

Aston Research Centre for Healthy Ageing

Just Retired, or Too Tired?

- the impact of sleep problems on
everyday life

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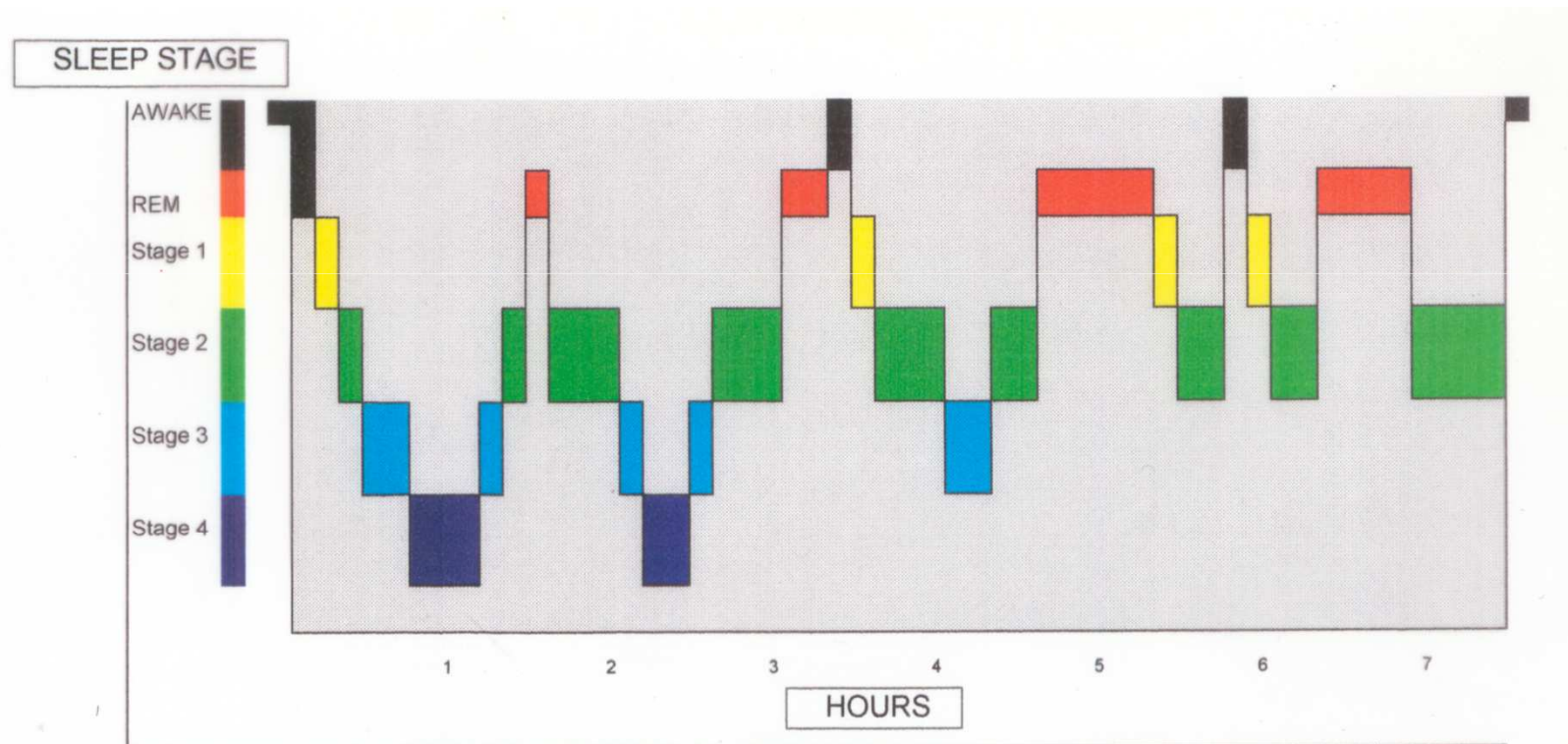
School of Life and Health Sciences, Aston University
And Birmingham Heartlands Hospital

