



# Psychological care of the Critically ill patient

He was handcuffed to a railing among the criminals in City Jail, fighting fiercely to free himself. Guards stood by ready to shoot him if he escaped. Panicking at 3 a.m., Robert (not his real name), a practicing private attorney in Baltimore, called his wife to pick him up immediately. He would be waiting outside on a bench, he told her.

“It’s OK. You’re at the Hospital. In the ICU. Go back to sleep,” his wife said, trying to be comforting.

“Come now. How can you leave me here?” he pleaded.

Agitated and afraid, he called three more times that night.

[Delirium \(hopkinsmedicine.org\)](http://hopkinsmedicine.org)

Patients surviving critical illness are at risk of developing psychological ill health which can have a substantial impact on quality of life and recovery. It is estimated that 29% of patients discharged from ICU go on to develop symptoms of post traumatic stress disorder (PTSD) Davydow (2008)

Acute stress occurs in 45-80% of critical care patients. It can manifest as panic, fear, anger, depressed mood, hallucinations/delusions

It could be related to

- ▶ to pain, thirst, fatigue, disorientation, invasive procedures, side effects of drugs, lines/tubes/masks
- ▶ Sleep deprivation
- ▶ Busy, noisy environment
- ▶ Lack of daylight
- ▶ Isolation
- ▶ Inability to communicate
- ▶ Sensory deprivation

*‘Psychological  
care’*

What does  
psychological  
care mean to  
you?

Have a think about patients you have  
looked after and your own life  
experiences?

# ICNARC Data

- Around 100,000 people are admitted to NHS Intensive cares across England every year.
- It is estimated that around two thirds of these patients will suffer some form of emotional distress.
- A range of stressful experiences may instigate forms of emotional distress such as;

*‘being reported as a ‘fear of dying’ invasive procedures i.e. mechanical ventilation, terrifying hallucinations, pain, discomfort and a lack of voice.’*

- NICE guidelines recommend patients should be assessed for ‘non-physical morbidity’ THINK delirium
- Those assessed as high risk should receive structured support during and after their stay.

# Importance of psychological care

- ▶ Reduce delirium - can lead to long term hallucinations, nightmares
- ▶ Prevent PTSD
- ▶ Prevent or reduce depression
- ▶ Prevent or reduce the likelihood of anxiety

# Delirium

- ▶ ‘Delirium (sometimes called ‘acute confusional state’) is a common clinical syndrome characterised by disturbed consciousness, cognitive function or perception, which has an acute onset and fluctuating course. It usually develops over 1-2 days. It is a serious condition that is associated with poor outcomes. However, it can be prevented and treated if dealt with urgently.’
- ▶ NICE Guidelines CG103 Delirium; prevention, diagnosis and management (2019).

# Types of delirium

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Hyperactive delirium: a subtype of delirium characterised by people who have heightened arousal and can be restless, agitated or aggressive.

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Hypoactive delirium: a subtype of delirium characterised by people who become withdrawn, quiet and sleepy.

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NICE Guidelines CG103 Delirium; prevention, diagnosis and management (2019)

# Risk factors of Delirium

need to stay longer in hospital or in critical care

have an increased incidence of dementia

have more hospital-acquired complications, such as falls and pressure sores

be more likely to need to be admitted to long-term care if they are in hospital

be more likely to die

NICE Guidelines CG103 Delirium; prevention, diagnosis and management (2019).

# Signs of delirium

- ▶ Cognitive function: for example, worsened concentration\*, slow responses\*, confusion.
- ▶ Perception: for example, visual or auditory hallucinations.
- ▶ Physical function: for example, reduced mobility\*, reduced movement\*, restlessness,
- ▶ agitation, changes in appetite\*, sleep disturbance.
- ▶ Social behavior: for example, lack of cooperation with reasonable requests, withdrawal, or alterations in communication, mood and/or attitude.

NICE Guidelines CG103 Delirium; prevention, diagnosis and management (2019).

Ideas!

