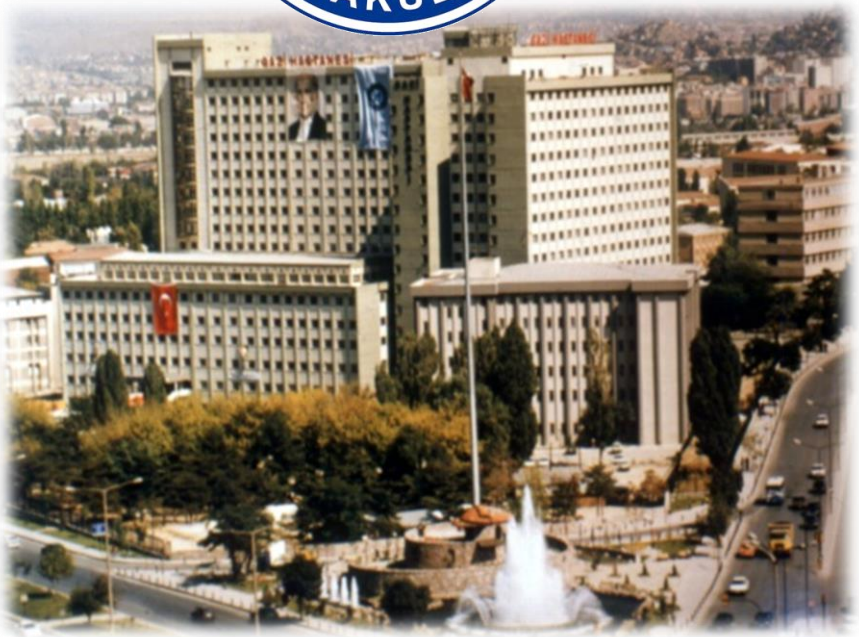
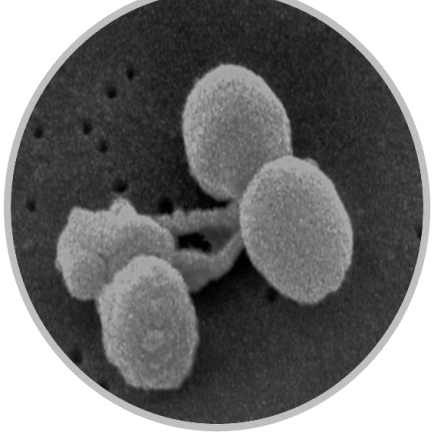
FELÇ VE KALP KRİZİNİ ÖNLEYEN AŞILAR
PNÖMOKOK

5. ULUSAL ERİŞKİN BAĞIŞIKLAMASI SİMPOZYUMU
13 Ekim MARDİN

Prof. Dr. Esin Şenol



Streptococcus pneumonia



Streptococcus pneumonia **- asemptomatik nazofarengeal kolonize olur**

Streptococcus pneumoniae **nın 90 dan fazla serotipi vardır.**
Tüm dünyada görülen enfeksiyonlar yaklaşık -20 serotipden kaynaklanır.
Kapsül polisakkaridi en önemli virülans faktörüdür.
Kapsül polisakkaridine karşı gelişen antikorlar koruyucudur

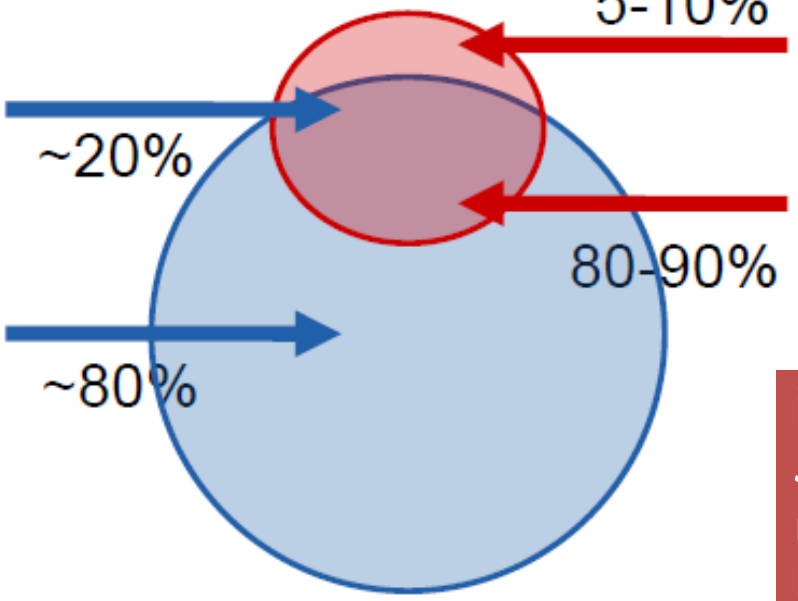
Geno KA G.Pneumococcal capsules and their types: Past, present, and future. Clin Microbiol Rev 2015 ;28(3) :871-899.

Pnömokokal Hastalık

Pnömokokal Pnömoni

Bakteremik Pnömokokal Pnömoni

Bakteremik-olmayan pnömokokal pnömoni



İnvazif Pnömokokal Hastalık

Menenjit, plörit,artrit

Bakteremik Pnömokokal Pnömoni

İnvazif hastalık: *S.pneumoniae*'nın normalde steril olan BOS,kan izole edilmesi

Büyük daire :Pnömokokal Pnömoni
Küçük Daire : İnvaziv Pnömokokal hastalık

Fedson, Musher, in Vaccines, 2004
Lynch JP III, Semin Respir Crit Care Med, 2009

PNÖMOKOKAL HASTALIKLARIN YÜKÜ

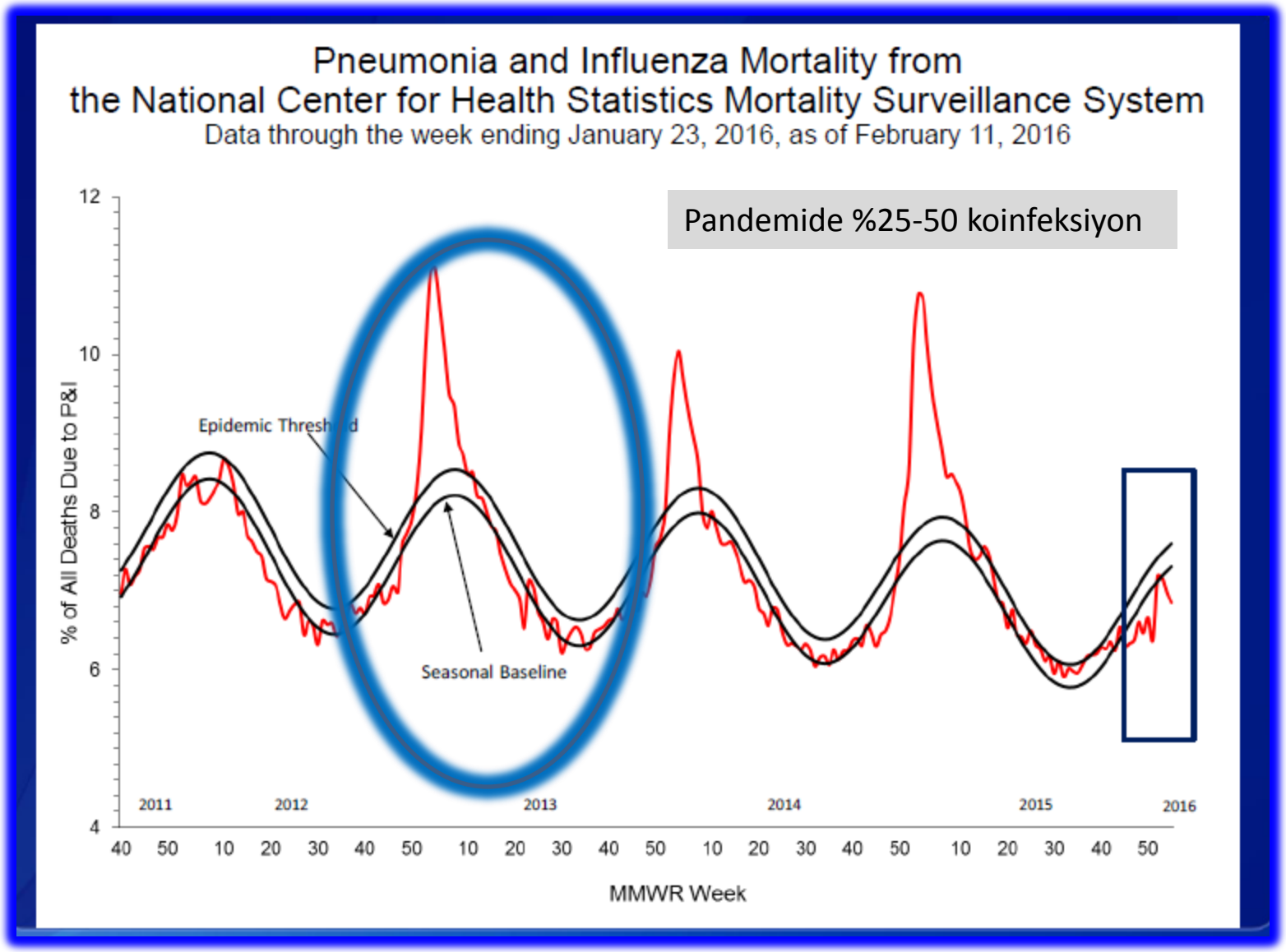
- MORTAL
  - PP (%5-7->%40), Bakteremi (%20-60)
  - USA-40.000 ölüm/yıl
  - **Türkiye'de mortalite: %10,3 – %60,0**
- AÖH ARASINDA 2.SIKLIKTAKİ ÖLÜM NEDENİ
- Influenza mevsim ve pandemiler; pnömonilerin %50'sinden ve neredeyse tüm ölümler ve komplikasyonlardan sorumlu
- **Risk grupları ve yaşlılarda insidans yüksek, mortalite 2-8 kat..**

