

Integrating Quality Improvement Content Throughout the Curriculum

Dorothea McDowell, Ph.D., RN

Debra Webster Ed.D, RNBC, CNE

Objective

- Discuss strategies that can be implemented across the pre-licensure curriculum to involve students in quality improvement initiatives.

QSEN Principle: Quality Improvement

- **Use data to monitor the outcomes of care process and use improvement methods to design and test changes to continuously improve the quality and safety of healthcare systems**
- **Knowledge**
 - Describe strategies for learning about outcome of care
 - Describe approaches for changing processes of care
- **Skills**
 - Seek information about outcomes
 - Use QI tools, root cause analysis of sentinel event
- **Attitudes**
 - Value own and others contributions to care
 - Value measurement, change and team work

Application of QSEN Principles

- It's not about teaching more content, it's about teaching content in a different way:
 - Helping students obtain knowledge, skills, and attitudes
 - Preparing the next generation of nurses
 - Integrating evidence-based practice
 - Improving the quality of care
 - Providing safe, family-centered care

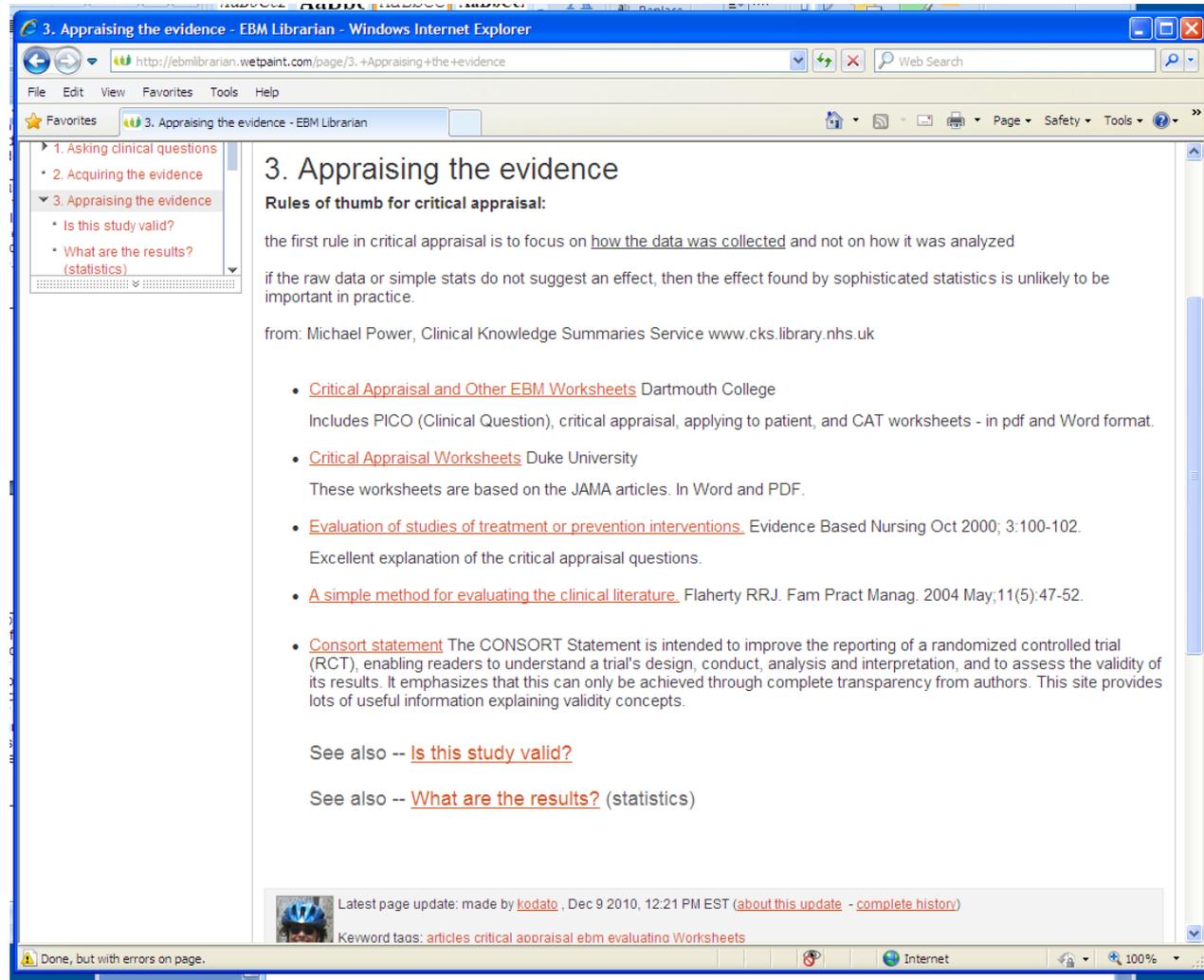
First Semester Introductory Course

- Introduce students to concept of Quality Improvement in acute care settings
- Guest lecture by local Risk Manager/ Quality Improvement team members
- Emphasize the ongoing nature of quality improvement

Second Semester Nursing Research Course

- Inclusion of content on the relationship of evidence to quality improvement
- Hierarchy of evidence reviewed
- Discussion of resources available to assist with evidence evaluation

http://ebmlibrarian.wetpaint.com/page/3.+Appraising+the+evidence



3. Appraising the evidence - EBM Librarian - Windows Internet Explorer

http://ebmlibrarian.wetpaint.com/page/3.+Appraising+the+evidence

File Edit View Favorites Tools Help

3. Appraising the evidence - EBM Librarian

1. Asking clinical questions

2. Acquiring the evidence

3. Appraising the evidence

- Is this study valid?
- What are the results? (statistics)

3. Appraising the evidence

Rules of thumb for critical appraisal:

the first rule in critical appraisal is to focus on how the data was collected and not on how it was analyzed

if the raw data or simple stats do not suggest an effect, then the effect found by sophisticated statistics is unlikely to be important in practice.

