Medical University of South Carolina

Case Study – DNP Program

Evidence-Based Practice

Identifies Salient Complaint

- Subjective Data: Initial visit-Feels tired and experiencing flu like symptoms, feels like he is going crazy, girlfriend says he is down and sad, doesn't feel like doing anything and many days doesn't do anything, lack of sleep, hears noises and thinks someone is in the house, feels there is too much pressure from his relationship. Revisit-States he is stressed, angry, doesn't know how he will come out of this or if girlfriend would be better off without him. Objective Data: Initial visit-Lacks energy, hair falling out, flat affect, noticeably concerned about recent changes. Revisit-More lethargic, less emphasis/gesticulation when explaining symptoms, pale. BP 122/82, HR 82, RR 18, Temp 98.9

Chooses Screening Tool

- Veterans returning from war may be six times more likely to develop symptoms consistent with PTSD (Stuart, 2013). Initial utilization of the Primary Care Posttraumatic Stress Disorder Screen to determine the need for a more formal assessment. After initial screen, utilization of the PTSD Checklist military version PCL-M due to tenure in Iraq (The National Center for PTSD, 2010).
- Initial utilization of the PHQ-2 for screening; a positive answer for either item 1 or 2 warranting a full diagnostic assessment for depression. After initial screen, utilization of the assessment/severity tool PHQ-9 to assist in diagnosing patient and tracking improvement over time (Feldman & Christensen, 2008).

Identifies salient data from H/P

- Family history of depression in the patient's father and grandmother. Family history of alcoholism, verbally abusive grandfather after returning from war. Fatigue and disinterest in activities/sex, weight loss/decreased appetite, slow concentration, poor insight, decreased recall. Family history of HTN, DM. Feelings of guilt about not saving fellow soldiers, night palpitations when thinking he hears someone.
- HCV antibody positive, Hepatitis c diagnosis, started interferon 3 MIU injections 4 weeks ago, LFT's decreased

Pursues diagnostic criteria

- PHQ-9 score of 20, response to item number 10 of very difficult. Use of this tool recommends considering major depressive disorder, with a score of 20-27 being indicative of severe depression (Pfizer, 2005). DSM-IV-TR diagnostic criteria for major depression: five of nine symptoms must be present for a two week period, with one of these nine symptoms being either depressed mood or anhedonia (Feldman & Christensen, 2008). The patient can be diagnosed with major depression due to having: *depressed mood, anhedonia*, sleep disorder (insomnia), fatigue, psychomotor agitation (hyper vigilance and arousal), and guilt.
- Patient's PCL-M score is a 68. A PTSD diagnosis can be made by determining positive moderate responses on the PCL-M scale as they relate to the DSM-IV criteria items B-D. At least one B item, three C items, and at least two D items must be present (The National Center for PTSD, 2010). The patient meets all of these criteria with specification of acute PTSD (less than 3 months).

Additionally, Criterion A-a positive stressor-threat to safety in Iraq, Criterion E-duration is longer than one month, Criterion F-functional significance-social/functional impairment with girlfriend and daily activities are present indicating diagnosis (The National Center for PTSD, 2010).

- Due to time of onset of symptoms and initiation of interferon injections, drug induced secondary depression must be considered.

Develops plan from best practices

- Evidence based treatment of depression recommends first line SSRI antidepressant medication treatment and several forms of psychotherapy including CBT and IPT (Feldman & Christensen, 2008). CBT therapy to identify/challenge long held self critical thoughts and direct combating of these thoughts. ITP to work through interpersonal conflict with girlfriend and grief related to experiences in Iraq.
- The National center for PTSD recommends SSRI treatment and concurrent psychotherapy including PE and CPT augmented with skill building and active coping activities (The National Center for PTSD, 2010). PE to utilize repeated exposure to the intrusive thoughts, stressors and feelings to reduce the power these feelings have of causing distress. CPT to understand the thoughts and feelings brought about by the traumatic event and utilization of skill building activities to gain increased understanding and challenging of these thoughts.

