



BSc HEALTH AND SOCIAL CARE

**BMHP6006 MENTAL DISORDERS
AND PSYCHOPATHOLOGY**

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An infographic with a large orange semi-circle on the left containing the text 'ICD-10 IS THE CLASSIFICATION OF MENTAL AND BEHAVIOURAL DISORDERS'. To the right, black text states 'Headed by the World Health Organisation (WHO) they set out to:' followed by a bulleted list of three points: 'Record global health trends and statistics', 'Document health conditions and diseases internationally', and 'Catalogue the criteria and diagnosis'. Below the list is the source 'Source: (WHO 1992)'. A dashed yellow line curves upwards in the bottom right corner.

ICD-10 IS THE CLASSIFICATION OF MENTAL AND BEHAVIOURAL DISORDERS

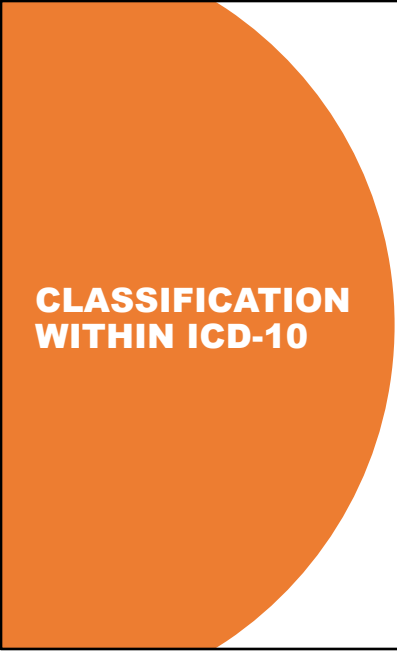
Headed by the World Health Organisation (WHO) they set out to:

- **Record global health trends and statistics**
- **Document health conditions and diseases internationally**
- **Catalogue the criteria and diagnosis**

Source: (WHO 1992)

World Psychiatry (2017), defines ICD-10 as the recording of evidence of human behaviours relating to distress and often with disruption to their personal functions. The WHO recognises the strict criteria so as to lessen the chance of mis-diagnosis when in clinical practise.

ICD-11 is the updated version to be released January 2022 and will include mortality and morbidity statistics, WHO (2020).



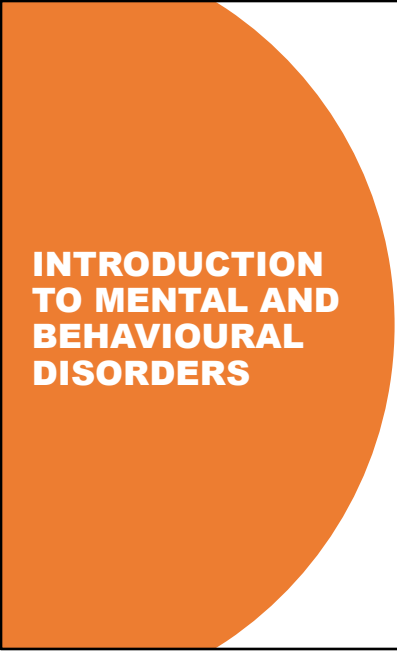
CLASSIFICATION WITHIN ICD-10

- **According to ICD-10 Sleepwalking (Somnambulism) is classified within F50 - F59 Behavioural Syndromes Associated with Physiological Disturbances and Physical Factors**
- **F51.3 Sleepwalking (Somnambulism)**

Source: WHO (1992)



This explains the behavioural habits that can be associated with a disorder that directly affects the physiology of a persons body. An example could be anorexia nervosa whereby the condition can drastically alter a sufferers physical form by turning their bodies into a desperately underweight body to the point of organs losing their capabilities to perform at optimal levels due to the lack of food substance. This could also affect the persons ability to walk and function, Novus Biologicals (2021). Depressive disorder alters how you behave because your thoughts and feelings are so confusing to you. You can feel physically weak so it can directly affect your day to day routine and leave you despondent to everything and everyone around you, Mind (2019).



INTRODUCTION TO MENTAL AND BEHAVIOURAL DISORDERS

- **This can be a collection of diseases and disorders that can severely affect a person's psychological and physiology being**
 - **It has the ability to interrupt a person's mental processes and behaviour in various ways**
 - **It will require the assistance of highly skilled clinical professionals**
 - **It can affect both children and adults**
 - **Most mental and behavioural disorders cannot be explained**
- 

Some of these disorders can cause significant distress not only to the sufferers but to their loved ones.