*Nursing someone with delirium/confusion/agitation can be challenging. What can we as healthcare professionals do, to care for our patients psychological well-being?*

# How could we care differently to improve psychological wellbeing

- ▶ Hello my name is...
- ▶ Orientate to time and place (picture of the date) clock
- ▶ Lights on/off represent day and night
- ▶ Cluster cares/protected time
- ▶ Stimulate the brain - radio/tv
- ▶ Talk to your patient clearly
- ▶ Friends and families
- ▶ Technology
- ▶ Think about medication
- ▶ Meal times
- ▶ Grounding techniques
- ▶ Targeted RASS
- ▶ CAM - ICU

# WYCCODN have adapted a Delirium Care bundle for use with Critical Care

(The full document can be found at [www.wyccn.org](http://www.wyccn.org))

## Documentation

- Patient diary commenced for appropriate patients (locally determined)
- Daily update in nursing records relating to 'DREAMS' elements, including plan of care and evaluation
- Provision of information relating to delirium for patients and relatives following admission

## Rehabilitation

- To be commenced early (NICE CG83, QS158) including assessment, goal setting and structured programme, early mobility flowchart. Audit programme established to assess compliance
- Reviewed by physiotherapist at least 5 days per week
- Daily activity/mobility record 7 days per week

## Early Identification

- Assessment for delirium using CAM-ICU tool 3 times per day and on change of condition

## Aids to Communication

- Hearing aids' spectacles available as appropriate.
- Consider barriers to effective communication and implement strategies to overcome e.g translation services

## Medication

- Assess sedation using Richmond Agitation Sedation Score (RASS) as a minimum 4 hourly, utilising local sedation and pain assessment protocol
- Daily review of sedation including setting target RASS and/or daily sedation hold
- Daily (Mon - Fri) review of prescription by critical care pharmacist to ensure effective prescribing practices.
- Medication review on admission and discharge to promote effective medicines reconciliation

## Sleep Bundle

- Reduce light and noise between 2300hrs and 0700hrs to promote sleep
- Offer eye mask and ear plugs to patients who can tolerate
- Group care interventions to minimise disturbance

# Sleep Hygiene

Sleep is a naturally occurring state of unconsciousness where the response to external stimuli is decreased, but the subject can usually be readily aroused. There are two patterns of sleep.

## **Non rapid eye movement sleep**

This is divided into 4 stages according to EEG activity.

- ▶ Stage 1: occurs as the subject falls asleep, low amplitude high frequency activity on EEG
- ▶ Stage 2: sleep spindles (alpha-like bursts of 10-14Hz) on EEG
- ▶ Stage 3: frequency slows and amplitude increased on EEG
- ▶ Stage 4: represents deep sleep, with rhythmic slow waves on the EEG
- ▶ Stages 3 and 4 represent a deeper sleep and are also known as delta or slow-wave sleep

# Rapid eye movement sleep

Rapid irregular low amplitude waves occur, this is when dreaming takes place. The eyes make rapid movements associated with tachycardia, tachypnoea and skeletal muscle relaxation.

Typically an adult passes rapidly through Stages 1 and 2, spending approximately 60-90 minutes in stages 3 and 4. This is followed by a 60-90 minute period of REM sleep. This cycle repeats until waking.

On average, ICU patients sleep only 2 hours per day, and less than 6% of their sleep is REM sleep.

## Sleep disruption on the ICU

Critically ill patients often do not sleep well. Their sleep may be highly fragmented and distributed throughout the day and night, and there is a reduction in slow wave and REM sleep. Reasons for poor sleep on the ICU include:

- ▶ Pre-existing disease (eg. COPD with frequent arousal from hypoxia or hypercapnia)
- ▶ Drugs eg. Benzodiazepines abolish stage 3 and 4 NREM sleep
- ▶ Opioid analgesic drugs increase arousal frequency
- ▶ Barbiturates and amphetamines inhibit REM sleep
- ▶ Catecholamines increase wakefulness
- ▶ Tricyclic antidepressants and serotonin reuptake inhibitors prolong slow wave sleep and block REM sleep
- ▶ Anaesthesia and surgery (ie. the stress response to surgery, fever, pain, starvation and age decrease stages 3 and 4 NREM sleep)
- ▶ Environmental factors (ie. noise, lighting, alarms, other patients, round the clock care)
- ▶ Mechanical ventilation
- ▶ Metabolic derangements
- ▶ Sepsis
- ▶ Fear and anxiety related to critical illness

Studies have reported that sleep disruption / deprivation may result in impaired cognition, irritability, decreased situational awareness, delirium, loss of concentration, immune function alterations (decrease NK cell and lymphocyte function), negative nitrogen balance, decreased thermoregulation and failure to wean from mechanical ventilation due to its effect on pulmonary mechanics and respiratory muscles.