Lynch JP,Zhanel GG.Semin Resp Crit Care Med 2009:30:189-209 2.Brundage JF.Lancet Infect Dis 2006:6:303-12 3.Ludwig E.Eur Respir Rev.212:21:123:57-65 4.Türk Toraks Derneği, Pnömoni Tedavi Uzlaşı Raporu, 2009, Cilt 10, Ek 9,5.TC Sağlık Bakanlığı, Refik Saydam Hıfzıssıhha Merkezi Başkanlığı Hıfzıssıhha MektebiMüdürlüğü ve Başkent Üniversitesi, Ulusal Hastalık Yükü ve Maliyet Etkinlik Projesi sonuçları, Aralık 2004

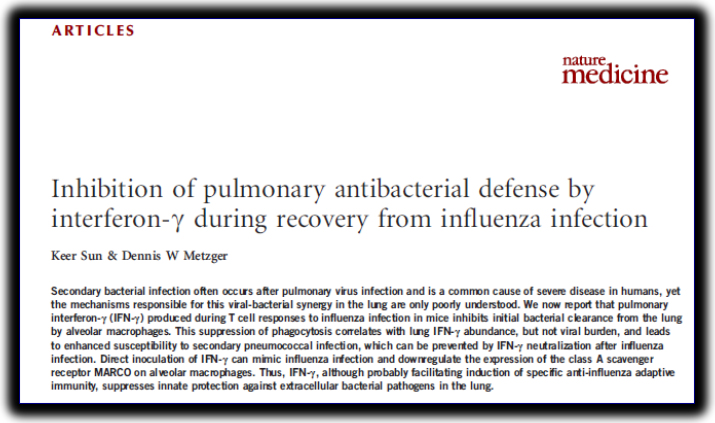
PNÖMOKOKAL HASTALIKLARIN YÜKÜ

- **TKP: PNÖMONİDEN- 3–4 milyon ölüm**
- **Avrupa-Erişkin Enfeksiyon Kaynaklı Ölüm 1. sırada**
- **Solunum sistemi hastalıklarına bağlı hastane günlerinin >%30 –işgücü kaybı - 3.5 milyar € -AVRUPA, 10.1 milyar €**
- **US > 50 y, 3.7 milyar $ total direk ve 1.8 milyar $ total indirek maliyet**

1. *Weycker D et al. Vaccine 2010;28:4955–60.*
2. *European Respiratory Society/European Lung Foundation. Pneumonia In: European Lung White Book. 2nd Edition: European Respiratory Society/European Lung Foundation, 2003*
3. *Corrales-Medina V,Lancet 2013:381:496-505*


Pneumonia and Influenza Mortality from
the National Center for Health Statistics Mortality Surveillance System
Data through the week ending January 23, 2016, as of February 11, 2016
Pandemide %25-50 koinfeksiyon
% of All Deaths Due to P&I
Epidemic Threshold
Seasonal Baseline
2011
2012
2013
2014
2015
2016
MMWR Week

Viral Bakteriyel Sinerji



ARTICLES

nature medicine

Inhibition of pulmonary antibacterial defense by interferon-γ during recovery from influenza infection

Keer Sun & Dennis W Metzger

Secondary bacterial infection often occurs after pulmonary virus infection and is a common cause of severe disease in humans, yet the mechanisms responsible for this viral-bacterial synergy in the lung are only poorly understood. We now report that pulmonary interferon-γ (IFN-γ) produced during T cell responses to influenza infection in mice inhibits initial bacterial clearance from the lung by alveolar macrophages. This suppression of phagocytosis correlates with lung IFN-γ abundance, but not viral burden, and leads to enhanced susceptibility to secondary pneumococcal infection, which can be prevented by IFN-γ neutralization after influenza infection. Direct inoculation of IFN-γ can mimic influenza infection and downregulate the expression of the class A scavenger receptor MARCO on alveolar macrophages. Thus, IFN-γ, although probably facilitating induction of specific anti-influenza adaptive immunity, suppresses innate protection against extracellular bacterial pathogens in the lung.

Secondary bacterial infection often occurs **after** pulmonary virus infection and is a common cause of severe disease in humans

Influenza virus and *Streptococcus pneumoniae* are the two pathogens that cause **the majority of respiratory infections** in humans.

Although influenza infection alone may cause pneumonia, secondary bacterial pneumonia is a major cause of excess morbidity
influenza
pandemic

The fact that increased susceptibility to various bacteria, including *S. pneumoniae, Haemophilus influenzae* and *Staphylococcus aureus*, can occur after influenza infection suggests a **general immune defect.**

Clinical secondary bacterial infections occur **at a time when the virus begins to be cleared from the lung** and the patient

The immune response that is induced against viral infection leads to decreased protection against bacterial infection

Keer Sun & Dennis W Metzger Inhibition of pulmonary antibacterial defense by interferon-g during recovery from influenza infection . NATURE MEDICINE. 2008; 14(5).

Pnömoni dahil alt solunum yolu enfeksiyonları, tüm dünyada ölümün başlıca nedenidir.[1]

Alt solunum yolu enfeksiyonları en ölümcül bulaşıcı hastalık olarak kaldı ve 2015'te dünya genelinde 3.2 milyon ölüme neden oldu.

KOAH, kronik obstrüktif akciğer hastalığı

1. Naghavi M, et al. Lancet. 2015;385:117–71. 2. http://www.who.int/mediacentre/factsheets/fs310/en/. Accessed on 14.05.2017

Acute pneumonia and the cardiovascular system

Ayaktan pnömonilerin % 21'i KV problem ile komplike - KV FONKSİYONLARIN ARAŞTIRILMASI

Lancet 2013; 381
Published Online January 16, 2012 http://dx.doi.org/10.1016/S0140-6736(12)61266-5

Department of Medicine, University of Ottawa, ON, da (V F Corrales-Medina MD, S Shachkina MD); Ottawa Hospital Research Institute, ON, Canada (V F Corrales-Medina, Shachkina); Departments of Medicine and Molecular

ects on the cardiovascular system at all severities of infection. Pneumonia tends to affect individuals who are also at high cardiovascular risk. Results of recent studies show that about a quarter of adults admitted to hospital with pneumonia develop a major acute cardiac complication during their hospital stay, which is associated with a 60% increase in short-term mortality. These findings suggest that outcomes of patients with pneumonia can be improved by prevention of the development and progression of associated cardiac complications. Before this hypothesis can be tested, however, an adequate mechanistic understanding of the cardiovascular changes that occur during pneumonia, and their role in the trigger of various cardiac complications, is needed. In this Review, we summarise knowledge about the burden of cardiac complications in adults with acute pneumonia, the cardiovascular response to this infection, the potential effects of commonly used cardiovascular and anti-infective drugs on these associations, and possible directions for future research.

