variation. While those observations provide a clue to aetiology, their interpretation is problematic. Many potentially pathological influences vary with the season. Seasons influence the plant and animal environment with changes in the availability of food and in the vectors and hosts of infectious agents. There are also seasonal changes in many other aspects of human behaviour such as occupation and recreation. Some of these changes are reflected in physiological changes in the body. Serum calcium levels, for example, tend to be lower in the winter and early spring than at other times.

A similar excess of winter/early spring birth dates has been recognised in congenital dislocation of the hip (Record & Edwards, 1958) and spina bifida (Leck, 1972). In the former condition, swaddling infants with the hips in extension as seen in Laps and American Indians is a causative factor. As in the previous work of Pulver *et al* (1990) this risk factor is correlated with gender. Females are less prone to this seasonal influence, presumably because other aetiologies such as shallow acetabulae and temporary hormonal joint laxity predominate in female infants. In spina bifida the observation of a seasonal variation in birth incidence has led most investigators to investigate a number of possible causative 'summer teratogenic' factors.

In some conditions, careful data collection has revealed changes in the seasonal influence with time. Anencephaly, as a cause of stillbirth, for example, appeared to lose a previously well recognised seasonal variation (Leck & Record, 1966), without any reduction in incidence. Future investigators into the seasonal trend factor in schizophrenia need to be mindful of the large variety of possible influences at work.

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Peripheral audiosensitivity

SIR: Bohman *et al* (*Journal*, December 1991, **159**, 860–863) described a subjective test for assessing intolerance for graded loud sounds. They seem unaware that there is a large literature on the Loudness Discomfort Level (LDL) Test (Dix, 1974), a standard quick procedure in clinical audiology for measuring loudness recruitment. Patients with cochlear deafness do not hear quiet sounds, but their LDLs are normal or only slightly raised. Working in an ENT clinic, I have not found the LDL test very useful. Objective acoustic stapedial reflex thresholds give the same information about recruitment and loudness registration, and LDLs correlate poorly with patients' complaints of loudness intolerance. If one is going to rely on subjective measures, there is no substitute for a detailed history.

Dr Bohman *et al* highlight the terminological confusion between lowered tolerance of higher intensities and hypersensitivity for threshold levels. Actually, the situation is more complex, at least in the audiological literature, since a third phenomenon, recruitment, has been confounded. I have tried (Gordon, 1986) to clarify this issue by restricting the term recruitment to a property of a damaged cochlea, whereby low-intensity loudness receptors are destroyed, middle-intensity ones impaired and high-intensity ones remain. On the basis of a careful history, audiosensitivity was defined as aversion to the output of TVs, radios or record players at levels tolerated by normal listeners. I restricted the term hyperacusis to better than normal pure-tone thresholds. Recruitment can only occur in patients with raised pure-tone thresholds or cochlear lesions, while audiosensitivity can occur in any patient, often with normal thresholds (e.g. autistic children, neurotics, Williams' syndrome, etc.). The relationship between audiosensitivity and hyperacusis is unclear since clinically they may occur independently, yet both are associated with incipient Menier's disease, lumbar puncture, etc. (Gordon, 1986, 1991). Audiosensitivity has a clear physiological basis, correlating with reversed or hyperactive stapedial reflexes (Gordon, 1986). Curiously, I could find no aural correlate of intolerance to loud noises other than those from audio equipment, i.e. audiosensitivity.

Dr Bohman *et al* assume that the sensory changes after head injury must be cortically mediated, and they implicate the highest level, the frontal area. They do not consider any lower level dysfunction. However, there is much clinical and anatomical evidence showing the post-concussional syndrome to be of labyrinthine origin (Gordon, 1989; Grimm *et al*, 1989).

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Special medical and nursing care needs of people with severe learning difficulties

SIR: Spencer (*Journal*, January 1992, **160**, 132–133) is right to draw attention to the need for dedicated intermediate physical care facilities where people with learning disabilities can be investigated and treated to a high standard. The sick ward of this 700 bedded mental handicap hospital had 88 admissions during 1990, most of them from the four categories defined in his letter.

There is an important fifth group which was not mentioned. It is formed by people with a learning disability who live in the community and have a physical illness for which their local district general hospital (DGH) has been unable to provide optimum care, either through limited experience with them or paucity of facilities and time for prolonged observation and treatment. A national survey of adult training centres in England and Wales showed that only 17% of trainees attending adult training centres were considered to be capable of using medical services (Whelan & Speake, 1977).

That people with learning disabilities require special facilities for their lives to be fully and safely 'normalised' may seem self-evident. It is important that purchasers of their care are made aware of these requirements.

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A HUNDRED YEARS AGO

Hypertrichiasis and mental derangement

Dr Andrea Cristani has written a paper on this subject in the *Archivio di Psichiatrica*, and an abstract of it appears in the *Neurologisches Centralblatt*. He has investigated 272 cases of insanity in females and a similar number of sane women with reference to the development of hair on various parts of the body, in which it is not found under ordinary circumstances. The insane ranged in age from twenty to eighty years, while the sane were all over sixty-five. He found that hypertrichiasis in the face as well as elsewhere is present much oftener amongst the insane than among the sane, that it is associated with signs of degeneration, and that it is more frequently present amongst insane patients in whom other signs of degeneration are present than amongst those who do not show symptoms. He also finds that the hairs are thicker and stiffer, and closely resemble those of the inferior races. The facts elicited are curious and interesting, and they are not easily explainable.

Reference

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Researched by Henry Rollin, Emeritus Consultant Psychiatrist, Horton Hospital, Epsom, Surrey.