Sleep is the best medicine: How rest facilities and EnergyPods can improve staff wellbeing

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60 minute allocation. Recurring reasons cited included a lack of facilities as well as judgement from other clinical staff. There was a pre-existing doctors’ mess in a separate building, however, due lack of proximity and subsequent safety concerns, only one out of 59 people surveyed reported that they had used it.

To address this issue, one strategy was the decision to trial the use of EnergyPods in high acuity areas. An EnergyPod, costing around £13,000 and measuring approximately 2.2 m by 1.4 m, is a specially designed chair which has been purpose built for napping in the workplace. It is ergonomically designed and equipped with a privacy visor as well as built in speakers and timed waking function to optimise the napping experience and function of staff.

Aims

This study aimed to assess the impact of the provision of an EnergyPod and sleep education on the wellbeing of medical and nursing staff in high acuity areas.

Methods

The study took place over a 4-month period from July to October 2019 and was set in the acute medical unit of a 304 bed district general hospital, City Hospital in Birmingham. The acute medical unit consists of 48 beds and is typically staffed by 10 nurses, five healthcare assistants and three junior doctors at night. The project was led by the deputy medical director (who is also an acute physician) and, together with enthusiastic junior doctors, created a project group to deliver and analyse the results on this initiative.

The EnergyPod was installed in a designated room on the acute medical unit and its appropriate use was widely publicised to the staff of this department (Fig 1). This was communicated locally through announcements at handover meetings and board rounds, as well as trust wide via multiple magazine articles and videos on the intranet. Sleep hygiene education was also incorporated into regular junior doctor teaching. This widespread dissemination of information encouraged consultants to actively promote the use of the pod.

Sleep education focused on highlighting the hazards of sleep deprivation as well as a summary of the sleep advice detailed by Dr Michael Farquhar, consultant paediatrician and sleep specialist. It also focused on reversing the negative connotations associated with napping on the job and emphasised the importance of taking breaks.

The study design employed the use of serial cross-sectional surveys with a focus on qualitative data collection with some quantitative components. The study comprised two surveys: one quantitative survey that was performed prior to the introduction of the EnergyPod and subsequently repeated 3 months after; and one qualitative survey that was performed immediately after pod use.

The quantitative study focused on assessing prevailing levels of fatigue and alertness on long shifts in the pre- and post-pod phase. The qualitative survey collected data on the length of use as well as immediate impact on alertness and energy levels. However, the primary focus of this survey was to collect descriptive data on individual experience.

Results

A total of 93 participants responded to the pre-pod survey and 68 responded to the post-pod introduction survey. After the introduction of the pods, there was a significant improvement in taking breaks and alertness at the end of the shift (Table 1). Users also reported an improvement in perceived safety of driving after night shifts (Table 2). Responses also suggested that the sleep pod was a suitable rest environment, with a positive impact on wellbeing, which they would recommend to a colleague (Table 2).

Prior to the EnergyPod, greater than 80% of workers reported that stress and fatigue had a negative impact on their personal life. Following 3 months’ use of the pod, 74% of users reported some positive impact on their physical or psychological health and their ability to manage stress. Eighty-seven per cent of respondents thought the EnergyPod would help with morale and wellbeing.

A total of 31 responses were received immediately post-use of the EnergyPod. There were three major themes developing from the descriptions received.

| Question                                      | Answer         | Before pod introduction, n=93, n (%) | After pod use, n=68, n (%) |
|-----------------------------------------------|----------------|-------------------------------------|---------------------------|
| What is your job role?                        | Doctor         | 35 (38)                             | 33 (49)                   |
|                                               | Nurse          | 58 (62)                             | 35 (51)                   |
| Are you able to take your allocated break time in 12-hour shifts? | Yes            | 34 (37)                             | 47 (69)                   |
| How alert do you feel after your night shift? | Alert / very alert | 23 (25)                             | 45 (66)                   |
|                                               | Not alert      | 70 (75)                             | 23 (34)                   |

Table 1. Pre- and post-EnergyPod results

Fig 1. The EnergyPod installed in the dedicated room.
The feedback from the EnergyPod showed three major themes: space away from the clinical workspace, relaxation and interdisciplinary cohesion. Users benefited from a dedicated space for relaxation, easily accessible within the unit. We also observed that around half of our respondents felt more able to drive after a shift during which they had used the pod. McClelland et al presented a worrying trend among trainees, with 84% of trainees feeling too tired to drive after a night shift. The hope is that by promoting and providing rest facilities, trainees will be able to reduce their personal risk of road traffic accidents.