MAKROLİD,FQ

	Effect of pneumonia
Vascular endothelium and peripheral vessels	Impaired reactive hyperaemia response and response to nitric oxide;[35] decreased peripheral vascular resistance in most young adults, but increased peripheral vascular resistance in up to a third of middle-aged adults (no data available for elderly patients);[36-39] increased concentrations of endothelin-1 and adrenomedullin[40,41]
Myocardium	Depression of left ventricular function;[37,38,42] myocarditis;[43] increased concentrations of troponins, BNP, and ANP[44-47]
Cardiac rhythm	Acute cardiac arrhythmias[39,48,49]
Coronary arteries	Possible acute inflammatory changes in atherosclerotic plaques;[50-52] possible coronary vasoconstriction[53]
Pulmonary circulation	Increased pulmonary artery pressures[54]
Cardiac autonomic function	Impairment of cardiovascular autonomic reflexes[55]
Coagulation	Increased procoagulant activity[56-58]
Renal function and fluid and sodium balance	Increased production of vasopressin;[41,58,60] decreased ACE activity;[61-63] water retention;[59] acute kidney injury[64,65]

BNP=B-type natriuretic peptide. ANP=atrial natriuretic peptide. ACE=angiotensin-converting enzyme.

Table: Effects of pneumonia on the cardiovascular system

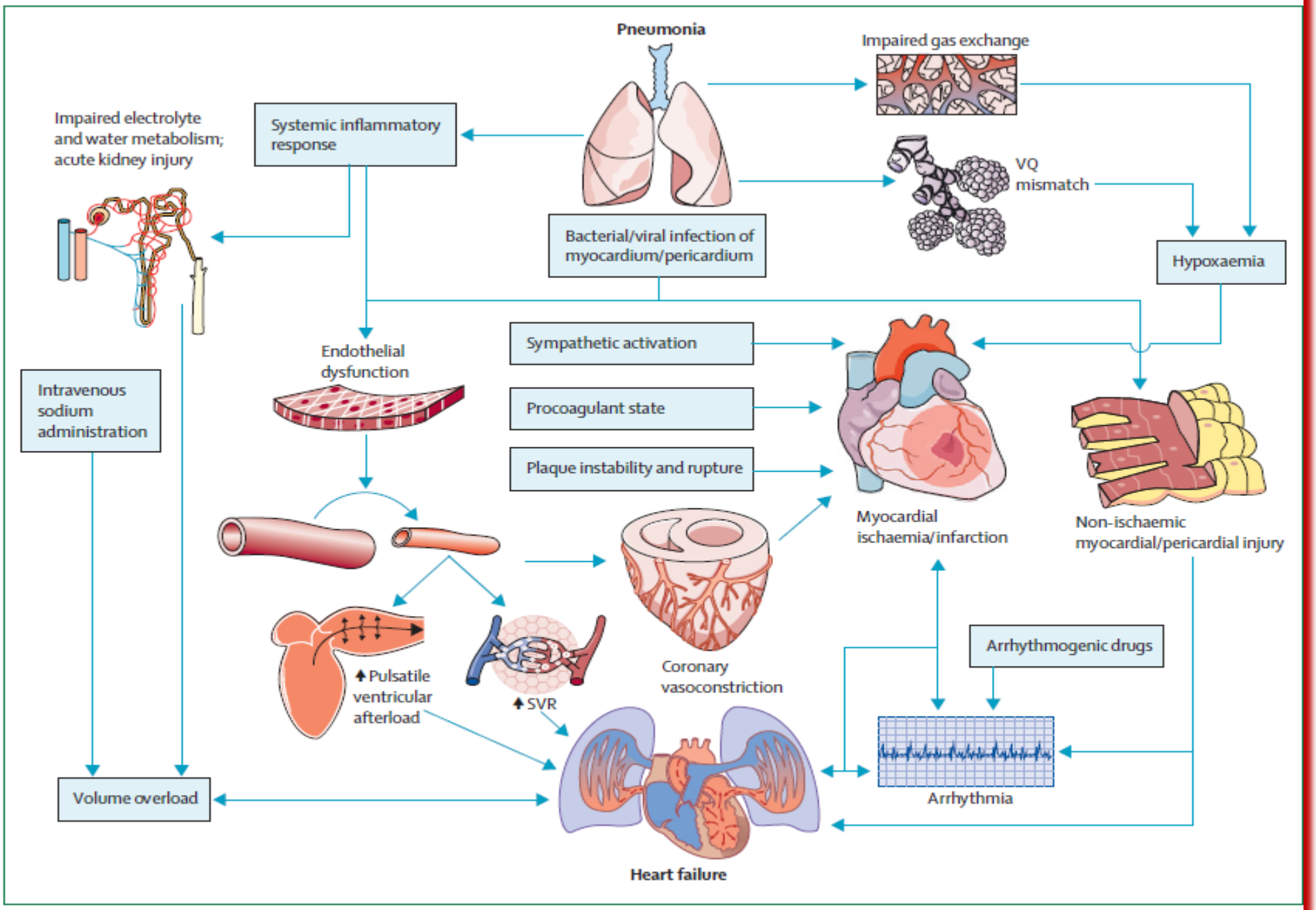


Figure 2: **Proposed pathophysiological mechanisms contributing to cardiac complications in patients with acute pneumonia**
VQ=ventilation–perfusion mismatch. SVR=systemic vascular resistance. Image of heart and lungs at the bottom of the figure reproduced with permission from Peter Gardiner at clinicalskills.net.

Risks of Cardiac Arrhythmia and Mortality Among Patients Using New-Generation Macrolides, Fluoroquinolones, and β-Lactam/β-Lactamase Inhibitors: A Study

Clinical Infectious Diseases® 2015;60(4):566–77

Hsu-Wen Chou,[1,a] Jiun-Ling Wang,[2,3,a] Chia-Hsuin Chang,[1,3] Chao-Lun Lai,[1,3,4] Mei-Shu Lai,[1,5] and K. Arnold Chan[6,7]

Background. Previous studies have demonstrated increased cardiovascular mortality related to azithromycin and levofloxacin. Risks associated with alternative drugs in the same class, including clarithromycin and moxifloxacin, were unknown. We used the Taiwan National Health Insurance Database to perform a nationwide, population-based study comparing the risks of ventricular arrhythmia and cardiovascular death among patients using these antibiotics.

Methods. Between January 2001 and November 2011, a total of 10 684 100 patients were prescribed oral azithromycin, clarithromycin, moxifloxacin, levofloxacin, ciprofloxacin, or amoxicillin-clavulanate at outpatient visits. A logistic regression model adjusted for propensity score was used to calculate the odds ratios (ORs) and 95% confidence intervals (CIs) for adverse cardiac outcomes occurring within 7 days after the initiation of antibiotic treatment.

