POST INTENSIVE CARE SYNDROME

PICS:
The Truth About Consequences

Long Beach Memorial  2016
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Maurene Harvey has no disclosures
Overview

Background – set the stage

Describe PICS including specific problems, risk factors, and prevalence

Discuss the prevention and management of PICS across the continuum of care

In 47 years of critical care nursing, have seen many exciting improvements

Proudly discharge millions of patients back to their families and communities each yr

Have always known that the patients we care for have a long road to recovery after discharge from the ICU
In the two past decades, learned how remarkably common and devastating the LTC of critical illness can be and how much some of our patients and their families suffer

Disturbing source of some moral distress to critical care practitioners

In response, working hard to identify risk factors for these consequences and rapidly implementing ways to mitigate their impact

Although the critical care community is becoming increasingly aware of PICS, patients, families and the post-hospital discharge care community are not

They are the ones who are most directly affected

It is our responsibility to increase their awareness and to work with those that care for them post ICU to identify and implement strategies to address these outcomes
Emerging Concepts Driving This Effort

- Emphasis on pt/family-centered care
- Focus on safe transitions and handoffs
- Acceptance that critical care is defined by the whole episode of care (pre and post ICU), not just the ICU stay

SCCM Conferences on PICS

In 2010, SCCM convened a stakeholders conference on improving long-term outcomes after ICU discharge – 14 national orgs represented

In 2012, SCCM conducted a 2nd conference on PICS – 21 national orgs represented

Results published in CCM 2012 & 2014
Stakeholders included SCCM and international experts, reps from national non-critical care orgs such as JCAHO, NIH, ICU care, rehab, PT, OT, LTC, palliative care, speech/hearing, case workers, HC systems, as well pts, families, and pt adv orgs

Those attending these conferences have begun to spread the word to their peers via publications, presentations and initiatives
Also need to increase awareness of the possible long term consequences of critical care in ICU survivors and their families.

Can decrease their fear of the unknown, decrease feelings of being unique, of something terribly wrong with them, and alert them to the possible need for out-pt follow-up assessments and referrals.

They need to know they are not alone.

To help with this now have:

- Definition of PICS on Wikipedia
- Videos by pts and families who have experienced PICS posted on YouTube
- Information on SCCM’s website section for pts and families
- Information on John Hopkins website OACIS

List of resources provided.
Thrive Campaign

SCCM’s high priority initiative – Awarding grants for research to accelerate recovery and improve pt/family support

Establishing peer to peer support collaboratives

The term post-intensive care syndrome is defined as new or worsening impairment in physical, cognitive and mental health status arising and persisting after hospitalization for critical illness.

Research has revealed wide ranges of reported incidence because of differences in patient populations, comorbidities, coexisting psychosocial factors, care delivery systems, measurement tools, length of time post ICU assessed (1 month to 5 or even 8 yrs)
Physical Consequences

10-60% (75% of those who undergo mech vent) have difficulty with ADLs 1 yr later

25-50% of those who undergo mech vent for over 4-7 days and 50-75% of those with sepsis develop ICU acquired weakness (ICUAW)

85-95% of those with ICUAW still have abnormalities 2-5 yrs later

Cognitive Consequences

Include problems with memory, processing speed, planning, problem solving, and visual-spatial awareness

30-80% of pts have cognitive impairment 1 yr later (improves in some but not all)

25% of those with ARDS still have impairment 6 yrs later

In those over 65 yrs with severe sepsis, impairment still present 8 yrs later
Psychological Consequences

10-50% of pts have symptoms of depression, anxiety, and/or sleep disturbance which can last months to yrs

10-50% also have clinically significant symptoms of PTSD which can still be present 8 yrs later

Socioeconomic Consequences

Pts report lower QOL which can improve slowly and may return to baseline after several yrs

50% of pts require caregiver assistance 1 yr later (from help with ADLs to full care)

50% of pts with ARDS (median age 45 yrs) have not returned to work 1 yr later and 33% never do

≥10% of pts undergoing mech vent ≤4d are alive and completely independent 1 yr later

10% go bankrupt
Other Potential Consequences

Pulmonary – Decreased pulmonary function, dyspnea
Nutritional – Loss of appetite, difficulty swallowing
Immunosuppression
Joint pain, stiffness, discomfort
Fatigue
Sexual dysfunction

Other Important Outcomes

Higher mortality rates
  5-36% 1st year, 15-50% 5 year
Higher hospital admission rates
  20-40%
Chronic critical illness
The cost of living....

