Prevalence of Cognitively Intact Individuals Residing in Extended Care Nursing Facilities

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There appears to be a relative absence of studies that have examined the prevalence of cognitively intact individuals who reside in extended care facilities. Prevalence data were collected on 296 persons who resided in 3 extended care nursing facilities in Central Virginia. Cognitive intactness was evaluated via the Minimum Data Set Cognitive Performance Scale (CPS) and an author-generated survey (i.e., Cognitively Intact Survey [CI Survey]) of select nursing staff members at each facility. The Mini-Mental State Examination (MMSE) was utilized to examine the accuracy of the two measures in identifying cognitive intactness. Findings indicated that prevalence rates of cognitively intact residents varied as a function of the measures utilized to assess intactness. Specifically, a significantly greater proportion of the total sample of residents was judged to be cognitively intact via the CI Survey (34.12%) as compared to the CPS (26.01%). The level of inter-judge agreement between the two measures was found to be moderately high ($K = 0.68$).

When the MMSE was employed to verify individuals’ levels of intactness, the percentages of residents predicted to actually be cognitively intact were somewhat lower for each measure. Specifically, based on the data obtained via the CI Survey, 22.75% of the total sample were predicted to actually be cognitively intact, whereas 17.85% of the sample were predicted to be intact based on the CPS results. Findings are discussed in light of factors that may have contributed to the differential prevalence rates of cognitively intact individuals obtained across the measures utilized in this study. Concerns regarding the utilization of the MMSE as a criterion measure of cognitive intactness in persons residing in extended care nursing facilities are provided, along with data on the living environments/roommate statuses of those residents judged to be intact via the CI Survey. Implications for the design of future extended care nursing units, as well as future research, are also included.

KEY WORDS: prevalence; cognitively intact; extended care; nursing facilities; minimum data set; cognitively intact units.

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In the past, a number of studies have examined the prevalence rates of psychiatric disorders, including dementia, within extended care facilities/nursing homes (Barnes and Raskind, 1981; Burns et al., 1988; Chandler and Chandler, 1988; Clarke et al., 1981; Class et al., 1996; Junginger et al., 1993; Rovner et al., 1986, 1990; Tariot et al., 1993). The overall prevalence rates for psychiatric disorders in these studies have been reported to be high, and range from 51 to 94%, depending on the sample, methodology, and diagnostic criteria utilized.

Precise data regarding the prevalence of cognitively intact individuals who reside in nursing facilities typically have not been provided in these studies. Although it might be assumed that individuals without psychiatric (or dementia) diagnoses would be cognitively intact, such an assumption would likely prove erroneous. Specifically, psychiatric under-diagnosis or misdiagnosis has been reported to occur in significant numbers of nursing home residents (Barnes and Raskind, 1980; Sabin et al., 1982). For example, Barnes and Raskind (1980) found that primary degenerative dementia was notably underdiagnosed in a sample of nursing home residents as only 5 of 36 patients who met the criteria for the disorder had received the diagnosis. It is also possible that a number of individuals who have been diagnosed with certain psychiatric disorders, such as depression, would generally be cognitively intact and able to engage in a diversity of meaningful activities such as interpersonal relationships and social activities.

There appear to be only two previous studies that have provided (incidental) data on the prevalence of cognitively intact individuals residing in nursing facilities (Hartmaier et al., 1995; Morris et al., 1994). Both of these studies utilized the relatively new Minimum Data Set (MDS) Cognitive Performance Scale (CPS) to obtain their prevalence rates. In their study addressing the creation of the CPS, Morris et al. (1994) found that approximately 35% of two large, multistate samples of nursing home residents were cognitively intact as assessed by the CPS, and that these residents were almost equally divided between the scale’s two intact categories (i.e., intact, borderline intact). Relatedly, Hartmaier et al. (1995), in their validation study of the MDS Cognitive Performance Scale, examined 200 nursing home residents across eight facilities. Results indicated that 26.5% of this sample fell within the CPS’s levels 0 (intact) or 1 (borderline) and were judged to be cognitively intact. It should be noted, however, that a potential limitation of these studies is that all of the data were collected by specially trained researchers versus nursing facility staff involved in routine/direct care (Hartmaier et al., 1995).

Based on the relative absence of studies which have assessed the prevalence of cognitively intact persons residing in extended care/nursing facilities, the purpose of this study was to provide additional data on the prevalence of cognitively intact individuals residing in such facilities via a survey of three large extended care nursing facilities’ medical records (i.e., MDS data) and select staff members. Cognitive intactness was examined via a two-tiered process. Initially it was assessed via the MDS Cognitive Performance Scale (CPS) and a survey (i.e., CI Survey) of select nursing staff members at each facility. The Mini-Mental State Examination (MMSE; Folstein et al., 1975) was then utilized as a criterion measure of cognitive functioning in an attempt to verify/confirm the cognitive statuses of those individuals identified via the CPS and/or the CI Survey as being cognitively intact. Data were also collected on the living environments/roommate statuses of those residents who had been judged to be cognitively intact via the survey of nurse respondents.