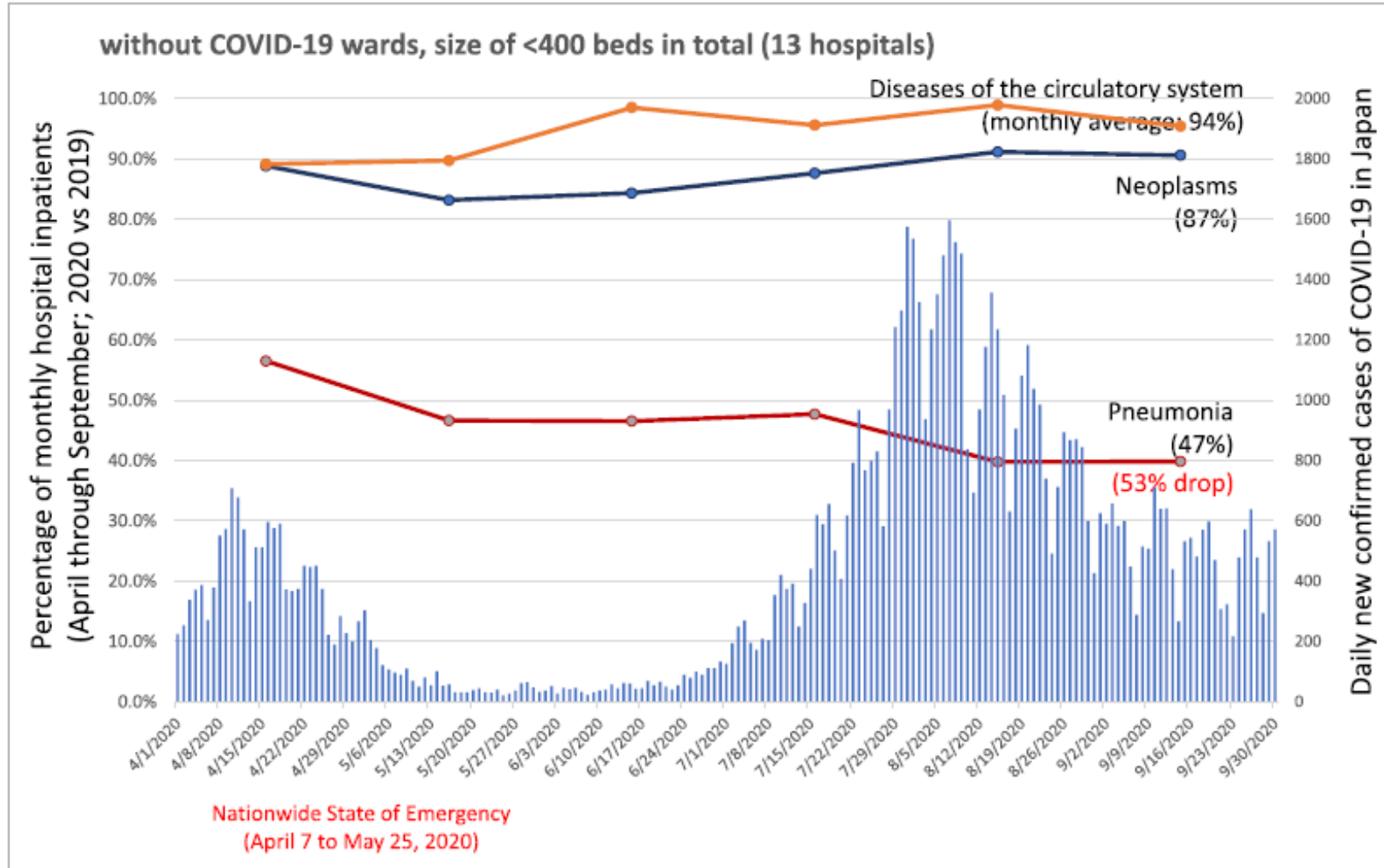




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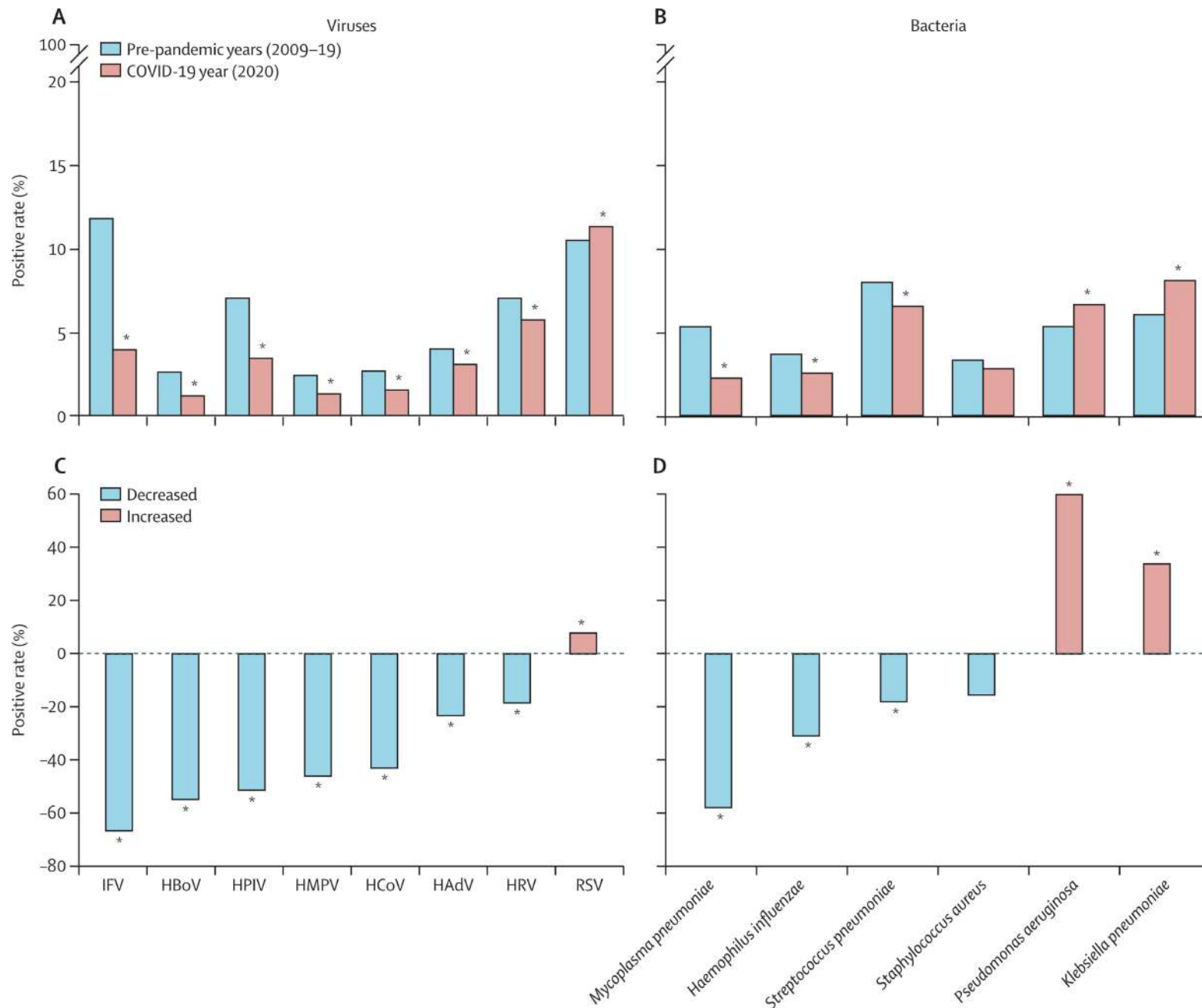
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Liu, Yan-Ning, et al. *The Lancet Microbe* (2023).

