

WHAT PHYSICIAN EXPECTS FROM PSYCHIATRIST ?



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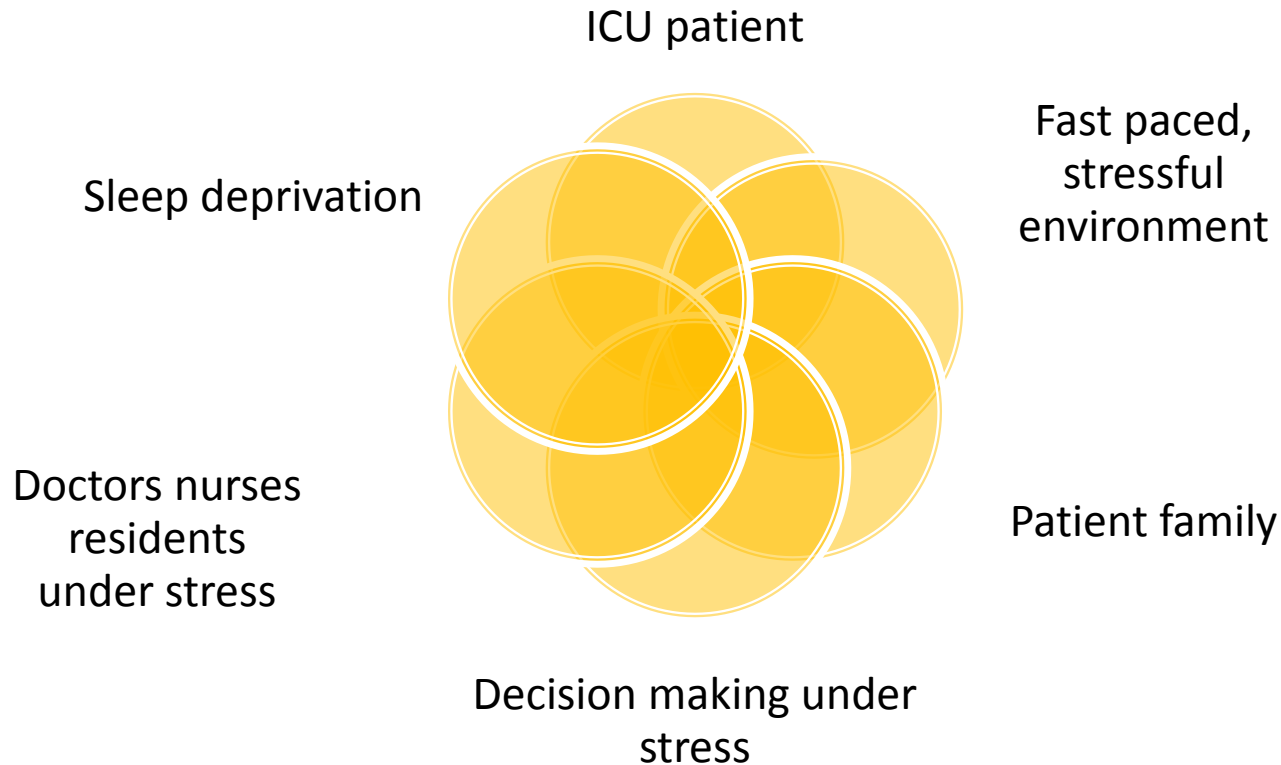
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Somato Psychic Disorders



- ❑ Very complex unpredictable disease processes

Scenario

- ❑ Elderly lady
- ❑ Withdrawn 2 days, not eating well
- ❑ Vomited, talking irrelevantly
- ❑ Losing balance
- ❑ Neuroconsult
- ❑ MRI scan : no abnormality
- ❑ Metabolic, UOP drop over night
- ❑ Lab came back WBC 13800
- ❑ Na 126
- ❑ Next morning drop in BP
- ❑ Difficulty in breathing
- ❑ Ambulance call
- ❑ Crashed, intubated in ambulance
- ❑ Sepsis

Scenario

- ❑ Elderly lady
- ❑ Aggressive behaviour
- ❑ Forgetfulness
- ❑ Irritable
- ❑ Under treatment with GP and psychiatrist 2 to 3 months
- ❑ Brought to physician for vomiting
- ❑ Investigations revealed a large front to temporal SOL
- ❑ Surgery