**CASE STUDY OF
SLEEPWALKING
(SOMNAMBULISM) –
JULES LOWE**

- **32 year old male**
 - **History of sleepwalking**
 - **Frequent episodes when alcohol consumed**
 - **Not know to be violent**
 - **Stressful events in his life**
 - **Killed father whilst sleepwalking**
- 

• **Source: BBC News (2005)**

Legal history was made in the UK after he was acquitted of the murder of his father. Although he did not get a prison sentence he was confined for life to a psychiatric hospital. Sleep study tests carried out on him revealed he killed his father in a sleepwalking state called automatism, put simply “acting involuntarily”. This falls into two categories, non insane, which relates to external factors and insane, which is associated with a ‘disease of the mind’. Extreme violence when sleeping is very rare, BBC News (2005). In 2009 several members of the British Government tabled a motion to amend the law that will see an end to using automatism as a defence to elude prison sentence for murder or rape in criminal cases, UK Parliament (2009). Pressman et al (2007), failed to see a link between excessive alcohol use, violent criminal behaviour and sleepwalking. They believe no evidence conducted scientifically will be able to support this sufficiently.

DEFINITION OF SLEEPWALKING

Sleepwalking (somnambulism) can be defined as an altered state of consciousness, lingering between wakefulness and sleep.

- **Getting up from bed whilst asleep**
- **Having had more than two episodes**
- **Walking around the house, anywhere up to 30 minutes**
- **No memory upon waking**
- **Short time of disorientation and confusion**
- **Face appears to be staring blankly**

Source: WHO (1992)

According to NHS (2017), sleepwalking can be defined as carrying out a series of activities while not awake, this occurs during the early section of the night, they also mention that it is possible to make yourself something to eat, leave the house or drive a car, all whilst fully asleep with your eyes wide open.

F51.4 Sleep terrors (night terrors) share common features such as this occurs during the first third of sleep, duration is under 30 mins, little recall after the event, disorientated and both are absence of any known causative organic factors such as neurological conditions, psychoactive substances or medication, ICD10 (1992).

Both sleepwalking and night terror disorder will arouse the person from sleep, often in the first 3rd of the night. According to the National Institute of Neurological Disorders and Stroke (NINDS) (2020), there are 4 stages of sleep and you are either in non-REM sleep or REM sleep. REM = rapid eye movement. Stage 1 is non-REM, whereby you are just lightly in between sleep and wake. Stage 2 is non-REM but here you experience light sleep. Stage 3 is the last of the non-REM and is considered deep sleep. Both your breathing and heart rate slows down considerably. Brain waves becomes slower. Finally, stage 4 is know as REM sleep, here your eyes are rapidly moving side to side while your eyes are fully closed. The total opposite physiological effect occurs here compared to the first three stages. Your brain wave frequency, heart rate, blood pressure and breathing all becomes faster, similar to your waking

state. You also go into a kind of paralysis which inhibits you from acting out in your dream, technically keeping you safe.

The infographic features a large orange semi-circle on the left side with the word 'AETIOLOGY' in white capital letters. To the right of this semi-circle, there is a list of factors in bold black text. Above the list, a bold black sentence states: 'There are several factors that can cause a sleepwalking event to occur:'. Below the list, the source 'Source: NHS (2017)' is noted. In the bottom right corner, there are several short, curved yellow lines.

AETIOLOGY

There are several factors that can cause a sleepwalking event to occur:

