



Normal Sleep 睡眠

- 很小的動作
- 固定的姿態 躺著或是 趴著
- 刺激的反應程度降低
- 睡眠狀態回復到清醒狀 態

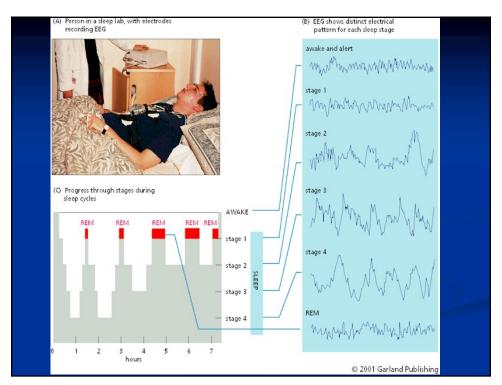


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睡眠的階段

- NREM sleep (非速眼動睡眠) 75%
 - Stage 1, 2, 3, 4 (四個次階段)
 - Stage 3 / 4 (SWS)
- Rapid Eye Movement sleep (速眼動睡眠) 25%
 - 腦波與清醒的時候是沒有太大差別
 - 眼球是快速地左右移動
 - 肌肉張力會很低 幾乎全然鬆弛
 - 溫度改變(poikilothermia)
 - 夜間陰莖勃起





睡眠與發展

- 新生兒 16-18 小時; 50% 是 REM sleep
- 兒童 10 小時
- 少年 8 小時
- 成年 8 小時; 20% 是 REM sleep
- 老年人 5-6 小時

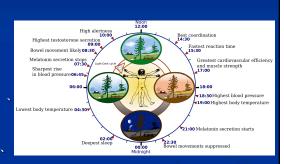


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Circadian Rhythm 日夜節奏

■ 內在節奏

- 生物時鐘 (internal clock)
- 自由運轉 25 小時
- 睡眠時有關的激素
 - 腎上腺皮質醇、 生長激素 褪黑激素
- 時間給予者 (zeitagiver):
 - 時間線索 光線、溫度、 運動、進餐以及社交活 動



睡眠異常

- Dyssomnias 睡眠障礙
 - Primary Insomnia 失眠
 - Primary Hypersomnia
 - Narcolepsy 嗜睡症
 - Breathing-related Sleep Disorder
 - 睡眠呼吸暫停/睡眠窒息症
 - Circadian Rhythm Sleep Disorder

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Insomnia 失眠

- ■睡不著
- ■睡不好
 - 不僅睡不著,睡著後還睡不好,易 受干擾,睡眠無法持續,無法深沈
 - 睡得好不好亦受主觀認知影響,例 如作夢





Insomnia 失眠

- 生理疾病
 - 胃潰瘍、心臟、腎臟引起的 生理異常、疼痛
- ■精神疾病
 - 焦慮症、憂鬱症 (失眠或過 眠)
- 藥物影響
 - 刺激物、飲料、食品、藥物
- 睡眠異常:
 - 生理性: 睡眠神經機制問題
 - 心理性: 制約形成、觀念錯 誤



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增強夜晚時想睡的欲望

- ■避免午睡或白天小睡
- ■減少臥床的時間
- ■可以在白天運動
 - 運動在睡前6小時完成
 - ■晚上只做按摩或柔軟體操
- ■睡前沖溫水澡



日夜節奏的維持

- ■維持固定的起床時間
- ■加強日夜節奏的時間線索



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避免使用興奮性藥物

- ■不抽煙
- ■不飲酒
- ■不喝含咖啡因的飲料
 - ■咖啡因的作用可達10小時,故有睡眠困擾者, 中午以後最好不要喝咖啡









相關睡覺情境

- 舒適的睡覺場所及寢 具
- 臥房功能單純化,沒 有不當的連結
- 發展適當的睡前禮儀
- ■放鬆入眠



失眠之認知行為治療

- ■刺激控制治療
 - 正確連結:床和睡眠行為 -放鬆、睡意
 - ■睡不著就起來
 - ■睡眠限制治療
- 降低生理激發(亢奮)
 - 維護生理時鐘之規律性
 - 肌肉放鬆訓練
- ■避免胡思亂想



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處理輪班引起之失眠

- 睡眠環境的維持
- 安排兩階段的睡眠

 - 一長(約4小時)一短(約2-3小時)或一短一長 例如:值完大夜班下班後,可睡4小時,在上班之 前再睡2-3小時。上班前的睡眠對於上班時的警覺
- 維持週末和週間的週期一致
- 順時針方向的輪班
 - 日→小夜→大夜→日
- 服用短時間作用的安眠藥



LETTERS TO THE EDITOR

Segmented Sleep in Preindustrial Societies

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I was intrigued to learn of the study conducted of three preindustrial cultures, without access to electric lighting, by a team of researchers led by Dr. Jerome Siegel in an effort to determine how humans slept "before the modern era." Titled 'Natural Sleep and Its Seasonal Variations in Three Pre-industrial Societies," it appears in the November issue of Current Biology. 1 Having written on the predominance of "segmented sleep" in preindustrial Europe,2 I was particularly surprised by the discovery reported by Yetish et al.1 that the members of all three of these equatorial societies did not "regularly awaken for extended periods in the middle of the night." In short, these individuals did not experience a "bimodal sleep pattern." The authors conclude, "by extension," that this pattern was "probably not present before humans migrated into Western Europe. Rather, this pattern may have been a consequence of longer winter nights in higher latitudes." Not only is this broad inference highly questionable, but significant historical and ethnographic evidence also exists to suggest the prevalence of segmented sleep in preindustrial equatorial cultures.

First, segmented sleep was common across preindustrial Europe throughout the year, not just during long winter nights.

10 o'clock," so that "before midnight their first sleep" was "usually over." 6

More recently, ethnographic evidence from the late 19th century to the latter half of the 20th century indicates that numerous non-Western cultures not exposed to artificial lighting still experienced "first" and "second" sleep, from Surinamese Maroons on the northeastern coast of South America7 to the Asante and Fante on the West African coast, for whom the phrase in their native Tshi language "woada ayi d. fā" signifies "they lie in the first sleep," whereas "wayi (or wada) d. biakō" reads "he has slept the first part of the night." Villages of the G/wi in Africa were found to be alive at night with newly awakened adults and children. Like the Ju/'hoansi studied by the team led by Dr. Siegel, the G/wi are among the San peoples who are hunter-gatherers in southern Africa. Based on long intervals of time living with the G/wi between 1958 and 1964, the remarks of the Australian anthropologist George B. Silberbauer are at the least suggestive: "A G/wi camp never has an uninterrupted night's sleep. There is always someone awake, adding wood to the household fire, eating a snack, seeing to a child, listening to a strange noise in the bush, or keeping watch if dangerous

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