from: Michael Power, Clinical Knowledge Summaries Service www.cks.library.nhs.uk

- [Critical Appraisal and Other EBM Worksheets](#) Dartmouth College
Includes PICO (Clinical Question), critical appraisal, applying to patient, and CAT worksheets - in pdf and Word format.
- [Critical Appraisal Worksheets](#) Duke University
These worksheets are based on the JAMA articles. In Word and PDF.
- [Evaluation of studies of treatment or prevention interventions](#). Evidence Based Nursing Oct 2000; 3:100-102.
Excellent explanation of the critical appraisal questions.
- [A simple method for evaluating the clinical literature](#). Flaherty RRJ. Fam Pract Manag. 2004 May;11(5):47-52.
- [Consort statement](#) The CONSORT Statement is intended to improve the reporting of a randomized controlled trial (RCT), enabling readers to understand a trial's design, conduct, analysis and interpretation, and to assess the validity of its results. It emphasizes that this can only be achieved through complete transparency from authors. This site provides lots of useful information explaining validity concepts.

See also -- [Is this study valid?](#)

See also -- [What are the results?](#) (statistics)

Latest page update: made by [kodata](#), Dec 9 2010, 12:21 PM EST ([about this update](#) - [complete history](#))

Keyword tags: [articles](#) [critical appraisal](#) [ebm](#) [evaluating Worksheets](#)

Done, but with errors on page.

Internet 100%

Second Semester Adult Health Clinical

- Clinical group involvement in quality improvement project
- Piloted in Spring 2012
- Students surveyed Sequential Compression Device use by surgical patients
- Reviewed literature, identified areas for improvement, made suggestions to staff

Sequentials Are Essential

Tsigereda Alemayehu, Lianna Bissell, Christy Causey,
Melissa Eberhard, Megan Hassan, Brianna Lasslett, Kim Poole-SU Nursing Students

How Data Were Collected

- Two students collected data, rotating every week
- Checked if the sequential compression devices (SCDs) were applied and the machine was on
- Offered to put on the SCD's if the patient did not have them on
- If the SCD's were not on, the students asked why
- Checked twice during the shift; once at the beginning around 4:00pm and once towards the end around 8:00pm
- Only checked patients that had either abdominal or gynecological surgery on 5 West A



What is a DVT?