Currently discharge around 5 million pts from ICU / yr in US
Expected to increase due to population demographics
Impact of PICS can also be expected to increase unless we can successfully intervene
PICS has an impact on the cost of healthcare and resource utilization
Prevention and Management Strategies

Research is young but many of these interventions have been documented to impact other outcomes Are already part of our practice for other reasons

CC practitioners are working hard to prevent or minimize risk factors

(Age over 65 yrs)
Immobility
#Days of MV, LOS in ICU
Heavy sedation, delirium
Sepsis, ARDS
Hypo or hyperglycemia
Hypoxia
Early Mobility

Early mobility in ICU patients is safe in most pts and may result in:
- Lower ICU and hosp LOS (cost)
- Shorter duration of mech vent
- Decreased weakness
- Decreased delirium, depression, anxiety
- Improved functional status
- Decrease well and long known problems of immobility

Barriers to Early Mobility Programs

- Poor definition of timing, type, duration, and frequency
- Need for staff education and training
- Fear of potential adverse consequences
- Resource, staff and time constraints
- Preexisting clinical practices and beliefs
- May require a change in unit culture
Post-ICU Rehab and Follow-up Clinics

Research is ongoing but who what where when and how not determined
Ethically and professionally responsible to recognize and address potential for largely unaddressed needs
More common in UK, Europe
Effective strategies may vary from simple follow-up calls to ensure proper care, to clinics that provide all possible required services
Begins in ICU and continues thru recovery

Early Psychological intervention

When psychologists established programs in the ICU for support, counseling, and education on stress management and coping skills - the incidence of anxiety, depression, and PTSD post discharge was cut in half.
May also include follow-up calls or apts post hospital discharge.
Providing a more healing environment
To help decrease delirium, agitation, anxiety
• promote sleep
• enhance pt comfort
• decrease noise, adjust room lighting temp and drafts
• make sure the pt uses their sensory aids (glasses, hearing aids) when appropriate
• promote family presence and participation
• bring familiar objects from home
• show our compassion and respect

Decreasing delirium has been shown to decrease the risk of cognitive impairment and PTSD post ICU
Pharmacological interventions for pain, agitation and anxiety can increase the risk of delirium
Non-pharmacological interventions can be very effective without the side effects drugs can incur
Part of being an intensive caring unit, not just an intensive care unit

Part of incorporating palliative care principals into every patient’s care, not just those at EOL

The art of nursing makes a big difference

Humanizing Intensive Care
Gabriel Heras
Intensivist from Spain

http://www.humanizingintensivecare.com/2016/02/

https://www.youtube.com/watch?v=1FpID5lVCVM
Diaries kept for patients by families and staff during ICU stay

Diaries describe pts ICU stays- fill in memory gaps, replace false memories and delusions, understand what happened to them

Have been shown to decrease patient anxiety, depression and PTSD

Also shown to decrease PTSD in families

Are a common practice in Europe but not in the US yet

Functional Reconciliation at Handoffs

Functional reconciliation refers to a checklist describing pts phys, cognitive and mental status to check progress and communicate across the continuum of care, for discharge planning and referrals

Can be a very useful tool but its impact has not been studied to date

Best assessment tools not identified

Prehospital baseline difficult to determine
Use the PAD ABCDEF(GHI) Bundle

**A**ssessment prevent and management of pain

**B**oth SAT and SBTs

**C**hoice of sedation and analgesia

**D**elirium assessment prevention and management

**E**arly mobility/exercise

**F**amily communication, *follow-up referrals, functional reconciliation*

**G**ood handoff communication and materials

**H**ealing environments

**I**CU diaries

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**Summary of Possible Strategies**

**Risk factor reduction**

**Early mobility programs**

**Post ICU rehab and follow-up clinics**

**Early psychological intervention**

**More healing environments**

**ICU diaries programs**

**Functional reconciliation checklists**

**ABCDEFGH I bundles**
Someday may have a bundle of strategies to decrease PICS with a high potential impact on long term outcomes

PICS-F
Post-Intensive Care Syndrome-Family
Our current model of family-centered care builds on the compassion and responsibility we have always felt for their well-being.

We understand they are an important link to understanding the pt’s past and medical history, a resource during their ICU stay and a bridge to their future care.

Addressing PICS in families is not only humane and ethically and professionally responsible, but caring for them will help them care for our patients post discharge.

**Risks of PICS-F**

The incidence is higher in women, in pt spouses, when pts are younger or at higher risk of death, in those with less education, in those involved with decision-making when it is not their preferred role.

It is lower in those who get more support and information during the ICU stay and who have more social support.
Incidence of PICS-F

20-75% suffer from anxiety, 8-42% are depressed (1/3 are taking meds for anxiety and depression when pt is discharged)

8-33% have symptoms of PTSD (up to 50% if pt is a child or pt died)

Problems can persist for years

Can have prolonged or complicated grief, exacerbation of chronic health problems

All this challenges family relationships and financial security

Possible Strategies to Decrease PICS-F

Promote family presence/participation in care

Establish good teamwork between staff and family with frequent/understandable communication and conferences, active listening

Create ICU diary program

Establish psychologist participation in family’s care and support groups during/after ICU

Have written information and lists of resources available

Teach skills they need to care for patient at home

Encourage them to take care of themselves
Requires collaboration with case workers, discharge planners, social workers and primary care to facilitate awareness, and proper referrals for pts and families

Finally, we need to continue our efforts to promote awareness and education of those caring for our patients and their families in the out-patient community both locally and nationally.

Although we are not responsible for post-hospital care, we are responsible for informing those that do.

*If not us, then who?*
This initiative adds to our role in a time when we are already stretched.

Ultimately our success as critical care providers will not be judged by pt survival alone, but by what our pts and their families want.

Survival is not the end-point for them – return to the highest quality of life is.

That ultimately is what we have always wanted too.

Our efforts to mitigate and address PICS have a high potential to impact this goal.
Thank you