



The Night Watch

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Skill Mix and Work Force Development: Sharing the lessons learnt
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Thinking captive to daytime





✧ Objective ✧

Objective

- To examine the differences between night and day at a hospital
- Background
 - Definitions: time, day & night, night watch
 - Thinking captive to daytime
- Case Study
- Safety & quality difference between night and day
- Conclusion

Definitions





Time [Oxford]

Duration

Day [Oxford]

Time during which sun is above the horizon

Night [Oxford]

Dark period between day and day

The Night Watch



Night watch [Oxford]

Person or party keeping watch by night
Roman division (one of three or four of the
night)

Time



Time and health services

- ☞ Patients 24 hours, 7 days, 52 weeks
- ☞ Business 8 hours, 5 days, 48 weeks
- ☞ Hospital operational hours?
 - Doors open
 - Services provided

Closed for the night





Closed, why do we need staff?



What is the purpose of being
open at night?



✧ Case Study ✧

Night time complications



Coronial Communique

- Case Number: 3291/03
- Case Precis Author: Professor Peter Ebeling, Chair, Victorian State Committee, RACP
- Coronial Communiqué [electronic resource]: Clinical Liaison Service, Connecting Clinicians and Community with Coroners. Southbank, Vic. State Coroners Office; Victorian Institute of Forensic Medicine.
- Available at: <http://www.vifm.org/communique.html>

Clinical Summary

- A 63yo female
 - past history of vertigo, ataxia and hypertension
 - being investigated as an outpatient for falls.
- Metropolitan hospital emergency department following a collapse.
 - Less than two hours later Glasgow Coma Score (GCS) was 10/15.
 - Brain CT was interpreted for the radiology registrar by the on-call radiologist two hours after the fall who stated
 - unable to make the diagnosis of a possible sagittal sinus thrombosis and
 - recommended a second brain CT with contrast.

Clinical Summary continued

- ☛ Radiology registrar then informed the ED staff there was a possible sagittal sinus thrombosis.
- ☛ Two hours later the second brain CT was performed.
 - Radiologist believed sagittal sinus thrombosis was one of several differential diagnoses,
 - A third brain CT was recommended.
- ☛ ED doctor told the on-call neurology registrar
 - diagnosis of sagittal sinus thrombosis was certain.
- ☛ Five hours after the fall
 - a loading dose of phenytoin was administered and
 - two hours later a loading dose and infusion of unfractionated heparin given

Clinical Summary continued

- ☛ Two hours after the patient was admitted to a ward
 - a clotting profile was ordered on the blood samples taken on admission, however,
 - the samples were not appropriate.
- ☛ At this time there was a rapid deterioration with the GCS decreasing to 7/15.
- ☛ Third CT scan then showed a 1cm subdural haematoma with midline shift.
- ☛ Heparin was ceased and the patient was intubated and transferred to a major teaching hospital.
- ☛ Patient died three weeks later despite evacuation of the haematoma.

Coronial Investigation

- Focus of the Coroner's investigation to determine the reason for
 - the administration of heparin
 - the miscommunications between medical staff
 - patient's treatment was against the hospital's guidelines for administration of anticoagulants in patients with recent cerebral infarcts.
 - No blood taken for a clotting profile before commencement of heparin
 - Heparin should only been administered after consultation with the neurologist on call & this was not done.
 - A bolus of heparin was given which was also against the guidelines.

Recommendations

- The Coroner recommended that all patients presenting with an acute deterioration in conscious state should have access to an immediate CT scan and that specialty unit referrals be expedited in patients with critical illnesses.

Hospital Response

- The hospital introduced new guidelines defining the duties and responsibilities of specialty registrars between 10pm and 8am.
- In cases of unstable medical illnesses they must attend within 15 minutes of notification by the ED doctor and within two hours for other less urgent opinions.

Author's Comments

- ☛ The system problem that contributed to the death of this patient arose from a misinterpretation of a verbal specialist radiology report by the radiology registrar.
- ☛ An incorrect diagnosis was promulgated to both the ED staff and specialty registrar, which resulted in an incorrect treatment being administered.
- ☛ This treatment was also administered without adhering to local clinical treatment guidelines.
- ☛ There should be a low tolerance for referring critically ill patients to specialty registrars and specialists on call.
- ☛ All specialists would prefer to know of difficult cases at the time rather than after the event.



✧ Is this phenomena due to
night? ✧





✧ Safety & quality difference
between night & day? ✧

Night Works



Night works in health

Operations

- Financial
- Clinical care
- Staff & infrastructure

Health service

- Prevention
- Acute
- Chronic
- Restorative
- Ambulatory

Communication



Communication

☞ DAY

- All modalities
- Time available
- Readiness to engage
- Considered: cross check, compare

☞ NIGHT

- Limited modalities especially face to face
- Time critical
- Limited if any engagement
- Limited opportunity for rebuttal or clarification

Knowledge, skill & competence



Nocturnal Animals
Screech Owl



"Are you a real doctor?"



