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Separation anxiety in the elderly

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Abstract

Separation anxiety has been studied in children and young adults but little is known about this form of anxiety in older people. This study aimed to examine socio-demographic, psychological and physical health correlates of separation anxiety in the elderly. Eighty-six ambulatory subjects aged 62–87 years were recruited from primary medical care practices to participate in this study. The presence of lifetime DSM-IV affective and anxiety disorders was determined by structured clinical interview. Subjects also completed a battery of self-report questionnaires measuring levels of state and trait anxiety, juvenile and adult separation anxiety. Adult separation anxiety scores were moderately correlated with juvenile separation anxiety scores ($r = .52, P < .001$), trait anxiety ($r = .55, P < .001$) and state anxiety scores ($r = .66, P < .001$), as well as younger age ($r = .39, P < .001$). Higher adult separation anxiety scores were also associated with a lifetime history of any anxiety disorder ($t = 3.74, df = 84, P < .001$) or any affective disorder ($t = 2.12, df = 84, P < .05$). However, adult separation anxiety was not associated with increasing age, being widowed, living alone or poorer physical health. Clinicians working with the elderly need to routinely explore this form of anxiety as it may complicate the pattern of presentation of other anxiety and affective disorders, and require specific forms of intervention.

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1. Introduction

Studies on heightened levels of separation anxiety have been mainly confined to children and adolescents (Last, Francis, & Hersen, 1987). However, recent case studies and other studies of adult outpatients with anxiety disorders have suggested that fears typical of juvenile separation anxiety disorder (SAD) may persist into early and middle adulthood (Manicavasagar & Silove, 1997) (Manicavasagar, Silove, & Hadzi-Pavlovic, 1998). Such fears have included anxiety when separated from close attachment figures, preoccupation that loved ones will be harmed and avoidance of being alone.

Both genetic factors (Silove, Manicavasagar, O'Connell, & Morris-Yates, 1995) and environmental stressors such as the loss of, or separation from, loved ones and physical ill health have been implicated in the development of heightened separation anxiety (Bowlby, 1973) (Bowlby, 1969). Whilst the elderly are particularly vulnerable to the experiences of loneliness, separation and grief, there has been no previous study of separation anxiety in this age group.

Indeed there have been relatively few studies of anxiety disorders across the adult age span and which have included people aged 65 years and over. Reported prevalence rates have varied depending on the use of hierarchical diagnostic criteria and case threshold criteria (Krasucki, Howard, & Mann, 1998). Phobic disorders, obsessive-compulsive disorder and panic disorder all appear to be commoner in younger life and in females when hierarchical diagnostic methods were used. The same trends were reported for generalized anxiety disorder, but there was no decline in prevalence with age when only threshold criteria were used. Further, apart from agoraphobia, anxiety disorders in old age have tended to persist from early life (Lindesay, 1991). Possible reasons for the decline in the rates of anxiety disorders in the elderly include changes in biological vulnerability (Sheikh, King, & Taylor, 1991), cohort effects, increased mortality in people with early onset anxiety disorders, and misattribution of anxiety symptoms to medical illness (Krasucki et al., 1998).

This study aimed to examine the levels of juvenile and current adult separation anxiety, and to identify possible socio-demographic, medical and psychological correlates of adult separation anxiety in an older sample.

We hypothesized that (a) subjects with heightened levels of juvenile separation anxiety may be more likely to manifest similar symptoms in later life and (b) aspects of increased aging such as illness in, or the death of, family and close associates, reduced availability of social supports, and declining physical independence may be associated with the development or rekindling of separation anxiety in vulnerable older people. Finally, we will describe a series of cases to illustrate symptoms of separation anxiety in older people.

2. Method

2.1. *Sample and procedures*

The data reported herein were obtained as part of a more comprehensive study of mental distress in primary medical care attenders aged 60 years and over.

The study sample was drawn from ambulatory primary medical care patients, which was anticipated to provide subjects with relatively lower levels of both medical and cognitive impairment. Primary care medical practitioners were recruited to hand out information sheets about the study to eligible consecutive patients who attended their surgeries. Potential subjects were requested to return personal details by mail if they wished to participate in the study. All subjects were interviewed by the first author, a medical specialist in geriatric psychiatry, who was blind to details of relevant self-report questionnaires but not to the study hypotheses.

Potential participants were further screened at interview to exclude those with a history of major mental illness such as schizophrenia; cognitive impairment as defined by a Mini-Mental State Examination score of less than 27 (Folstein, Folstein, & McHugh, 1975); or residing in a supported aged care residential facility.

