



Sleep Right Sleep Tight Audit

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Rationale

- ❖ “Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects.” Yoder, J. (2012)
- ❖ We were asked by Head of Nursing for Surgery to audit factors affecting the quality of sleep within the PHNT; we decided to initially consider noise and light levels as we believed that these levels in many wards at night was of an unacceptable level
- ❖ We undertook a pilot audit to ascertain whether further measures should be implemented and what they may be and repeated the audit 3 months later to establish the effectiveness of its recommendations.



Methodology – comparison of the two audits

April 2015

- ❖ Visited the wards for a period of 20 minutes between hours of 23:00 and 03:00 on a weekday night.
- ❖ Sitting in the bay opposite the nurses station by the window
- ❖ Recorded what was heard
- ❖ Provided instant feedback to wards on any issues found
- ❖ Visited all 27 adult wards to establish levels of lighting available, Paediatrics, Midwifery, Assessment units and Critical Care were excluded from the audit.

August 2015

- ❖ Methodology remained the same as April but extended following results of original audit to include
 - Factors that may delay light levels
 - Time frame of light returning to day levels
 - Clarification of reporting faults



Light Audit

April 2015

Questions asked:

1. Bay lights working?
2. Bed lights working?
3. Corridor night lights working?
4. Corridor night lights on

August 2015

Additional questions:

1. Reporting of faults and follow up of repairs?
2. Time of lights reduced?
3. Factors that delay reduction of light levels?
4. Time of lights return to daylight levels?



Noise Audit

April 2015

- ❖ Factors examined were:
 - Staff noise
 - Patients voice
 - Equipment
 - Radio
 - Ward duties

- ❖ 8 wards were chosen at random to complete an in depth review covering all service provision

August 2015

- ❖ 8 different wards were chosen to exclude bias

- ❖ Change Radio factor to other

- ❖ Impression notes



Light audit – outcomes

April 2015

Of the 27 wards visited:

- ❖ 8 wards with overhead bay lights not working
- ❖ 6 wards with a number of bed lights not working
- ❖ 5 wards with corridor night lights not working
- ❖ 12 wards with main lights still on. Some as late as 00:15



Light audit – outcomes

August 2015

- ❖ **26 wards aim for night light levels before 23:00**
- ❖ **Daylight levels**
 - 5 wards return Daylight levels after 07:00
 - 22 wards before 07:00 – only 2 in both bays and corridor
- ❖ **Delay factors**
 - 16 wards state Acuity of patients/staffing levels
 - All areas state timing of drug round
 - Only 12 wards commenced before 22:00
 - Consideration from previous time of drug round
 - 10 wards are adopting the practice of reducing lights as drug round in bay completed = gradual reduction
- ❖ **Night light**
 - 25 wards corridor light working
 - 19 wards corridor lights on
 - 10 wards Personal bed lights not working/checked
 - 6 wards bay lights not working/checked – 2 wards not on as too bright
- ❖ **Faults reporting**
 - 1 no procedure
 - 9 wards use Safety briefing/day staff
 - 15 wards to ward clerk
 - 1 had confirmed follow up procedure



Noise audit – outcomes from 8 wards

April 2015

❖ Staff noise

- Nursing conversation heard at nurses station on all wards
- Subject matter could be clearly heard when either talking on the phone or liaising with MDT
- General movement of staff. Eg. documentation folders/ moving equipment were consistent in all areas
- Conversations between colleagues and/or patients were evident in 5 wards

August 2015

❖ Staff noise

- Conversation on 6 wards subject matter was not clearly heard.
 - 3 with patients at nurses station
 - 3 with medical team
 - Noise increase when talking to patients partially if they had poor hearing and patients response was at day time levels



Noise audit – cont

April 2015

❖ Patient voice

- Half the wards had noise from patients eg. confused or asking for assistance
- Level of conversation increased on one ward when the lights were switched on

August 2015

❖ Patient voice

- Patient discussion with staff on 6 wards
- 2 areas discussion between patients
- 2 wards having confused/calling out patients



April 2015

❖ Equipment

- Bed pan macerators were an issue on 2 wards
- 5 wards had bed noises eg mattress/cotsides
- Movement of observation equipment into the bays and their use were evident on wards
- ½ the wards had call bells that were heard at day time levels
- 1 ward with specialist treatment eg NIV
- Nurse station phone ring tone not reduced

August 2015

❖ Equipment

- 4 wards using observations machine/cardiac monitoring
- 3 wards had infusion pumps alarms and operation of nebulisers

❖ Other

- 1 Personal items
- 1 radio



April 2015

❖ Other ward duties

- Using PPE items
- ½ the wards using bins/sinks in bays
- Checking emergency equipment
- 3 wards drawing curtains around bed space
- 5 wards restocking items
- No radio, music or television noise was noted.