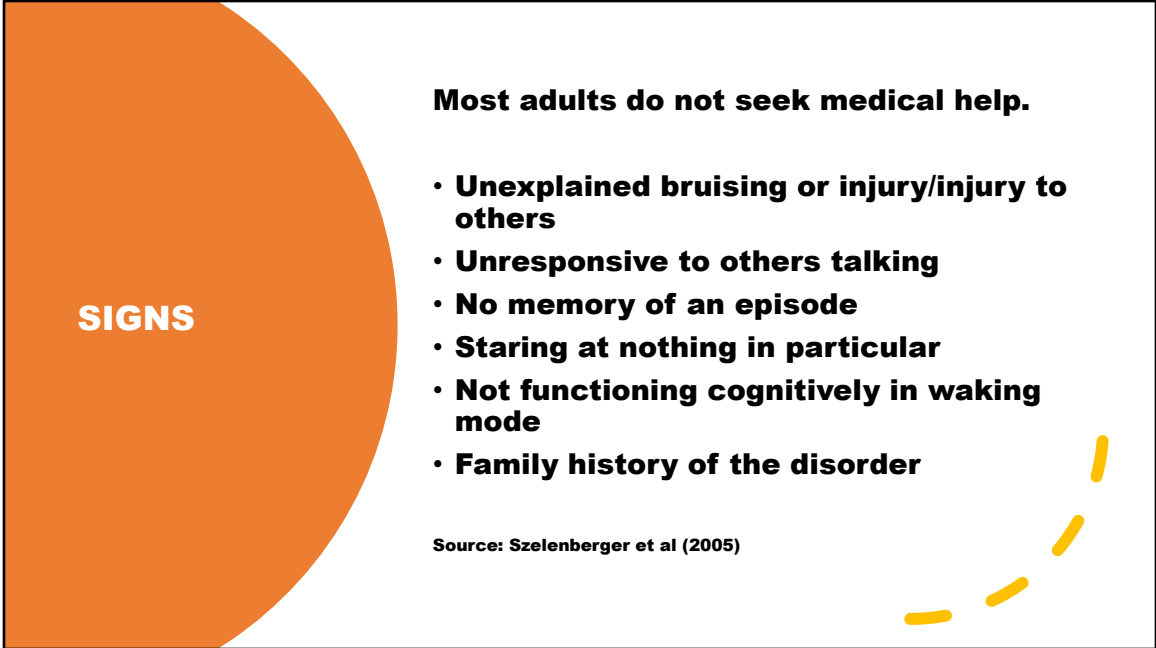
- **Excessive amount of alcohol**
- **Anxiety and stressful situations**
- **Continuous interruption to sleeping patterns**
- **The digestion of recreational drugs**
- **Onset of fever or recovering from a fever**
- **Organic health conditions**

Source: NHS (2017)

Juszczak (2011), is in agreeance with the above but add another cause could be the use of sleep sedatives such as zolpidem which is a hypnotic drug, commonly used for somnambulism.

The findings conducted by Labelle et al (2013), suggest overt psychopathology was not present in their test subjects and that outside of clinical trial a high percentage of adults that show signs of sleepwalking were reluctant to seek medical assistance. Some, however, were compelled to take advisement from their GP's when unexplained injuries occurred and they had no conceivable notion of how it materialised. Others, who had partners wee encouraged as a precautionary measure, as the partners were concerned, even fearful of the possibilities that the sleepwalker could accidentally harm them or themselves. The study did not find any main causes, in excess of the usual causes, for sleepwalking, however, they could not rule out sleep apnoea as a probable cause but did stress the need for more research in this area.

A study performed by Desautels et al (2013), looked at somnolence in adults in a daytime situation and found the main reason the test subjects sleepwalked at night was directly due to them being in a state of semiconsciousness during the waking hours.



SIGNS

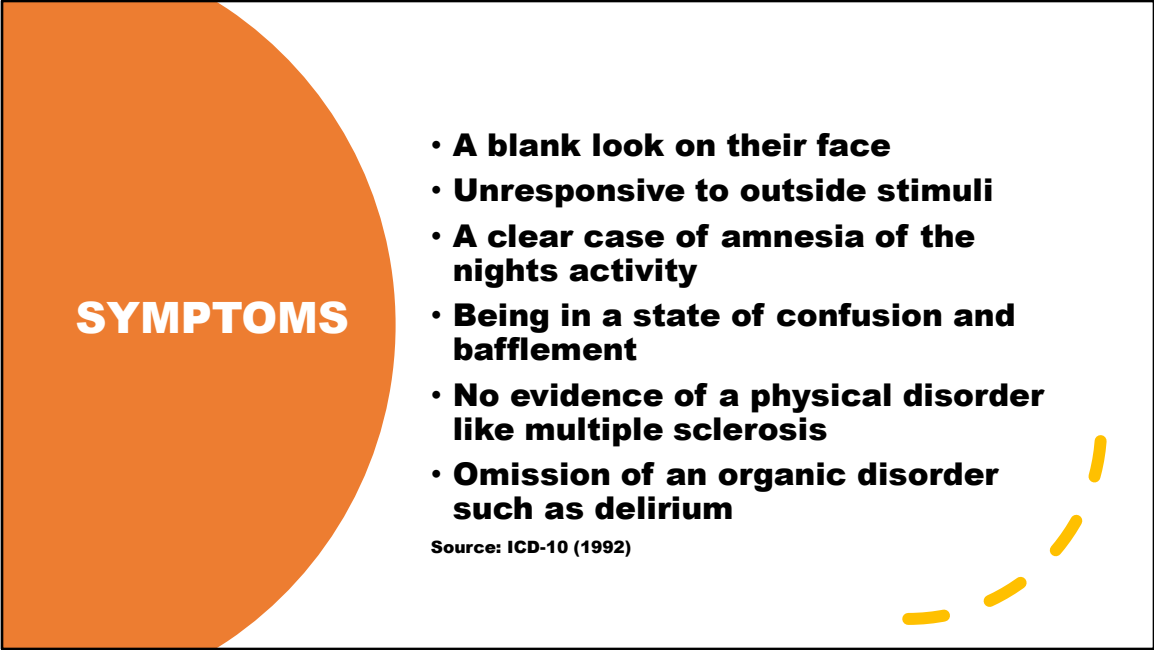
Most adults do not seek medical help.