Infection and co-infection patterns of community-acquired pneumonia in patients of different ages in China from 2009 to 2020: a national surveillance study



The COVID-19 Pandemic and the Incidence of the Non-COVID-19 Pneumonia in Adults

[Chienhsiu Huang*](#)

Mevsim ve yaş gruplarına göre hastaneye yatış gerektiren toplum kökenli pnömoni hastaları

	Patients No (2019)	Patients No (2020)	Patients No (2019–2020)/2019
Season			
January to March	79 (24.4%)	68 (27.2%)	11 (13.9%)
April to June	79 (24.4%)	63 (25.2%)	16 (20.3%)
July to September	93 (28.7%)	75 (30.0%)	18 (19.4%)
October to December	73 (22.5%)	44 (17.6%)	29 (39.7%) ↓
Age cohorts*			
Age <55 Y/O, No (%)	27 (8.3%)	23 (9.2%)	4 (14.8%)
Age 55–64 Y/O, No (%)	38 (11.7%)	33 (13.2%)	5 (13.2%)
Age 65–74 Y/O, No (%)	51 (15.8%)	39 (15.6%)	12 (23.5%)
Age 75–84 Y/O, No (%)	100 (30.9%)	78 (31.2%)	22 (22.0%)
Age ≥ 85 Y/O, No (%)	108 (33.3%)	77 (30.85)	31 (28.7%)
Total	324	250	74 (22.9%) ↓

The COVID-19 Pandemic and the Incidence of the Non-COVID-19 Pneumonia in Adults

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Sonuç

1. COVID-19 salgınına önleme stratejisi, halkın, özellikle yaşlıların zatürreden korunmasını da sağlamak son derece etkili olmuştur

Toplum kökenli pnömoni hastalarında tanımlanmış patojenler

	Patients No (2019)	Patients No (2020)
Streptococci group (%)	26 (19.1%)	9 (7.9%)*
<i>Pseudomonas aeruginosa</i> (%)	24 (17.6%)	17 (14.9%)#
<i>Klebsiella pneumoniae</i> (%)	15 (11.0%)	24 (21.1%)
<i>Staphylococcus aureus</i> (MRSA) (%)	14 (10.3%)	5 (4.4%)
<i>Escherichia coli</i> (%)	11 (8.1%)	16 (14.0%)
<i>Haemophilus influenzae</i> (%)	10 (7.4%)	6 (5.3%)
<i>Acinetobacter baumannii</i> (CRAB) (%)	8	6
<i>Acinetobacter baumannii</i> (%)	6	3
<i>Klebsiella pneumoniae</i> (CRKP) (%)	3	4
<i>Stenotrophomonas maltophilia</i> (%)	2	1
<i>Pseudomonas aeruginosa</i> (CRPA) (%)	1	6
<i>Staphylococcus aureus</i> (MSSA) (%)	3	5
Influenza (%)	3	0
<i>Proteus mirabilis</i> (%)	2	7 (6.1%)
Others (%)	8	5
Total	136	114