Ageing and Sleep

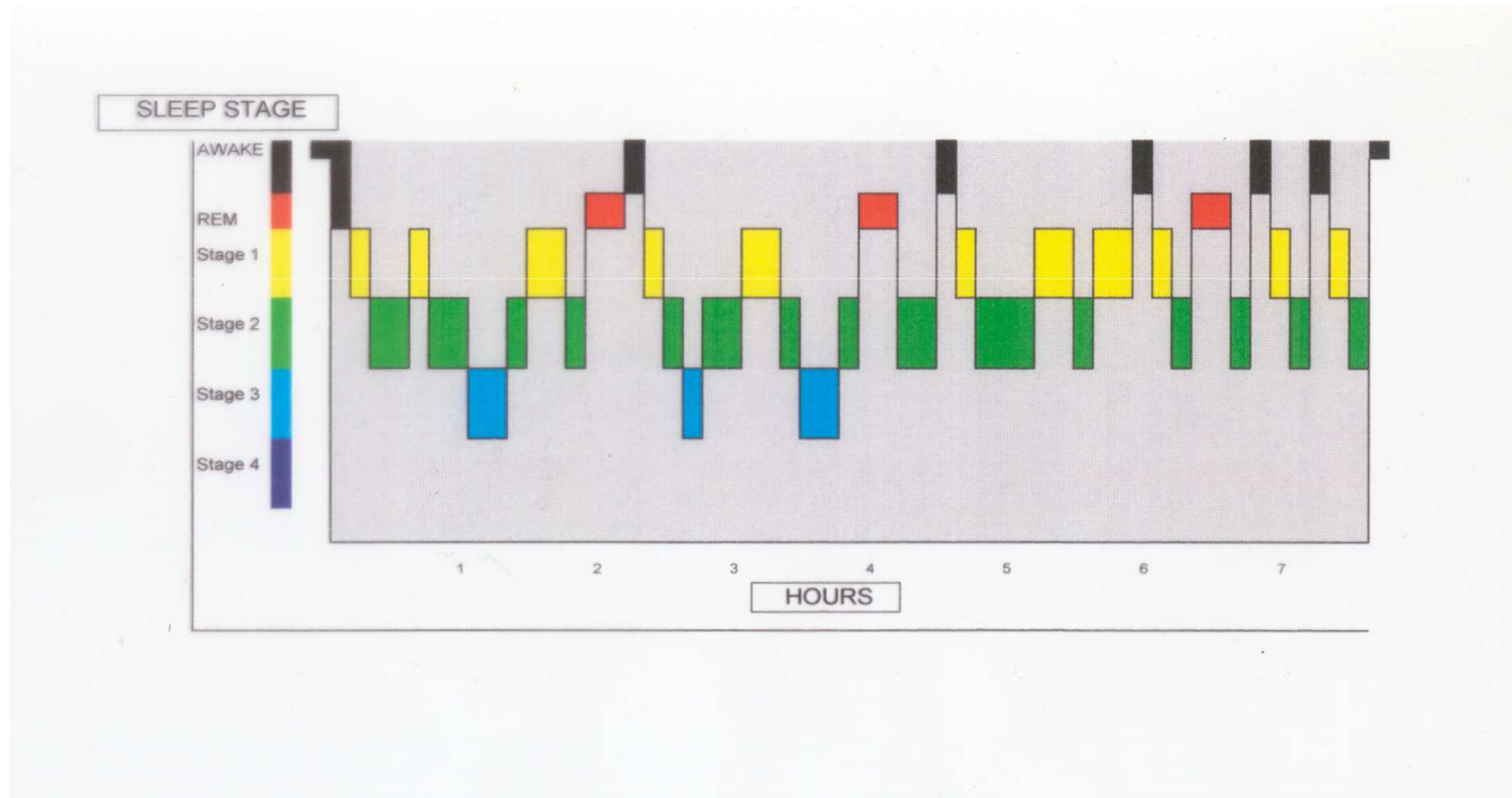
“If one is going to age, the key is to do it gracefully, to stay as healthy as possible, and to keep getting a good night’s sleep”