- **Unexplained bruising or injury/injury to others**
- **Unresponsive to others talking**
- **No memory of an episode**
- **Staring at nothing in particular**
- **Not functioning cognitively in waking mode**
- **Family history of the disorder**

Source: Szelenberger et al (2005)

Szelenberger et al (2005), looked closely at both sleepwalking and sleep terrors and found these two conditions mirrored each other but with slight differences. With night terrors sufferers do not leave their beds and walk around, they tend to wake up and scream and be in a state of panic and presents with rapid breathing and intense anxiety. The pre-disposition of a genetic make up did not go unnoticed by Szelenberger et al, they conclude that the DQB1 gene is likely to be the culprit for these parasomnias as the DQB1 gene oversees motor control during sleep.

NOTE: DQB1 gene is responsible for helping to make a protein in the body that helps the immune system distinguish the body's proteins from proteins made by foreign invaders, such as viruses and bacteria. If DQB1 is not working at optimal pace it can produce health concerns like, narcolepsy and other sleep disorders, juvenile arthritis, autoimmune disorders and type 1 diabetes., Medlineplus.Gov (2020).



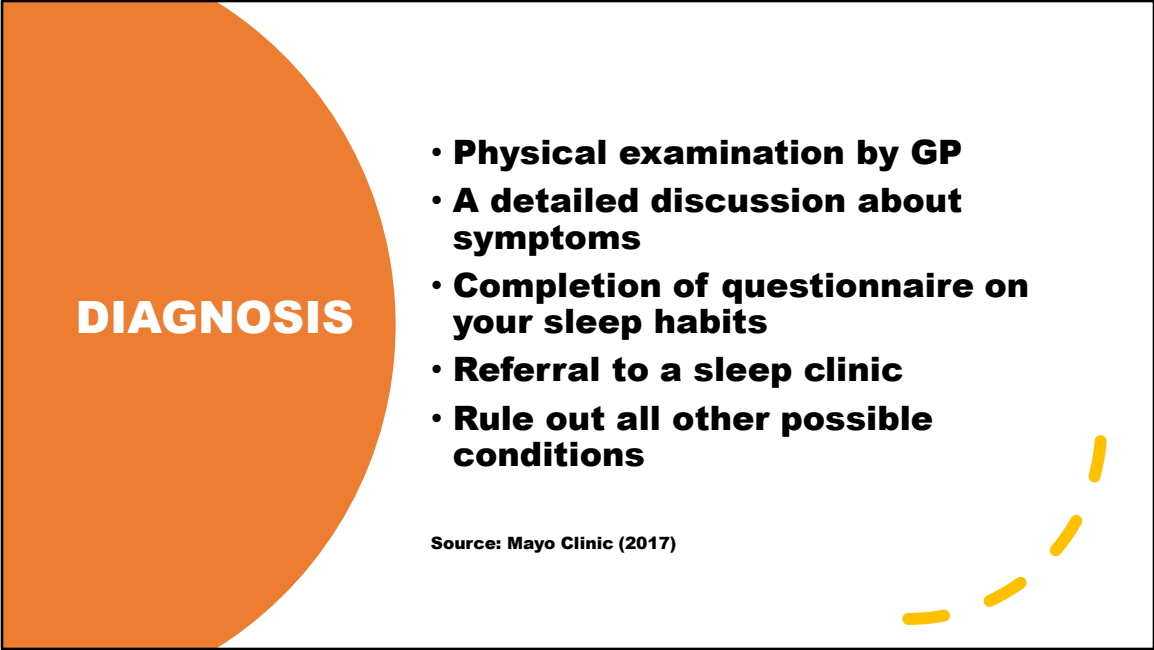
SYMPTOMS

- **A blank look on their face**
- **Unresponsive to outside stimuli**
- **A clear case of amnesia of the nights activity**
- **Being in a state of confusion and bafflement**
- **No evidence of a physical disorder like multiple sclerosis**
- **Omission of an organic disorder such as delirium**

Source: ICD-10 (1992)

A look at Cochen de Cock (2016), noted that possible symptoms could be due to the constant fatigue, anxiety and depression.