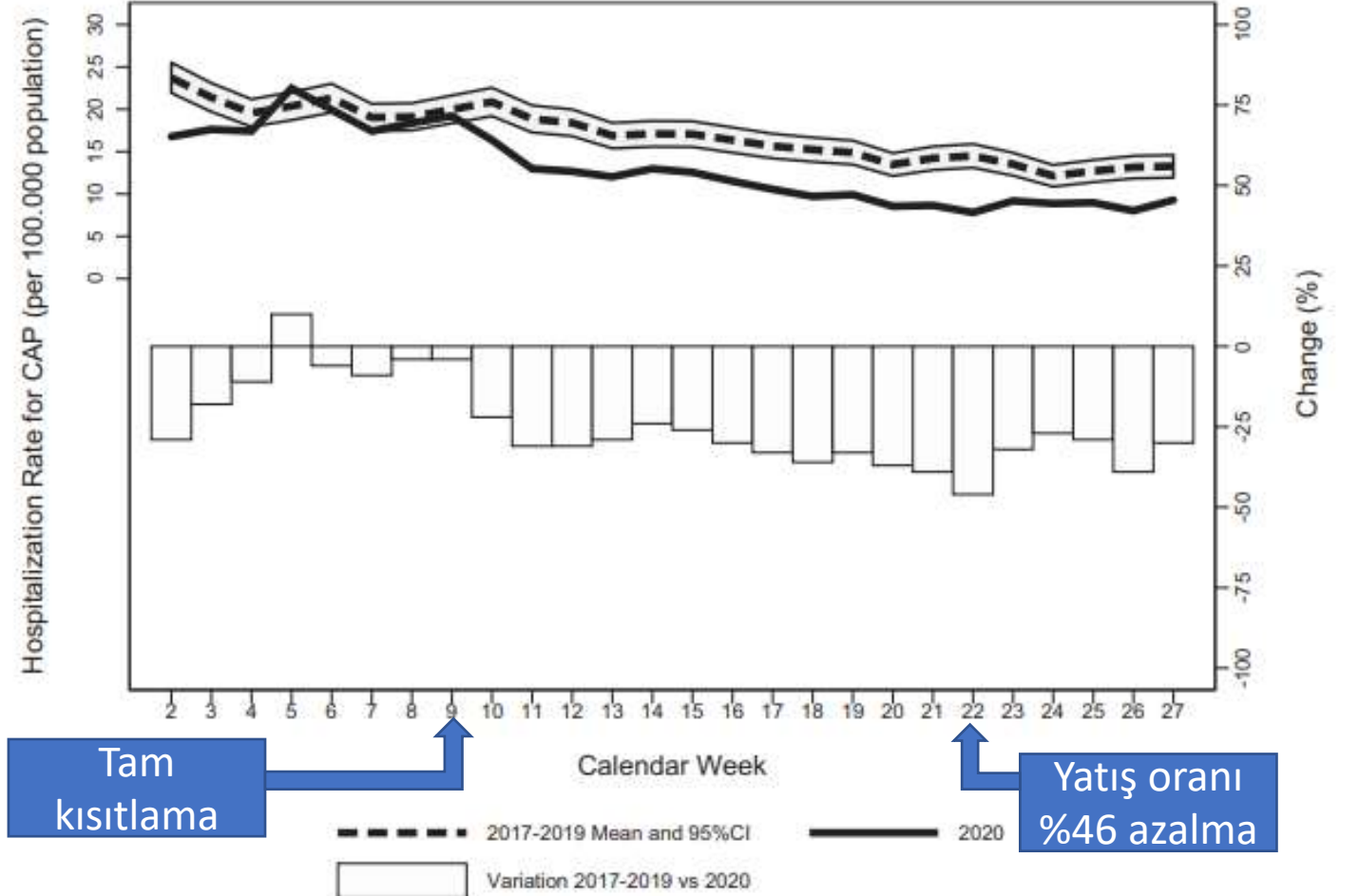


The indirect impact of COVID-19 large-scale containment measures on the incidence of community-acquired pneumonia in older people: a region-wide population-based study in Tuscany, Italy



Vieri Lastrucci^{a,b,*}, Guglielmo Bonaccorsi^b, Silvia Forni^c, Sara D'Arienzo^c, Letizia Bachini^c, Sonia Paoli^d, Chiara Lorini^b, Fabrizio Gemmi^c

2017-2019'da CAP için 2020'ye kıyasla haftalık hastaneye yatış oranları(65 yaş üstü)

