Managing the Medically-Complex Psychiatric Patient

3:45 – 4:45 pm
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Key Points

• The person with psychiatric illness is at high risk for premature death

• Premature death can be modified with early prevention

Key Points

• The inpatient psychiatric hospitalization provides an opportunity to impact health

• A Nurse Practitioner model of providing medical care in the inpatient psychiatric setting is cost-effective and can enhance health in the psychiatric patient

Individuals with mental illness have higher rates of co-occurring chronic medical conditions and premature mortality.

(Druss & Esenwein, 2006)
Increased Rate of Cardiovascular Disease

- **Depressive symptoms** clearly increase the risk of cardiovascular disease and diabetes (Carney, et al, 2002; Eaton, 2002;)

- There is a higher morbidity and mortality associated with depressed patients after myocardial infarction (Lauzon, , et al, 2003; Carney, et al, 2008)

The leading cause of death in those with **serious mental illness** (SMI) is **heart disease** (Osby, et al, 2001, ADA, 2004; Weisler & Nasrallah, 2010)

- In schizophrenia, the adjusted relative risks of 2.2 for cardiovascular disease and 1.8 for diabetes (Curkendal, et al, 2004)

Increase Risk: Metabolic Syndrome

- Individuals with **serious mental illnesses** have elevated rates of metabolic syndrome

- The CATIE study demonstrated a 40.9% rate among patients with chronic schizophrenia. In those with BPD, the rates have varied between 17 & 50% (Ryan, Collins, & Thakore, 2003; Correll, et al, 2010)
Increased Rates of Obesity

- Many of the atypical antipsychotic medications have side effects which can provoke **obesity** by increasing the appetite and can induce development of type 2 diabetes and heart disease.

Poorer Glycemic Control

- Studies have shown that **depression** is associated with worse glycemic control and higher mortality in those with diabetes (Egede, Nietert, & Zheng, 2005; Lin, et al, 2009).
- One study showed improved medical outcomes when the diabetic person was treated for depression, and two other studies showed worse glycemic control with treatment (Gill, Klinkman, & Chen, 2010).

Increase Rate of Pulmonary Illness

- One study found pulmonary illness (COPD, lung CA, pneumonia) to be the most prevalent physical health problem among persons with **serious mental illness** (Jones, et al, 2004).
- Using data from the National Health and Nutrition Examination Study, a 22.6% prevalence of COPD was found in adults with SMI compared to a reported rate of 6% in the general population.
Premature Death

• Those with SMI die, on average, 25-30 years earlier

• Primarily as a result of cardiovascular disease

(ADA, 2004)
In Summary
Persons with mental illness are at higher risk than the general population for:

• Co-occurring medical issues which affect health and
• Higher risk for premature death

Challenges for the Mental Health Population

There are barriers to effective medical care.

Barrier #1-Poor Quality of Care

• 2006 CATIE study demonstrated that a large proportion of persons with schizophrenia in an outpatient setting in the US had their serious medical problems ignored
• Specifically, the CATIE study showed that 60% of patients with schizophrenia had frank hypertension and never received an antihypertensive drug
• 30% had diabetes and never received treatment for this
Barrier #2 - Problems in Prevention and Early Detection, and Chronic Disease Management

- The literature highlights the need for better preventative health care, early detection, and chronic disease management for persons with mental illness.

- Early intervention to address the formidable health risks that contribute to poor physical functioning in the psychiatric population is often lacking.

  (Chafetz, et al, 2006)

Barrier #3 - System Factors

- Patient, provider, and system factors all contribute to poor quality of care at the interface of mental health with general medicine.

  (Unutzer, Schoenbaum, Druss, Katon, 2006)

Patient Barriers for Effective Care

_Patients_ may:

- Not recognize or correctly identify sx’s
- Be reluctant to seek care because of stigma
- Be reluctant to adhere to tx recommendations
PCP Barriers for Effective Care

*PCPs* may:
- Lack necessary training and confidence to provide appropriate tx for mental health problems
- Be limited in what they can accomplish in a 12-15 minute office visit in which the pt may have multiple medical and social problems

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Psychiatry Barriers for Effective Care

*Psychiatrists*
- May fail to ask about or address medical problems with patients
- Adding to this challenge is an "identity crisis" in psychiatry. Psychiatrists have gone to medical school but have not viewed themselves as physicians in the same way as an internist would. Many psychiatrists don't necessarily consider these kinds of metabolic complications associated with mental illness and its treatment to be their responsibility
  
  *(Phend, 2008)*

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ADA/APA Guidelines

- Weight and waist circumference, BP, lipid levels, and HgbA1C at baseline
- Reassessment of weight at 4 weeks, 8 weeks, and 12 weeks after starting a new antipsychotic, and quarterly thereafter
- HgbA1C & BP should be reassessed at 12 weeks and annually thereafter
- Lipid levels at 12 weeks and every five years after
  
  *(Cohn & Sernyak, 2006; ADA, 2004)*
ADA: Metabolic Monitoring Guidelines for Antipsychotics Largely Unheeded

- A 2008 report noted that recommendations for lipid and glucose monitoring for patients on atypical antipsychotic drugs have made scarcely a dent on clinical practice.