Ajlouni et al (2005), studied patients with hyperthyroidism and brings to light that other illnesses could contribute to a persons symptoms as to why they may sleepwalk. If you consider the factors associated with hyperthyroidism, namely weight-loss, palpitations, tremors, irritability and restlessness you could understand the constant stress and worry of the condition, hence the possibility of the manifestation of somnambulism due to the body being in extreme high anxiety throughout the day. Ajlouni concluded that this should not be ruled out as a possible symptom.

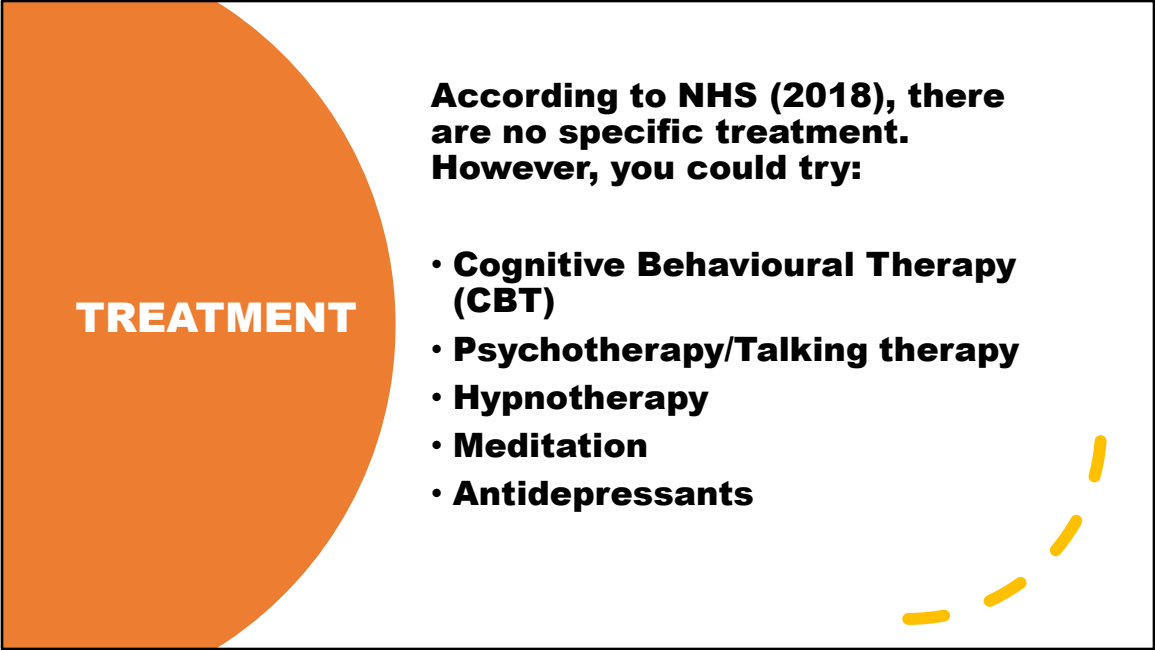


DIAGNOSIS

- **Physical examination by GP**
- **A detailed discussion about symptoms**
- **Completion of questionnaire on your sleep habits**
- **Referral to a sleep clinic**
- **Rule out all other possible conditions**

Source: Mayo Clinic (2017)

According to Zadra (2008), the diagnosing of somnambulism can be a difficult task when performing it under test conditions, oftentimes the episodes from the test subjects does not transpire within the laboratory setting. However, the test subjects are initially assessed by video-polysomnography to get a clear baseline levels of brain waves activity, blood oxygen levels, breathing and heart rate. It also monitors the test subjects movements. This over night treatment is an excellent way to be properly diagnosed.