A deep vein thrombosis, or DVT, is the formation of a blood clot in a vein deep inside the body. DVTs usually form in large veins of the lower leg and thigh, but may also form in other veins. These clots can fully or partially block blood flow back toward other areas of the body. If the clot mobilizes and travels through the bloodstream, it is called an embolus. Emboli can become lodged in blood vessels leading to the lungs and cause a pulmonary embolism, which can be fatal.

The following are S/S of a DVT:

- Increased redness in one leg
- Increased warmth in one leg
- Leg pain in one leg
- Edema of one leg

Ideas For Reinforcement

- Sign in each patients room "Ask your nurse about your compression devices" (This would spark a patients interest)
- Include in CNAs rounding
- Include in a post-operative check list
- Have CNA place compression devices on bed while they are up walking so when patient enters room it is easily visible and a reminder
- Educate the family and patient about the importance
- "Sequentials are Essential" signs around the unit to remind the nurses
- Include the sequential checks when the vitals are taken
- Incentive for the nurses for documentation compliance

Results

- Out of the 30 patients that were monitored 16 were wearing SCD's correctly with the machine turned on (53%) and 14 were not (47%) (at 2000)
- The most common reason patient's did not have SCD's on was because they were walking frequently
- The second most common reason was a nurse fixable point. For example, SCD's on but machine is not in room or not turned on.
- Patients were more likely to be wearing SCD's in the first 24-48 hours post-op
- Patients were more likely to be wearing SCD's later in the evening (1900-2000)

Questions for further research regarding SCDs:

- 1.What is the minimum number of times a patient needs to walk in order to not need the SCD's?
- 2.What is the fall risk associated with the proper use of SCDs?
- 3.What is the rate of DVT occurrence with SCD use alone vs. SCD use concurrent with anticoagulant therapy in post-abdominal surgical patients?
- 4.What is the risk of skin injury/breakdown with the use of SCDs in patients with decreased peripheral perfusion, mobility and level of consciousness?
- 5.Qualitatively – what are the beliefs of med-surg nurses regarding the use of SCDs in the prevention of DVT?
- 6.Qualitatively – what are the patient's perceptions of wearing SCDs immediately after surgery and during the post-op period?

Reasons Why Patients Are Not Wearing Sequentials (2000)



Nurse fixable points

There are many simple things that nurses can do to increase the use and effectiveness of SCD's!

- Check that the SCD's are on the client's legs properly
- Make sure that the machine is on and connected to the SCD's
- Assess sequential use Q2H
- Place them back on the client's legs after getting back into bed
- EDUCATION! If clients know how SCD's work and what health benefits they have, they will be more apt to use them
- If all of these things can be implemented in client care everyday, we can reduce our client's risk of DVTs. It will only take a few minutes to assess for these few basic things, but over looking them could be dangerous to our clients.

References

- James, M. M. (2010). Duration of deep vein thrombosis prophylaxis in the. *The American Journal of Surgery*, 200, 413-421.
- Melynk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2009). Igniting a Spirit of Inquiry: An Essential Foundation for. *American Journal of Nursing*, 109(11), 49-52.
- Melynk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). The Seven Steps of Evidence-Based Practice. *American Journal of Nursing*, 110(1), 51-53.
- Stillwell, S. B., Fineout-Overholt, E., Melynk, B. M., & Williamson, K. M. (2010). Asking the Clinical Question: A Key Step in. *American Journal of Nursing*, 110(3), 58-61.
- Qaseem, A., Chou, R., Humphrey, L.L., Starkey, M., Shekelle, P. (2011). Venous thromboembolism prophylaxis in hospitalized patients: a clinical practice guideline from the American. *Annals of Internal Medicine*, 155(9), 625-32.

Psychiatric Mental Health Course

- **Course Objective:** Use research findings to enhance evidence based practice in the mental health setting
- In depth analysis of the pertinent issues related to assigned patient
- Incorporate research into the care of the patient to enhance quality
- Topics may include: diagnosis, medications, cultural considerations, interventions
- 30 minute presentation to faculty, peers, and staff

Examples of EBP in Psychiatric Mental Health Nursing

- Cognitive Behavioral Therapy and Anxiety Treatment
- Pet Therapy and PTSD
- Relapse and Alcohol Dependence
- Exercise and Schizophrenia
- Mental Health Beliefs and Attitudes of Older African Americans with Depression
- Antipsychotics and Diabetes
- Substance Abuse in Veterans
- Sexual Abuse and PTSD

Project Example



Consider This Patient....