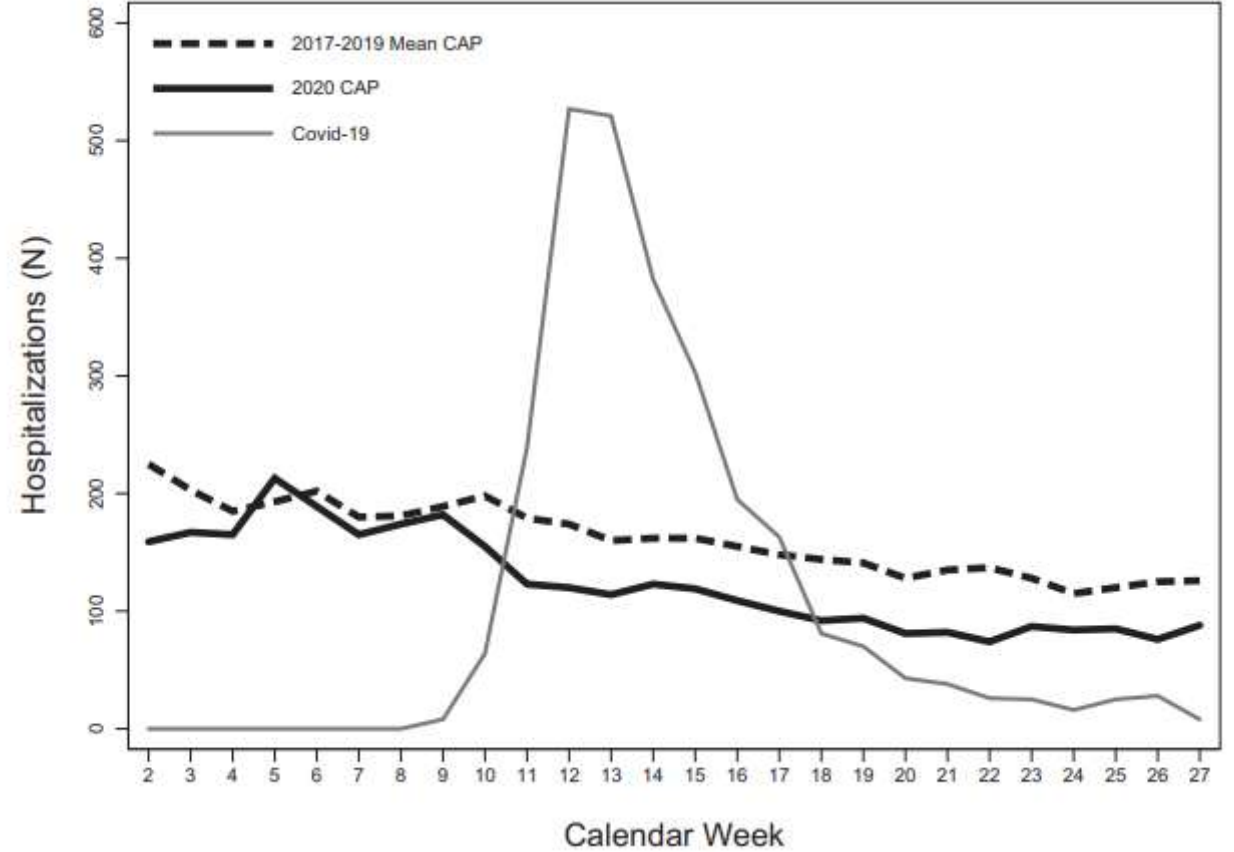




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65 yaş ve üstü kişilerde TKP (2017-2019'a karşı 2020) ve COVID-19 nedeniyle hastaneye yatış sayısı



Tam
kısıtlama





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The indirect impact of COVID-19 large-scale containment measures on the incidence of community-acquired pneumonia in older people: a region-wide population-based study in Tuscany, Italy



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TKP hastaneye yatışlarının hastane içi mortalitesi