- Only about 20% of patients on second-generation antipsychotics received recommended glucose monitoring and just 10% had lipids monitored.

ADA: Metabolic Monitoring Guidelines for Antipsychotics Largely Unheeded

Monitoring rates were:
- For lipid screening, 8.25% before guidelines and 10.08% afterward ($P<0.01$)
- For lipid monitoring, 6.78% before guidelines and 8.63% after ($P<0.05$)
- For glucose screening, 17.23% before guidelines and 21.37% after ($P<0.01$)
- For glucose monitoring, 14.03% before guidelines and 17.61% afterward ($P<0.01$)

System Barriers for Effective Care

- Low rate of compliance with labs
- Difficulty accessing primary care provider
- Lack of focus on prevention
- Lack of insurance coverage for screening care
- Geographical issues
- Lack of integration between medical and mental health care
Improving Outcomes

- Focus on prevention, early detection, and chronic disease management (Piatt, Munetz, & Ritter, 2010)
- Focus on modifiable risk factors, such as tobacco use, obesity, pneumonia and influenza vaccination programs through behavioral, educational, and cognitive-behavioral interventions for self-management of severe psychiatric illness (Faulkner, Soundy, & Lloyd, 2003; Evins, et al, 2004; Miller, Paschall, & Svendsen, 2006; Goodarz, et al, 2009)
- Improve communication between providers
- Adhere to existing treatment monitoring guidelines

Key Point Summary

- Premature death can be modified with early prevention
- The inpatient psychiatric hospitalization provides an opportunity to impact health

Inpatient Psychiatric Hospitalization

- Is an opportunity for prevention and early intervention activities
- Team-based setting which can provide patient education and cognitive behavioral interventions aimed at improving health
- Can provide target-based activities to promote health and disease management
- Can promote integration and communication between the medical care and psychiatric care
Old Model for Provision of Medical Care

- Group of four medical consultants who performed H&Ps on new admits for psychiatric patients (not CD). H&Ps were done after office hours (evenings) and on weekends
- Performed additional medical consultation on patients at request of psychiatrist
- Available by phone for consultation 24 hrs per day
- Labs were primarily reviewed by psychiatrists or faxed to consultants office

• A Nurse Practitioner (NP) model of providing medical care can provide cost-effective care which enhances health
Cost Savings

<table>
<thead>
<tr>
<th>OLD MODEL</th>
<th>NEW MODEL</th>
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<tr>
<td><strong>Consultants:</strong> Paid at $160 per full H&amp;P and $110 for interim H&amp;P (those readmitted within 30 days)</td>
<td><strong>Employ NP 1.0 FTE + back-up</strong></td>
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<tr>
<td>• Plus, after hours on-call fee of $110 per day</td>
<td>• Consultants paid same</td>
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<td>• Annual cost $400,000</td>
<td>• Annual Cost: $290,000</td>
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<td>• Savings of $110,000</td>
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New NP Model for Provision of Medical Care

• NP performs H&Ps Mon-Friday (8:30 am-5:00 pm)
• Does rounds on each unit to assess and manage ongoing medical issues
• Reviews all labs and radiology reports daily
• Available for medical emergencies
• Review vital signs board each day
• Oversee detox (alcohol and opiate withdrawal) management

New NP Model for Provision of Medical Care

• On-call Medical Consultants are available after hours for telephone consultation and provide weekend H&P services
• Medical consultation available on weekends at request of psychiatrist
Services Added by NP
• Medical management of Chemical Dependency Residential Program patients
• CLIA waived testing: urine dipsticks, Rapid Strep, Rapid Influenza
• Pelvic exams and STD testing
• Face-to-face restraint and seclusion assessments
• Does patient education re: health conditions
• Consults with outside PCPs/specialists
• Routine pneumonia and influenza vaccine offering
• Consults on referrals of medically-complex pts

Discharge Planning
• Patient assisted with making appointment with PCP for follow-up after discharge if has any acute/chronic problems that need ongoing monitoring and follow-up
• Communicate with PCP either via phone call or sending copy of H&P and discharge summary on D/C