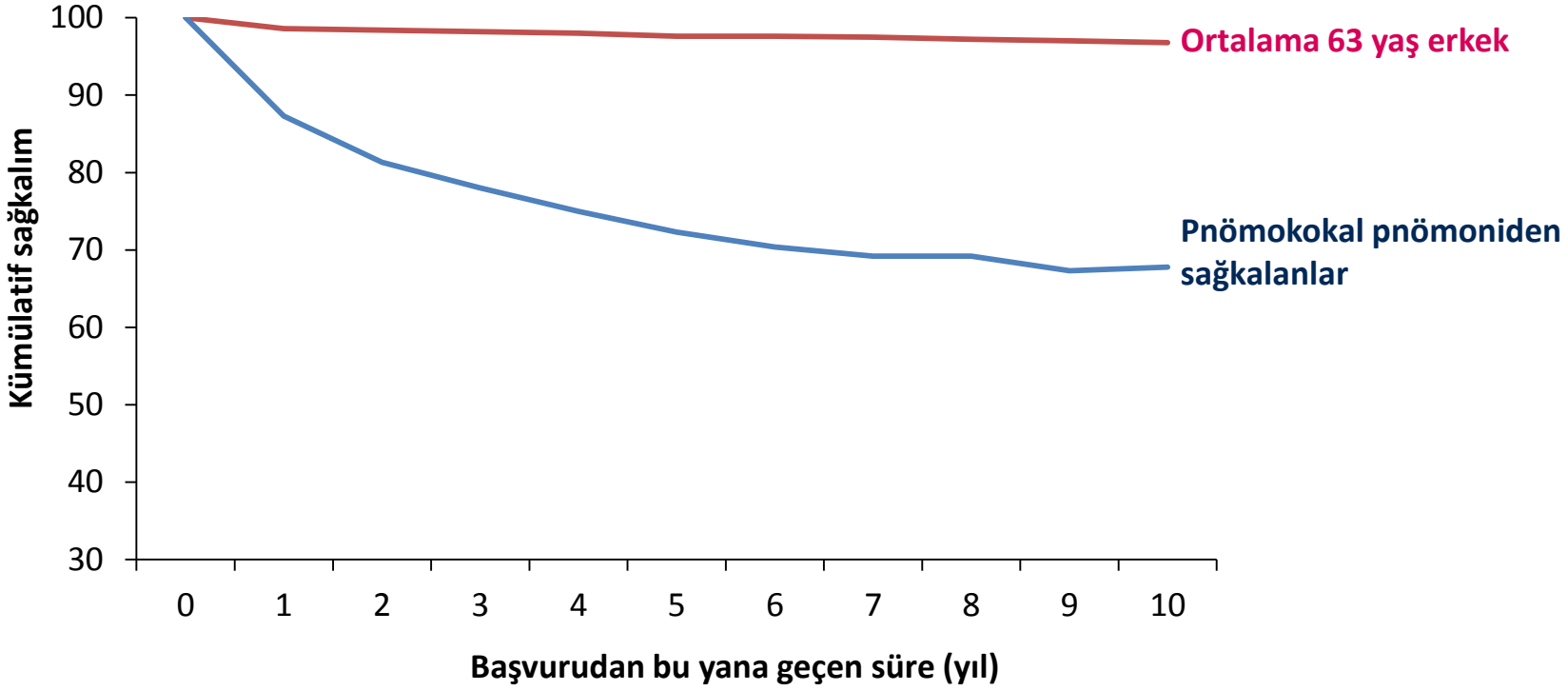
Results. Compared with amoxicillin-clavulanate treatment, the use of azithromycin and moxifloxacin was associated with significant increases in the risks of ventricular arrhythmia and cardiovascular death. The adjusted ORs for ventricular arrhythmia were 4.32 (95% CI, 2.95–6.33) for azithromycin, 3.30 (95% CI, 2.07–5.25) for moxifloxacin, and 1.41 (95% CI, .91–2.18) for levofloxacin. For cardiovascular death, the adjusted ORs for azithromycin, moxifloxacin, and levofloxacin were 2.62 (95% CI, 1.69–4.06), 2.31 (95% CI, 1.39–3.84), and 1.77 (95% CI, 1.22–2.59), respectively. No association was noted between clarithromycin or ciprofloxacin and adverse cardiac outcomes.

Conclusions. Healthcare professionals should consider the small but significant increased risk of ventricular arrhythmia and cardiovascular death when prescribing azithromycin and moxifloxacin. Additional research is needed to determine whether the increased risk of mortality is caused by the drugs or related to the severity of infection or the pathogens themselves.

Keywords. ventricular arrhythmia; cardiovascular death; azithromycin; moxifloxacin; levofloxacin.

Pnömokokal pnömoni, uzun dönem sağkalımın kısalması ile ilişkilidir.[1]

Kaplan–Meier eğrisi, ortalama 63 yaşındaki bir Amerikalı erkek hastanın beklenen 10 yıllık sağ kalım süresine kıyasla, pnömokokal pnömoniden sağ kalan 344 hastanın* 10 yıllık kümülatif sağkalımını göstermektedir.



*Son 1 ay sağkalan hastalar, başvuru sırasında PORT skor şiddet indeksine (PSI) göre derecelendirildi.

Kaynak: 1. Sandvall B, et al. Clin Infect Dis 2013;56:1145–1146, by permission of Oxford University Press.

İPH VE PNÖMOKOKAL PNÖMONİ RİSKİ

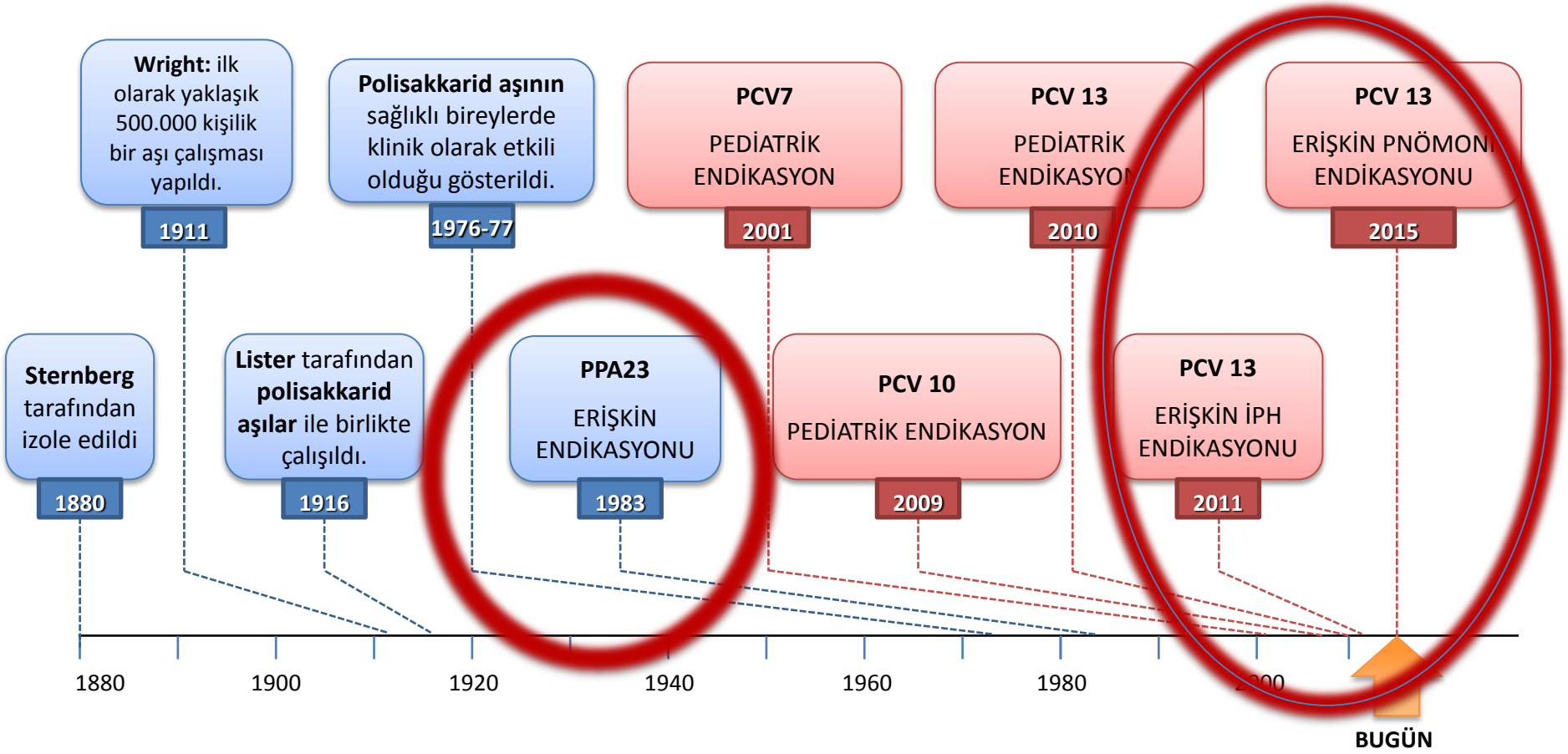
Konak faktörler				
Yaş[1]	Riskli grup[2,3,5,6]	Yüksek riskli grup[2,3,5,6]	Çevresel faktörler[3,4]	Davranış faktörleri[2,3]
• ≤ 2 yaş • ≥ 65 yaş	• Kronik kalp hastalığı • Kronik akciğer hastalığı* • Diyabet • Fonksiyonel veya anatomik aspleni • Kronik karaciğer hastalığı • Serebrospinal sıvı kaçakları	• HIV enfeksiyonu • Kronik böbrek yetmezliği, nefrotik sendrom • Kanser (solid ve hematolojik) • Solid organ transplantasyonu • Otoimmün hastalıklar • İmmünsüpresif tedavi ve kortikosteroidler • Primer immün yetmezlikler	• Geçirilmiş viral solunum yolu enfeksiyonu (örn. influenza) • Bir kurumda konaklama (örn. bakım evi)	• Sigara • Alkol kullanımı

