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Letter to the Editor

Sleepwalking and Crime: Review with Emphasis on Indian Legal Provisions

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Sleepwalking (somnambulism) is one of the sleep disorders known as the parasomnias, which are basically not disorders of the processes responsible for sleep rather undesirable phenomena that occur predominantly during sleep. It is a disorder of arousal in which the subject arises from deep sleep displaying short and simple behavior or longer complex behavior, including leaving the bed and walking along with memory impairment of the event [1]. Eyes are often held open and patients may appear awake during sleepwalking, but motor behavior is usually clumsy and purposeless with slowing in speech and mentation and poor response to stimulation. Noteworthy behavior is that in the entire episode there is no screaming, tremors or autonomic signs such as sweating. Complex behaviors such as cooking, eating and drinking, playing a musical instrument and driving a car may occur during sleepwalking [2,3]. Attempts to wake up patients often do not lead to full arousal and may induce resistance and violence.

Disordered arousal mechanisms with an inability of the brain to fully awaken from slow-wave sleep are thought to lead to these motor automatisms [4]. Sleepwalking occurs during slow-wave sleep and therefore is most often evident during the first third of the night or during other times of increased slow-wave activity, such as after-sleep deprivation [5]. Sleepwalking episodes usually occur abruptly during the first 2 or 3 hr of sleep, patients showing a blank facial expression with a low level of awareness and reactivity. Usually, a delta build-up before an arousal during stages 3–4 of non REM (NREM) sleep is visually observed just prior to the somnambulistic events.

The causes of sleepwalking are incompletely understood. Genetic factors are said to be important in the etiology of the disorder because the prevalence of sleepwalking in first-degree relatives of an affected individual is at least tenfold greater than in the general population[5]. Family history is very important, because the prevalence in children increases to 45% if one of the parents is affected and to 60% if both parents are affected. Twin studies too provided support for a possible genetic origin of sleepwalking: the concordance rate in monozygotic twins is 55% compared with 35% in dizygotic twins [5].

Concomitant dysfunction of GABA(A) and cholinergic pathways has also been suggested to predispose the brain to sleepwalking due to the inability to maintain consolidated Slow Wave Sleep (stages 3 & 4), the inability to stop nocturnal movements, and the reduced reactivity to sensory stimuli during sleepwalking episodes [6]. Sleepwalking has also been reported in association with other disorders such as parkinsonism, migraine and hypothyroidism [7, 8, 9]. Sleepwalking may also occur following use of antipsychotic drugs such as quetiapine or olanzapine [11, 12].

Somnambulism (sleep walking) is a form of sleep in

which a person is able to function without any awareness of his motivations and actions. In somnambulism a greater or smaller part of the personality takes command and dictates the general behavior, the rest of the normal personality becoming apparently incapable of consciousness for the time being and having no influence on conduct as there is complete dissociation of behavior patterns from the pattern of awareness. The dissociation involves that part of the brain known as the diencephalons. This is similar to fugue. In true fugue the individual suddenly leaves his previous activity and does something that has no apparent relation to what he has just been doing, and for which he has complete amnesia [12]. The debate has extended far too long.

Somnambulism is a hysterical dissociated state of mind and a sleep disorder. Previously it was considered to be 'automatism simpliciter', or sane automatism and hence was automatically taken out from the purview of 'guilt'. Automatisms are of two types: 'insane' which arise from internal factors such as psychomotor epilepsy or brain functions compromised by disease or defect; whereas, 'sane automatism' is applicable in conditions like semi-somnolence, somnambulism, or extraneous factors like brain concussion or hypoglycemia induced by an injection of insulin [13].

Judge Sir Ian Smith ruled that both sleepwalking and hysterical dissociated states are insane automatism and hence the defendant was forced to enter a secure mental hospital [14]. However, in two other cases somnambulism as an example of insane automatism the defendant was found to be guilty of crime [15].

These cases quoted here reflect upon the dilly-dallying nature of law unable to decide whether crimes committed under somnambulistic behavior be found to be 'guilty but acquitted' or 'not guilty'. The question of finding the defendant guilty and sentencing him or her does not arise. Hysterical dissociated states are by nature would render the offender not guilty because the requirement of law to prove guilty – mens rea – is conspicuously absent. The other ingredient – actus reus – is there but that is the product of mind non-conforming with body action.

In India, such legal examples connecting somnambulism to crime are few and far between. However, it would be apt to quote a case in which the bench of learned judges of High Court set aside the conviction of life sentence awarded to the defendant and pronounced him free [16].

A drastic revision is needed in the present legal provisions governing crimes under the spell of somnambulism. It would be better if separate section for it is created similar to sections 84 IPC (pertaining to insanity) or 302 IPC (pertaining to homicide) governing specific crimes.

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