Prescribes appropriate medication

- SSRI's are considered as first line treatment of depression co occurring with medical illnesses because of their safety and tolerability (Herring, Muzyk & Jamerson, 2010). The patient has a co morbidity of hepatitis c with interferon injections; those individuals with serious hepatic dysfunction should start paroxetine at 10mg daily in a single morning dose (Labbatte, Rosenbaum, Fava & Arana, 2010). The National center for PTSD recommends initial daily dosing of 50 mg of sertraline or 20 mg of paroxetine. This dosing would be adjusted according to LFT's to ensure hepatic safety, with possible decreased dosing considered due to pharmacologic recommendations (see above).
- If the depression is severe, which the PHQ-9 score has indicated, it is reasonable to initiate antidepressant therapy for drug induced secondary mood disorders (Labbatte et al., 2010). Hepatitis c patients should be considered as candidates for treatment with an SSRI before successful interferon therapy is discontinued. Paroxetine can be safely used in hepatitis c patients if there is no evidence of severe liver dysfunction (Kraus, Schafer, Faller, Csef & Scheurlen, 2002).

Orders appropriate tests

- History of and continued monitoring of LFT's, weight gain/loss, CBC, thyroid function, UA, SSRI therapeutic levels

<u>Communication and Mental Health</u>

Utilizes motivational interviewing

- Utilization of motivational interviewing techniques to guide Mr. Chapman's care in a safe and efficient manner (Stuart, 2013). Resist the righting reflex-the patient should voice the argument for change. Understand and explore the patient's motivations -show interest in the patient's concerns and elicit the reason for wanting to make a change. Listen to the patient -the answers to behavior change often come from the patient with ancillary guidance from the provider. Empower the patient-help the patient to take an active interest in their own consultation and care (Rollnick, Miller & Butler, 2008).
- Guide the patient through his care utilizing appropriate communication as it is relevant to PTSD and depression. Ask Mr. Chapman what his goals are for treatment and where he wants to go. Inform Mr. Chapman of his options for medication, psychotherapy, and adjunctive therapy. Listen to what Mr. Chapman wants to do and offer appropriate guidance (Rollnick et al., 2008).

Analyzes genogram for genetics, epigenetics, and individual stressors

- Major depression is a familial disorder, with lifetime risk in the general population at 6%, and lifetime risk of those with relatives with depression at 20% (Stuart, 2013). The patient's grandmother and father both had depression creating an increased risk of depression. Alcohol use disorder and any anxiety disorder both have 40% co morbidity with lifetime major depressive disorder (Stuart, 2013). The patient has a family history of alcoholism; sister has a substance abuse issue, and also has an uncle and grandfather with maladaptive behavior after returning from military service. He is currently displaying symptoms of an anxiety disorder, and is at risk for alcoholism due to family history.
- Disturbances in mood can be specific responses to both major life stressors and accumulation of minor life stressors (Stuart, 2013). Younger sister won't speak to him, currently not close with younger brother, increased relationship conflict with girlfriend, dislike of mother's new husband, presence of chronic illness, guilt from Iraq are all precipitating stressors to depression and PTSD.

Develops plan for brief intervention

- During the acute treatment phase the goal is to eliminate symptoms and bring the patient back to level of functioning before the illness (Stuart, 2013). Initiation of an SSRI sertraline or paroxetine for the treatment of depression and PTSD, with consideration of use of antianxiety or antipsychotic drugs for co management of anxiety symptoms (Labbatte et al., 2010). Monitor for suicidal symptoms, particularly at this critical stage of treatment initiation as the medication may exacerbate suicidal thoughts prior to full therapeutic response (Labbatte et al., 2010).
- Establish rapport through shared time and convey belief in the patient that they are a valuable individual when initiating psychotherapy activities (Stuart, 2013). Initiate conversations tailored to determining specific individualized psychotherapy (mentioned above) giving information in small chunks and with appreciation of the patient's potential slower cognitive processing until energy improves with therapeutic drug action (Feldman & Christensen, 2008).