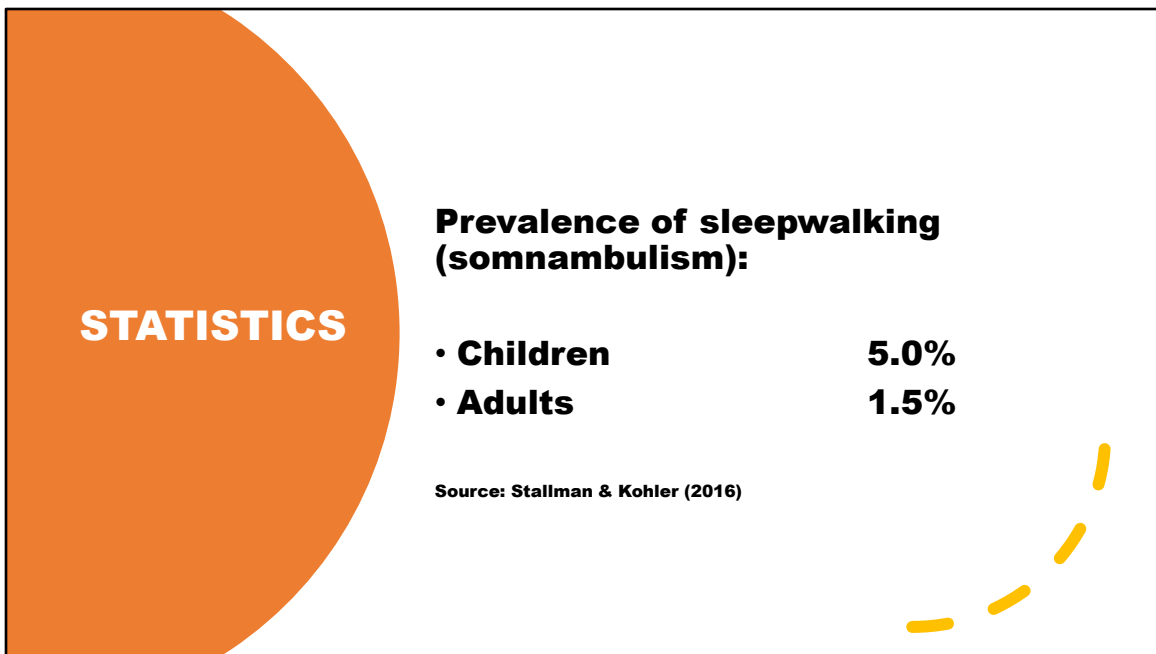
TREATMENT

According to NHS (2018), there are no specific treatment. However, you could try:

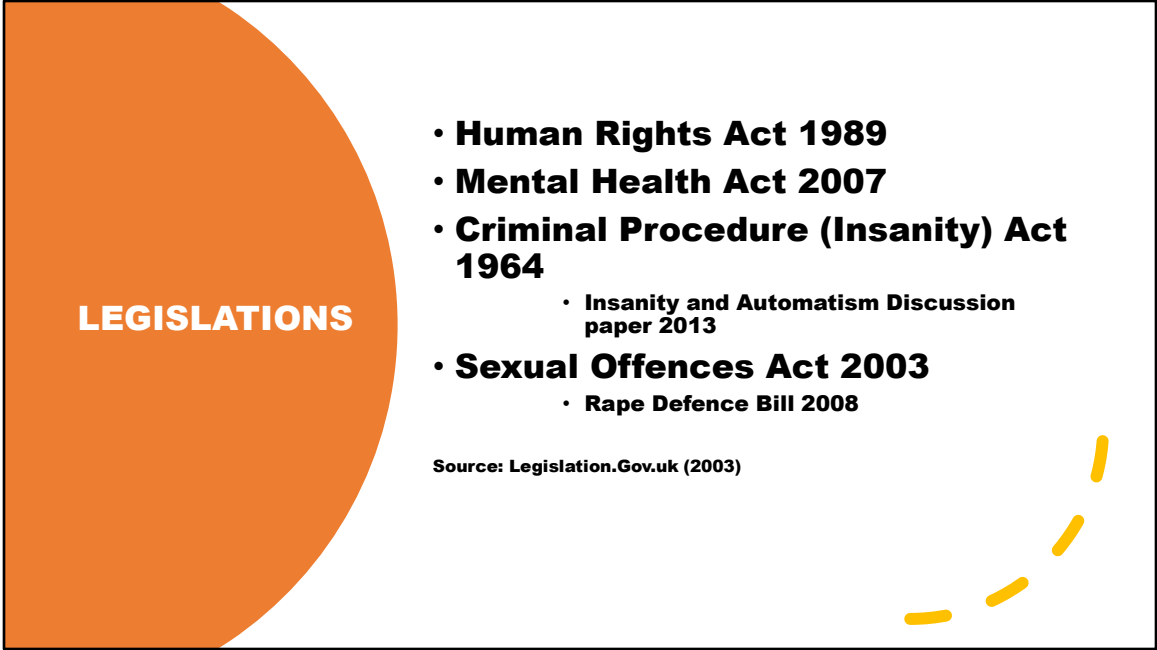
- **Cognitive Behavioural Therapy (CBT)**
- **Psychotherapy/Talking therapy**
- **Hypnotherapy**
- **Meditation**
- **Antidepressants**

