Alzheimer's disease is a physical illness which causes a progressive decline in the ability to remember, to learn, to think and to reason. It was first described by a German neurologist, Alois Alzheimer, in 1907. It is the most common form of dementia, accounting for 50 per cent of those diagnosed as having dementia. Another 20 per cent have multi-infarct dementia and another 20 per cent have both. Ten per cent have a variety of rarer forms of dementia.

The loss of short-term memory is the most striking early sign. As the disease progresses, the loss of the ability to think, reason and grasp complex ideas becomes more and more marked. Simple tasks like trying shoelaces or telling the time become difficult. As the disease takes hold, sufferers become increasingly less aware of their condition.

2 The disease is associated with changes in the neurons in the outer layer of the brain which cause the brain to shrink. Under a microscope it is possible to see damaged brain cells forming 'tangles' and 'plaques'. There are also biochemical changes, with a noticeable reduction in the neurotransmitter acetylcholine. The cause of Alzheimer's disease is unknown, but it is known that it is not caused by hardening of the arteries, under or overuse of the brain, or the effects of stress. There is some evidence that there is excess aluminium found in the brains of people with Alzheimer's. This does not mean that the disease is caused simply by exposure to aluminium. It affects all sections of society, and both sexes equally. There is no known curative treatment.

3 Prevalence of dementia in the population is:

Ages 40–65 less than 1 per cent
Ages 65–70 2 per cent
Ages 70–80 5 per cent
Ages 80 and above 20 per cent

There is some evidence of a genetic influence with a slight but definite familial tendency. This is a stronger genetic link where age of onset is relatively low (between 35 and 60 years).

- ⚠ The onset of Alzheimers is gradual and frequently comes to the attention as a result of some acute disturbance such as an illness, a change of environment or a bereavement. Usually diagnosis occurs a while after the onset of the illness. Decline can be rapid in some people, gradual or uneven in others. Some people can live up to 20 years, but most live for 6–12 years after onset.
- **5** Dementia does not only affect the patient. It profoundly changes the lives of all family members and friends involved. Help from health and social workers is geared towards reducing the stress and strain on caring relatives, as well as alleviating as many unpleasant consequences of the condition as possible.