



87033650

A Snapshot of Psychogeriatric Research in Australia

H. Brodaty

A survey of academic departments specialising in psychogeriatrics was undertaken in order to provide a picture of current research in this area. Reports from departments in seven universities demonstrate strong performance in dementia, depression and carer research, and burgeoning interest in nursing home and biological areas.

This descriptive paper aims to present a snapshot of research by academic psychogeriatricians in Australia. A survey of relevant academic departments was undertaken in Autumn 1997.

METHOD

Eight of the eleven Australian medical schools known to have academic departments involved in psychogeriatrics were surveyed. Heads of departments were asked to send a summary or recent report of their research activities. Responses were received from seven of the eight departments and these are summarised (in alphabetical order) below. The length of each summary neither reflects the quality nor quantity of research.

RESULTS

Australian National University, Psychiatric Epidemiology Research Centre (previously the Social Psychiatry Research Unit)

The outstanding contributions of S. Henderson and T. Jorm to the epidemiology of mental disorders of late life have been summarised recently (Henderson and Jorm 1997). They have developed a number of instruments useful in assessing the cognitive function and psychiatric status in older people, namely the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) (Jorm and Jacomb 1989; Jorm et al. 1996); Canberra Interview for the Elderly (Mackinnon et al. 1993; Social Psychiatry Research Unit 1992); and the Psychogeriatric Assessment Scales (Jorm and Mackinnon 1995; Jorm et al. 1995). The Centre has also been investigating protective factors for dementia such as education, occupation, use of anti-inflammatory drugs and antioxidants as well as risk factors such as malnutrition, stress, depression and apolipoprotein E status (Henderson et al. 1995).

The Centre's major study has been a three wave survey over eight years of an initial cohort of 1135 Canberra residents aged 70-102 years. Results from the second wave interviews (3.6 years after the first), found that decline was almost universal in at least one cognitive area among those aged over 85 years. Education appeared to slow the rate of decline in crystallised intelligence but not other cognitive abilities and may compensate for neurodegenerative changes rather than protect against them (Christensen et al. 1997b).

Analysis of general practice (GP) attendance, physical and psychological symptoms and patient gender, revealed that (as expected) male and female high attenders had more symptoms than low attenders. An unanticipated result was the identification of a group of men, who had not attended their GP for at least a year despite similar health, more pain, more hearing impairment and less social support than low or high attenders (Jacomb et al. 1997).

Other interesting findings were that:

- i. pet ownership did not have any impact on physical or mental health measures or on use of medical services (Jorm et al. 1997a);
- ii. occupation did not appear to be a risk factor for dementia, as previously reported cross-sectional occupational differences on cognitive tests and in dementia prevalence could be explained by differences in pre-morbid ability (Jorm et al. 1997b);
- iii. anti-inflammatory drugs conferred no protection against cognitive impairment (Henderson et al. 1997);
- iv. the community point prevalence of having one or more psychotic symptoms, was 6.0% of whom over half had substantial cognitive impairment or dementia;
- v. mild cognitive disorder did not predict subsequent dementia (Christensen et al. 1997a).

Monash University

The Academic Unit of Psychogeriatrics at Monash University has several projects underway or just completed. In a cross-national interrater reliability study of the diagnosis of dementia, 13 researchers from five centres in Australia, Germany, the Netherlands, UK and US were asked to rate the presence and severity of dementia from written vignettes of a 100 elderly people. Within centre interrater reliability was high, more so for yes-no DSM-III-R diagnoses of dementia than the multi-level clinical dementia rating scale. Between centre agreement was lower but still moderate to good. Concordance was lower for intermediate levels of severity than for no dementia or severe dementia (O'Connor, Blessed and Cooper 1996).

A longitudinal, quasi-experimental examination of the effectiveness of dementia programs in hostels concluded that such programs worked. Residents in hostels with programs were less likely to go to nursing homes and had enhanced quality of life (Rosewarne, Bruce and McKenna 1997).

D. O'Connor, C. Doyle, J. Opie, E. Dubois and W. Elliot-Smith are evaluating psychosocial consultancies to nursing home residents. They will examine whether planned consultancies which provide individually designed social, psychological, nursing and medical interventions to nursing home residents, reduce the frequency and severity of behaviour disorders associated with dementia. Over the two years of the study, targeted behaviours will be rated over a four week period by detailed multiple independent observations using time sampled ratings and nursing staff recordings.

In a study on the recognition and management of dementia and depression in elderly GP patients, over 1000

patients 70 years and older (and 837 informants) were rated by 30 Melbourne GPs as regards mood and cognition and then interviewed by the researchers using the Canberra Interview for the Elderly. D. O'Connor, R. Rosewarne and A. Bruce are comparing GP assessments to research diagnoses based on DSM-III-R and ICD-10 criteria. Patients and relatives were questioned about their contacts with GPs and the usefulness of GPs' recommendations.

In another current study, D. O'Connor and R. Rosewarne are examining carers' responses to difficult behaviours in elderly persons with dementia. Patients who are diagnosed as having cognitive impairment or dementia in the earlier general practice community survey will be re-interviewed along with their carers about the frequency and typology of behaviour disorders; the consequences of these behaviours to carers; carers' usual management strategies; their sources of advice and support; their assessment of the usefulness of this advice; and the relationship between difficult behaviours and dependents' subsequent admission to residential care.