*Kronik obstrüktif akciğer hastalığı, amfizem ve astım dahil olmak üzere.

HIV, insan immün yetmezlik virüsü; İPH, invaziv pnömokok hastalığı.

1. Centers for Disease Control and Prevention. Available from: http://www.cdc.gov/abcs/reports-findings/survreports/spneu12.pdf. Accessed March 2015. 2. Centers for Disease Control and Prevention. MMWR Morb Mortal Wkly Rep 2010;59:1102–6. 3. Musher DM. In: Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 7th edn, 2010:2623–42. 4. Centers for Disease Control and Prevention. Available from: http://www.cdc.gov/h1n1flu/vaccination/provider/provider_pneumococcal.htm. Accessed March 2015. 5. van Hoek AJ, et al. J Infect 2012;65:17–24. 6. Klemets P, et al. BMC Infect Dis 2008;8:96.

PNÖMOKOK AŞISININ BAŞLICA GELİŞİM AŞAMALARI



Adapted from: Grabenstein JD, Klugman KP. Clin Microbiol Infect. 2012 Oct;18 Suppl 5:15-24.

Prevenar 13® Summary of Product Characteristics. March 2015.

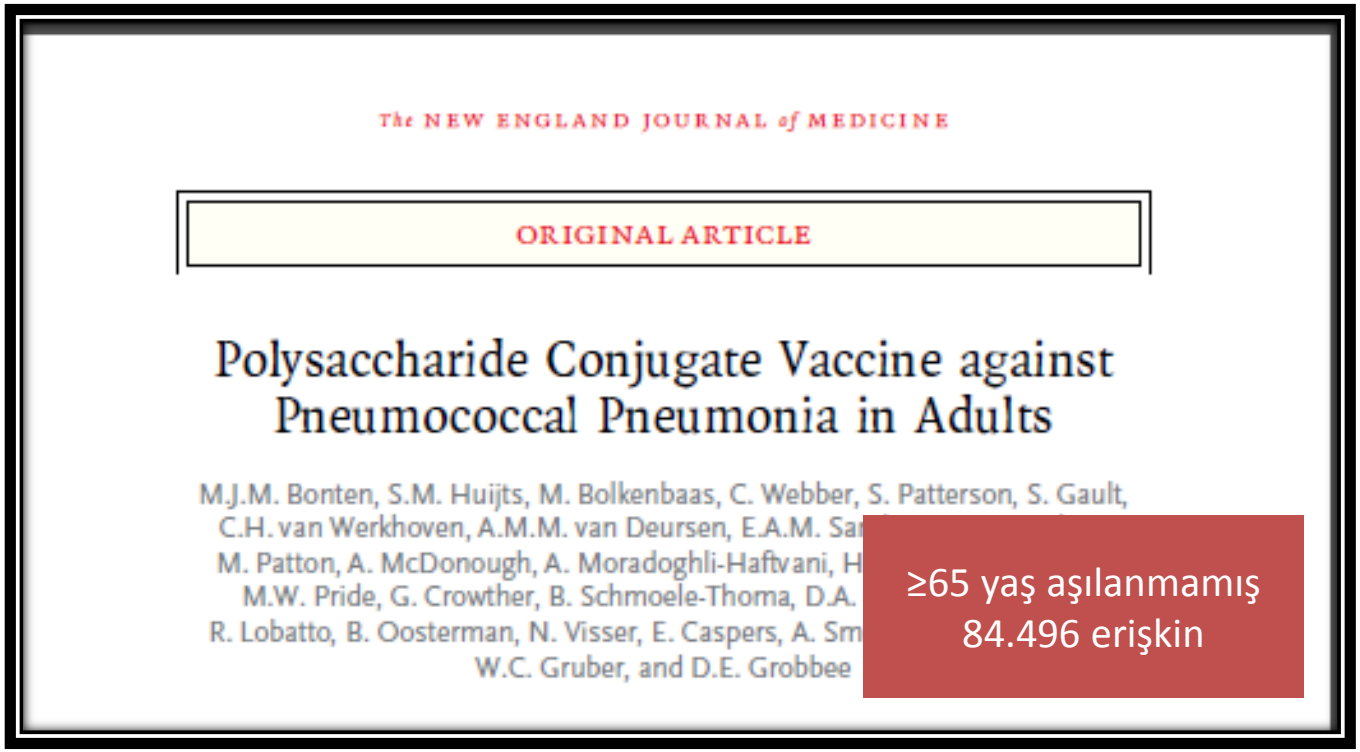
Pnömokok Aşıları

Polisakkarid Pnömokok Aşısı (PPA23)
İnvaziv hastalığa en sık neden olan 23 pnömokok antijenini içerir

13 değerli konjuge pnömokok (KPA13) aşısı etkinliği daha yüksek bir aşıdır.

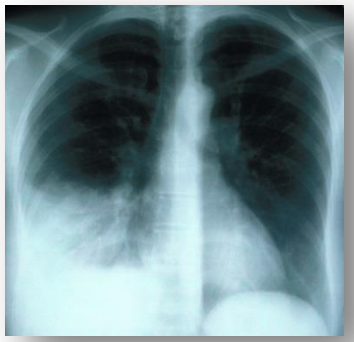
İki aşının birlikte kullanımı ile etkinlik ve kapsayıcılığını arttırma hedeflenmiştir

Mart 2015 tarihinde New England Journal of Medicine'da yayımlanan CAPITA çalışması (Erişkinlerde Toplum gelişen Pnömoni İmmünizasyon Çalışması)



Bonten MJ, et al. N Engl J Med 2015;372:1114–25.

CAPiTA ÇALIŞMASI
N Engl J Med 372:12:March 2015



	Etkinlik	P-değeri
VT-CAP	%45.56	.0006
VT-NB CAP	%45	.0067
VT-IPD	%75	.0005

Dünyada ve Ülkemizde yaşam beklentisi artıyor.[1,2]

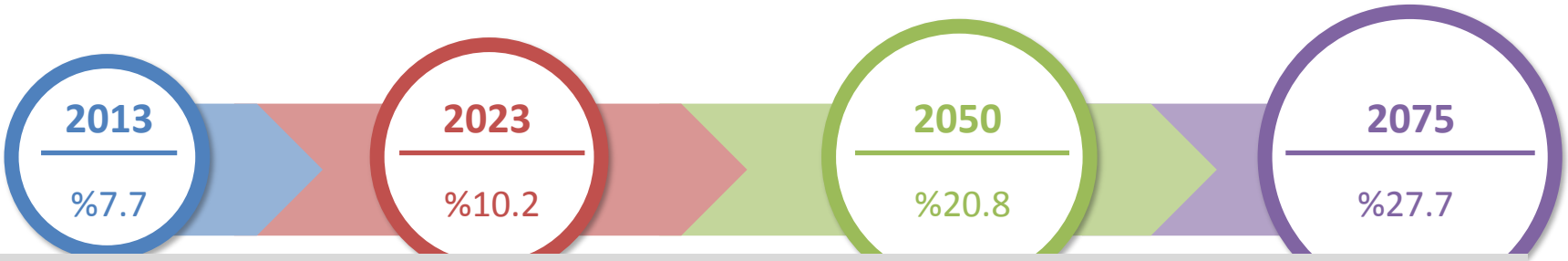
Dünyada yaşam beklentisi

2015 yılında doğan bir bireyin **ortalama 71.4 yıl yaşaması** beklenmektedir.[1]
İleride bizi daha yaşlı bir nüfus beklemektedir.[3,4]

