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

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Introduction to Geriatric Twitter Journal Club (see video)

@AnnieHara3: #GeriJC

@AnnieHara3: “Stride Study concluded that multifactorial interventions did not result in lower rate of serious falls, however there may have been difficulties implementing recommendations, resources, uncertainty of individualized plans as well as patient adherence likely contributed” #geriJC

@curcumin: The lack of post intervention impact on physical performance was a serious research design flaw

@AnnieHara3: 5 components focused on:

1) modifiable risk factors: strength, gait, issues with feet/shoes, vision impairment, osteoporosis, low vit D home safety.
2) Management of risk factors
3) Individualized care plan focusing on risk factors
4) Implementing care plan
5) Followup

T1. What are the most interesting aspects of the paper?

@curcumin: Most interesting part of the STRDIE TRIAL was lack of subset analysis. Did some older adults benefit more than others? #GeriJC

@KahliGoBlue: Fascinating question! I wonder if frailty, cognitive impairment would make a difference? With >2000 participants in each arm, subset analysis seems feasible #GeriJC
@PellecerSanchez: Little interest from patients in deprescription may have had an impact on the negative results of the study #GeriJC

@curcumin: The intervention allowed patients to prioritize their interventions even if they selected the least impactful intervention. What’s up with that? #GeriJC

@PellecerSanchez: Thought the same thing! Maybe the idea was to try to focus deprescription in what patients prioritize in an attempt to be more successful at it? #GeriJC

@curcumin: Stand alone RN assessments rarely work for functional outcomes #GeriJC

@realDrDac: For me the most interesting facet of the study was the outcome rate of falls. I would have held a hypothesis in line the authors (20% lower falls for intervention group). Surprised to see no sig difference #GeriJC

@BERosensteinMD: Part of the negative findings, the lower than projected event rates in the control group; so are we already preventing many falls prior to this study? #GeriJC

This is a great observation! There was a lower event rate and much lower rate of serious injury than is commonly reported – possibly suggesting increased awareness of the intervention led to dilutional effect. #GeriJC #STRIDE

@GeriEducator: #GeriJC

@curcumin: Wonder if fall risk, like CV risk, varies across different regions in the US? CV risk highest in East and South

@GeriEducator: Here is the state wise data from CDC on # of falls reported in 2018. The rate is definitely lower in East. #GeriJC

@GeriEducator: No significant difference in rate of serious fall injury in older adults at risk.
T2. Were the analytical approaches used in the study appropriate?

@BERosensteinMD: Intention to treat seems like a good approach. If adherence to protocol was a concern within the study, this at least sets expectations for clinical implementation.

Would it have been better to study all falls (injurious or not)? – probably too hard to capture #GeriJC

@curcumin: Absolutely. If your intervention is not reducing falls then how do you know it is even effective? #GeriJC

Dr. Marilyn Klug presents her views on the analytical approaches used in this study (see video)

T3. Does the study add new knowledge to established foundations?

@curcumin: In terms of health care redesign, the intervention was doomed by creating de novo fall managers who are not integrated into teams.

@BERosensteinMD: Lends weight that fall prevention is not a medical intervention per se but a public health issue. It requires community measures, designs, and supports to be achieved. #GeriJC

@curcumin: We don’t know % of participants who accessed community programs on fall prevention nor do we know if there is consistency between state supported programs such as Stepping ON. #GeriJC

@BERosensteinMD: Or even if or to what degree participants engaged in other regular exercise

@PellecerSanchez: Maybe confirmation that vitamin D supplementation does not appear to be beneficial in community dwelling older adults in prevention falls? #GeriJC

@WesGodfrey1: As @curcumin stated earlier, sub-analysis would be really helpful. Maybe some groups did benefit, who? Why? To me it confirms how individualized fall prevention has to be. One size does not fit all.

T4. What are the weaknesses of the study (design)?

@BERosensteinMD: Despite multisite, multistate reach, the cohort was still about 90% those who id as white. Who aren’t we reaching and why?

@realDrDac: That is a very good point. It also crossed my mind.

Questions arising from the STRIDE study by Dr. Ken Covinsky (see video)
T5. How would you introduce the findings in your practice?

@BERosensteinMD: Though not a statistical difference in fall injuries, it may be clinically important. We should certainly still aim to prevent falls and related injuries (exercise, PT, bisphosphonates). We should also prepare patients, what do you want us to do if you fall? #GeriJC

@KahliGoBlue: Thinking about falls in the context of QOL/palliation, and perhaps as a trigger to reconsider a patient’s trajectory of illness, as all falls may not be preventable – context is important #GeriJC

@NDgeriDOCDahl: In my real world practice I’ve always said if I could have a van that went around and picked up patients to drop them off at an exercise group, I think there would be benefit! Often #frail #elders do not drive!