

Syllabus

Course Overview

This course explores the neurobiological, behavioral, psychological, and physical effects of psychoactive substances on individuals. The classifications, indications, and contraindications of commonly prescribed psychopharmacological medication are examined. Principles of psychopharmacology are applied to the clinical practice of counselors and therapists, including consultation and interfacing with the medical community and other systems of care.

Kaltura Activities

As part of this course, you are required to narrate and record a presentation using Kaltura or similar software. Refer to [Using Kaltura](#) for more information about this courseroom tool.

You will need an external or built-in microphone to record the audio for your presentation.

Note: If you require the use of assistive technology or alternative communication methods to participate in these activities, please contact DisabilityServices@Capella.edu to request accommodations.

Course Competencies

(Read Only)

To successfully complete this course, you will be expected to:

- 1 Examine neurobiological, behavioral, psychological, and physical effects of psychoactive substances.
- 2 Identify classifications, indications, and contraindications of commonly prescribed psychopharmacological medication.
- 3 Evaluate psychopharmacological research.
- 4 Integrate knowledge of psychopharmacology with clinical practice.
- 5 Communicate in a manner that is ethical, scholarly, professional, and consistent with the expectations for members of professional communities.

Course Prerequisites

There are no prerequisites for this course.

Syllabus >> Course Materials

Required

The materials listed below are required to complete the learning activities in this course.

Library

The following required readings are provided in the Capella University Library or linked directly in this course. To find specific readings by journal or book title, use [Journal and Book Locator](#). Refer to the [Journal and Book Locator library guide](#) to learn how to use this tool.

- [16D psychosis](#). (2016). *MPR - Physician Assistants' Edition*, 23(2), 154–158.
- Angermeyer, M. C., Van der Auwera, S., Matschinger, H., Carta, M. G., Baumeister, S. E., & Schomerus, G. (2016). [The public debate on psychotropic medication and changes in attitudes 1990–2011](#). *European Archives of Psychiatry and Clinical Neuroscience*, 266(2), 165–172.
- Argento, E., Tupper, K. W., & Socias, M. E. (2019). [The tripping point: The potential role of psychedelic-assisted therapy in the response to the opioid crisis](#). *International Journal of Drug Policy*, 66, 80–81.
- Baldwin, D. S., Hou, R., Gordon, R., Huneke, N. T. M., & Garner, M. (2017). [Pharmacotherapy in generalized anxiety disorder: Novel experimental medicine models and emerging drug targets](#). *CNS Drugs*, 31(4), 307–317.
- Bassir Nia, A. (2019). [Cannabidiol as an adjunctive treatment for schizophrenia](#). *Psychiatric Times*, 36(4), 5–7.
- Bellonci, C., Baker, M., Huefner, J. C., & Hilt, R. J. (2016). [Deprescribing and its application to child psychiatry](#). *Child and Adolescent Psychopharmacology News*, 21(6), 1–9.
- Bersani, F. S., Coviello, M., Imperatori, C., Francesconi, M., Hough, C. M., Valeriani, G., . . . Corazza, O. (2015). [Adverse psychiatric effects associated with herbal weight-loss products](#). *BioMed Research International*, 2015, 1–10.
- Betts, K. A., Sikirica, V., Hodgkins, P., Zhou, Z., Xie, J., DeLeon, A., . . . Wu, E. Q. (2014). [Period prevalence of concomitant psychotropic medication usage among children and adolescents with attention-deficit/hyperactivity disorder during 2009](#). *Journal of Child and Adolescent Psychopharmacology*, 24(5), 260–268.
- Bjornestad, J., Davidson, L., Joa, I., Larsen, T. K., Hegelstad, W., Langeveld, J., . . . Bronnick, K. (2017). [Antipsychotic treatment: experiences of fully recovered service users](#). *Journal of Mental Health*, 26(3), 264–270.
- Bose-Brill, S., Xing, J., Barnette, D. J., & Hanks, C. (2017). [Pharmacogenomic testing: Aiding in the management of psychotropic therapy for adolescents with autism spectrum disorders](#). *Pharmacogenomics and Personalized Medicine*, 10, 247–252.
- Bottelier, M. A., Schouw, M. L. J., Klomp, A., Tamminga, H. G. H., Schranter, A. G. M., Bouziane, C., . . . Reneman, L. (2014). [The effects of psychotropic drugs on developing brain \(ePOD\) study: Methods and design](#). *BMC Psychiatry*, 14, 48.
- Brodie, L., Donaldson, J., & Watt, S. (2014). [Non-medical prescribers and benzodiazepines: A qualitative study](#). *Nurse Prescribing*, 12(7), 353–359.
- Carlo, A. D., & Alpert, J. E. (2015). [Geriatric psychopharmacology: Pharmacokinetic and pharmacodynamic considerations](#). *Psychiatric Annals*, 45(7), 336–341.
- Collin, J. (2015). [Universal cures for idiosyncratic illnesses: A genealogy of therapeutic reasoning in the mental health field](#). *Health*, 19(3), 245–262.
- Correll, C. U., Rubio, J. M., Inczedy-Farkas, G., Birnbaum, M. L., Kane, J. M., & Leucht, S. (2017). [Efficacy of 42 pharmacologic cotreatment strategies added to antipsychotic monotherapy in schizophrenia: Systematic overview and quality appraisal of the meta-analytic evidence](#). *JAMA Psychiatry*, 74(7), 675–684.
- Duong, J., Elia, C., Takayanagi, A., Lanzilotta, T., Ananda, A., & Miulli, D. (2018). [The impact of methamphetamines in patients with traumatic brain injury: a retrospective review](#). *Clinical Neurology and Neurosurgery*, 170, 99–101.
- Fawcett, J. (2015). [Geriatric psychopharmacology: The good, the bad, and the ugly](#). *Psychiatric Annals*, 45(7), 328–330.
- Ferré, S. (2016). [Mechanisms of the psychostimulant effects of caffeine: Implications for substance use disorders](#). *Psychopharmacology*, 233(10), 1963–1979.
- Fosco, W. D., White, C. N., & Hawk, L. W., Jr. (2017). [Acute stimulant treatment and reinforcement increase the speed of information accumulation in children with ADHD](#). *Journal of Abnormal Child Psychology*, 45(5), 911–920.
- Horowitz, E., Bergman, L. C., Ashkenazy, C., Moscona-Hurvitz, I., Grinvald-Fogel, H., & Magnezi, R. (2014). [Off-label use of sodium valproate for schizophrenia](#). *PLoS One*, 9(3), 1–7.
- Hunt, J. I. (Ed.). (2017). [SSRIs for children and adolescents: NIMH trials show better efficacy than meta-analyses indicate](#). *Brown University Child & Adolescent Psychopharmacology Update*, 19(6), 1–4.
- Kinetz, E. (2019, May 8). [Chinese researchers try brain implants to treat drug addicts](#). *National Post (Online)*.
- Limandri, B. J. (2018). [Are you ready for change?](#) *Journal of Psychosocial Nursing & Mental Health Services*, 56(2), 11–13.
- McCall, C., & Winkelman, J. W. (2015). [The use of hypnotics to treat sleep problems in the elderly](#). *Psychiatric Annals*, 45(7), 342–347.

