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# 10 BEST ARTICLES OF THE PAST YEAR

GERIATRIC UPDATE

OCTOBER 30, 2020

Barry Goldlist

# Disclosures

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- No financial disclosures
- Several of my junior colleagues (at this stage of my career all colleagues are junior), could have given a better presentation. Fortunately several were kind enough to give me recommendations on articles to discuss.
- I will not provide detailed descriptions of the trials that emphasize review of the methodology, validity and **generalizability** (if that is what you were expecting, consider a nap now and save yourself for better talks)
- I do not believe in the concept of ‘10 best’
- I have trouble counting to 10

Therefore...

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# ARTICLES THAT MAY INFLUENCE YOUR PRACTICE IN THE COMING YEAR

A COLLABORATIVE PRESENTATION WITH PARTICULAR  
THANKS TO

RICHARD NORMAN, LINDY ROMANOVSKY, REENA  
AHLUWAHLIA & NATHAN STALL

JAMA Dermatology | Review

# Effectiveness and Safety of Systemic Therapy for Psoriasis in Older Adults A Systematic Review

Marieke E. C. van Winden, MD, MSc; Lara S. van der Schoot, MD; Mariluz van de L'Isle Arias, MD;  
Lieke J. van Vugt, MD; Juul M. P. A. van den Reek, PhD; Peter C. M. van de Kerkhof, PhD;  
Elke M. G. J. de Jong, PhD; Satish F. K. Lubeek, PhD

**IMPORTANCE** Treating older adults with psoriasis can be challenging owing to comorbidities, concomitant medication use, and consequent safety risks. Although many studies focus on the effectiveness and safety of systemic antipsoriatic therapies in the general population, their effectiveness in older adults with psoriasis has not been systematically assessed.

- + Editorial
- + Related article
- + Supplemental content

**This would be very important to a dermatologist treating older adults with psoriasis or an older person with severe psoriasis, but not being discussed today.**

May 21, 2020

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

## Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington

Temet M. McMichael, Ph.D., Dustin W. Currie, Ph.D., Shauna Clark, R.N., Sargis Pogojans, M.P.H., Meagan Kay, D.V.M., Noah G. Schwartz, M.D., James Lewis, M.D., Atar Baer, Ph.D., Vance Kawakami, D.V.M., Margaret D. Lukoff, M.D., Jessica Ferro, M.P.H., Claire Brostrom-Smith, M.S.N., Thomas D. Rea, M.D., Michael R. Sayre, M.D., Francis X. Riedo, M.D., Denny Russell, B.S., Brian Hiatt, B.S., Patricia Montgomery, M.P.H., Agam K. Rao, M.D., Eric J. Chow, M.D., Farrell Tobolowsky, D.O., Michael J. Hughes, M.P.H., Ana C. Bardossy, M.D., Lisa P. Oakley, Ph.D., Jesica R. Jacobs, Ph.D., Nimalie D. Stone, M.D., Sujan C. Reddy, M.D., John A. Jernigan, M.D., Margaret A. Honein, Ph.D., Thomas A. Clark, M.D., and Jeffrey S. Duchin, M.D., for the Public Health–Seattle and King County, EvergreenHealth, and CDC COVID-19 Investigation Team\*



# The NEW ENGLAND JOURNAL *of* MEDICINE

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## Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility

M.M. Arons, K.M. Hatfield, S.C. Reddy, A. Kimball, A. James, J.R. Jacobs, J. Taylor, K. Spicer, A.C. Bardossy, L.P. Oakley, S. Tanwar, J.W. Dyal, J. Harney, Z. Chisty, J.M. Bell, M. Methner, P. Paul, C.M. Carlson, H.P. McLaughlin, N. Thornburg, S. Tong, A. Tamin, Y. Tao, A. Uehara, J. Harcourt, S. Clark, C. Brostrom-Smith, L.C. Page, M. Kay, J. Lewis, P. Montgomery, N.D. Stone, T.A. Clark, M.A. Honein, J.S. Duchin, and J.A. Jernigan, for the Public Health–Seattle and King County and CDC COVID-19 Investigation Team\*

# WHAT DID WE LEARN FROM THESE TWO ARTICLES

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- COVID-19 spread quickly in a Seattle skilled nursing facility (SNF)
- More than half the patients in the Seattle SNF were asymptomatic at the time of testing, and likely contributed to transmission, therefore just focusing on symptomatic patients not sufficient
- Fewer asymptomatic patients in LTC facilities, but widespread infection occurred
- Recommendations:
  - LTC facilities to identify and exclude potentially infected staff and visitors
  - Actively monitor for potentially infected residents
  - Implement appropriate IPAC measures (in Ontario we settled for isolation not proper IPAC)
  - In Ontario we opted for ineffective solitary confinement (Supreme Court says extended solitary confinement not appropriate in prisons)