	Pre-epidemic period			Epidemic period		
	Standardized ratio*	95% CI	P value	Standardized ratio*	95% CI	P value
Average length of stay	1.02	0.99; 1.05	0.07	1.002	0.97; 1.04	0.76
Hospitalizations requiring ICU	0.92	0.77; 1.63	0.55	1.5	0.95; 2.33	0.086
In-hospital mortality	0.83	0.66; 1.07	0.15	1.44	1.27; 2.31	<0.001



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Sonuç

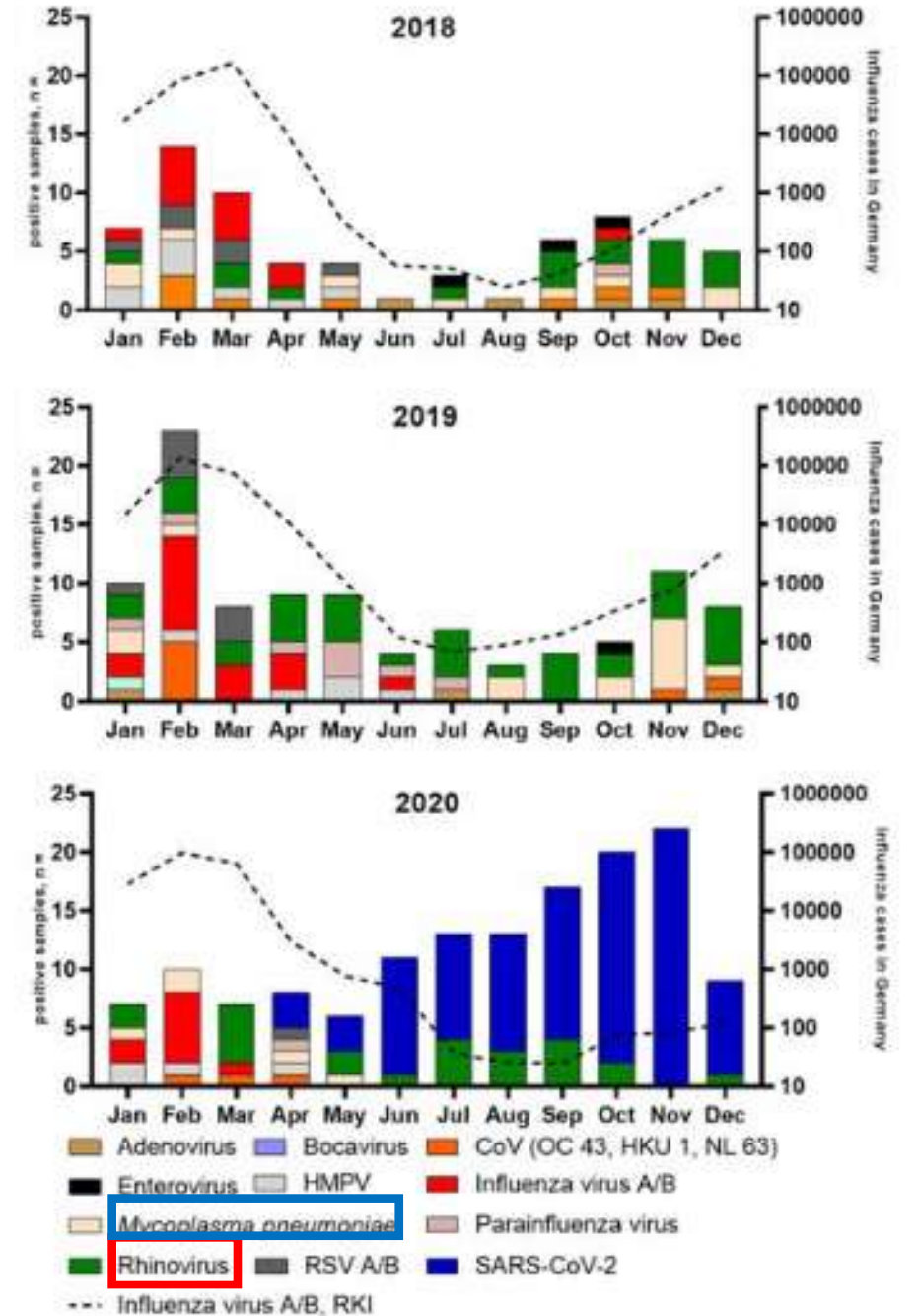
1. Yaşlı poülasyonda hastaneye yatış oranlarında önemli düşüş
2. TKP için ayaktan antibakteriyel ilaç tüketiminde azalma
3. Sınırlama önlemleri COVID-19 ve bulaşıcı solunum yolu hastalıklarının yükünü azaltmıştır
4. TKP için hastaneye yatırılan hastalarda hastane içi mortalitede artış