C. Doyle, D. O'Connor, T. Zapparoni and S. Runci examined the efficacy of psychosocial treatments for problematic noise making in severe dementia. Interventions were contingent reinforcement of quiet behaviour and environmental stimulation tailored to individual preferences. Of the 12 cases recruited into the study, two died during the course of observations, three did not appear to be as noisy and three showed a clear reduction in noise making. Four cases did not show any overall reduction in noise making.

In a related study, R. Rosewarne and A. Bruce are in the process of describing what arrangements, if any, are in place to help older people in public places who are confused, disorientated or lost. They are attempting to determine the nature and extent of problem wandering in the community and suggesting ways of responding to this. Service providers, consumer organisations, shopping centre managers, police, transport authorities and carers will be surveyed for information about this.

C. Doyle, J. Opie, M. Carter and M. McKenna have developed a measure of quality of care in Australian nursing homes. Work is still in progress on the measure, called QSCAN, which measures structural, procedural and outcome aspects of quality of care and some staff attitudes (by use of vignettes). Additionally, this group is very active in evaluating a number of Commonwealth initiatives: an evaluation of a residential staff counselling service (S. Ward, J. Opie); education and training in residential care in Australia: needs, provisions and directions (C. Doyle, S. Ward); an overview of a meta-evaluation of the demonstration projects program funded under the National Action Plan for Dementia Care (C. Doyle, S. Ward); an evaluation of the Alzheimer Education Training Course (S. Ward, C. Doyle); and an investigation of a number of areas relevant to the care needs of people with dementia and challenging behaviour living in Commonwealth-funded residential facilities (R. Rosewarne, J. Opie, A. Bruce, C. Doyle, S. Ward, J. Sach, J. Beckman).

University of Melbourne

Several researchers have been active in old age psychiatry research at the University of Melbourne where an emphasis has been on international partnerships. D. Ames has been collaborating with:

- i. The Central Institute of Mental Health, Mannheim, with S. Weyerer in a project examining screening methods for depression (Weyerer et al. 1995b);
- ii. The University of Liverpool with J. Copeland and D. Ashby examining dementia and depression detection rates, and latent trait/class analysis of symptoms of depression and dementia;
- iii. The University of Melbourne Departments of Geriatric Medicine (with L. Flicker and R. Helme), Radiology (B. Tress, P. Desmond), Ophthalmology (J. Rait, A. Crawford and M. Coote) and Pathology (C. Masters and C. McLean). Representative studies include investigation of drugs for Alzheimer's disease (Balson et al. 1995), neuroimaging and diagnosis of Alzheimer's disease and psychiatric disorder (Desmond et al. 1994; O'Brien et al. 1994a, 1997a) and glaucoma and amyloid pathology of Alzheimer's disease. In addition D. Ames has been supervising work on the religious attitudes of psychogeriatricians (with V. Payman) and the working habits of psychogeriatricians (J. Tovey).

Over the past three years D. Ames and colleagues have examined the prevalence of psychiatric disorders in geriatric hospitals (Ames, Flynn and Harrigan 1994), general hospitals (Ames and Tuckwell 1994) and nursing homes (Martin, McKenzie and Ames 1994); developed the Even Briefer Assessment Scale for Depression (Allen et al. 1994); and focused on the prevalence, course and treatment of depression among older people in residential care in England, Germany and Australia (eg. Allen et al. 1994; Weyerer et al. 1995a; Moss et al. 1995). Additionally, there have been a number of studies with J. O'Brien examining the usefulness of magnetic resonance imaging (MRI) in the early diagnosis of Alzheimer's disease (Desmond et al. 1994; O'Brien 1995; O'Brien, Ames and Schweitzer, 1996; O'Brien et al. 1996a, c; O'Brien et al. 1997a,c) and in the investigation of cerebrovascular lesions in depression (O'Brien et al. 1997b). Hippocampal atrophy was found to be both a sensitive (85%) and specific (85-90%) marker for the presence of Alzheimer's disease, even when compared to depression and other causes of cognitive impairment (O'Brien, Ames and Schweitzer, 1996; O'Brien et al. 1994a, 1996c, 1997a). A further part of this study was to investigate the relationships between activation of the hypothalamic-pituitary-adrenal axis in Alzheimer's disease and depression and its relationship to neuroimaging changes (O'Brien et al. 1996a). Activation of the axis in Alzheimer's disease was related to hippocampal atrophy and provided the first demonstration that subjects with Alzheimer's disease had enhanced adrenal sensitivity, similar to findings reported in depression (O'Brien, Ames and Schweitzer 1993; O'Brien et al. 1994b, c; O'Brien et al. 1996b).

E. Chiu has been a leading researcher into psychiatric aspects and the management of Huntington's disease (Phillips et al. 1996a,b; Hanes et al. 1996). His team has just completed a study of family well-being and predictive testing in Huntington's disease and is about to commence a study of gait disorder in Huntington's disease. E. Chiu and D. Ames (1994) have co-edited *Functional Psychiatric Disorders of the Elderly*; and *Neuro-imaging and the Psychiatry of Late Life* (Ames and Chiu 1997).

