Promoting rest breaks and resources to improve sleep hygiene for junior doctors working nightshifts

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Guy’s and St Thomas’ NHS Foundation Trust

What was the problem?

Sleep is fundamental to good health but junior doctors receive little teaching on its importance, particularly with respect to their own health when working nightshifts.

What was the solution?

Knowledge of basic sleep physiology, together with simple strategies to improve core sleep and the ability to cope with working nights, can bring significant improvements for junior doctors and the patients they care for.

Teaching on strategies to improve sleep and cope with working nightshifts is integrated into mandatory junior doctor induction in Evelina London Children’s Hospital, and for every new Foundation-programme doctor starting work in the trust.

Guy’s and St Thomas’ staff who feel too tired to drive home safely after a nightshift but have no alternative travel options, can contact the duty site nurse practitioner, who will try to find them a bed. If this is not possible, they will discuss and make other arrangements, with no charge to the individual. In practice this rarely happens as most staff can get home by public transport.

The trust supports staff who work nightshifts, and promotes a ‘take a break’ culture. Breaks for staff are not a luxury – especially during busy or intense night work – but essential for safe, effective patient care. The trust’s HALT campaign\(^1\) emphasises that, unless critically ill patients require immediate attention, patients are always better served by clinicians who have had appropriate rest during their shifts.

What were the challenges?

The challenge was to break down the prevailing culture and overcome the idea that ‘it’s just not possible to do this’. Presentations to senior executives and clinical directors before implementation helped with this.

What were the results?

Feedback on teaching sessions to improve sleep hygiene included:

- “Best lecture of my life! So engaging thank you – PLEASE GIVE TO ALL DOCTORS.”
- “Excellent presentation, nice to have practical tips regarding our own health.”
- “Why have we not had this talk before? Genuinely concerned about driving post night shift when my drive is 1 hour.”
- “Very well presented and useful information given.”

Want to know more?

- Fifteen-minute consultation on problems in the healthy paediatrician: managing the effects of shift work on your health
- Night-time shift work and the new junior doctor contract
- Sleep: looking after your wellbeing
- See appendices 1 to 3 below.

Dr Michael Farquhar, Consultant in Sleep Medicine, Evelina Children’s Hospital
Michael.Farquhar@gstt.nhs.uk
Twitter: @DrMikeFarquhar

To see the other case studies in this series: visit the NHS Improvement website at:
https://improvement.nhs.uk/resources/engaging-supporting-and-valuing-doctors-in-training/

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2 http://ep.bmj.com/content/early/2016/12/16/archdischild-2016-312119
3 http://www.londonpaediatrics.co.uk/all-news/night-time-shift-work-and-the-new-junior-doctor-contract/
Appendix 1: Top tips for good sleep

Dr Mike Farquhar, Consultant in Sleep Medicine, Evelina London Children’s Hospital

Create a good sleep environment

Your bed, including mattress and pillows, should be comfortable and supportive. Make your bedroom as dark as possible:

- invest in blackout blinds/curtains
- do not switch on main bright lights if you need to get up through the night
- consider a good quality eye mask for daytime sleeping.

External noise should be reduced as much as possible:

- consider use of white noise (e.g. a fan, quiet relaxing music, a radio turned to static) or ear plugs.

Your bedroom should be cool:

- aim for a temperature of ~18°C to 20°C
- a warm bath, or wearing bed socks, can encourage peripheral vasodilation before sleep, which helps to optimise core body temperature.

Some natural remedies, such as lavender, can improve sleep quality.

Create a good sleep routine

- Ensure as much natural daylight exposure as possible.
- Regular exercise, but not too close to bedtime, supports sleep – in adults with insomnia, regular exercise can be more effective than sleeping tablets in improving sleep quality.
- Eat regular meals but do not eat your main meal within two hours of bedtime.
- A light pre-bed snack (e.g. a bowl of cereal, fruit, yoghurt) 30 minutes before bed can help prevent disruption from night-time hunger, but avoid evening ‘grazing’.
- Minimise use of alcohol, caffeine and nicotine, particularly in the evening – these can affect both the ability to get to sleep and the quality of sleep obtained.
- Set sleep and wake times that permit the amount of sleep that is right for you.
• Aim to go to bed at roughly the same time each night and get up at the same time each morning.

• Minimise electronics use for the 30 to 60 minutes before bed – do not use your phone as your alarm clock; it should preferably be charged outside your bedroom.

• Consider relaxation strategies to ‘wind down’ before bed.