- Mohammadpour, N., Jazayeri, S., Tehrani-Doost, M., Djalali, M., Hosseini, M., Effatpanah, M., . . . Karami, E. (2018). Effect of vitamin D supplementation as adjunctive therapy to methylphenidate on ADHD symptoms: A randomized, double blind, placebo-controlled trial. *Nutritional Neuroscience*, 21(3), 202–209.
- Olashore, A., Ayugi, J., & Opondo, P. (2017). Prescribing pattern of psychotropic medications in child psychiatric practice in a mental referral hospital in Botswana. *The Pan African Medical Journal*, 26, 83.
- Parrott, A. C., Hayley, A. C., & Downey, L. A. (2017). Recreational stimulants, herbal, and spice cannabis: The core psychobiological processes that underlie their damaging effects. *Human Psychopharmacology: Clinical & Experimental*, 32(3), 1–9.
- Paulzen, M., Veselinovic, T., & Gründer, G. (2014). Effects of psychotropic drugs on brain plasticity in humans. *Restorative Neurology & Neuroscience*, 32(1), 163–181.
- Popa-Velea, O., Gheorghe, I. R., Trutescu, C. I., & Purcarea, V. L. (2015). Current challenges and pitfalls in the pharmacological treatment of depression. *Journal of Medicine and Life*, 8(2), 181–186.
- Preston, J. D., O'Neal, J. H., & Talaga, M. C. (2017). *Handbook of clinical psychopharmacology for therapists (8th ed.)*. Oakland, CA: New Harbinger.
- Runnels, P. (2018). Recent advances in the treatment of schizophrenia: Increasing adherence to improve outcomes. *Journal of Managed Care Medicine*, 21(3), 49–52.
- Samara, M. T., Cao, H., Helfer, B., Davis, J. M., & Leucht, S. (2014). Chlorpromazine versus every other antipsychotic for schizophrenia: A systematic review and meta-analysis challenging the dogma of equal efficacy of antipsychotic drugs. *European Neuropsychopharmacology*, 24(7), 1046–1055.
- Schenberg, E. E. (2018). Psychedelic-assisted psychotherapy: A paradigm shift in psychiatric research and development. *Frontiers in Pharmacology*, 9, 1–11.
- Schindler, A. G., Soden, M. E., Zweifel, L. S., & Clark, J. J. (2016). Reversal of alcohol-induced dysregulation in dopamine network dynamics may rescue maladaptive decision-making. *Journal of Neuroscience*, 36(13), 3698–3708.
- Sevi Tok, E. S., Arkar, A., & Bildik, T. (2016). The effectiveness of cognitive behavioral therapy, medication, or combined treatment for childhood anxiety disorders. *Turkish Journal of Psychiatry*, 27(2), 1–8.
- Stern, T. A. (Ed.). (2015). This issue: Geriatric psychopharmacology [Guest Editorial section]. *Psychiatric Annals*, 45(7), 333–334.
- Swift, K. M. (2017). Integrative nutrition therapy for mood disorders. *Today's Dietitian*, 19(10), 36–40.
- Tomba, E., Guidi, J., & Fava, G. A. (2018). What psychologists need to know about psychotropic medications. *Clinical Psychology & Psychotherapy*, 25(2), 181–187.
- Turna, J., Patterson, B., & Ameringen, M. (2017). Is cannabis treatment for anxiety, mood, and related disorders ready for prime time? *Depression & Anxiety*, 34(11), 1006–1017.
- Varma, S., Sareen, H., & Trivedi, J. K. (2010). The geriatric population and psychiatric medication. *Mens Sana Monographs*, 8(1), 30–51.
- Williams-Hailey, M. (2019). Psychotropic medications: Why is there more to know beyond the "five rights" and side-effects? *Dean's Notes*, 40(3), 2–4.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- American Counseling Association. (n.d.). Knowledge center: Ethical & professional standards. Retrieved from <https://www.counseling.org/knowledge-center/ethics>
- American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- Handwritten Tutorials. (2012, September 18). Pharmacokinetics 1 - Introduction [Video]. | Transcript Retrieved from <https://www.youtube.com/watch?v=8-Qtd6RhV4>
- Kwok, C. L. (2016). Central nervous system neurotoxicity of chronic alcohol abuse. *Asia Pacific Journal of Medical Toxicology*, 5(2), 70–71. Retrieved from http://apjmt.mums.ac.ir/article_7670_6793c72efcf5cab0cd56453f9709fc7f.pdf
- Microsoft. (n.d.). Record a slide show with narration and slide timings. Retrieved from <https://support.office.com/en-us/article/Record-a-slide-show-with-narration-and-slide-timings-0b9502c6-5f6c-40ae-b1e7-e47d8741161c?ui=en-US&rs=en-001&ad=US>
- Psychopharmacology Institute. (2012, January 28). Dopamine pathways, antipsychotics and schizophrenia [Video]. | Transcript Retrieved from <https://youtu.be/5wM2oqQJhV4>
- Speed Pharmacology. (2016, November 10). Pharmacology - Antidepressants - SSRIs, SNRIs, TCAs, MAOIs, lithium (made easy) [Video]. | Transcript Retrieved from <https://youtu.be/T25jvLC6X0w>
- Speed Pharmacology. (2018, September 17). Pharmacology - Benzodiazepines, barbiturates, hypnotics (made easy) [Video]. | Transcript Retrieved from <https://youtu.be/4ZHudeMho8g>

Suggested

Optional

Unit 1 >> History of Psychopharmacology

Introduction

As a new counselor providing care to patients, you will often hear the term "psychopharmacology." Psychopharmacology is the use of medications to treat mental health disorders. Whether you are working in an inpatient setting such as a hospital or detox center or in an outpatient setting such as a private therapy practice, you will likely be coordinating care with your patient's other medical providers (psychiatrist, primary care provider, et cetera). These providers will mention the use of different medications to help patients manage their behavioral health diagnosis. In your capacity as a counselor, you must be prepared for these discussions by being knowledgeable about current medications and treatment options. Since there have been a lot of changes in attitude regarding the use of psychotropic medication, we will start this course with a look at the history of psychopharmacology through present day.

Learning Activities

u01s1 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 1, "Introduction," pages 3–14.
- Chapter 2, "Integrated Models," pages 15–28.

Use the Capella library to read the following:

- These articles review the history of psychopharmacology and changes in attitudes regarding psychotropic medications:
 - Collin, J. (2015). [Universal cures for idiosyncratic illnesses: A genealogy of therapeutic reasoning in the mental health field](#). *Health*, 19(3), 245–262.
 - Angermeyer, M. C., Van der Auwera, S., Matschinger, H., Carta, M. G., Baumeister, S. E., & Schomerus, G. (2016). [The public debate on psychotropic medication and changes in attitudes 1990–2011](#). *European Archives of Psychiatry and Clinical Neuroscience*, 266(2), 165–172.
- These articles examine the use of psychopharmacology for various mental health issues:
 - Betts, K. A., Sikirica, V., Hodgkins, P., Zhou, Z., Xie, J., DeLeon, A., . . . Wu, E. Q. (2014). [Period prevalence of concomitant psychotropic medication usage among children and adolescents with attention-deficit/hyperactivity disorder during 2009](#). *Journal of Child and Adolescent Psychopharmacology*, 24(5), 260–268.
 - Popa-Velea, O., Gheorghe, I. R., Trutescu, C. I., & Purcarea, V. L. (2015). [Current challenges and pitfalls in the pharmacological treatment of depression](#). *Journal of Medicine and Life*, 8(2), 181–186.
 - Correll, C. U., Rubio, J. M., Inczedy-Farkas, G., Birnbaum, M. L., Kane, J. M., & Leucht, S. (2017). [Efficacy of 42 pharmacologic cotreatment strategies added to antipsychotic monotherapy in schizophrenia: Systematic overview and quality appraisal of the meta-analytic evidence](#). *JAMA Psychiatry*, 74(7), 675–684.
 - Brodie, L., Donaldson, J., & Watt, S. (2014). [Non-medical prescribers and benzodiazepines: A qualitative study](#). *Nurse Prescribing*, 12(7), 353–359.

u01s2 - Course Assignments Overview

There are three assignments in this course that will provide you with an opportunity to apply your knowledge of the course content. It is important to be aware of the requirements of each assignment so that you are prepared and can plan your time accordingly. We have intentionally added preparation time throughout this course and recommend you budget your time appropriately. Read the assignment descriptions in the unit where the assignment is due to learn the criteria for each deliverable.