Scenario

- ❑ 70 M businessman , very confident and active
- ❑ Difficulty in getting up and fear of fall over a week 10 days
- ❑ Son called that on phone he was irrelevant
- ❑ Forgot name of family member
- ❑ Whether he is developing dementia
- ❑ His signature changed
- ❑ Brought to hospital suspecting metabolic .. ?
Hyponatremia but lab normal
- ❑ Chr AF on anticoagulation
- ❑ In 12 hours developed left UL weakness
- ❑ Urgent brain imaging :
- ❑ A large subdural hematoma
- ❑ Immediate surgery with correction of coagulopathy

Care in ICU : Patient perspective

- ❑ 'Make me better , faster' – effectiveness
- ❑ 'Don't hurt me' – safety
 - (prevent nosocomial infection), make me feel safe
- ❑ 'Be kind to me' – patient experience
 - Give me pain relief
 - I want my Sleep Zzzzzzz
- ❑ Post traumatic stress syndrome (PTSD)
 - “I don't want to remember dreadfulness of ICU”

Safe ??
OR
Threatening ??

Multiple situations where we need
help of a psychiatrist

SLEEP IN ICU



(This is not from our ICU !)



WE ARE NOT TALKING
ABOUT THIS ! ! ! !

BUT THIS



1) Are ICU patients sleep deprived ?

Sleep deprivation in ICU : A reality Observations

- ❑ Absence of stage 2 and reduced REM sleep : which is unphysiological
- ❑ Noise and light pollution
- ❑ Interventional pollution : NIBP frequency / monitor alarms
- ❑ Patient ventilator asynchrony
- ❑ Underlying disease / medicines
- ❑ Cooper AB Chest 2000

2) Adverse effects of sleep deprivation in ICU

Increased

- ❑ Disturbed circadian rhythm
- ❑ Basal vasomotor tone
- ❑ Altered endocrine function
- ❑ Insulin resistance
- ❑ B P
- ❑ Anxiety
- ❑ Catecholamines
- ❑ Hyperalgesia

Decreased: Immune function

- ❑ Natural killer cells
- ❑ Antibody titers after influenza vaccine
- ❑ Interleukin 2 production
- ❑ Baroreflex sensitivity
- ❑ Parasympathetic CVS modulation

3) Effects of common medications interacting with sleep

Drugs / diseases causing insomniac effects

- ❑ Vasopressors insomnia and reduced REM
- ❑ Sepsis, stress, attentive ICU care
- ❑ Theophylline
- ❑ Steroids
- ❑ TCA
- ❑ Mechanical ventilation, anxiety

Drugs / diseases Causing sedative effects

- ❑ Opioids increase st II sleep
- ❑ Haloperidol, olanzipine , resperidone
- ❑ GABA

Review of Currently available agents for ICU sedation: Ideal properties

- ❑ Rapid onset
- ❑ Rapid recovery
- ❑ No accumulation
- ❑ Easy titration to various levels of sedation
- ❑ Haemodynamic stability
- ❑ Absence of tachyphalaxis / withdrawal
- ❑ Cost

Sedative dosing

Continuous

- ❑ Constant level of sedation
- ❑ Better patient comfort ?
- ❑ More drug , higher expense
- ❑ Over sedation : longer length of stay and ventilation
- ❑ Higher incidence of PTS

Intermittent

- ❑ Shorter recovery period
- ❑ Less patient comfort but factual awareness
- ❑ More taxing and distracting from other pt care issues on nurses

Deep sedation needed in certain conditions only

- ❑ Difficult management strategies
- ❑ Eg permissive hypercapnia
- ❑ Low tidal volume
- ❑ Prone position
- ❑ IRV
- ❑ Desire to avoid paralytics



Commonly Used Sedatives

- ❑ “Standard” sedation
 - Benzodiazepines - midazolam, lorazepam, diazepam
 - Anesthetics – propofol
 - Newer agents dexmedetomidine

- ❑ Special circumstance sedation
 - Central alpha-agonists - clonidine, dexmedetomidine
 - High-dose opioids
 - Haloperidol