A. Shah's contributions include analyses of the economic burden of psychiatric illness in old age (Shah

1995a, b) and of psychogeriatric inpatient suicides in Australia (Shah and Ganesvaran 1994, 1997a, 1997b; Ganesvaran and Shah 1997). Aggression in nursing homes and senile squalor have been other areas of research (Shah 1995c; Shah, Chiu and Ames 1997).

University of New South Wales

At the Prince Henry Hospital (PHH), a group led by P. Sachdev and myself have been investigating late onset schizophrenia. Convenience samples of older people with schizophrenia whose onset was after the age of 50 were compared with those whose onset was before the age of 35 and with a normal control group. In essence, phenomenology, neuropsychological assessment and MRI imaging did not differentiate the two schizophrenic groups (Brodady et al. 1997e; Sachdev, Brodady and Rose 1997).

The phenomenology, prognosis and treatment of depression in the elderly, as well as its link with dementia have been major foci of investigations at PHH. Some of these studies have been conducted in association with the Mood Disorders Unit which developed a new, sign-based method of rating psychomotor disturbances associated with melancholic depression (Parker et al. 1994). We have found aetiological and phenomenological differences in older patients with depression compared to their younger counterparts (Brodady et al. 1991, 1997b) and have put forward theories to explain the higher rate of psychosis, melancholia and psychomotor disturbance in the elderly (Brodady 1996). Regarding the link with dementia, we examined the data base of the PHH Memory Disorders Clinic to determine the prevalence of depression. Whereas previous reports indicated about that 20% of patients with dementia had comorbid depression, we found rates of about six to eight per cent, depending on the criteria used (Brodady and Luscombe 1996).

A 25-year follow-up permitted a reassessment of a cohort of patients admitted with depression between 1966 and 1970 and followed up 2, 5 and 15 years later in order to determine the long term prognosis of depression as well as the risk of subsequent dementia and the effect on mortality. We confirmed that depression is a lifelong illness with frequent recurrences. We found a higher than expected rate of dementia, most of which were of vascular aetiology (Brodady et al. 1997c), and of death (Brodady et al. 1997d). Compared to the general population, the mortality rate was increased over the 25 years, but this was mostly accounted for by the higher suicide rate (Brodady et al. 1997d). We are following up a surgical control group, admitted to PHH 25 years ago in order to compare neuropsychological performance in the two groups.

C. Peisah has been investigating the long term effects of depression on families and has developed a questionnaire designed to rate aspects of the relationship between adult children and their parents (Peisah 1995). C. Peisah and colleagues have completed interviews with 27 spouses and 76 children of depressed probands and are now interviewing family members of matched controls. E. Scott and colleagues, investigating the significance of sub-cortical white matter changes on MRI in older patients with severe depression (Scott et al. 1997), found that such patients have a poor response to treatment and a poorer longitudinal course with higher rates of dementia and death (Hickie et al. 1995).

Caregivers for people with dementia have been another major research focus. An eight year follow up and detailed description of the PHH Dementia Carers Programme confirmed that psychosocial intervention can delay nursing home admission (Brodady, Gresham and Luscombe 1997). B. Draper has demonstrated that the psychological effects on carers of stroke and dementia are similar and that about 25% of the variance in carer stress or psychological morbidity can be explained by behavioural disturbance (Draper et al. 1992); another longitudinal study is underway. In addition, Draper is examining an intervention program for carers of dysphasic stroke patients and also surveying male carers. Additionally, a reanalysis of a survey by G. Luscombe, H. Brodady and S. Freeth of carers of young people with dementia commissioned by the Alzheimer's Association (Australia) has confirmed that carers of younger people with dementia face special problems with diagnosis and management.

Nursing home psychiatric studies have been mainly concerned with prevalence of disorders or management strategies. We are now examining different models of intervention, firstly for residents of nursing homes with dementia complicated by depression or psychosis in a randomised, prospective controlled study, and secondly of screaming behaviour in a naturalistic follow-up study. Suicidal and other life threatening behaviours in nursing home residents are underdiagnosed. A scale, developed by B. Draper to rate these behaviours, is currently being tested for validity and reliability.

The PHH Academic Department of Psychogeriatrics is one of a number of Australian centres for drug trials in Alzheimer's disease, mainly using cholinergic enhancement strategies (Brodady 1997). Other studies include an examination of older psychiatrists and their attitudes towards ageing and their practices as regards retirement (Draper, Winfield and Luscombe 1997), a survey of old age psychiatry in Australia (Draper and Snowdon 1996) and the effects of ageing on holocaust survivors (Joffe, Brodady and Ehrlich 1995). Finally, a consensus conference on whether GPs should screen all older patients for cognitive impairment concluded that this was not efficient and should be undertaken only when there is an index of suspicion or where cognitive impairments are noted by an informant, such as a spouse (Brodady et al. 1997a).

At St George Hospital, D. Burke and colleagues have been studying early cognitive impairment and have been comparing regional brain volumes in patients with depression and early memory loss (Burke et al. 1996). C. Wijeratne has commenced an investigation of somatisation disorder in the elderly by surveying general practice attenders to determine the levels of somatic and psychological symptoms in older patients.