- Unit 3: To Medicate or Not to Medicate.
- Unit 6: Medication Selection and Ethical Issues.
- Unit 9: Professional View of Psychopharmacological Issues.

u01s3 - Using Kaltura

In preparation for recording your narrated presentation for the Unit 9 assignment, complete the following:

- If you have not already done so, set up and test your microphone, using the installation instructions provided by the manufacturer.
- Practice recording to ensure the audio quality is sufficient.
- Refer to [Using Kaltura](#) for directions on recording and/or uploading your recording in the courseroom.

Note: If you require the use of assistive technology or alternative communication methods to participate in this activity, please contact DisabilityServices@Capella.edu to request accommodations.

u01d1 - Psychotropic Medication

Before you participate in this first discussion, read the scoring guide to learn how the instructor will evaluate your discussion participation throughout this course.

Much has changed in recent years in regard to the usage of psychotropic medication to treatment mental health. While many in the medical and counseling fields have argued for the benefits of using psychotropic medications, others have challenged their efficacy. For this discussion:

- Explain some of the neurobiological, behavioral, and psychological benefits of psychoactive medications in the treatment of mental illness from recent literature.
- Discuss some of the negative neurobiological, behavioral, psychological, and physical effects of psychoactive substances that have been reported on from research studies.
- Based on your findings, share your thoughts on whether you believe the benefits outweigh the risks.

Response Guidelines

Review your peers' posts and respond to at least two. Point out gaps in information or incorrect steps in the events the learner identified. Provide positive feedback as well. Be sure to cite any resources you use to support your initial posts and responses using current APA style and format.

Course Resources

Graduate Discussion Participation Scoring Guide

u01d2 - Integrated Models

Biological and psychological factors can influence a person's behavior. There may be both physical and psychological issues impacting a patient and what diagnosis they may be given. Based on the case studies you read in Chapter 2 of [Handbook of Clinical Psychopharmacology for Therapists](#), come up with a patient scenario in which a physical health condition may be impacting the patient's mental health.

Response Guidelines

Review your peers' posts and respond to at least two. Point out gaps in information or incorrect steps in the events the learner identified. Provide positive feedback as well. Be sure to cite any resources you use to support your initial posts and responses using current APA style and format.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 2 >> Neurotransmission and Drug Action

Introduction

When meeting with a new patient, there may be questions posed to you on how medications work to help alleviate symptoms and what possible side effects to expect. Basic knowledge of neurotransmission and drug action is essential for the counseling professional. This week you will learn about both neurotransmission (when nerve impulses travel between neurons in the brain) and pharmacokinetics (how medications interact with the body).

Learning Activities

u02s1 - Studies

Readings

Use the Capella library to read the following:

- These articles examine the effect of psychotropic medications on the brain:
 - Tomba, E., Guidi, J., & Fava, G. A. (2018). What psychologists need to know about psychotropic medications. *Clinical Psychology & Psychotherapy*, 25(2), 181–187.
 - Paulzen, M., Veselinovic, T., & Gründer, G. (2014). Effects of psychotropic drugs on brain plasticity in humans. *Restorative Neurology & Neuroscience*, 32(1), 163–181.
 - Bottelier, M. A., Schouw, M. L. J., Klomp, A., Tamminga, H. G. H., Schranter, A. G. M., Bouziane, C., . . . Reneman, L. (2014). The effects of psychotropic drugs on developing brain (ePOD) study: Methods and design. *BMC Psychiatry*, 14, 48.
 - Limandri, B. J. (2018). Are you ready for change? *Journal of Psychosocial Nursing & Mental Health Services*, 56(2), 11–13.
- This article examines nurses' perspective of psychotropic medications:
 - Williams-Hailey, M. (2019). Psychotropic medications: Why is there more to know beyond the "five rights" and side-effects? *Dean's Notes*, 40(3), 2–4.

Video

Use the Internet to view the following video that explores the movement of drugs into, through, and out of the body:

- Handwritten Tutorials. (2012, September 18). Pharmacokinetics 1 - Introduction [Video] | Transcript. Retrieved from <https://www.youtube.com/watch?v=8-Qtd6RhVA>

Multimedia

Complete the Neurotransmission presentation to learn more about the transmission of nerve impulses between neurons.

u02s2 - Assignment Preparation

Your first assignment is due at the end of next week. You will prepare a report with treatment recommendations for a fictitious client.

You are encouraged to take time this week to prepare for the assignment by reviewing the guidelines and the scoring guide to ensure you understand the criteria and grading requirements. Contact your instructor with any questions or concerns.

u02d1 - Chemical Events in Neurons

The human brain contains billions of neurons. Each neuron generates its own neurotransmitters that may influence the functioning of adjacent neurons. For this discussion, explain the events that occur during neurotransmission, from the presynaptic to postsynaptic stages. You may want to review the Neurotransmission presentation from the studies this week. As you describe these steps, consider the different steps of neurotransmission and think about how each step provides a place where medications can intervene.

Response Guidelines

Review your peers' posts and respond to at least two. Point out gaps in information or incorrect steps in the events the learner identified. Provide positive feedback as well. Be sure to cite any resources you use to support your initial posts and responses using current APA style and format.

Course Resources

Graduate Discussion Participation Scoring Guide

u02d2 - Pharmacokinetics

Jane is a 45-year-old female client of average height and weight. Her family physician prescribed Prozac, a selective serotonin reuptake inhibitor (SSRI) antidepressant medication, to treat her persistent depressive disorder. Her initial dosage was 20 milligrams per day, which helped her somewhat. Two months ago, you and her family physician agreed that she should increase her dosage level to 40 milligrams per day. She has taken 40 milligrams for 2 months, and her symptoms have completely subsided.

While in the waiting room of her family physician, Jane learns that another client, Mark, is taking Celexa, which is also an SSRI antidepressant medication. Mark is nearly twice Jane's size and several inches taller, but he only needs 20 milligrams of his medication per day. Jane decides she wants to change her medication to Celexa so she can take a smaller dosage.

Instructions

Pharmacokinetics includes the body's absorption, distribution, biotransformation, and excretion of a drug. For this discussion:

- Define the four aspects of pharmacokinetics in your own words.
- Determine which of the four aspects—absorption, distribution, biotransformation, or excretion—Jane is experiencing.
- Analyze the effects this aspect and the psychotropic drug have on Jane's neurotransmission and hormonal system.

Response Guidelines

Review your peers' posts and respond to at least two. In each response, indicate whether you agree or disagree and justify your reasoning.

Remember to cite any outside sources you use to support your initial posts and responses.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 3 >> Anxiety Disorders

Introduction

Anxiety disorders make up a major category of mental diagnoses. These disorders are classified as mood disorders, also known as affective disorders. They are characterized by subjective feelings of apprehension, tension, fear, and helplessness. Anxiety disorders include panic disorder, generalized anxiety disorder, phobias, social anxiety/social phobia, and post-traumatic stress disorder. The physiological symptoms of anxiety can include:

- Increased heart rate.

- Sweating.
- Chest discomfort or pressure.
- Shortness of breath.
- Nausea.
- Dizziness.
- Trouble relaxing.
- Numbness or tingling in the hands or face.

Anxiety may arise from exposure to situations in which a person feels threatened, or it may arise from physical sensations in the body associated with anxiety or physiological activation states. Often, an anxiety disorder occurs when a feeling is unrealistic, exaggerated, or overwhelmingly strong. It may be so great that the anxiety interferes with everyday life. These final two characteristics distinguish normal anxiety levels from those requiring professional intervention in the form of counseling, medication, or both.