<u>Critical Thinking</u>

Develops differential diagnosis

- Generalized anxiety disorder, major depressive disorder, PTSD, traumatic brain injury, hypothyroidism, anemia. Consideration of subtypes of depressive disorders: drug induced secondary depression, depression with psychotic features, anxious depression

Identifies pertinent data

- Symptoms of depressed mood, anhedonia, sleep disorder (insomnia), fatigue, psychomotor agitation (hyper vigilance and arousal), guilt related to inability to save fellow soldiers, palpitations, hearing voices in the home. Family history of depression, previous post war tendencies of family members who were service members
- PCL-M, PHQ-9, DSM-IV-TR indicate diagnoses of PTSD and Major Depressive Disorder
- CBC, UA, TSH, Chemistry Panels are WNL

Formulates plan for action

- The patient will be seen in 1-3 weeks for an early contact visit after the brief intervention is complete while utilizing subsequent PHQ-9 and PCL-M testing to measure change. A decrease of 5 points on the PHQ-9 signifies a clinically significant improvement (Feldman & Christensen, 2008). A PCL-M 5-10 point change signifies reliable change, and a 10-20 point change suggests clinically significant change (The National Center for PTSD, 2010). Adherence to treatment and medication side effects will be addressed.
- Continued combination of psychotherapy and pharmacotherapy all while communicating utilizing motivational interviewing techniques. Gradual increase of exposure to anxiety stimulus and progressive muscle relaxation for treatment of PTSD. Progressive identification and resolution of identified stressors.

<u>Clinical Judgment</u>

Notices or plans for unexpected

- If symptoms do not subside after SSRI and psychotherapy treatment, reducing or withdrawing interferon treatment would be considered to maintain patient safety. Continued suicide assessment throughout care.
- If treatment resistant depression/PTSD arises consider dosage increases, augmentation or combination of drugs, or switching to a new drug (Labbatte et al., 2010). Utilize motivational interviewing to reassess patients motivation and response to psychotherapy. Examine the use of ECT if treatment of depression is refractory (Feldman & Christensen, 2008).

Adapts plan over time

- Suggestion of entrance into intermittent group therapy sessions once a strong rapport is established. Continued LFT's as a marker of interferon efficacy.
- Continue to work through stressors, encouraging patient to re establish relationships with family and friends that were previously affected. With the patient's permission, consider incorporating these individuals into team building activities.
- Teach new CBT skills regarding hyper arousal and desensitization related to PTSD symptoms. Continue treatment with sertraline or paroxetine. Consider benzodiazepines on a time-limited basis for treatment of extreme arousal, insomnia, and anxiety (Feldman & Christensen, 2008).

Provides psychoeducation

- Utilize a psycho educational model with the family as a whole if willing to participate. Within the model, outline reciprocal impact of mental disorders on family members and suggestions and strategies for coping. Communicate to the patient and family that mental disorders are a medical illness not a defect and that recovery is the rule. Convey that the patient is treatable and that the goal is for the patient to stay well (Stuart, 2013).
- Educate the client on risk for alcoholism. Provide information regarding alternative psychotherapy treatments utilizing motivational interviewing (allow the patient to actively participate in progression and management of care).

Gives anticipatory guidance

- Extensive proactive patient education on the side effects of SSRI's including agitation, sexual dysfunction, weight gain, fatigue and sleep disturbances and potential need for medication adjustments (Labbatte et al., 2010). Encourage the patient to contact the primary care provider if symptoms worsen or before discontinuing medication due to side effects.
- Explain that the illness can be relieved but that the potential for continued treatment will be necessary. Inform the patient that consultation with a mental health specialist beyond the primary care spectrum may be necessary if remission of symptoms cannot be attained (Feldman & Christensen, 2008).

Plans Appropriate time for follow-up

- Serial one month follow ups with the previously mentioned PHQ-9/PCL-M scale changes used as clinical progression markers until remission is achieved; appropriate consideration of medication dosing changes or medication changes as needed. Upon reaching remission, combination treatment will be continued for 6-12 months using maintenance dosing with continued screening for both conditions (Feldman & Christensen, 2008). Continued maintenance drug therapy and intermittent refresher psychotherapy sessions to help prevent recurrences. PHQ-9 checkups every 6-12 months for the rest of the patient's life to maintain safety.