August 2015

❖ Ward duties

- Curtains opening/closing noted on 5 wards
 - 1 areas back to bed 5 times
- Staff using the bins in the bays noted on 4 wards
- Staffing accessing PPE noted on 2 wards



Noise audit – outcomes August 2015

❖ Staff

- 6 wards general discussion was heard
 - Nil private
 - All clinical
 - Noted 1 ward bleep Dr to sister office for private discussion

❖ Patient

- 7 wards due to interaction with care staff or other patients

❖ Equipment

- 6 ward for clinical observations
- 1 ward for personal hygiene

❖ Ward duties

- 4 wards using bins
- 5 wards using Curtain opening/closing



Light audit – Summary

April 2015

- ❖ Nursing staff very unclear if night lights were working on many wards and as a consequence it appears that the main corridor lights remained on for extended periods.
- ❖ Nursing staff appeared to feel that there was justification for the light to remain on and as a consequence night light usage appeared to be very poor until all care delivery had been given.
- ❖ 2 areas gave concern regarding adequate lighting when main lights were changed to night in the corridors – PIU and Moorgate .
- ❖ There was a general theme that items reported were not seen to be actioned and as a result failures were not reported.

August 2015

- ❖ No clear responsibility for significant areas of fault follow up with some areas relying on ward clerks
- ❖ Inconsistent with needing lights for drug round as many did not put the light up to day time in the morning around 06:00
- ❖ All areas now had a target time for night lighting
- ❖ Increased use of personal lighting for IV administration which resulted in a earlier reduction of light levels.
- ❖ Nursing staff appeared to be engaged in achieving their target time



Noise Audit -Summary

April 2015

❖ Impression

- A wide range of noise disturbance was evident
- Nursing staff were of the opinion that their wards were unnaturally quiet during the audit
- Little consideration was given to the level of noise generated for clinical care

August 2015

❖ Impression

- Ward staff actively trying to limit the noise generated but some evidence where noise could be further reduced.
- Noise increased when communicating with patients
- Noise generated from pumps/monitors were not always stopped due to nature of patients condition



Overall summary

April 2015

- ❖ Our impression that the majority of patients have less than 7 hours sleep per night, with some patients having less than 5, due to the delay in lighting being reduced and mane observations being commenced
- ❖ The duration of hours slept could not be guaranteed to be uninterrupted.
- ❖ Little consideration for use of facilities available to aid early rest were used by nursing staff.
- ❖ There was evidence that available resources were used only after all clinical care was delivered

August 2015

- ❖ Significant improvement was noted on noise generated in the ward environment, with nursing staff appearing to work hard on achieving a low tolerance to noise and high threshold to maximise length of sleep available to patients from day to night.
- ❖ Nursing staff have been inventive in using options to reduce light levels
- ❖ Drug rounds appear to be the main stumbling block to reducing lights in a timely manner. Many quoting safety of administration as the main reason.
- ❖ Little evidence of a cohesive fault follow up process on any of the ward.
- ❖ Some areas did not think about items needed and resulting in multi trips to equipment stores and back to bed.



Recommendations

April 2015

❖ No cost

1. Turn lights down by 23:00
2. Turn phone and call bell volume down eg level 5
3. Bleep MDT from offices to enable private conversations
4. Close bay doors if possible
5. Restock items to be opened away from patients areas
6. Ensure doors are closed before starting noisy equipment eg loading kitchen washer or macerator
7. Observation items in each bay prior to settling patients
8. Think twice before switching bay lights on for clinical care eg use bed light
9. Nightly check of bed lights – report if bulbs gone
10. Turn off bed side TV
11. Consider timing of observations to maximise sleep time

August 2015

❖ Reinforce current progress

1. Achieved
2. Not achieved
3. Not achieved on at least 1 ward
4. Not achieved
5. Achieved
6. Achieved
7. Not achieved
8. Achieved
9. Not fully achieved
10. Achieved
11. Work in progress



April 2015

❖ Low cost

- Consider eye masks and ear plugs for patients
- Purchase nursing station table light
- Replace light bulbs both in corridor and patients own
- Purchase noise monitoring equipment eg. SoundEar (to enable nursing staff to be aware of noise level being generated)
- **Re-audit 6 months time**

August 2015

1. Nil evidence of any purchase by wards
2. Not fully achieved where necessary
3. Not fully achieved due to poor follow up procedure
4. Finance not identified



April 2015

❖ High cost

- Install night light capacity on wards without adequate lighting

August 2015

❖ Fully achieved.



This is NOT a new problem

“Unnecessary noise is the most cruel abuse
of care which can be inflicted on either the
sick or the well,”
(Nightingale 1859)



References/Bibliography

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