Complications of ICU sedation

- ❑ Unpredictable pharmacokinetic and dynamic effects
- ❑ Drug drug interaction
- ❑ Altered renal and hepatic function
- ❑ Altered protein binding
- ❑ Circulatory instability

HENCE

- ❑ Less sedation
- ❑ Intermittent dosing
- ❑ Protocol driven approach : Daily interruption

Situation : Delerium in ICU

- ❑ Patient is unmanageable, rowdy, removing lines, restless, agitated



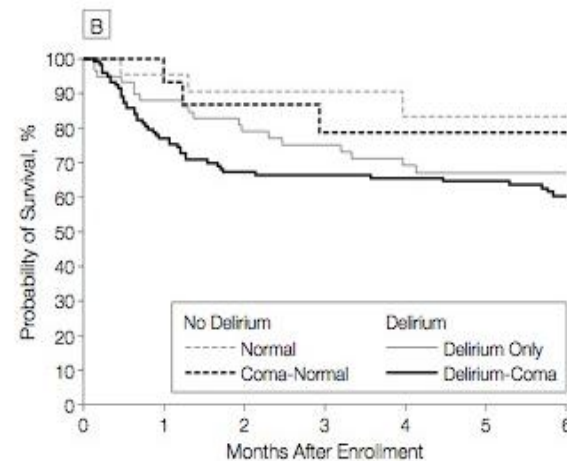
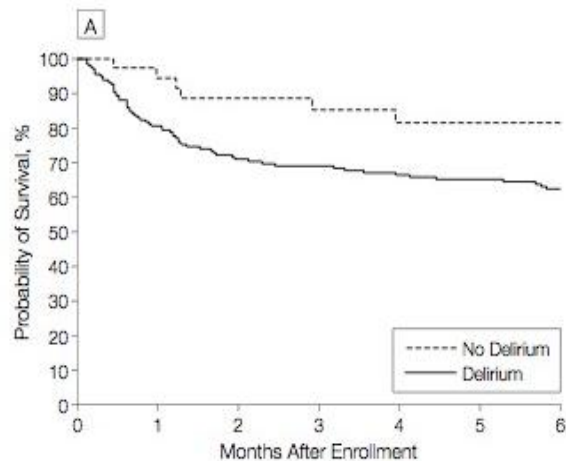
Delirium highly prevalent in ICU

- ❑ Increased incidence in ventilated patients
 - Incidence in critically ill patients range from 35-60%.
 - Up to 81.7% of mechanically ventilated pts developed delirium at some point during Vanderbilt study.
- ❑ Underdiagnosed condition
 - Delirium goes undiagnosed in >66% of patients
 - Adds up the cost especially of neuro imaging and other lab investigations

- Ely EW et al. Delirium as a predictor of mortality in mechanically ventilated patients in the ICU. *JAMA* 2004; 291: 1753-62
- Ely EW et al. The impact of delirium in the intensive care unit on hospital length of stay. *Intensive Care Med* 2001; 27: 1892-1900
- Inouye SK et al. Nurses' recognition of delirium and its symptoms. *Arch Intern Med.* 2001; 161: 2467-2473.

Delirium in ventilated patients

- Independent predictor of **mortality** (3-fold increase) and increased **length of stay** in ventilated pts.
- After adjusting for confounders, delirium was also associated with a **39%** increase in ICU costs.



Eli EW et al. Delirium as a predictor of mortality in mechanically ventilated patients in the ICU. JAMA 2004; 291: 1753-62

Milbrandt EB et al. Costs Associated with Delirium in Mechanically Ventilated Patients. Crit Care Med 2004; 32: 955-962, 2004

Overview of Delirium

DSM-IV requires the following essential criteria for a diagnosis of delirium

Disturbance of consciousness (i.e. reduced clarity of awareness of the environment) with reduced ability to focus, sustain, or shift attention.

Change in cognition (e.g. memory deficit, disorientation, language disturbance and perceptual disturbance) that is not better accounted for by a pre-existing, established, or evolving dementia.

Development over a short period of time (usually hours to days) and disturbance **tends to fluctuate** during the course of the day.