Learning Activities

u03s1 - Assignment Overview

The To Medicate or Not to Medicate assignment allows you to explore both sides of the medication debate that occurs in the mental health profession. You will learn about Lauren Summers, a new patient who has recently come to counseling for a first therapy session in an outpatient facility. As her counselor, you must prepare a report with your treatment recommendations to present to the medical staff at the bimonthly clinic supervision meeting.

To begin working on your assignment:

1. Review the different elements on the Your Desk multimedia presentation.
2. Reflect on Chapters 1–5 of [*Handbook of Clinical Psychopharmacology for Therapists*](#) and what you have learned about the two schools of thought:
 - Pro-medication (anti-psychotherapy).
 - Pro-psychotherapy (anti-medication).
3. Consider the following as you develop your report:
 - How do these two varying perspectives view the neurobiological, behavioral, psychological, and physical effects of psychoactive substances on the treatment of patients?
 - What are some commonly prescribed psychopharmacology medications?
 - How does current psychopharmacological research support the use of medication?
 - Given your knowledge of clinical practice, how has psychopharmacology been integrated?

u03s2 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 6, "Preliminary Diagnostic Considerations," pages 65–74.
- Chapter 9, "Anxiety Disorders," pages 107–122.
- Chapter 18, "Antianxiety Medications," pages 217–226.

Use the Capella library to read the following articles that explore the different therapies and medications for anxiety disorders:

- Baldwin, D. S., Hou, R., Gordon, R., Huneke, N. T. M., & Garner, M. (2017). [Pharmacotherapy in generalized anxiety disorder: Novel experimental medicine models and emerging drug targets](#). *CNS Drugs*, 31(4), 307–317.
- Sevi Tok, E. S., Arkar, A., & Bildik, T. (2016). [The effectiveness of cognitive behavioral therapy, medication, or combined treatment for childhood anxiety disorders](#). *Turkish Journal of Psychiatry*, 27(2), 1–8.

Video

Use the Internet to view the following video to learn about how these drugs affect both mind and body:

- Speed Pharmacology. (2018, September 17). [Pharmacology - Benzodiazepines, barbiturates, hypnotics \(made easy\) \[Video\] | Transcript](#). Retrieved from <https://youtu.be/4ZHudeMho8g>

Writing Resources

You are encouraged to explore the following writing resources. You can use them to improve your writing skills and as source materials for seeking answers to specific questions.

- [Academic Honesty & APA Style and Formatting](#).
- [APA Style and Format](#).
- [Introduction to the Writing Center](#).

u03a1 - To Medicate or Not to Medicate

Psychotropic drugs are used to treat people of all ages and multiple mental disorders. While many modern drug therapies have proved themselves useful—if not lifesaving—for millions, there is a growing belief among medical professionals that there has been overuse of psychiatric drugs at the expense of other drug-free successful therapies.

For this assignment, you will explore both sides of the medication debate that occurs in the mental health profession. As a counselor working in an outpatient facility, you are working with a new patient, Lauren Summers, who has recently come to counseling for a first therapy session. You must prepare a report with your treatment recommendations to present to the medical staff at the bimonthly clinic supervision meeting.

Review the elements related to your new client, Lauren Summers, as presented in the Your Desk multimedia. After you have studied the items, prepare a professional report for clinic staff.

The numbered assignment instructions outlined below correspond to the grading criteria in the To Medicate or Not to Medicate Scoring Guide, so be sure to address each point. You may also want to review the performance-level descriptions for each criterion to see how your work will be assessed. Address the following:

1. Evaluate pharmacological options based on the mental health needs of a client/patient.
 - What is the patient's presenting problem and diagnosis based on your intake session with the patient?
2. Recommend a medication and provide support for use based on the mental health needs of a client/patient.
 - What are the treatment plan goals set by the patient and counselor at the intake session? Download the template for a treatment plan from the Your Desk multimedia presentation.
3. Recommend a non-medical intervention and provide support for use based on the mental health needs of a client/patient.
 - What are the acceptable treatment options available based on your diagnosis?
4. Justify selection of either pharmacological or non-pharmacological intervention based on the mental health needs of a client/patient.
 - Provide a pharmacological medication recommendation or a non-pharmacological recommendation, along with a reason for your selection and support for its use.
 - Present which viewpoint you most align with.
 - Support your selection with cited literature and studies.
5. Write clearly with good organization and correct spelling, grammar, and syntax.

Additional Requirements

- **Written communication:** Ensure written communication is free of errors that detract from the overall message. Avoid stigmatizing language.
- **Submission length:** 3–5 double-spaced pages, excluding the title page, treatment plan, and references. An abstract is not needed.
- **Font:** Times New Roman, 12 point.
- **Citations and references:** Include at least two current, scholarly references from a peer-reviewed academic journal or academic book. References should be no older than five years. Use the [Counseling: Masters Research Guide](#) to help you search the scholarly literature.
- **APA formatting:** Use current APA formatting. Refer to [APA Style and Format](#) for more information.

u03d1 - Treatment of Generalized Anxiety Disorder

For this discussion, you will be addressing the use of selective serotonin reuptake inhibitor (SSRI) medications for the treatment of generalized anxiety disorder (GAD) in an adult patient.

Picture yourself as a counselor collaborating with a physician to discuss prescribing psychotropic medication. Would you choose SSRIs or benzodiazepines as your recommendation to treat GAD in particular? Justify your choice.

Response Guidelines

Review the posts of your peers and find at least one peer who chose the same medication you did. Present an argument for the use of the other medication. If you indicated that you would treat GAD with SSRIs, for instance, create a persuasive argument for the use of benzodiazepines to treat GAD.

You are encouraged to continue your discussion with this peer to exchange ideas and feedback. If the discussion with your chosen peer does not extend beyond two responses to your initial post, engage with another peer in an exchange involving at least two replies to your initial post.

Remember to cite any academic sources you use to support your initial posts or responses.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 4 >> Depressive and Bipolar Disorders

Introduction

In the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*, American Psychiatric Association, 2013), depression and conditions involving mood disturbance such as mania and hypomania are now separated into two categories: depressive disorders and bipolar and related disorders. Each class of disorders has their own cause psychopharmacological treatment approaches.

Depressive Disorders

There are many types and subtypes of depressive disorders. Depression in general can be characterized by sensations and experiences including:

- Loss of interest in activities.
- Feeling down, depressed, or hopeless.
- Feeling of guilt or letting down oneself or family.
- Trouble with concentration.
- Loss of appetite or overeating.
- Loss of energy and feeling tired.
- Trouble falling or staying asleep or sleeping too much.
- Recurrent thoughts of death and suicide.

The most commonly used medications for the treatment of depressive disorders are selective serotonin reuptake inhibitors (SSRIs). SSRIs increase serotonin neurotransmission, primarily by blocking serotonin reuptake by the neuron. SSRIs are extremely effective and have less severe side effects than their predecessors, the tricyclic antidepressants (TCAs).

Bipolar and Related Disorders

Bipolar and related disorders are characterized by some similar symptoms as depression, but also include symptoms related to mania. People who have bipolar and related disorders switch between periods of depression and elevated moods, also known as mania. Mania is often characterized by:

- Elation.
- Hyperactivity.
- Rapid, disorganized thought patterns.
- Racing thoughts.
- Increased irritability and the tendency to start arguments.
- Spending excess money or engaging in unsafe or risky behavior.

Mood stabilizers such as carbamazepine, Depakote, lamotrigine (Lamictal), and lithium are used to treat bipolar disorder.

In this unit, you will examine both depressive and bipolar disorders and the various protocols for treatment.