University of Sydney

J. Snowdon and colleagues are continuing their analysis of the way medications are being used in Sydney nursing homes and studying the prevalence and methods of managing behavioural disturbances in that setting (Snowdon, Vaughan and Miller 1995; Snowdon et al. 1995a, 1995b, 1996; Snowdon, Miller and Vaughan 1996). J. Snowdon is examining evaluations of depression severity by nurses in nursing homes and the prevalence of anxiety in nursing homes (Cheok et al. 1996). Other studies include an analysis of Australian suicide data

(Snowdon 1997b); the role of a rating scale, which measures psychomotor disturbance associated with depression in the assessment and evaluation of treatment for older people with depression; and a twelfth year follow up of psychological and cognitive functioning of elderly people living in the community. Recent publications include a survey of psychiatric services for elderly people in Australia (Snowdon et al. 1995a), evaluation of the use of the Cohen-Mansfield Agitation Inventory (Miller, Snowdon and Vaughan 1995) and epidemiological questions on mood disorders in old age (Snowdon 1997a).

At the Healthy Ageing Research Unit based at Hornsby/Ku-ring-gai Hospital, R. Llewellyn-Jones and colleagues have been interested in intervention programs to reduce depression in the elderly. They have evaluated the clinical effectiveness of a collaborative shared care intervention which involved removing barriers to care, educating professional carers and health workers. The study, which was unusual in that it was a preventative and population-based treatment approach, demonstrated a reduction in level of depression in the population receiving the intervention compared to a control (Baikie et al. 1997; Llewellyn-Jones 1997). R. Llewellyn-Jones and colleagues are examining behavioural problems in people with dementia in which a shared care model management emphasising non-pharmacological dimensions is being compared with a control group who receive existing standard care.

University of Western Australia

P. Burvill has been one of the leading international researchers in the field of stroke, particularly for his five year follow up of a community, rather than hospital, derived sample of 248 people, who had had a stroke and who lived in a defined geographical area of Perth, Western Australia. Subjects were assessed psychiatrically by G. Johnson or P. Burvill four months after their stroke with the aims of determining (a) whether depression four months after a stroke leads to a higher five year mortality and (b) what factors influence mortality. Results to date indicate that, contrary to previous findings in selected hospitalised stroke patients, five year mortality is no greater in the depressed than in the non-depressed stroke patients (Burvill et al. 1995a; Burvill, Stampfer and Hall 1995). Functional disability and cognitive disability appear to be dominant factors influencing mortality, not depression. Furthermore, depression was no more common and of no more specific aetiology, than it is among elderly patients with other physical illness (Burvill et al. 1997). Burvill has also examined whether site of lesion influenced the development of post-stroke dementia (Burvill et al. 1996) and the occurrence of anxiety after stroke (Burvill et al. 1995b). In a similar five year follow up study of the same cohort of stroke patients, Burvill and colleagues are analysing which factors influence institutionalisation five years later. Additionally Burvill has reported on suicide in the multi-ethnic elderly (Burvill 1995), on methods for screening for depression (Johnson et al. 1995; Loke, Nicklason and Burvill 1996) and he and colleagues are assessing stress in carers of patients twelve months after a stroke.

University of Queensland

G. Byrne, in a three-phase longitudinal study of phenomena in widowers, reported that 8.8% of the men *Australian Journal on Ageing, Vol. 16, No. 3*

experienced persistent, chronic grief during the first 13 months post-bereavement (Byrne and Raphael 1994). Widowers unable to anticipate their wife's death had more severe bereavement reactions. Compared to non-bereaved controls, anxiety symptoms emerged as the predominant clinical feature of recent conjugal bereavement (Byrne and Raphael 1997).

CONCLUSIONS

Psychogeriatrics is a young discipline but the pace and amount of research are impressive as is affirmed by the publication of a special issue on Australian research in psychogeriatrics in the *International Journal of Geriatric Psychiatry* (Ames 1997). Until recently, efforts have been clinically and epidemiologically focused, particularly concerning depression and dementia. This reflects the dominance of these diagnoses in the work of psychogeriatricians. Research is now expanding into different areas of inquiry, such as nursing home psychiatry, caregiver research and neurotic disorders in late life; other paradigms – biological, epidemiological and social – and into intervention studies.

ACKNOWLEDGMENT

Thanks to Jenny Grice and Georgina Luscombe, who helped with the manuscript, and my colleagues who responded so rapidly.

Address correspondence to Professor Henry Brodaty, Academic Department of Psychogeriatrics, Prince Henry Hospital, Anzac Parade, Little Bay, NSW 2036. E-mail: s8300158@vmsuser.acsu.unsw.edu.au