There is **evidence** from the history, physical examination, or laboratory findings that the **disturbance is caused by the direct physiological consequences of a general medical condition.**

- ❑ Term **ICU psychosis** is “old-fashioned, inaccurate and not appropriate”
- ❑ Sleep deprivation, loss of circadian rhythm and Delirium; suspected but not a proven link

Subtypes of Delirium

- ❑ *Hyperactive* - paranoid, agitated
 - Readily recognized, best prognosis
 - Purely hyperactive: 1.6% of delirium episodes
- ❑ *Hypoactive* - withdrawn, quiet, paranoid
 - “Quiet delirium”
 - Often not well recognized, misdiagnosed
 - Purely hypoactive episodes 43.5%
- ❑ *Mixed* - combination
 - Most common in ICU patients 54.9%
 - Worst prognosis

Peterson JF, et al. Delirium and Its Motoric Subtypes: A Study of 614 Critically Ill Patients. *J Am Geriatr Soc* 54: 479-484, 2006.

Assessing Delirium

❑ Confusion Assessment Method for ICU (CAM)

Feature 1: Acute onset of mental status changes
or a fluctuating course

Evidence of acute change from baseline?
Fluctuating RASS, GCS or other assessment?

And

Feature 2: Inattention

Attention Screening Exam: Auditory or Visual

And

Feature 3: Disorganized Thinking

OR

Feature 4: Altered Level of Consciousness

= DELIRIUM

Richmond Agitation Sedation Scale (RASS)

Questions:

- Will a stone float on water?
- Are there fish in the sea?
- Does one pound weight more than two pounds?
- Can you use a hammer to pound on a nail?

Assessing Delirium

□ Richmond Agitation Sedation Scale (RASS)

The Richmond Agitation and Sedation Scale: The RASS*

Score	Term	Description	
+4	Combative	Overtly combative, violent, immediate danger to staff	
+3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive	
+2	Agitated	Frequent non-purposeful movement, fights ventilator	
+1	Restless	Anxious but movements not aggressive vigorous	
0	Alert and calm		
-1	Drowsy	Not fully alert, but has sustained awakening (eye-opening/eye contact) to <i>voice</i> (≥ 10 seconds)	} Verbal Stimulation
-2	Light sedation	Briefly awakens with eye contact to <i>voice</i> (<10 seconds)	
-3	Moderate sedation	Movement or eye opening to <i>voice</i> (but no eye contact)	} Physical Stimulation
-4	Deep sedation	No response to voice, but movement or eye opening to <i>physical</i> stimulation	
-5	Unarousable	No response to <i>voice or physical</i> stimulation	

If RASS is -4 or -5, then **Stop** and **Reassess** patient at later time

If RASS is above -4 (-3 through +4) then **Proceed to Step 2**

*Sessler, et al. AJRCCM 2002; 166:1338-1344.

*Ely, et al. JAMA 2003; 289:2983-2991.

Pathophysiology Poorly Understood

- ❑ Neurobiology of attention
- ❑ Cortical vs subcortical mechanisms
- ❑ Neurotransmitter mechanisms
 - Acetylcholine plays a key role in pathogenesis
 - Anticholinergic drugs caused delirium in healthy volunteers, reserved by cholinesterase inhibitors
 - Serum anticholinergic activity correlated with severity of delirium

Mach, JR, Dysken, MW, Kuskowski, M, et al. Serum anticholinergic activity in hospitalized older persons with delirium: A preliminary study. J Am Geriatr Soc 1995; 43:491.

Treatment of Hyperactive and Mixed Delirium

Haloperidol is agent of choice*

- ❑ Best antipsychotic, few anticholinergic side-effects
 - Unlikely to cause sedation and hypotension
- ❑ Typical starting dose: 1-2 mg IV every 2-4 hours
 - Adjust for elderly and degree of agitation
- ❑ Can double dose every 20-30 minutes if uncontrolled --> continuous drip 5-10 mg/hr
- ❑ QT prolongation
 - Cardiac monitoring at higher doses, measure K⁺ and Mg²⁺
 - Discontinue if QTc>450ms or extrapyramidal symptoms develop

American Psychiatric Association. Practice Guidelines for Treatment of Patients with Delirium. 1999.
UK Clinical Pharmacy Association. Detection, Prevention and Treatment of Delirium in Critically Ill Patients. June 2006.

