

Eugeria, longevity and normal ageing

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On 4 August 1997 Jeanne Calment, aged 122 years and considered to be the oldest human being in the history of our species, died in Arles of 'natural causes'. Not only was she the oldest person, she was probably also the most healthy. Living independently until the age of 110, with no previous history of illness, she had entirely escaped the principal current causes of mortality and morbidity; cancer, cardiovascular disease and senile dementia. Despite visual and hearing loss, she maintained autonomy in the face of the dependence imposed by the regulations of a nursing home – refusing care and visitors she did not want, smoking in a public place, and insisting on her daily glass of port.

In June 1993, at the age of 118 years, she gave me signed permission to conduct a series of neuropsychological examinations and a computed tomographic scan. Jeanne understood our aims and the nature of the contribution she could make to our understanding of the cerebral ageing process, and she responded to my many questions with intelligence, humour and the politeness of an Arlesian 'grande dame'. She always thanked us at the end of each session for our interest. Performing in the range of most 80-year-olds, despite sensory deficits, she demonstrated above all that, even in the face of significant age-associated cortical atrophy, learning of new material and complex cognitive functioning were still possible and enjoyable (Ritchie, 1995). She also showed me that after five years of confinement to an armchair she could still raise her leg a metre from the ground with little difficulty.

Two years later, in the weeks following her 120th birthday, I examined her for the last time before the director of the nursing

home suspended all visiting rights. She recalled the previous sessions and reiterated her willingness to participate. In that last session she repeated three of the cognitive tasks: immediate name recall, narrative recall and verbal fluency. On the first two tasks she achieved the same level as she had done two years previously, and showed a 30% improvement on her previous score on verbal fluency, thus performing in the range of a 70-year-old. Jeanne appeared to be maintaining her former level of competency. Furthermore, the increasing number of visits she had been receiving seemed to be improving her verbal skills.

The notion of 'successful ageing' was probably first described by Aristotle. He used the term *eugeria*, which he defined as living a long and happy life, without suffering and without being a burden to others. Jeanne might be said to have achieved *eugeria*. Is this a 'freak' occurrence? Probably not; Jeanne's grandmother had lived beyond estimates of maximal life expectancy (80 years) in the 18th century. Today, average life expectancy for women in France is 81 years. Jeanne and her family point to the importance of making a distinction between the notions of 'average' and 'normal'. 'Normality' may be a rare occurrence.

For those of us concerned with mental health Jeanne Calment has caused us to ruminate on two important issues. First, her

mental status clearly challenges the assumption that we will all develop senile dementia if we live long enough. Her capacities were not only reflected in scores achieved on cognitive tests, but also in the quality of her performance – above all she was curious, and laughed both with us and at us. Second, we are left to reflect on the deleterious impact of social isolation and dependence-enforcing institutional care on performance. At the time of our first meeting most members of staff assumed she was demented because she did not speak; but then very few people spoke to her. Her case illustrates the part that social isolation may play in senescent cognitive decline.

Apart from her modest contribution to neuropsychiatry, Jeanne has also played an important role in France, and perhaps elsewhere, as ambassador for the elderly by promoting a positive image of very old age. Taking obvious pleasure in both her memories and her visitors, she also firmly asserted her personal rights. "If I had lived today," she confided in 1993, "I would have been a feminist". In the many students of medicine to whom I have shown extracts of the clinical examinations, her case has inspired considerable interest in psychogeriatric medicine, a field in which typically few young students show overwhelming enthusiasm.

Jeanne also enjoyed our attention. When once asked what she lived for, she replied with a smile, "I am waiting for death . . . and the journalists". The journalists were no longer permitted; Jeanne's choice was limited, and we are left to speculate on the meaning of death by 'natural causes'.

REFERENCE

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