

began during pregnancy. It is important to disentangle the impact on the infant of the mother–infant relationship and the environment she provides for her child from those genetic factors which place the infant at risk.

Neurobiological features are suggested by reports that: variations in maternal care in the rat promote hippocampal synaptogenesis and spatial learning and memory through systems known to mediate experience-dependent neural development (Liu *et al.*, 2000); schizophrenia is a disorder of developmentally reduced synaptic connectivity (McGlashan & Hoffman, 2000); and selective deficits in early-stage sensory processing in schizophrenia are due to a failure to support the entrainment of intrinsic gamma-frequency oscillations (30–50 Hz or broader, centred on 40 Hz) (Friedman & Coats, 2000) involved in processes associated with encoding into sensory memory both at the cellular level (synaptic potentiation) and at the cognitive level (Haenschel *et al.*, 2000).

This hypothesis is supported by short-term laboratory experience demonstrating that adult female speech production is sufficient to influence infant speech production occurring in the silent intervals between the adult vocalisations of the order of 3 seconds. This is linked with increased coherence of electroencephalograph gamma-band activity associated with the execution of more complex tasks (Friedman & Coats, 2000); language discrimination by human newborns may be influenced by hearing rhythmic aspects of speech while in the womb, a period in development during which exposure may have a more profound impact on the organisation of the brain than does learning after birth (Ramus *et al.*, 2000).

These findings prompt the possibility of prevention of neurocognitive defects (at least those of a sensory and perceptual nature) by establishing effective cortical oscillations, starting during pregnancy as suggested by Yoshida *et al.*

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Disclosing the diagnosis of dementia

We read with interest the paper about truth-telling and the diagnosis of dementia (Pinner, 2000). The thrust of the article is that people with dementia should be told the diagnosis in the same way that patients are told that they are suffering from cancer. The disadvantages of this approach are stated but underplayed. In clinical practice it is common to see patients who have been told the diagnosis of cancer, sometimes with such frankness that they have gone on to develop major psychological sequelae and sometimes fatal decline.

We experienced this recently when a 58-year-old woman, after being made aware of her diagnosis of dementia, developed severe depression and suicidal ideas. The depression worsened her cognitive state and made her non-compliant to intervention. Cognitive decline makes patients more vulnerable and reduces their ability to cope with stress (Clafferty, 1999). Suicides after disclosure of diagnosis have been described (Rohde *et al.*, 1995). Insight regarding progressive cognitive decline is an important determinant of reaction to disclosure. In insightful patients the risk of depressive reactions and suicide must be seriously considered after disclosure of any major illness (Maguire *et al.*, 1996).

The debate about this issue is a further example of the importance of dealing with each patient as an individual. It is good practice for every patient to be informed about the illness and its implications. It is equally important to accept that some patients do not want to know the nature of their illness and informing them is harmful. This perspective needs greater emphasis in

a climate when telling everyone is sometimes seen as the only approach.

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Need for neuropathological studies in pre-senile dementia

Kay *et al.*'s paper (2000) on long-term survival in pre-senile dementia adds a useful and important contribution to this under-researched area. While acknowledging the difficulties faced in drawing valid conclusions from a non-neuropathologically confirmed study, there are several points of interest and concern not raised by the authors.

Pre-senile dementia is a heterogeneous group of disorders and the report that only 19 of 233 cases were not pre-senile dementia of Alzheimer type or pre-senile vascular dementia is a concern. The authors previously recognised that cases defined as Alzheimer's disease by clinical criteria alone may include conditions with non-Alzheimer type pathology, such as Pick's disease (Newens *et al.*, 1993), but felt this reflected only a small number of patients. However, recent evidence suggests that the fronto-temporal dementia (FTD) may account for up to a quarter of patients presenting before the age of 65 (Snowden *et al.*, 1996). Retrospective analysis of case notes using the NINCDS–ADRDA criteria (McKhann *et al.*, 1984) for diagnosing Alzheimer's disease may well include many FTDs, as the criteria for a diagnosis of probable Alzheimer's disease are also features of this subgroup.

The diagnosis was reportedly confirmed in a proportion as part of a case-control study, although there is a risk of selection bias by possible exclusion of the more behaviourally challenging uncooperative FTD patients.