Other Treatments for Hyperactive/Mixed Delirium

- ❑ Role for benzodiazepines
 - Specifically indicated for EtOH or BZD withdrawal delirium
 - If possible, avoid use
 - Contribute to development of delirium
 - Ineffective in treating delirium
- ❑ In ventilated patients, sedation with benzodiazepines is often necessary

Treatment of Hypoactive Delirium

- ❑ No published data in critical care literature
- ❑ Antipsychotics may still play a role
 - Treat like hyperactive delirium
- ❑ Stimulants such as methylphenidate may be used

American Psychiatric Association. Practice Guidelines for Treatment of Patients with Delirium. 1999.

UK Clinical Pharmacy Association. Detection, Prevention and Treatment of Delirium in Critically Ill Patients. June 2006.

Sleep friendly ICU



- ❑ Different monitoring schedules for day and night
- ❑ Noise level, light level control at night
- ❑ Sensitise ICU staff (including class IV) for noise level
- ❑ Appropriate sedation policies

Common causes of delirium and confusional states

Drugs and toxins

- ❑ Prescription medications (eg, opioids, sedative-hypnotics, antipsychotics, lithium, skeletal muscle relaxers, polypharmacy)
- ❑ Nonprescription medications (eg, antihistamines)
- ❑ Drugs of abuse (eg, ethanol, heroin, hallucinogens, nonmedicinal use of prescription medications)
- ❑ Withdrawal states (eg, ethanol, benzodiazepines)
- ❑ Medication side effects (eg, hyperammonemia from valproic acid, confusion from quinolones, serotonin syndrome)
- ❑ Poisons:
 - ❑ Atypical alcohols (ethylene glycol, methanol)
 - ❑ Inhaled toxins (carbon monoxide, cyanide, hydrogen sulfide)
 - ❑ Plant-derived (eg, Jimson weed, Salvia)

Common causes of delirium and confusional states

Infections

- ❑ Sepsis
- ❑ Systemic infections; fever-related delirium

Metabolic derangements

- ❑ Electrolyte disturbance (elevated or depressed): sodium, calcium, magnesium, phosphate
- ❑ Endocrine disturbance (depressed or increased): thyroid, parathyroid, pancreas, pituitary, adrenal
- ❑ Hypercarbia
- ❑ Hyperglycemia and hypoglycemia
- ❑ Hyperosmolar and hypoosmolar states
- ❑ Hypoxemia
- ❑ Inborn errors of metabolism: porphyria, Wilson disease, etc
- ❑ Nutritional: Wernicke encephalopathy, vitamin B12 deficiency, possibly folate and niacin deficiencies

Drugs believed to cause or prolong delirium or confusional states

Analgesics

- NSAIDs
- Opioids (especially meperidine)

Antibiotics and antivirals

- Acyclovir
- Aminoglycosides
- Amphotericin B
- Antimalarials
- Cephalosporins
- Cycloserine
- Fluoroquinolones
- Isoniazid
- Interferon
- Linezolid
- Macrolides
- Metronidazole
- Nalidixic acid
- Penicillins
- Rifampin
- Sulfonamides

Drugs believed to cause or prolong delirium or confusional states

Anticholinergics

- ❑ Atropine
- ❑ Benztropine
- ❑ Diphenhydramine
- ❑ Scopolamine
- ❑ Trihexyphenidyl

Anticonvulsants

- ❑ Carbamazepine
- ❑ Levetiracetam
- ❑ Phenytoin
- ❑ Valproate
- ❑ Vigabatrin

Antidepressants

- ❑ Mirtazapine
- ❑ Selective serotonin reuptake inhibitors
- ❑ Tricyclic antidepressants

Cardiovascular and hypertension drugs

- ❑ Antiarrhythmics
- ❑ Beta blockers
- ❑ Clonidine
- ❑ Digoxin
- ❑ Diuretics
- ❑ Methyldopa

Depression, suicide

We treat the medical part of it , but

Suicidality — Suicidal patients can elicit discomfort in ICU doctors, who may feel inadequately trained to evaluate and treat these challenging patients. Suicidality in seriously ill patients may take the form of passive thoughts of death, specific plans to end one's own life, requests for physician-assisted or hastened death or deliberate self-injurious behavior (eg, intentional overdosing with narcotics, attempted and completed suicides).