The study was approved by the South Eastern Sydney Area Health Service Ethics Committee, Southern Section. All subjects provided written informed consent.

2.2. *Measures*

Subjects were administered a structured psychiatric interview, using DSM-IV diagnostic criteria for current and lifetime affective and anxiety disorders, including SAD (American Psychiatric Association, 1994). Ratings of the adequacy of social and economic resources were made using the Older Americans Resources and Services Multidimensional Functional Assessment Questionnaire (OMFAQ) (Fillenbaum, 1988).

Physical health was measured primarily by the Cumulative Illness Rating Scale for Geriatrics (CIRSG), which rates illness severity, using a four-point scale ranging from 0 (“no problem”) to 4 (“severe impairment in function”) in 13 organ-specific categories (Miller, Paradis, & Houck, 1992). As the CIRSG emphasizes chronic medical morbidity and functional limitation over acute threats to mortality, we also rated whether patients had suffered an acute medical illness in the preceding year. The total number of medications used, whether at least one psychotropic drug was used, and an estimate of the number of consultations from medical health care providers over the preceding year were recorded. Finally subjects rated their health subjectively on a five-point scale, ranging from “excellent” to “poor.”

Subjects also completed a number of self-report questionnaires measuring anxiety. Current separation anxiety was measured by the Adult Separation Anxiety questionnaire (ASA-16), which consists of 16 items which are individually scored on a four-point scale, ranging from 0 for “this has never happened” to 3 for “this happens very often,” and then summated to derive a total score (Manicavasagar, Silove, & Curtis, 2000). Scores of 17 or greater are thought to reflect clinically significant levels of adult separation anxiety. When compared to diagnoses of adult separation anxiety disorder based on a clinical interview, the ASA-16 has been shown to have adequate levels of sensitivity (81%) and specificity (80%) (Manicavasagar et al., 2000). Preliminary analyses of the ASA-16 has demonstrated high Cronbach’s alpha (.93) and split-half (.90) coefficients (Manicavasagar et al., 2000).

Juvenile separation anxiety was measured by the 15-item Separation Anxiety Symptom Inventory (SASI) (Silove, Manicavasagar, & O’Connell, 1993). This too is a self-report questionnaire assessing adult’s memories of separation anxiety symptoms experienced in the first 18 years of life. The measure has a coherent factorial structure, high internal consistency (Cronbach’s alpha ranging from .84 to .88) and sound test–retest reliability (intra-class correlations ranging from .86 to .98) (Silove et al., 1993). Items are rated on a four-point scale similar to the ASA-16, with the summated score then subjected to a square root transformation to normalize the distribution (Silove et al., 1993).

State anxiety was measured by the 11-item generalized anxiety sub-scale of the Anxiety Disorder Scale (Lindesay, Briggs, & Murphy, 1989). This measure was developed specifically for use in older people, and comprises questions concerning motor tension, autonomic arousal, apprehension and hypervigilance.

Finally, trait anxiety was measured by the 12-item neuroticism sub-scale of the revised form of the Eysenck Personality Questionnaire (EPQ-N) (Eysenck & Eysenck, 1991).

3. Results

Altogether, 150 information sheets about the study were handed out and 93 patients agreed to participate, a response rate of 62%. There were no age or gender differences between those who agreed to participate and those who refused. Seven subjects were excluded from the study after initial interview because of cognitive impairment.

The final sample comprised 86 people aged from 62 to 87 years (mean = 74.0 years, S.D. = 6.6 years). The whole sample was white, including 95% of Anglo-Celtic descent, 50% were female, 35% had been widowed and 37% lived alone. Eight percent were working part- or full-time, and 14% had received education beyond high school. Around 85% of the sample was assigned to the highest or second highest category for the adequacy of social resources, and a similar number to one of the two highest categories for the adequacy of economic resources.

The physical health of the sample was as follows. The mean average score on the CIRSG (that is, the total score divided by the number of categories endorsed) was less than 2, which indicates that physical problems experienced tended to need active therapy but were of moderate severity. Only 28% were rated as having at least one severe medical problem associated with constant disability on this scale. In addition 77% rated their own health as “excellent,” “very good,” or “good.”

Thirty-seven percent of the sample reported a lifetime history of at least one affective (major depression or dysthymia) disorder, and 31% a lifetime history of at least one anxiety disorder based on DSM-IV criteria. Adult SAD was diagnosed in 6% of the sample. Twenty-two percent of the sample was currently taking at least one antidepressant or anxiolytic medication.