Reference

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Learning Activities

u04s1 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 7, "Depressive Disorders," pages 77–94.
- Chapter 8, "Bipolar Disorders," pages 95–106.
- Chapter 16, "Antidepressant Medications," pages 174–200.
- Chapter 17, "Bipolar Medications," pages 201–216.

Video

Use the Internet to view the following video to learn how the SSRI class of drugs affects the body:

- Speed Pharmacology. (2016, November 10). [*Pharmacology - Antidepressants - SSRIs, SNRIs, TCAs, MAOIs, lithium \(made easy\)*](https://youtu.be/T25jvLC6X0w) [Video] | [Transcript](#). Retrieved from <https://youtu.be/T25jvLC6X0w>

u04d1 - SSRIs, SNRIs, and TCAs

For this discussion, you will be comparing the similarities and differences in how selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), and tricyclic antidepressants (TCAs) function in a neuron.

Imagine you were talking to a client and encouraging him or her to consider medication management to treat depression. Your client is having a difficulty understanding the differences in these types of medications. What would you say? How would you explain the differences?

Use your readings for this week to support your comparison.

Response Guidelines

Read the posts of your peers and respond to two. Respond from the perspective of the client:

- What do you not understand?
- What questions do you have?

Course Resources

Graduate Discussion Participation Scoring Guide

u04d2 - Treating Bipolar Disorder

Read Case 14 in Chapter 8 of [*Handbook of Clinical Psychopharmacology for Therapists*](#).

For this discussion, you are the clinician seeing patient Cheryl R. for her first therapy session.

- What criteria would Cheryl need to meet in the *DSM-5* to qualify as having Bipolar II disorder?
- How would you explain how medication can help with managing both depressive and manic symptoms?

Create a dialogue in which you as the counselor explain what bipolar disorder is and several medications that are often prescribed to treat this condition in terms that Cheryl can understand before she accepts the referral to see a psychiatrist.

Response Guidelines

Review your peers' posts and respond to at least two.

Remember to cite any outside sources you use to support your initial posts and responses.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 5 >> Psychotic Disorders and Medications for Psychosis

Introduction

As a counselor working in the mental health field, you may encounter patients who have experienced psychotic symptoms and needed hospitalization. Psychosis is a disturbance of thought patterns wherein the person experiencing psychosis has a break with reality. (Schizophrenia is one psychotic disorder, but people can also experience psychotic symptoms with depression and bipolar disorder.)

When a person has a psychotic episode, they may experience visual or auditory hallucinations, paranoia, extreme agitation, aggressive behavior, delusions, neglect of personal grooming, social isolation, and false beliefs such as being of extreme importance or being monitored or watched.

According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association, 2013), excess dopamine transmission can cause many of the symptoms a person with schizophrenia may display. Drugs shown to inhibit dopamine neurotransmission are some of the most effective treatments available for psychosis. Other symptoms of schizophrenia appear to be related to structural abnormalities in the brain (American Psychiatric Association, 2013; Preston, O'Neal, & Talaga, 2017).

This week we will discuss antipsychotic medications and atypical neuroleptics that are prescribed specifically for psychotic disorders.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Preston, J. D., O'Neal, J. H., & Talaga, M. C. (2017). *Handbook of clinical psychopharmacology for therapists* (8th ed.). Oakland, CA: New Harbinger.

Learning Activities

u05s1 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 11, "Psychotic Disorders," pages 129–138.
- Chapter 19, "Antipsychotic Medications," pages 227–238.

Use the Capella library to read the following articles that examine the use of antipsychotic medications for schizophrenia and other psychotic disorders:

- Bjørnstad, J., Davidson, L., Joa, I., Larsen, T. K., Hegelstad, W., Langeveld, J., . . . Bronnick, K. (2017). [Antipsychotic treatment: experiences of fully recovered service users](#). *Journal of Mental Health*, 26(3), 264–270.
- Runnels, P. (2018). [Recent advances in the treatment of schizophrenia: Increasing adherence to improve outcomes](#). *Journal of Managed Care Medicine*, 21(3), 49–52.
- [16D psychosis](#). (2016). *MPR - Physician Assistants' Edition*, 23(2), 154–158.
- Samara, M. T., Cao, H., Helfer, B., Davis, J. M., & Leucht, S. (2014). [Chlorpromazine versus every other antipsychotic for schizophrenia: A systematic review and meta-analysis challenging the dogma of equal efficacy of antipsychotic drugs](#). *European Neuropsychopharmacology*, 24(7), 1046–1055.

- Horowitz, E., Bergman, L. C., Ashkenazy, C., Moscona-Hurvitz, I., Grinvald-Fogel, H., & Magnezi, R. (2014). Off-label use of sodium valproate for schizophrenia. *PloS One*, 9(3), 1–7.

Video

Use the Internet to view the following video on dopamine pathways, antipsychotics and schizophrenia.

- Psychopharmacology Institute. (2012, January 28). *Dopamine pathways, antipsychotics and schizophrenia* [Video] | Transcript. Retrieved from <https://youtu.be/5wM2oqQJhV4>

u05s2 - Assignment Preparation

Your second assignment is due at the end of next week. You will create a profile on a client with your thoughts on treatment and medication options. You will also prepare a letter for a primary care physician that explains the rationale behind your recommendations.

You are encouraged to take time this week to prepare for the assignment by reviewing the guidelines and the scoring guide to ensure you understand the criteria and grading requirements. Contact your instructor with any questions or concerns.

u05d1 - Antipsychotic Medications

Stanley is a 42-year-old male patient who has been assigned to your caseload recently after another therapist left the practice. Stanley is diagnosed with schizophrenia but has a history of medication noncompliance. At today's session, Stanley appears agitated, is distractible, and keeps looking over his shoulder in session. After asking Stanley how he is feeling today he replies, "I keep hearing a voice telling me that everyone is watching me. I have been hearing this voice for several days. I can't sleep."

Stanley has an appointment to see the counseling practice's psychiatrist after his session with you. There are consents in place already for you and the doctor to discuss Stanley's case, and the psychiatrist agrees to meet with you briefly before he sees Stanley for his psychiatrist appointment. At your meeting with the psychiatrist, medication is discussed.

Instructions

For this discussion:

- Compare the positive and negative effects of chlorpromazine, risperidone, and aripiprazole (Abilify).
- Describe the circumstances in which you would recommend (and not recommend) each medication or a combination of these medications. Make sure to address both of these options.

Response Guidelines

Read your peers' posts and respond to at least two. In your response to at least one peer, argue for or against his or her position on prescribing chlorpromazine, risperidone, aripiprazole, or any combination of these. Support your position with this week's readings.

Course Resources

Graduate Discussion Participation Scoring Guide

u05d2 - Biological Causes of Schizophrenia

There are three models or theories that explain the biological causes of schizophrenia: the dopamine model, the glutamate model, and the neurodevelopmental/neurodegenerative model. For this discussion:

- Compare the similarities and differences in these models.
- Indicate the theory with which you most agree.
- Provide a rationale and support for your choice.

Response Guidelines

Review your peers' posts and identify the themes that emerge. Respond to at least two posts. In one response, be sure to address the following:

- Which theory you think was chosen most often?
- What were the similarities and differences in the rationales that you noticed?

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 6 >> Central Nervous System Depressants and Psychomotor Stimulants

Introduction

As a counselor, it is important you know about the various medications that can affect the central nervous system (CNS). CNS depressants, such as alcohol, can slow down neurotransmission and may cause a person to be drowsy, feel depressed, or act with a lack of restraint. Psychomotor stimulants, such as amphetamines, speed up neurotransmission. Chronic use and abuse of psychomotor stimulants can result in seizures, stroke, or psychosis. Two classes of drugs that will be discussed this week are CNS depressants and psychomotor stimulants.