RESEARCH  VULNERABLE POPULATIONS

# For-profit long-term care homes and the risk of COVID-19 outbreaks and resident deaths

Nathan M. Stall MD, Aaron Jones MSc PhD, Kevin A. Brown MSc PhD, Paula A. Rochon MD MPH, Andrew P. Costa PhD

■ Cite as: *CMAJ* 2020 August 17;192:E946-55. doi: 10.1503/cmaj.201197; early-released July 22, 2020



## Association Between Nursing Home Crowding and COVID-19 Infection and Mortality in Ontario, Canada

Kevin A. Brown, PhD, Aaron Jones, MSc, Nick Daneman, MD, MSc, Adrienne K. Chan, MD, MPH, Kevin L. Schwartz, MD, MSc, Gary E. Garber, MD, Andrew P. Costa, PhD, Nathan M. Stall, MD

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Department of Health Research Methods, Evidence, and Impact, McMaster University, Hamilton, Canada (Costa, Jones)

# WHAT DID WE LEARN FROM THESE TWO ARTICLES

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- My colleague Nathan Stall, even though still working on his PhD, is already a star researcher!
- Crowding is a major factor in nursing home COVID-19 infection and mortality
- Crowding is a major factor in why for-profit LTC facilities had more infections and deaths than nonprofit homes. There was no difference in likelihood of an outbreak between the two.
- JAGS August 2020 had a brief report that location and size of the nursing home, not traditional quality indicators were related to COVID-19 infections
- ***WHY DID WE GRANDFATHER OLDER LTC FACILITIES IN ONTARIO RATHER THAN GIVE A TIMETABLE FOR ADHERING TO NEW STANDARDS?***
- We all have to advocate for better LTC

# ARE DOCTORS THE ONLY HEALTH CARE PROVIDERS?

As a doctor I have to admit:

- Nurses are the largest group of health care providers
- They are the most versatile group
- They are arguably the most important: hospitals can provide service without doctors, but not without nurses

“Save one life, you’re a hero. Save a hundred lives, you’re a nurse.”

-Unknown

# Wiley Public Health Emergency Collection

Public Health Emergency COVID-19 Initiative

Hastings Cent Rep. 2020 May 14 : 10.1002/hast.1110.

doi: [10.1002/hast.1110](https://doi.org/10.1002/hast.1110) [Epub ahead of print]

PMCID: PMC7272859

PMID: [32410225](https://pubmed.ncbi.nlm.nih.gov/32410225/)

## Covid-19: *Ethical Challenges for Nurses*

GEORGINA MORLEY, CHRISTINE GRADY, JOAN MCCARTHY, and CONNIE M. ULRICH



# ISSUES DISCUSSED

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- Safety
  - Nurses spend more time physically close with patients
- Allocation of scarce resources
  - PPE
  - Which areas should nurses be allocated to? What are the correct staffing ratios?
  - Priority testing for health care workers
- Relationships with patients and their families (caregivers)
  - Dealing with patients dying isolated from their loved ones

# **Annals of Internal Medicine**

October 1, 2019

## **Antipsychotics for Preventing Delirium in Hospitalized Adults**

### **A Systematic Review**

Esther S. Oh, MD, PhD; Dale M. Needham, MD, PhD; Roozbeh Nikooie, MD; Lisa M. Wilson, ScM; Allen Zhang, BS; Karen A. Robinson, PhD\*; and Karin J. Neufeld, MD, MPH\*

## **Antipsychotics for Treating Delirium in Hospitalized Adults**

### **A Systematic Review**

Roozbeh Nikooie, MD; Karin J. Neufeld, MD, MPH; Esther S. Oh, MD, PhD; Lisa M. Wilson, ScM; Allen Zhang, BS; Karen A. Robinson, PhD\*; and Dale M. Needham, MD, PhD\*

November 5, 2019

## **Comparative Efficacy of Interventions for Aggressive and Agitated Behaviors in Dementia**

### **A Systematic Review and Network Meta-analysis**

Jennifer A. Watt, MD, PhD; Zahra Goodarzi, MD, MSc; Areti Angeliki Veroniki, PhD; Vera Nincic, PhD; Paul A. Khan, PhD; Marco Ghassemi, MSc; Yuan Thompson, PhD; Andrea C. Tricco, PhD; and Sharon E. Straus, MD, MSc

# WHAT DID WE LEARN FROM THESE THREE ARTICLES?

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- Another star is born: Jennifer Watt at Unity Health (St. Michael's Hospital) is the lead author of the third article and an impressive young clinician scientist
- There is really no good evidence that antipsychotics help in the management of delirium in hospital (analogy with morphine in acute MI), weak evidence for prevention in certain surgical populations. A far cry from proven efficacy of the HELP program in preventing hospital delirium
- Nonpharmacological interventions more effective than pharmacological interventions in reducing aggressive behaviors in dementia