The mean ASA-16 score for the whole sample was 3.9 (S.D. = 4.9) and 3.5% of the sample scored 17 or greater on the ASA-16 indicating clinically significant levels of separation anxiety. The mean ASA-16 score in those diagnosed with adult SAD using DSM-IV criteria was significantly higher than those without such a diagnosis (11.8, S.D. = 7.9 vs. S.D. = 3.4, S.D. = 4.2; $t = -4.0$, $df = 84$, $P < .001$).

Higher scores on the ASA-16 were significantly associated with younger age ($r = .39$, $P < .001$), juvenile separation anxiety ($r = .52$, $P < .001$), state anxiety ($r = .66$, $P < .001$) and trait anxiety ($r = .55$, $P < .001$). When psychological disorders were examined, higher ASA-16 scores were associated with lifetime history of affective ($t = 2.12$, $df = 84$, $P < .05$), or anxiety disorders ($t = 3.74$, $df = 84$, $P < .001$). Higher ASA-16 scores were also associated with the use of at least one psychotropic medication ($t = -2.09$, $df = 84$, $P < .05$). However, higher ASA-16 scores were not associated with gender, being widowed, or living alone.

4. Clinical vignettes

4.1. Case 1

Mrs. A was a 69-year-old widowed woman living alone. She denied having been a particularly anxious child despite occasional anxiety about attending school and being left alone at home. Whilst in her 30s, she suffered from panic attacks which were complicated by an inability to leave her home except in the company of her husband. However, she never sought treatment for these problems. When she was 56 years, one of her two daughters died in a car accident, which then led to constant and severe ruminations about the safety of her other daughter and grandchildren, whom she continued to contact daily. She reported significant physical symptoms of anxiety such as palpitations and abdominal discomfort when family visits ended. Her ASA-16 score was 19, indicating that she suffered from a clinically significant level of separation anxiety.

4.2. Case 2

Mr. B, a 67-year-old married man, who denied any childhood anxiety but recalled his father as a tense man who chain-smoked whilst waiting for him or his siblings to return home from school. He described himself as a chronic worrier who suffered from panic attacks for about 18 months at the age of 51, for which no treatment was sought. He began worrying about the safety of his four children when they were in their teenage years and when they began socializing at night. His anxiety intensified when one son bought a motorbike. He experienced physical anxiety and catastrophic cognitions whenever he heard an ambulance siren and regularly scanned media reports of traffic accidents. He had asked all his children to ring him daily to check on their safety. His ASA-16 score of 14 was slightly below the threshold for clinical significance.

4.3. Case 3

Mrs. C was a 68-year-old widowed woman whose son lived with her intermittently. She was significantly depressed at the time of the study. She described herself as an anxious child who often returned home soon after been dropped off at school by her mother. She had never been able to sleep in the dark or with the door to her room closed. She described a life-long fear of heights and enclosed spaces. When she was 58 years old, one of her sons died in a motor vehicle accident and her husband died 3 months later. Since then, she constantly worried about the safety of her remaining son and grandchildren. She reported physical anxiety symptoms such as hyperventilation when her son left to go to work. Her ASA-16 score was 28, indicating a significant level of separation anxiety.

5. Discussion

This is the first study to investigate the presence of separation anxiety symptoms in an elderly population. Separation anxiety symptoms in our sample of elderly patients were more common among those with a lifetime history of any affective or anxiety disorder, and higher ASA-16 scores were also moderately correlated with both higher state and trait anxiety scores. Both these findings may suggest that high levels of separation anxiety may reflect an underlying non-specific vulnerability to psychological distress which predisposes sufferers to affective and anxiety disorders (Andrews, 1996).

Both childhood and adult separation anxiety scores were lower than in other studies. For instance, in another, albeit younger sample (mean age = 45 years), mean ASA-16 scores of 13.3 for normal control subjects and 41.6 for those diagnosed with adult SAD were found (Manicavasagar, Silove, Rapee, et al., 2001). The lower childhood score may have reflected either recall bias or poor memory in an older population, although cognitive impairment was used to

exclude potential subjects. The lower adult score was not unexpected as previous studies have used subjects receiving psychological treatment. It is also possible that some items used in the ASA-16 were biased against older people. For instance, two items asked about panic attacks which are less common in this population (Krasucki et al., 1998), and questions about difficulty in staying away from home or in sleeping may be confounded by physical illness in older people.

However, the first author who conducted the interviews was blind to ASA-16 scores, and yet those subjects with a lifetime diagnosis of DSM-IV SAD still returned significantly higher scores than those not so diagnosed. Whilst the numbers involved were small, such findings lend further support to the validity of SAD as a primary anxiety disorder in adulthood.