Learning Activities

u06s1 - Assignment Overview

The Medication Selection and Ethical Issues assignment will help you develop skills to communicate about psychopharmacology as applied to clinical cases. You will read about a patient named Brian, select a benzodiazepine medication, create a patient profile, and write a letter to a primary care physician that explains the rationale behind your medication and treatment recommendations.

u06s2 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 14, "Substance-Related Disorders," pages 153–160.

Use the Capella library to read the following articles that look at the impact of psychomotor stimulants on the brain:

- Duong, J., Elia, C., Takayanagi, A., Lanzilotta, T., Ananda, A., & Miulli, D. (2018). [The impact of methamphetamines in patients with traumatic brain injury: a retrospective review](#). *Clinical Neurology and Neurosurgery*, 170, 99–101.
- Ferré, S. (2016). [Mechanisms of the psychostimulant effects of caffeine: Implications for substance use disorders](#). *Psychopharmacology*, 233(10), 1963–1979.
- Fosco, W. D., White, C. N., & Hawk, L. W., Jr. (2017). [Acute stimulant treatment and reinforcement increase the speed of information accumulation in children with ADHD](#). *Journal of Abnormal Child Psychology*, 45(5), 911–920.

- Kwok, C. L. (2016). Central nervous system neurotoxicity of chronic alcohol abuse. *Asia Pacific Journal of Medical Toxicology*, 5(2), 70–71. Retrieved from http://apjmt.mums.ac.ir/article_7670_6793c72efcf5cab0cd56453f9709fc7f.pdf
- Schindler, A. G., Soden, M. E., Zweifel, L. S., & Clark, J. J. (2016). Reversal of alcohol-induced dysregulation in dopamine network dynamics may rescue maladaptive decision-making. *Journal of Neuroscience*, 36(13), 3698–3708.

Writing Resources

You are encouraged to explore the following writing resources. You can use them to improve your writing skills and as source materials for seeking answers to specific questions.

- [Academic Honesty & APA Style and Formatting](#).
- [APA Style and Format](#).
- [Introduction to the Writing Center](#).

u06a1 - Medication Selection and Ethical Issues

Today you met with a new patient named Brian. You have received consent from him to coordinate care with his personal physician and must write a letter with your thoughts on continued treatment and medication options. Based on your meetings and evaluation, you have determined that Brian has generalized anxiety disorder (GAD) and would benefit from a non-benzodiazepine medication. Brian believes only benzodiazepine drugs will work.

Read Case Study: Brian to learn more about your new patient. Prepare a patient profile and write a letter to his primary care physician that explains the rationale behind your medication and treatment recommendations.

The numbered assignment instructions outlined below correspond to the grading criteria in the Medication Selection and Ethical Issues Scoring Guide, so be sure to address each point.

1. Differentiate types of benzodiazepine drugs based on their effect on neurotransmission.
 - Choose any of the benzodiazepine drugs—Valium (diazepam), Librium (chlordiazepoxide), Klonopin (clonazepam), Restoril (temazepam), Ativan (lorazepam), Xanax (alprazolam), or Halcion (triazolam).
2. Differentiate types of benzodiazepine drugs based on their effect on the hormonal system.
3. Create a profile of a client who would benefit from a benzodiazepine drug.
 - Create a profile for Brian.
 - Explain why he would benefit from this type of medication, based on its effect on neurotransmission and the hormonal system.
4. Explain the rationale for the selection of a benzodiazepine drug for use with a client.
 - The profile should contain enough information about the client's GAD that you could perform a diagnosis to determine the disorder.
 - You do not need to address any treatment issues; however, do include any significant demographic or background factors that may inform clinical decision-making related to the medication choice.
5. Communicate in a manner that is consistent with expectations for professional communities.
 - Write a brief letter to a primary care physician that explains your rationale for the use of this medication with this client.
 - Assume the physician does not know you and include properly cited references to support your assertion so he or she is convinced to accept your referral.

Additional Requirements

- **Written communication:** Ensure written communication is free of errors that detract from the overall message. Avoid stigmatizing language.
- **Submission length:** 3–5 double-spaced pages, excluding the title page and references. An abstract is not needed.
- **Font:** Times New Roman, 12 point.
- **Citations and references:** Include at least two current, scholarly references from a peer-reviewed academic journal or academic book. References should be no older than five years. Use the [Counseling: Masters Research Guide](#) to help you search the scholarly literature.
- **APA formatting:** Use current APA formatting. Refer to [APA Style and Format](#) for more information.

u06d1 - Alcohol and the Central Nervous System

Alcohol is one of the mostly commonly used central nervous system (CNS) depressants. The exact mechanisms by which alcohol produces its effects are still not understood. Locate an article in the Capella library on alcohol and the use of SSRIs, SNRIs, and NRIs. Address the following:

- Describe the current state of knowledge, based on your reading, for how alcohol affects the CNS.
- If a client taking an SSRI antidepressant also uses alcohol, explain the effects this combination might have on the CNS.

Response Guidelines

Read the posts of your peers and respond to two or more. In at least one response, write a brief case-study example of the effects of alcohol on the CNS of a client taking an SSRI, NRI, or atypical antidepressant, with potential outcomes. Explain how this differs from SSRI effects. Support your assertions with references to the article you found. Be sure to include the link to the article and use proper APA style to cite and reference it.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 7 >> Marijuana, Dietary Supplements, and Herbal Products

Introduction

Marijuana usage is becoming more popular as a result of legalization in many states and Canada. Medical marijuana is often available to patients who have health conditions that are recognized and treatable with marijuana and who obtain a medical marijuana card. As a counselor, you may encounter patients who are seeking treatment for anxiety or depression and also using medical marijuana.

Patients may also use over-the-counter products for various reasons—for example, they may use melatonin as a sleep aid or St. John's wort to help manage the symptoms of depression. A patient may try an over-the-counter supplement or herbal product yet not be aware of negative side effects or possible adverse interactions with other medications. Unfortunately, patients tend to not inform their doctors about their use of herbal products.

This week you will examine current research on the various uses of marijuana, dietary supplements, and herbal products in treating various health conditions.

Learning Activities

u07s1 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 20, "Over-the-Counter Dietary Supplements and Herbal Products," pages 239–246.

Use the Capella library to read the following:

- These articles explore the use of cannabis for psychiatric disorders:
 - Bassir Nia, A. (2019). [*Cannabidiol as an adjunctive treatment for schizophrenia*](#). *Psychiatric Times*, 36(4), 5–7.
 - Turna, J., Patterson, B., & Ameringen, M. (2017). [*Is cannabis treatment for anxiety, mood, and related disorders ready for prime time?*](#) *Depression & Anxiety*, 34(11), 1006–1017.
- These articles examine herbal supplements and nutrition therapy for psychiatric disorders:
 - Bersani, F. S., Coviello, M., Imperatori, C., Francesconi, M., Hough, C. M., Valeriani, G., . . . Corazza, O. (2015). [*Adverse psychiatric effects associated with herbal weight-loss products*](#). *BioMed Research International*, 2015, 1–10.
 - Mohammadpour, N., Jazayeri, S., Tehrani-Doost, M., Djalali, M., Hosseini, M., Effatpanah, M., . . . Karami, E. (2018). [*Effect of vitamin D supplementation as adjunctive therapy to methylphenidate on ADHD symptoms: A randomized, double blind, placebo-controlled trial*](#). *Nutritional Neuroscience*, 21(3), 202–209.
 - Parrott, A. C., Hayley, A. C., & Downey, L. A. (2017). [*Recreational stimulants, herbal, and spice cannabis: The core psychobiological processes that underlie their damaging effects*](#). *Human Psychopharmacology: Clinical & Experimental*, 32(3), 1–9.
 - Swift, K. M. (2017). [*Integrative nutrition therapy for mood disorders*](#). *Today's Dietitian*, 19(10), 36–40.

u07s2 - Assignment Preparation

Your third and final assignment is due in two weeks. We recommend you take time this week to begin to prepare for the assignment by reviewing the guidelines and the scoring guide to ensure you understand the criteria and grading requirements. Contact your instructor with any questions or concerns.

u07d1 - Effect of Marijuana and Herbal Products on the Central Nervous System

Lydia is a 19-year-old female client who has come to your counseling practice to get help for her anxiety and depression. Lydia admits that she is a daily marijuana smoker and that she also is using St. John's wort to help with her depression. She is resistant to talking to the psychiatrist about receiving a prescription for any antianxiety or antidepressant medications and states, "I prefer using marijuana and herbal products as they are better for your body." Lydia reports she is on a birth control pill, but she denies any other medications being prescribed to her at this time.