REFERENCES

- Allen, N., Ames, D., Ashby, D., Bennetts, K., Tuckwell, V. and West, C. (1994) A brief sensitive screen for depression in late life: a short form of the Brief Assessment Scale for depression: the EBASDEP. *Age and Ageing*, 23, 213-218.
- Ames, D. (1997) Geriatric psychiatry in Australia. *International Journal of Geriatric Psychiatry*, 12, 143-144.
- Ames, D. and Chiu, E. (1997) *Neuroimaging and the Psychiatry of Late Life*. Cambridge: Cambridge University Press.
- Ames, D., Flynn, E. and Harrigan, S. (1994) Prevalence of psychiatric disorders among inpatients of an acute geriatric hospital. *Australian Journal on Ageing*, 13(1), 8-11.
- Ames, D. and Tuckwell, V. (1994) Psychiatric disorders among elderly patients in an acute general hospital. *Medical Journal of Australia*, 160, 671-675.
- Baikie, K., Llewellyn-Jones, R., Cohen, J., Smidgers, H., Dmitry Pond, C., Andrews, C., Wollcock, S., Castell, S., Baikie, A., Snowdon, J., Tennant C. (1997) Differential impact of a shared care intervention for late life depression in residential care. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A53.
- Balson, R., Gibson, P., Ames, D. and Bhadral, P. (1995) Tacrine-induced hepatotoxicity: tolerability and management. *CNS Drugs*, 4, 168-181.
- Brodaty, H. (1996) Melancholia and the ageing brain: In *Melancholia: A Disorder of Mood, Movement and Thought*. New York: Cambridge University Press. pp. 237-251.
- Brodaty, H. (1997) Drug treatments for Alzheimer's disease. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A16.
- Brodaty, H. and Luscombe, G. (1996) Depression in persons with dementia. *International Psychogeriatrics*, 8(4), 609-622.
- Brodaty, H., Gresham, M. and Luscombe, G. (1997) The Prince Henry Hospital dementia caregivers training program. *International Journal of Geriatric Psychiatry*, 12(2), 183-192.
- Brodaty, H., Peters, K., Boyce, P., Hickie, I., Parker, G., Mitchell, P. and Wilhelm, K. (1991) Age and depression. *Journal of Affective Disorders*, 23, 137-149.
- Brodaty, H., Clarke, J., Ganguli, M., Grek, A., Jorm, A.F., Khachaturian, Z. and Scherr, P. (1997a) Screening for cognitive impairment in general practice: towards a consensus. *Alzheimer Disease and Associated Disorders* (in press).
- Brodaty, H., Luscombe, G., Parker, G., Wilhelm, K., Hickie, I., Austin, M-P. and Mitchell, P. (1997b) Increased prevalence of psychosis and psychomotor change in depression with age. *Psychological Medicine* (in press).
- Brodaty, H., Luscombe, G., Peisah, C., Anstey, K. and Andrews, G. (1997c) Depression in old age. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A69.
- Brodaty, H., MacCuspie-Moore, C., Tickle, L. and Luscombe, G. (1997d) Depression, diagnostic sub-type and death: a 25 year follow-up study. *Journal of Affective Disorders* (in press).