CBT is excellent for people suffering from mental and behavioural disorders as it helps to alter a person's thinking and behaviour.

Hypnotherapy helps by making a series of suggestive statements to your subconscious. Meditation/yoga helps to relax and calm a person down and reduces stress. Medication like Zopiclone is a sleeping pill, normally for insomnia, but side effect is sleepwalking, NHS (2018).



Although sleepwalking is prevalent in children and adolescents it is common for them to grow out of it in the teenage years. According to Cochen de Cock (2016), it is thought there are approximately 2.5 to 4% of adults with this condition. This figure clearly differs from Stallman and Kohler. Knott and Huins (2018), somnambulism is extremely common amongst children, although no known causes, it is claimed that 1 in 5 children will have at least one sleepwalking incident. The average age is around 10 years old but it could also be younger than that. This behaviour will often stop in teenagerhood.

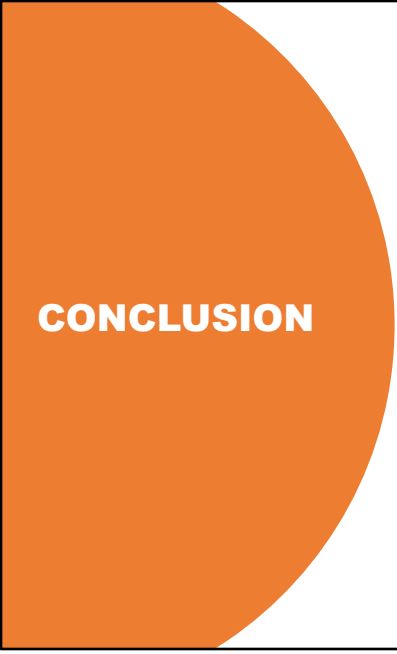


LEGISLATIONS

- **Human Rights Act 1989**
- **Mental Health Act 2007**
- **Criminal Procedure (Insanity) Act 1964**
 - **Insanity and Automatism Discussion paper 2013**
- **Sexual Offences Act 2003**
 - **Rape Defence Bill 2008**

Source: Legislation.Gov.uk (2003)

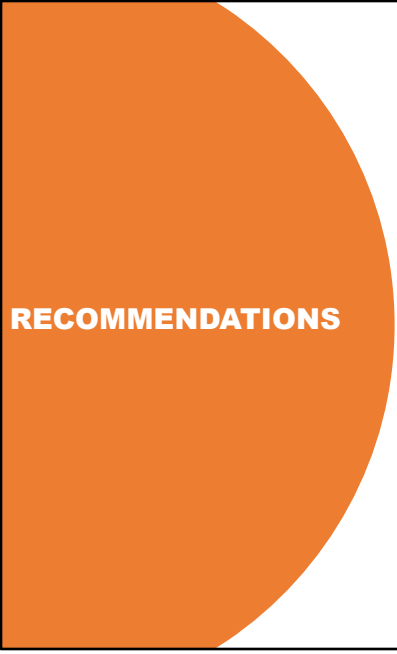
In 2008 the MP Cohen petitioned Parliament for the Government to amend the 2003 Sexual Offences Act to disallow the automatism defence in the case of rape or other sexual offences.