Instructions

For this discussion:

- Describe the effects of marijuana on the central nervous system.
- Describe the possible side effects of St. John's wort on the body and negative interactions with other medications.
- Use at least two scholarly peer-reviewed articles from Capella's library to support your initial post. Include a link for each article, and cite and reference the articles using proper APA style.

Response Guidelines

Review your peers' posts and respond to at least two. Using the articles you located, discuss the challenges of medical marijuana use by clients in treatment for behavioral health concerns.

Be sure to include the link to each article and use proper APA style to cite and reference it.

Course Resources

Graduate Discussion Participation Scoring Guide

u07d2 - Herbal Remedies

Tyler, a 19-year-old male patient, has a diagnosis of major depressive disorder, single episode, moderate. Tyler refuses to take prescription medication and in today's session asks for your guidance regarding herbal remedies. As his counselor, how would you advise him? What recommendations would you make? Locate an article in the Capella library to support your position.

Response Guidelines

Read the posts of your peers and respond to two or more. Support your assertions with references to the article you found and this week's readings. Be sure to use proper APA style to cite and reference your resources.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 8 >> Pharmacotherapy for Children and Adolescents

Introduction

When a counselor is working with patients who are children or teens, there may be push from both parents and schools to place the patient on medication to help with issues such as attention difficulties or test anxiety. You may also see a patient under the age of 18 who is already on medication for a behavioral health reason.

This week you will examine how to address childhood disorders with psychotropic medication. You will also consider the very serious and timely question of whether children and adolescents should or should not be prescribed these types of drugs.

Learning Activities

u08s1 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 23, "Child and Adolescent Psychopharmacology," pages 255–276.

Use the Capella library to read the following articles that examine psychotropic therapy for children and adolescents:

- Bellonci, C., Baker, M., Huefner, J. C., & Hilt, R. J. (2016). [Deprescribing and its application to child psychiatry](#). *Child and Adolescent Psychopharmacology News*, 21(6), 1–9.
- Bose-Brill, S., Xing, J., Barnette, D. J., & Hanks, C. (2017). [Pharmacogenomic testing: Aiding in the management of psychotropic therapy for adolescents with autism spectrum disorders](#). *Pharmacogenomics and Personalized Medicine*, 10, 247–252.
- Olashore, A., Ayugi, J., & Opondo, P. (2017). [Prescribing pattern of psychotropic medications in child psychiatric practice in a mental referral hospital in Botswana](#). *The Pan African Medical Journal*, 26, 83.
- Hunt, J. I. (Ed.). (2017). [SSRIs for children and adolescents: NIMH trials show better efficacy than meta-analyses indicate](#). *Brown University Child & Adolescent Psychopharmacology Update*, 19(6), 1–4.

u08s2 - Assignment Preparation

Your third and final assignment is due at the end of next week. You will prepare and record a narrated presentation for a professional conference. Take time this week to work on this assignment and to become familiar with PowerPoint, Kaltura, or other presentation software you plan to use. Make sure you review the guidelines and the scoring guide to ensure you understand the criteria and grading requirements. Contact your instructor with any questions or concerns.

u08d1 - Addressing Childhood Disorders With Psychotropic Medications

Today it is common for the same psychotropic medications given to adults to also be given to children. Most available psychotropic drugs were developed for adults. Concerns about the developmental impacts of such substances on children and related ethical issues have prioritized caution to avoid doing harm.

For this discussion:

- Identify and analyze the position of the journal articles from this week's required readings.
- Discuss your views on giving adult medications to children.

- Provide a brief evaluation of the effects of psychotropic medications on children's neurotransmission and hormonal systems and the limitations of psychopharmacology with this population.
- Be sure to properly cite and reference any articles referred to in your post, including the URLs.

Response Guidelines

Review your peers' posts and respond to at least two. Address the following in each response: How does your peer's analysis affect your views of prescribing adult medications to children? Comment on any common themes or key differences you notice between your initial post and your classmates' posts.

Course Resources

Graduate Discussion Participation Scoring Guide

u08d2 - Challenges of Psychotropic Medications for Children

Diagnosing a child with a mental disorder and treating this disorder with pharmacological agents designed for adults can be fraught with controversy. For this discussion:

- Research an adult medication used to treat children for one of the following disorders—autism spectrum disorder, bipolar and related disorders, or attention deficit hyperactivity disorder (ADHD).
- Under what circumstances would you prescribe the medication you researched? What challenges (if any) would you have prescribing this drug to a child? Why? Provide a rationale and evidence to support your views.
- Be sure to properly cite and reference your articles in your post, including the URL for each article.

Response Guidelines

Review your peers' posts and respond to at least two. Address the following in each response: How did the chosen articles and your peer's analysis affect your views of prescribing adult medications to children? Do you agree or disagree with your peer's conclusions? Explain your position to advance the conversation.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 9 >> Geriatric Patients

Introduction

There are close to 80 million people in the United States born between 1946 and 1964 known as the baby boom generation (U.S. Census Bureau, n.d.). By 2029, all of these people will be over age 65. Medical and other improvements have resulted in increased life expectancies for baby boomers as well as their parents, resulting in an increase of age-related health concerns such as Alzheimer's disease and dementia.

Fortunately, the efficacy of treatment for Alzheimer's patients is improving as well, and there are more options. Psychologists and counselors may find themselves attending to the needs of the families of a client with a dementia-related disorder as much as to the needs of the client. Further, treating the clients with Alzheimer's or any other disorder can be controversial and complicated, as older people are often prescribed medications that could be incompatible with treatment.

This week we look at the pharmacological treatment of geriatric clients in the United States.

Reference

United States Census Bureau. (n.d.). Age and sex. Retrieved from <https://www.census.gov/topics/population/age-and-sex.html>

Learning Activities

u09s1 - Assignment Overview

You have been asked to present at a conference on the following topic: Professional View of Psychopharmacological Issues. You will select one of the clients in the Client Case Studies multimedia and recommend the appropriate psychotropic agent or agents that may be used to correct neurotransmission and behavior. You will use PowerPoint and Kaltura (or similar software) to create and record your presentation.

u09s2 - Studies

Readings

Use the [*Handbook of Clinical Psychopharmacology for Therapists*](#) e-book to read the following:

- Chapter 22, "Red Flags: When to Re-evaluate," pages 247–254.
- Appendix B, "Pharmacotherapy in Special Populations," pages 285–292.