Ülkemizde yaşam beklentisi

Ülkemizde beklenen yaşam süresi 2016 yılı itibariyle kadınlarda 80.7 yıl, erkeklerde 75.3 yıl olarak tahmin edilmektedir.[2]

Ülkemizde 65 yaş ve üzeri nüfus oranı[5]*



50 yaş +32 yıl, 60 yaş +23 yıl

Hoyert DL.Natl Vital Stat Rep 2012

population grows dramatically. https://www.nih.gov/news-events/news-releases/worlds-older-population-grows-dramatically Son erişim tarihi: 25.10.2017 4. U.S. Census Bureau. An Aging World: 2015 International Population Reports. https://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf Son erişim tarihi: 26.10.2017 5. Türkiye İstatistik Kurumu. İstatistiklerle Yaşlılar, 2013. http://www.tuik.gov.tr/PreHaberBultenleri.do?id=16057 Son erişim tarihi: 28.08.2017


YAŞLILIK
HASTALIKLARIN
LİMANIDIR

WANTED

The following are at HIGH RISK for PNEUMOCCAL DISEASE:

- Those ≥ 65 Years of Age
- Persons 19-64 years with asthma or smokes cigarettes
- Persons 19-64 with chronic illnesses

REWARD

PNÖMOKOK AŞI ENDİKASYONLARI

Indications for administration of PPV23 and PCV13 in adults aged 19 to 64 years

Risk Group	Medical Condition	PCV13	PPV23	PPV23 Revax[a]
Presumed Immunocompetent	Asplenia (including hemoglobinopathies)	X	X	X
	CSF leaks	X	X	—
	Cochlear implant	X	X	—
	Chronic heart disease	—	X	—
	Cigarette smoking	—	X	—
	Chronic lung disease	—	X	—
	Diabetes	—	X	—
	Alcoholism	—	X	—
	Chronic liver disease	—	X	—
Immunocompromised	Congenital or acquired immunodeficiencies	X	X	X
	HIV infection	X	X	X
	Chronic renal failure	X	X	X
	Nephrotic syndrome	X	X	X
	Leukemia	X	X	X
	Lymphoma	X	X	X
	Hodgkin disease	X	X	X
	Generalized malignancy	X	X	X
	Iatrogenic immunosuppression	X	X	X
	Solid organ transplant	X	X	X
	Multiple myeloma	X	X	X

Önce PCV13 8 hf.sonra PPSV23

İlk doz PPSV23 1 yıl sonra PCV13

[a] Single revaccination 5 years after a prior vaccination.

Zatürre her yıl dünyada milyonlarca ölüme neden olan ciddi bir hastalık. 65 yaş ve üstü için korunmak ise tedaviden çok daha önemli.
Sağlık Bakanlığı artık zatürre aşısının, risk grubundaki yetişkinlere ücretsiz yapılmasına karar verdi.

European Journal of Preventive Cardiology
EUROPEAN SOCIETY OF CARDIOLOGY®

Hospitalization for CAP is associated with an up to eight-fold increase in the risk of acute myocardial infarction (MI) and many 'pneumonia-related deaths' are related to non-infectious complications including acute coronary syndrome (ACS) events.[6,7] Many proposed pathophysiological mechanisms contribute to cardiovascular (CV) complications including endothelial dysfunction, plaque instability, inflammation, sympathetic activation, hypercoagulability, tissue hypoxaemia, depression of ventricular function, arterial stiffness, volume overload and arrhythmias.[8,9]

Conclusion: PV is associated with decreased risk of cardiovascular events and mortality. This protective effect increases at older age and in high cardiovascular risk subjects and decreases as the time elapses from PV. PV decreases the risk of MI and cerebrovascular events in the elderly.

Vila-Corcoles et al. BMC Public Health 2012, 12:222
http://www.biomedcentral.com/1471-2458/12/222

BMC Public Health

RESEARCH ARTICLE Open Access

Clinical effectiveness of pneumococcal vaccination against acute myocardial infarction and stroke in people over 60 years: the CAPAMIS study, one-year follow-up

Angel Vila-Corcoles[1,2*], Olga Ochoa-Gondar[1], Teresa Rodriguez-Blanco[2], Antonia Gutierrez-Perez[2], Angel Vila-Rovira[2], Frederic Gomez[3], Xavier Raga[4], Cinta de Diego[1], Eva Satue[1] and Elisabet Salsench[1], for EPIVAC Study Group[1]

Abstract

Background: Conflicting results have been recently reported evaluating the relationship between pneumococcal vaccination and the risk of thrombotic vascular events. This study assessed the clinical effectiveness of the 23-valent polysaccharide pneumococcal vaccine (PPV23) against acute myocardial infarction and ischaemic stroke in older adults.

Methods: Population-based prospective cohort study conducted from December 1, 2008 until November 30, 2009, including all individuals ≥ 60 years-old assigned to nine Primary Care Centres in Tarragona, Spain (N = 27,204 individuals). Primary outcomes were hospitalisation for acute myocardial infarction and/or ischaemic stroke. All cases were validated by checking clinical records. The association between pneumococcal vaccination and the risk of each outcome was evaluated by Multivariable Cox proportional-hazard models (adjusted by age, sex, influenza vaccine status, presence of comorbidities and cardiovascular risk factors).

Results: Cohort members were followed for a total of 26,444 person-years, of which 34% were for vaccinated subjects. Overall incidence rates (per 1000 person-years) were 4.9 for myocardial infarction and 4.6 for ischaemic stroke. In the multivariable analysis, vaccination was associated with a marginally significant 35% lower risk of stroke (hazard ratio [HR]: 0.65; 95% confidence interval [CI]: 0.42-0.99; $p = 0.046$). We found no evidence for an association between pneumococcal vaccination and reduced risk of myocardial infarction (HR: 0.83; 95% CI: 0.56-1.22; $p = 0.347$).

Conclusions: Our data supports a benefit of PPV23 against ischaemic stroke among the general population over 60 years, suggesting a possible protective role of pneumococcal vaccination against some acute thrombotic events.

Pneumococcal Vaccination and Risk of Acute Myocardial Infarction and Stroke in Men

Hung Fu Tseng, PhD
Jeffrey M. Slezak, MS
Virginia P. Quinn, PhD
Lina S. Sy, MPH
Stephen K. Van Den Eeden, PhD
Steven J. Jacobsen, MD, PhD

Context Multiple studies have shown that preventing influenza by vaccination reduces the risk of vascular events. However, the effect of pneumococcal polysaccharide vaccine on vascular events remains controversial.

Objective To examine the association between pneumococcal vaccination and risk of acute myocardial infarction (MI) and stroke among men.

Design, Setting, and Participants A prospective cohort study of Kaiser Permanente Northern and Southern California health plans with 84 170 participants aged 45 to 69 years from the California Men's Health Study who were recruited between January 2002 and December 2003, and followed up until December 31, 2007. The cohort was similar to the population of health plan members and men who responded to a general health survey in California on important demographic and clinical characteristics. Demographic and detailed lifestyle characteristics were collected from surveys. Vaccination records were obtained from the Kaiser Immunization Tracking System.

Main Outcome Measure Incidence of acute MI and stroke during the follow-up period in men who had no history of such conditions.