# Prevention of sleep disruption/deprivation

Sleep on the ICU can be facilitated by

- ▶ minimising noise/stimuli,
- ▶ reducing lighting,
- ▶ decreasing unnecessary interventions at night.
- ▶ provisions of stimulating activities for the patients during the daytime.
- ▶ Use of ear-plugs and eye masks has also been demonstrated to be helpful.
- ▶ Melatonin at night may help promote sleep without residual hangover psychomotor effects.

<https://youtu.be/1pRCgFlbAp0>

WYCCN have developed a sleep bundle to improve sleep and reduce risk of delirium in Critical Care. This can be found on the next page.

# Care Bundle to improve sleep and reduce risk of delirium in Critical Care to be applied 23:00 - 07:00 hrs



Turn off all unnecessary lights between 23:00 - 07:00



Offer earplugs/eye-masks to each patient



Replace infusions before they approach empty



Keep voices down and aim for face-to-face discussions to occur away from bed spaces



Turn down the telephone volume and answer promptly



Turn monitors onto night-mode



Orientate your patient to date/time and place if they wake



Group patient care activities . Complete non-essential activities before 23:00 or after 07:00



If your patient has a poor nights sleep or becomes CAM-ICU +ve, discuss on the ward round and request a medication review



# Patient diaries

- An important aspect of psychological care proven to reduce post traumatic stress disorder by 29% (Costa et al 2019).
- Qualitative studies show that patients and relatives generally welcome the diary
- The diary enables patients to evaluate their recovery and improves communication with their families about their experiences, thus sustaining family centred care
- By reading the diary, patients are able to understand their perceptions of their dreams and to connect these to diary entries and photographs during their period of critical illness
- Patients may even be able to distinguish between reality and imagination, and determine whether some memories are misinterpretations of what actually happened. This may lead to a better understanding of their fears and the changes they have gone through.
- The diary is proved to reduce the incidence of depression, anxiety and PTSD for patient and relatives

<http://www.icu-diary.org>

# References

Costa, V, Padfield, O, Elliott, S Hayden, P (2019) Improving patient diary use in intensive care: A quality improvement report Journal of the Intensive Care Society. 2021 vol 1 27-33

Davydow, D, Gifford, J Desai, S (2008) Post traumatic stress disorder in general intensive care unit survivors. A systematic review. Gen Hospital Psychiatry 30 (5) 421 -434.

NICE Guidelines CG103 Delirium; prevention, diagnosis and management.

<https://www.nice.org.uk/guidance/cg103/chapter/Introduction>

# Test your understanding

Q1. List 4 interventions that could improve patient psychological wellbeing in critical care.

Q2. What is Delirium?

Q3. Delirium can present as..

- a. restlessness
- b. agitation
- c. sleepiness
- d. withdrawn
- e. all of the above

Q4. How might patient diaries help a patient after critical illness?

Q5. Sleep on the ICU can be facilitated by giving all patients sleeping tablets and spacing interventions throughout the night.

True or false

# Answers

Q1. Any on slide 12

Q2. Delirium (sometimes called 'acute confusional state') is a common clinical syndrome characterised by disturbed consciousness, cognitive function or perception, which has an acute onset and fluctuating course. It usually develops over 1-2 days. It is a serious condition that is associated with poor outcomes

Q3. All of the above

Q4. See slide 20

Q5. Pharmacological interventions may help some patients but not all. It is important to consider non pharmacological interventions to promote sleep first. By grouping interventions rather than spacing them out over night, the patients will have more opportunity to enter REM sleep.