- Brodsky, H., Sachdev, P., Rose, N. and Prenter N. (1997e) Schizophrenia in old age. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A68.
- Burke, D., Schwartz, R., Fell, K. and Hickie, I. (1996) A longitudinal study of early cognitive impairment: the challenge of dementias. *The Lancet Conference Edinburgh*.
- Burvill, P.W. (1995) Suicide in the multiethnic elderly population of Australia, 1979-1990. *International Psychogeriatrics*, 7(2), 319-333.
- Burvill, P.W., Stampfer, H.G., Hall, W.D. (1995) Issues in the assessment of outcome in depressive illness in the elderly. In E. Murphy & G. Alexopoulos (Eds) *Geriatric Psychiatry*. New York: Wiley. 177-190.
- Burvill, P.W., Johnson, G.A., Jamrozik, K., Anderson, C.S., Stewart-Wynne, E.G., Chakera, T.M.H. (1995a) The prevalence of depression following stroke: the Perth Community Stroke Study. *British Journal of Psychiatry*, 166, 320-327.
- Burvill, P.W., Johnson, G.A., Jamrozik, K., Anderson, C.S., Stewart-Wynne, E.G., Chakera, T.M.H. (1995b) Anxiety disorders following stroke: results from the Perth Community Stroke Study. *British Journal of Psychiatry*, 166, 328-332.
- Burvill, P.W., Johnson, G.A., Chakera, T.M.H., Stewart-Wynne, E.G., Anderson, C.S., Jamrozik, K.D. (1996) The place of site of lesion in the aetiology of post-stroke depression. *Cerebrovascular Diseases*, 6, 208-215.
- Burvill, P.W., Johnson, G., Jamrozik, K., Anderson, C., Stewart-Wynne, E. (1997) Risk factors for post-stroke depression. *International Journal of Geriatric Psychiatry*, 12(2), 219-226.
- Byrne, G.J. and Raphael, B. (1994). A longitudinal study of bereavement phenomena in recently widowed elderly men. *Psychological Medicine*, 24, 411-421.
- Byrne, G.J.A., Raphael, B. (1997). The psychological symptoms of conjugal bereavement over the first 13 months. *International Journal of Geriatric Psychiatry*, 12(2), 241-252.
- Cheok, A., Snowdon, J., Miller, R. and Vaughan, R. (1996) The prevalence of anxiety disorders in nursing homes. *International Journal of Geriatric Psychiatry*, 11, 405-410.
- Chiu, E. and Ames, D. (1994) *Functional Psychiatric Disorders of the Elderly*. Cambridge: Cambridge University Press.
- Christensen, H., Henderson, A.S., Korten, A.E., Jorm, A.F., Jacomb, P.A. and Mackinnon A.J. (1997a). ICD-10 Mild cognitive disorder: its outcome three years later. *International Journal of Geriatric Psychiatry* (in press).
- Christensen, H., Korten, A.E., Jorm, A.F., Henderson A.S., Jacomb, P.A., Rodgers, B. and Mackinnon, A.J. (1997b) Education and decline in cognitive performance: compensatory but not protective. *International Journal of Geriatric Psychiatry*, 12, 323-330.
- Desmond, P., Tress, B., Ames, D., O'Brien J., Clement, J., Clement, P., Schweitzer, I., Robinson, G. and Tuckwell, V. (1994) Volumetric and visual assessment of the mesial temporal structures in Alzheimer's disease. *Australian and New Zealand Journal of Medicine*, 24, 547-553.
- Draper, B. and Snowdon, J. (1996) Old age psychiatry in Australia and New Zealand. *Old Age Psychiatrist*, 5, 5.
- Draper, B., Winfield, S. and Luscombe, G. (1997) The older psychiatrist and retirement. *International Journal of Geriatric Psychiatry*, 12(2), 233-240.
- Draper, B., Poulos, C.J., Cole, A.M.D., Poulos, R.G. and Ehrlich, F. (1992) A comparison of caregivers for elderly stroke and dementia victims. *Journal of American Geriatrics Society*, 40(9), 896-901.
- Ganesvaran, T. and Shah, A.K. (1997). Psychiatric inpatient suicide rates: a 21 year study. *Medicine, Science and the Law* (in press).
- Hanes, K.R., Andreevs, D.G., Panelis, C. and Chiu, E. (1996) Subcortical dysfunction in schizophrenia: a comparison with Parkinson's disease and Huntington's disease. *Schizophrenia Research*, 19, 121-128.
- Henderson, A.S. and Jorm, A.F. (1997) Some contributions to the epidemiology of dementia and depression. *International Journal of Psychogeriatrics*, 12(2), 145-154.
- Henderson, A.S., Easteal, S., Jorm, A.F., Mackinnon, A.J., Korten, A.E., Christensen, H., Croft, L. and Jacomb, P.A. (1995). Apolipoprotein E allele (4, dementia and cognitive decline in a population sample. *Lancet*, 346, 1387-1390.
- Henderson, A.S., Jorm, A.F., Christensen, H., Jacomb, P.A., Korten, A.E. (1997) Aspirin, anti-inflammatory drugs and risk of dementia. *International Journal of Geriatric Psychiatry* (in press).
- Hickie, I., Scott, E., Mitchell, P., Wilhelm, K., Austin, M. and Bennett, B. (1995) Subcortical hyperintensities on magnetic resonance imaging: clinical correlates and prognostic significance in patients with severe depression. *Biological Psychiatry*, 37, 151-160.
- Jacomb, P.A., Jorm, A.F., Korten, A.E., Rodgers, B., Henderson, S. and Christensen, H. (1997) GP attendance in an elderly Australian sample: evidence for unmet need in elderly men. *Medical Journal of Australia* (in press).
- Joffe, C., Brodaty, H. and Ehrlich, F. (1995) The Twilight Years: how do ageing and experience of the holocaust trauma interact? *7th International Psychogeriatric Association Congress*. Sydney.
- Johnson, G., Burvill, P.W., Anderson, C.S., Jamrozik, K., Stewart-Wynne, E.G., Chakera, T.M.H. (1995) Screening instruments for depression and anxiety following stroke: experience in the Perth Community Stroke Study. *Acta Psychiatrica Scandinavica*, 91, 252-257.
- Jorm, A.F. and Jacomb, P.A. (1989) The informant questionnaire on cognitive decline in the elderly (IQCODE): socio-demographic correlates, reliability, validity and some norms. *Psychological Medicine*, 19(4), 1015-1022.