References

Feldman, M. D. & Christensen, J. F. (2008). *Behavioral medicine: A guide for clinical practice.* (3rd ed.) New York: McGraw Hill Lange

Herring, C., Muzyk, A.L. & Jamerson, B. (2010). Treatment of co morbid depression in medical illness. *Journal of Pharmacy Practice*, 23 (3), 274-276

Kraus, M. R., Schafer, A., Faller, H., Csef, H. & Scheurlen, M. (2002). Paroxetine for the treatment of interferon-α-induced depression in chronic hepatitis C. *Alimentary Pharmacology & Therapeutics*, 16 (6), 1091–1099

Labbatte, L.A., Rosenbaum, J.F., Fava, M. & Arana, G.W. (2010). *Handbook of psychiatric drug therapy*. (6th ed.) Philadelphia: Lippincott, Williams & Wilkins

National Center for PTSD (2010). PTSD Checklist (PCL-M). Retrieved 9/16/2010 from http://www.ptsd.va.gov/professional/pages/assessments/ptsd-checklist.asp

National Center for PTSD (2010). DSM-IV PTSD. Retrieved 9/16/2010 from http://www.ptsd.va.gov/professional/pages/dsm-iv-tr-ptsd.asp

Pfizer (2005). PHQ9. Retrieved 9/16/2010 from http://webct.musc.edu/SCRIPT/NRDNP840/scripts/serve_home

Rollnick, S., Miller, W.R. & Butler, C.C. (2008). *Motivational interviewing in healthcare: Helping patients change behavior*. New York: Guilford Press

Stuart, G.W. (2013). *Principles and practice of psychiatric nursing*. (10th ed.) Saint Louis: Mosby, Inc.

Genogram for case 1

Patient is #20

1. Grandfather who was colonel in the army saw combat overseas in WWII and was decorated for valor. He was alcoholic after returning from the war and was verbally abusive to his wife and younger son (patients father). Died of lung cancer at age 74.
2. Grandmother devoted wife and mother, meek, never raised her voice. Suffered from depression; died in nursing home with Alzheimers disease.
3. Maternal grandfather . Owned insurance company, very successful. Very hard on his daughters as they grew up. Didn't let them date until they were 18. Died of MI at age 58.
4. Maternal grandmother still living, very healthy, active , has moved to Florida where patient's aunt lives. She is a Walmart greeter and loves this job.
5. Married to uncle, school teacher retired, mother of 3 sons (pts cousins) all college grads, working, athletic.
6. Uncle, retired military, computer expert, rank major, plays golf, distant emotionally.
7. Patients father, died brain hemorrhage age 62, took over father-in-laws insurance company, very good provider, worked long hours, not very involved with children, chronic depression, heavy drinker.
8. Husband of aunt, lives in Florida, retired commercial real estate, very successful.
9. Mothers sister, sold insurance, now retired, mostly homemaker.

10.Patients mother, warm, loving, parents had good relationship, mother much younger than father, remarried after husband died, has another child by current husband. Always homemaker. Currently hypertensive, type 2 diabetes, and obese.

11. Mothers current husband. Patient does not like step-father, thinks he spoils patient's younger sister, gambles, and is generally not a 'nice guy', very unlike his own father.

15. Computer data analyst, married to patient's cousin:

16. Eleanor. He is much older with child from previous marriage:

17. Tamara. They have just adopted an infant. This wife's first child.

18. 6 month old little boy, adopted. After 2 year infertility work-up with parents.

19. Patient's girlfriend, known many years, she is pharmaceutical rep, pretty, has had lots of boyfriends in the past.

20. Patient

21. Patient's younger brother who has taken over insurance company. He is doing well but is struggling to keep it afloat. They are currently not close but have been in past. Body builder, a real gym enthusiast.
22. Younger sister, who is "very troubled". Her boyfriend has been caught cheating on her, patient went to talk to him and 'roughed him up ' a little. Since then his sister won't talk to him. College student with substance abuse issues.
23. 18 year old younger sister , just graduated from high school and parents bought her red mustang. Patient thinks this was very bad idea.

Case 1