Night watchman cricket^[Oxford]

Inferior batsman sent in near the close of day
to avoid dismissal of better one in adverse
conditions

Knowledge, skill & competence

☞ DAY

- Multiple & narrow scope
- Specialist focus
- Immediate & ready access
- Implicit to day
- Diagnose and manage

☞ NIGHT

- Few & broad scope
- General focus
- Delayed & hurdles to access
- Night specialist not considered
- Rescue & maintain till morning

Work environment, scheduling

☛ DAY

- Day shift
- Fresh
- Numbers available
- Lighting
- Cross-section of personalities

☛ NIGHT

- Night shift
- Fatigue
- Limited staff
- Night staff personalities

Equipment

☞ DAY

- Open
- Maintenance
- Exhaustive

☞ NIGHT

- Locked
- Limited maintenance
- Restricted

Policy & procedures



Policies & procedures

☞ DAY

- Present
- Design for the day
- Business hours

☞ NIGHT

- Absent
- General principles

Safety



Safety mechanisms

DAY

- Supervision
- Training
- Planning
- Evaluation

NIGHT

- Supervision
- Training
- Planning
- Evaluation

The mystery of night



Patients

DAY

- Elective
- Patient
- Sober
- Disease and trauma patterns

NIGHT

- Emergency
- Impatient & tired
- Drug & alcohol affected
- Disease and trauma patterns

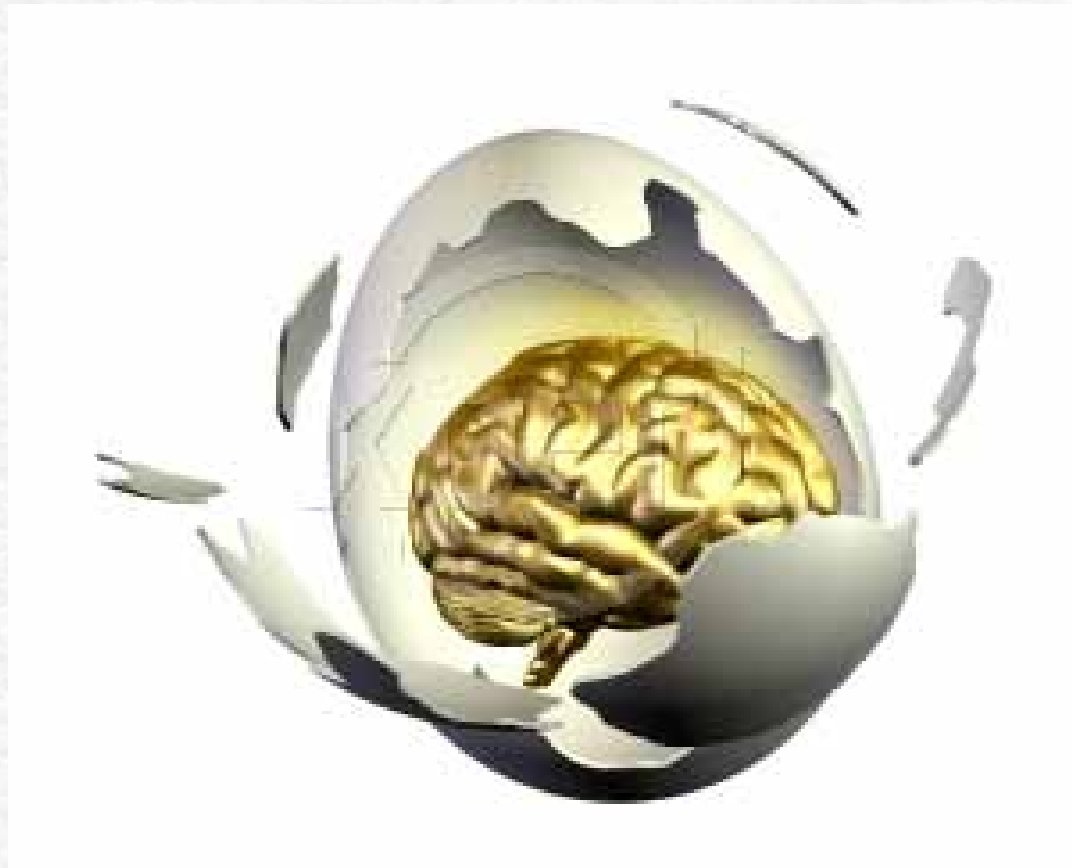


✧ Successful night watch ✧

Defining a successful night watch
Fit for purpose



A new way of thinking



Successful night watch

- ☞ Define what it is or ought to be!
- ☞ Are we delivering 'quality of care"
 - 'The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'. Institute of Medicine
- ☞ Or a bare minimum service?

Fit for purpose

- ☛ Clarity of purpose by asking what do the patients need at night?
- ☛ Who is responsible for making nights a success in day?
- ☛ Why is there a difference in day & night operations?
- ☛ Is there a difference in care delivery and patient outcomes?
- ☛ What do our staff need to work safely & effectively?

Fit for purpose [2]

- Health care interfaces that exist in the day and how do they change at night?
 - External: Hospital, ambulatory, home and community based services
 - Internal: different levels within each clinical unit, department
- Importance and relevance of the clinical issues for the night
 - High risk, volume, cost
- Differences in values, philosophy and operational approach

End of the night shift!





✧ Conclusion ✧

Conclusion [1]

- Case Study
- A 63yo female taken to a metropolitan hospital emergency department
 - possible sagittal sinus thrombosis
 - chain of miscommunication
 - without adhering to local clinical treatment guidelines

Conclusion [2]

- Objective: the differences between night and day at a hospital
- Background
 - Definitions: time, day & night, night watch
 - Time and health services
 - Thinking captive to daytime
 - Closed for the night
 - Purpose of being open

Conclusion [3]

Case Study

- A 63yo female taken to a metropolitan hospital emergency department
 - possible sagittal sinus thrombosis
 - chain of miscommunication
 - without adhering to local clinical treatment guidelines
- Complications due to the night?

Conclusion [4]

- ☛ Safety & quality difference between night and day
 - Night works in health
 - Communication
 - Knowledge, skills & competence
 - Work environment, scheduling
 - Equipment
 - Policy & procedures
 - Safety
 - The mystery of night: patients

Conclusion [5]

- ✓ Successful night watch
 - A new way of thinking
 - Defining a successful night watch
 - Fit for purpose

Contact Details

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