- 46 year old B.W. African American male
- Multiple admissions to drug & alcohol rehabilitation facilities as well as inpatient psychiatric facilities, discharged with relapse
- Diagnosed with Bipolar Disorder & Major Depression
- Reports past history of hearing voices and suicide attempts.
- Describes life in which he is haunted by feelings of worthlessness, hopelessness, depression and an overall constant feeling of gloom.
- Uses alcohol and drugs to cope with depression & auditory hallucinations
- Has faced stigmatization in the community and also by health care workers.



SUBSTANCE ABUSE AND MENTAL ILLNESS: NURSE'S ROLE IN PATIENT'S RECOVERY

Introduction

- Understanding how to care for Mental Health clients is important in all aspects of nursing, not just for Psychiatric Nurses
- The National Institute of Mental Health (NIMH) estimates that in a given year, one of four individuals in the United States may suffer from a mental illness.
- A stigma exists for those carrying a mental illness diagnosis; this stigma exists not only in the general population but also among health care workers (Bjorkman, T., Angelman T., Jonsson M 2008).
- There is also a stigma associated with individuals whom have a substance abuse illness (Bjorkman 2008).
- NIMH estimates almost half of those with a mental illness are also suffering from an addiction issue.
- Dual diagnosis patients have issues with multiple relapses. There are steps we, as health care professionals can take to aid in their success.
- There are many problems, some lie in relapse prevention and providing empathetic care

Exploring Relapse Issues...

Reasons patients relapse

- Exacerbations of Mental Illness
- Pressures to use within drug network
- Lack of meaningful activity
- Poor treatment for mental illness or addiction

Ways to Prevent Relapse

- Safe housing & employment
- Medication Compliance
- Strong Social support
- Life/Job Skill Training (Drake, R. E., Wallach, M. A., McGovern, M. P. 2005).

What Can Nurses Do?

- Nurses must be able to provide empathetic, kind and compassionate care to dual diagnosis clients
- Advocate for the client upon discharge
- Develop therapeutic relationship with client
- Be sure to assess your feelings regarding mental illness and addiction, do not stigmatize clients
- Clients need to feel they have a place to go without judgment of staff

Thoughts to Consider

Many patients suffering from addiction and mental illness are stuck in a cycle, although there are often many other factors (finances, lack of insurance etc) there are barriers related to stigmatization and lack of empathy these patients encounter from health care workers and family members. If their own family has turned on them, where do they go? If they do not feel safe turning to the medical community, they will turn back to drugs and alcohol.

A Study Found...

those with mental illness and substance abuse are more likely to seek treatment if they feel they will receive treatment from health care providers whom actually care and are understanding, that show "acts of kindness" towards them. Clients actually would rather stay on the streets or use in times of distress than go back to facilities which made them feel stigmatized, and misunderstood (Padgett, D. K., Henwood B., Abrams C., Davis A. 2008).

References

- Bjorkman, T., Angelman T., Jonsson M. (2008). Attitudes people with mental illness: a cross-sectional study among nursing staff in psychiatric and somatic care. *Nordic College of Caring Science*, 22, 170-177.
- Drake, R. E., Wallach, M. A., McGovern, M. P. (2005). Special Section on Relapse Prevention: Future Directions in Preventing Relapse to Substance Abuse Among Clients With Severe Mental Illnesses. *Psychiatric Services*, 56(10), 1297-1302.
- National Institute of Mental Health. (2009, August 10). *The Numbers Count: Mental Disorders in America*. Retrieved November 28, 2009, from <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>.
- Padgett, D. K., Henwood B., Abrams C., Davis A. (2008). Engagement and retention in services among formerly homeless adults with co-occurring mental illness and substance abuse: voices from the margins. *Psychiatric Rehabilitation Journal*, 31(3), 226-233.