CONCLUSION

To sum up:

- **Clearer judicial procedure in criminal cases**
 - **More research to fully understand this disorder**
 - **More specific treatment for this condition**
 - **Improve UK statistics on active cases**
 - **Reform the legislation to make it harder to plea this disorder as a defence**
- 



RECOMMENDATIONS

- **Avoid naps during the day**
 - **Ensure your bed is comfortable, if not purchase a new one**
 - **Avoid alcohol and caffeine (they are stimulants)**
 - **Practise yoga, mindfulness or meditation to settle your mind**
 - **Remove all distracting objects from your room, including all mobile devices before bed**
 - **Adjust room temperature to cool**
 - **Go to bed at the exact same time each night**
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REFERENCES

- Ajlouni, K. M. *et al.* (2005) 'Sleepwalking Associated with Hyperthyroidism', *Endocrine Practice*, 11(1), pp. 5–10.
- Cochen De Cock, V. (2016) 'Sleepwalking', *Current Treatment Options in Neurology*, 18(2), p. 6. doi: 10.1007/s11940-015-0388-8.
- Desautels, A. *et al.* (2013) 'Daytime somnolence in adult sleepwalkers', *Sleep Medicine*, 14(11), pp. 1187–1191. doi: 10.1016/j.sleep.2013.04.029.
- Juszczak, G. R. (2011) 'Desensitization of GABAergic receptors as a mechanism of zolpidem-induced somnambulism', *Medical Hypotheses*, 77(2), pp. 230–233. doi: 10.1016/j.mehy.2011.04.019.
- Knott Dr, L. and Huins Dr, H. (2018) *Sleepwalking | Causes and Treatment*. Available at: <https://patient.info/mental-health/insomnia-poor-sleep/sleepwalking> (Accessed: 4 April 2021).
- Labelle, M.-A. *et al.* (2013) 'Psychopathologic correlates of adult sleepwalking', *Sleep Medicine*, 14(12), pp. 1348–1355. doi: 10.1016/j.sleep.2013.05.023.
- Legislation.Gov.UK, E. (2003) *Sexual Offences Act 2003*. Statute Law Database. Available at: <https://www.legislation.gov.uk/ukpga/2003/42/contents> (Accessed: 6 April 2021).
- Medlineplus.Gov (2020) *HLA-DQB1 gene: MedlinePlus Genetics*. Available at: <https://medlineplus.gov/genetics/gene/hla-dqb1/> (Accessed: 5 April 2021).
- Mind.org.uk (2019) *About depression*. Available at: [/information-support/types-of-mental-health-problems/depression/about-depression/](https://www.mind.org.uk/information-support/types-of-mental-health-problems/depression/about-depression/) (Accessed: 6 April 2021).

REFERENCES

- NHS (2017) *Sleepwalking*, *nhs.uk*. Available at: <https://www.nhs.uk/conditions/sleepwalking/> (Accessed: 30 March 2021).
- Ninds.Nih.Gov (2020) *Brain Basics: Understanding Sleep | National Institute of Neurological Disorders and Stroke*. Available at: <https://www.ninds.nih.gov/disorders/patient-caregiver-education/understanding-sleep> (Accessed: 31 March 2021).
- Novus Biologicals (2021) *Behavioral Syndrome Associated With Physiological Disturbance And Physical Factors: Disease Bioinformatics*, *Novus Biologicals*. Available at: <https://www.novusbio.com/diseases/behavioral-syndrome-associated-with-physiological-disturbance-and-physical-factors> (Accessed: 6 April 2021).
- Pressman, M. R. *et al.* (2007) 'Alcohol-induced sleepwalking or confusional arousal as a defense to criminal behavior: a review of scientific evidence, methods and forensic considerations', *Journal of Sleep Research*, 16(2), pp. 198–212. doi: <https://doi.org/10.1111/j.1365-2869.2007.00586.x>.
- Stallman, H. M. and Kohler, M. (2016) 'Prevalence of Sleepwalking: A Systematic Review and Meta-Analysis', *PLOS ONE*. Edited by A. P. Arez, 11(11), p. e0164769. doi: 10.1371/journal.pone.0164769.
- Szelenberger, W., Niemcewicz, S. and Dąbrowska, A. J. (2005) 'Sleepwalking and night terrors: Psychopathological and psychophysiological correlates', *International Review of Psychiatry*, 17(4), pp. 263–270. doi: 10.1080/09540260500104573.
- WHO ICD-10 (1992) *WHO | ICD-10 classification of mental and behavioural disorders*, WHO. World Health Organization. doi: 10/en/index.html.
- WHO ICD-11 (2020) *ICD-11 - Mortality and Morbidity Statistics*. Available at: <https://icd.who.int/browse11/l-m/en> (Accessed: 3 April 2021).
- Zadra, A., Pilon, M. and Montplaisir, J. (2008) 'Polysomnographic diagnosis of sleepwalking: Effects of sleep deprivation', *Annals of Neurology*, 63(4), pp. 513–519. doi: <https://doi.org/10.1002/ana.21339>.