## Depression, Low 'Will to Live' Increase Mortality

BY KATE JOHNSON

Montreal Bureau

ORLANDO — Elderly patients who answer unenthusiastically when asked how long they would like to live may have a dramatically increased risk of dying within 2 years if this attitude is combined with even minor or subthreshold depression, according to some unexpected findings from the Philadelphia Quality of Life of Elders Study.

The findings highlight the importance of even subthreshold depression in this population, said Jana M. Mossey, Ph.D. "From a clinical perspective, when you ask a person how they are doing today you should be really paying attention to the answer," she said in an interview.

The study, which she presented as a poster at the annual meeting of the Gerontological Society of America, analyzed self-rated health, depression, and years of desired life (YDL) among 600 community-living elderly people (mean age 77 years) and compared this with their mortality rates within the 2 years following the interviews.

Predictably, among the 12% of subjects who died during this period, both poor self-rated health and depressive symptoms were risk factors for mortality, said Dr. Mossey, professor at Drexel University's School of Public Health in Philadelphia.

Although below-average YDL was not a

risk factor by itself, it was a factor in the highest mortality risk when combined with depressive symptoms.

"Once you identify someone who is at increased risk [based on depressive symptoms], it's important to delve a bit further and find out what they're thinking about in terms of how they see themselves in the future and how long they want to go on the way they are. This is all information that's going to tell the doctor that here is a person who has high mortality risk and needs to be looked at through a different lens." she said.

After controlling for objective health status, poor self-rated health increased mortality risk by about 3.5 times, compared with excellent self-rated health. And presence of depressive symptoms (measured using the Centers for Epidemiological Studies Depression scale) doubled mortality, compared with absence of depressive symptoms.

YDL was measured by asking subjects the following question: "Thinking of yourself today—your health and how you manage things—if you were going to be just like you are now for the rest of your life, please tell me the longest time you'd want to live? How many more years or days?" Responses were categorized according to norms established for each age group.

Although 22% of subjects had below-average YDL, this characteristic in itself did not increase their mortality risk, com-

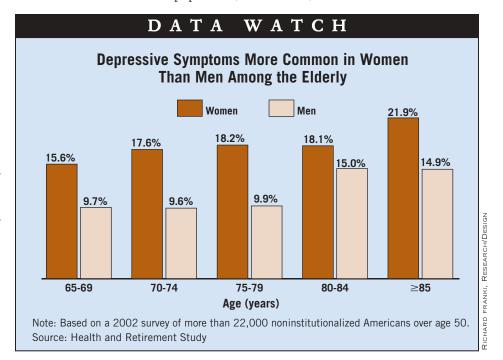
pared with those that had above-average YDL, said Dr. Mossey. But the combination of below-average YDL with depressive symptoms dramatically increased mortality risk by more than eightfold.

"This tells us that depressive symptoms, even when they are minor or subthreshold, need to be taken more seriously than we had thought in the past," she said.

In a recent paper on subthreshold depression, Dr. Mossey wrote that unlike major depression, which occurs in between 2% and 6% of the population,

subthreshold depression is significantly more common, with a prevalence of up to 25%, and rates in excess of 50% among hospitalized patients (Advance for Nurses 2005;7:37-9).

With growing evidence that subthreshold depression compromises quality of life, physical and social functioning, and recovery from illness and injury, and is associated with a disproportionate use of health services, this form of depression represents "a disease state that warrants treatment," she wrote.



## Seniors in Low-Income Housing Respond Less to Antidepressants

BY MARTHA KERR
Contributing Writer

Older adults living in low-income census tracts are significantly less likely to respond to depression treatment than are their counterparts in middle- and high-income census tracts, researchers reported.

Alex Cohen, Ph.D., of Harvard Medical School, Boston, and his associates analyzed pooled data from the open-label phases of two Pittsburgh-based clinical trials funded by the National Institute of Mental Health.

In the first of these studies, nortriptyline hydrochloride combined with interpersonal psychotherapy was studied for the treatment of depression in 169 subjects aged 59 and older. The second study evaluated the combination of paroxetine and interpersonal psychotherapy among 116 subjects aged 69 and older (Arch. Gen. Psychiatry 2006;63:50-6).

Using the 17-item Hamilton Rating Scale for Depression, the investigators found that subjects living in low-income census tracts were less likely to respond to treatment. For example, participants in the higher-income tracts were far less likely to report suicidal ideation. The investigators found no association between socioeconomic status and remission.

One possible explanation for the gap between low- and middle-income subjects, the researchers said, is that "the persistence of de-

pressive episodes was more pronounced among individuals with lower socioeconomic status." Comorbid conditions also had some effect on antidepressant response, but they did not negate the effects of socioeconomic status when investigators adjusted for that variable.

Dr. Cohen and his colleagues also pointed to the "nonlinearity" of the findings. Educational level is usually a principal component of socioeconomic status, but in this study, higher educational status did not correlate with better treatment outcome. Subjects in the higher-income census tracts were not always the most likely to respond.

In an interview, Dr. Cohen said he would be cautious about drawing clinical implications from this research for two reasons: The work needs to be replicated, and he is not a psychiatrist. However, he said he would assume that research showing predictors of response to treatment does have clinical implications.

"If it is true that residents of low-income neighborhoods are relatively less likely to respond to efficacious interventions and more likely to experience suicidal ideation during treatment, then it would follow that treatment for such patients might need to be more intense, of longer duration, or possibly, augmented with other psychosocial interventions," he said.

Dr. Cohen, an anthropologist, is affiliated with the Harvard Medical School's department of social medicine.

## Biofeedback Heart Rate Control Aids Depression in Older Adults

BY KATE JOHNSON

Montreal Bureau

ORLANDO — The use of biofeed-back to control heart rate variability could be useful in the treatment of older patients with depression, just as it has been beneficial for patients with asthma, chronic obstructive pulmonary disease, and various cancers.

"Heart rate variability is probably the best marker of health in general, such that if one has good heart rate variability, one is generally healthy. But should someone have any health problems, they can learn to improve their heart rate variability and do better," said Leon Hyer, Ph.D., in a poster presentation given at the annual meeting of the Gerontological Society of America.

In a pilot study of two depressed women aged 55 and 56 years, Dr. Hyer, a professor of psychiatry at the Robert Wood Johnson Medical School, Piscataway, N.J., found that biofeedback training aimed at improving heart rate variability (HRV) resulted in a significant decrease in depressive symptoms.

"This has been shown in young, depressed patients but not in older

patients," said Dr. Hyer in an interview. The two subjects underwent 10 biofeedback sessions in which they were taught—using audio and video feedback from laptop computers—how to regulate their heart rates and breathe at their resonant frequency. They were encouraged to practice frequently.

At the end of the 10 sessions, both subjects experienced a significant decrease in depressive symptoms. Their baseline scores on the Beck Depression Inventory II (BDI-II) were 18 and 21, dropping to 0 for one patient by the end of the study. The second patient's score dropped from 21 to 3 by the end of the 4th session, but rose to 11 by the study's end.

"Since both medical disorders and mood state have a bidirectionality in their effects, there is a significant advantage in applying a treatment that can improve both," he said.

Although pharmacologic therapy for depression typically has a 60% response rate, this response is not usually sustained in the long term.

By contrast, biofeedback, combined with cognitive-behavioral training, has been shown to produce sustained responses in other health conditions, Dr. Hyer said.