

judgements of stress are biased by the "central tendency of judgement"—what is acceptable depends on what you are used to? But what physician would agree that barbiturates are the best sleeping tablets for people who have to sleep during the day; that years of work overload increases the chances of a coronary thrombosis; that eye-strain and headaches may be due to refracture errors?

Though the author is MRC, Cambridge, the publisher is Springfield, Illinois, and the writing is American English: "gotten," "enlisted man," "traveling," "fiber," also "helping to update" and "to bring it into line with present-day thinking." But I hope it is successful on both sides of the Atlantic.

M K WILLIAMS

Shift work and health: a critical review of the literature. By J M Harrington. (Pp 28; £1.00). London: Health and Safety Executive, HMSO, 1978.

The Employment Medical Advisory Service commissioned this review "to undertake a critical analysis of the major publications in an effort to arrive at some acceptable conclusions and to outline directions for future work." Harrington has succeeded in doing this in a detailed but concise and well-presented report that covers shift work practices; evaluates the health effects; studies the influence of, and the effect on, social, domestic, and environmental circumstances; outlines criteria for

optimal shift work practice; and makes some useful conclusions and recommendations.

No new conclusions are arrived at about the health consequences of shift workers and, indeed, the report contains fewer than do some of the papers reviewed. It is pleasing to see the ruthlessly objective critical analysis to which these studies have been subjected since many seem to have been poorly planned. Not all the criticism is negative, however, and due credit is given to the work of P J Taylor, A Aaronsen, and P Andlauer among others.

Only two of the 27 papers specifically concerned with sickness absence suggested that absence from work was higher in shift workers, and, indeed, many studies suggested a lower incidence of sickness absence, but whether or not this is due to self-selection of the workers has not yet been adequately established. Undoubtedly shift work does interfere with normal circadian rhythms causing measurable biochemical change but again significance and consequence of this disruption has not been clearly established. This is apparent among shift workers, which may be related to the lack of good catering facilities at night and the altered dietary habits associated with night shift.

Generally there is agreement that sleep disruption does occur in night shift workers and the vague concept of fatigue is frequently mentioned, although ill-

defined in the papers reviewed. Certainly efficiency and performance are undoubtedly affected in such circumstances, and some papers have suggested that the accident rate is higher at night than during the day.

Some criteria for shift-working practice are outlined and comment is made on the importance of appropriate selection of the workers for the job. The overall conclusion is that there is little evidence as yet that shift work adversely affects health, but many questions remain unanswered, and carefully planned longitudinal studies are required both of shift workers and ex-shift workers. Clearly there have been far too many uncontrolled observations and "an astonishing lack of critical evaluation." Social, domestic, or religious considerations affect people working on shift work, and these are undoubtedly important but often neglected in employers' considerations.

One-fifth of the workforce in industrialised societies have to undertake shift work. This report provides a good summary of the current literature, makes some pertinent observations and useful recommendations, and would be well read by employers and unions as well as occupational physicians. It is to be hoped that having commissioned this excellent report the Employment Medical Advisory Service will be active in following up the recommendations for further research.

E W MACDONALD