Psychiatrist's help highly needed for assessment and before shifting out of ICU or hospital and for the family too



Metabolic causes of depression in ICU

B₁₂ deficiency

Hypothyroid

Hyponatremia

Glucose disorders

Calcium

❑ Hepatic

❑ Renal

❑ Sepsis

❑ Fever

Drowsiness

Side effects of Psychiatric drugs

Side Effects of Antipsychotic Medications



Neuroleptic Malignant Syndrome (NMS)

- ❑ Hyperthermia, muscular rigidity, tachycardia, hyper or hypotension, autonomic instability, rhabdomyolysis, confusion
- ❑ Increased creatine phosphokinase and leukocytes
- ❑ More common in first weeks of treatment
- ❑ Increased risk with higher doses, multiple drugs, male, and young
- ❑ Can lead to loss of consciousness and death
- ❑ Misdiagnosis: catatonia, EPS, serotonin syndrome, infectious disease
- ❑ Supportive management and stop drug

SYMPTOMS	NEUROLEPTIC MALIGNANT SYNDROME (NMS)	SEROTONIN SYNDROME
	<p>A neurological disorder caused by an adverse reaction to neuroleptic or antipsychotic drugs. NMS usually develops within the first two weeks of treatment with a dopamine antagonist but it can occur at any time</p>	<p>A dose-related range of toxic symptoms which are largely attributable to increasing serotonin concentrations in the central nervous system. Although severe cases have been reported with an overdose of a single drug, they usually occur with a combination of two or more serotonergic drugs (even at therapeutic doses)</p>
Behavioural	<ul style="list-style-type: none"> • Confusion, delirium or coma 	<ul style="list-style-type: none"> • Confusion, delirium • Agitation • Restlessness
Autonomic	<ul style="list-style-type: none"> • Hyperthermia • Sweating • Tachycardia • Unstable blood pressure • Tachypnoea 	<ul style="list-style-type: none"> • Hyperthermia • Sweating • Tachycardia • Hypertension • Mydriasis • Flushing
Neuromuscular	<ul style="list-style-type: none"> • Generalised muscle rigidity 	<ul style="list-style-type: none"> • Clonus (symmetrical and usually more marked in the lower limbs) • Hypotonia
Laboratory findings	<ul style="list-style-type: none"> • Elevated creatine phosphokinase • Leucocytosis 	

Side Effects of Antipsychotic Medications

Sedation

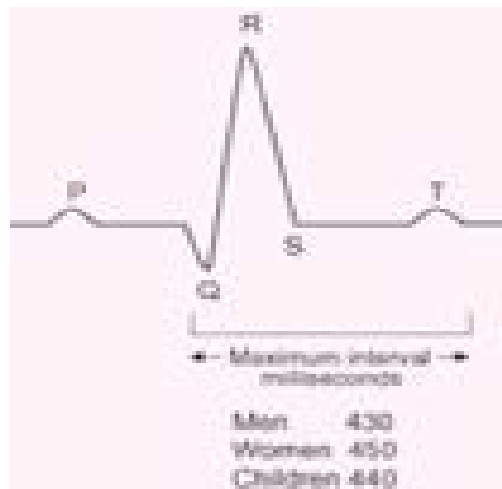
- ❑ Frequent and dose dependent
- ❑ Tolerance may develop
- ❑ May be a wanted effect in agitated patients
- ❑ More sedating agents
 - Chlorpromazine
 - Clozapine
 - Quetiapine

Side Effects of Antipsychotic Medications

Cardiovascular: Orthostatic hypotension, increased heart rate, dizziness, reduced ST interval, **longer Qtc Interval**

Antipsychotics:

- ❑ Risperidone
- ❑ Fluphenazine
- ❑ Haloperidol
- ❑ Clozapine
- ❑ Ziprasidone
- ❑ Pimozide
- ❑ Droperidol
- ❑ Quetiapine



Antidepressants:

- ❑ Amitriptyline
- ❑ Clomipramine
- ❑ Imipramine
- ❑ Dothiepin
- ❑ Doxepin
- ❑ Venlafaxine

How we try to minimise psy manifestations in ICU



Special Indian Scenarios

- ❑ Emotional attachment level
- ❑ Literacy level
- ❑ Internet use
- ❑ Diverse religious background
- ❑ Spiritual background
- ❑ Current era of distrust

Our approaches in icu to reduce psychiatric manifestations eg, Palliative care

Establishing a sound partnership requires careful attention to effective communication.