# MY (NON EVIDENCE BASED) THOUGHTS

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- We use medications because nonpharmacological approaches require the system having an established team approach. One successful method I have observed is an advanced practice nurse developing a plan with ward nurses.
- Antipsychotics work best for severe paranoia and hallucinations in delirious and demented patients. In delirium they do not alter the course of recovery but can relieve the suffering of hallucinations and paranoia
- Families can be dissuaded from antipsychotics by informing them of the risk of heart attack and stroke being increased with these meds



# POLL QUESTION

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Mrs. S is 82 years old and lives in an apartment by herself. She is independent of basic and instrumental ADLs, but has been complaining of fatigue for the past year. History, physical, and lab findings are normal except for an elevated TSH of 6.7 on two occasions ( $N < 4$ ). Would you start treatment with thyroxin?

- a) YES
- b) NO

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# **L-Thyroxine Therapy for Older Adults With Subclinical Hypothyroidism and Hypothyroid Symptoms**

**Secondary Analysis of a Randomized Trial**

**Maria de Montmollin, MD; Martin Feller, MD, MSc; Shanthi Beglinger, MBChB, MBiolSci; Alex**

**McConnachie, PhD;**

**Drahomir Aujesky, MD, MSc; Tinh-Hai Collet, MD; Ian Ford, PhD; Jacobijn Gussekloo, MD, PhD; Patricia**

**M. Kearney, MD, PhD, MPH; Vera J.C. McCarthy, PhD, MA, BSc(Hons); Simon Mooijaart, MD, PhD;**

**Rosalinde K.E. Poortvliet, MD, PhD; Terence Quinn, MD; David J. Stott, MD; Torquil Watt, MD, PhD,**

**DMSc; Rudi Westendorp, MD, PhD; Nicolas Rodondi, MD, MAS; and Douglas C. Bauer, MD**

**Annals of Internal Medicine ORIGINAL RESEARCH**

**June 2, 2020**

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# Association Between Levothyroxine Treatment and Thyroid-Related Symptoms Among Adults Aged 80 Years and Older With Subclinical Hypothyroidism

Simon P. Mooijaart, MD, PhD; Robert S. Du Puy, MD; David J. Stott, MD; Patricia M. Kearney, MD, PhD;

Nicolas Rodondi, MD, MAS; Rudi G. J. Westendorp, MD, PhD; Wendy P. J. den Elzen, PhD; Iris Postmus, PhD;

Rosalinde K. E. Poortvliet, MD, PhD; Diana van Heemst, PhD; Barbara C. van Munster, MD, PhD;

Robin P. Peeters, MD, PhD; Ian Ford, PhD; Sharon Kean; Claudia-Martina Messow, PhD; Manuel R. Blum, MD;

Tinh-Hai Collet, MD; Torquil Watt, MD, PhD; Olaf M. Dekkers, MD, PhD; J. Wouter Jukema, MD, PhD;

Johannes W. A. Smit, MD, PhD; Peter Langhorne, MD, PhD; Jacobijn Gussekloo, MD, PhD

JAMA | Original Investigation

November 26, 2019

# WHAT DID WE LEARN FROM THESE TWO ARTICLES

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- The importance for academics to get more than one article from their data set
- Patients over 80 years of age with modest elevations in TSH levels ( $<7$ ), do not benefit from thyroid hormone replacement and the elevation of TSH is often transient
- Endocrinologists that I know have been saying this for years, so perhaps this will spread to all physicians
- Editorial that accompanied the JAMA article suggested changing the normal reference range of TSH in older individuals to avoid temptation of unnecessary treatment



## POLL QUESTION 2

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Mr. L is 76 and quite healthy. He is a non smoker, and has no evidence of cardiac or cerebrovascular disease. His cholesterol is above normal, theoretically giving him an increased 10 year risk of vascular events. Should he be started on a statin for primary prevention?