- Jorm, A.F. and Mackinnon, A.J. (1995) *Psychogeriatric Assessment Scales. User's Guide and Materials*, 2nd edn. ANUTECH, Canberra.
- Jorm, A.F., Mackinnon, A.J., Henderson, A.S., Scott, R., Christensen, H., Korten, A.E., Cullen, J.S. and Mulligan, R. (1995) The Psychogeriatric Assessment Scales: a multi-dimensional alternative to categorical diagnoses of dementia and depression in the elderly. *Psychological Medicine* 25, 447-460.
- Jorm, A.F., Broe, G.A., Creasey, H., Sulway, M.R., Dent, O., Fairley, M.J., Kos, S.C. and Tennant, C. (1996). Further data on the validity of the informant questionnaire on cognitive decline in the elderly (IQCODE). *International Journal of Geriatric Psychiatry*, 11, 131-139.
- Jorm, A.F., Jacomb, P.A., Christensen, H., Henderson, A.S., Korten, A.E. and Rodgers, B. (1997a) Impact of pet ownership on elderly Australians' use of medical services: an analysis using Medicare data. *Medical Journal of Australia*, 166, 376-377.
- Jorm, A.F., Rodgers, B., Henderson A.S., Korten, A.E., Jacomb, P.A., Christensen, H. and Mackinnon, A.J. (1997b) Occupation type as a predictor of cognitive decline and dementia in old age. *Age and Ageing* (in press).
- Llewellyn-Jones, R. (1997) Late life depression in residential care. *Australian and New Zealand Journal of Psychiatry*, 31(suppl. 1), A69.
- Loke, B., Nicklason, F., Burvill, P. (1996) Screening for depression: clinical validation of geriatricians' diagnosis, the Brief Assessment Schedule Depression Cards and the 5-item version of Symptom Check List among non-demented geriatric in-patients. *International Journal of Geriatric Psychiatry*, 11(5), 397-490.
- Mackinnon, A., Christensen, H., Cullen, J.S., Doyle, C.J., Henderson, A.S., Jorm, A.F., Korten, A.E. and Scott, L.R. (1993) The Canberra Interview for the Elderly: Assessment of its validity in the diagnosis of dementia and depression. *Acta Psychiatrica Scandinavica*, 87, 146-151.
- Martin, C., McKenzie, S. and Ames, D. (1994) Disturbed behaviour in dementia sufferers: a comparison of three nursing home settings. *International Journal of Geriatric Psychiatry*, 9, 393-398.
- Miller, R.J., Snowdon, J. and Vaughan, R. (1995) The use of the Cohen-Mansfield agitation inventory in the assessment of behavioural disorders in nursing homes. *Journal of the American Geriatrics Society*, 43, 546-549.
- Moss, F., Wilson, B., Harrigan, S. and Ames, D. (1995) Psychiatric diagnoses, outcomes and lengths of stay of patients admitted to an acute psychogeriatric unit. *International Journal of Geriatric Psychiatry*, 10, 849-854.
- O'Brien, J.T. (1995) Is hippocampal atrophy on magnetic resonance imaging a marker for Alzheimer's disease? *International Journal of Geriatric Psychiatry*, 10, 431-435.
- O'Brien, J.T., Ames, D. and Schweitzer, I. (1993) HPA axis function in depression and dementia: a review. *International Journal of Geriatric Psychiatry*, 8, 887-898.
- O'Brien, J.T., Ames, D. and Schweitzer, I. (1996) White matter changes in depression and Alzheimer's disease: a review of magnetic resonance imaging studies. *International Journal of Geriatric Psychiatry*, 11, 681-694.
- O'Brien, J.T., Desmond, P., Ames, D., Schweitzer, I., Tuckwell, V. and Tress, B. (1994a) The differentiation of depression from dementia by magnetic resonance imaging. *Psychological Medicine*, 24, 633-640.
- O'Brien, J.T., Schweitzer, I., Ames, D., Tuckwell, V. and Mastwyk, M. (1994b) Cortisol suppression by dexamethasone in the healthy elderly: effects of age, dexamethasone levels and cognitive function. *Biological Psychiatry*, 36, 389-394.
- O'Brien, J.T., Schweitzer, I., Colman, P. and Ames, D. (1994c) HPA axis function in Alzheimer's disease: response to insulin hypoglycaemia and dexamethasone suppression. *British Journal of Psychiatry*, 165, 650-657.
- O'Brien, J.T., Ames, D., Schweitzer, I., Colman, P., Desmond, P. and Tress, B. (1996a) Clinical and magnetic resonance imaging correlates of hypothalamic-pituitary-adrenal axis function in depression and Alzheimer's disease. *British Journal of Psychiatry*, 168, 679-687.
- O'Brien, J.T., Ames, D., Schweitzer, I., Mastwyk, M. and Colman, P. (1996b) Enhanced adrenal sensitivity to adrenocorticotrophic hormone (ACTH) is evidence of HPA axis hyperactivity in Alzheimer's disease. *Psychological Medicine*, 26, 7-14.
- O'Brien, J.T., Desmond, P., Ames, D., Schweitzer, I., Harrigan, S. and Tress, B. (1996c) A magnetic resonance imaging study of white matter lesions in depression and Alzheimer's disease. *British Journal of Psychiatry*, 168, 477-485.
- O'Brien, J.T., Ames, D., Chiu, E., Schweitzer, I., Desmond, P. and Tress, B. (1997a) Temporal lobe MRI can differentiate Alzheimer's disease from depression, vascular dementia and other causes of cognitive impairment. *Psychological Medicine* (in press).
- O'Brien, J.T., Ames, D., Schweitzer, I., Desmond, P., Coleman, B., Tress, B. (1997b) Clinical, magnetic resonance imaging and endocrinological differences between delusion and non-delusional depression in the elderly. *International Journal of Geriatric Psychiatry*, 12(2), 211-218.
- O'Brien, J.T., Desmond, P., Ames, D., Schweitzer, I. and Tress, B. (1997c) Magnetic resonance imaging correlates of memory impairment in the healthy elderly: association with medical temporal lobe atrophy but not white matter lesions. *International Journal of Geriatric Psychiatry*, 12, 369-374.