Use the Capella library to read the following articles that review the complications and considerations for geriatric patients in need of psychotropic therapy:

- Carlo, A. D., & Alpert, J. E. (2015). [Geriatric psychopharmacology: Pharmacokinetic and pharmacodynamic considerations](#). *Psychiatric Annals*, 45(7), 336–341.
- Fawcett, J. (2015). [Geriatric psychopharmacology: The good, the bad, and the ugly](#). *Psychiatric Annals*, 45(7), 328–330.
- Stern, T. A. (Ed.). (2015). [This issue: Geriatric psychopharmacology \[Guest Editorial section\]](#). *Psychiatric Annals*, 45(7), 333–334.
- Varma, S., Sareen, H., & Trivedi, J. K. (2010). [The geriatric population and psychiatric medication](#). *Mens Sana Monographs*, 8(1), 30–51.
- McCall, C., & Winkelman, J. W. (2015). [The use of hypnotics to treat sleep problems in the elderly](#). *Psychiatric Annals*, 45(7), 342–347.

Presentation and Writing Resources

PowerPoint

You are encouraged to explore the following PowerPoint resources. These may be of help as you prepare for the assignment this week.

- [Capella University Library: PowerPoint Presentations](#).
- [Microsoft Office Software](#).
- Microsoft. (n.d.). [Record a slide show with narration and slide timings](#). Retrieved from <https://support.office.com/en-us/article/Record-a-slide-show-with-narration-and-slide-timings-0b9502c6-5f6c-40ae-b1e7-e47d8741161c?ui=en-US&rs=en-001&ad=US>

Kaltura

To use Kaltura, you may want to complete the tutorials and review these helpful instructions:

- [Using Kaltura](#).

Writing Resources

You are encouraged to explore the following writing resources. You can use them to improve your writing skills and as source materials for seeking answers to specific questions.

- [Academic Honesty & APA Style and Formatting](#).
- [APA Style and Format](#).
- [Introduction to the Writing Center](#).

u09a1 - Professional View of Psychopharmacological Issues

You will prepare and record a narrated presentation for a professional conference based on a client chosen from the Client Case Studies media. Based on the symptoms and characteristics of your chosen client, you will communicate your understanding of the basic principles of psychopharmacology and evaluate current psychopharmacological research surrounding the disorder presented in the case study. You will recommend the appropriate psychotropic agent or agents that may be used to correct neurotransmission and behavior.

The numbered assignment instructions outlined below correspond to the grading criteria in the Professional View of Psychopharmacological Issues Scoring Guide, so be sure to address each point:

1. Identify the specific *DSM–5* disorder of a client/patient based on what the symptoms appear to imply.
2. Evaluate the professional views of psychopharmacological issues related to the selected disorder.
3. Compare the medical and psychological models related to the disorder.
4. Justify the selection of the appropriate psychotropic agent or agents that may be used to correct neurotransmission and behavior.
5. Analyze the selected agents' effects on neurotransmission, behavior, and the hormonal system in the case.
6. Predict the agents' potential effectiveness.
7. Evaluate the limitations of treatment with the agents.
8. Communicate in a manner that is scholarly, ethical, professional, and consistent with expectations for professional communities.

Additional Requirements

- **Presentation guidelines:** Prepare and record a professional narrated presentation with 7–10 slides, not to exceed five minutes in length. Use PowerPoint and Kaltura (or similar software) to create and record your presentation.
- **Citations and references:** Include at least two current, scholarly references from a peer-reviewed academic journal or academic book. References should be no older than five years. Use the [Counseling: Masters Research Guide](#) to help you search the scholarly literature.
- **APA formatting:** Use current APA formatting for citations and references. Refer to [APA Style and Format](#) for more information.

u09d1 - Alzheimer's Clients and Medications

A primary care provider has referred an 87-year-old female client to you who has been diagnosed with Alzheimer's disease. This woman is accompanied by her two sons, who are her caregivers. She is currently living with her older son and experiencing challenges.

Address the following points:

- Explain how Alzheimer's disease is different from normal aging.
- In your own words, describe how medications may help this client.
- Create a dialogue in which you, as the counselor, explain to the client and her sons what is happening to her in terms the client can understand.
 - **Note:** In writing out a dialogue, you will be providing a script of what the client might ask and what your responses would be; envision this as a series of questions and answers.

Response Guidelines

Review your peers' posts and respond to one.

- Identify any knowledge gaps that were not considered in your peer's post.
- Identify an assumption on which the post seems to be based and pose a useful alternative or contrasting approach.
- Ask a probing question or elaborate on a particular point.

Course Resources

Graduate Discussion Participation Scoring Guide

Unit 10 >> Professional Standards and Future Research

Introduction

In keeping with the guidelines set in place by the American Counseling Association (ACA) and the American Psychological Association (APA), counselors need to continue to work from an ethical and professional standpoint. The APA's General Principles state that the mental health professional will practice beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignities (APA, 2017).

This week you will examine ethical and professional standards of practice in psychopharmacology and look at current and future research that may be controversial in nature, such as brain implants and psychedelic-assisted therapy.

References

American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. Retrieved from <http://www.apa.org/ethics/code/index.aspx>

Learning Activities

u10s1 - Studies

Readings

Use the *Handbook of Clinical Psychopharmacology for Therapists* e-book to read the following:

- Appendix C, "Psychotropic Drug Interactions," pages 293–308.
- Appendix D, "Differentiating Psychotropic Side Effects From Psychiatric Symptoms," pages 309–312.
- Appendix F, "Trade Versus Generic Drug Names: A Quick Reference," pages 317–320.
- Appendix G, "Medication Safety," pages 321–324.
- Appendix H, "Books for Patients About Medication Treatment," pages 325–326.

Use the Capella library to read the following articles that explore the future of psychotherapy treatment as it applies to psychedelic therapy and surgery:

- Schenberg, E. E. (2018). *Psychedelic-assisted psychotherapy: A paradigm shift in psychiatric research and development*. *Frontiers in Pharmacology*, 9, 1–11.
- Argento, E., Tupper, K. W., & Socias, M. E. (2019). *The tripping point: The potential role of psychedelic-assisted therapy in the response to the opioid crisis*. *International Journal of Drug Policy*, 66, 80–81.
- Kinetz, E. (2019, May 8). *Chinese researchers try brain implants to treat drug addicts*. *National Post (Online)*.

Use the Internet to review the following professional ethical standards:

- American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- American Counseling Association. (n.d.). *Knowledge center: Ethical & professional standards*. Retrieved from <https://www.counseling.org/knowledge-center/ethics>

u10d1 - Training Guidelines

For this discussion:

- Discuss the APA or ACA stance on psychopharmacology. You may also discuss your state's stance on this subject.
- Most psychologists and all counselors are currently unable to prescribe psychotropic medications. Given this, do you feel the APA or ACA has taken too strong of a stance or overstepped its bounds regarding psychopharmacology? Justify your response.
- Imagine you were asked to be on a treatment team where pharmacologic agents are used.
 - Would you be comfortable participating on the team and recommending psychotropic medications?
 - If you have experienced this, describe your experience.
 - If your answer to being part of a treatment team is no, what would make you comfortable?

Response Guidelines

Read the posts of your peers and respond to at least two. How are their posts different from yours? If they are uncomfortable being part of a team, what would you recommend they do to rectify this situation?

Graduate Discussion Participation Scoring Guide

u10d2 - Psychedelics and Brain Implants

Medical research is currently looking at new and innovative ways to treat various mental health concerns including addiction. Psychedelic-assisted therapy (PAP) is one treatment option that is being studied. Participants are given psychedelic drugs such as LSD, ketamine, and MDMA under supervision while also receiving psychotherapy. In China, deep brain stimulation treatment via insertion of an implant in the brain is being examined to treat addiction.

For this discussion:

- Share your thoughts on the pros and cons of both PAP and deep brain stimulation treatment. Justify your response.
- Imagine you were hired as a counselor to work at a treatment facility offering either of these treatment options.
 - Would you be comfortable being part of the treatment team?
 - In your opinion, what are some ethical and legal issues that may occur with experimental treatment?

Response Guidelines

Read the posts of your peers and respond to at least two peers with feedback that furthers discussion on the topic.