Results During follow-up, there were 1211 first MIs in 112 837 vaccinated person-years (10.73 per 1000 person-years) compared with 1494 first MI events in 246 170 unvaccinated person-years (6.07 per 1000 person-years). For stroke, there were 651 events in 122 821 vaccinated person-years (5.30 per 1000 person-years) compared with 483 events in 254 541 unvaccinated person-years (1.90 per 1000 person-years). With propensity score adjustment, we found no evidence for an association between pneumococcal vaccination and reduced risk of acute MI (adjusted hazard ratio [HR], 1.09; 95% confidence interval [CI], 0.98-1.21) or stroke (adjusted HR, 1.14; 95% CI, 1.00-1.31). An inverse association was also not found in men of different age and risk groups. The results appeared to be consistent, because using more specific *International Classification of Diseases, Ninth Revision* codes for the outcome definition did not change the estimations.

Conclusion Among a cohort of men aged 45 years or older, receipt of pneumococcal vaccine was not associated with subsequent reduced risk of acute MI and stroke.

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MULTIPLE STUDIES HAVE shown that vaccination against influenza can reduce the risk of recurrent myocardial infarction (MI), sudden cardiac death, cardiac hospital admissions, need for revascularization, and stroke.[1-5] A similar finding has been recently reported for pneumococcal polysaccharide vaccine.[6] In the study by Lamontagne et al,[6] the authors hypothesized that besides preventing bacterial infections, pneumococcal vaccination may protect against cardiovascular events by decreasing the extent of atherosclerosis. There were, however, several potential limitations of this study that raise questions about the validity of the results, including preferential inclusion of a healthier cohort, confounding from dietary factors, physical activity, and family his-

MAJOR ARTICLE

Prevention of Acute Myocardial Infarction and Stroke among Elderly Persons by Dual Pneumococcal and Influenza Vaccination: A Prospective Cohort Study

Ivan F. N. Hung,[1,2] Angela Y. M. Leung,[3] Daniel W. S. Chu,[4] Doris Leung,[3] Terence Cheung,[3] Chi-Kuen Chan,[2] Cindy L. K. Lam,[3] Shao-Haei Liu,[5] Chung-Ming Chu,[6] Pak-Leung Ho,[1] Sophia Chan,[3] Tai-Hing Lam,[4] Raymond Liang,[2] and Kwok-Yung Yuen[1]

[1]Infectious Disease Division, Queen Mary Hospital, State Key Laboratory of Emerging Infectious Diseases, Carol Yu Centre for Infection, The University of Hong Kong, Departments of [2]Medicine and [3]Nursing Studies and [4]School of Public Health, The University of Hong Kong, [5]Family Medicine and Primary Healthcare and [6]Department of Infection, Emergency, and Contingency, Hospital Authority, [7]Centre for Health Protection, Department of Health, and [8]Department of Medicine, United Christian Hospital, Hong Kong SAR, China

2007 -2008:Prospektif bir çalışma, Kronik hastalığı nedeni ile trivalan inaktif aşı ve PPA 23 aşısı verilen 65 yaş hastalar ölüm, hastaneye yatma , pnömoni,iskemik atak, MI ve koroner ve yoğun bakıma yatma bakımından 31 mart 2009 (1 yıl)izlenmiş

Toplam 36,636 kişi:Aşılanmayan 25,393 kişi

İki aşı verilen 7292

İnfluenza aşısı tek başına 2076 kişi

PPA23 tek başına 1875 kişi

from developing complications from respiratory, cardiovascular, and cerebrovascular diseases, thereby reducing hospitalization, coronary or intensive care admissions, and death.

Pneumococcal and influenza infections can cause se- population. In Hong Kong, overcrowded living con-

İki aşı verilenlerde ölüm, pnömoni , inme ve MI aşılanmayanlara göre daha düşük bulunmuş

1058-4838/2010/5108-0003$15.00
DOI: 10.1086/656427

elderly persons, defined as those aged ≥65 years in most

Commentary

Successful Control of Vaccine-Preventable Diseases Requires More than Vaccines

Walter A. Orenstein, MD, Lance E. Rodewald, MD

TÜRKİYE'DE PNÖMOKOK AŞILAMASI: RİSK GRUPLARI VE MEVCUT AŞILAMA DURUMU

Esin Şenol[1] ve Devrim Emel Alıcı[2]

[1] Gazi Üniversitesi Tıp Fakültesi, Enfeksiyon Hastalıkları Anabilim Dalı, Ankara, Türkiye

[2] Pfizer İlaçları, Medikal Departman, İstanbul, Türkiye

AMAÇ

Streptococcus pneumoniae (pnömokok) enfeksiyonları tüm dünyada yetişkinlerde aşı ile önlenebilir hastalıklar arasında morbidite ve mortalitenin önemli bir nedeni olmaya devam etmektedir. Türkiye'de konjuge pnömokok aşısı (KPA)-13 aşısı çocuklar için ulusal aşılama şemasında yer almakta ve rutin olarak uygulanmaktadır. Erişkinlerde ise riskli gruplara ve ≥65 yaş herkese aşı önerilmekle beraber yaygın ve düzenli bir pnömokok aşı uygulaması yoktur. Pnömokok aşılama oranları erişkinlerde istenen düzeylere ulaşmamıştır. Bu çalışmada literatür taraması aracılığıyla erişkinlerde, risk gruplarında yer alan kişilerin sayısını belirlemek amaçlanmıştır.

YÖNTEM

Pubmed ve iki ulusal medikal veritabanı (Ulakbim ve Türk Medline) şu anahtar kelimeler kullanılarak tarandı: Türkiye, prevalans, kronik böbrek hastalığı, kronik obstrüktif akciğer hastalığı (KOAH), koroner arter hastalığı ve pnömokok aşısı. Demografik veriler (2015 verisi) Türk İstatistik Kurumu'nun resmi web sitesinden elde edildi.

BULGULAR

Yaklaşık 24 milyon yetişkinin pnömokok enfeksiyonları açısından risk altında olduğu tahmin edilmektedir (Tablo 1). Pnömokok aşılanma oranı yüksek risk gruplarında bile halen istenen düzeyin altındadır (ör. diyabetiklerde %1; üçüncü basamak sağlık merkezlerinde KOAH hastalarında %10-%15). Hekimlerin pnömokok aşısını önermedeki eksiklikleri ve bilgi eksikliği yetişkinlerin pnömokok aşısı olmamasının başlıca nedenleri arasındadır.

SONUÇLAR

Yüksek popülasyona sahip bir ülke olan Türkiye'de, pnömokok ve diğer aşı ile önlenebilir hastalık riski taşıyan yetişkin prevalansı yüksektir ve yakın gelecekte de artması beklenmektedir. Dolayısıyla, sürdürülebilir yetişkin aşılama stratejilerinin hayata geçirilmesi gerekmektedir.

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Türkiye'deki riskli gruplarda aşılama oranları

TIHUD

Ege Bölgesi Çalışma Grubu

Türkiye'de Diyabetik Hastalardaki Aşılama Oranları

%0.1 pnömokok aşılama oranı

%9.1 influenza aşılama oranı

Eur J Epidemiol (2013) 28:169–180
DOI 10.1007/s10654-013-9771-5

DIABETES MELLITUS

Twelve-year trends in the prevalence and risk factors of diabetes and prediabetes in Turkish adults

Ilhan Satman · Beyhan Omer · Yildiz Tutuncu · Sibel Kalaca · Selda Gedik · Nevin Dinccag · Kubilay Karsidag · Sema Genc · Aysegul Telci · Bulent Canbaz · Fulya Turker · Temel Yilmaz · Bekir Cakir · Jaakko Tuomilehto

