Sources of Discomfort in Persons With Dementia

Current methods to assess discomfort often include rating scales, such as the discomfort scale for Alzheimer disease, which are also used to assess pain.1,2 In this study, we take an alternative approach in which we examine the discomfort in the context of its source.

Methods

Participants included 179 agitated nursing home residents with dementia (mean age, 86 years; 72% female; mean Mini-Mental State Examination [MMSE] score, 8.79) from 10 nursing homes in Maryland. Residents’ discomfort was observed as part of the study for the Treatment Routes for Exploring Agitation (TREA) that received institutional review board approval of Charles E. Smith Life Communities.

The Source of Discomfort Scale (SODS) was developed on the basis of our experience observing persons with dementia and noticing different types of discomfort. It included some questions to the resident, such as “How are you? Are you comfortable?” and mostly observational items, such as seeing a resident’s head lying unsupported or a leg dangling. The SODS was completed by several trained research assistants who observed each participant during 3 days (13 hours a day, for 3 minutes every half hour). Each research assistant completed the SODS once, during the shift on the third day of observation of each resident.

Cognitive functioning was assessed by the MMSE.4 Pain was assessed for half of the participants through administering the Pain Assessment in Elderly Persons (PAINE)5 to the participants’ direct nursing care caregivers. The PAINE has been shown to be useful in detecting pain that responds to analgesic intervention in persons with dementia.6 Both the MMSE and the PAINE were administered by trained research assistants.

Results

The distribution of sources and indicators of discomfort, based on the SODS, is presented in the Table. Among participants, the most common sources or indications of discomfort were being sleepy or tired (61.5%); sitting in the same place without movement for over 2 hours (49.7%); having physical restraints (28.5%); having insufficient light (27.4%); and moving in the seat (25.7%). Other sources of discomfort that were observed for more than 10% of the participants were feeling cold and having furniture in the way of the resident. Overall, participants were observed as having 0 to 10 sources of discomfort, with a mean (SD) of 3.0 (2.1).

The correlation between PAINE score and the number of sources of discomfort was \( r = 0.287 \) \( (P = .006 \ [n = 89]) \), indicating that the PAINE explained 8% of the variance in SODS. Those who answered “no” to the question “How are you? Are you comfortable?” had significantly higher mean PAINE scores than those who either responded in the affirmative or did not respond (5.22 and 3.26, respectively; \( t_{87} = 3.11 \ [P = .002] \)); those with their leg dangling had significantly higher mean PAINE scores than those who did not (5.21 and 3.28, respectively; \( t_{87} = 2.87 \ [P = .005] \)).

Discussion

We found a very high prevalence of discomfort in nursing home residents with dementia. Specifically, 3 to 4 short observations revealed up to 10 sources of discomfort in participants, with a mean of 3 sources per person. While assessment of discomfort is only the first step in alleviating it, it is a necessary step. Furthermore, with some of the sources of discomfort, our methodology directs the caregiver to an intervention. For example, dangling leg and unsupported head have direct seating implications.
In addition to the role of the SODS in detecting discomfort of individuals and providing suggestions for alleviating it, the SODS can highlight systematic and environmental aspects of quality of care that need to be addressed. For example, we found that almost half of the participants were sitting in the same spot without moving for over 2 hours as well as much higher rates of restraint than anticipated. Similarly, more than a quarter of the residents experienced insufficient levels of light (as estimated by the research assistant). These examples provide direction for improving systems of care to enhance quality of care and quality of life in the nursing homes.

Unlike other discomfort scales, the SODS is not an assessment of pain. While there was a significant relationship with our measure of pain, pain explained less than 8% of the variance in discomfort, and only 2 items showed significant relationships between discomfort and pain. In terms of alleviating discomfort, most of the SODS items call for environmental modifications, whereas the pain measure is geared more toward detecting indications for analgesic for environmental modifications, whereas the pain measure significant relationships between discomfort and pain. In terms of alleviating discomfort, most of the SODS items call for environmental modifications, whereas the pain measure is geared more toward detecting indications for analgesic use. The intent with the SODS was to use it as one measure in a battery to facilitate better understanding of the needs of persons with dementia and thus to better alleviate or prevent agitated behaviors in this population. We hope that others will find it useful in this vein.

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Use of Niacin in the United States and Canada

The failure of recent trials of extended-release niacin has focused attention on the use of niacin in practice.1,2 Prior studies have shown that niacin can modify lipid levels but have not consistently shown improved patient outcomes, with a particularly absence of evidence in the statin era.3,4 We sought to examine recent trends in niacin use and expenditures in the United States and Canada, which have health systems with different approaches to pharmacy benefits and formularies.

Table. Distribution of Sources and Indicators of Discomfort Based on the Sources of Discomfort Scale

Sources and Indicators of Discomfort                    Participants, % (N = 179)

<table>
<thead>
<tr>
<th>Source of Discomfort</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the resident sleepy or tired?</td>
<td>61.5</td>
</tr>
<tr>
<td>Has the resident been sitting in the same place without movement for over 2 hours?</td>
<td>49.7</td>
</tr>
<tr>
<td>Is the resident restrained?</td>
<td>28.5</td>
</tr>
<tr>
<td>Is there insufficient light around the resident?</td>
<td>27.4</td>
</tr>
<tr>
<td>Is the person moving in the seat?</td>
<td>25.7</td>
</tr>
<tr>
<td>The person is cold (combined: try to shake the person’s hand–is it excessively cold? Is the resident complaining of being cold? Is the room temperature excessively cold?)</td>
<td>15.1</td>
</tr>
<tr>
<td>Is the person’s head lying unsupported?</td>
<td>13.4</td>
</tr>
<tr>
<td>Is any furniture in the way of the resident?</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Use of Niacin in the United States


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Letters

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