A-V counseling room



Allowing relatives on the rounds



DIMENSION

Family Presence on Rounds

A Systematic Review of Literature

Brigitte S. Cypress, EdD, RN, CCRN

Family-centered care has become the new trend in the health care field that involves honoring the patient and families' perspectives and choices and supporting them in participating in care and decision making at whatever level they choose. Family presence on rounds is one of the guidelines instituted for evidence-based best practices for support of family in the delivery of patient-centered care in the intensive care unit (ICU) but identified as the least studied among all the other aspects of family-centered care in the ICU. From 1988 to 2010, only 1 research study on family presence was conducted in an adult ICU. The purpose of this article was to review research studies related to family presence on medical rounds, reviews that focus on both adults and pediatric patients in the critical and noncritical care settings are also included.

Key Words: families, needs of family members, rounds

[DIMENS CRIT CARE NURS. 2012;31(1):53-64]

The 2001, Institute of Medicine's landmark publica-

the ACCM Task Force of 2004 to 2005 de

Windows



Presence of family member on ICU rounds

- ❑ The impact on staff satisfaction and the family's ability to participate in their care is significant, and it also fosters teamwork and empowers hospital staff
- ❑ Researchers have found that the basic needs of family members in ICUs are information, reassurance, support, and the ability to be near the patient.
- ❑ Family involvement also improves communication, shares decision making, and offers new learning for residents and students.
- ❑ *“ Family centered rounds ”*

Avoiding doctor _ patient family conflicts

Challenging interactions in the medical setting

- Can be understood as interpersonal exchanges involving strong emotions such as anger, frustration, fear, despair, or humiliation. Associated behaviors include verbal outbursts, threats, destruction of property, or physical altercations.
- Extrapolations from general medical and primary care studies suggest that such interactions between patients and clinicians are both common (15 to 30 percent) and consequential

Approaches to avoid doctor patient conflicts

Communication

- ❑ Demonstrate basic professional manners
- ❑ Be direct, clear, honest, and as specific as possible.
- ❑ Acknowledge limitations in a clinician's ability to predict treatment responses or outcomes.
- ❑ Provide consistent messaging about the plan of care
- ❑ Respond to challenging interactions in a matter-of-fact fashion
- ❑ Be explicit about rules and behavioral expectations
- ❑ Be specific about how a particular behavior is problematic, to team members
- ❑ Identify key family members and potential surrogate decision makers as early as possible.
- ❑ Team on the same page
- ❑ Treat co-occurring mood or substance use disorders with targeted psychopharmacology for patient

Successful partnership

Positive feedback even after losing a patient

- ❑ Nature of decision
- ❑ Treatment alternatives
- ❑ Pros and cons of choices
- ❑ Discuss uncertainty
- ❑ Assess family understanding
- ❑ Elicit patient's values and understanding
- ❑ Discuss the family's role in decision-making
- ❑ Assess the need for input from others
- ❑ Is there anyone else the family would like to consult?
- ❑ Explore the context of the decision
- ❑ How will the decision affect the patient's life?
- ❑ Elicit the family's opinion about the treatment decision

Opportunity of Teaching the communication skills to juniors

Burnout in health care workers

- ❑ Burnout in the intensive care unit professionals
- ❑ A systematic review

Chien-Huai Chuang, et al 2016

Results

- ❑ Overall, 203 full text articles
- ❑ The prevalence of burnout in ICU professionals in the included studies ranged from 6% to 47%.
- ❑ The factors associated with burnout: Age, sex, marital status, personality traits, work experience in an ICU, work environment, workload and shift work, ethical issues, and end-of-life decision-making.

What we expect from a psychiatrist

- ❑ Responsiveness
- ❑ Communicability
- ❑ Help Identifying organic or non organic condition
- ❑ Symptom relief
- ❑ Counselling
- ❑ And .. What we don't
 - ❑ Over sedation
 - ❑ Over drugging
 - ❑ Drugs without counselling
 - ❑ Delayed response





Thank you

www.Rubyicu.com