The impact of the SARS-CoV-2 pandemic on the prevalence of respiratory tract pathogens in patients with community-acquired pneumonia in Germany

Theo Dähne^a, Wolfgang Bauer^b, Andreas Essig^c, Bernhard Schaaf^d, Christoph D. Spinner^e, Mathias W. Pletz^{f,g}, Gernot Rohde^{g,h,i}, Jan Rupp^{g,j}, Martin Witznath^{g,k,l}, Marcus Panning^a and Members of the CAPNETZ study group

Sonuç

1. TKP hastalarında solunum yolu viral patojenlerinin prevalansında belirgin değişiklik
2. Rinovirüsler dışında solunum yolu patojenlerinin yayılmasını durduran non-farmakolojik önlemler etkin



Impact of the COVID-19 Pandemic on Community-acquired Neonatal Pneumonia Admissions to a Tertiary Care Hospital During Respiratory Syncytial Virus Season

COVID-19 Pandemisinin Respiratuar Sinsityal Virüs Sezonunda Üçüncü Basamak Bir Hastanenin Toplum Kökenli Yenidođan Pnömonisi Başvuruları Üzerindeki Etkisi

© Sarkhan ELBAYİYEV¹, © Fuat Emre CANPOLAT¹, © Gülsüm KADIOĐLU ŐİMŐEK¹, © İzzet ÖZGÜRLÜK², © Aybüke YAZICI¹, © Hayriye Gözde KANMAZ KUTMAN¹

Viral ajanların dađılımının karřılařtırılması- COVID-19 pandemi dönemi öncesi ve sırasında hastalar

	Pre-COVID-19 pandemic era (n=70)	Post-COVID-19 pandemic era (n=15)	p value
Respiratory syncytial virus	60%	13.3%	0.001
Rhinovirus	21.5%	46.7%	0.056
Influenza	7.1%	0%	0.581
Parainfluenza	4.3%	20%	0.065
Metapneumovirus	0%	20%	0.005
Enterovirus	5.7%	0%	0.453
Adenovirus	1.4%	0%	0.824

Values are presented as percentage.
COVID-19: Coronavirus disease-2019

Sonuç

COVID-19 pandemisi sırasındaki önlemler RSV ve influenzanın mevsimsel aktivitesini baskıladı, ancak rinovirüs ve metapnömovirüsün deđil

COVID-19'un solunum yolu enfeksiyonu epidemiolojisi üzerindeki etkisi

Pozitif etki

- COVID 19 dışı pnömoni için hastane doluluk oranlarında azalma
- COVID 19 dışı viral pnömonilerde azalma
- Pnömonokoksik pnömonilerde azalma

Negatif etki

- Antimikrobiyal yönetim politikalarında gevşeme
- Covid-19 koenfeksiyonları için antimikrobiyal ajanların aşırı kullanımı
 - Antibiyotiğe dirençli bakterilerin seçimi
- Enfeksiyon kontrol önlemlerinin bozulması
 - Antimikrobiyal dirençli mikroorganizmaların yayılması
 - Nozokomiyal enfeksiyon oranlarında artış

Teşekkürler

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