- O'Connor, D.W., Blessed, G. and Cooper, B. (1996). Cross-national interrater reliability of dementia diagnosis in the elderly and factors associated with disagreement. *Neurology*, 47, 1194-1199.
- Parker, G., Hadzi-Pavlovic, D., Wilhelm, K., Hickie, I., Brodaty, H., Boyce, P., Mitchell, P. and Eyers, K. (1994) Defining melancholia: properties of a refined sign-based measure. *British Journal of Psychiatry*, 164, 316-326.
- Peisah, C. (1995) The development of a questionnaire to measure contemporaneous adult-child and parent relationships. *The 7th International Psychogeriatric Association Congress, Sydney*.
- Phillips, J.G., Bradshaw, J.I., Chiu, E., Teasdale, N., Iansek, R. and Bradshaw, J.A. (1996a) Bradykinesia and movement precision in Huntington's disease. *Neuropsychologia*, 34(12), 1241-1245.
- Phillips, J.G., Chiu, E., Bradshaw, J.I. and Iansek, R. (1996b) Impaired movement sequencing in patients with Huntington's disease: a kinematic analysis. *Experimental Brain Research*, 34(12), 1241-1245.
- Rosewarne, R., Bruce, A. and McKenna, M. (1997) Dementia programme effectiveness in long-term care. *International Journal of Geriatric Psychiatry*, 12(2), 173-182.
- Sachdev, P., Brodaty, H. and Rose, N. (1997) Pathways to the development of late-onset schizophrenia. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A65.
- Scott, E., Hickie, I., Brodaty, H. and Wilhelm, K. (1997) MRI and long-term outcome in depression. *Australian and New Zealand Journal of Psychiatry*, 31(Suppl 1), A9.
- Shah, A.K. (1995a) Is the economic burden of psychiatric illness in old age important? *Australian Journal on Ageing*, 14, 3-5.
- Shah, A.K. (1995b) What is in the name - the economics of burden of illness. Reply to Sheill. *Australian Journal on Ageing*, 14, 7.
- Shah, A.K. (1995c) Squalor syndrome. *Australian Journal on Ageing*, 14, 160-162.
- Shah, A.K., Chiu, E. and Ames, D. (1997). The relationship between two aggression scales in nursing homes. *International Journal of Geriatric Psychiatry* (in press).
- Shah, A.K. and Ganesvaran, T. (1994) Suicide in the elderly. In E. Chiu and D. Ames (Eds) *Functional Psychiatric Disorders in the Elderly*. Cambridge: Cambridge University Press. 221-244.
- Shah, A.K. and Ganesvaran, T. (1997a) Psychogeriatric inpatient suicides in Australia. *International Journal of Geriatric Psychiatry*, 12, 15-19.
- Shah, A.K. and Ganesvaran, T. (1997b) Inpatient suicides in an Australian mental hospital. *Australian and New Zealand Journal of Psychiatry* (in press).
- Snowdon, J. (1997a) Epidemiologic questions on mood disorders in old age. *Clinical Neuroscience*, 4, 3-7.
- Snowdon, J. (1997b) Suicide rates and methods in different age groups: Australian data and perceptions. *International Journal of Geriatric Psychiatry*, 12(2), 253-258.
- Snowdon, J., Miller, R. and Vaughan, R. (1996) Behavioural problems in Sydney nursing homes. *International Journal of Geriatric Psychiatry*, 11, 535-541.
- Snowdon, J., Vaughan, R. and Miller, R. (1995) Mental health services in Sydney nursing homes. *Australian Journal of Public Health*, 19, 403-406.
- Snowdon, J., Ames, D., Chiu, E. and Wattis, J. (1995a) A survey of psychiatric services for elderly people in Australia. *Australian and New Zealand Journal of Psychiatry*, 29, 207-214.
- Snowdon, J., Vaughan, R., Miller, R., Burgess, E.E. and Tremlett, P. (1995b) Psychotropic drug use in Sydney nursing homes. *Medical Journal of Australia*, 163, 70-72.
- Snowdon, J., Burgess, E., Vaughan, R. and Miller, R. (1996) Use of antidepressants, and the prevalence of depression and cognitive impairment in Sydney nursing homes. *International Journal of Geriatric Psychiatry*, 11, 599-606.
- Social Psychiatry Research Unit (1992) The Canberra Interview for the Elderly: A new field instrument for the diagnosis of dementia and depression by ICD-10 and DSM-III-R. *Acta Psychiatrica Scandinavica*, 85, 105-113.
- Weyerer, S., Hafner, H., Mann, A.H., Ames, D. and Graham N. (1995a) Prevalence and course of depression among elderly residential home admissions in Mannheim and Camden, London. *International Psychogeriatrics*, 7, 479-493.
- Weyerer, S., Mann, A.H. and Ames, D. (1995b) Prevalenz von depression und demenz bei altenheimbewohnern in Mannheim und Camden (London). *Z Gerontol Geriat*, 28, 169-178.

TOTAL AGED SERVICES
in conjunction with
VICTORIA UNIVERSITY of TECHNOLOGY (DEPARTMENT OF NURSING)
present the
**2nd NATIONAL NURSING HOME
INNOVATION CONFERENCE**
**"THE MOST IMPORTANT CONFERENCE
FOR NURSING HOMES IN 1997!"**

Building on the enormous success in 1996, this major conference will once again focus on practice based innovation in Nursing Homes.

Friday November 7 1997
Melbourne Park Function Centre
Batman Avenue, Melbourne, Victoria
Initial enquiries & expressions of interest to:
TOTAL AGED SERVICES
3 AILEEN AVE, CAULFIELD SOUTH, VIC. 3162
PHONE: (03) 9528 2491; FAX: (03) 9528 4049