INTRODUCTION

• Low muscle thickness is considered an indicator of frailty in critically ill patients
• We studied the association between frailty and whole body lean body mass index (LBMI) and muscle thickness of the rectus femoris (RF) in community dwelling older adults aged ≥55y

METHODS

• Frailty status was assessed with the Groningen Frailty Indicator (GFI), using ≥4 as cut-off score for frailty
• LBMI (kg/m^2) was estimated with BIA (Quadscan 4000©, Bodystat)
• Muscle thickness (mm) of the RF was measured with ultrasound, using the Bodymetrix© (Intelametrix)
• Univariate and multivariate binary logistic regression analyses were performed for the association between LBMI and RF thickness, and frailty
• Multivariate analysis corrected for age, sex, BMI, and handgrip strength
• Statistical significance at p<0.05

RESULTS

• 93 participants were included
• In both the univariate and multivariate analysis, LBMI and RF thickness were not significantly associated with frailty

ASSOCIATION BETWEEN LEAN BODY MASS AND MUSCLE THICKNESS WITH FRAILTY IN COMMUNITY DWELLING DUTCH OLDER ADULTS

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CONCLUSION

In this sample of older adults, LBMI and RF thickness are not associated with frailty

Table 1: Characteristics of 93 older community dwelling Dutch adults

<table>
<thead>
<tr>
<th>Frailty (GFI≥4)</th>
<th>n=18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>65.2±7.7</td>
</tr>
<tr>
<td>Female</td>
<td>54%</td>
</tr>
<tr>
<td>LBMI (kg/m^2)</td>
<td>17.2±2.6</td>
</tr>
<tr>
<td>m. RF (mm)</td>
<td>14.6±4.4</td>
</tr>
<tr>
<td>BMI (kg/m^2)</td>
<td>25.5±4.9</td>
</tr>
<tr>
<td>Handgrip (kg)</td>
<td>33.6±11.7</td>
</tr>
</tbody>
</table>

Table 2: Logistic regression analyses LBMI and RF thickness, and frailty (GFI ≥4)

<table>
<thead>
<tr>
<th>Frailty yes/no</th>
<th>Univariate analysis</th>
<th>P-value</th>
<th>OR [95%CI]</th>
<th>Multivariate analysis</th>
<th>P-value</th>
<th>OR [95%CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBMI (cm/m^2)</td>
<td>0.082</td>
<td>0.82</td>
<td>[0.66-1.03]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. RF (mm)</td>
<td>0.077</td>
<td>0.55</td>
<td>[0.28-1.07]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBMI (cm/m^2)</td>
<td>0.436</td>
<td>0.95</td>
<td>[0.84-1.08]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. RF (mm)</td>
<td>0.796</td>
<td>1.02</td>
<td>[0.88-1.18]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IMPLICATIONS

As frail participants scored at cut-off or just above, measurements in a population with higher scores for frailty may provide further insight in the association between lean body mass and muscle thickness and frailty
Notes:

1. Correct fonts won’t load until you open this in PowerPoint (e.g., if you’re previewing this in your browser it’ll look uglier than it actually is).

2. Generate QR codes here:
https://www.qrcode-monkey.com/
The ‘hat’ icon.

Fun, reinforces your finding, makes your poster memorable — and can be interpreted at-a-glance.

Example donated by @MCLaScience

Example donated by @DStroumsa

Example donated by @ElzaRechtman

Example donated by @mikemorrison

Example donated by @akreutzer82
The on-theme background.

Add fun and reinforce your study’s context, but make sure to keep a high contrast between your text and background!

Example donated by @brenden0walker

Mountain photo by @mnthydro

Example donated by @hydrogawker

Example donated by @nasaman58

Example donated by @SarraceniaMason

Example donated by @americoamorim

Example by @mikemorrison
The key figure

Show-and-tell the best, most insightful part of your methods & data.

Example donated by @DrElsje
You can get icons from TheNounProject.com

https://thenounproject.com
Get full-color graphics on a transparent background for ~$1/each from...

VectorStock.com

https://vectorstock.com
If your punchline is **more than 2 lines**, don’t center it. Centering makes your eyes do more work.
When people **find their work meaningful**, they talk about it using **identity words**, like...

"I am a writer" vs. "I work for a magazine."

Example by @mikemorrison
How to QR Code

How do I create a QR code?
- [https://www.qrcode-monkey.com/](https://www.qrcode-monkey.com/) is free, URLs don’t expire, and you can add cool features like images.

How do I scan a QR code?
- Just pull out your phone and take a picture! All modern iPhones and most Android phones have built-in QR detection in their cameras. Some Android phones may need an app.

How can I link the QR to my paper and a copy of my poster and my contact details?
- Try creating a multi-page link for free via [https://linktr.ee/](https://linktr.ee/). (Still trying to figure out the best answer to this though.)
What if my intro/methods/results doesn’t fit in the silent bar?

- If you’re trying to put so much into that bar that it doesn’t fit, they won’t have time to read it anyway. First try moving stuff to the ammo bar. Next, cut cut cut.
- Instead of trying to fill space, you’re trying to conserve space.

What if I have a really important graph or picture?

- Move the QR Code to the Silent Presenter, then put your graph/image in the middle.
What research influenced this idea?

a.k.a “I need some ammo to help persuade my faculty to try this.”

1. Need to know > Nice to know
   https://www.nngroup.com/articles/inverted-pyramid

2. Plain language is interpreted faster.
   https://www.nngroup.com/videos/plain-language-for-experts/
   https://www.nngroup.com/articles/plain-language-experts/

3. Interaction cost.
   https://www.nngroup.com/articles/interaction-cost-definition/

4. Effective designs minimize cognitive load
   https://www.nngroup.com/articles/minimize-cognitive-load/
How did you make the cartoon?

**Short version:** I highly recommend making a video using [Vyond.com](http://Vyond.com) if it's your first one and you don't want to go insane for a year like I did. It’s fun, easy, and works perfectly well for most projects!

- **Animation:** Most of the animation was done in *Adobe After Effects*, which is super powerful but had a bit of learning curve for me.
- **Graphics:** A combination of [VectorStock](http://VectorStock.com) and custom graphics I made in Adobe Illustrator.
- **Characters** were mostly from [Vyond.com](http://Vyond.com). I got the facial expressions, etc. right in Vyond, then put them on a green background, then dropped them into After Effects and removed the background, just like a green screen.
- **Sound effects:** [AudioJungle](http://AudioJungle.com).
- **Voice** was my own voice with the bass boosted for a little of that radio announcer vibration, courtesy of [Adobe Audition](http://AdobeAudition.com).
Design isn’t about making things look pretty. It’s about directing attention.

Great design is subtle.

Design should feel like problem-solving.

UX designers feel a surge of happiness when they get to delete something.

When it looks too simple to represent the amount of time you put into it, you’re done.