Volume
• # of H&Ps range from 2200 - 2584 per year (inpatient and day treatment programs)
• NPs perform about 70% of the H&Ps and 95% of medical consults
• NPs perform an average of 8-9 H&Ps per day (range 6-12), plus at least six medical consults
Starting an NP service

Where to Start

• First step:
  Establish “buy in” from physicians/medical staff
  – Began by finding/talking with other hospitals who were using a similar model to get information about how they did it
  – Providing education regarding role of the NP

NP Licensure

• Nursing practice is defined and regulated by the Nurse Practice Act in each state
• NPs must hold an individual certificate or license to practice in each state where they see patients. The state determines the scope of practice allowed as well as whether the NP is allowed to practice independently, or in a supervised or collaborative manner with a physician
NP Licensure

• There are 23 states that require no physician involvement for the licensed NP to diagnose, and treat, but the remaining states require some degree of written or formal physician involvement in NP practice
• The umbrella of supervision, collaboration, or delegation can never be used to replace scope and individual responsibility

CA Law Regarding NP Practice

• NPs rely on standardized procedures for authorization to perform overlapping medical functions (CCR Section 4485). They are the legal mechanism for Nurse Practitioners to perform functions which would otherwise be considered the practice of medicine

CA Law Regarding NP Practice

• Standardized procedures are authorized in the Business and Professional Code, Nurse Practice Act (NPA) Section 2725 and clarified in California Code of Regulations (CCR 1480 & 1474 & 1379)
• Standardized procedures are the policies and procedures which guide practice
CA Law Regarding NP Practice

• A Nurse Practitioner may perform standardized procedure functions only under the conditions specified in the health care system’s standardized procedure and must provide the system with satisfactory evidence that the nurse meets the experience, training, and/or educational requirements to perform the functions. A formulary may be attached to the standardized procedure.

CA Law Regarding NP Practice

• Furnishing of medications occurs under consulting physician supervision (e.g., collaboration, approval via standardized procedures, telephone consultation).

• CA law states consulting physician may supervise no more than four NPs at one time.

Where to Start

• **Second step:**
  Once “buy in” has been achieved, look for a consulting physician
  – Understands the NP role
  – Is willing to be available for consultation during the NPs working hours
  – Sees role as collaborative
  – Helpful if likes to teach
Where to Start

- **Third step:**
  Formulate model of how system would work (NP hours, back-up after hours and weekends)

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Model

- Medical Staff need to decide whether to credential NPs as part of the medical staff
- OR
- Facility can hire NPs as employees

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Where to Start

- **Fourth step:**
  - Develop job descriptions
  - Develop standardized procedures and formulary
  - Physician contracts and payment arrangements
Benefits to NP Provided Care

• Focus on health promotion, disease prevention, health teaching and coaching
• Closer monitoring of medical conditions which has allowed us to accept more medically acute/complex patients
• All lab work is followed up on
• Increased patient satisfaction

Benefits to NP Provided Care

• More opportunity for collaborative care (medical and psychiatric) as NPs are on-site eight hours per day
• Continuity of care with outside PCP plan for follow-up care developed and appointments are made for follow-up medical care prior to D/C
• Able to care for more medically-complex patients

Other Benefits

• Develop improved protocols for diabetes management, anti-coagulant therapy, wound monitoring, nursing staff monitoring of medical conditions
• Increased our medical competency of nurses through in-service training
• Developed more patient education materials regarding common chronic illness management
Sister Facilities

- Two sister hospitals – one block and eight miles away. Full service medical facilities. One is a designated trauma hospital
- Mental health walk-in patients are screened by ED physician and then psychiatric assessment team does face-to-face evaluation

ED Visits

- Total volume of emergency department visits by patients with mental health and substance abuse disorders has been increasing more rapidly than the number of visits by other patients
- Stats are showing that there is a huge increase in ED waiting times across the nation. ED visits: 90 million in 1990 to 123 million in 2008 according to the AHA

Our ED

- Seeing more psychiatric and substance abuse patients
- More safety issues have arisen
- Developed “safe room” in the ED area for psychiatric patients
- Changed procedures for monitoring these patients to keep them and staff safe
ED Psychiatric Consultation

- Assessment team comprised of psychiatric RNs who work in the Intake Department at the Behavioral Health Center
- Perform psychiatric assessments and then consult with on-call psychiatrist regarding disposition recommendations
- Arrange for follow-up care (transfer, outpatient referrals, etc.)

Thank you

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Questions