Project Example

Childhood Sexual Abuse (CSA)

Definition:

When an adult or older adolescent abuses a child for sexual gratification

Client: K.J. 39 y/o female
Divorced: once

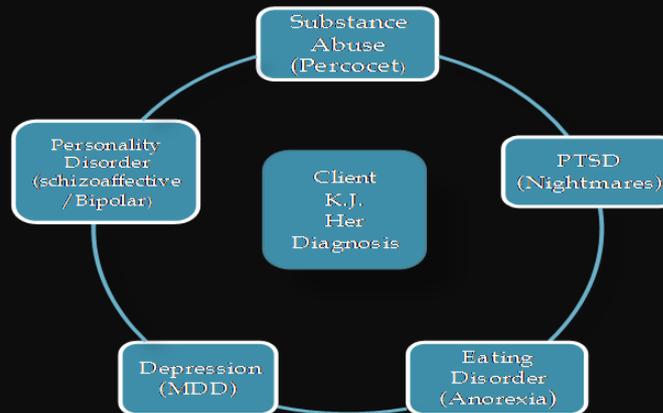
Currently: Separated (2nd Husband)

Children: 16 y/o boy (who is addicted to Percocet)
12 y/o girl (Currently healthy)
both live with client's Mother

Besides Diagnosis listed, these are issues that the client felt:

- Problems with interpersonal relationships usually due to mistrust
- Guilt because she felt it was her fault
- Low Self-esteem; couldn't do anything right, ugly, fat

Long lasting effects of Childhood sexual abuse



Research:

- Of 1, 189 women 78% report being depressed as evidenced by Beck Depression Inventory
- Cohabiting relationships women more control (what they seek since they did not have control during abuse) Women also stay in relationships for shorter periods of time (6-8 months)
- Substance Abuse: To a leave the mental pain
- PTSD: Recurrence of traumatic experience
- Eating Disorder: Had no control over abuse but can control food and what they eat, body is never good enough, never thin enough, ugly to them
- Schizoaffective/Bipolar Disorder: Prefrontal cortex is still developing in childhood which affects critical thinking, judgment, and behavior. Those that have damage to this area at a young age cannot modify behavior and become inflexible to changing situations

Nursing Diagnosis:

- Risk for suicide r/t past attempts
- Risk for addiction relapse r/t withdrawal symptoms
- Risk for ineffective coping r/t PTSD a/e/b nightmares and intrusive thoughts

Medications

Thorazine: 400 mg PO once daily (anti-psychotic)
Zoloft: 50 mg PO once daily (SSRI)

Statistics:

- 1 in 4 girls before age 18
- 1 in 6 boys before age 18
- 30%-40% abused by family member
- 50% abused by someone they know
- 10% abused by stranger
- 60 million survivors exist today in America

References:

- E. Crawford, M. O. Wright, & K. Sebastian. (2007) Positive Resolution of Childhood Sexual Abuse Experience: The Role of Coping, Benefit-Finding and Meaning-Making. *Journal of Family Violence* 22, 597-608.
- M. Cheasty, A. Clare & C. Collins. (2002) Child Sexual Abuse – A Predictor of Persistent Depression in Adult Rape and Sexual Assault Victims. *Journal of Mental Health* 11; 79-84.
- D. Martzolf, C. Draucker. (2008) The Legacy of Childhood Sexual Abuse and Family Adversity. *Journal of Nursing Scholarship* 40; 333-340.

Senior Seminar

- Course Objective: Apply current research findings to leadership and management issues
- Identify ongoing quality improvement initiative on assigned clinical unit
- Summarize initiative including why this particular issue was chosen, how the data is being collected and analyzed
- Discuss how the quality improvement initiative will effect health care practice on the unit
- Summarize two related research articles
- Discuss application of research finding

Project Topics

- Couplet Care in Maternity
- Hourly Rounding
- Skin Precautions and Ulcer Prevention
- Patient Satisfaction
- Preventing Falls

Root Cause Analysis

- Discussion on decision making and problem solving
- Small group exercise
- Patient Fall
- Use of fishbone diagram

Questions?



Thanks for your participation.