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EPIDEMIC PSYCHOSIS

DEAR SIR,

On a recent visit to Thailand I came across three apparent outbreaks of epidemic psychoses. All occurred within a week and appeared to have a substantial psychiatric component. I was unable to investigate them personally and my report is based largely on local press reports, notably the *Bangkok Post*. The first and most spectacular outbreak occurred in North East Thailand when the so-called 'Rok Joo' (genital shrinking disease) recurred despite repeated disavowals by doctors. Several Thai language newspapers carried banner headlines on the alleged recurrence of the dreaded disease with the *Naew Na Daily* saying that the entire North East Region 'is in a panic'. A new outbreak of the disease came to light when more than 50 tapioca plantation workers in Nakhon Ratchasima Province were admitted to the provincial hospital with their genitals only half normal size. The workers, both male and female, reported that the shrinkage occurred soon after they ate canned sardines given to them by their employer. Some male workers blamed 'Krungthong 85' cigarettes for their diminished manhood. The outbreak was also reported as spreading in the Sakon Nakhon Province where people in the Sarakham Village complained that their genitals became smaller after they ate noodles and Pla Too (Mackerel) bought in the village. A provincial member of Parliament confirmed the existence of the disease after visiting some of the patients in the village. "I am fascinated; it did shrink", he is quoted as saying, adding, that all the villagers were fearful of the disease and had stopped eating noodles and Pla Too.

A further outbreak of a rather different sort was reported on the front page of *Naew Na* which said that almost 100 people in two villages in Saraburi Province had contracted rabies after eating a pig that was bitten by a stray dog. The correspondent of the paper, who visited the villages the previous day, said that he was shocked to see naked men, women and children lying around in their houses and "going wild like mad dogs". There was a local rumour that a pig raiser had sold a pig to the villagers a few days ago and it was believed that the pig had been bitten by a dog that had contracted rabies. Public Health officials had been ordered to go to the village to help the afflicted people.

The third report had archetypal features common to traditional eastern snake stories. *Thailand Time* reported that people living near Wat Praputtabart in Lop Buri Province were fearful of a giant snake which had eaten many cows and chickens during the past few days. The paper said that the snake, whose body was said to be as big as a large coconut tree was living in a cave near the temple. Some of the villagers had tried to kill the snake but were stopped by the Abbot who said that he believed the animal was a guardian of a spirit.

The term epidemic psychosis seems to be preferable to the label of mass hysteria because of the many other connotations of the latter diagnosis. Features which appear common in the development of epidemic psychoses are fear created by a false rumour or misinterpretation leading to a group panic state. Overwhelming anxiety increases suggestibility, regression to magical and primary process thinking, and the development of false beliefs which are spread contagiously and which are held, at least temporarily, with delusional conviction. The resulting irrational and non-adaptive behaviour is not easily dispelled by authoritative reassurance. Predisposing factors include membership of an undeveloped peasant community, limited education and cultural beliefs in the supernatural.

Belief in spirits or phi are widespread throughout Thailand and these can take many forms, including demons, goblins, pixies, ghosts, poltergeists, etc. While some phi are benign, many are malicious. To house and placate them one sees everywhere small spirit houses like ornate dolls houses, which are designed astrologically and are places where various anxiety-relieving rituals are practised. Phi may possess people either temporarily or throughout their lives. They can alter behaviour, set people dancing, talking in riddles, change their sex, etc. A cultural acceptance of such supernatural forces may be a potent factor in the epidemiology of epidemic psychoses.

While epidemic psychoses appear to be commonplace in South East Asia, they are not unknown in Europe. Historically there were the dancing manias of the Middle Ages and Tarantism in the 17th century, when psychotic-like illnesses spread following real or imagined bites of spiders. More recent outbreaks have tended to be confined to adolescents, particularly girls, and a notable example was the outbreak of fainting, vomiting and disturbed behaviour occurring in young girls who were members of marching bands and who were rumoured to have been poisoned by ice cream or soil contamination.

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After my visit to Thailand I have asked myself the question, "Are adult European populations immune to these epidemic psychoses or do they now take more subtle forms?" What, for example, might happen if a rumour started in East Anglia that a new fungicide used on the potato crop caused impotence and genital shrinkage. Once such a rumour started, would it be easily dispelled by medical reassurance? If rabies were reported to have spread from Europe to Kent and, at the same time, a wedding party fell ill after eating pork pie from an allegedly infected pig, would people be more readily reassured by public health experts than their Thai counterparts? What would happen if a Scottish farmer reported that the Loch Ness Monster had emerged from hiding and eaten a couple of cows and several sheep? If such an account was endorsed by a local MP, would it be easily rebutted? My own conclusion is that so-called sophisticated Westerners are not immune to gullibility, remarkable suggestibility, magical thinking and shared delusions leading to irrational behaviour. As Orson Welles found some years ago, the fictional announcement of an invasion from outer space can lead to a dramatic psychic epidemic. Social psychiatrists should perhaps give more attention to shared irrational beliefs in our own society.

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NEUROPATHOLOGY OF THE CORPUS CALLOSUM IN SCHIZOPHRENIA

DEAR SIR,

In their study of ipsilateral/contralateral differences in early somatosensory evoked response, Jones and Miller (*Journal*, 1981, **139**, 553–57) found that the interhemispheric conduction time across the corpus callosum in 12 schizophrenic patients was essentially zero. They concluded that schizophrenia may be a split-brain condition akin to agenesis of the corpus callosum and that neuropathological examination of the corpus callosum, of which there is no report yet in the literature, should test this hypothesis.

We recently completed a post mortem histopathological study of the corpus callosum in 18 chronic schizophrenic and 11 nonpsychiatric control subjects. The thickness of the corpus callosum in the schizophrenic sample was not different from the control group, which does not confirm the findings of Rosenthal and Bigelow (1972). However, the corpus callosum was significantly thinner in the cases with late onset (after age 30 years, usually paranoid, N = 7) compared to early onset (before age 30 years, usually nonparanoid, N = 11) (Bigelow *et al*, 1981).

We examined glial cells on a hematoxylin-eosin stain and callosal fibers on a Bielschowsky stain. There were no differences in the number of glial cells per unit area (high-power microscopy) or the number of fibers (cross sections) per unit area between the schizophrenic and control subjects or between the schizophrenic subtypes.

The slides were then evaluated by a neuropathologist blind to the source of the tissue. He rated gliosis as absent (0) mild (1) moderate (2) severe (3) and very severe (4). There was significantly more gliosis in late onset (paranoid) schizophrenia (Rank Sum Test $P < .04$) than in control subjects. There was no difference in gliosis between the early onset schizophrenia and control groups.

The results suggest that late onset (paranoid) schizophrenia may be associated with a chronic inflammatory process, such as viral encephalitis. There is some evidence for a viral involvement in schizophrenia (Torrey and Peterson, 1976).

The possible disruption of interhemispheric transfer across a diseased corpus callosum is consistent with the findings of abnormal lateralization in schizophrenia (Newlin *et al*, 1981) particularly in the paranoid subtype (Nasrallah *et al*, 1981).

It is possible that the absence of a trans-callosal conduction time reported by Jones and Miller (1981) may reflect compensatory ipsilateral pathways secondary to callosal disease. It would be interesting to know what the subtype composition of the Jones and Miller sample was.

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