- a) YES
- b) NO

# STATIN USE IN THE ELDERLY

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## **Statin Use Over 65 Years of Age and All-Cause Mortality: A 10-Year Follow-Up of 19 518 People**

Sophia Eilat-Tsanani, MD, Elad Mor, MD, and Yochai Schonmann, MD, MSc

Journal of the American Geriatrics Society

October 2019 (early release July 2019)

# Original Investigation

July 7, 2020, JAMA

## **Association of Statin Use With All-Cause and Cardiovascular Mortality in US Veterans 75 Years and Older**

Ariela R. Orkaby, MD,  
MPH; JaneA. Driver, MD, MPH  
YukLam Ho, MPH; Bing Lu, MD, PhD;  
Lauren Costa, MPH; Jacqueline Hon  
erlaw, RN, MPH<sup>2</sup>; Ashley Galloway, M  
PH<sup>2</sup>; Jason L. Vassy, MD,  
MPH; Daniel E. Forman, MD;  
J. Michael Gaziano, MD, MPH; David  
R. Gagnon, MD, PhD; Peter  
W.F. Wilson, MD; Kelly Cho, PhD;  
Luc Djousse MD, ScD

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*JAMA*. 2020;324(1):68-78.  
doi:10.1001/jama.2020.7848

# CAN WE TRUST THESE ARTICLES?

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- The first article from Israel showed that patients over 65 (> 19,500 people) who adhered to their statin prescription had less mortality and fewer CVS events.
- However, not randomized, and those who adhere to Rx often different from those who do not
- Second study was in veterans (~97% men) over 75 and was a retrospective study (326981 patients, 57178 on statins) showed less all cause And CV mortality as well

***These results are suggestive, but not definitive, and support the need for randomized clinical trials.***

***They have shaken my pessimism about statins for primary prevention in the elderly.***



# THE AGING MALE AND TESTOSTERONE

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21 January 2020; Annals of Internal Medicine

## **Efficacy and Safety of Testosterone Treatment in Men: An Evidence Report for a Clinical Practice Guideline by the American College of Physicians**

Susan J. Diem, MD, MPH, Nancy L. Greer, PhD

Roderick MacDonald, MS et al

# WHAT DO WE LEARN FROM THIS ARTICLE?

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- The ONLY real indication in older men is for low testosterone with sexual dysfunction (and the evidence for this is low quality)
- Other symptoms such as decreased energy, depression etc. are not indications
- IM injections cheaper than transdermal preparations
- Patients should be re-assessed for benefit within the first 12 months and periodically thereafter

# FALLS IN THE ELDERLY

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The classic geriatric syndrome:

Points to remember:

- Syncope and seizures do not usually present like falls
- Falls in the elderly are multifactorial (not mechanical)
- The process is:
  - What are all the factors involved in the fall?
  - Which can we do something about?
  - Which factors can be improved quickly (e.g. intercurrent illness, medications)?
  - Which factors will require more long term management (e.g. strengthening and balance exercises)?

ORIGINAL ARTICLE

## A Randomized Trial of a Multifactorial Strategy to Prevent Serious Fall Injuries

S. Bhasin, T.M. Gill, D.B. Reuben, N.K. Latham, D.A. Ganz, E.J. Greene, J. Dziura, S. Basaria, J.H. Gurwitz, P.C. Dykes, S. McMahon, T.W. Storer, P. Gazarian, M.E. Miller, T.G. Trivison, D. Esserman, M.B. Carnie, L. Goehring, M. Fagan, S.L. Greenspan, N. Alexander, J. Wiggins, F. Ko, A.L. Siu, E. Volpi, A.W. Wu, J. Rich, S.C. Waring, R.B. Wallace, C. Casteel, N.M. Resnick, J. Magaziner, P. Charpentier, C. Lu, K. Araujo, H. Rajeevan, C. Meng, H. Allore, B.F. Brawley, R. Eder, J.M. McGloin, E.A. Skokos, P.W. Duncan, D. Baker, C. Boulton, R. Correa-de-Araujo, and P. Peduzzi, for the STRIDE Trial Investigators\*

40-month pragmatic cluster randomized trial set in 86 primary care practices within 10 diverse health care systems across the United States

Administered by specially trained nurses

## Strengths

- Well designed trial
- Multifactorial interventions that are patient-centered
- Pragmatic design –mimics real world settings
  - Implementing recommendations that required transportation, copayments, or insurance coverage.
  - Referred to existing services provided by local health or community centers (no additional resources)
- Blinded personnel assessing patients every 4 months

## Weaknesses

- Low participation rate
- 14% of those assigned to intervention did not receive intervention
- Study does not capture quantitative adherence data and validated measures of participant engagement.

# WHAT DO I THINK?

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- I believe that falls prevention programs can be very useful (disclosure: I was involved in the creation of such a program)
- They are costly and require skilled personnel. We are approaching 3 million seniors (2016 data) in Ontario, and about one third have fallen. Do we have a fraction of the resources to enroll all of them in a falls prevention program?
- From a Public Health point of view we have known that the major intervention should be increasing physical activity in all age groups and continuing physical activity into older age groups



# QUESTIONS

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"Who was first?"



Sinai  
Health

Mount Sinai Hospital  
Joseph & Wolf Lebovic Health Complex

# QUESTION ANSWERED