Contrary to our expectations, increasing age, medical illness, being widowed or living alone were not associated with higher levels of adult separation anxiety. This finding may reflect the fact that this sample of elderly patients appeared to have access to very adequate economic and social resources, and thus unlikely to have been suffering from serious levels of psychosocial adversity. Taken together, these findings would tentatively suggest that heightened levels of adult separation anxiety may occur independently of life stressors such as loss and loneliness.

All our case vignettes indicated the experience of significantly disabling symptoms of separation anxiety, but in no case was specific treatment sought from either the primary medical carer or a mental health professional. All subjects were informed about potential treatment modalities but refused referral, which may have reflected the fact that subjects viewed chronic anxiety symptoms as characterological and resistant to treatment. This may have also reflected a cohort effect in that psychiatry remains a relatively young specialty, and until recently mental health treatment tended to be directed at those with major mental illness. Another possibility is that symptoms of worry or physical anxiety may be attributed to aging, to medical illness, or to other psychological disorders such as depression by both the sufferer and their physician.

We believe that separation anxiety in later life is worthy of both routine clinical scrutiny and further formal study. Specifically, questionnaires measuring separation anxiety need to include developmentally appropriate items, and to be validated in older populations with larger sample sizes. Future studies with a prospective and longitudinal design are also needed to examine differences in the frequency or presentation of separation anxiety across the life cycle, so as to assist clinicians to diagnose and treat this anxiety disorder in the elderly.

References

- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington, DC: Author.
- Andrews, G. (1996). Comorbidity and the general neurotic syndrome. *British Journal of Psychiatry*, 168(Suppl 30), 76–84.
- Bowlby, J. (1969). *Attachment and loss. Volume I. Attachment*. London: Penguin.

- Bowlby, J. (1973). *Attachment and loss. Volume II. Separation: anxiety and anger*. New York: Basic Books.
- Eysenck, H., & Eysenck, S. (1991). *Manual of the Eysenck personality scales*. London: Hodder and Stoughton.
- Fillenbaum, G. (1988). *Multidimensional functional assessment of older americans. The duke older Americans resources and services procedures*. Hillsdale, NJ: Erlbaum.
- Folstein, M., Folstein, S., & McHugh, P. (1975). A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12, 189–198.
- Krasucki, C., Howard, R., & Mann, A. (1998). The relationship between anxiety disorders and age. *International Journal of Geriatric Psychiatry*, 13, 79–99.
- Last, C., Francis, G., Hersen, M. et al. (1987). Separation anxiety and school phobia: a comparison using DSM-III criteria. *American Journal of Psychiatry*, 144, 653–657.
- Lindesay, J. (1991). Phobic disorders in the elderly. *British Journal of Psychiatry*, 159, 531–541.
- Lindesay, J., Briggs, K., & Murphy, E. (1989). The guy's/age concern survey. Prevalence rates of cognitive impairment, depression, anxiety in an urban elderly community. *British Journal of Psychiatry*, 155, 317–329.
- Manicavasagar, V., & Silove, D. (1997). Is there an adult form of separation anxiety disorder? A brief clinical report. *Australian and New Zealand Journal of Psychiatry*, 31, 299–303.
- Manicavasagar, V., Silove, D., & Hadzi-Pavlovic, D. (1998). Subpopulations of early separation anxiety: relevance to risk of adult anxiety disorders. *Journal of Affective Disorders*, 48, 181–190.
- Manicavasagar, V., Silove, D., Curtis, J. et al. (2000). Continuities of separation anxiety from early life into adulthood. *Journal of Anxiety Disorders*, 14, 1–18.
- Manicavasagar, V., Silove, D., Rapee, R., et al. (2001). Parent–child concordance for separation anxiety disorder: a clinic study. *Journal of Affective Disorders*.
- Miller, M., Paradis, C., Houck, P. et al. (1992). Rating chronic medical illness burden in a geropsychiatric practice and research: application of the Cumulative Illness Rating Scale. *Psychiatry Research*, 41, 237–248.
- Sheikh, J., King, R., & Taylor, C. B. (1991). Comparative phenomenology of early-onset versus late-onset panic attacks: a pilot survey. *American Journal of Psychiatry*, 148, 1231–1233.
- Silove, D., Manicavasagar, V., O'Connell, D. et al. (1993). The development of the Separation Anxiety Symptom Inventory (SASI). *Australian and New Zealand Journal of Psychiatry*, 27, 477–488.
- Silove, D., Manicavasagar, V., O'Connell, D., & Morris-Yates, A. (1995). Genetic factors in early separation anxiety: implications for the genesis of adult anxiety disorders. *Acta Psychiatrica Scandinavica*, 92, 17–24.