

# THE CHOICE OF OBJECTIVE AND SUBJECTIVE TESTS OF DAYTIME SLEEPINESS

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Excessive daytime sleepiness (EDS) in daily life is of increasing interest and importance. However, there is a problem in deciding what it is and how best to measure it. This problem is due, on the one hand, to poor definition of the many words used to describe sleepiness, and on the other hand, to failure of the current conceptual models of sleep and wakefulness to explain sleepiness. These issues are discussed here in terms of the various subjective and objective tests currently used. The Multiple Sleep Latency Test (MSLT) has been widely promoted as a gold standard. It measures the rapidity of sleep onset in one particular situation. This has been assumed, wrongly in my opinion, to be an accurate measure of sleep propensity in other situations and in daily life. The sensitivity and specificity of the MSLT in distinguishing between narcoleptic patients, who by definition have EDS, from normal subjects is reported here for the first time. Neither the MSLT nor the related Maintenance of Wakefulness Test is as discriminating in this regard as the Epworth Sleepiness Scale (ESS) which depends on subjective reports about dozing behaviour in a variety of different situations. All subjective reports are open to bias, but objectivity does not guarantee accuracy if the test measures something that is correlated in an uncertain way with what is intended to be measured. The choice of the most appropriate test will depend on the requirements of the task. These may be different for testing the sedative side-effects of a drug or the average sleep propensity in daily life of patients with obstructive sleep apnea, or whether a truck driver is awake or asleep at a particular time. All existing tests have limitations and more research is needed.