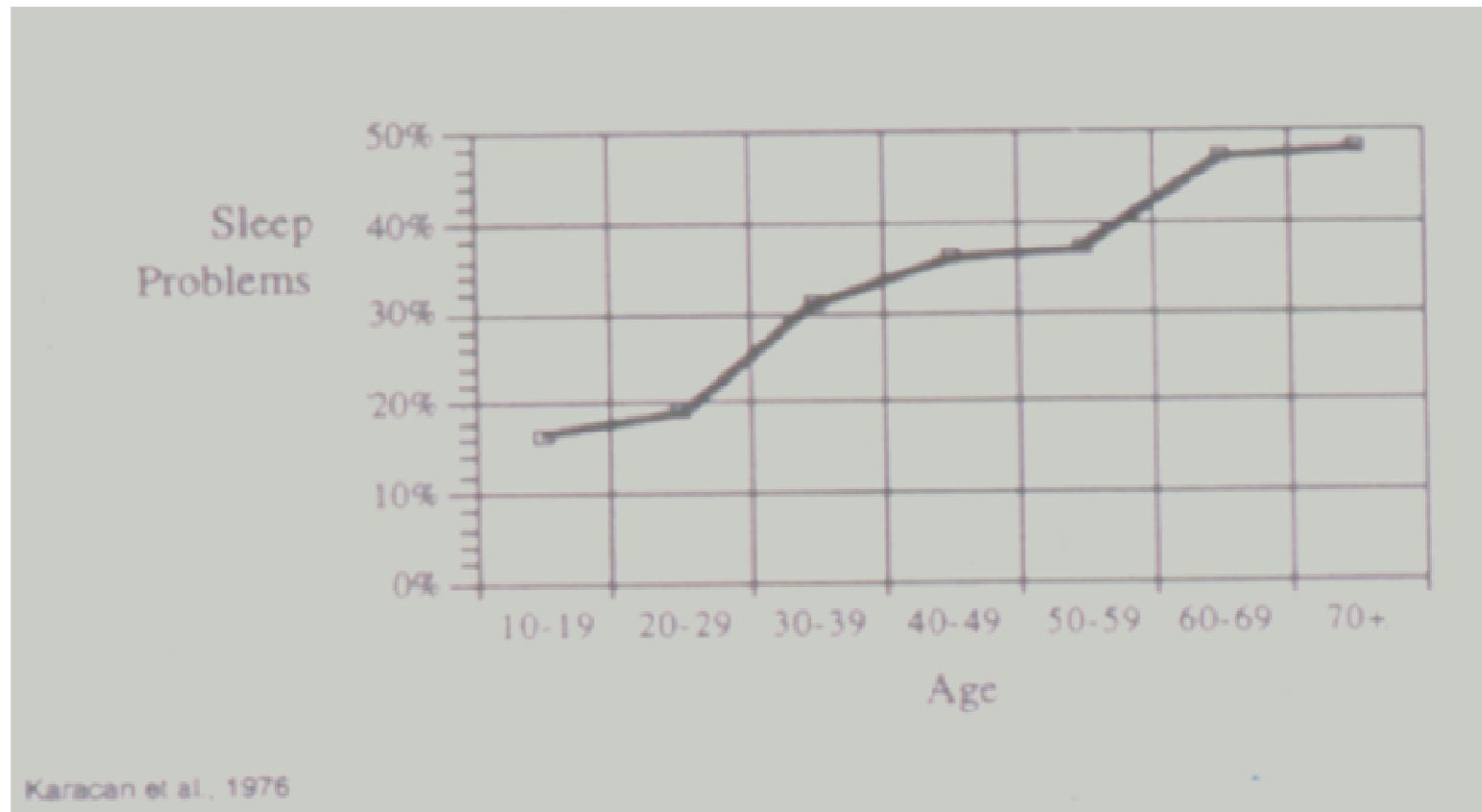
Cycles of Sleep–Young Sleepers



Sleep Cycles as we age



Changes in sleep with age



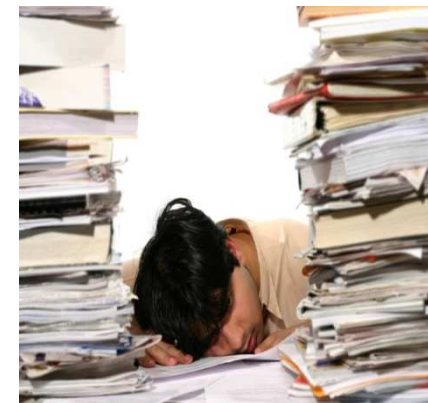
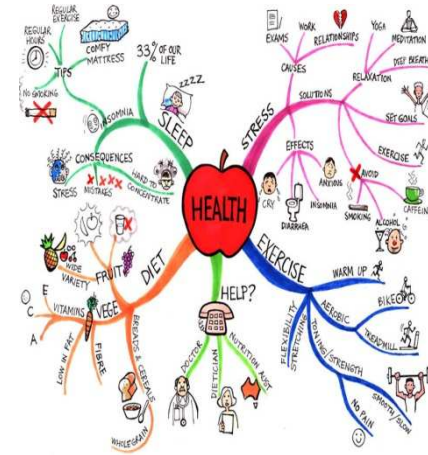
Sleep disorders that costs the society?

- Sleep deprivation
- Insomnia
- Obstructive sleep apnoea
- Sleep behaviour disorders / parasomnias / acting out dreams (REM behaviour disorder)
- Other sleep conditions eg drug induced sleepiness, other neurological conditions eg multiple sclerosis, Parkinson's disease, dementia etc

Causes of poor sleep in older adults

- Physiological – age related
- Medical illnesses
- Psychiatric
- Medications
- Sleep disorders e.g. Obstructive sleep apnoea (OSA), Restless legs syndrome / Periodic leg movements, REM behaviour disorder
- Behavioural and social – retirement, lifestyle changes, bereavements, napping

All aspects of society are affected by sleep disorders



Sleep changes in the older adult

- Most age related changes occur mid adulthood
- Older adults tend to complain less of compromised sleep compared to younger adults
- BUT 50% of older adults will still complain of chronic sleep disturbance

Research Interests in Sleep in the elderly at Aston University

- The impact of sleepiness on day to day functioning e.g. driving capabilities
- The impact of sleep disorders particularly OSA on day to day physical and cognitive functioning in the older adult
- Development of new medications to assist sleep (insomnia) in the older adult
- The impact of dementia / PD on sleep (and carers)

Example of sleep research at Aston

- 75years old patient attends NHS clinic – complains of being sleepy
- Sleep test confirms sleep is disrupted by sleep apnoea
- Attends Department of Psychology Driving Simulator Centre
- QUESTIONS – compared to a similar 75 years old who doesn't have sleep apnoea, how do those who have OSA perform on a driving simulator?
- Are they aware of obstacles on the driving screen
- Can they respond quick enough?
- ANSWER – to be confirmed



Collaborations with Aston

Sleep research

- Aston Research Centre for Healthy Ageing (ARCHA)
Sleep and cognition and simulated driver assessment
- Aston Brain Centre
Neuroimaging and sleep neurophysiology assessment
- NHS partners
Heart of England NHS foundation Trust (HEFT)
Clinical trials include assessment of novel insomnia treatment in the older adult and the effect of continuous positive airway pressure (CPAP) on cognition in older adults patients with OSA

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THANK YOU