A minimum weekly frequency of concurrent training (1 session per week of strength training and 1 session per week of cycle endurance training) may be an efficient stimulus in elderly in early phases of training;

- For concurrent-training protocols in which both strength and endurance training are performed on the same day, the strength gains may be optimized with strength training before endurance intra-session exercise sequence;

- Endurance parameters also may be optimized when strength exercises are performed before endurance exercises in each session, because greater changes in the neuromuscular system result in enhanced endurance capacity.

- Concurrent strength- and endurance-training prescription should include high-speed muscle contractions in the strength-training program, as skeletal muscle power has been strongly associated with the functional capacity of this population.

References


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MDS 3.0: A Giant Step Forward, but What About Items on Resident-to-Resident Aggression?

To the Editor:

The editorial by John E. Morley1 provides an excellent overview of the main changes in the transition from MDS 2.0 to MDS 3.0. The piece makes a strong case that the MDS 3.0 represents a substantial improvement on its earlier version. It described the new tool as “a giant step forward,” “resounding success,” and “that will improve care and outcomes.”

In the domain of behaviors (Section E—Behaviors), the author notes that the “MDS 3.0...provides highly useful information on...behavior...” and states, “The screen for difficult behaviors in MDS 3.0 is comprehensive and helpful.” The author concludes by stating, “the MDS 3.0 meets the guidelines of WHO/International Association of Gerontology and Geriatrics consensus group in both improving quality of care and being an excellent, meaningful instrument for future research.”

It is important to acknowledge that the MDS 3.0, with all its invaluable improvements, has a major gap in the behavior domain (Section E—Behaviors). Specifically, the phrasing of certain items in the section limits the ability to differentiate and disentangle physical and verbal aggressive behaviors directed toward staff versus those directed toward other residents (or for that matter to differentiate any other targets, such as family members, and other visitors, including friends of residents, private aides/companions, and volunteers). As demonstrated herein, the term “others” limits identification of the target of the aggressive behaviors. Specifically, question E0200A (in segment E0200 Behavioral Symptom—Presence and Frequency) states, “Note presence of symptom and their frequency: Physical behavioral symptoms directed toward others (eg, hitting, kicking, pushing, scratching, grabbing, abusing others sexually).” The subsequent question E0200B is: “Verbal behavioral symptoms directed toward others (eg, threatening others, screaming at others, cursing at others).”

The question E0600A (in segment E0600 Impact on Others) states, “Did any of the identified symptom(s), put others at significant risk for physical injury?” (Coding Instructions: Code 1, yes; if any of the identified behavioral symptom(s) placed staff, visitors, or other residents at significant risk for physical injury.)
This limitation of the aforementioned questions represents a major barrier for determining the scope of the concerning phenomena of resident-to-resident aggressive behaviors in nursing homes and developing policies, practices, and effective interventions to address them. For example, linking items that specifically and explicitly address resident-to-resident aggressive behaviors to other clinical data from the MDS 3.0 and/or other datasets could shed light on and enhance understanding of the risk factors and causes of these unique behaviors, especially in light of the fact that large-scale studies on resident-to-resident aggressive behaviors are sorely needed.²

Although the MDS data consist of other limitations in terms of their ability to accurately capture aggressive behaviors, such as the significant underestimation of abusive/aggressive behaviors reported by Bharucha et al.,³ the recommended modifications in the MDS 3.0 behavior-related items could nevertheless bring us closer to understanding and preventing these highly complex, diverse, and potentially harmful behaviors.⁴

There is an urgent need to bridge the gap in the MDS 3.0 as we start to plan the MDS 4.0 or, if possible, make necessary modifications to the MDS 3.0. In the words of the author of the editorial (about the MDS 2.0), "Although the MDS 2.0 has been widely used for epidemiologic studies, its use at the level of the individual care was highly questionable."¹ We need to take the necessary steps to ensure that the items in “Section E — Behaviors” of the MDS 3.0 are clinically useful at the front lines of care. Careful consideration will be required in formulating the wording of the missing item(s). Currently it is not possible to disentangle aggressive behavior directed by a resident toward “others” (such as staff members) from aggressive behavior directed by a resident toward other residents. The long-overdue change is expected to have profound positive implications for practice and research, and, most importantly, to care providers’ daily efforts to keep nursing home residents safe.

References

Erratum

The authors wish to correct Table 1 of their Original Study article: Kathryn A. Frahm, PhD, MSW, Lisa M. Brown, PhD, and Kathryn Hyer, PhD, MPP. Racial Disparities in End-of-Life Planning and Services for Deceased Nursing Home Residents. J Am Med Dir Assoc 2012;13(9):819.e7–819.e11.

Table 1 was inaccurate in the presentation of research findings. However, all other data and findings presented in the article itself, as well as all other tables, were correct. Please see the corrected Table 1 below, which reflects the corrected findings. This table has been corrected online.

Table 1
Descriptive Statistics of Deceased Nursing Home Residents’ Demographics*

<table>
<thead>
<tr>
<th>Demographics</th>
<th></th>
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<tbody>
<tr>
<td><strong>Average age, y</strong></td>
<td>86.0</td>
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<tr>
<td><strong>Race, %</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>88.0</td>
</tr>
<tr>
<td>Black</td>
<td>7.9</td>
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<tr>
<td>Hispanic</td>
<td>2.3</td>
</tr>
<tr>
<td>Asian</td>
<td>1.0</td>
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<tr>
<td><strong>Gender, %</strong></td>
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</tr>
<tr>
<td>Female</td>
<td>71.8</td>
</tr>
<tr>
<td>Male</td>
<td>28.2</td>
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<tr>
<td><strong>Disease diagnoses, %</strong></td>
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<tr>
<td>Cancer &amp; dementia/Alzheimer disease</td>
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<tr>
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<td>8.8</td>
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<tr>
<td>Cancer</td>
<td>2.8</td>
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<tr>
<td>Other</td>
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<tr>
<td><strong>End stage disease, %</strong></td>
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<tr>
<td>Yes</td>
<td>12.9</td>
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<tr>
<td>No</td>
<td>87.1</td>
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</tbody>
</table>

*Assessment of 2007 Minimum Data Set national data.