

syndrome undergoes accelerated aging (Kedziora *et al*, 1981).

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PSYCHIATRIC MORBIDITY AND CIRCADIAN RHYTHMS

DEAR SIR,

In commenting on the paper by Jauher and Weller (*Journal*, March 1982, **140**, 231–5), Dr Gunnar Götestam (*Journal*, September 1982, 317–18) has confused certain matters. One of the confusions arises from the ambiguity of the references to what is 'advanced' when we refer to alterations in the circadian rhythm. He writes, 'Flying east also means a phase advance in the sleep-wake cycle', and cites Wehr *et al* (1979) in support of the observation that a flight eastwards tends to produce elevation of mood. What Wehr *et al* have written is, 'Sleep in depressed patients resembles sleep in normal subjects whose circadian rhythms of temperature and rapid-eye-movement sleep are phase-advanced (shifted earlier) relative to their sleep schedules' (*Ibid*, p. 710). Thus if the phase of the sleep-wake cycle is *advanced* the phase of the other circadian systems is *delayed*. But in writing of flights westwards Götestam states, 'Flying west prolongs the 24 hour day and delays the circadian cycle'. This is incorrect: it does not—it *advances* it (shifts it earlier) relative to the sleep-wake cycle, hence the depressive effect.

Neither is Götestam correct when he states that, 'It is now well known that sleep deprivation elevates mood (Pflug, 1978). A deprivation of a night's sleep may result in a slight increase in mood, as is often experienced by doctors after an entire night on duty'. But the study of Pflug to which he refers was concerned with endogenously depressed patients: in a previous study Pflug and Töller (1971) showed that normal subjects suffer some dysphoria after the loss of a night's sleep in contrast to the relative euphoria of depressed patients. There is little doubt about the

validity of this finding for it has been confirmed independently by Cutler and Cohen (1970) and Gerner *et al* (1979). It seems hardly likely that Götestam's medical colleagues were endogenously depressed! Now that the therapeutic possibilities of using sleep deprivation are being further explored (see Lovett Doust and Christie, 1980) it is of great importance to get our basic facts right.

Finally, I must point out that Götestam is hardly correct in stating that, 'Tricyclic antidepressants (TCA) are not so far known to affect the circadian rhythm . . .' He cites Wehr *et al* (1979) but the latter state quite unequivocally that tricyclics do have this effect—'. . . tricyclic antidepressants and estrogen, all of which have profound effects on depressive illness, also alter the basic timekeeping function of the circadian clock'. (*Ibid*, p. 712).

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MONTHLY VARIATION OF SUICIDAL AND ACCIDENTAL POISONING DEATHS

DEAR SIR,

Barracrough and White (1978a, 1978b) reported that the monthly distributions of accidental and undetermined deaths due to poisons were significantly