• Avoid spending long periods awake in bed; your bed should only be for sleep or sex.

If you are unable to sleep, get out of bed and do a quiet or relaxing activity for 15 minutes, then return to bed and try to sleep again.
Appendix 2: Top tips for surviving nightshifts

Dr Mike Farquhar, Consultant in Sleep Medicine, Evelina London Children’s Hospital

Preparing for the night ahead

- Maintain a good core sleep routine – ‘bank’ sleep in the 24 hours before starting nights; have a long lie in, or try to have an afternoon nap.

- Exercise in the morning may help encourage napping in the natural circadian ‘siesta time’ in the early afternoon.

Ensure you are well-fed and well-hydrated.

During the shift

- Aim to stick to a consistent routine during each shift and work as a team to provide effective cover for breaks – consider use of ‘bleep filtering’ systems to minimise interruption to team members on breaks.

- Your breaks are essential – during breaks, have short (15 to 20-minute) naps.

- Avoid high calorie/high fat/high carbohydrate foods – night shift calories do count, and contribute significantly to increased risks of impaired glucose tolerance and cardiovascular disease.

- Try to maintain your normal eating patterns/times as much as possible when working nights – aim to minimise eating between midnight and 6am where possible, and when you do eat/snack choose healthier satisfying options (eg, soups, wholegrain sandwiches, yoghurt, fruit, salads, nuts, etc).

- Keep well-hydrated; carry a water bottle and drink regularly but use caffeine carefully.

- Maximise exposure to bright light in non-clinical areas but remember your patients need their sleep, so keep light and noise disruption in clinical areas to a minimum.

Watch the 4 am dip. This is when both you and your patients are at their lowest physiological ebb, so take time to double-check all critical calculations in particular.

After the shift

- If too tired to drive – do not. Use public transport if you can.

- If possible, wear sunglasses on the way home – daylight will encourage your brain to feel awake and reduce your chance of getting good quality sleep (but be cautious of wearing sunglasses if driving).
• Aim to be in bed as quickly as possible after your shift ends – the later you get to sleep, the less total sleep you are likely to get.

• Resist the temptation to use electronic devices. Your phone should preferably be in a different room in aeroplane mode.

• Have a light meal or snack about 30 minutes before going to sleep – do not go to bed hungry.

• Avoid alcohol, nicotine and caffeine and try to do some light exercise.

• If you share a house or flat with other people, make sure they clearly know you are trying to sleep.

• Do not allow daytime deliveries during the time you expect to be asleep.

Ensure you are exposed to bright light for the first 20 minutes after waking.

Post-nights team breakfasts are not just a social event: they allow you to informally ‘decompress’ and reflect on events which may have occurred during your shifts. Airing worries and anxieties in a supportive environment will likely help you sleep better.

• After your final night, aim for a short morning nap (one to two hours), ideally before midday, then get up and do as many ‘normal’ activities as possible.

• Re-establish normal eating and exercise patterns.

• Aim for as close to your normal bedtime as possible and for a short lie-in only on the following morning; try to get up as close to your normal wake time as possible, and to go to bed only slightly earlier than usual.

You are likely to need two ‘normal’ nights to successfully re-establish your usual sleep pattern.
Appendix 3: How hospitals can improve conditions for night workers

Dr Mike Farquhar, Consultant in Sleep Medicine, Evelina London Children’s Hospital

These tips are for human resources, medical staffing and organisational development leads to consider.

- Use forward-rotating (day-evening-night) rota designs.
- Minimise frequent transitions between day and night shifts.
- Provide adequate recovery time after nights to re-establish normal wake/sleep patterns.
- Provide basic education for staff at induction on sleep and working nights, as well as general healthy lifestyle advice and support.
- Ensure staff comply with current rest/break entitlement requirements:
  - current ‘New Deal’ contract: at least 30 minutes’ continuous rest after approximately four hours’ duty
  - new contract: at least one 30-minute paid break for a shift rostered to last more than five hours and a second 30-minute paid break for a shift rostered to last more than nine hours.
- Encourage a team-based ‘hospital at night’ approach, including bleep filtering and protection policies to permit consistent breaks.
- Provide appropriate rest areas (not necessarily an ‘on-call room’) overnight, which allow staff to nap during breaks if they choose to.
- Provide access to good quality food for night staff.
- Provide beds, free of charge, for post-nights staff who feel too tired to drive home.
- Offer regular screening of shift workers for primary sleep disorders.