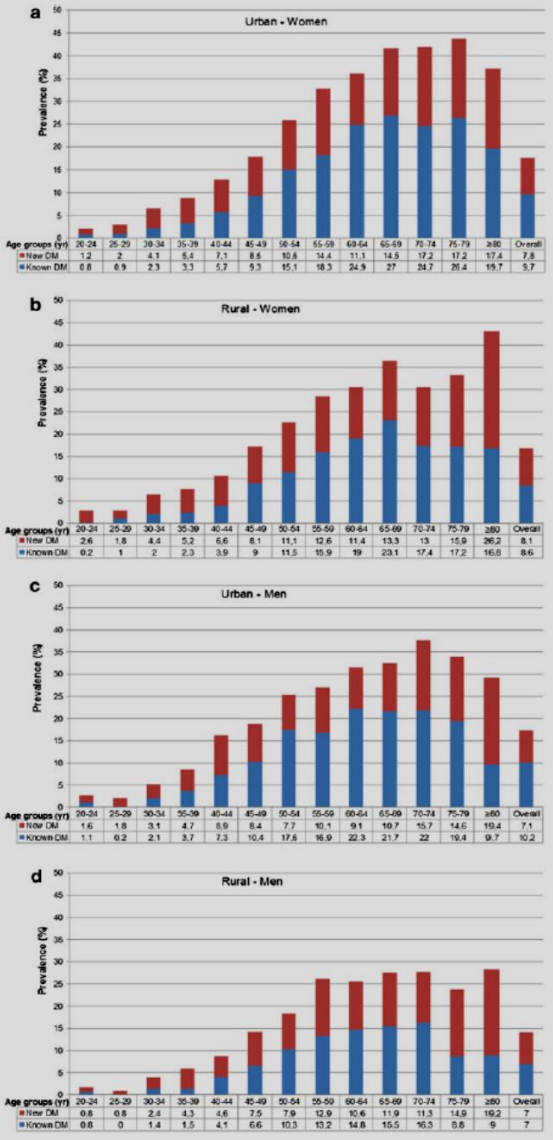
Compared with the data from the earlier TURDEP-I [6], the prevalence of diabetes, IGT, and obesity increased by 90, 106 and 40 %, respectively; but the prevalence of hypertension decreased by 11 %. The projected increases

epidemic in Turkey. We aimed to determine the prevalence of diagnosed and undiagnosed diabetes, prediabetes and their 12-year trends and to identify risk factors for diabetes in the adult Turkish population. A cross-sectional, population-based survey, 'TURDEP-II' included 26,499 randomly sampled adults aged ≥ 20 years (response rate: 87 %). Fasting glucose and biochemical parameters were measured in all; then a OGTT was performed to identify diabetes and prediabetes in eligible participants. The prevalence of diabetes was 16.5 % (new 7.5 %), translating to 6.5 million adults with diabetes in Turkey. It was higher in women than men ($p = 0.008$). The age-standardized 1997–98) was 13.7 % (if same diagnostic definition was applied diabetes prevalence is calculated 11.4 %). The prevalence of isolated-IFG and impaired glucose tolerance (IGT), and combined prediabetes was 14.7, 7.9, and 8.2 %, respectively; and that of obesity 36 % and hypertension 31.4 %. Compared to TURDEP-I; the rate of increase for diabetes: 90 %, IGT: 106 %, obesity: 40 % and central obesity: 35 %, but hypertension decreased by 11 % during the last 12 years. In women age, waist, body mass index (BMI), hypertension, low education, and living environment; in men age, BMI, and hypertension were independently associated with an increased prevalence of diabetes. In women current smoking, and in men being single were associated with a reduced risk. These results from one of the largest nationally representative surveys carried out so far show that diabetes has rapidly become a major public health challenge in Turkey. The figures are alarming and underscore the urgent need for national programs to

This study was conducted on Behalf of the TURDEP-II Study Group (members of the group are listed in the Appendix section).

Electronic supplementary material The online version of this article (doi:10.1007/s10654-013-9771-5) contains supplementary material, which is available to authorized users.

Fig. 1 The prevalence of newly diagnosed and previously known diabetes by 5-year age intervals (a Urban - Women, b Rural - Women, c Urban - Men, and d Rural - Men)



PneuVUE

Adult Pneumonia Vaccine Understanding in Europe

A New View into Pneumonia Among Older Adults

Sample size

Austria	Czech Republic	France	Germany
1000	1002	1001	1001

Greece	Italy	Portugal	Spain	UK
1008	1001	1016	1000	

PneuVUE® Total findings

TRAFİK KAZALARININ 4 MİSLİ ÖLÜM ORANLARI !!!!

claim to know what it is

20% do not identify it as a lung infection

Only **44%** think it's *true* that some forms of pneumonia may be contagious

Pneumonia is said to be serious disease, but there is an apparent failure to link this to a risk to their own personal health

92%

4% for pneumonia – in reality, pneumonia is responsible for almost 4 x as many deaths[10]

There is a lot of uncertainty about whether pneumonia is a preventable disease, and how to prevent it.

Only **39%** think it is *false* that "pneumonia can only be treated and not prevented"

A higher proportion think the following are effective at protecting against pneumonia

are aware it is possible to be vaccinated against pneumonia

Only **16%** of those at higher risk of pneumonia have been vaccinated

Doctors, and other allied health professionals such as nurses and pharmacists have a key role to play in widening awareness and raising vaccination rates.

75% of those who have been vaccinated against

HER 1/5 KİŞİ PNÖMONİNİN AKCİĞERİ İLGİLENDİREN BİR DURUM OLDUĞUNU BİLMİYOR

Italy, France, Spain, Portugal and UK. Fieldwork was conducted November 2015 - February 2016.

ERİŞKİN BAĞIŞIKLAMADA HEDEF: HEALTHY PEOPLE 2010 / 2020 - CDC

ELİMİNASYON;
Difteri, KKK, Tetanoz

%75 AZALTMA;
Hepatit A ve B

Kanada, ABD;
İnfluenza%30-40

UYUM; ≥ 65 yaş ; İnfluenza ve en az 1 doz pnömokok aşısı 90%

18-64 yaş ,yüksek risk: pnömokok aşısı %60 uyum, >6 ay influenza aşısı , %70 , SP %90


Sana attığım email'i
almadın mı?

idsafoundation.org

IDSA Infectious Diseases Society of America Foundation

nfectious diseases was exciting because of the
ewly developing antibiotics," she recalled. "ID was
ne of those rare specialties where you could cure
eople from previously fatal diseases. And the
ildhood vaccines eliminated the scourges of
etanus, diphtheria, whooping cough and many
ore. You could prevent illnesses."

hat passion for prevention and tre
r. Wilfert's career as she moved in
ombination of clinical work, resear
eaching. In 1969, she joined the Du
chool of Medicine and later was na
hief of Pediatric Infectious Disease
epartment of Pediatrics, a position
he mid-90s, along with serving as a professor of
ediatrics and microbiology.

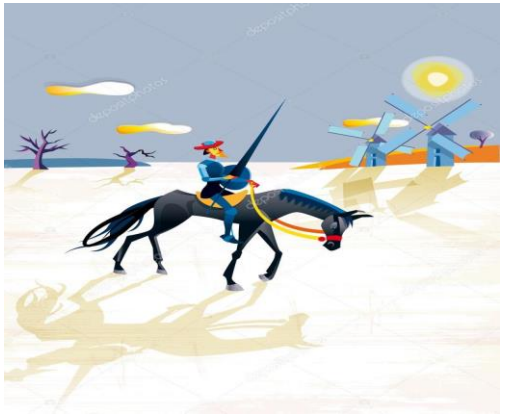
er research included clinical trials of vaccines in
ildren and later, therapeutic trials for children
ith HIV. She was principal investigator of the
ediatric AIDS Clinical Trials Unit at Duke, which
unched in 1987. Dr. Wilfert is best known for he
roundbreaking work in pediatric HIV prevention.
hrough this trailblazing work, she is credited with
aving countless lives.

Wellcome, whose staff included a former fellow of Dr. Wilfert's, developed AZT. Dr. Wilfert's ongoing friendship with her resident ensured that Duke's medical facility was one of the drug's early trial sites. That connection proved pivotal.

Dr. Wilfert theorized that by reducing the viral load of infected mothers, she could diminish the amount of virus their babies were exposed to, thereby reducing HIV transmission from mother to baby. Turns out, she was right.

Duke estimates the application of Dr. Wilfert's concept led to the reduction of mother-to-baby transmission of HIV by 75 percent in the United States.

DİNLEDİĞİNİZ İÇİN TEŞEKKÜRLER...



SORULARINIZ?

Prof. Dr. Esin Şenol