The third theme was not one we expected; however, the unintended consequence of improved team cohesion is a positive outcome. We found respondents from all the multidisciplinary team (MDT) reporting an improvement in their wellbeing and a positive impact on their physical as well as psychological health. Initially, the project had been primarily focused on junior doctors, but this project naturally spilt over into the MDT, bringing members of the team closer together.

What is difficult to convey in data are the cultural behaviours of a department. Firstly, the physical presence of an EnergyPod sent a very strong message to the workers on the floor that management teams and leaders care about the staff and their wellbeing, and that was incredibly powerful. Secondly, the promotion of ‘it is okay to take a rest’ from senior clinicians who actively promoted, if not mandated, this sent a clear message to all juniors that this was accepted and expected behaviour, promoting safety for everyone. Typically, many clinicians do not take breaks, with the main reasons often cited as workload pressures or that the act exhibits weakness. Top down strong leadership was a key enabler in the success of this project and cultural shift of the mindset of taking breaks.

Although our data show significant positive impact since the introduction of the EnergyPod, the contribution of culture change and education on proper sleep hygiene should not be underestimated. Given the lack of rest spaces beforehand, a significant confounder to the evaluation of the impact of the EnergyPod itself was the establishment of a designated rest space. It is also not possible to distinguish between the effects of the pod and sleep hygiene advice. The project focused on subjective staff wellbeing but did not analyse the effect of rest on patient safety (for example, by looking at prescribing errors during a night shift). This could be a further expansion of the project.

There are a few criticisms of the EnergyPod, mainly associated with its cost, cleanliness and capacity. The EnergyPods are priced at £13,000 with alternatives such as a bed or reclining chair costing significantly less. However, none of these alternatives incorporate its salient features; for instance, a recliner chair or bed would not provide the immersive yet controlled rest environment provided by the EnergyPod. Through multiple uses, the pod can become unhygienic and therefore relies on users to sanitise after use. The EnergyPod is also much larger than alternatives, requiring a dedicated, quiet, non-clinical area for breaks. This subsequently encouraged staff to take breaks, with senior staff opting to designate defined break times to juniors. Supporting quotes included ‘[It’s] really nice having something that is not a doctor’s office. [It] feels like I can actually switch off for 20 minutes,’ and ‘[It] helped me after stress to get away from the ward.’

The second major theme was an appreciation of the relaxing effect of the EnergyPod with improved energy and stress reduction. Supporting quotes included ‘[I] feel calmer like I’m able to process thoughts better,’ ‘[From] my time in the pod, I felt relaxed and ready to do my job all over again. Amazing,’ and ‘Very calming and relaxing during mid-shift to ease stress.’ Eighty-four per cent of respondents felt more energised and 81% felt more alert.

The third theme was improved interdisciplinary cohesion due to positive interactions of encouraging each other to rest. There was increased recognition on stressors and fatigue of different multidisciplinary team members and subsequent encouragement to take rest. Participants described an overall sense of increased camaraderie between teams while on shift. Multiple respondents said it was ‘Nice to see something for nurses.’ Ninety-four per cent of respondents would recommend the EnergyPod to a colleague.

### Discussion

The EnergyPod was beneficial to staff wellbeing. Crucially, they are not designed for deep sleep; they enable a short period ‘power nap’ due to a pre-set timed function. Users are unlikely to drop into deeper sleep stages in this period, preventing a ‘sleep hangover’. This power nap has been shown to improve alertness and energy, as we also observed in our data. Further useful features include sensory distraction with music, ambient lighting and vibration, which enables accelerated relaxation. This is significant given the time pressures in high acuity areas where rest time is minimal.

The use of both qualitative and quantitative data allowed the analysis of both cohort and individual use. The quantitative data showed the need for pods and the great majority (88%) were in favour of keeping the facilities, with 94% recommending to a colleague.

### Conclusion

The introduction of an EnergyPod with sleep education was shown to have a positive impact on medical and nursing staff. Most users reported increased energy and alertness after use, with many appreciating the quiet and relaxing space away from the clinical area. It facilitated increased team cohesion as the culture...
shifted to encourage dedicated breaks with coverage of clinical responsibilities. The staff in the acute medical unit have benefited immensely from the rest facilities and EnergyPod implementation. We recommend night shift staff take a mandatory 20-minute rest to improve their alertness and accuracy. ■

Supplementary material

Additional supplementary material may be found in the online version of this article at www.rcpjournals.org/fhj: S1 – Questionnaire.

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